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Editor’s note

In the December edition of the Reserve Bank Bulletin for 2010, we present a number of articles that span a range of the Reserve Bank’s functions.

The first article by Felicity Barker and Noemi Javier explains new regulations for non-bank deposit taking institutions (NBDTs) that apply from 1 December 2010. The NBDT sector consists of building societies, credit unions and finance companies. The new regulations form an additional component in the Reserve Bank’s prudential regulation regime aimed at promoting the soundness and efficiency in the financial system.

The second article by Richard Dean details the Insurance (Prudential Supervision) Act 2010. This Act brings financial stability legislation to the insurance industry. The article notes that failure of an insurer can have significant impacts on large numbers of policyholders of all descriptions and argues for appropriate prudential regulation. The article then steps through the detail of the Act, exploring the rationale for the new legislation, the objectives of the Act and the Reserve Bank’s approach to achieving these objectives.

The third article by Zoe Wallis discusses trends in currency trading across the global financial crisis. The article makes particular use of the most recent BIS triennial survey of currency trading. The survey shows that daily foreign exchange turnover has continued to increase, albeit at a slower rate than over the past three years. Moreover, the popularity of the ‘carry trade’ has decreased because of increased volatility in currencies generally and the New Zealand dollar has become less of a focus for international traders. It remains to be seen whether markets gradually return to an environment of lower volatility and increased risk appetite or whether the popularity of the New Zealand dollar will return to pre-crisis levels.

In our final article, Daan Steenkamp considers New Zealand’s imbalances in a cross-country context, highlighting sources of vulnerability. The article begins with the build up of New Zealand’s large and negative net international investment position that has been financed through foreign debt typically of short maturity. This reliance on short-term foreign financing makes New Zealand vulnerable to changes in the availability and cost of external financing. The article notes that debt maturity has lengthened recently in response to both market pressure and the Reserve Bank’s Prudential Liquidity Policy. High debt levels threaten to weigh on economic growth by raising the cost of capital and crowding out private investment. The article also argues that faster fiscal consolidation would help rebalance the economy towards exports and towards higher savings.

I hope you find this edition to be informative and enjoy the Christmas break.

Kirdan Lees
Editor
The non-bank deposit taking (NBDT) sector comprises building societies, credit unions and finance companies. NBDTs can play an important role in the economy, providing services complementary to those provided by banks. In recent years, many finance companies have failed, resulting in a significant loss of value in the sector. These failures have revealed weaknesses in the operating models of several finance companies, such as high levels of related party exposures and inadequate capitalisation relative to the risks taken.

On 1 December 2010, NBDTs became subject to new regulatory requirements relating to capital adequacy, related party exposures, liquidity and governance. This represents a further step in the implementation of a new prudential regulatory regime administered by the Reserve Bank. Regulations setting out credit rating requirements came into force on 1 March 2010 and NBDTs have been required to have a risk management programme since September 2009.

The new regulatory regime is aimed at promoting the soundness and efficiency of the financial system by setting minimum prudential standards that NBDTs must meet. The requirements have been modelled on the banking regime, but have been tailored so that they are fit for purpose for the NBDT sector.

This article explains the requirements in force on 1 December 2010 and discusses the motivation for these requirements.

Introduction

1 The Role of the Reserve Bank

On 1 December 2010, NBDTs became subject to new regulatory requirements relating to capital adequacy, related party exposures, liquidity and governance. These requirements represent a major step in the implementation of a new prudential regulatory regime for NBDTs administered by the Reserve Bank. Other existing requirements under the prudential regime are the requirement for NBDTs to have a credit rating and the requirement for NBDTs to have a risk management programme. These requirements came into force in March 2010 and September 2009 respectively.

The Reserve Bank’s new regulatory powers over NBDTs derive from the addition of a new Part 5D in the Reserve Bank Act (the Act) in September 2008. The Reserve Bank’s powers in the NBDT sector are expected to be expanded next year. The Reserve Bank is consulting on a second Bill that would grant it powers in relation to licensing, fit and proper person requirements, changes of ownership and powers of intervention, such as the power to obtain information or give directions in certain circumstances.

The new prudential powers complement the Reserve Bank’s existing powers as the regulator and supervisor of the banking sector. In addition, in September 2010, the Insurance (Prudential Supervision) Bill was passed making the Reserve Bank the prudential regulator and supervisor of the insurance sector. These changes have created a single prudential regulatory agency for financial institutions in New Zealand and bring a common purpose to the regulation of these entities; namely, the promotion of a sound and efficient financial system. However, in the case of the NBDT sector, trustees act as the supervisors, unlike for banks and insurance companies where the Reserve Bank is both regulator and supervisor (see box 1).
In recommending regulations for the NBDT sector, the Reserve Bank has used the banking regime as a point of reference. However, the Reserve Bank has also been conscious to ensure that regulatory costs are not unduly onerous for small entities and that regulation appropriately recognises that NBDTs operate under different business models to banks. Hence, requirements have been tailored to be fit for purpose for the NBDT sector.

The new prudential powers complement the Reserve Bank’s existing powers as the regulator and supervisor of the banking sector. In addition, in September 2010 the Insurance (Prudential Supervision) Bill was passed making the Reserve Bank the prudential regulator and supervisor of the insurance sector.

2 The NBDT sector and the rationale for regulation

The NBDT sector comprises two main types of entity: deposit-taking finance companies and savings and lending institutions such as building societies, credit unions and the PSIS Ltd (a co-operative company). The essential characteristic for an institution to be subject to the NBDT prudential regime is that it offers debt securities to the public and then lends the money out or otherwise provides financial services.2

The NBDT sector represents less than 5 percent of the financial assets held by financial institutions in New Zealand.

2 Section 157 of the Act defines a deposit taker as “a person who offers debt securities to the public in New Zealand and carries on the business of borrowing and lending money, or providing financial services, or both.” Banks, collective investment schemes, local authorities and the Crown are specifically excluded. In this paper, we use the term NBDT to mean deposit taker as defined by the Act.
The failure of many finance companies over recent years has highlighted a number of areas where regulation and supervision of the NBDT sector has been inadequate.

Other financial institutions include registered banks, insurance companies, non-deposit-taking lending institutions and other financial institutions, such as superannuation and managed funds (figure 1). Although NBDTs only comprise a small proportion of the financial system, the sector can play an important role in the economy, often financing activities with which banks have not traditionally been involved.

Since 2006 a number of finance companies have filed for receivership or liquidation, gone into moratorium or otherwise exited the market. This has seen a significant reduction in the assets held by finance companies and a significant reduction in lending from the NBDT sector. In 2006, deposit-taking finance companies accounted for approximately $12 billion in assets. The Reserve Bank estimates that the remaining active deposit-taking finance companies (that is finance companies not in moratorium, receivership or liquidation) now account for approximately $5 billion in assets. Finance companies engaged in property development lending have had a particularly high rate of failure and lending to this sector has been greatly reduced. It is likely that the NBDT sector's exposure to the property development sector will remain reduced as the model of retail funding for high risk exposures has been proven unsustainable.

In comparison, savings institutions have generally operated under more conservative business models than finance companies. Savings institutions have performed relatively well over the recent period and have not suffered similar failures.

The Reserve Bank has had concerns about the level of risk taken in the NBDT sector, particularly by finance companies, for a number of years. The failure of many finance companies has highlighted a number of areas where the regulation and supervision of the NBDT sector has been inadequate.

In particular, many finance companies held low levels of capital for the level of risk they took and lacked diversification in their loan portfolios. This left them vulnerable to adverse changes in economic conditions. Further, many finance companies had high levels of related party exposures in their loan books. In addition, the absence of uniform measurement standards and limited transparency in financial information made it difficult for the market to assess and compare risks across the sector. These issues have contributed to declining confidence and consequent funding and liquidity problems.

In October 2008, the government implemented the Crown's Retail Deposit Guarantee Scheme, which covered qualifying NBDTs. The original scheme expired in October 2010. An extended version of the scheme, with more stringent qualification requirements, is in operation until December 2011. Only a small number of entities are participating in this scheme.

The following sections of this paper discuss the requirements for NBDTs in force as at 1 December 2010.

Figure 2
Assets of active deposit-taking finance companies in 2006 and 2010

Source: RBNZ
Note: Excludes finance companies operating under a moratorium arrangement or that are in receivership. The chart identifies specific finance companies with assets over $500 million only.

See for example the 2004 Financial Stability Report p21 which commented, in relation to the rapid growth of non-bank financial institutions, that “if the economy slows next year, as is projected, that could provide a litmus test of the extent to which the growth recorded by this sector reflects sustainable expansion in its role…and the extent to which growth has been achieved by taking on additional risk”. 
Many of the finance companies that failed over recent years had poor risk management practices. For example, some finance companies had poorly diversified loan portfolios, or loans held with inadequate security, e.g. subordinated mortgages coupled with schemes which allowed interest to be added to principal rather than being paid.

The first new requirement under the NBDT prudential regime came into force in September 2009. This required that NBDTs have, and take steps to comply with, a risk management programme setting out procedures for the identification and management of credit, liquidity, market and operational risk.4

Box 1
Trustees’ powers and duties
In the case of banks and insurance companies, the Reserve Bank is both regulator and supervisor. But for NBDTs, the Bank is the prudential regulator, while trustees act as front-line supervisors. This arrangement is unique to the NBDT sector.

NBDTs are required, under The Securities Act 1978, to appoint a trustee to represent the interests of security holders. In this capacity, trustees supervise and monitor the performance of NBDTs and take actions in the event of breaches of trust deeds. Minimum prudential standards, set by way of regulations made under the Act, are imposed on NBDTs through trust deeds executed between the NBDT and the trustee. Trustees may negotiate for more stringent prudential requirements if they consider it justified for a particular institution and in the best interest of security holders.

In line with the regulatory framework for NBDTs, the Act has given trustees additional powers and duties. For example, a trustee can amend a trust deed where said trust deed does not comply with prudent requirements and the trustee is unable to agree to a change with the NBDT. Trustees are required to report certain matters to the Reserve Bank, such as if an NBDT is not complying with regulations or if an NBDT is unable to pay debts as they become due.

In order to enhance cooperation between trustees as front-line supervisors and the Reserve Bank as prudential regulator, the Reserve Bank entered into a Memorandum of Understanding (MOU) with the Trustees Corporations Association of New Zealand (TCA) and its members and associate members. The focus of the MOU is to facilitate an ongoing working relationship between trustees and the Bank, with the intent to promote open communication and active exchange of information.

For its part, the Reserve Bank endeavours to provide guidance and assistance to TCA and its members in implementing regulations made under Part 5D. The MOU will be reviewed on a regular basis to ensure that it remains relevant and effective in promoting cooperation and coordination among the parties concerned.

The Reserve Bank has issued guidelines to help NBDTs comply with the requirement to have a risk management programme. Some of the matters covered by the guidelines are:

- the programme should cover all activities affecting the NBDT’s risk profile and cover all material risks;
- where possible, the NBDT should quantify its exposure to risk;
- contingency plans for managing stress events should be included; and

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4 Section 157M of the Act requires that every deposit taker must have a risk management programme and take all practicable steps to comply with that programme.
• the programme should be regularly reviewed.

Guidance is also provided on best practices to be followed for operational considerations, such as the role of the governing body and senior management, and definitions for credit, liquidity, market and operational risks are given.

4 Credit ratings

Credit ratings assist investors in making investment decisions by providing a simple way to compare the financial strength of different institutions. A poor credit rating indicates that there is a higher risk that an institution will default on payments to investors. For example, a triple A-rated institution’s probability of default is approximately 1 in 600 over 5 years, whereas a double B-rated institution’s probability of default is approximately 1 in 10 over 5 years.  

As of 1 March 2010, NBDTs have been required to have a credit rating from an approved rating agency, unless an exemption applies. NBDTs for which the consolidated liabilities of the borrowing group are less than $20 million are exempted from this provision until 1 March 2013. The $20 million threshold was set in recognition that the cost of obtaining a credit rating would be disproportionately high for small institutions.

Ratings may apply to a particular issue of securities or to the issuer itself. An issuer rating evaluates the creditworthiness of an entity, whereas an issue rating rates a particular issue of securities (which depends on where the debt ranks in order of preference in insolvency). Regulations require that NBDTs hold a long-term issuer rating. In contrast registered banks are required to maintain an issue rating, applicable to their long-term senior unsecured New Zealand dollar obligations payable in New Zealand. For NBDTs an issuer rating was preferred as it provides a benchmark rating of NBDTs (which is not dependent on the priority of a particular issue of securities) and is also likely to be relatively easy for depositors to understand.

5 Capital requirements

Minimum capital requirements are a basic prudential requirement for banks and NBDTs. An entity’s capital comprises shareholders’ equity and accumulated earnings; it represents the owner’s funds at risk. Hence, capital provides an incentive for owners to manage the business prudently and provides a cushion to protect depositors and other creditors against unexpected losses.

Many finance companies have been inadequately capitalised relative to the risks taken. This made them vulnerable to possible failure in the face of adverse economic conditions. The following table shows an estimate of the capital ratio for four failed finance companies, measured using the NBDT capital adequacy framework discussed below, compared to their reported equity-to-assets ratio prior to their failure.

Regulations stipulating a minimum capital ratio to be included in the trust deeds of NBDTs came into force on 1 December 2010. The regulations require that NBDTs with

Table 1

<table>
<thead>
<tr>
<th>NBDT</th>
<th>Capital ratio NBDT framework % (estimate)</th>
<th>Equity/assets last accounts %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgecorp</td>
<td>2-4</td>
<td>8</td>
</tr>
<tr>
<td>Dorchester</td>
<td>2.12-4</td>
<td>11</td>
</tr>
<tr>
<td>Hanover</td>
<td>1-3</td>
<td>11</td>
</tr>
<tr>
<td>South Canterbury</td>
<td>-5.7</td>
<td>9.5</td>
</tr>
<tr>
<td>Finance</td>
<td>-5.7</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Source: Figures for Bridgecorp, Dorchester and Hanover are an RBNZ estimate made in 2008 based on data available at the time. These figures may overstate the true capital position of the entities. Data for SCF is as at 31 December 2009.

The probability of default refers to the approximate median likelihood that an investor will not receive repayment on a five-year investment on time and in full, based upon historical default rates published by rating agencies. See http://www.rbnz.govt.nz/finstbl/nbdt/requirements/3857901.html for more information on credit ratings and a list of NBDTs that have received credit ratings.

Section 157I of the Act requires that deposit takers have a credit rating provided by an approved rating agency.

Deposit Takers (Credit Ratings Minimum Threshold) Exemption Notice 2009.

Deposit Takers (Credit Ratings, Capital Ratios, and Related Party Exposures) Regulations 2010. Capital ratio regulations are promulgated under Section 157S of the Act. Section 157P allows for the setting of a minimum capital level. This is not a requirement at present.

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a credit rating hold a minimum of 8 percent of capital to total risk-weighted exposures and an NBDT without a credit rating hold a minimum of 10 percent. Trustees may require that a higher capital ratio be set in the trust deed, should they judge the position of the NBDT to warrant additional capital. This requirement is similar to banks, which are required to hold a minimum of 8% total capital to total risk-weighted exposures.

**Capital adequacy framework**

The NBDT capital adequacy framework determines how to compute an NBDT’s capital ratio. It is largely based on the banking regime’s capital adequacy framework, which itself is based on “Basel II” requirements. For the NBDT sector, adjustments were made where necessary to take account of different characteristics in the NBDT sector compared to the banking sector.

The essential elements of the capital adequacy framework are the calculation of:

- capital;
- total risk-weighted exposures.

The framework defines what types of capital instruments can be included in gross capital. Capital is then calculated as the difference between gross capital and required deductions.

We use the term ‘total risk-weighted’ exposures to refer to the sum of the risk-weighted amount for credit risk and the aggregate amount for market risk and operational risk. Credit risk is the risk of loss to an NBDT arising from a counterparty defaulting on or being unable to meet its obligations. This is the main component of risk exposures. Market risk measures the level of risk an NBDT faces from changes in interest rates, exchange rates and equity prices. Operational risk refers to risks arising from the running of the business, such as fraud and legal risk.

The capital ratio is calculated as the percentage of the NBDT’s capital to total risk-weighted exposures.
If the NBDT is part of a borrowing group (comprising the deposit taker and all its guaranteeing subsidiaries), the capital ratio must be calculated on a consolidated basis. Below, we provide more detail on the calculation of the capital ratio.

Capital

The banking regime allows two types of capital for regulatory purposes: tier 1 and tier 2. Tier 1 capital represents a permanent and unrestricted commitment of funds with the ability to absorb losses without the need for the entity to cease trading. Tier 2 capital has some of the attributes of tier 1 capital but is restricted in its ability to absorb losses other than in a winding up. Tier 2 capital may, for example, have a stated maturity date that limits the life of the instrument.

In addition to being required to hold a minimum ratio of total capital to total risk-weighted exposures of 8 percent, banks are required to hold a minimum ratio of 4 percent of risk-weighted tier 1 capital to total risk exposures.

For the NBDT sector, only tier 1 capital is permitted for capital adequacy purposes. The main reasons for this are: very few NBDTs have tier 2 capital instruments; tier 1 capital is available to absorb losses without requiring the entity to cease trading; a single-tier regime is simpler to understand and administer than a multi-tier regime; and, significantly, the international regulatory community is moving towards greater emphasis on tier 1 capital in the banking regime.

Under the NBDT regime, gross capital consists of:

- issued and fully paid-up ordinary shares;
- fully paid-up perpetual non-cumulative preference shares;¹¹
- retained earnings and reserves; and
- minority interests.

A number of deductions are then made from gross capital to arrive at the measure of capital used for the purposes of calculating the capital ratio. These deductions include items such as goodwill, intangible assets and deferred tax benefits.¹² The deductions ensure that what is counted as capital is truly available to absorb unanticipated losses in the event of financial distress.

Total risk exposures

NBDTs are required to hold capital against credit, market and operational risk.

Credit risk

As with banks, the amount of capital an NBDT is required to hold against credit risk depends on the riskiness of the NBDT’s assets. To make capital requirements risk sensitive, credit risk is calculated by multiplying the value of assets in defined assets classes by risk weights. Risk-weighted assets are then summed up to calculate ‘risk-weighted credit exposures’.

The NBDT capital adequacy framework recognises a number of asset classes including: cash; claims on the Crown or Reserve Bank; claims on other New Zealand-registered banks; residential mortgages; property development loans; loans secured over machinery; personal loans and equity investments. Several of these categories are further divided into sub-classes based on certain risk characteristics. For example, mortgages are further categorised in terms of the ranking of the security and the loan-to-value ratio (LVR).

The risk weight applying to a particular asset indicates the degree of risk associated with that asset. For example, cash carries a risk weight of 0 percent; first ranking residential mortgages with an LVR of between 80-90 percent carry a risk weight of 100 percent; second or subsequent ranking property development loans carry a risk weight of 300 percent.¹³

¹¹ Non-cumulative preference shares can only be included in capital if they meet certain criteria prescribed in clause 10(4) of the regulations, such as that the payments of dividends must be able to be withheld and the shares are not redeemable at the option of the holder. Further, under clause 10(5) non-cumulative preference shares without full voting rights may not be more than 25 percent of capital if the NBDT is not a qualifying mutual, and 50 percent of capital, if it is a qualifying mutual.

¹² Clause 10(3) of the Deposit Takers (Credit Ratings, Capital Ratios, and Related Party Exposures) Regulations 2010 sets out the full list of deductions that must be made.

¹³ The risk-weights are included in the Schedule to the Deposit Takers (Credit Ratios, Credit Rating and Related Party Exposures) Regulations 2010.
Banks also calculate risk-weighted credit exposures by summing up risk-weighted assets. Where differences between the NBDT and banking sector are unimportant, the risk weights for NBDTs are the same as for banks (e.g., cash carries a weight of 0 percent in both regimes). However, for a number of classes of exposures, different risk weights have been prescribed for NBDTs to better reflect particular characteristics in this sector. The calculation of risk weights is discussed in more detail in box 2 with regard to an example of calculating the risk weights for residential housing.

**Market and operational risk**

The amount of capital required to cover market and operational risks for NBDTs is calculated by multiplying the average of the book value of total assets and risk-weighted credit exposures by a scalar, $s$:

\[
\text{Required capital} = \frac{\text{total assets} + \text{credit exposures}}{2} \times s
\]

An average of total assets and risk-weighted credit exposures is used, as both these measures are likely to be correlated with particular measures of market or operational risk. The scalar is derived from registered banks’ operational and market risk figures but adjusted upward to reflect the fact that operational risk is generally higher for smaller institutions.

In the banking regime, operational risk capital is either calculated as a scalar of a moving average of both balance sheet and income statement items, or may be based on a bank’s internal model where Reserve Bank approval has been obtained. Market risk capital is calculated using the market risk exposures methodology. These methodologies are complex and were not considered appropriate for the NBDT sector.

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**Box 2**

**Calculating risk weights for residential housing**

The approach to the calculation of risk weights for the NBDT capital adequacy framework is based on the approach used for banks. For banks, however, risk weights are derived from the Basel II standardised model, or alternatively from the internal models approach, provided that the bank meets certain criteria and has secured the Reserve Bank’s approval. Under the standardised model, risk weights for asset categories are prescribed. Under the internal models approach, banks may use their own models to generate input for calculating risk weights, subject to the approval of their models by the Reserve Bank.

Although a similar approach to calculation of risk weights as in the standardised approach for banks was applied in the NBDT framework, the resulting risk-weights are different for a number of asset classes. This is because the calculation of risk weights takes account of a number of differences between banks and NBDTs, such as the higher level of risk in NBDTs’ portfolios due to a lower level of diversification. The NBDT risk weights were also calculated using more up-to-date data.

The risk weights for NBDT residential housing loans used the housing risk weights from the bank standardised approach as the starting point. These risk weights were then amended to reflect the characteristics of the NBDT sector by drawing on outputs generated by the Reserve Bank’s housing lending risk model. This model simulates various scenarios and computes, in each of these scenarios, factors such as probabilities of losses and defaults for a mortgage portfolio. The inputs used to calibrate the NBDT framework were the same as for banks, with the exception of volatility in housing prices, which was increased to reflect that NBDTs are typically more exposed to regional housing lending portfolios and are hence more vulnerable to regional house price volatilities. These differences, and the updating of inputs used in the Bank’s model, led to higher risk weights in the NBDT framework compared with the standardised banking framework for mortgages with an LVR of over 80 percent. The higher risk-weight also reflects that there are some circumstances where banks are required to hold capital for housing loans where NBDTs are not (e.g., housing loans in default).
6 Related party exposures

Related party exposures can be problematic because relationships with related parties can be abused. For example, related parties may be accorded preferential treatment or may not be subject to as rigorous credit checks as would be the case for non-related parties.

A number of finance companies that failed over recent years had high levels of related party exposures.

A number of the finance companies that failed over recent years had high levels of related party exposures. For example, some finance companies extended loans to companies or projects promoted by a director of a company in the same borrowing group as the finance company. In other cases, loans were extended to a related party of the finance company's parent entity and may even have been guaranteed by the parent. Analysis of related party exposures was difficult due to the absence of uniform standards and definitions to measure related party exposures. Figure 4 shows the percentage of related party exposure to paid up capital for building societies, credit unions and finance companies.

Regulations on related party exposures came into force on 1 December 2010. The regulations provide for a maximum limit on aggregate related party exposures of no more than 15% of the capital of the NBDT, or if it is part of a borrowing group, relative to the capital of that borrowing group.

Figure 4
Related party loans to paid up capital (%)

Registered banks are also subject to limitations on related party exposures. Similar to NBDTs, credit exposures to a non-bank connected person are not to exceed 15 percent of the banking group's tier 1 capital. For aggregate credit exposures (non-bank and bank connected entities), banks are subject to a ratings-contingent framework that correlates the maximum level of connected exposures to the bank's credit rating. For example a bank with a double A or above credit rating can have exposures of 75 percent of tier 1 capital, a bank with an A rating can have exposures of 40 percent of tier 1 capital.

The Act defines a related party, in relation to a NBDT. This definition has been extended by regulation. The definition covers key office holders, those with a substantial interest in the entity and other entities with significant ownership or directorship crossover. The definition is similar to that applying to banks; the main difference is the inclusion of interlocking directorships and a lower threshold for substantial interest for NBDTs.

7 Liquidity

Liquidity risk refers to the risk that either: (a) an entity cannot meet its financial obligations as they fall due; or (b) an entity can only meet its financial obligations at an elevated cost.

The policy rationale for liquidity requirements is two-fold. First, an entity that cannot raise funds to meet its financial obligations at reasonable cost may become insolvent. This could result in a loss of confidence in the sector and lead to a further withdrawal of funding for the remaining entities. Second, it is important that investors have good information on entities’ liquidity management so that they can make quality investment decisions.

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14 Deposit Takers (Credit Ratings, Capital Ratios, and Related Party Exposures) Regulations 2010.


16 Section 157B of the Act and Clause 4 of the Deposit Takers (Credit Ratings, Capital Ratios, and Related Party Exposures) Regulations 2010.

17 See the annex for more detail on the definition of ‘related party’.
Within the NBDT sector, liquidity management practices are varied. Credit unions and building societies provide bank like transaction services to their clients and are hence funded mainly from on-call funds or funds at short-term maturities. These institutions generally hold high levels of liquid assets to manage the risk of excessive withdrawal of funds. Finance companies have been used as longer-term savings vehicles for depositors and hence tend to have a greater proportion of funding at maturities of greater than one year. Their liquidity management strategy is to try and match the maturities of funding to that of lending. It is important that any requirements relating to liquidity are sufficiently flexible to allow NBDTs to manage liquidity in a way appropriate to their business type.

Figure 5
Maturity profile of $NZ funding within the NBDT sector as at 31 October 2009

Source Reserve Bank SSR

From the onset of the recent finance company failures and subsequent diminishing investor confidence, the ability of finance companies to raise new funding was limited. Their ability to meet liquidity requirements was predominately dependent on the successful repayment of their loan book assets. During this period, finance companies within the consumer financing sector have shown some success in meeting their financial obligations. However, finance companies within the property financing sector have been particularly vulnerable to liquidity shortfalls as their loan book assets have proven to be highly illiquid in a stressed market. Savings institutions have continued to enjoy high levels of reinvestment and have hence been able to manage their liquidity positions.

Regulations that came into force on 1 December 2010 require that trustees and NBDTs agree appropriate quantitative liquidity requirements to be included in trust deeds. In practice, this allows requirements to be tailored to the business model of the NBDT, provides the trustee with powers to monitor and enforce those requirements; and provides investors with information to assess different NBDTs. Many, but not all, trust deeds already contain some form of liquidity requirements. The Reserve Bank has also issued non-binding guidelines to assist the sector to develop appropriate requirements and therefore fulfill the obligations in the regulations. These guidelines set out matters such as the measurement of liquidity risk, assets that may be used in calculating quantitative requirements and a stress testing methodology. In addition, as discussed, NBDTS must address liquidity management in their risk management plans.

In contrast to the approach taken to NBDTs, liquidity requirements in the banking regime are more prescriptive, requiring that large locally incorporated banks meet a minimum standard. This regime has two main components. Large locally incorporated registered banks are required to maintain funding from stable sources, such as retail deposits or longer-term wholesale funding, at a minimum level (called the core funding ratio). The current requirement is that 65 percent of the bank’s funding is from stable sources. It is intended that the core funding ratio be increased in steps to 75 percent over time. Locally incorporated registered banks must also hold sufficient levels of liquid assets against short-term liabilities, calculated on both a weekly and monthly basis (the one-week and one-month mismatch ratio).

8 Governance

It is important that the directors of an NBDT act in the best interests of the NBDT. This provides a level of assurance to security holders that their interests will not be prejudiced in favour of a related entity or individual. Independent directors are considered the cornerstone of best practice

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18 Deposit Takers (Liquidity Requirements) Regulations 2010. These regulations are promulgated under section 157Z of the Act.
corporate governance, as they are better able to provide impartial advice and direction to the company, particularly in dealings with related parties.

From 1 December 2010, NBDTs that are companies or building societies must have at least two independent directors and a chairperson who is not an employee of either the NBDT or a related party. In addition, NBDTs that are subsidiaries are prohibited from including in their constitutions provisions that would allow their directors to act other than in the interests of the NBDT. These provisions apply to locally incorporated registered banks.

9 Conclusion

A strong non-bank sector is an important part of a sound and efficient financial system, particularly given the role the sector plays in financing activities that banks have not traditionally been involved with.

The NBDT sector has been through a period of major change over recent years. Many finance companies have failed or otherwise exited the market, with finance companies exposed to property development suffering a particularly high rate of failure. Whilst economic conditions have been difficult, many of the finance companies that failed had poor risk management and lending practices, inadequate capitalisation high levels of related party exposures. Savings institutions have generally had more conservative business models and have not suffered similar failures as in the finance company sector.

The NBDT sector’s exposure to the property development sector is likely to remain greatly reduced, as the model of retail funding for high-risk exposures has proven to be unsustainable. The funding of viable projects in the property development sector will require new funding models better suited to the financing of higher-risk projects. For example, a number of private equity-based funding vehicles have been launched over recent months with the intention of financing both new and existing property development.

The new regulatory regime for NBDTs, administered by the Reserve Bank, addresses many of these weaknesses in the NBDT sector. The regime is aimed at promoting the maintenance of a sound and efficient financial system. The Reserve Bank has made substantial progress in implementing this new regime. The most significant requirements to date are the capital adequacy requirement, restrictions on related party exposures and the requirement for NBDTs to have a credit rating. NBDTs are also required to meet good practice corporate governance standards, explicitly agree to a quantitative liquidity target with their trustee and formulate and abide by a risk management plan. New legislation is expected to come into force in 2011 providing requirements for licensing and changes in ownership, fit and proper person standards and powers of intervention for the Reserve Bank.

The regime for NBDTs is similar to that for banks. However, the requirements have been tailored to be fit for purpose for the NBDT sector. This approach sets minimum prudential standards for NBDTs whilst recognising the importance of having a diverse NBDT sector that provides niche services to complement banks.

These provisions are provided in section 157L of the Act.
## Annex

### Comparison of requirement for banks and NBDTs

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<th>Policy</th>
<th>Banks</th>
<th>NBDTs</th>
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<tbody>
<tr>
<td><strong>Credit ratings</strong></td>
<td>Banks must maintain a rating for their long-term senior unsecured New Zealand dollar obligations payable in New Zealand</td>
<td>NBDTs must maintain a New Zealand dollar, long-term, issuer rating</td>
</tr>
<tr>
<td><strong>Capital requirements</strong></td>
<td>Total capital must not be less than 8% of total risk-weighted exposures</td>
<td>Tier 1 capital must not be less than 8% of total risk-weighted exposures for NBDTs with credit rating or 10% of total risk-weighted exposures for NBDTs without credit rating</td>
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<td></td>
<td>Tier 1 capital must not be less than 4% of total risk-weighted exposures</td>
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<td></td>
<td>Total capital of the banking group must not be less than $30 million</td>
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<tr>
<td><strong>Deductions</strong></td>
<td>Deductions for assets of little value in distress of bank or for equity-like assets</td>
<td>Deductions similar to banking regime but tailored to NBDT business</td>
</tr>
<tr>
<td><strong>Exposure types</strong></td>
<td>Credit, market and operational risk</td>
<td>Credit, market and operational risk</td>
</tr>
<tr>
<td><strong>Credit risk</strong></td>
<td>Assets risk-weighted to calculate risk-weighted credit exposures</td>
<td>Assets risk-weighted to calculate risk-weighted credit exposures</td>
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<tr>
<td></td>
<td>Risk weights based on either Basel II standardised model or advanced bank internal model</td>
<td>Risk weights set by RBNZ based on characteristics of NBDT sector</td>
</tr>
<tr>
<td><strong>Market risk</strong></td>
<td>RBNZ market risk model</td>
<td>Scalar applied to average of total assets and risk-weighted assets</td>
</tr>
<tr>
<td><strong>Operational risk</strong></td>
<td>Scalar applied to total assets and income or banks may calculate based on internal models</td>
<td>Scalar applied to average of total assets and risk-weighted assets</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>Large locally incorporated banks must maintain, for the end of each business day:</td>
<td>NBDTs and trustees are required to ensure that trust deeds include quantitative liquidity requirements</td>
</tr>
<tr>
<td></td>
<td>(a) A one-week mismatch ratio of ≥ 0%;</td>
<td>Guidelines are provided on how to determine these requirements</td>
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<td>(b) One-month mismatch ratio of ≥ 0%;</td>
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<tr>
<td></td>
<td>(c) One-year core funding ratio of ≥ 65% (expected to be raised to 75% over time).</td>
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<tr>
<td>Policy</td>
<td>Banks</td>
<td>NBDTs</td>
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<tr>
<td><strong>Related party exposures</strong></td>
<td>Credit exposures to non-bank connected persons shall not exceed 15% of the banking group’s tier 1 capital. Aggregate allowable credit exposures of the banking group to all connected persons depends on the rating of the bank.</td>
<td>Aggregate exposures to related parties must not exceed 15% of the capital of the borrowing group.</td>
</tr>
<tr>
<td><strong>Definition of related party</strong></td>
<td>Owners: a person holding a substantial direct or indirect interest in the registered bank. Sister entities: an entity in which the owner has a substantial interest; Directors of the registered bank. Substantial interest means holding 20% or more of: • issued securities; • dividend entitlements; • voting rights; • control over composition of governing body.</td>
<td>Owners: a person holding a substantial direct or indirect interest in a member of the NBDT group. Sister entities: an entity in which the owner has a substantial interest; Subsidiary/held entities: a (non-guaranteeing) subsidiary or an entity in which a NBDT has a substantial interest. Directors and senior office holders of NBDT group members and their relatives. Interlocking directorships: entities with 40% commonality in governing body. Substantial interest means holding 10% or more of: • ordinary shares; • control of the company; • voting rights; or • control &gt;25% of composition of governing body.</td>
</tr>
<tr>
<td><strong>Credit exposure</strong></td>
<td>Maximum loss incurred if the related party fails to meet its obligations.</td>
<td>Maximum loss incurred if the related party fails to meet its obligations.</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td>Locally incorporated registered banks must meet the following requirements: • have at least 2 independent directors; • the chairperson of the board must not be an employee of the bank; • the bank’s constitution must not allow a director to act other than in the interests of the bank.</td>
<td>NBDTs must meet the following requirements: • have at least 2 independent directors; • the chairperson of the board must not be an employee of the bank; • subsidiary NBDTs’ constitution must not allow a director to act other than in the interests of the NBDT.</td>
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References
Bringing financial stability legislation to the insurance industry – the Insurance (Prudential Supervision) Act 2010

Richard Dean

Insurers face a number of significant areas of risk in the operation of an insurance business. As well as pure insurance risk, there are credit risk, investment (or market) risk, liquidity risk and operational risks to consider. Financial weakness or failure of an insurer can have significant impacts on large numbers of policyholders of all descriptions. In order to properly protect policyholder interest, it is therefore clear that the financial strength of the insurance industry should be subject to appropriate prudential regulation.

Until the enactment of the Insurance (Prudential Supervision) Act 2010 (the Act) in September, there had been no previous comprehensive prudential regulatory regime covering the activities of insurers carrying on insurance business in New Zealand. Now the industry is subject to a world-class regulatory model administered by the Reserve Bank.

This article explores the reasons behind the introduction of the new legislation, its objectives and the Reserve Bank's intended approach in achieving these.

1 Introduction

Insurance is an important (but not systemic) component of the financial services sector in New Zealand. The protection provided by insurance is a significant element in the financial security of individuals and companies in New Zealand, as is the case worldwide, and the lack of insurance through the failure of an insurer could have significant impact on those who are directly or indirectly affected. Whilst the failure of an individual insurer may not have the same systemic importance in New Zealand as the failure of one of New Zealand's major banks, independent failures within the insurance industry would certainly have a degree of impact on the economy's security. Accordingly, it is important that the New Zealand insurance industry is financially stable and soundly regulated, and, equally importantly, is seen to be so by external observers.

For many years, the New Zealand insurance industry has carried something of a “wild west” reputation, at least as viewed from overseas. The country had one of the least regulated insurance markets in the world and, despite a reasonably effective self-regulatory approach taken by insurers, New Zealand remained firmly out of line with established international expectations of insurance regulation. All our relevant trading partners have well-established and strong regulatory models covering the activities of insurers; for example the Australian Prudential Regulation Authority (APRA) regulates insurance in Australia, the Financial Services Authority (FSA) in the UK, the Office of the Superintendent of Financial Institutions (OSFI) in Canada, the Monetary Authority of Singapore (MAS) in Singapore, and there are many state regulatory models in place across the US.

Government acknowledged this regulatory shortfall early in the decade and, in 2003 and 2004, the New Zealand Law Commission produced reports on life insurance, including recommendations regarding an overhaul of existing outdated legislation and the establishment of a prudential regulator for the New Zealand insurance sector; ie, a watchdog over the financial stability of insurers carrying on insurance business in New Zealand.

Following this report, and as part of its ongoing “Review of Regulatory Frameworks”, the government announced a review of the Regulation of Non-Bank Financial Products and Providers (RFPP) in 2005, with the intention of ultimately
developing an effective and consistent regulatory framework and promoting confidence and participation in sound and efficient financial markets. This review included the insurance sector. A rising from the RFPP was the government decision to appoint the Reserve Bank as the prudential regulator and supervisor for insurers.

2 Designing a new regulatory regime
A strong Reserve Bank understanding of the New Zealand insurance industry was a critical factor in the successful design of an effective and appropriate regulatory model for insurers carrying on insurance business in New Zealand. New Zealand’s population of just over 4 million people is served by a diverse insurance industry that currently comprises approximately 160 registered entities that have paid their statutory deposits as required by the Insurance Companies Deposits Act 1953.3

Insurers are split approximately 75 percent non-life (including medical insurers) and 25 percent life insurers. There are a large number of small companies and a smaller number of large companies – at least large by New Zealand standards. (By worldwide standards all insurers operating in New Zealand are small, and the total New Zealand insurance market is tiny when viewed in a worldwide context). There are a large number of companies that are sourced offshore, some of which exist in New Zealand as locally incorporated subsidiaries and some as branches of overseas insurers. There are also a number of indigenous insurers. There are reinsurers and captive insurers. In summary, the market is small, comparatively well developed, diverse – and (until now) virtually unregulated from a prudential perspective.

The creation of a new regulatory model, to apply to an industry that has never been subject to such regulation, is not a task that is achieved in a vacuum. The Reserve Bank undertook an extensive review of existing legislation (see section 3 below), relevant precedent regulatory models from overseas, and the model Insurance Core Principles published by the International Association of Insurance Supervisors (IAIS). The Bank had significant regard to these references which continued to serve as a guide throughout the period of preparation of the legislation. In addition, there was proactive and extensive consultation with stakeholders from within the industry as well as related support professions.

The requirement was to design a regulatory model that:
- would promote the maintenance of a sound and efficient insurance sector and promote confidence in the sector;
- would achieve this, where possible, in a light-handed manner;
- would bring New Zealand into general alignment with established international standards of insurance regulation;
- would recognise the realities and idiosyncrasies of the New Zealand market and maintain the general balance of the market, including maintaining the interest of overseas support; and
- would not unduly restrict the industry from carrying on its business.

3 Existing legislation
Existing legislation that impacts the insurance sector, and is being repealed wholly or in part and replaced by the new Act, is as follows:
- the Life Insurance Act 1908
  - which provides for rudimentary reporting requirements only;
- the Mutual Insurance Act 1955
  - which is no longer applicable in New Zealand;
- the Insurance Companies Deposits Act 1953
  - which requires insurers to maintain a statutory deposit of up to $500,000 NZ with the Public Trustee; and
- The Insurance Companies (Ratings and Inspections Act) 1994

See Ministry of Economic Development (2008) for a list of insurers with a deposit listed at the Public Trust.
which requires property and/or natural disaster insurers to obtain and publicise a financial strength rating from a rating agency

4 History of insurer failure in New Zealand

There have been only a small number of insurer failures in New Zealand, all of comparatively minor industry and public impact, including:

- Maoriland Life (liquidated 1952);
- Standard Insurance Company (1961);
- Guarantee Mutual Life (wound up 1980);
- Superannuation Mutual and Tasman Mutual (liquidated 1989);
- Capital Life (1989); and
- ACL Life Insurance (placed under judicial management 1989).

However, the historical infrequency of failure is, of itself, no guarantee against future failures. The intentions of the new legislation are:

- firstly, to ensure that companies are in a position of financial strength that renders failure unlikely (without going as far as to provide a guarantee against failure); and
- secondly (but also importantly) to facilitate the orderly resolution of distress management situations that may arise, whether by way of directed recovery or by facilitation of an orderly market exit of the distressed insurer.

It is expected that the great majority of supervisory effort will be applied in a 'business as usual' focus on the first intention, with distress management activity being required only infrequently.

5 The development of the legislation, and support along the way

A draft Insurance (Prudential Supervision) Bill was released to stakeholders for consultation in mid-2009. The finalised Bill was given its first reading in Parliament in December 2009. During its six-month period at Finance and Expenditure Committee, the Bill was released for public comment, generating 61 submissions in response. Following its second reading in July 2010, and committee stages and third reading in August, it received the Royal Assent on 7 September 2010 and became the Insurance (Prudential Supervision) Act 2010.

The Bill received unanimous cross-party support at all stages of its progress through Parliament. In addition, the insurance industry has been generally supportive through the development phase of the legislation. Broader stakeholder engagement has also been strong and a range of constructive inputs has significantly informed the final form of the legislation.

6 The key features of the legislation

The Act focuses only on prudential regulation – it is not focused on market conduct issues. Regulation of market conduct matters is the subject of other legislation, currently administered mainly by the Ministry of Economic Development and Securities Commission, although much of this responsibility is expected to pass to the (about to be established) Financial Markets Authority.

a. The Reserve Bank's functions under the Act are to:

- issue licences to qualifying insurers;
- undertake prudential supervision of licensed insurers;
- take appropriate action in relation to insurers that have failed, are failing or are likely to fail to comply with the requirements of the Act; and
- carry out other functions as required by the Act and regulations.
b. Licensing, and scope of the Act:
The Act requires that all persons carrying on insurance business in New Zealand must be licensed, and it is an offence for an unlicensed person to carry on insurance business in New Zealand, or to hold itself out as a licensed insurer. The definition of “carrying on business in New Zealand” is subject to certain exclusions, including Crown or public entities and incorporated societies that provide insurance only as an incidental service within a broader primary purpose, and the Act enables the Reserve Bank to declare certain persons not to be carrying on insurance business in certain defined circumstances.

The definition of “carrying on insurance in New Zealand” under the Act is tied to the definition of “contract of insurance”. In turn, the definition of “contract of insurance” is subject to a number of exclusions, to minimise the unintended capture of concepts that are not, in substance, insurance for the purposes of the Act. Examples of this include derivative transactions, financial guarantees, product or service warranties, and Kiwisaver benefits.

The Act does not license insurers that do not carry on insurance business in New Zealand. Therefore, overseas or New Zealand insurers that do not offer insurance in New Zealand are not eligible for licensing under the Act. However, the Act does not prevent New Zealand-based residents and businesses from seeking insurance outside New Zealand, nor does it prevent licensed New Zealand insurers that carry on business in New Zealand from offering insurance in other countries. Table 1 shows the requirements an insurer must comply with to be entitled to a licence.

c. Prudential regulation of insurers includes:

* **Solvency standards (separate standards for life insurers, non-life insurers and captive insurers)**

Key components in assessing the financial stability of an insurer are solvency, capital adequacy and liquidity. Solvency is a measure of whether an insurer has adequate assets to cover its liabilities. Capital adequacy is a measure of whether or not an insurer has adequate capital backing to support the assessed risks to which the insurer is exposed. These risks include insurance risks as well as investment risk, operational risk, credit risk, liquidity risk and other risks that may be specific to the insurer. Liquidity is a measure of the insurer’s ability to meet its current day-to-day financial obligations. For an insurer, this usually means having enough cash readily available to pay current and near-term claims.

The nature of solvency, capital adequacy and liquidity considerations varies between different categories of insurers. The fact that life insurance liabilities tend to be longer term than those of non-life insurance gives rise to different capital and liquidity requirements. For example, claims on life insurance are less frequent and tend to occur much further out into the future than domestic contents or motor-vehicle claims which tend to occur at greater frequency and over a shorter timeframe. In addition, captive insurers, as defined by the Act, which are insurers that are wholly owned by a non-insurer parent company and that insure only the risks of the non-insurer parent, present different capital and liquidity considerations due to the internal financial structure within the parent company.

The Act allows for the development of as many standards as may be required to cover the full range of insurer categories in an appropriate manner. There are separate standards currently in preparation for life insurance, non-life insurance and captive non-life insurance. Others may be prepared as they become necessary.

Insurers are required to disclose their solvency position in their annual financial statements and on their website (if applicable). In addition, insurers must constantly monitor their solvency position and report to the Reserve Bank on any current or future likelihood of breaching required solvency standards.

* **Financial strength ratings requirement**

Financial strength ratings of insurers are provided by specialist independent rating agencies, and assess the ability of insurers to pay the claims for which they are liable. Ratings have been a legislated requirement in New Zealand on the majority of non-life insurers since 1994 under the Insurance Companies (Ratings and Inspections) Act 1994. The new Act extends the rating requirement to all insurers, with only very limited exceptions (e.g., captive insurers). Financial strength ratings,
<table>
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<tr>
<th>Licensing requirements for each insurer</th>
<th>Rationale</th>
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<tr>
<td>Must hold a financial strength rating from an approved rating agency</td>
<td>Ratings are a useful independent opinion of the financial strength of an insurer which can assist policyholders and prospective policy holders to assess the risks associated with particular insurers</td>
</tr>
<tr>
<td>Has the ability to carry on its business in a prudent manner</td>
<td>Includes considerations of appropriate resources and internal controls, nature of insurance products offered, reinsurance arrangements, non-insurance activities and related party transactions</td>
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<tr>
<td>Has the ability to comply with requirements on solvency standards, financial strength ratings, risk management, appointed actuary, financial reporting and statutory funds</td>
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</tr>
<tr>
<td>Has the ability to comply with any proposed conditions of licence</td>
<td>Given the diversity of the New Zealand market it is likely that many licences will be issued subject to conditions relating to matters specific to the insurer concerned</td>
</tr>
<tr>
<td>Holds and can maintain the required capital specified in the solvency standards</td>
<td>Adequate capital is the key component in assessing the financial stability of an insurer</td>
</tr>
<tr>
<td>Has and operates an appropriate fit and proper policy</td>
<td>Fitness and propriety of directors and officers are key determinants in assessing the governance, management and leadership of an insurer</td>
</tr>
<tr>
<td>Has and operates an appropriate risk management programme</td>
<td>Risks to the financial health of the insurer must be adequately identified and provided for</td>
</tr>
<tr>
<td>Has ownership and governance structures and financial strength appropriate to the size and nature of its business</td>
<td>The insurer must be adequately resourced, have sufficient ownership strength and be appropriately governed for the business it intends to carry on</td>
</tr>
<tr>
<td>If the insurer is an overseas insurer, has home-country legal environment and insurance regulatory requirements that meet Reserve Bank required standards</td>
<td>Certain recognition may be considered for home-country regulation of insurers from approved jurisdictions with appropriate regulatory standards</td>
</tr>
<tr>
<td>Is registered under the Financial Service Providers (Registration and Dispute Resolution) Act 2008</td>
<td>Alignment to other insurance-relevant legislation</td>
</tr>
<tr>
<td>Can comply with the Anti-Money Laundering and Countering Financing of Terrorism Act 2009 if that Act is applicable to the insurer</td>
<td>An insurer must be able to ensure that its activities do not unwittingly assist criminal or terrorist purposes</td>
</tr>
<tr>
<td>Can comply with any other prescribed requirement</td>
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which must be renewed annually, provide policyholders with an independent specialist opinion on the financial strength of an insurer, and also a useful cross-check on the Reserve Bank’s view of the financial stability of insurers.

Insurers are required to disclose their ratings to the public in a prescribed manner. Rating agencies must be approved by the Reserve Bank, and an insurer may only disclose a rating provided by an approved rating agency.

**Risk management requirements**

Another key component in the assessment of the current and likely future financial stability of an insurer is its ability to properly identify, and then effectively manage, the risks to which it is exposed. Risk in the insurance context extends well beyond the common perception of insurance risk; i.e. the risks for which the insurer offers insurance. Areas for consideration under this heading also include credit risk, investment (or market) risk, liquidity risk and operational risk. The Reserve Bank requires an insurer to demonstrate the extent of its risk awareness as well as its documented approach to the management of such risks.

The nature of risk can vary widely between categories of insurer as well as individual insurers within each category. Therefore, there is no fixed template model for risk assessment that can apply generally to all insurers. The risk approach of each insurer will be assessed individually by the Reserve Bank.

**Appointed actuary requirement, including the financial condition report**

The assessment of insurance liabilities, in addition to many other insurance-specific concepts and calculations, is the specialist territory of an actuary. The Act requires that all insurers (with very limited exceptions) must have an appointed actuary as one of their relevant officers, and the responsibilities of the appointed actuary are clearly stated in the legislation.

The involvement of an actuary in specialist areas is important in increasing public and regulatory confidence in the methodology and consistency supporting, and the accuracy of, insurers’ self-reported financial data. As the majority of insurers already contract the services of an actuary – either internally employed or an external consultant – this legislated requirement will not mean a major change for them.

**Financial reporting requirements**

To date, public disclosure of an insurer’s financial position has been limited to financial reporting required under the Financial Reporting Act 1993 or similar legislation. In addition to current annual public reporting, the Act requires insurers to provide regulatory reporting to the Reserve Bank every six months. The annual reporting requirement is more detailed than the six-monthly reporting.

By reviewing formal reporting on a six-monthly basis, as well as requiring the insurer to constantly monitor its solvency position and report to the Reserve Bank on any likely breach, the Reserve Bank will maintain a close and effective watch over the financial position of each insurer and thereby the industry as a whole.

As with all prudential data reported by insurers to the Reserve Bank, the regulatory material provided in these reports will remain confidential between the insurer and the Bank.

**Statutory fund requirement for life insurers**

Life insurance liabilities tend to be long-term in nature, and therefore the assets that cover those liabilities must be preserved to ensure adequate coverage of the liabilities right through to their settlement. However, day-to-day operational requirements of a life insurer may be much shorter-term in nature, and there is therefore the necessity to protect long-term liabilities from being undermined by supporting assets being stripped out to cover short-term requirements.

The Act requires life insurers to establish a statutory fund vehicle within their accounts. This is a means of ring-fencing all assets and liabilities relating to the life insurance business to ensure that they are only available for use in respect of the life insurance business. All life insurance revenues and appropriate asset coverage must be credited to the fund (or funds) and all liabilities must be paid from the fund. The
fund may not contain anything that does not relate to the life insurance business of the insurer.

A number of life insurers already operate a ‘life fund’ model, so the requirement under the Act for the establishment of at least one statutory fund will not mean a significant operational change. However, the legal status of the statutory fund under the legislation is enhanced and, therefore, the protection of life policyholder funds will be significantly increased.

d. Prudential supervision provisions include:
   
   * Information gathering
     The Act includes broad information-gathering powers empowering the Reserve Bank to seek and obtain information from insurers, associated persons and other persons in respect of any matters relating to the business, operation or management of the insurer. Such information must be used for the purposes of prudential supervision. This information-gathering power applies to all insurers at all times, not limited to situations of actual or suspected insurer distress. The Reserve Bank may require that information provided to it be independently reviewed for verification.
     This power enables the Reserve Bank to remain fully aware of an insurer’s position at all times, without having to wait until six-monthly formal reporting dates specified elsewhere.

   * Investigations
     If the Reserve Bank has cause to suspect that an insurer is failing to maintain solvency requirements, or is not conducting its business in a prudent manner, or is operating fraudulently or recklessly, or has failed to supply information or supplied false information (this also applies to associated persons of the insurer), or an insurer is failing to comply with any direction of the Reserve Bank, the insurer may be required to supply information either direct to the Reserve Bank or to an investigator appointed by the Reserve Bank to obtain such information.
     There are significant penalties for failure to comply with the requirements under the information gathering and investigation provisions.

e. Distress management provisions include:
   
   * Recovery plans
     If an insurer is failing to maintain solvency requirements, or fails to comply with any direction of the Reserve Bank, or its business is not being conducted in a prudent manner, the Act empowers the Reserve Bank to direct an insurer to prepare a recovery plan that must be satisfactory to the Reserve Bank. The recovery plan must set out actions and a timetable toward the achievement of a compliant position and the maintenance of that position.

   * Giving of directions to licensed insurers
     The Act gives the Reserve Bank broad direction-making powers to require an insurer to carry out, or refrain from carrying out, certain actions in the event of certain failures, transgressions or situations of breach. Directions are wide ranging, from requiring the insurer to consult with the Reserve Bank on certain issues right through to requiring the insurer to cease to carry out its business or a part thereof.
     The Reserve Bank may also issue directions to associated persons of an insurer in certain circumstances.
     There are significant penalties for failure to comply with the requirements relating to recovery plans and directions.

   * Removal, replacement or appointment of key officers
     In circumstances similar to those that give rise to the requirement for recovery plans or the giving of directions, the Act empowers the Reserve Bank to remove, replace, or appoint directors, the auditor or the appointed actuary of the insurer.

   * Reserve Bank may apply for the liquidation or voluntary administration of licensed insurers
     In cases of severe insurer distress, the Act empowers the Reserve Bank to seek the liquidation or voluntary administration of an insurer. The Reserve Bank retains a wide range of rights to participate and be represented at proceedings during the period of liquidation or voluntary administration.
Reserve Bank may request the appointment of a statutory manager to a licensed insurer

In the most severe cases of insurer distress or non-compliance, and where such issues may cause significant damage to the financial system or the economy of New Zealand, or where the insurer is acting fraudulently or recklessly, the Reserve Bank may recommend that the Minister of Finance request the Governor General to place an insurer or an associated person of the insurer into statutory management, and appoint a person as statutory manager of the insurer. The Reserve Bank powers in this respect are broadly similar to those in the Reserve Bank Act 1989 and the Corporations (Investment and Management) Act 1989.

7 Implementation programme

The Act was passed into law on 7 September 2010. Certain provisions commenced immediately upon enactment and a number of operational provisions will commence on 1 February 2011. Provisions relating to licensing requirements and the repeal or amendment of existing legislation become effective on 7 March 2012; ie, 18 months following enactment.

All insurers are now required to move through the licensing process. Full compliance with all requirements of the Act will not be possible for any insurer immediately upon enactment and, therefore, there will be a transitional path to compliance available to insurers that will last for a maximum of three years from the date of enactment. Upon application and evidence of satisfactory compliance with initial requirements, insurers will be issued with a provisional licence that will contain conditions detailing their required path to full compliance with the requirements of the Act.

All insurers must have a licence by 7 March 2012, whether this is a provisional or a full licence. All insurers must be fully compliant with the requirements of the Act, and therefore be fully licensed, by 7 September 2013. Any insurer that does not meet either of these licensing requirements by the required dates will be in breach of the Act and will be required to cease carrying on insurance business in New Zealand.

8 Format of the legislation

Formal documentation relating to this legislation will comprise:

- the Act (the primary legislation);
- regulations attaching to the Act, which have the force of law. Solvency Standards and Fit and Proper Standards (and possibly others in the future) will be deemed regulations attaching to the Act; and
- guidance notes. These do not have the force of law, but are intended to explain the Reserve Bank’s expectations behind the various legislative requirements as well as how to complete documentation relating to the administration of the Act.

The required regulations and guidance notes are currently under preparation.

9 Reserve Bank intentions and expectations

The delivery of brand new legislation into a previously unregulated sector is inevitably a complex task. Delivery of the Insurance (Prudential Supervision) Act 2010 is no exception.

The Reserve Bank has clear objectives in the delivery and implementation of the Act. In addition to the stated purpose of the legislation, which is to “promote the maintenance of a sound and efficient insurance sector and promote public confidence in the sector”, the Reserve Bank expects the following outcomes from this legislation:

- an ongoing principles-based and outcome-focused approach to regulation;
- an efficient style of prudential supervision that does not unnecessarily disrupt industry;
- an efficient transitional path toward full licensing for the industry;
- a general raising of industry standards, especially in the areas of risk management and corporate financial understanding;
- clear recognition of the obligations upon directors and
senior officers and the importance of their contributions to corporate outcomes;

- a generally raised public perception of the New Zealand insurance industry, both within New Zealand and overseas; and

- better information about the financial strength of insurers available to policyholders.

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Global currency trends through the financial crisis

Zoe Wallis, Financial Markets Department

In this article, we examine trends in the global and NZD foreign exchange (FX) markets over the recent financial crisis period from 2007 to 2010, identifying key changes in the nature of FX trading. These trends are examined using the most recent Bank for International Settlements (BIS) triennial survey as well as other data sources and market intelligence. The survey shows that, overall, the volume of global FX turnover has increased over the last three years. Demand for safe-haven currencies such as the US dollar and Japanese yen have increased through the crisis. The NZD’s share of global turnover has decreased in an environment of increased risk aversion and volatility, and investor interest in trading the NZD has waned. Demand for carry trades, particularly in NZD, has fallen in an environment of increased volatility.

1 Introduction

The recent global financial crisis commencing in 2007 has caused a significant shift in the nature of trading in FX markets. The types of FX-rate instruments traded, the volume of currency market transactions and the types of investors trading have all changed in response to the increased volatility and decreased risk appetite that has been observed over the crisis period.

This paper utilises data from the BIS Triennial FX Turnover survey, which provides comprehensive data on global turnover in the FX market, and the latest survey covers the past three years from April 2007 to April 2010, allowing for pre- and post-crisis comparison. The data is compiled from surveying 1309 individual banks and other dealers, asking questions about turnover in FX and over-the-counter (OTC) derivatives. A total of 53 central banks and monetary authorities collated the data and the results are then reported to the BIS. This survey provides an overarching view of trends in foreign exchange trading over the past three years that is particularly useful for understanding trends in currency trading across this period. The article begins by discussing some of the changing trends seen in global currency markets over the crisis period and the nature of some of the most popular trades. We then turn our attention to the impact of the crisis on trading trends in the NZD market.

The article finds that, while overall global turnover volume has continued to increase through the recent financial crisis, the increase was at a slower pace than that seen over the previous three years from 2004 to 2007. Risk appetite declined over the crisis and volatility in FX markets increased, causing currency traders to prefer relatively more liquid currencies and, overall, take a more cautious approach to trading. Turnover in the NZD as a share of global FX turnover has decreased over the crisis, driven by the decline in risk appetite and lower New Zealand interest rates. This has also seen a paring back in previously popular carry trade positions in the NZD, further reducing trading in the currency.

2 Trends in global foreign exchange markets

The financial crisis began in mid-2007 and then escalated with the collapse of Bear Sterns in May 2008 and Lehman Brothers filing for bankruptcy in September 2008. The recent crisis is commonly viewed as the worst since the Great Depression in the 1930s, and has had a major impact on financial markets. Foreign exchange markets have experienced a period of reduced market liquidity, increased volatility and an increased focus on counterparty risk.

The crisis caused investors to reassess many of the trades that were predicated on a low volatility and low risk environment and were popular over 2004-07. Safe-haven demand for currencies such as the US dollar increased as traders began to take a more cautious approach towards investing. Traders around the world reported a lack of liquidity in FX markets during the height of the crisis and there were often volatile swings in currency rates, which increased the risk of trading even further. Even though the absolute volume of currency transactions has increased and currency markets continued to become more globalised, the crisis has slowed the strong
growth in trading that was seen over 2004-07. There is now the question as to whether markets will return to the same level of risk taking as seen prior to the collapse of Lehman Brothers, or whether we will see a ‘new normal’ where markets settle at a lower level of risk taking compared to pre-crisis.

Markets started to stabilise as confidence began to recover in March 2009. By this stage, central banks had undertaken significant monetary policy easing and provided additional liquidity measures to further support markets and economies.

This period of relative calm continued more or less uninterrupted until financial markets expressed doubts about the sustainability of sovereign debt at the end of 2009 and concern escalated rapidly in early 2010. These doubts led to the European Union and the IMF forming the European Financial Stability Fund (EFSF) as a back-stop for European governments struggling to raise funding and also a separate emergency funding package for Greece. Recently, concerns over European sovereigns have re-emerged, again prompting an increased demand for safe-haven currencies such as the US dollar and Japanese yen.

Moreover, the recovery in the US appeared to stall somewhat during mid-2010 and markets were volatile as participants become nervous about growth prospects. In response to persistently elevated long-term unemployment and the risk of deflation, the Federal Reserve introduced a second round of asset purchases in early November, further easing monetary policy.

**Changes in risk sentiment and volatility**

During the lead-up to the financial crisis, there was a marked increase in the amount of FX turnover, aided by a period of low volatility and a relatively high appetite for risk. These factors reversed during the recent financial crisis when traders became increasingly risk averse and market volatility spiked higher, particularly at the end of 2008 (see figure 1). This increase in volatility in the FX market meant that sharp swings in the currency created the potential for both larger gains and losses. Traders tend to pare back the size of their positions during periods of high volatility in order to avoid the sizeable risks on the downside.

Traders also were increasingly constrained by tighter trading limits, due to the technical way risk is monitored at most financial firms. Typically, banks use a measure called ‘Value at Risk’ (VAR), which is assessed using historical data and based on probability of losses over a certain time-frame. As the historical data began to include the crisis period, the increased historical losses heightened the risk associated with most assets. This caused downwards revisions to position limits, further restraining the size of positions and level of risk traders could take. Many investors had to quickly close down positions, which caused greater volatility in markets. From the end of 2008, traders pared back positions in higher-yielding currencies (yields such as New Zealand and Australia) in a ‘flight-to-safety’. This was in stark contrast to the boom period of 2004-07 when volatility was low and traders were keen to take on additional risk. After many years of prolonged strong risk appetite, the almost simultaneous shift in market positioning exacerbated currency moves and further increased market volatility.

**Figure 1**

Deutsche Bank volatility index

Source: Bloomberg

**Counterparty risk and market liquidity**

Since the news of Bear Sterns first disclosed sizeable hedge fund losses in mid-2007, traders became somewhat more cautious over the rest of 2007, but over the start of 2008 markets were beginning to return to normal and it was not until the failure of Lehman Brothers that markets experienced a dramatic loss of confidence. Following Lehman Brothers’ bankruptcy, liquidity in financial markets fell substantially. The collapse of Lehman Brothers raised considerable
concerns about the flow-on effects to other banks and other institutions that may be vulnerable. This increased the perceived counterparty risk, and traders became much more concerned about who was holding their money on the other side of trades. As volatility and counterparty risk increased, the spread between bid and ask quotes widened and market liquidity fell as traders dealt in smaller amounts. Interestingly, the crisis period still saw an increased amount of FX turnover despite smaller trade sizes. Many market participants have attributed this to a ‘hot potato’ effect, where traders were keen to pass on any risk as quickly as possible.

This ‘hot potato’ trading is likely to have been one of the driving factors behind the increase in FX turnover despite the increased risk factors associated with trading over this period. The BIS survey shows the total amount of global currency turnover increased by 20 percent from April 2007 to April 2010, rising to an average daily turnover of US$4.0 trillion (figure 2). However, this increase is well down on the 72 percent increase that was seen between 2004 and 2007.

Figure 2
Daily average global FX turnover
(Average daily turnover for April of each reported year)

Spot FX transactions involve the simple exchange of one currency in return for another at the prevailing (spot) exchange rate at the time of the transaction. While the spot rate is agreed at the time of the transaction, the transaction will be settled (exchange of funds) in two business days under market conventions, hence they are relatively short term and the amount of counterparty risk is typically small. Spot transactions as a share of trading increased from 30 to 37 percent of the market.

FX rate swaps are one of the most commonly traded instruments and involve two transactions, one at initiation where one currency is purchased at the current spot rate and a second where the initial transaction is reversed at a specified future date at an agreed exchange rate. This trade involves a much greater level of counterparty risk, as payments are made at the end of the contract period (often three months or longer). The trade is based on interest rate differentials in different economies and is commonly used to match cash flows with the delivery of imports or exports, or by traders to take a view on relative interest rate movements.1

Over 2007 to 2010, the percentage of FX swaps declined from 52 to 44 percent. As the financial crisis started to escalate, spreads in the FX swap market widened out considerably and by more than the moves seen in spot rate spreads.2

In December 2007, the US Federal Reserve, European Central Bank (ECB) and the Swiss National Bank (SNB) agreed to establish reciprocal FX swap lines to provide the ECB and SNB with US dollars. The amounts available via these swap lines were then further extended in March 2008 and in May these lines were increased even further to a total of $50 billion for the ECB and $12 billion for the SNB. Following the collapse of Lehman Brothers in 2008, these swap lines with the ECB and SNB were more than doubled and new swap lines with many of the other major central banks, including the Reserve Bank of New Zealand (RBNZ) were introduced.3

A swap line to the RBNZ was established at the end of October 2008 for an amount of up to US$15 billion. These swap arrangements continued until expiry on 1 February

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1 See Smyth (2005) and Rosborough (2001) for further discussion of traded FX instruments.

2 See also Baba and Packer (2009).

Common types of FX transactions

Looking into the types of trades that were conducted over the crisis period, figure 3 shows there was a broad move towards shorter-term currency instruments. Shorter-term instruments typically have a lower level of associated counterparty risk and the likelihood of your counterparty collapsing is reduced the shorter the trading period.
2010, but temporary lines were later re-established with some central banks in response to shortages of US dollar funding in May 2010.

Trading of outright forward FX increased marginally over the past three years, rising from 11 to 13 percent of the share of trading activity. Outright forward FX is typically used if traders want to lock in an exchange rate at a future point in time, rather than conducting the transaction in the spot market at the time. The trade occurs in a very similar manner to a spot trade, but the settlement will occur at a set date in the future at a rate agreed upon today. The trades allow a party to lock in a known forward exchange rate and are often used by exporters to hedge their exposure to moves in the currency. As currencies fluctuated violently, forward rates helped reduced some of the volatility for imports and exporters by giving them known exchange rates for a future date; however the spreads on these instruments also widened out significantly following the collapse of Lehman Brothers.

Less frequently traded are FX options and currency swaps and the percentage share of trading in these instruments has remained relatively unchanged at around 7 percent. FX options give the holder of the contract the right, but not the obligation, to buy or sell a currency at a pre-determined rate. Currency swaps are where two parties exchange streams of interest rate payments in different currencies for a set period of time and also transfer the principal at maturity at an agreed exchange rate.

**Figure 3**

Percentage share of turnover traded in different FX instruments

Source: Bank of International Settlements Triennial Central Bank Survey 2010

**Increase in financial market correlation**

Also a striking factor of the recent financial crisis has been the high correlations between movements in a wide range of asset classes. Over the past few years, the general flight-to-safety trend has seen equity, commodity, bond and currency market movements remain highly correlated (figure 4). The movements over the crisis period have been predominantly driven by risk appetite and, when this declined, there was a broad sell-off in risky assets, largely indiscriminate of some of the underlying fundamentals for different assets.

**Figure 4**

Equity and commodity prices and the US dollar

Source: Bloomberg

**Increased trading in safe-haven currencies**

The flight-to-safety saw increased trading in currencies that were viewed as safe-haven, such as the US dollar and Japanese yen. Trading in the euro also gained through 2008 and 2009 from demand to use the currency as a safe haven and as investors looked to diversify their portfolios. This changed when European sovereign debt concerns emerged at the end of 2009.

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The US dollar has remained the most commonly traded currency by far, although across the past nine years the popularity of the US dollar (USD) has decreased slightly and the euro has increased as its popularity as an intermediary currency increases. Table 1 shows that, over the past three years, 28 percent of all trades occurred in the USD/EUR cross and almost 85 percent of all trades in a USD cross of some form (Table 1). \(^4\) Safe-haven demand and the reversal of carry trades have seen the proportion of trading in the Japanese yen increase. The share of FX transactions conducted in the NZD has fallen, while turnover in the Australian dollar has continued to increase. This may be due to the Australian dollar being used as a proxy trade, allowing investors to bet on the outlook for Asian growth (given close ties between Australian and Asian economic prospects), and also a higher level of interest rates in Australia attracting investors back into the currency as financial markets began to improve in 2009.

**Table 1**

<table>
<thead>
<tr>
<th>Currency</th>
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<th>2007</th>
<th>2010</th>
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<tr>
<td>Other</td>
<td>26.3</td>
<td>26.0</td>
<td>32.4</td>
<td>29.8</td>
</tr>
</tbody>
</table>

Source: Bank of International Settlements Triennial FX Turnover Survey

The US dollar has remained the most commonly traded currency by far, although across the past nine years the popularity of the US dollar (USD) has decreased slightly and the euro has increased as its popularity as an intermediary currency increases. Table 1 shows that, over the past three years, 28 percent of all trades occurred in the USD/EUR cross and almost 85 percent of all trades in a USD cross of some form (Table 1). \(^4\) Safe-haven demand and the reversal of carry trades have seen the proportion of trading in the Japanese yen increase. The share of FX transactions conducted in the NZD has fallen, while turnover in the Australian dollar has continued to increase. This may be due to the Australian dollar being used as a proxy trade, allowing investors to bet on the outlook for Asian growth (given close ties between Australian and Asian economic prospects), and also a higher level of interest rates in Australia attracting investors back into the currency as financial markets began to improve in 2009.

**Decline of the carry trade**

The carry trade, (where investors borrow in a low-yielding currency and use the funds to buy assets in a high yielding currency) has diminished in popularity in the environment of increased risk and uncertainty. The volatile moves in currency markets seen over the past three years have significantly reduced the appeal of the carry trade investment strategy, given the heightened risk that sharp currency moves could wipe out any interest rate gains.

Starting in August 2007, there was a large-scale unwinding of carry trade positions as investors reduced the amount of risk on their books. This initial unwind was relatively short-lived, but was later followed by a second round of deleveraging later following Lehman Brothers’ collapse in 2008 (see figure 5, which shows long positions held by Japanese margin traders). Since hedge fund trading is often leveraged, as losses started accumulating during the crisis, funds would be called upon to deliver additional cash to the broker or close out their positions. With cash hard to come by, many hedge funds had to close down large positions, exacerbating the moves in currencies and further heightening the risks of the carry trade. However, these liquidations were relatively small scale compared to those seen following the collapse of Lehman Brothers in September 2008.

**Figure 5**

Net long positions held by Japanese margin traders

![Figure 5](source)

Source: Tokyo Financial Exchange, RBNZ

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\(^4\) Because two currencies are involved in each transaction, the sum of the percentage shares for individual currencies sums to 200 percent instead of 100 percent.
Carry trade activity was also scaled back by retail investors during the crisis, as can be seen in the levels of margin trading. Margin trading is a popular form of the carry trade, often undertaken by Japanese investors, where investors put down a 'margin' with a currency broker in order to trade a leveraged position in foreign currency. During the past year, the overall level of Japanese margin positions has increased almost back to levels last seen in mid-2008, with the record low levels of interest rates in the US, accompanied by the expectation of rates remaining low for an extended period of time, attracting investors back into carry trade positions. Despite this, the level of margin trading in the NZD has remained very subdued.

3 Trends in NZD FX markets
The 2004-07 period was characterised by an increase in investor risk appetite. This saw increasing investment in the NZD as traders searched for yield and showed a strong preference for higher-yielding currencies. The carry trade was a favoured investment with offshore investors, as well as strong demand for NZD-denominated bonds. Trading in these markets subsequently declined during the crisis as increased volatility and declining New Zealand interest rates reduced the appeal of these trades.

NZD levels
In terms of levels, the NZD depreciated from the start of 2008, falling over 15 percent on a trade weighted index (TWI) basis. The NZD continued to decline until March 2009 when financial markets reached a turning point. The US dollar strengthened as global investors flocked to the safe-haven currency and US investors repatriated their assets back into their home currency. Overall, however, the NZD is at similar levels, both against the US dollar and on a TWI basis, to those seen in April 2007 when the last BIS survey was completed.

NZD turnover
Total market turnover in the NZD FX market has declined somewhat from a percentage share of around 1.9 percent of total market volume down to around 1.6 percent (see Figure 6). Overall, the level of trading in the NZD has increased marginally. A slight increase in the amount of spot transactions (see figure 7) has offset declines in the trading of other currency instruments such as forward contracts.

Figure 6
Percentage of average daily turnover in NZD

The NZD has historically been a high-yielding currency with comparatively high interest rates compared to other developed economies. In the lead-up to the financial crisis, these high returns attracted offshore investors to deposit funds in New Zealand, increasing demand for the NZD. The carry trade was particularly popular but many of these trades were exited when the crisis hit. There has been little evidence of the carry trade returning to anywhere near the same volumes as before the crisis. This was one of the factors driving the decline in turnover in the NZD.

The broad increased level of volatility in markets since the start of the crisis has also driven a broad demand for safe-haven currencies such as the US dollar and Japanese yen. The NZD has received less attention from traders since the start of the crisis, particularly as other commodity-linked countries, such as Australia, began to raise official policy interest rates, attracting investment into the Australian dollar rather than back into the NZD, where the Official Cash Rate (OCR) remained on hold for a longer period of time.

While the level of interest in trading the NZD as a percentage of global foreign exchange trades has declined, the level of
spot trading in the NZD has increased steadily since 1998 (see figure 7). The aggregate global turnover data shows that, over the past three years, the amount of spot FX transacted has continued to grow, albeit at a slower pace (figure 9). However, the overall level of derivatives traded in NZD markets has fallen in recent years, possibly related to the reduced interest in carry trades.

The exception to this has been an increase in the turnover of currency swaps, which have risen by around 40 percent. This adds to a sizeable increase of 370 percent between 2004 and 2007. The increase over 2004 to 2007 was probably due to a large-scale increase in offshore issuance of Uridashi, Eurokiwi and Kauri bonds, the proceeds of which would then have been swapped back into the local currency. Recently, issuance of these NZD offshore bonds has been very subdued.

The increase in currency swaps between 2007 and 2010 may be due to an increase in the term of bank funding as banks act to lock in longer-term financing. The cash raised in offshore markets is then likely to have been swapped back into NZDs via currency swaps. There may also be somewhat of a timing issue, as in April when the 2010 measure was taken, local banks were relatively active in trying to raise longer-term funding, more so than they may have been over 2007-2009.

The currency swap market is a very small percentage of total trading in NZDs (less than 1 percent) however. The majority of NZD trading is conducted in the FX swaps market, which involves swapping the principal amount of the trade at both the initiation and conclusion of the trade. The volume of NZD FX swaps declined by around 5 percent between 2007 and 2010 as the attractiveness of NZD trades based on interest rate differentials diminished, with interest rates in other developed economies rising above those offered in New Zealand. The preference for banks to issue longer-term funding has also seen a switch in turnover from rolling over a large volume of short-term FX swaps, moving into the currency swap market instead.

**Figure 7**

Turnover of spot transactions in NZD and turnover of currency swap market in NZD

![Figure 7](image)

NZD carry trading remains subdued

Positions in NZD/JPY started to be unwound in August 2008 and the NZD/JPY exchange rate declined over 40 percent to February 2009. Interest in the NZD as a margin trade instrument appears to have substantially dissipated; a factor that is likely adding to a lack of liquidity in the NZD market.

**Figure 8**

Net long NZD positions held by Japanese margin traders

![Figure 8](image)
Historically, New Zealand has had relatively elevated levels of interest rates even compared to other high-yielding countries such as Australia (figure 7). This attracted considerable inflows of capital in the lead-up to the financial crisis and made the carry trade very attractive. Since early 2008, New Zealand interest rates have fallen below those in Australia, a phenomenon not seen since the end of 1995. Since 2000, the interest rate spread between New Zealand and the US has also widened, reaching a peak of almost 500 basis points prior to the start of the crisis. This widening encouraged investors to buy NZDs and take advantage of the attractive rates of return offered in New Zealand.

**Liquidity in the NZD market**

During the crisis, liquidity in the New Zealand dollar market became very thin which caused a sharp widening in the quoted bid-offer spreads (see Figure 10), particularly just following the collapse of Lehman Brothers bank. While the bid-offer spread has narrowed again, the spread remains slightly elevated compared to post-crisis levels and the New Zealand dollar spread remains above those in other major currencies. In an environment of increased volatility, this may remain a disincentive for some investors trading NZD. The spread on the Australian dollar has historically always been below that of the NZD, illustrating the greater relative liquidity of the Australian dollar market.

**4 Summary and conclusions**

During the recent financial crisis, an increase in volatility and risk aversion in financial markets has prompted changes in the nature of foreign exchange market trading over the past three years. Overall, daily FX turnover has continued to increase, albeit at a slower rate than seen in previous years. During the crisis, risk appetite waned and increased volatility has seen large positions scaled back with increased demand for relatively more liquid safe-haven currencies. While the US dollar remains the most commonly traded currency, its popularity has declined in favour of the euro and Japanese yen, particularly as these markets have become more liquid and international markets have diversified. While the US dollar remains the standard transactional and intermediary currency, the euro and Japanese yen have also become increasingly popular, taking some of the US dollar’s

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share of market turnover. The NZD share of total trading turnover has declined over the past three years after rising steadily since 1998.

The popularity of the carry trade has decreased as increased volatility reduced the appeal of this strategy and the NZD has become less of a focus for international traders. It remains to be seen whether, as markets gradually return to an environment of lower volatility and increased risk appetite, the popularity of the NZD will return to pre-crisis levels.

References


Appendix
Currency mnemonics
These are the symbols for national currencies that are routinely used by FX traders:

AUD  Australian dollar
BRL  Brazilian real
CAD  Canadian dollar
CHF  Swiss franc
CZK  Czech koruna
DKK  Danish krone
EUR  Euro
GBP  Great British pound
HKD  Hong Kong dollar
IDR  Indonesian Rupiah
INR  Indian rupee
JPY  Japanese yen
KRW  Korean won
MXN  Mexican peso
NOK  Norwegian krone
NZD  New Zealand dollar
PLZ  Polish zloty
RUB  Russian rouble
SEK  Swedish krone
SGD  Singapore dollar
THB  Thai baht
TWD  Taiwanese dollar
USD  United States dollar
ZAR  South African rand
New Zealand’s current account deficit is the counterpart of a low rate of national saving relative to domestic investment. Persistent current account deficits have led to the build-up of a large net international investment position (NIIP) financed largely through foreign debt with short maturity. Dependence on foreign capital makes New Zealand vulnerable to changes in the availability and cost of external financing, although New Zealand has not added to this vulnerability by taking on currency risk. Debt maturity has lengthened over the recent past in response to market pressure and the Reserve Bank’s Prudential Liquidity Policy. Apart from New Zealand’s financial vulnerability, high debt levels threaten to weigh on economic growth by raising interest rates and crowding out private investment. A strong fiscal position in the run-up to the global crisis served to allay concerns over New Zealand’s credit worthiness, but the government’s finances have deteriorated in the wake of the crisis. It would therefore be prudent to improve the fiscal position sooner rather than later. Faster fiscal consolidation would also contribute to the required rebalancing of the economy towards higher saving and exports. This article considers New Zealand’s imbalances in a cross-country context in order to highlight sources of vulnerability.

1 Introduction

Over the past three decades, New Zealand has been running one of the largest and most persistent current account deficits relative to other advanced economies. The deficit has largely been funded using foreign borrowing. As a result, New Zealand is one of the more indebted nations in the OECD. The increase in New Zealand’s overseas debt largely reflects private borrowing, much of which has been of short maturity. This position makes New Zealand vulnerable to changes in investor sentiment and credit ratings that raise the cost of external financing or ultimately close off funding altogether. Currency risk is, however, very low, since almost all foreign currency borrowing is hedged back to local currency. The Reserve Bank can therefore provide local currency liquidity should funding risks spike unexpectedly.

New Zealand’s economy has been relatively resilient through the recent global financial crisis. This has reflected, in part, a comparatively low level of public debt. However, in the aftermath of the global crisis, the government’s finances have deteriorated. Much of the deterioration reflects a structural increase in expenditure, not merely a cyclical reduction in revenue. A worsening fiscal position could have negative implications for borrowing costs and private sector access to capital. Faster fiscal consolidation would therefore be prudent. It would also contribute to the required rebalancing of the economy.

Domestic savings and investment behaviour are important features of New Zealand’s external imbalances. The current account deficit is the counterpart of a gap between domestic saving and investment. While the investment rate is comparable to those of other OECD economies, the saving rate is comparatively low. A higher investment rate may reflect New Zealand’s growing population and desired catch-up to income per capita levels of other advanced economies. But low national saving implies a dependence on inflows of foreign capital. Over time, this foreign borrowing requirement may weigh on growth by raising interest rates.

New Zealand’s vulnerability to shocks can be reduced by gradual unwinding of its imbalances. Such rebalancing will likely require higher national saving, improved international competitiveness and fiscal consolidation. The recovery that is currently under way displays some important features of the required rebalancing, including higher household saving and debt consolidation. Over the longer term, such a rebalancing would enhance resilience and support higher and more sustainable growth.
This article considers New Zealand’s imbalances in a cross-country context in order to highlight sources of vulnerability. Section 2 compares New Zealand’s external imbalances to those faced by other advanced countries. A discussion of internal imbalances is taken up in section 3, focusing on household saving and investment behaviour and public sector borrowing and creditworthiness. Section 4 considers the rebalancing process and the adjustment that the New Zealand economy must undergo. Section 5 concludes.

2 New Zealand’s external imbalance

Large and persistent current account deficits

The current account reflects the difference between domestic saving and total investment. In an open economy, a part of domestic spending and investment can be financed from capital inflows from other countries. For developed economies, a current account deficit can be symptomatic of a lack of international competitiveness, leading to a trade deficit and need to borrow to finance consumption in excess of income.

New Zealand’s large and persistent current account deficit, however, reflects a low national saving rate relative to domestic investment. The current account deficit has, on average, largely been the product of a deficit on the investment income account – the trade balance has been in surplus for much of the last two decades. As such, the deficit is strongly related to the country’s high stock of foreign debt, low rates of return on foreign assets, and the relative attractiveness of New Zealand’s financial assets.

New Zealand’s current account deficit is large by OECD standards. Figure 1 below plots New Zealand’s external balances against those in other OECD countries. New Zealand’s current account deficit averaged over 5 percent per annum between 1980 and 2009 and over 8 percent in each year between 2005 and 2008. Australia and New Zealand have both been able to run large and persistent current account deficits over several decades without experiencing a sudden balance of payments reversal or a even a prolonged rebalancing.

Build-up of foreign liabilities

The flipside of the large current account deficit is a large offshore financing requirement. Continuous current account deficits since 1973 have therefore led to a build-up of foreign liabilities (figure 2). The country’s NIIP, which reflects the balance of total assets held offshore and total liabilities owed to foreigners, has deteriorated to around 86 percent of GDP – one of the highest levels among OECD countries (figure 3). A high level of external liabilities increases a country’s vulnerability. This is because creditors may become increasingly anxious about the possibility that the country will not be able to meet its debt service obligations, raising

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3 A country’s NIIP in a given period will equal the current account deficit recorded in the previous period plus the NIIP from the previous period, adjusted for valuation changes. Valuation changes occur because of changes in the exchange rates and prices used to measure the values of the assets and liabilities that comprise the NIIP.
borrowing costs and making the repayment of debt even more difficult. The recent experiences of Iceland, Greece, Spain, Portugal and Hungary demonstrate the vulnerability of countries with large net foreign liability positions (see figure 4).

Burgeoning current account deficits and dependence on foreign capital have been a major source of fragility for several other economies in the OECD. Greece, Hungary, Iceland, Ireland, Portugal and Poland have all seen the costs of their external borrowing rise as global risk aversion spiked during the crisis and market perceptions of public sector credit worthiness (figure 5) subsequently deteriorated.

Factors that have distinguished New Zealand and Australia include relatively strong fiscal positions prior to the crisis, very low levels of currency exposure and floating exchange rates.

Despite the vulnerabilities associated with large external imbalances, New Zealand has been able to sustain a persistent current account deficit over recent decades. One possible reason why markets have been so sanguine about New Zealand’s deficit could be that the risk of a sudden external adjustment has been quite low. A study by Edwards (2006) suggests that, while a high deficit raises the probability of an abrupt and costly external adjustment, the risk of a large adjustment nevertheless remains relatively low in New Zealand.4

Financial market confidence about New Zealand’s ability or willingness to repay its external obligations may also reflect expectations of higher future incomes and economic growth. If the deficit reflects investment in the economy, inflows of foreign capital will raise the country’s capital stock and growth potential.3 Provided that inflows are invested productively, inflows may be expected to generate sufficient additional income to service the country’s additional foreign obligations. Even though New Zealand’s growth performance over recent decades has been lower than the OECD average, research by the Treasury (Makin, Zhang and Scobie 2008) suggests that the returns to foreign capital have been sufficient to service the debts that have accompanied those inflows.

4 For a given debt level and a current account deficit of 3 percent, Edwards estimates that the probability of a 5 percent of GDP adjustment in the current account deficit is about 0.6 percent. Given a deficit of 9 percent of GDP, the probability rises to 5 percent. See for example, Makin (2005), Kim, Hall and Buckle (2006), or Munro and Sethi (2006).

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**Figure 3**
NIIP for OECD countries in 2008 (% of domestic GDP)

Source: IMF, Statistics NZ, author’s calculations.

**Figure 4**
Change in NIIP between 2000 and 2008 (% of GDP)*

* A negative change reflects a deterioration in the NIIP. Source: IMF, Statistics NZ, author’s calculations.

**Figure 5**
Sovereign credit default swap spreads for selected OECD countries*

* Credit default swaps measure the perceived riskiness of debt denominated in a given national currency. Source: Bloomberg.
Composition of New Zealand’s external balance sheet

The size and composition of the external balance sheet has important implications for the transmission of external shocks to its economy (Bedford 2008). The structure of the external balance sheet will also have an important bearing on the evolution of the country’s external position. The gross value of international assets and liabilities will be impacted by movements in the exchange rate and domestic and foreign asset prices. Changes in the returns to different classes of foreign assets and liabilities will also impact cross-border income flows.

New Zealand’s large stock of net foreign liabilities, together with a high average yield on New Zealand’s liabilities relative to those on the country’s assets, have been responsible for generating a large net deficit on the investment income account. The deficit averaged over 6 percent to GDP between 2000 and 2009. As mentioned earlier, a large deficit on the net international investment account has been a key contributor to the persistence of the current account deficit.

New Zealand’s external deficit has been financed largely through debt inflows. As a result, gross liabilities comprise mostly debt. Over 80 percent of New Zealand’s gross foreign liabilities are in the form of borrowing, while debt comprises over 90 percent of foreign liabilities on a net basis.

The vulnerabilities associated with foreign debt financing will depend on the composition, maturity structure and currency denomination of the stock of debt. New Zealand has a large stock of external debt, much of which reflects banking sector borrowing at relatively short maturities.

Gross foreign debt to GDP peaked at over 130 percent in 2008 (figure 6). Banks are responsible for more than 60 percent of total gross foreign debt, which is equivalent to around 80 percent of GDP. General government debt is a comparatively small portion of external debt. Since bottoming at the end of 2006 at 8.9 percent of GDP, gross public debt increased to about 13 percent by the first quarter of 2010. On a net basis, public external debt stands at 6.7 percent of GDP and overseas bank debt is 64 percent of GDP (figure 7).

Figure 6
New Zealand’s total gross external debt (% of GDP)

Source: Statistics NZ, author’s calculations

Figure 7
New Zealand’s net external debt (% of GDP)

Source: Statistics NZ, author’s calculations

While New Zealand is relatively highly indebted on a net basis, gross indebtedness is much lower compared to other OECD economies. In the absence of comparable figures for net external debt, cross-country debt figures are proxied using gross stocks of portfolio debt and other investment

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6 It appears that periods of strong nominal GDP growth and favourable valuation changes have helped offset some of the deterioration in New Zealand’s NIP to GDP ratio from cumulative current account deficits (as in figure 2). Offsetting valuation changes are likely to reflect the fact that New Zealand’s foreign assets are slightly skewed to equity that have delivered large valuation changes, while liabilities are skewed to debt, almost all of which is denominated in local currency or hedged. The latter implies that the liabilities side of New Zealand’s balance sheet will be less subject to revaluation effects from exchange rate changes.
assets and liabilities (after subtracting financial derivate).\textsuperscript{7} On this basis, Figure 8 shows that New Zealand’s ratio of net foreign liabilities to GDP is higher than the median level for the OECD, at over 70 percent of GDP in 2008. New Zealand’s gross position is, however, much lower in comparison to other OECD economies (depicted as the blue bars in figure 8). This means that New Zealand has not used its foreign borrowing to lend offshore.

**Low currency risk**

Debt funding implies exposure to changes in interest rates and roll-over risk as loans mature. Compared to other countries, currency risk is low in New Zealand. About half of New Zealand’s gross foreign debt is denominated in local currency. Almost all of New Zealand’s foreign currency debt (93 percent) is hedged, either using financial derivative contracts or by matching foreign currency exposures with foreign currency assets or expected foreign currency revenues.\textsuperscript{8} This virtual absence of currency mismatch insulates domestic debtors against adverse exchange rate fluctuations, reducing the impact of expectations of currency depreciation on debt and debt service costs.

**Some refinancing risk**

Reliance on short-term foreign borrowing makes a country vulnerable to funding problems in the event of changes in the availability of foreign lending. New Zealand does have a reasonably high proportion of short-term debt to total foreign borrowing, at about 40 percent (see figure 9). But by OECD standards, New Zealand’s short-term foreign indebtedness does not appear to stand out. Available data suggest that the value of New Zealand’s outstanding short-term debt securities are not high on a comparative basis, both as a percentage of GDP or as a share of total gross external debt in issue (figures 10 and 11).\textsuperscript{9} Both ratios have also dropped in recent years relative to those in peer OECD countries. Figure 12 shows that New Zealand’s foreign exchange reserves cover a relatively large portion of the country’s short-term external debt, even though the gross level of foreign reserves remains reasonably low relative to some other OECD countries.

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\textsuperscript{7} Figure 8 uses a balance of payments presentation to compare New Zealand’s external position to other countries. This approach nets out cross-border inter-company borrowing and lending and excludes financial derivatives. Note that the foreign debt figures presented in figures 6 and 7, on the other hand, are based on a balance sheet approach. In the balance sheet presentation of the external position, all forms of lending are classified as assets and all forms of borrowing are classified as liabilities. The balance sheet and balance of payments presentations provide the same NIIP, equity positions and reserve asset balances. But gross estimates of the foreign debt will differ depending on the composition of individual assets and liabilities. See Statistics New Zealand’s ‘Balance of Payments and International Investment Position’ reports, available from their website, for more detail.

\textsuperscript{8} See Statistics New Zealand’s annual hedging survey. Results are available in their ‘Balance of Payments and International Investment Position’ reports published on their website.

\textsuperscript{9} External debt should be calculated as borrowing to non-residents less financial derivatives. Because a breakdown of financial derivatives by maturity is not published, New Zealand’s short-term external debt is proxied using short-term external borrowing only, whereas gross external debt is total external borrowing less total financial derivatives. New Zealand’s short-term debt figures will therefore be slightly overstated in figures 10-14.
The banking sector remains exposed to liquidity and refinancing risk should domestic conditions deteriorate or external events cause global interest rates to spike or liquidity to dry up. Over 40 percent of New Zealand’s domestic bank lending is funded via offshore borrowing and over 50 percent of this is short term. Domestic on-lending by banks is, however, focused on longer-term advances such as mortgage loans. Housing debt owed to registered banks totals over 90 percent of household lending from banks.

Several factors offset these risks. New Zealand banks’ hedging activities largely reduce interest rate risk. Banks have tended to reduce funding costs by borrowing in foreign currency in foreign wholesale markets and then using swap contracts to convert the proceeds into New Zealand dollars. This transforms foreign short-term borrowing into local currency borrowing that is only subject to longer term repricing.\textsuperscript{10} Government guarantees and the Reserve Bank’s liquidity operations also played a key role in maintaining the supply of funding during the crisis. The introduction of the Crown wholesale guarantee scheme in November 2008 buttressed confidence in the market for New Zealand debt and helped secure bank sector funding.\textsuperscript{11} The lack of currency exposure on external debt means that the Reserve Bank can provide New Zealand dollar liquidity should local borrowers face stress in external funding markets. Access to external financing is also supported by the linkages between Australian parents and domestic banks.

In response to market pressures, domestic banks have lengthened the maturity of funding to reduce their refinancing risk. The Reserve Bank’s Prudential Liquidity Policy also underpinned this development, by requiring a larger proportion of long-term wholesale financing and retail deposits.\textsuperscript{12} Bank funding with a maturity of more than 1 year has increased from about 34 percent of total in mid-2008 to 44 percent.

\textsuperscript{10} See Craigie and Munro (2010) for more detail.
\textsuperscript{11} See Financial Stability Report November 2010.
\textsuperscript{12} At the time of writing, domestic banks’ core funding levels exceed the current minimum ratio (65 percent) as well as the level that the ratio is expected to be raised to over the next two years (75 percent). Banks’ liquid asset positions also remain well above the minimum required level.
Government guarantees and liquidity operations can transfer some private credit risk to the public sector. Banking sector stresses and interbank freezes can feed through to sovereign liquidity and solvency risk. The recent Irish experience offers an important warning about the potential impact of government bank bailouts on the solvency of the public sector.

3 Domestic imbalances

Low national saving rate

New Zealand’s external imbalances are inextricably linked to domestic imbalances. A low national saving rate relative to investment manifests as a large and persistent current account deficit. Higher levels of public and private debt make the economy vulnerable to shocks and weigh on New Zealand’s growth potential by raising interest rates and crowding out private investment. It also reduces the scope for counter-cyclical fiscal responses to shocks.

The national saving rate has fallen slightly over recent years, while the investment rate has remained largely stable. The decline in national saving has seen a widening in the gap between New Zealand’s saving and investment rates. While the investment rate has been just above the median for OECD countries (figure 13), New Zealand’s saving rate has been low by OECD standards (figure 14).

Figure 13

Gross Fixed Capital Formation (average 2000 to 2007 % of GDP)

Source: IMF.

Figure 14

Gross national saving (average 2000 to 2007 % of GDP)

Source: OECD.

A low saving rate has important implications for macro-stability and future growth prospects. Low national saving implies a dependence on inflows of foreign capital, which over time increases debt service costs. Servicing the foreign borrowing requirement may weigh on the performance of the economy if higher levels of debt lead to higher interest rates and lower capital accumulation. Figures 15 to 16 compare interest rates in OECD countries and demonstrate that New Zealand’s interest rates have been relatively high.

Figure 15

Comparative real short-term interest rates* and NIIP

Source: OECD, IMF, author’s calculations.

* Annual average nominal interest rates less average annual consumer prices.

By impairing Government’s perceived creditworthiness, a banking crisis could set off a sudden stop in capital inflows. See André (2010) for a description of plausible scenarios of a sudden adjustment, in the context of recent international experiences.

See New Zealand Treasury (2010) for a detailed discussion.
Higher interest rates could reflect higher risk premia associated with New Zealand’s external debt. Monetary policy may also increase interest rates in response to the inflationary consequences of low saving and debt-financed consumption. The latter explanation for high interest rates in New Zealand appears to be particularly applicable in the decade preceding the crisis, as it was characterised by abundant global liquidity and compression of country risk premia.

Prior to the global crisis, relatively high interest rates also tended to attract yield-seeking inflows, strengthening the currency. A strong currency has tended to reinforce the current account deficit by lowering returns to exports and lowering the cost of imported goods. Over time, this has produced a divergence between the fortunes of the traded and non-traded sectors in New Zealand, creating considerable demand for imports and reducing the economy’s capacity to expand exports and unwind the imbalances.

The economy could be burdened with substantially higher debt service costs should global investors increase the rates of return they require for lending to New Zealand residents. In the aftermath of the global financial crisis and stress in the sovereign debt markets elsewhere, global credit markets remain cautious about markets and sovereigns that appear risky.

Low household saving

Official data suggest that households in New Zealand have been dis-saving, in effect financing consumption out of accumulated saving, borrowing or increases in wealth from rising asset prices. Households displayed a high propensity to finance consumption using debt in pre-crisis years – reacting to strong growth in house prices by withdrawing housing equity. The household saving rate has trended down since 1989 and has been negative for much of the recent decade (figures 17 and 18).

Figure 16

Comparative real long-term interest rates* and NIIP

* Annual average nominal interest rates less average annual consumer prices.
Source: OECD, IMF, author’s calculations.

Figure 17

Gross saving by sector

Source: Statistics New Zealand

Figure 18

Saving rate by households in New Zealand

Source: Statistics New Zealand

Erratum: This online version uses the corrected figure.

There are measurement problems associated with household sector income and balance sheet estimates in New Zealand. These measurement issues makes accurate

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15 See Labuschagne and Vowles (2010).
16 See Briggs (2008).
17 A full set of institutional sector accounts is not currently produced in New Zealand. There is likely to be substantial under-coverage of the cross-holdings of assets and income sharing between households and businesses in New Zealand in the existing estimates. Several papers have highlighted problems with different measures of saving in New Zealand (see for example Claus and Scobie (2002), Bascaud, Cope and Ramsay (2006) or Scobie and Henderson (2009). 

comparison of New Zealand’s household saving rate with other countries difficult. Nevertheless, the official figures are the best estimates of the economy’s historical saving performance and suggest that New Zealand has the lowest household saving rate in the OECD (figure 19), albeit with the aforementioned caveat.

Figure 19
Net household saving by selected OECD countries (2009)

The current account deficit and low national saving need to be viewed against a global backdrop of historically low global long-term real interest rates. Prior to the crisis, easing borrowing constraints, associated with abundant liquidity, encouraged debt accumulation and discouraged saving in countries with open financial markets. For example, in the US, Canada, UK and Australia, self-reinforcing cycles of credit growth, asset price growth and rising indebtedness emerged during the run-up to the global crisis, as rapidly growing credit inflated asset price booms that facilitated even more credit extension. Rising housing equity collateralised growth in credit extension and higher levels of debt, weighing on disposable income despite lower interest rates. There is evidence that New Zealand’s strong consumption pre-crisis was related to a rise in household wealth.

Households are exposed to property prices
A significant portion of New Zealand households’ wealth is stored in the form of housing. The concentration of household wealth in property has meant that wealth is dependent on trends in property prices. New Zealand house prices grew very rapidly prior to the global crisis (figure 20). This contributed to a considerable increase in household net wealth between 2001 and 2006, in turn enabling debt accumulation via stronger household balance sheets.

Figure 20
Nominal House Prices in selected economies

The paucity of data also prevents accurate analysis of whether the deterioration in household saving in the country prior to the crisis reflected a partial offset to rising government saving pre-crisis or ‘piercing of the corporate veil’ via offsetting changes in business saving. This problem can be addressed by analysing the saving behaviour of the private sector as a whole. On this basis, business saving (measured as a residual) has remained relatively stable, averaging 14 percent between 2000 and 2009.

Note that household saving rates may not be directly comparable. Reasons include, for example, the calculation of depreciation in estimating net saving from the gross figures, the treatment of unincorporated businesses and non-profit organisations in the national accounts or whether pension benefits and contributions are included in disposable income.

This owed, in part, to structural surpluses in oil producers and fast-growing Asian economies, as well as reserve accumulation by developing countries seeking to amass the resources required to intervene in foreign exchange markets and self-insure against ‘sudden stops’ in the availability of foreign capital.

New Zealand households’ debt-to-income ratio rose rapidly prior to the global crisis, tripling since the early 1990s. Though very high by New Zealand’s own historic standards, this ratio is not dramatically higher than in OECD economies with liberalised financial markets (Figure 21). In the run-up to the crisis, credit growth was however lower in New Zealand.

than in countries where the subsequent housing corrections have been particularly pronounced, such as Ireland and Spain (see figure 22).

**Figure 21**

**Household debt as a proportion of disposable income for selected countries**

![Graph showing household debt as a proportion of disposable income for selected countries.](source: OECD, RBNZ, RBA.)

**Figure 22**

**Credit growth and house prices in selected OECD countries**

![Graph showing credit growth and house prices in selected OECD countries.](source: OECD, IMF.)

History suggests that debt ratios may be set to decline further in the coming years, particularly in economies that experienced banking crises. A recent Bank of International Settlements paper suggests that, on average, private sector debt to GDP tends to fall by 38 percent in the wake of financial crisis.23

Homeowners in New Zealand appear to have an adequate buffer to absorb adverse shocks. Debt service costs rose in the run-up to the financial crisis as policy tightened, but subsequently declined as the policy rate was lowered and effective interest rates fell. At present, the ratio of non-performing loans remains relatively low (see Financial Stability Report November 2010). Moreover, the bulk of mortgage debt is held by higher-income households, who are more able to service their debt stocks.24

Households’ debt service capacity nevertheless remains vulnerable to shocks to income or interest rates. Any severe or persistent housing correction or tightening of lending conditions would also significantly drag on GDP growth as the deterioration of household balance sheets feeds through to confidence and consumption. By impacting the perceived credit worthiness of domestic banks and the government, weakening domestic fundamentals could lead to a larger premium for offshore funding. In this way, a reliance of foreign borrowing could amplify the impact of household sector stresses on the economy.

**A strong initial fiscal position an important risk offset**

While household saving fell significantly in the years prior to the crisis, government saving offset some of that decline. On a gross basis, government saving averaged over 5 percent of GDP between 1994 and 2009, with a return to consistent budget surplus from the mid-1990s. This allowed government to repay debt, which fell to below 30 percent of GDP at end 2006 on a gross basis. A low level of public debt and government surpluses in the run-up to the crisis meant that the Government had the fiscal space necessary to support the economy via expansive fiscal policy during the downturn. New Zealand’s government debt remains low relative to other OECD economies (figure 23).

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24 See Kida (2009).
But the strong fiscal position has reversed

In the aftermath of the crisis, the borrowing needs of most advanced economies have expanded rapidly. This is due to both the costs of fiscal stimulus, support for troubled institutions, as well as automatic stabilisers – expanding welfare payments and lower tax receipts brought on by the recession that the crisis produced. The reversal in New Zealand’s fiscal position since the recession has been significant by OECD standards (figure 24).

Figure 24
General Government cyclically-adjusted budget balances

The change in the cyclically adjusted budget balance between 2007 and 2009 was the third largest in the OECD, behind Spain and Ireland. Much of the deterioration in New Zealand’s fiscal position owes to rising spending and lower tax rates, rather than a cyclical falloff in revenue from weaker growth. Treasury forecasts, based on Government’s current fiscal strategy, show that consolidating public finances will take several years. Net public debt is projected to reach over 26 percent of GDP by 2014, from 5.8 percent in 2008. Reducing net debt to the Treasury’s target of 20 percent of GDP is projected to take until 2022.

Financial markets and ratings agencies are continually reassessing country-specific credit risk, particularly for countries seeking to finance this borrowing externally. Although New Zealand’s sovereign debt remains relatively low, the country’s overall capacity to absorb future shocks through additional borrowing will be constrained as public debt rises.

The government’s finances are also vulnerable to changes in the availability of foreign capital or, at least, higher costs of external financing. In the context of impaired credit markets, higher public borrowing requirements are also more likely to crowd out more productive investment by competing with private borrowers for available funding. Crowding out could become more severe once the economy has recovered and growth is closer to its potential. Fiscal consolidation is, therefore, important for reducing pressure on interest rates and, therefore, the exchange rate, as well as for restoring the economy’s buffers against shocks.

4 The required rebalancing

A smooth rebalancing is required to maintain macroeconomic and financial stability in New Zealand. There are four ways to stabilise and gradually reduce New Zealand’s ratio of net foreign liabilities to GDP. These include erosion of the real debt burden through higher inflation, a reduction in imports, higher exports or an improvement in the country’s growth performance. The first option – greater tolerance for inflation – would likely be costly and ineffective, since New Zealand’s debt is largely short-term and rising inflation expectations would therefore quickly translate into higher interest rates on existing and future issuances. The first option is also ruled out by the Reserve Bank’s inflation-targeting mandate and the Bank’s independence from Government.

Rebalancing the economy towards the tradeables sector would be supported by rebalancing of the global economy

See Bollard (2005).
and a more competitive currency. Global imbalances reflect recurrent current account deficits in several major industrial countries and current account surpluses in a number of Asian economies and oil exporters. A gradual global adjustment is likely to require higher saving and exports in countries with current account deficits and domestic demand-led growth and currency appreciation in surplus economies.

There are indications of some unwinding of global imbalances in the wake of the global crisis. While some of this is a cyclical adjustment to lower trade growth, there is evidence that a large part of the reduction in global imbalances reflects a rebalancing of import and export growth (Freund 2010). This would tend to be more sustainable once global trade recovers because it is a manifestation of shifts in domestic saving and investment. Longer-term global rebalancing will require that these trends become entrenched as the recovery in the global economy takes deeper root.

There are also signs of internal rebalancing. Households in New Zealand and in many countries have made efforts to increase saving and reduce indebtedness. In the short term, lower consumption and credit growth is weighing on growth. While these shifts represent a natural cyclical adjustment to the past recession, it is important that they develop into a structural change in behaviour. This will support the long-run sustainability of domestic and global growth paths.

The increase in household saving has, however, been offset by the reduction in public saving. While fiscal policy is providing an important buffer at present, fiscal retrenchment over the longer term will be necessary to ensure that national saving rises in future and that government regains the flexibility to respond to any unexpected future shocks. Improved Government saving will also be crucial in preparing for increased spending pressures associated with the ageing population.

Given the drag on growth from internal rebalancing and withdrawal of fiscal stimulus over the medium term, an external rebalancing via stronger tradeables growth would significantly reduce the risk of an abrupt and disorderly rebalancing. Global factors are, however, expected to continue supporting the New Zealand dollar. Global interest rate normalisation is unlikely over the short term, so that New Zealand financial assets are likely to remain attractive to yield-seeking investors.

5 Conclusion

New Zealand has, over the last several decades, run large and persistent current account deficits. As a result, New Zealand is one of the most indebted nations in the OECD on the basis of its net international investment position. The post-crisis world is characterised by cautious markets, studying data for signs of fundamental weakness and indications of adverse future debt dynamics.

New Zealand's high stock of foreign debt means that the country remains vulnerable to changes in the availability and cost of external financing. The country's banking institutions are exposed to refinancing risk because of their dependence on short-term, foreign wholesale funding. Bank balance sheets are also exposed to shocks to households' debt service capacity, such as higher borrowing costs, declines in house prices or income. Over time, a dependence on inflows of foreign capital may weigh on growth by raising interest rates.

Several factors, however, mitigate these risks. Foreign exchange risk is very low since New Zealand's foreign liabilities are largely denominated in local currency or hedged. As a result, the Reserve Bank can supply local currency liquidity should credit conditions deteriorate. The maturity structure of bank funding has lengthened owing to market pressure and the implementation of the Reserve Bank's Prudential Liquidity Policy, moderating roll-over risk.

The shift from debt-financed consumption to greater saving and investment is also expected to support the household sector's capacity to repay its debt. Continued rebalancing is desirable, but will face headwinds in the form of a strong currency, weak foreign demand and low global interest rates.

While a relatively favourable fiscal position differentiated New Zealand from most other OECD governments prior to the crisis, the deterioration of the fiscal balance reduces the
economy’s capacity to respond flexibly to shocks. Faster fiscal consolidation would be a prudent approach to sustaining the required rebalancing over the long term.

References


DISCUSSION PAPERS

DP2010/06
Sharing a risky cake
David Baqaee and Richard Watt
Consider an n-person bargaining problem where players bargain over the division of a cake whose size is stochastic. In such a game, the players are not only bargaining over the division of a cake, but they are also sharing risk. This paper presents the Nash bargaining solution to this problem, investigates its properties, and highlights a few special cases.

DP2010/07
Exporting and performance: market entry, expansion and destination characteristics
Richard Fabling and Lynda Sanderson
We examine the effect of export market entry on New Zealand firm performance. Our novel contribution to the literature is the treatment of export status as an incremental process, in which firms may export to one or more markets with each of these markets providing additional potential for learning to occur. Focussing on new markets provides several benefits. Since we use matching techniques to account for self-selection, controlling for firm export histories reduces the problem of selection on unobservables (such as managerial preferences) which would confound a causal interpretation. Also, most new market entry is undertaken by incumbent exporters, providing a large number of events on which to test the learning-by-exporting (LBE) hypothesis.

DP2010/08
Intertemporal choice: a Nash bargaining approach
David Baqaee
A compelling, but highly tractable, axiomatic foundation for intertemporal decision making is established and discussed. This axiomatic foundation relies on methods employed in cooperative bargaining theory. Four simple axioms imply that the intertemporal objective function is a weighted geometric average of each period’s utility function. This is in contrast to standard practice, which takes the objective function to be a weighted arithmetic average. The analysis covers both finite and infinite time.

DP2010/09
Debt dynamics and excess sensitivity of consumption to transitory wealth changes
Emmanuel De Veirman and Ashley Dunstan
We analyse the consumption-wealth relationship using a framework that accounts for transitory variation in wealth, and in a setting where transitory variation in household net worth is not dominated by boom and bust cycles in stock markets. We find that transitory variation in consumption depends positively on recent transitory changes in wealth. In addition, we find that gross asset wealth and household debt are positively related. Both findings constitute departures from standard lifecycle/permanent income hypothesis theory with complete financial markets, but can be explained by the introduction of liquidity constraints.

DP2010/10
Does the Kiwi fly when the Kangaroo jumps? The effect of Australian macroeconomic news on the New Zealand dollar
Andrew Coleman and Özer Karagedikli
We conduct an event study that examines how the New Zealand - US (NZ/US) and the Australia - US (AU/US) exchange rates responds to the release of Australian macroeconomic news including the CPI, GDP, trade balance, and monetary policy decisions. We use two different measures of the unanticipated component of the news announcements. First, we use the difference between the actual value of the data and a survey of market participants’ expectations of that data announcement. Second, we use the immediate response of the AU/US exchange rate to the news announcement. Our study has three main conclusions: 1) We show that the effects of the macro news in one country can also transmit to another country via the non-bilateral exchange rate (probably in anticipation of future spill-over effects). 2) Combined with results that show that the AU/US exchange rate responds by very little to New Zealand news, the results
suggest that the low variation in the New Zealand - Australia cross rate is because both currencies respond in a similar fashion to Australian (but not New Zealand) macroeconomic data. 3) We highlight the problems associated with the events studies in which the surprises are calculated from a market price and propose a new estimator that overcomes this problem.
NEWS RELEASES

 Reserve Bank Bulletin released

30 September 2010

The Reserve Bank today released the September 2010 issue of the Reserve Bank of New Zealand Bulletin.

Our lead article shows how yield curves can help economists understand such events as the global financial crisis. The yield curve describes the relationship between interest rates and debts with different maturities, for example the differing returns on one, two- and five-year mortgages. The article discusses yield curves for government debt, bank securities and mortgage rates.

Our second article looks at the New Zealand dollar and the impact of the global financial crisis on our currency. The article identifies three key drivers of the exchange rate: interest rate differentials, commodity prices and investors’ risk appetite.

The Reserve Bank has responsibilities under the new Anti-Money Laundering and Countering Financing of Terrorism Act from 2009. Our third article explains the regulatory and supervisory risk-based framework established by this Act and describes the Reserve Bank’s supervisory approach.

Our final article describes the Reserve Bank’s approach to managing the currency composition of its reserves portfolio. When reserves are fully hedged, foreign currency assets are matched with foreign currency liabilities, leaving little net foreign exchange rate risk. In July 2007, the Reserve Bank moved away from a fully-hedged reserve position, which made the currency composition of reserves a key decision.

Retail deposit guarantee scheme

8 October 2010

The Reserve Bank says the current Retail Deposit Guarantee Scheme, which ends on 12 October 2010, has served its purpose. Depositors will now need to take full account of the risks, returns and credit ratings associated with their deposits, Governor Alan Bollard said today.

The deposit guarantee scheme (which has been extended for a limited number of companies on tighter terms), is administered by the New Zealand Treasury and has covered all retail deposits of participating New Zealand-registered banks as well as retail deposits by eligible depositors in non-bank deposit-taking entities, including building societies, credit unions and finance companies.

Dr Bollard described the retail deposit guarantee scheme as a temporary measure designed to give assurance to New Zealand depositors, while continuing to ensure the efficient functioning of New Zealand financial markets.

The scheme was successful on both counts, he said. “It is now time to put banks and non-bank deposit takers, such as building societies, credit unions and deposit-taking finance companies, on a normal footing.

“The scheme was set up in response to exceptional circumstances, at a time of international financial market turbulence. That crisis is now well past us.”

The Reserve Bank’s focus with the retail deposit scheme was on the stability of New Zealand’s financial sector. From 1 December 2010, the Reserve Bank will oversee new regulations governing non-bank deposit takers.

Dr Bollard said banks now enjoy a strong level of public and market confidence.

He said parts of the non-bank lending sector had come through the recent period well. Other parts would continue to face adjustment.

“In the finance company sector, over the medium term, there’s an improving outlook most notably for institutions with stronger capital positions and better risk and liquidity management practices.

“Among savings institutions, comprising building societies, credit unions and the PSIS, there will likely remain a high level of confidence, supported by their sound performance through the recent downturn.

“In the absence of a government guarantee, it is vital that depositors understand the risks and the potential trade-off between risk and return. In this regard, one useful tool is an entity’s credit rating – which banks and all but the smallest NBDTs are required to hold and publicly disclose.

“The more stringent regulatory regime for deposit-taking institutions will be a further catalyst for change.”

The Reserve Bank is the prudential regulator of non-bank
deposit takers which, from 1 December 2010, will be required to have:

- Credit ratings from an approved rating agency.
- Governance arrangements designed to ensure they give proper consideration to the interests of all stakeholders.
- Risk management programmes outlining how they will identify and manage key risks, such as credit and liquidity risk.
- Minimum capital requirements included in trust deeds.
- Restrictions on a deposit taker's related party exposure.
- Liquidity provisions enabling them to withstand a plausible range of shocks.

Developments in the non-bank deposit-taking sector

8 October 2010

The Reserve Bank today announced two developments regarding non-bank deposit takers (NBDTs).

1. Consultation paper on a second NBDT Bill

The Bank today released a consultation paper seeking comment on policy proposals for a second Bill to complete the legislative framework for the Bank's regulation of the NBDT sector.

Deputy Governor Grant Spencer said these proposals would give the Bank a number of powers covering licensing, fit and proper person requirements for directors and senior office holders of NBDTs, the ability to place restrictions on changes of ownership, as well as distress and failure management.

Submissions for the consultation paper close on 5 November.

2. Implementation of liquidity regulations

The Bank also noted that new liquidity requirements for NBDTs have been gazetted.

The Deposit Takers (Liquidity Requirements) Regulations 2010 were gazetted on 7 October 2010 and will commence on 1 December 2010. These regulations require quantitative liquidity requirements to be included in trust deeds.

The Bank will shortly release guidelines on quantitative liquidity requirements. "These guidelines are intended to assist NBDTs and trustees to meet prudential liquidity requirements," Mr Spencer said.

The consultation paper and information on prudential liquidity requirements can be accessed on the Bank's website (http://www.rbnz.govt.nz/finstab/nbdt/index.html).

Reserve Bank and NZX reach agreement

11 October 2010

The Reserve Bank and NZX today announced an agreement on the provision of clearing and settlement services to New Zealand's capital markets.

The Reserve Bank and NZX run New Zealand's two principal securities settlement systems: NZClear and New Zealand Clearing Limited, respectively.

In December 2009, the Capital Markets Development Taskforce recommended that the Reserve Bank and NZX Limited work together to ensure an efficient clearing and settlement infrastructure that supports the development of capital markets in New Zealand.

Reserve Bank Deputy Governor Grant Spencer said today that, following an extensive review of alternative options, the Bank and NZX have agreed to maintain separate competing systems but with full interoperability between them.

The agreement is formalised in a Memorandum of Understanding (PDF 1.5MB) which sets out joint objectives for the Bank and NZX with regard to the clearing and settlements infrastructure.

Mr Spencer said that, consistent with its broader liquidity policy, New Zealand Clearing Limited will be eligible for backup liquidity support from the Reserve Bank in its standard overnight facility.

Further, the Bank and NZX agree to establish a joint settlements advisory council to create a unified approach to dealing with industry issues.
Mr Spencer said the Bank and NZX consider agreement on these issues will help to ensure an efficient and competitive securities settlement infrastructure which will in turn support the development of New Zealand’s capital markets.

Reserve Bank releases 2009-10 Annual Report
12 October 2010

The Reserve Bank’s broad coverage of financial and economic functions has proved valuable in dealing with both financial and natural disasters, Reserve Bank Governor Alan Bollard said today when releasing the Bank’s 2009-2010 Annual Report.

Dr Bollard said the Bank is one of the few OECD central banks to retain all its functions in one organisation. “A special pamphlet in the Annual Report illustrates how hugely useful it has been during the financial crisis and recovery to be carrying out monetary policy, financial stability, foreign reserves management, bank regulation, payments and settlements, and currency management all under one roof.

“It has also meant that we were able to assess rapidly how the recent Canterbury earthquake affected the financial system and economy, and where we could assist.”

Dr Bollard said the economic recovery was proving slow and fragile, as could be expected when an economic recession coincided with a financial crisis.

“Nevertheless, the Bank is now able to manage a return to normality through the Official Cash Rate (OCR). Most of the crisis policies have been withdrawn or are time-limited, including most of the special liquidity facilities for banks and other institutions and the Bank’s increased foreign reserves position.”

The Bank is now focusing on the further development of New Zealand’s prudential oversight regime for banks, non-bank deposit takers and insurance companies. “The Bank’s new prudential liquidity policy has been at the forefront of prudential policy responses to the Global Financial Crisis, and has already proved its worth during the Greek sovereign debt crisis.

“At the same time, we are monitoring international developments to strengthen bank regulatory requirements under the ‘Basel III’ initiative, which is expected to be largely finalised by the end of 2010, with measures then being introduced over a long phase-in period. The Reserve Bank expects to adopt the bulk of these reforms, particularly around the strengthening of bank capital buffers. However, measures will not be adopted if they are ill-suited to New Zealand conditions.”

Dr Bollard noted the Bank is now implementing its regulation of non-bank deposit takers, with requirements in place for credit ratings, capital, connected exposures, and the composition of boards. “To make this work for New Zealanders, the trustees, who are the front-line supervisors, will have to lift their game,” he said.

The Bank is also putting in place regulation of the insurance industry.

Financially, the Annual Report shows the Bank has made a dividend payment to government of $290 million for the 2010 year. “This leaves the Bank with equity of $2,574 million, a strong base for the potential risks inherent in our activities and large balance sheet,” Dr Bollard said.

This dividend follows a voluntary dividend payment in April 2010 of $45 million, which the Bank determined was surplus to its capital requirements emerging from the crisis.

The Annual Report also shows the Bank has maintained stable underlying income from interest earnings and stable operating costs. “Nonetheless, we have recorded a loss of $111 million for the year ended 30 June 2010, as a result of unrealised losses arising from adverse revaluations on our assets and liabilities.”

Dr Bollard said most of these losses occurred on the Bank’s unhedged foreign exchange position, as exchange rate and interest rate movements partially reversed the large unrealised gains of the previous year.

“While our reserves are still showing a positive return based on purchase costs, we foreshadowed in the 2009 Annual Report the likelihood of volatility in accounting profit and loss.”

The Bank and the Minister of Finance have entered into a new Funding Agreement for the five years ended 30 June 2015. This was ratified by Parliament on 20 July and focuses
on extending capacity in new regulatory and surveillance areas, commencing a programme of upgrading bank notes, and establishing a small office in Auckland to offer more security in the event of a Wellington earthquake.

This follows a year in which the Bank completed development work to improve the robustness and efficiency of its payment and settlement systems, to update inventory systems to manage currency, and to fundamentally rebuild financial and economic statistical systems.

“The financial crisis reinforced that accurate knowledge and robust controls are crucial for a central bank,” Dr Bollard concluded.

RBNZ consultation on covered bonds

15 October 2010

The Reserve Bank today released a consultation paper on the introduction of a regulatory framework for the development of covered bond programmes by New Zealand banks.

Although used extensively in Europe for many years, covered bonds represent a new funding instrument for New Zealand banks. Covered bonds are debt securities backed by the cash flows from a specific pool of mortgages or other loans. They differ from standard bonds in that investors have specific recourse to the assets that secure (‘cover’) the bonds in the event of default, as well as retaining a claim on the residual assets of the issuer.

Deputy Governor Grant Spencer said covered bond programmes will benefit the New Zealand banking system through a broadening of international funding sources, particularly for the issuance of long term debt.

“The covered bond market is already underway for New Zealand banks under informal guidelines and it will probably develop further without a formal regulatory framework. However, the Reserve Bank believes that some relatively minor legislative changes would usefully support the development of this market,” Mr Spencer said. “The Reserve Bank is therefore now consulting on possible legislative changes, as well as proposals for a formal limit on covered bond issuance by each bank.”

The Reserve Bank also intends to introduce new disclosure requirements to ensure that the impact of covered bond issuance is transparent. It will do this in the context of the wider bank disclosure review currently under way.

Submissions for the consultation paper close on 19 November 2010.

The consultation paper can be accessed on the Bank’s website (www.rbnz.govt.nz/finstab/banking/)

OCR unchanged at 3.0 percent

28 October 2010

The Reserve Bank today left the Official Cash Rate (OCR) unchanged at 3.0 percent.

Reserve Bank Governor Alan Bollard said: “Despite some data turning out weaker than projected, the medium-term outlook for the New Zealand economy remains broadly in line with that assumed at the time of the September Monetary Policy Statement.

“Downside risks to the outlook for global growth continue, with high public and private debt inhibiting recovery in many developed economies. Moreover, it is unclear how further policy support would impact on the outlook for growth in our Western trading partners. Offsetting this weakness, strong growth continues in China, Australia and emerging Asia.

“Domestically, recent data has turned out weaker than projected. Continued household caution has seen consumer spending and housing market activity remain muted, and many firms have become less optimistic about their future prospects. However, continued high export prices, along with reconstruction and repairs in Canterbury, will support activity over the coming year.

“Overall, continued GDP growth is expected to gradually absorb current surplus capacity over the next few years. Headline inflation is expected to move higher following the recent increase in the rate of GST. The subdued state of domestic demand suggests this inflation spike will have limited impact on medium-term inflation expectations.
“While it is appropriate to keep the OCR on hold today, it remains likely that further removal of monetary policy support will be required at some stage.”

Liquidity guidelines for non-bank deposit takers
29 October 2010
The Reserve Bank has published non-binding quantitative liquidity guidelines for the non-bank deposit taking sector. The guidelines complement the Deposit Takers (Liquidity Requirements) Regulations 2010 gazetted earlier this month. Under the regulations, appropriate quantitative liquidity requirements must be included in an NBDT’s trust deed by 1 December 2010.

Deputy Governor Grant Spencer said the Guidelines are intended to help the sector develop quantitative liquidity requirements that are appropriate for an NBDT, and therefore meet their obligations under the regulations.

“They outline the matters that an NBDT and trustee should consider in setting quantitative liquidity requirements,” Mr Spencer said.

The guidelines and information on prudential liquidity requirements can be accessed on the Bank’s website http://www.rbnz.govt.nz/finstab/nbdt/requirements/4212995.pdf (PDF 92KB).

Removal of temporary crisis liquidity facility
9 November 2010
The Reserve Bank announced today that it is removing the last remaining temporary liquidity facility put in place during the financial crisis.

Commenting on the adjustment Reserve Bank Deputy Governor Grant Spencer said:

“Financial market conditions continue to stabilise. Use of the RBNZ’s special facilities, specifically for the purpose of accessing term funding, has been low with New Zealand banks able to access funding from their normal market sources. As a result, the RBNZ is removing the regular Tuesday Open Market Operation which is the last remaining temporary liquidity facility introduced during the financial crisis.”

The regular Tuesday Open Market Operation (OMO) involves repurchase transactions for maturities of up to three months. There has recently been very little use of this facility and the RBNZ retains the ability to offer term maturity dates at its discretion in its normal OMOs.

This change will take effect from 1 December 2010, with the final regular Tuesday OMO scheduled for 30 November 2010. The RBNZ will be reviewing over coming months the remaining measures initiated during the crisis, in particular the range and credit quality of securities that are repo eligible in RBNZ operations. Further detail will be announced on this in due course.

“These decisions have no implications for the stance of monetary policy,” Mr Spencer said.

Financial system better placed to support economic growth
10 November 2010
New Zealand’s financial system has benefited from recovery in the global economy, with banks now better positioned to meet future credit demand and support economic growth, Reserve Bank Governor Alan Bollard said today.

On the release of the Bank’s November 2010 Financial Stability Report, Dr Bollard said that domestic rebalancing is proceeding but pressures on the New Zealand dollar are not helping.

“Households and businesses are keeping spending low as they reduce debt,” Dr Bollard said. “Combined with improved export commodity prices, this is reducing New Zealand’s current account deficit and external indebtedness, both of which are positive for financial stability. However, the New Zealand dollar remains relatively high, reflecting easy monetary conditions and weak economic activity in the major developed economies. If sustained, this will make the continued rebalancing of economic activity towards the tradables sector difficult to achieve.

“Emerging Asia remains the main engine of global growth and this has been positive for New Zealand. Financial markets
have become more stable since the European sovereign debt crisis earlier in the year. But the widespread withdrawal of fiscal stimulus and debt reduction by consumers and businesses continue to pose risks to the global recovery. In the US new quantitative measures have been announced recently. These appear to be supporting risk asset markets, but they are also putting pressure on capital inflows and exchange rates in third country economies, which is problematic for international rebalancing."

Deputy Governor Grant Spencer said that the New Zealand banks remain in good shape. They have substantially increased the stability of their funding base over the past year, consistent with the Reserve Bank’s new prudential liquidity policy introduced in April. This has reduced a major source of vulnerability highlighted during the financial crisis. Spencer added that the Reserve Bank is now removing its last remaining crisis liquidity facility.

“On the asset side, the level of banks’ non-performing loans now appears to be stabilising after rising steadily from mid-2007. We expect to start seeing an improvement as the economic recovery continues into 2011. Risks to this outcome would arise if the current softness in house prices were to become accentuated or if agricultural export prices were to drop off their current high levels.

In the non-bank sector, we have seen more failures of finance companies with high exposure to the property development sector, most notably South Canterbury Finance. “The remaining firms in this sector have less exposure to property and therefore provide a foundation for recovery and industry consolidation. The non-banks are also now coming into compliance with the requirements of the new Reserve Bank regulatory regime, most of which comes into force next month.”

Mr Spencer said an important new regulatory development has been the passage of the Insurance (Prudential Supervision) Act. The Reserve Bank is now responsible for prudentially regulating and supervising New Zealand insurers. This means all insurance providers, including life, health and general insurers, will have to meet prudential standards and be licensed by the Reserve Bank.”

He added that the Reserve Bank is generally supportive of the ‘Basel III’ initiative on new international standards for bank capital and liquidity requirements. “However, we will fully assess the potential impacts of these standards before making any changes in New Zealand.”

Bank disclosure review outcome: better information, less compliance cost

19 November 2010

The Reserve Bank has finalised the main policy decisions in its review of disclosure requirements for registered banks.

The Bank issued a consultation paper on registered bank disclosure in August this year and has now followed this up with a policy outcome statement.

Deputy Governor Grant Spencer said the changes in disclosure requirements will significantly reduce banks’ compliance costs, while at the same time creating more manageable disclosure documents that are better aligned with the needs of investors and analysts.

“Some elements of the regime will be dropped completely, while other parts, which can be costly to produce, will be streamlined and simplified,” Mr Spencer said.

“The result will be a regime that produces better, more accessible information for users at lower cost to the banks.”

Mr Spencer added that the Reserve Bank appreciated the level of engagement received from the banks and from interested users. He said the consensus around the options presented was encouraging and the Reserve Bank would now put the preferred option into effect.

The main changes to the existing regime include:

- Dropping the quarterly Key Information Summary and Supplemental Disclosure Statement.
- Introducing a single quarterly disclosure document aimed at more financially savvy readers.
- Cutting by three or four times the size of the half-year disclosure document, by basing it on interim rather than full-year accounting standards.
Further rationalisation of information across all time periods.

While these main features will go ahead as proposed, the Reserve Bank has also taken into account concerns raised during the consultation process. For instance, the Reserve Bank has accepted that the extra compliance cost for banks in producing an interest-rate re-pricing schedule every quarter rather than every six months, outweighs the advantages of more frequent updates for users.

This is the first major overhaul of the disclosure regime since it was set up in 1996 and will better align disclosure information with its original purpose of enhancing market discipline in the banking sector.

Subject to the Orders in Council process, required to bring these changes into effect, the first disclosure statements under the new regime will be for reporting periods ended 31 March 2011.

The policy outcome document (PDF 168KB) and the earlier consultation document (497KB) can be downloaded from the Reserve Bank's website.

OCR unchanged at 3.0 percent

9 December 2010

The Reserve Bank today left the Official Cash Rate (OCR) unchanged at 3.0 percent.

Reserve Bank Governor Alan Bollard said: “Interest rates are now projected to rise to a more limited extent over the next two years than signalled in the September Statement.

“The pace of economic growth appears to have moderated. Corporate investment intentions are now below average. Household spending also remains weak, with household credit still flat and housing market activity slowing further. House prices may decline a little further in the near term. This continued household and business caution suggests current low interest rates are having a less stimulatory effect than in the past.

“On the positive side, activity in New Zealand’s trading partners continues to expand. Growth in the Asia-Pacific region remains strong, and growth in the US and UK has turned out a little stronger than was projected. Consistent with this, export commodity prices, which were already very high, continue to increase. While this is encouraging, downside risks to global growth and export prices persist.

“Repairs to earthquake damage in Canterbury are expected to add to GDP growth over the projection period. The earthquake appears to have caused about $5 billion of damage to infrastructure, and residential and commercial property.

“While the near-term outlook for GDP growth has softened, beyond this, higher export volumes and earthquake repairs are expected to push GDP growth above that projected in the September Statement. As growth recovers, current spare capacity will gradually be used up, causing underlying inflation to pick up. More immediately, the recent increase in the rate of GST will cause headline CPI inflation to spike higher temporarily, although there is little evidence of this spike affecting price and wage setting behaviour.

“While interest rates are likely to increase modestly over the next two years, for now it seems prudent to keep the OCR low until the recovery becomes more robust and underlying inflationary pressures show more obvious signs of increasing.

“The New Zealand dollar has appreciated significantly since the September Statement. Sustained strength in the currency is inhibiting the rebalancing of economic activity towards the tradable sector. Accelerated elimination of New Zealand’s fiscal deficit could help improve national savings, thereby easing current pressure on interest rates and the New Zealand dollar, and reducing New Zealand’s dependence on international borrowing.”
PUBLICATIONS

Regular publications

Annual Report
Published in October each year.

Financial Stability Report
Published six-monthly. A statement from the Reserve Bank on
the stability of the financial system.

Monetary Policy Statement
Published quarterly. A statement from the Reserve Bank on
the conduct of monetary policy.

Reserve Bank of New Zealand Statement of Intent, 2010-2013

Recent Reserve Bank Discussion Papers

2010

DP2010/01   Evaluating household expenditures and their relationship with house prices at the
microeconomic level
Mark Smith

DP2010/02   All together now: do international factors explain relative price co-
movements?
Özer Karagedikli, Haroon Mumtaz and Misa Tanaka

DP2010/03   Multi-period fixed-rate loans, housing and monetary policy in small open
economies
Jaromír Beneš and Kirdan Lees

DP2010/04   Internationalised production in a small open economy
Aurélien Eyquem and Güneş Kamber

DP2010/05   Using estimated models to assess nominal and real rigidities in the United
Kingdom
Güneş Kamber and Stephen Millard

DP2010/06   Sharing a risky cake
David Baqaee and Richard Watt

DP2010/07   Exporting and performance: market entry, expansion and destination
characteristics
Richard Fabling and Lynda Sanderson

DP2010/08   Intertemporal choice: a Nash bargaining approach
David Baqaee

DP2010/09   Debt dynamics and excess sensitivity of consumption to transitory wealth
Changes
Emmanuel De Veirman and Ashley Dunstan

DP2010/10   Does the Kiwi fly when the Kangaroo jumps? The effect of Australian
macroeconomic news on the New Zealand dollar
Andrew Coleman and Özer Karagedikli

A full list of Discussion Papers is available from Administration, Economics Department.

Selected other publications

Testing stabilisation policy limits in a small open economy: proceedings from a macroeconomic policy forum
Finance and Expenditure Select Committee inquiry into the future monetary policy framework: submission by the
Reserve Bank of New Zealand

Pamphlets

Explaining Currency
Explaining Monetary Policy
The Reserve Bank and New Zealand’s Economic History
This is the Reserve Bank
Your Bank’s Disclosure Statement – what’s in it for you?
Snakes and Ladders – a guide to risk for savers and investors, by Mary Holm

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Reserve Bank of New Zealand: Bulletin, Vol. 73, No. 4, December 2010
Articles in recent issues of the Reserve Bank of New Zealand Bulletin

Vol. 72, No. 4, December 2009
The Reserve Bank's new liquidity policy for banks
Assessing recent external forecasts
Banking crises in New Zealand – an historical perspective
The evolution of New Zealand's trade flows

Vol. 73, No. 1, March 2010
The crisis and the Reserve Bank's stabilisation rate
Twenty years of inflation targeting
Inflation targeting, the financial crisis and macroeconomics: an interview with Mark Gertler
How may the new architecture of financial regulations develop?
Lessons from previous US recessions and recoveries
The crisis and monetary policy: what we learned and where we are going
Recent trends and developments in currency

Vol. 73, No. 2, June 2010
The Reserve Bank and macro-financial stability
Financial sector amplification and credit cycles in New Zealand
World trade interdependencies: a New Zealand perspective
The Reserve Bank's new approach to holding and managing its foreign reserves

Vol. 73, No. 3, September 2010
Connecting the dots: a yield curve perspective on New Zealand's interest rates
The New Zealand dollar through the global financial crisis
Anti-money laundering and countering the financing of terrorism - the Reserve Bank's responsibilities and approach
The currency denomination of New Zealand's unhedged foreign reserves