



**RESERVE
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Editorial Committee

Michael Reddell (chair), Bernard Hodgetts, Jason Burt.

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EDITOR'S NOTE

In this edition of the *Bulletin*, our articles cover considerable ground.

Toby Fiennes and Cavan O'Connor-Close outline the evolution of New Zealand's prudential supervision over the last five years or so. New legislation established a prudential supervisory framework for non-bank deposit-taking institutions and insurance companies, and the consequences for the insurance industry of the Canterbury earthquakes provided an early focus for the Bank's involvement with insurance companies. The financial crises and stresses that have shaken the world's economy and financial markets in recent years have been an important part of the set of factors leading us to refine and extend the Bank's long-standing supervisory framework for registered banks.

Over the last couple of decades, the Reserve Bank has published a number of pieces reviewing and reflecting on the lessons of recent business cycles. In this issue, Willy Chetwin reviews New Zealand economic developments over the turbulent period since the end of the previous recession in 1998. We experienced a long period of pretty good economic times, albeit with significant imbalances. The good times have been followed by a growing number of years when New Zealand, and many other countries, has experienced little or no sustained per capita real income growth, and yet few of the imbalances have resolved themselves. A forthcoming article will review some of the lessons for policy that might be drawn from the period since 1998.

James Graham and Christie Smith look back rather further in their article reviewing how the monetary policy and associated governance provisions of the Reserve Bank Act have evolved since the Bank was first established in 1934. The provisions providing operational autonomy to the Reserve Bank in pursuit of agreed targets, and a structured transparent approach for the Bank's relationship to the Minister of Finance, have now been quite settled for over 20 years. In earlier decades, however, there was considerable variation in views on how best to formally articulate the monetary policy role of the Reserve Bank, and on what monetary policy might best be able to contribute to New Zealand's economic well-being.

Sovereign debt problems, especially in Europe, command considerable attention at present. In our final article, Michael Reddell looks back at a now largely forgotten episode from the Great Depression when legislation was used to compel the restructuring (in the borrower's favour) of a large amount of central and local government debt. The New Zealand economy was highly indebted and the large unexpected fall in the price level led to substantial pressure to ease the burden on borrowers. The New Zealand Debt Conversion Act 1933 was one element in the government's response.

Michael Reddell
For the Editorial Committee



ARTICLES

The evolution of prudential supervision in New Zealand

Toby Fiennes and Cavan O'Connor-Close¹

This article reviews how the Reserve Bank's prudential supervision activities have evolved over the last five years. During this period, three major impacts on prudential supervision have been the global financial crisis (GFC), the collapse of nearly 50 finance companies and the Canterbury earthquakes. The article discusses the implementation of the new prudential regimes for the Non-Bank Deposit Taking (NBDT) and insurance sectors, both of which have been established following the government's Review of Financial Products and Providers (2006). It also highlights how the GFC in particular has led to a rebalancing in prudential supervision. While self- and market discipline remain key pillars of prudential supervision, there is now greater emphasis on regulatory discipline, including tighter regulatory standards and a more active engagement between the Reserve Bank and the regulated entities.

1 Introduction

The scope and nature of the Reserve Bank's regulatory and supervisory activities have grown and changed significantly in the last five years. One outcome of the Review of Financial Products and Providers (a review led by the Ministry of Economic Development during the middle years of the last decade) was a decision to introduce prudential regulation for the NBDT and insurance sectors.² Given the Reserve Bank's existing mandate for prudential supervision of banks, the government decided that it should become the single prudential regulator for New Zealand and take on responsibility for those two other sectors. Over the same period, New Zealand's financial system faced three extraordinary and largely unrelated challenges: an unprecedented Global Financial Crisis (GFC); the numerous finance company failures; and the Canterbury earthquakes.

The Reserve Bank responded to its broader mandate and these challenges by expanding and adapting its prudential supervision capabilities. The Prudential Supervision Department (PSD) was created on 1 November 2007. The department is responsible for the microprudential regulation of banks, payment and settlement systems (PASS), insurance companies and

NBDTs, and for supervision of all but NBDTs. It is also responsible for supervising the compliance of entities in all those sectors with their obligations under the Anti Money Laundering and Countering the Financing of Terrorism Act 2009 ("AML supervision").³ Macroprudential issues, which have gained renewed attention since the GFC, are covered separately.⁴

PASS oversight is a critical area of responsibility for the Reserve Bank. Payment systems are often referred to as the "plumbing" of the financial system – in the sense that they perform the vital function of facilitating all financial flows, but whose importance is often overlooked until things go wrong. This importance has been much better recognised internationally since the GFC. Because PASS oversight is by its nature very different from supervision of institutions, and because the legal framework under which we exercise our responsibilities in New Zealand is rather different, this article does not cover it. We intend that it be the subject of a separate stand-alone *Bulletin* article in the near future.

This article looks at how PSD has accommodated its new responsibilities for NBDTs and insurers, how we have responded to the major events and how our overall supervisory approach has evolved.

¹ We are grateful to the following Reserve Bank colleagues for their valuable comments: Margaret Griffin, Ian Harrison, Bernard Hodgetts, Michael Reddell, Grant Spencer and Andy Wood.

² For more information on this, see <http://www.med.govt.nz/business/business-law/past-work-and-older-topics/review-of-financial-products-and-providers/review-of-financial-products-and-providers-related-documents> and <http://www.rbnz.govt.nz/finstab/nbd/t/3857996.html>

³ This article is limited to a discussion of prudential supervision. The Reserve Bank's approach to anti money laundering and countering the financing of terrorism supervision will be the subject of a separate, forthcoming article.

⁴ For a discussion of macroprudential issues and the macro- and microprudential interplay in New Zealand see A Bollard, 'Where we are going with macro and micro-prudential policies in New Zealand', speech at the Basel III conference, Sydney, Australia, March 2011. Available at: <http://www.rbnz.govt.nz/speeches/4327011.html>

2 The fundamentals of prudential supervision

Prudential supervision is about the regulation and monitoring of financial institutions and infrastructure, in order to enhance the soundness and efficiency of the financial system.⁵ This is primarily done by responding to market imperfections which, left alone, would lead to welfare losses.

The most compelling reasons for regulating and supervising financial institutions are to prevent the failure of one institution from affecting the financial system and the economy more widely (spillovers and negative externalities), and to offset the negative consequences of players not bearing the full cost of their actions when things go wrong (moral hazard). Information asymmetries, as will be shown later, provide a further reason for intervention.

A good example of the potential for wider economic spillover effects is the special role of the banking sector and its connections to the real economy. Banks' position at the heart of the payments infrastructure and their key role as credit providers mean that any disruption quickly spills over and damages the real economy. Equally, the protection provided by insurance is an important element in the financial security of individuals and companies in New Zealand, and in the economy's ability to function efficiently. Failure of a major insurer would have a significant impact on the financial system, the economy and on individuals affected.

The interconnectedness of financial institutions can also result in the failure of one player quickly affecting others. This applies particularly in the banking sector, and can occur either because other institutions are directly or indirectly exposed to a failed bank or because of a loss of confidence amongst banks in each other's ability to meet future obligations when they fall due, thus triggering a liquidity freeze as evidenced at the start of the GFC. Moreover, the public may lose trust in the banking system and a bank run may ensue. Although the Reserve Bank's role of lender of last resort means that it has an effective

response to any bank runs, these situations can easily spill over to the real economy; for example, in the form of a credit crunch. A key objective of prudential regulation and supervision is to reduce these risks.

Moral hazard occurs when those making decisions do not take account of the full cost of getting it wrong. The importance of the financial system to the overall functioning of the economy can accentuate moral hazard by reinforcing expectations of government support in the event of difficulties. Market participants know this and may assume that government support would be made available in a crisis. This can lead to excessive risk taking, thus – paradoxically and worryingly – increasing the probability of financial crises.

Due to their smaller sizes and the lower levels of interconnectedness, the insurance and NBDT sectors are not of the same systemic importance as the banking sector. However, the moral hazard, negative externality and spillover arguments apply to varying degrees across the board. It is the spillover effect to the wider financial and economic system in particular that prudential regulation seeks to address.

Consumer protection, the attainment of predefined social goals and constraining market power are also often cited as rationales for public intervention – but prudential supervision is not generally the best tool for addressing these issues and they do not form the basis for prudential supervision in New Zealand. Rather, they are addressed by a variety of other ministries and agencies, such as the Ministry of Consumer Affairs, the Commerce Commission and the Financial Markets Authority, which regulate other aspects of the activities of financial institutions.

Legal bases

Sections 68 and 157A of the Reserve Bank Act 1989 require the Reserve Bank to carry out its supervision of banks and NBDTs (respectively) for the purposes of promoting the maintenance of a sound and efficient financial system; and avoiding significant damage to the financial system that could result from the failure of a registered bank or NBDT.

⁵ For a fuller discussion on efficiency in this context, see C. Bloor and C. Hunt, 'Understanding financial system efficiency in New Zealand', Reserve Bank of New Zealand *Bulletin*, 74 (2), June 2011.

This role is mirrored in the insurance context. Section 3 of the Insurance (Prudential Supervision) Act 2010 provides that the Reserve Bank promotes the maintenance of a sound and efficient insurance sector and promotes public confidence in the insurance sector.

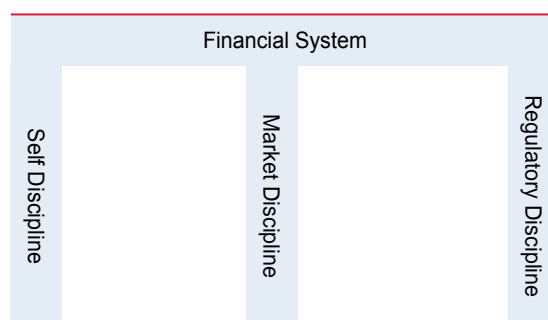
The Reserve Bank's philosophy and approach towards prudential supervision

The legal bases underpinning prudential supervision clearly imply that the Reserve Bank's supervisory role concerns the financial system and the insurance sector respectively but not (directly at least) individual financial institutions.

This, of course, also influences the Reserve Bank's philosophy as regards prudential supervision, which in New Zealand is comparatively light-handed. It is not about completely eliminating risk, but rather aims to ensure that risk is well understood by market participants, including depositors and policyholders. Primary responsibility for managing an institution rests with its board and senior managers; and for making investment decisions with those who have, or may have, a claim on that institution (depositors, investors and policyholders). The fact that New Zealand does not have a permanent deposit insurance scheme is commensurate with this philosophical approach.

That said, it should be noted that although the Reserve Bank's legislative purpose is system-wide in nature, we are very mindful of the damage that individual institutional failure, or especially a series of related failures, such as was seen with the finance company sector, can do to system-focused objectives. So, although the Reserve Bank would be prepared to allow individual firms to fail and does not provide any absolute "protection" to depositors or policyholders, we seek – via the application of rules and requirements discussed below – to reduce the probability of institutional failure across all three industries.

Figure 1
Three pillars of prudential regulation and supervision



Three pillar approach

The Reserve Bank's approach towards prudential supervision relies on the well-established 'three pillars' of supervision: self discipline, market discipline, and regulatory discipline.

Self discipline

Self discipline refers to a firm's internal risk management and governance systems, responsibility for which rests primarily with a firm's board and senior managers. The Reserve Bank seeks to embed and enhance self discipline via a number of channels: for example through governance requirements and guidance that support independent scrutiny by the Board of Directors or an equivalent body. The Reserve Bank also has powers to object to the appointment of directors and senior managers who may not meet a "fit and proper" test.

Market discipline

Market discipline is about the role of financial market participants in monitoring the risk profile, and the financial performance and position, of financial institutions, and in influencing their behaviour (especially risk-related behaviour).⁶ Investors and policyholders can exercise market discipline through the price they demand for supplying funds or through their choice of product provider. A core element of the Reserve Bank's approach is to help overcome information asymmetries, i.e., situations where

⁶ For a fuller discussion of market discipline see Mortlock, G 'Strengthening market disciplines in the financial sector', Reserve Bank of New Zealand *Bulletin*, 65 (3). September 2002

one party has better information than the other and is in a position to use that to its economic advantage. Consumers or investors, for example, might not be in a position to adequately assess a company's risk without the company disclosing information in an accessible way.

Information asymmetries are not just damaging in a consumer protection sense but they can also lead to a misallocation of resources and exacerbate cyclicalities in the financial system and the wider economy. Finance companies' overextending lending to property development companies is a good example. Mandatory disclosure requirements aim to overcome these information asymmetries and ensure that investors have the information they require to make informed decisions and exercise market discipline. There are tough disclosure requirements for firms in all three sectors. One common feature – for all but the smallest NBDTs and insurers – is the requirement to have and disclose a credit rating.⁷

Regulatory discipline

In addition to taking measures to enhance self and market discipline, the Reserve Bank also places emphasis on regulatory discipline. This involves certain rules and mandatory requirements in specific areas, such as minimum capital and liquidity requirements. A number of general requirements exist in all three sectors, for example risk management and governance rules, but their stringency might differ, reflecting our risk-based approach. Rules for banks tend to be tougher than those for other sectors. Two of the bank specific requirements are: a requirement for banks above a certain size to be locally incorporated and limits on the amount of outsourcing they can do.

Institutions in all three industries are subject to minimum capital (solvency, in the case of insurance) requirements. Capital adequacy serves two main purposes: to provide financial institutions with a buffer so that they can withstand losses from plausible but low probability events, and to ensure that those who own a bank, NBDT or insurance company have a reasonable amount of 'skin in the game' and an incentive to make

sure the business is well run and does not take on undue risk. Banks and NBDTs are also subject to liquidity requirements.

Again, capital and liquidity standards are calibrated to reflect systemic risk. Bank and NBDT capital standards are calibrated to deliver equivalent outcomes, while insurance has a somewhat lower capital requirement. However, capital standards also reflect exposure risk. In all sectors, more risky assets carry a higher risk weighting and thus capital charge.

These regulatory requirements supplement financial institutions' own risk frameworks and market discipline to support the soundness of the financial system. The requirements ensure that all entities in each sector are subject to minimum rules that support regulatory competitive neutrality while taking account of differences in risk.

New Zealand's approach towards prudential supervision aligns with the Basel and the International Association of Insurance Supervisors' (IAIS) core principles.⁸ This approach is well established in the banking sector and now being introduced to the insurance and NBDT sectors. The decision to extend the Reserve Bank's prudential powers to these two sectors was taken prior to the GFC and the collapse of the numerous finance companies. However, it is those two events and the Canterbury earthquakes that have presented the three major challenges for prudential supervision these past five years.

3 Developments over the last five years

Three challenges: GFC, finance companies and Canterbury earthquakes:

GFC impact

The GFC impacted on prudential supervision in two main ways: one directly and the other more indirectly.

⁷ See the Reserve Bank's factsheet on credit ratings available at <http://www.rbnz.govt.nz/finstab/nbdt/3857993.html>

⁸ The Basel and IAIS core principles are set by the respective international standard-setting bodies and contain essential elements for effective banking and insurance supervision. They are available at: <http://www.bis.org/publ/bcbs129.htm> and http://www.iaisweb.org/view/element_href.cfm?src=1/94.pdf

Once the full impact of the GFC was felt in New Zealand, it led to immediate intervention by the Reserve Bank and government. In the banking and NBDT sectors, a liquidity freeze in the interbank lending market and the nervousness with which market participants tried to assess institutions' riskiness required unprecedented intervention.

Banks

Although New Zealand banks, including the big four and their Australian parents, weathered the GFC reasonably well in comparison to many of their foreign counterparts, they had become heavily dependent on international wholesale lending markets for their funding. And with a high proportion of that funding borrowed on a short term basis, the drying up of wholesale funding soon began to affect them. The Reserve Bank and government intervened swiftly with various measures to support system liquidity and confidence.

The Reserve Bank implemented a suite of emergency liquidity measures,⁹ including a widening of the definition of collateral it accepted for its overnight lending facility and the term auction facility (TAF). Under the TAF banks could borrow funds from the Reserve Bank for terms of up to one year against eligible collateral. In order to calm markets and investor sentiment, the government, with the involvement of the Reserve Bank, announced a temporary deposit guarantee for eligible institutions.

The GFC exposed some vulnerabilities of regulatory regimes around the world and laid bare the intricacies of dealing with financial institutions and financial markets that are globally interwoven. The impact on prudential supervision has been more indirect and happened largely through a tightening and strengthening of regulatory standards at the national and international levels.

Domestic response

At home, the Reserve Bank accelerated the development and implementation of policies for the banking sector, some of which had already been in the pipeline. The precarious situation that many banks around

the world found themselves in, and the case of Lehman in particular, demonstrated the difficulties of dealing with a failing financial institution in an orderly manner without the need for government bailouts. In New Zealand, a policy on resolving a failed institution, called Open Bank Resolution (OBR), was accelerated. OBR will allow a distressed bank to be kept open for business, providing continuity of core banking functions and thus limiting the contagion effects on the rest of the financial system, while placing the costs of the failure primarily on the bank's shareholders and creditors rather than taxpayers. As well as protecting the taxpayer's interests, OBR should reduce the risk of moral hazard by ensuring that authorities are in a position to impose losses on owners and creditors without closing the bank.¹⁰

The onset of the GFC also brought into sharp relief the downsides of a banking system characterised by relatively low levels of liquid assets and a heavy reliance on short-term offshore funding markets. The drying up of funding from those markets confirmed that the previous disclosure-based liquidity regime was in need of strengthening. A new liquidity policy for locally incorporated banks came into effect in April 2010. The main elements of this policy are three liquidity ratios, rules and guidance on banks' liquidity management processes and reporting obligations to the Reserve Bank as well as public disclosure of key information. The disclosure requirements aim to enhance market discipline. A one-week and one-month mismatch ratio aims to ensure that banks can meet their obligations in case of a short-term liquidity stress. A core funding ratio requires banks to source more of their funding from long-term wholesale markets and retail deposits. It effectively reduces the amount of funding that needs to be rolled over in the short-term. The Reserve Bank is currently in the process of extending the liquidity policy to branches of overseas incorporated banks.

In many instances, the Reserve Bank was in a position to react to the GFC more quickly than prudential regulators in other jurisdictions. Our system focus was helpful and meant that some policies, such as OBR, were

⁹ For a more detailed discussion on these liquidity measures see E. Cassino and A. Yao, 'New Zealand's emergency liquidity measures during the global financial crisis', Reserve Bank of New Zealand *Bulletin* Vol 74, No 2, June 2011.

¹⁰ See also K. Hoskin and I Woolford, 'A primer on Open Bank Resolution', Reserve Bank of New Zealand *Bulletin*, 74 (3), September 2011.

already at a relatively advanced stage of development. Looking ahead we will continue to reassess our prudential policy framework in the context of international regulatory developments. Our aim is to remain in broad alignment with international regulatory norms, while modifying policies to allow for specific New Zealand conditions.

Response at the international level

At the international level, there has been a range of responses, including changes to compensation practices, a reshape of accounting rules, enhanced disclosure and resolution regimes, better risk management practices and new legislation such as Dodd-Frank in the US. A large part of the international response falls under the umbrella of the Financial Stability Board (FSB),¹¹ the forum for the national regulatory authorities of the world's financial centres and international financial institutions, and the Basel Committee on Banking Supervision, which has overseen reforms of the regulatory framework for the banking sector, also commonly referred to as Basel III. The main elements of Basel III involve higher capital adequacy requirements, tougher liquidity requirements and policies for dealing with distressed systemically important banks. With regard to liquidity and bank resolution, these changes are broadly consistent with policies already in place or in the process of being implemented in New Zealand. The Reserve Bank is currently consulting on its proposed implementation of the Basel III capital adequacy standards.

NBDT sector and failure of finance companies

Over 2008-2010, the Reserve Bank became responsible for prudential regulation of the NBDT sector.¹² Trustees continue in their role as front-line supervisors. The NBDT sector has been marred by the collapse of close to 50 finance companies since the middle of the last decade. The failures occurred largely for domestic reasons to do with inadequate risk management, including overexposure to certain sectors and related party lending, and supervision. In hindsight, the heavy reliance on

disclosure to market participants (i.e., market discipline) did not work as intended. A key failing was the poor quality of the information available to investors. These NBDT failures, while not themselves of systemic importance to the financial system, devastated the savings of many New Zealanders and the trust investors had placed in the sector. Reforming the sector's regulatory framework is aimed at alleviating these regulatory failings and can make a significant contribution to re-establishing confidence in the sector. The Reserve Bank is contributing by improving standards in prudential regulation, while the Financial Markets Authority (FMA), established in 2011, is raising the standards for market conduct.

The decision to strengthen prudential regulation in this sector came out of the Review of Financial Products and Providers and was taken in December 2005, but the preconditions for the subsequent wave of failures were already in place. For the Reserve Bank, it has meant increasing our knowledge of this sector and introducing a new regulatory regime. The bulk of this regulatory regime was introduced in 2010. Similar to the prudential regulation of banks, it covers requirements on capital, liquidity, related party exposures, credit ratings and governance and risk management.¹³ These requirements are tailored to the needs of the NBDT sector, reflecting their generally smaller size compared to banks. Smaller NBDTs are exempt from certain requirements, for example, the requirement to have a credit rating.

A second NBDT Bill, currently in the legislative process, is intended to extend the Reserve Bank's regulatory powers to areas such as fit and proper requirements for directors and senior managers, licensing of NBDTs and controls on ownership changes. It also introduces a framework for managing NBDT failures.¹⁴

¹¹ For more information on the FSB, see: <http://www.financialstabilityboard.org/index.htm>

¹² See also F. Barker and N. Javier, 'Regulating non-bank deposit takers', Reserve Bank of New Zealand *Bulletin* 73 (4), December 2010

¹³ More detail on each of these requirements can be found at: <http://www.rbnz.govt.nz/finstab/nbdtr/requirements/3857992.html>

¹⁴ See <http://www.rbnz.govt.nz/finstab/nbdtr/4448840.html>

Insurance sector

The Insurance (Prudential Supervision) Act 2010 established the Reserve Bank as the prudential regulator and supervisor of the insurance sector.¹⁵ While the insurance sector did not suffer the failures of the NBDT sector, it too had been loosely regulated and was identified by the Review of Financial Products and Providers as a sector in need of enhanced regulation and supervision. The Reserve Bank has had to build up its knowledge of this sector. Since 2010 a number of regulations and standards have been introduced, covering, amongst others, governance, disclosure and solvency. A licensing regime has been put in place and insurers are currently going through the process of obtaining their licences. As with banks and NBDTs, it is a risk-based approach, with some smaller insurers exempt from some of the requirements, and with our resources applied more intensively to the larger players.

Canterbury earthquakes

The earthquakes had, and continue to have, a material impact on financial institutions, especially the non-life insurance sector. A key task in the subsequent weeks and months was to establish the size of the claims and how insurance companies would cope with those claims, usually with significant recourse to reinsurance. While the damage estimates are now clearer, the still ongoing aftershocks and difficulties in accurately assessing the damage mean that these estimates remain subject to revision.

Although the foreign parents of some New Zealand insurers provided useful support in some instances, a small number of insurers ran into serious difficulties as a result of the scale of the disaster relative to their reinsurance cover and capital positions. AMI encountered significant problems due to its heavy exposure to Christchurch, roughly one-third of its total business, and required a government underwrite to provide it with sufficient time to replenish its capital base. The Reserve Bank was heavily involved in finding a solution to AMI's problems.

¹⁵ See also R. Dean, 'Bringing financial stability legislation to the insurance sector - the Insurance (Prudential Supervision) Act 2010', Reserve Bank of New Zealand *Bulletin*, Vol 73, No 4, December 2010.

One response, which was already signalled before the February 2011 earthquake, was to set tougher requirements for insurers that offer catastrophe cover. There was an absence of consistent, mandatory solvency standards in New Zealand prior to the introduction of the new prudential regime, and the Reserve Bank considers that the new standards will put insurers in a stronger position to cope with future catastrophe events.

The adequacy of reinsurance and capital resources becomes vital for the country at a time of serious natural disaster. This means that the capital and/or reinsurance requirements on non-life insurers must be set at a level that gives the required degree of comfort that insurers are in a position to withstand any similar future event.

Recent events have almost certainly increased moral hazard in the market. That is, insurers and policyholders may believe that government intervention will occur in the future if there is a catastrophe. This further supports the need for robust solvency requirements in respect of earthquake risk.

4 Impact on supervisory approach

The challenges outlined in the previous section have had a significant effect on prudential supervision in New Zealand. The GFC presented new regulatory challenges in what had until then been the Reserve Bank's core area of prudential supervision, the banking system. While the Reserve Bank was well placed to respond to those challenges, as evidenced by having been at the forefront of strengthening liquidity requirements and developing the OBR failure framework for banks, work still needs to be done. We are, for example, currently consulting on further strengthening our prudential standards in line with Basel III.

The general trend since the GFC has been towards tighter regulation. In terms of our three-pillar approach, there has been a shift towards more emphasis on regulatory discipline. But this does not mean that prudential regulation systems around the world are being completely overhauled. For the most part, this strengthening of regulatory standards takes place by amending existing

rules and regulations. Basel III, for example, builds on Basel II. Our regulatory response at home is no different. We have amended, and are amending, existing regulatory standards to strengthen *inter alia* liquidity and capital provisions and to further facilitate market discipline.

Thus, the Reserve Bank still favours a light-handed approach by international comparison, but with a rebalancing of regulatory discipline alongside the well-established canons of market and self-discipline, allied with a significantly more active approach to institutional engagement and information provision. Disclosure reporting by financial institutions continues to be a core element of this approach. The strengthening of capital-adequacy requirements and the introduction of liquidity ratios in the banking sector do represent a stronger emphasis on regulatory discipline. And the insurance and NBDT sectors are moving from a loosely regulated regime, as mentioned above, to one with higher regulatory standards. Whereas a decade ago the Reserve Bank might have relied more on self- and market discipline, and less on regulatory discipline, the regimes that are now being introduced in these two sectors reflect this rebalancing in emphasis, also in terms of direct engagement between the Reserve Bank and financial institutions. The frequency and substance of the Reserve Bank's engagement with banks has already been stepped up. This increased level of engagement with banks also translates to the Reserve Bank's interactions with insurance companies. However, regular on-site inspections, which were already a key feature in many other jurisdictions before the GFC, will continue to play a minor role to be used in exceptional circumstances only.

The stronger emphasis on regulatory discipline increases the need for robust and thorough analytical underpinnings of the rules and regulations the Reserve Bank imposes on the financial system. Analytical capabilities have been enhanced and new policies are routinely accompanied by regulatory impact analysis which, where possible and sensible, includes quantitative analysis of the policy's costs and benefits. More than before, consultation documents encourage affected parties to supply the Reserve Bank with concrete cost

and benefit information to facilitate the use of cost-benefit analysis.

A risk-based and outcome-focused approach

Prudential regulation and supervision in New Zealand will continue to be risk-based and outcome focused, whether that is in the banking, NBDT or insurance sector. Being risk-based and outcome-focused means that the Reserve Bank is concerned about getting to the best outcome to meet its legislative objectives. The Reserve Bank sets common minimum standards but does not apply a simple one-size-fits-all to regulated institutions either within or across sectors. A simple example is that the capital rules are different for NBDTs, banks and insurers. Another is governance requirements. The Reserve Bank's robust governance requirements for banks are enshrined in their conditions of registration and reflect the systemic importance of that sector, while in the NBDT sector there is scope for exemptions from governance requirements for eligible NBDTs, and in the insurance sector, where the variability of size and nature across the sector is enormous governance requirement, they have the status of guidance.

5 Conclusion

The last five years have been an eventful period for prudential supervision thanks to the domestic and global developments described in this article. The Reserve Bank's prudential regime in the banking sector has met these challenges well. We have not faced the bank failures that a number of countries around the world have had to deal with. The regulatory and supervisory approach based on self discipline, market discipline and regulatory discipline has served us well. This approach is now being rolled out to the NBDT and insurance sectors. It is expected that this will reduce the likelihood of a repeat of the problems encountered by the NBDT sector under the previous regime.

However, any regime has to continue to evolve and to adapt to new circumstances, and ours is no exception. Where necessary, we have tightened up standards and

implemented new policies. Looking ahead in banking, Basel III will have an impact on prudential regulation in New Zealand, in particular through a strengthening of capital adequacy requirements. Domestically, large banks are also being required to pre-position for OBR. In the NBDT and insurance sectors we will press on with the implementation of a high-quality prudential regime and fine tune existing requirements.

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Business cycle review, 1998-2011

Willy Chetwin

This article analyses New Zealand's economic expansion from 1998 to 2007, the contraction that followed in 2008-09, and the gradual recovery thereafter. The expansion was long and large by the country's post-war standards, while the contraction was marginally longer but shallower than the norm. An important driver of the expansion was a long and sustained rise in the terms of trade, in part reflecting expansion in the Asian region, especially China. A sharp rise in net immigration early in the period, a marked increase in the use of credit funded from offshore, and rising government spending were also important influences. The strong New Zealand dollar was another important factor, eroding competitiveness in parts of the tradables-producing sector and helping fuel demand for non-tradable goods and services. Balance sheets of households, farms and businesses became increasingly stretched over the period, a factor that has dampened the speed of recovery over the past three years.

1 Introduction¹

New Zealand's small open economy is exposed to a broad range of economic forces that can cause considerable variability in output, inflation, and financial variables. Analysing the sources and consequences of the fluctuations can yield useful insights about how New Zealand's economy responds, and important lessons for policy-makers. Of particular interest for the Reserve Bank is monetary policy's effectiveness over the business cycle, and whether policy should respond differently if similar shocks were to arise in future.

This article analyses New Zealand's most recent economic expansion, which ran from 1998 to 2007, the contraction that followed in 2008-09, and the gradual recovery thereafter. It focuses mainly on understanding the drivers of the expansion, while monetary policy is treated in a largely descriptive way.² A forthcoming *Bulletin* article will discuss the natural follow-on questions about the conduct of monetary policy and what we can learn about policy from the period.³

The article breaks the 1998-2011 period into five phases. Each phase reflects the contemporary drivers,

external and domestic, of the economy and the outlook. Each phase overlaps somewhat with the next, because the main drivers overlapped in time, but this breakdown nonetheless provides a useful way to characterise the period.

2 Cyclical developments, 1998-2011

The five identified phases of the cycle are as follows.

- 1998-2000: recovery after the East Asia Crisis (EAC)
- 2000-03: global headwinds
- 2003-06: domestic boom
- 2006-08: oil price spike
- 2007 onward: Global Financial Crisis (GFC), recovery and sovereign debt problems

Table 1 provides summary statistics on the expansion and contraction. Figure 1 is a chart of GDP growth that identifies the five phases. As background to the following discussion of economic events, Box A provides numbers on the overall size of the expansion and contraction in a historical context. An appendix contains charts that compare movements in New Zealand's GDP growth, inflation and real interest rates with those of Australia, the UK, the US and the euro area.

In short, the economic expansion from 1998 to 2007 was long and large by the standards of post-Second World War experience. The contraction in 2008-09 was slightly longer and shallower than the post-war average. Perhaps

¹ The author would like to thank a number of colleagues for helpful comments, and particularly Bernard Hodgetts, Michael Reddell and Tim Ng.

² For earlier Reserve Bank business cycle reviews, see Brook, Collins and Smith (1998), Drew and Orr (1999), Reserve Bank of New Zealand (2000), Reserve Bank of New Zealand (2007a).

³ Reserve Bank of New Zealand (2011b) provides a preliminary view on the business cycle and monetary policy over this period.

Table 1

Averages for expansion and contraction – main macroeconomic indicators

	Annual growth, pct ¹	Annual inflation, pct ²	90-day interest rate, pct ³	TWI, level ⁴
Overall expansion 1998Q2-2007Q4	3.2	2.4	6.4	60.6
Overall contraction 2008Q1-2009Q1	-0.7	3.8	7.2	63.6

Notes:

- ¹ Average of the annual percentage change, real production GDP
- ² Average of the annual inflation rate, CPI (excluding credit services prior to 1999Q3)
- ³ Monthly average 90-day rate, nominal
- ⁴ Monthly average TWI, nominal

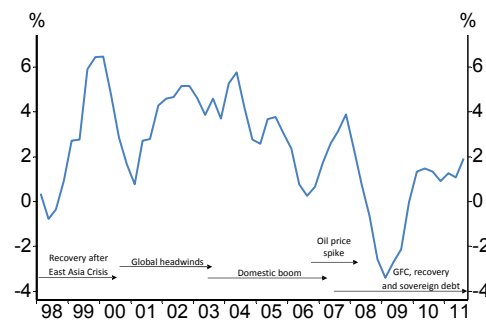
Source: Statistics New Zealand, RBNZ

more striking than the contraction itself are the period of slower average growth leading up to the recession and the very gradual recovery thereafter.

Recovery after the EAC: 1998-2000

Our review period starts with the recession and recovery following the East Asia Crisis (EAC). The effects of the EAC were relatively short-lived outside the Asian region: New Zealand emerged from recession in 1998. By mid-1999, estimates of New Zealand’s output gap – a measure of actual GDP relative to its potential or non-inflationary level – suggest that demand had already risen by enough to be placing modest pressure on supply

Figure 1
GDP growth (annual percentage change)



Source: Statistics New Zealand

Box A

New Zealand GDP: this cycle compared with post-war experience

New Zealand’s economic expansion from 1998 to 2007 was long and large by the standards of post-war experience.⁴ The expansion lasted 38 quarters and GDP rose by a total of around 39 percent or by 25 percent in per capita terms.

By comparison, other expansions since World War 2 averaged 21 quarters in length and closed with GDP around 26 percent higher. Two other post-war expansions lasted longer than 30 quarters: 1959-66 with a 39 percent rise in GDP, and 1968-76 with a 32 percent

rise in GDP.⁵

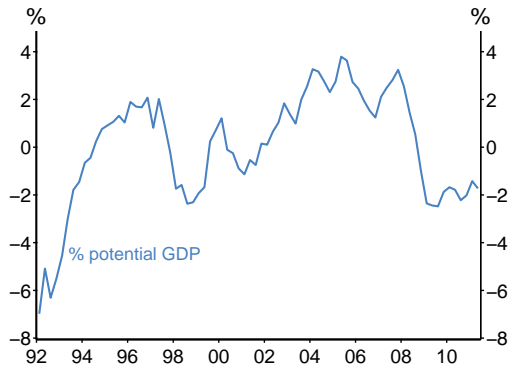
The 2008/09 contraction was 5 quarters long. GDP shrank by just under 4 percent, or 5 percent in per capita terms. The contraction was slightly longer but shallower than the post-war average (figure 1). Importantly, there was a period of slow average growth each side of the recession while population growth continued. This left GDP per capita in 2011 around the levels of 2004 and only 15 percent higher than at the start of the expansion in 1998.

⁴ This takes the expansion as starting in the June quarter of 1998, the first quarter of positive quarterly growth after the 1997-98 recession, and finishing in the December quarter of 2007 before the economy entered recession in 2008.

⁵ For these summary statistics on post-war business cycles, see Hall and McDermott (2009).

capacity (figure 2).⁶ By the start of 2000 growth had reached an impressive 6.5 percent.

Figure 2
Output gap (December 2011 estimate)



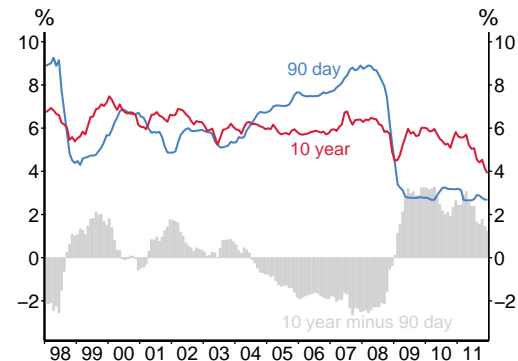
Source: Statistics New Zealand, RBNZ estimates

Through the EAC, the Reserve Bank implemented monetary policy using the Monetary Conditions Index (MCI). The MCI signalled the Reserve Bank's preferred level of monetary conditions, treating short term falls (rises) in the currency and rises (falls) in interest rates as offsetting each other.

Consequently, when the currency dropped following the EAC, markets pushed up interest rates. Higher interest rates persisted until the Reserve Bank eased monetary conditions from mid-1998 after the severity of the EAC became clear. The easing caused 90-day rates to fall from 9 percent to just over 4 percent by early 1999 (figure 3). The sharp fall in short-term rates reduced their spread over offshore rates to a very low level, and this gap stayed small even as New Zealand monetary policy began tightening later that year. Combined with a weaker growth outlook for New Zealand, the relatively low short-term interest rates encouraged a drop in the New Zealand dollar. It continued falling until mid-2000 (figure 4).

While the EAC lowered Asian demand for New Zealand's exports, the country's growth picked up strongly soon afterwards.⁷ Export incomes rose from mid-1999 after the New Zealand dollar fell sharply and advanced Western economies' growth continued. Investment as a share of GDP grew, partly in response to the Year-2000

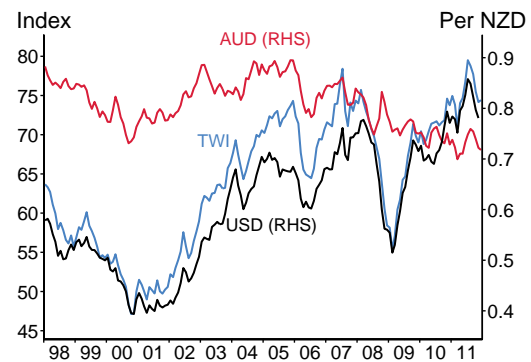
Figure 3
New Zealand interest rates*



* The 90-day rate is the rate on 90-day bank bills; the 10-year rate is on 10-year government bonds.

Source: RBNZ

Figure 4
Real New Zealand dollar exchange rates



Source: Statistics New Zealand, RBNZ, RBNZ calculation

computer problem (Y2K) and Auckland's hosting of the America's Cup.

CPI inflation was modest immediately after the EAC, reflecting weak demand and low oil prices (figures 5 and 6). CPI inflation then climbed from mid-1999, and peaked at 4 percent at the end of 2000: the fall in the currency, a subsequent rise in oil prices and growing demand pressure were behind the rise, as was an increase in the excise tax on tobacco.⁸

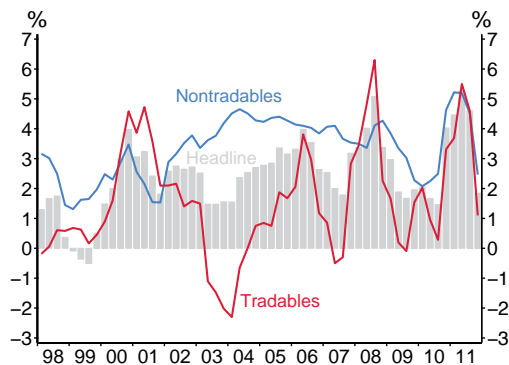
The Reserve Bank tightened monetary policy in response to growing demand and inflation pressure. This was achieved using the Official Cash Rate (OCR) – the new main instrument of monetary policy introduced in March 1999 to replace the MCI.⁹ The OCR was raised

⁶ This article refers to the output gap estimates from the December 2011 *Monetary Policy Statement* (Reserve Bank of New Zealand, 2011d) rather than contemporary estimates.

⁷ By the late-1990s, the Asian region took around one third of New Zealand exports.

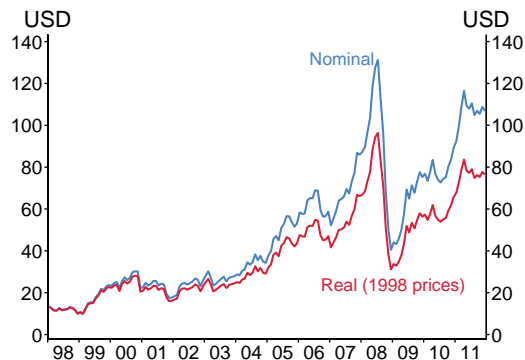
⁸ The Reserve Bank's target was measured according to CPI excluding credit services in 1998 and the first two quarters of 1999, and headline CPI inflation thereafter.

Figure 5
Annual CPI inflation measures



Source: Statistics New Zealand, RBNZ

Figure 6
Dubai oil prices

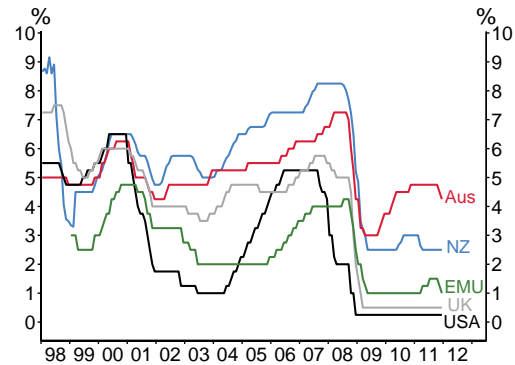


Source: Reuters, Haver Analytics, RBNZ calculation

from 4.5 to 6.5 percent in late 1999 and the first half of 2000 (figure 7).

After the sharp pick up, growth slowed from the middle of 2000. While the next section focuses on the offshore reasons for this, some transitory domestic factors were also relevant in late-1999 and early-2000. Droughts in the summers of 1997-98 and 1998-99 hurt agricultural production and primary exports into 2000. Investment spending fell after the pre-Y2K and pre-America's Cup strength. Business and consumer confidence dipped briefly, though the reasons proved short-lived.¹⁰

Figure 7
Monetary policy interest rates*



* The New Zealand rate is the minimum overnight floating rate prior to the start of the OCR regime. EMU is the euro area rate.

Source: Haver Analytics, RBNZ

Global headwinds, 2000-2003

From mid-2000 and on into 2003, the prominent economic theme was one of economic shocks from abroad. The shocks turned out to be individually short-lived, but collectively their threat to demand continued for a longer period. That threat had a significant bearing on views among businesses and forecasters, including the Reserve Bank, about the outlook for New Zealand's external sector. While New Zealand had little direct exposure to the sources of these offshore shocks, the risk was that export demand and prices would weaken with global growth.

In the first part of the 2000-03 period, the main events threatening the outlook were the burst of the dotcom bubble in the second quarter of 2000 and terrorist attacks in the US on 11 September 2001. Later, oil prices rose from 2002 and the outbreak of the SARS virus began disrupting travel and economic confidence from March 2003.

In response, the Reserve Bank twice eased monetary policy quickly as insurance against the economic risks. The OCR was cut by one percentage point in late 2001 after the terrorist attacks in the US. The policy rate was lowered by 75 basis points (bps) in response to the economic threat posed by SARS and, to some degree, rising oil prices.

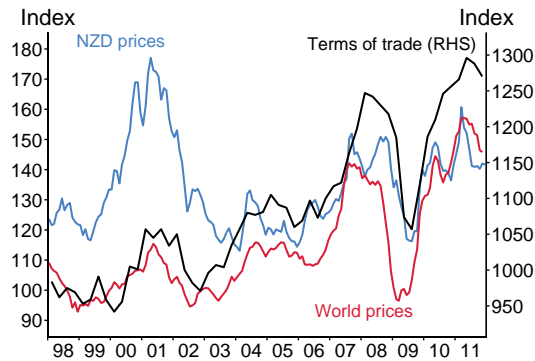
On each occasion the insurance was found not to be needed, and the Reserve Bank started raising the OCR again within six months of the last rate cut. The weakening in export demand and prices (figure 8) due to global events

⁹ Archer, Brooks and Reddell (2000) sets out the rationale for the change to the OCR and the mechanics of how the OCR works as the policy instrument.

¹⁰ Reasons for the drop in confidence included the expectation of rising interest rates as inflation pressure rose; concern about the effect of prospective policy changes; and the end of the strong investment.

proved smaller than initially feared, and domestic demand and inflation pressure were building. Consequently, the New Zealand policy rate and short-term interest rates fell by less than rates in the US and Europe during this phase (figure 7).

Figure 8
Terms of trade and real commodity prices



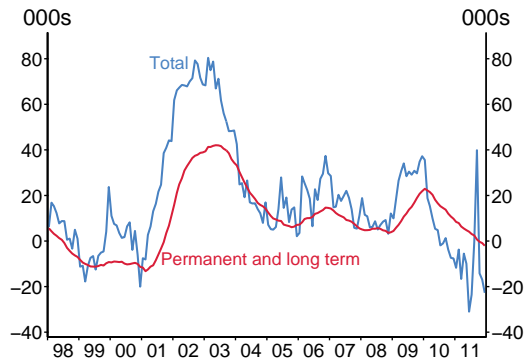
Source: ANZ National Bank Ltd., Statistics New Zealand, RBNZ calculations

Growth was returning in the domestic economy, after the slow-down during 2000, and remained quite robust to international events. Adding to the local momentum was a strong boost to population growth from net migration, which would last until late 2003 (figure 9). Net migration rose suddenly and sharply from late 2001, with outflows falling and inflows climbing. Behind the increase in net migration were perceptions that New Zealand was safe and had relatively good economic prospects. The extra population growth added materially more to demand than to aggregate supply in the short term: the extra demand for housing and the 'set-up' consumption by new arrivals more than offset the boost to supply from new entrants to the labour force.¹¹

Strong domestic demand pulled up GDP growth, which sat near or above four percent from late-2001 until 2004 (figure 1). This was enough to bring a return of growth in per capita GDP, even with the faster-than-usual population growth (figure 10).

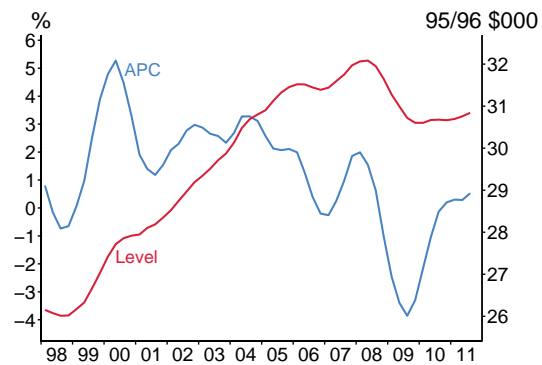
The rapid growth led to the emergence of excess demand in the economy, as indicated by output gap estimates and survey measures of capacity pressures,

Figure 9
Annual net immigration



Source: Statistics New Zealand

Figure 10
Real production GDP per capita (annual)



Source: Statistics New Zealand, RBNZ calculations

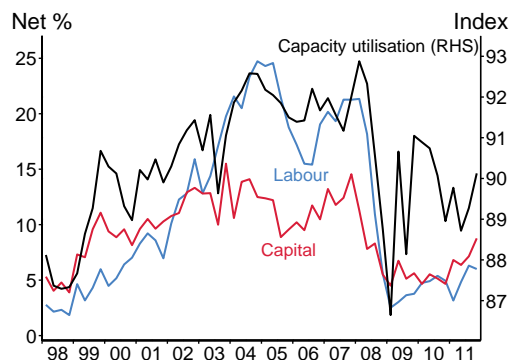
and this situation continued to intensify (figures 2 and 11). By late 2000, the unemployment rate had already fallen below its lowest level of the 1990s, and it continued falling in the following years (figure 12). Strained capacity along with the strong currency and falling international prices for investment goods, led to a sharp lift in real business investment.

As discussed in the next section, the domestic demand pressure that started building in the current phase would underpin inflation through until the recession of 2008-09. Domestic ('non-tradables') inflation began climbing from late-2001, though at that time falling oil prices and a rising New Zealand dollar had lowered the CPI headline rate (figure 5). CPI non-tradables inflation remained strong, sitting above 3 percent from mid-2002 until 2009.

With New Zealand's short-term interest rates falling by less than those in the US and Europe, foreign funding became increasingly available to New Zealand as

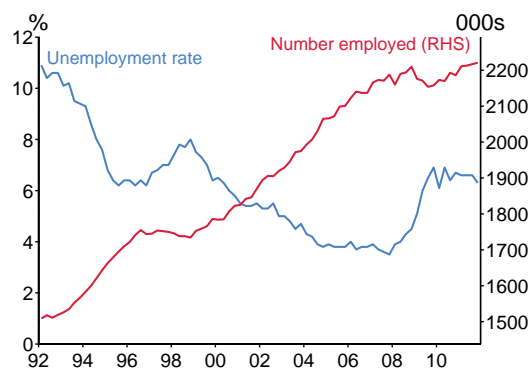
¹¹ For further discussion of the demand and supply effects, see Box 3 of the March 2003 *Monetary Policy Statement* (Reserve Bank of New Zealand, 2003).

Figure 11
Capacity utilisation and limiting factors to expansion
(Seasonally adjusted)



Source: NZIER

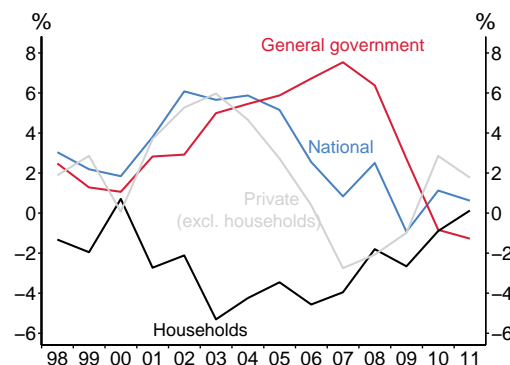
Figure 12
Unemployment and employment
(Seasonally adjusted)



Source: Statistics New Zealand

international investors sought higher risk-adjusted yields. Credit growth had picked up from around 2000, and the banks' ability to readily access offshore funding allowed credit – particularly in the household sector – to accelerate further (figure 15). The household savings rate became increasingly negative, although the effect on national saving was offset by higher government savings. The rise in credit growth, use of fixed-rate mortgages and fall in private savings were all important parts of the domestic economic story in the following years (figure 13).

Figure 13
Savings rates
(net, percent of nominal gross national income)



Source: Statistics New Zealand, RBNZ calculations

Domestic boom, 2003-06

By 2003, domestic momentum was very strong and fears about the world outlook were receding as advanced economies returned to growth. Domestic credit was expanding quickly, funded increasingly from abroad, and private savings rates were falling (figures 13 and 16). Credit extension supported rising property prices and consumer demand, even as the earlier strength of business investment levelled-off over 2004-07.¹²

Growing world demand added to domestic momentum, boosting the terms of trade and pushing up incomes for commodity exporters. Rising incomes in China, and the Asian region more broadly, contributed significantly to this demand growth. Meanwhile, producers in the non-commodity tradables sector lost competitiveness as the exchange rate rose and prices for imported manufactures fell (figure 8).

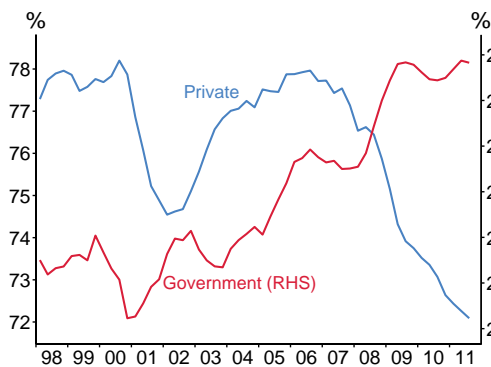
Imbalances in the domestic economy became more and more apparent during this phase. Demand and resources – including new investment – were increasingly focused on commodity production and on the production of non-tradable goods and services. In marked contrast, the non-commodity tradables sector was suffering, and there was a growing external trade deficit.

Fiscal policy played a significant role in driving domestic demand, and in doing so added upward pressure to the New Zealand dollar. Government spending rose rapidly

¹² For further discussion of the consumption story, see De Veirman and Reddell (2011).

from 2005, becoming highly stimulatory at a time of excess demand in the economy, as it had in the 1990s economic expansion (figure 14).¹³ While the core operating balance was in surplus by around 7 percent of GDP until as late as 2006, partly reflecting strong economic performance, it fell from there to a deficit of greater than two percent of GDP in 2009.

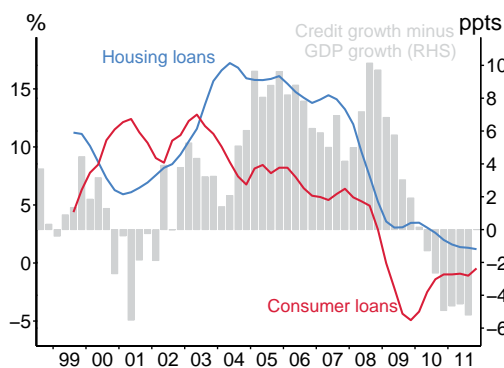
Figure 14
Annual sum of consumption and investment
(percent of annual GDP)



Source: Statistics New Zealand, RBNZ calculations

The private sector was dis-saving, and borrowing was being used to finance property purchases more than consumption (figures 13 and 15). Supporting this borrowing was a continued increase in the banking system's use of funding from offshore (figure 16).¹⁴

Figure 15
Annual lending growth to households and
national excess credit growth (nominal)

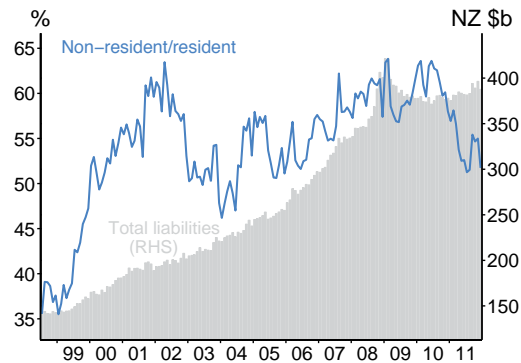


Source: Statistics New Zealand, RBNZ, RBNZ calculations

¹³ A contemporary view on fiscal policy over the period to 2007 is in Reserve Bank of New Zealand (2007a).

¹⁴ An important source of that funding stemmed from foreign institutions issuing bonds in New Zealand dollars – eurokiwis and uridashis – and swapping the New Zealand dollars for foreign currency. See Drage, Munro and Sleeman (2005).

Figure 16
M3 institutions' funding sources



Source: RBNZ

Adding to the credit being made available, domestic finance companies were competing aggressively for business in the property development sector. In particular, finance companies lent on more-marginal, and riskier, housing projects. This buoyed some parts of the property sector, but also sowed the seeds of the finance company failures from 2006.¹⁵

Along with strong growth in credit came a rise in leverage in the private sector, notably on farm and household balance sheets. The combination of leverage and rising property prices further illustrated the growing domestic imbalances.

High labour incomes and domestic confidence about the outlook contributed to the strength in private demand and property markets. Greater use of fixed-rate mortgages helped provide certainty for borrowers, insulating for a time those with existing loans from a tightening in monetary policy as inflation pressure increased.

In total, house prices grew for nine years before they ultimately started falling in 2008. The fall in property prices from 2008 came from levels that had increasingly appeared overvalued.¹⁶

The average annual rise in house prices over that period had been 8.6 percent.¹⁷ Adding to the effects of

¹⁵ Reserve Bank of New Zealand (2007c), section 4.2, discusses some of the background to, and effects of, finance company failures.

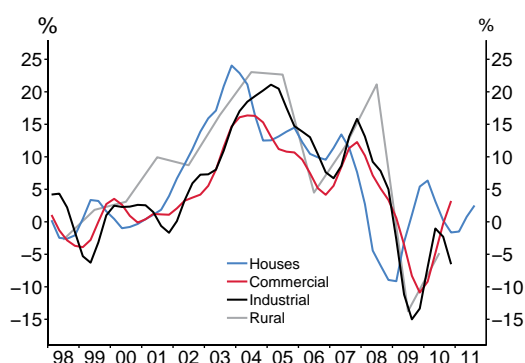
¹⁶ At the time, the Reserve Bank commented that while the available evidence on valuation was inconclusive, "... in our judgement house prices are stretched beyond levels that economic fundamentals can sustain over the longer term". See the May 2007 *Financial Stability Report* for the background to this assessment (Reserve Bank of New Zealand, 2007b).

¹⁷ By comparison, the 1990s boom was concentrated in urban areas, lasted around seven years and average price growth was 5.5 percent.

strong demand in the housing sector, limitations on the availability of new land appear to have helped sustain the rise in section prices once the upswing had started.¹⁸

From 2003 to 2006, house prices outside the main urban areas grew even more rapidly than in the large cities, partly fuelled by strong rural incomes. The pattern of price inflation moved similarly across housing, commercial and industrial property and rural property (figure 17).

Figure 17
Annual property price inflation

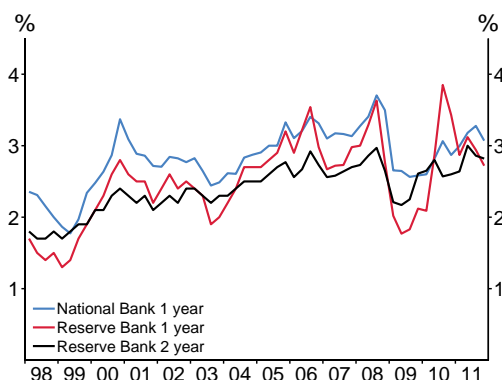


Source: Quotable Value New Zealand, RBNZ calculations

The economy's productive capacity and demand were becoming increasingly mismatched, with excess demand putting intense pressure on productive resources through to 2008. Output gap estimates show GDP at least 1 percent above potential output over the entire period from 2002 to 2008, at times reaching nearly 4 percent (figure 2). The unemployment rate dropped as low as 3.4 percent – more than two percentage points under the lowest rate in the 1990s – and sat at or below 4 percent for four years (figure 12). Survey measures of capacity constraints similarly show a tight labour market and stretched physical capital (figure 11).¹⁹

Consequently, the main source of upward pressure on inflation was strong non-tradables sector inflation, leading CPI inflation to average close to 3 percent from 2003-06 (figure 5). Surveyed inflation expectations rose steadily, if gently (figure 18). From 2006, in the next phase of the review period, oil prices rose and added to price pressure and inflation expectations. As in the 2000-03 phase,

Figure 18
Survey measures of inflation expectations



Sources: ANZ National Bank Ltd., RBNZ

tradables inflation was relatively weak through these years, particularly because of the strong exchange rate.

Despite strong domestic activity, the Reserve Bank and other forecasters saw credible risks to the outlook during this phase. These threats influenced views on how much monetary tightening was needed to offset inflation pressure.

In the external sector, the uncertainty came from volatility in the terms of trade, the strong New Zealand dollar and the outlook for foreign demand. The concerns became stronger in 2005 and beyond, and continued into 2007.

In the domestic economy, there was an expectation of a braking effect from the cumulative monetary tightening, high leverage on private balance sheets, the risk of a fall in overvalued property prices, and labour shortages and capacity constraints. Finance company failures from 2006 were highly visible and posed a risk of denting domestic confidence to some degree, even if the failures were small relative to total wealth in the economy.

Despite these perceived headwinds, the Reserve Bank raised the OCR from 5 percent through the second half of 2003 to 7.25 percent at the end of 2005. By 2006, growth in the economy did indeed appear to be cooling, with GDP growth falling sharply to around zero. The OCR was therefore held at 7.25 percent through 2006. However, in the first part of the next phase – 2006-08 – it became evident that the slow-down had been short-lived and, following a sharp rise in the terms of trade, the Reserve Bank raised the OCR further to lean against inflation pressures.

¹⁸ Reserve Bank of New Zealand (2011a).

¹⁹ Wage inflation, according to the Labour Cost Index (LCI) which excludes rises in compensation for productivity growth, rose from 2.2 percent in early 2003 to 3.1 percent in late 2006. The rate peaked at 3.7 percent in 2008, compared with the 1990s peak of 2.2 percent.

Oil price spike, 2006-2008

In late 2006, against a background of resurgent domestic demand and inflation pressure, world oil and food prices spiked. Oil prices rose from an already high level to peak in mid-2008 at just over USD130 per barrel, roughly double their level of a year earlier. Higher world food prices were positive for New Zealand export incomes, but added to inflation. Higher oil prices combined with other factors weighing on activity would tip the economy into recession in 2008.

CPI inflation rose sharply, and with domestic inflation and demand pressure already high, there were concerns about the potential for the rise in inflation to become persistent. This played off against signs of weakening demand, leading the Reserve Bank to hold the OCR unchanged through 2006 while watching the opposing forces on inflation play out.

The other factors weighing on New Zealand's outlook were the very strong New Zealand dollar, the cumulative effect of several years of monetary tightening combined with high leverage on balance sheets, and in 2007 the early signs of financial stress abroad. To a lesser degree, a drought in the summer of 2007-08 also weakened confidence and activity. These, combined with higher oil prices, ultimately tipped New Zealand into recession in 2008. These other events – and particularly the worsening outlook for the US and Europe with the growing financial disruption – are discussed in more detail in the next section.

Why oil and food prices rose so sharply remains the subject of debate. For oil, explanations include tension in the Middle East, speculative pressure, market concerns about 'peak oil', and tight supply because of a shortage of extraction capacity. For food, the stories include climatic factors, growing Asian demand, higher oil prices affecting production costs, and a substitution towards producing agricultural products for biofuels instead of food.²⁰

Government spending remained stimulatory, with discretionary spending having risen sharply from 2005 (figure 14). This offset the effects of "automatic stabilisers"

– the increases in tax revenue and reductions in welfare payments that tend to happen during an upswing. As noted above, the core Crown surplus started falling after 2006.

With the spike in oil prices, CPI inflation rose from late 2007 to reach 5.1 percent by the September quarter of 2008. Offsetting this were the slowing growth and non-tradables inflation, discussed in the next section.

Looking at inflation expectations data, the oil-driven spike in inflation proved transitory and does not appear to have become embedded in inflation expectations (figure 18). Part of the reason is likely to be the contemporary slowing in activity and the subsequent recession.

After pausing its OCR rises in 2006, the Reserve Bank started raising the policy rate again in 2007 as activity picked up again and the inflation risks once again appeared to be rising. The OCR was lifted from 7.25 to 8.25 percent in the first half of 2007. Short-term wholesale rates rose even further as international markets became nervous around the start of the GFC. The OCR was held at 8.25 percent until July 2008, at which point the Reserve Bank started lowering the policy rate.

Continuing the trend from previous years, interest rates on new mortgages rose largely in line with wholesale rates for similar terms. However, the weighted average rate on existing mortgages continued to rise more slowly than wholesale rates, because of the high proportion of existing fixed-rate mortgages.

GFC, recovery and sovereign debt problems, 2007-

In 2007, the early stages of the GFC began playing out. Stress rose in world financial markets and funding on international markets became more expensive for banks, relative to more normal conditions. This came on the back of the oil price spike and growth of domestic imbalances in New Zealand. Along with the corresponding slow-down in world demand, was an important factor contributing to New Zealand's economic contraction in 2008-09.

The early signs of the GFC became apparent in the US, with the housing market weakening dramatically and foreclosures mounting. As the year progressed, financial stress increased. In the US and Europe, there was a string

²⁰ Briggs, Harker, Ng and Yao (2011) provides a detailed discussion of movements from 2000 to 2008 in world prices for oil, dairy, beef and lamb.

of failures of housing lenders that had investments in sub-prime mortgages. By August 2007, liquidity pressures were emerging in financial systems internationally.

Central banks around the world, including the Reserve Bank, provided additional liquidity support to offset pressures in interbank markets. One effect of market nervousness was a rise in interest rates relative to policy rates, having the effect of tightening monetary conditions. The Reserve Bank, in July 2008, lowered the OCR from 8.25 percent to 8 percent to offset this rise in spread. As the world outlook worsened and inflation risks fell, the OCR was cut by another 50 bps in September.

The global outlook subsequently weakened further and nervousness in markets rose following the collapse of Lehman Brothers in the US in September 2008. Liquidity flows in interbank markets fell sharply. Central banks began rapidly lowering policy rates. The Reserve Bank cut the OCR from its level of 7.5 percent shortly before the Lehman Brothers failure to 2.5 percent by April 2009.

While policy easing brought down the level of short-term interest rates around the world, reduced risk appetite and liquidity meant banks seeking funding had to pay higher spreads over benchmark rates. In spite of the fact that New Zealand banks and their Australian parents had little direct exposure to the initial sources of the GFC, they, too, faced a sharp rise in funding spreads. Governments around the world, including New Zealand's and Australia's, used retail deposit and wholesale funding guarantees to support confidence.

Higher spreads for wholesale funding meant banks in New Zealand increased competition for retail deposits and tightened their lending standards. Retail deposit rates and lending rates rose relative to what would be expected in more normal conditions. Credit growth slowed, reinforcing the slow-down in property markets.

The finance company failures that started in New Zealand in 2006 continued. This reduced access to credit for more marginal property development projects, and added to broader nervousness among depositors and investors in New Zealand.

Following the GFC there was a major drop in world trade, and so in demand for New Zealand's exports. The New Zealand dollar fell sharply from 2008 with the

country's growth and export outlook, but rebounded similarly quickly in 2009. The rebound limited the benefits for farmers of the higher commodity prices that came with the return of Asian and Australian demand. Demand from the US and Europe also remained weak. With weak income growth and high debt ratios, farmers became increasingly cautious about new spending.

As Asian demand continued to grow and the world outlook more generally improved through 2009, commodity prices rose in 2010. Prices of New Zealand's export commodities – particularly dairy – ultimately reached record levels in early 2011, and the New Zealand dollar TWI returned to a level near its 2007-08 peak.

Helping the world outlook to improve in 2009 was support, to the financial sector and through economic stimulus more broadly, from governments and central banks. Uncertainty in markets remained high, however. While central banks started withdrawing part of the liquidity support, the degree of extraordinary support remained considerable. In the US, UK and euro area, central banks used various forms of 'quantitative easing', injecting liquidity to help the effectiveness of monetary policy. Direct assistance to the banking sector remained important for market confidence.

Growth in government spending helped sustain New Zealand's domestic demand through this phase, particularly after private investment plunged from mid-2008. The level of government spending as a share of GDP remained high at the end of our review period, but a growing deficit and rising debt were increasing the imperative for fiscal consolidation. The cost of responding to earthquakes had added to the deficit.

In 2010, concerns grew about high levels of sovereign debt in parts of Europe and about the need for fiscal consolidation there and in the US. Market nervousness and funding spreads for financial institutions rose sharply once more, and financial sector support from the official sector took on renewed importance. Uncertainty about a solution to the sovereign debt problems remained through to the end of our review period. So, too, did higher funding spreads for banks.

Domestically, a series of major shocks came late in 2010 and through 2011 with a series of large earthquakes hitting Christchurch. These caused significant damage to the capital stock and so production, consumer confidence and business confidence.

Shortly after the February 2011 earthquake the Reserve Bank initially estimated the likely cost of reconstruction at around 8 percent of nominal GDP, or NZ \$15 billion. Around NZD9 billion of that was seen as being in the residential sector, with NZD3 billion each in non-residential construction and infrastructure.²¹ While much of the cost of reconstruction was expected to be covered by insurance, continuing quakes and the difficulty of insuring new buildings created uncertainty about the timing of reconstruction and repair.

The events described above help explain the relative slowness of New Zealand's recovery since the GFC. The strong currency has dampened export incomes. High funding spreads for banks, combined with highly geared balance sheets in the household and farm sectors particularly, have slowed credit and spending growth. The household and private savings rates have risen (figure 13), but efforts to reduce leverage have, so far, halted the rise in debt ratios without lowering the numbers significantly. Property markets have remained weak.

Looking at overall performance since the GFC, real GDP fell through 2008 and into the first quarter of 2009. Per capita GDP fell from the second half of 2008 to mid-2010, and from there grew at only a slow rate. By the end of the review period, per capita GDP was around the levels seen in late 2004 (figure 10).

The recession meant that GDP fell to around 2 percent below potential output from 2009 onward. Survey-based indicators of capacity pressure also suggest a considerable release of the earlier strain (figure 11). Aside from a transitory spike in 2011, inflation has been easing.²²

The OCR has remained at very low levels through the post-GFC period. It was lifted by 50 bps in two steps in 2010 as the world and local outlook improved, but this was

reversed after the Christchurch earthquakes and the rise of sovereign debt problems abroad.

By comparison, the Australian policy rate was raised from 3 to 3.25 percent in October 2009 and reached 4.75 percent in November 2010. The rate was then lowered gradually from late 2011 as the world outlook weakened and domestic momentum eased. Policy rates in the US, euro zone and the UK have all remained at the lows they reached in late 2008 and early 2009. As noted above, the very low interest rates have been assisted by other tools that seek to enhance the effectiveness of monetary easing.

4 Conclusion

New Zealand's economic expansion from 1998 to 2007 was long and large by post-war standards. The 2008-09 contraction was marginally longer and deeper than the norm, was preceded by two years of slower average growth, and was followed by a very gradual recovery.

After recovering from the post-EAC recession, New Zealand avoided the recession that subsequently hit the US and euro area economies in 2001. The country entered 2002 in what seemed good shape for a sustained period of growth. Inflation pressure was limited; the unemployment rate was low; the fiscal position was strong; house price inflation was still modest; the terms of trade were high compared with the previous two decades; and the currency was relatively low.

As it turned out, this picture of a balanced economy changed quite quickly. Large domestic imbalances developed: the non-tradables sector faced strong demand while competitiveness fell for non-commodity tradables producers; and property markets boomed, with balance sheets becoming stretched across the household and farm sectors in particular. While private savings rates fell as households borrowed, national savings did not fall by much overall – the government accounts were in surplus until the last couple of years of the decade.

Early in the 2000s, a large and unanticipated rise in net migration came when activity was already picking up. This added a boost to consumer and housing demand and so domestic momentum. The migration rise was transitory,

²¹ Reserve Bank of New Zealand (2011c)
²² The rise in measured non-tradables inflation in 2011 largely reflected a rise in GST, which subsequently fell out of the CPI. The tradables rise was driven by oil and other commodity prices.

with the higher inflows lasting only until 2003, but other factors took over to sustain momentum.

Important for sustaining that momentum, and the growth of domestic imbalances, was easy access to credit through the mid-2000s. This financed property investment especially – in the household sector, for example, housing loans grew much more quickly than consumer loans while consumption rose largely in line with GDP. It also supported growth in broader investment. Property prices climbed sharply for several years in all of the housing, rural and commercial sectors.

Relatively cheap funding from abroad led to growth in the use of longer-term fixed-rate loans. This helped insulate holders of existing loans from subsequent rises in the OCR. The Reserve Bank increased the OCR significantly through the mid-2000s because of strong inflation pressure.

New Zealand's terms of trade climbed during the review period and have remained high by historical standards, reaching levels last seen in the early 1970s. World demand for commodity exports was important, as were falling world prices for imported goods. Strong growth in the Asian region contributed to both of those phenomena.

With high terms of trade, a relatively good growth outlook and high interest rates, the New Zealand dollar was strong for a long period. This, together with a tight labour market, further reduced competitiveness in the non-commodity tradables sector. Investment was increasingly directed to the non-tradables sector and commodity exports.

The strong domestic activity brought a high degree of capacity strain and inflation pressure. Excess demand in the 2000s was consistently, for around five years, at levels near the peaks reached in the 1990s. Inflation expectations rose, but remained generally consistent with the Reserve Bank's inflation target despite the sharp rise in oil prices from 2006.

The GFC has had a major bearing on New Zealand's economic performance in recent years. Following the GFC, the striking feature of New Zealand's experience has been the slowness of the recovery. The OCR has

consequently remained very low for an extended period with inflation pressures relatively contained.

Strong demand from some regions – Asia particularly – caused New Zealand's terms of trade to rise again from 2009. With this has come a rise in the New Zealand dollar against trading partners in other regions, offsetting some of the gain from strong terms of trade. Balance sheets, especially in the household and farm sectors, remain stretched. Spending has consequently been cautious, and recovery in asset markets slow. To date, the limited appetite for debt has only really stalled the rise in debt ratios rather than reducing leverage. Earthquakes in Canterbury have been a setback to economic confidence as well as the capital stock in that region. Rebuilding is, however, expected to underpin a strong recovery in domestic demand over coming years.

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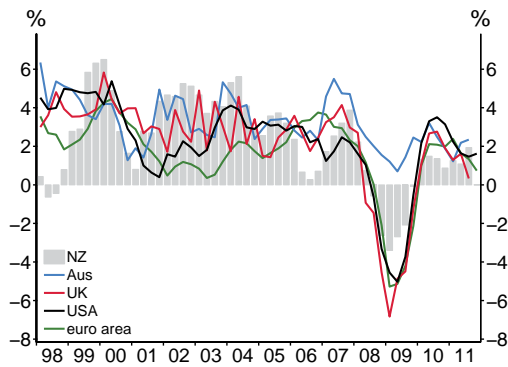
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Appendix

Cross-country charts

Figure A1

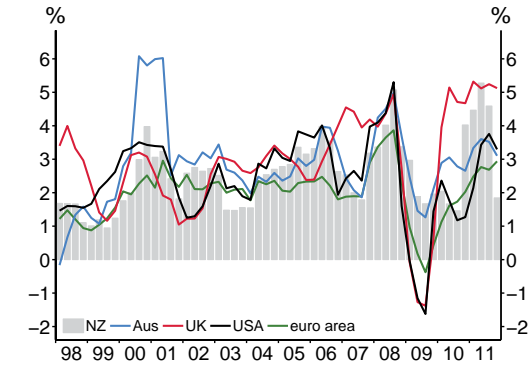
GDP growth rates (annual percentage change)



Source: Haver Analytics, Statistics New Zealand

Figure A2

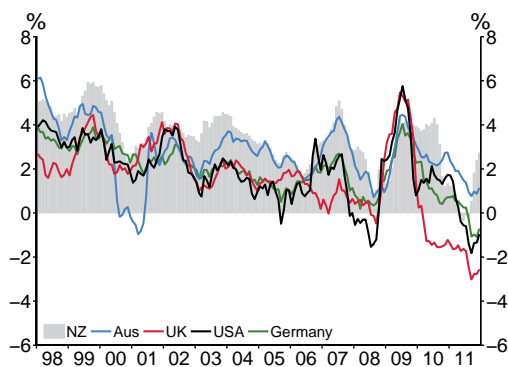
Annual CPI inflation



Source: Haver Analytics, Statistics New Zealand

Figure A3

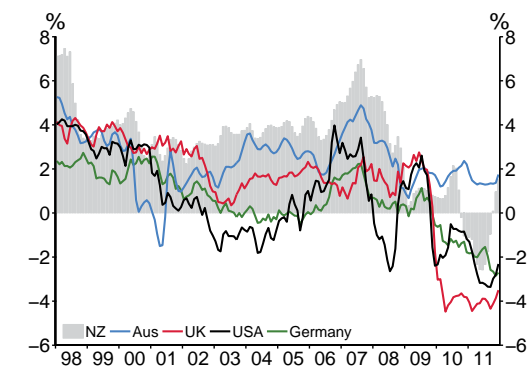
Real 10-year rates (CPI-deflated)



Source: Haver Analytics, Reuters, Statistics New Zealand, RBNZ calculation

Figure A4

Real 90-day rates (CPI-deflated)



Source: Haver Analytics, Reuters, Statistics New Zealand, RBNZ calculation

A brief history of monetary policy objectives and independence in New Zealand¹

James Graham and Christie Smith

The legislative framework for monetary policy has been fairly settled for more than 20 years. This stability contrasts with the frequent revisions that occurred to statutory provisions dealing with monetary policy objectives and the relationship between the Reserve Bank and the government in the decades following the Bank's establishment in 1934. This article traces the changes in the legislation governing monetary policy and outlines some of the influences on the evolution of monetary policy objectives and the role of the Reserve Bank in conducting monetary policy.

1 Introduction

Views about the appropriate role for monetary policy, and the appropriate legal relationship between the government and the Reserve Bank, have evolved considerably since the Reserve Bank's inception in 1934. In this article we outline the evolution of the legislative objectives for monetary policy in New Zealand and the changing nature of the Reserve Bank's statutory responsibility for monetary policy.

The statutory objectives governing monetary policy and the Reserve Bank's independence have been repeatedly modified since the 1930s. These provisions have been influenced by differing domestic political emphases and by the evolution of economic thought about what monetary policy can usefully achieve. The current form of the legislative provisions governing monetary policy was also extensively influenced by the rethinking of wider public sector governance in New Zealand in the late 1980s. Although New Zealand's approach to monetary policy has evolved in much the same way as in other countries, many of the details of our framework have retained a distinctly New Zealand flavour.

At inception, the purpose of the Reserve Bank was to manage money and credit conditions to promote New Zealand's economic welfare. An integral part of this was the requirement that the Reserve Bank maintain the New Zealand pound's convertibility into the British pound. In subsequent amendments and acts between 1936 and

1964, the number and scope of monetary objectives expanded – variously encompassing economic and social welfare, production, trade, employment, and price stability, though not necessarily in that order. Eventually, with the floating of the New Zealand dollar in 1985 and the passage of the Reserve Bank Act 1989, the primary objective of monetary policy settled on domestic price stability,² under the implicit, oft-repeated, understanding that monetary policy pursuing price stability provided the best possible contribution to the economic welfare of New Zealand.

The legal independence of the Reserve Bank in respect of monetary policy has also been amended over its history. The Bank was granted a high degree of formal independence under the inaugural Reserve Bank Act of 1933, but this independence was substantially removed later in the 1930s and in other subsequent amendments to the Reserve Bank Act. The 1989 Act put in place a balanced arrangement in which the Reserve Bank has full operational autonomy in the conduct of monetary policy, while the Minister of Finance has considerable (transparent) involvement in agreeing how price stability should be pursued, and some reserve powers of intervention.

2 The responsibility of a new central bank

By the late 1920s, most countries were once again part of the Gold Standard, with national currencies being convertible into gold at a fixed price. For example, the UK, New Zealand's most important trading partner, returned

¹ The authors acknowledge helpful comments from Michael Reddell, Tim Ng and Mike Hannah.

² Previous Reserve Bank legislation, as enacted, can be downloaded from http://www.nzlii.org/nz/legis/hist_act

to the Gold Standard in 1925, following its temporary suspension during World War I. Convertibility of paper currency into gold was seen as a basic feature of sound money in this era, establishing confidence in the currency and promoting macroeconomic stability.

Until the late 1920s, New Zealand trading banks managed domestic credit conditions to maintain a *de facto* fixed exchange rate close to parity between the New Zealand pound and the British pound (Hawke, 1973, pp 17, 19). Prior to the establishment of the Reserve Bank in 1934, trading banks in New Zealand issued their own bank notes. Before World War I, these notes were convertible to gold upon request (Wright 2006, p 6).

Concerns about foreign reserves and domestic credit provided an impetus for the establishment of a central bank. In the late 1920s, four of New Zealand's six trading banks were Australian owned. These four banks held common pools of sterling reserves for the two countries, which led some to believe that adverse macroeconomic conditions in Australia were constraining credit conditions and the availability of foreign exchange for New Zealand (Ashwin, 1930). It was thought that a New Zealand central bank would provide greater differentiation between the two Australasian monetary systems, and would thus ensure that New Zealand credit conditions better reflected New Zealand's export earnings and borrowing capacity.

In July 1930 Sir Otto Niemeyer, a Bank of England official, was invited by the New Zealand government to give advice on banking and currency issues. His report to Parliament in February 1931 recommended the formation of an independent central bank. Niemeyer's report advised that the central bank should maintain a fixed exchange rate for the New Zealand pound, with the exchange rate to the British pound being at or near parity (Niemeyer, 1931).

In the period between Niemeyer's report and the passage of the inaugural Reserve Bank Act of 1933 the international environment changed substantially. In 1931 the UK (and various other countries) left the Gold Standard, and the US followed in 1933. In New Zealand, the devaluation of January 1933 was the first policy action to set an exchange rate against sterling at other than parity.

In the 1933 Act, the Bank's overall purpose was stated broadly:

It shall be the primary duty of the Reserve Bank to exercise control [...] over monetary circulation and credit in New Zealand, to the end that the economic welfare of the Dominion may be promoted and maintained (1933, s12).

Convertibility was an important feature of the Act and the Reserve Bank was required to convert New Zealand pounds into British pounds on demand (though only in wholesale amounts). The Act stated that "the rate at which the exchange is effected shall be fixed by the Bank" (1933, s16).

3 Early Reserve Bank independence

Niemeyer's report had argued that "the Bank must be entirely free from both the actual fact and the fear of political interference" (Niemeyer 1931, p 4), a view shaped no doubt by the Bank of England's independence (Wright 2006, p 11). Gordon Coates, the United-Reform coalition's Minister of Finance, qualified Niemeyer's view somewhat and suggested that while the government should have ultimate responsibility for monetary policy, the Reserve Bank's implementation of policy should be free from "the fact, as well as the suspicion, of being influenced by [anything] other than the economic welfare of the Dominion as a whole" (Coates, 1933, p 3).

The 1933 Act was designed to constrain the government's formal influence over the Reserve Bank. The Act established the Bank as a semi-private institution, entrusted with the management of the national currency but limited by Parliament's determination of its statutory objectives, duties, and powers. One-third of the Reserve Bank's paid up capital was issued to the public (Singleton *et al*, 2006) and while the Crown retained a majority shareholding of the Reserve Bank, the Minister of Finance was not entitled to vote at shareholder meetings (1933, s6). The Governor of the Bank was appointed by the Governor-General, but this appointment was to be made on the recommendation of the Board (1933, s24), and four of the seven board members were to be appointed by the

shareholders (1933, s29). The Board was, from inception, ultimately responsible for the affairs of the Reserve Bank (1933, s3).

The government had no formal powers to direct the Bank in any of the areas of its operations. The Reserve Bank took over the government's banking business but, importantly, the Reserve Bank's ability to lend to the government was limited by statute (1933, s14). In most other operational areas, the Bank had considerable formal autonomy but a rather limited range of instruments (1933, s13, s14, s45). Foreign exchange inflows and outflows would, in practice, be the biggest influence on domestic monetary conditions, as they had been prior to the Bank's establishment.

4 Monetary policy in the 1930s

Despite the formal statutory provisions, from the time of the Reserve Bank's inception it was generally agreed that its independence should be limited to the implementation, rather than the direction, of monetary policy. Following the 1933 Act, the Reserve Bank's Board formally resolved that the government should be responsible for setting the overall direction of monetary and exchange rate policy, while the Reserve Bank should carry it out. This stance was endorsed by the government (Hawke 1973, p 64).

The first Labour government, elected in 1935, had an extensive reform agenda. The newly elected government put the amendment of the Reserve Bank Act at the top of its legislative priorities (Hawke 1973, p 65), intending to have the Reserve Bank play a more active role in the government's overall economic programme. Elements of Labour Party thinking at the time were influenced by the Douglas Credit (ie, Social Credit) movement, which was highly suspicious of private banks' creation of credit and saw an important role for government credit creation in sustaining a fully-employed economy.

The 1936 amendment to the Act stated

It shall be the function of the Reserve Bank [...] to give effect as far as may be to the monetary policy of the Government [...] For this purpose, and to the end that

the economic and social welfare of New Zealand may be promoted and maintained, the Bank shall regulate and control credit and currency in New Zealand, the transfer of moneys to or from New Zealand, and the disposal of moneys that are derived from the sale of any New Zealand products and for the time being are held overseas (1936, s10). [Emphasis added.]

This amendment made explicit the government's responsibility for the direction of monetary policy. Furthermore, additional provisions introduced the power for the government to make regulations under the Act, putting greater power directly in the hands of the Minister of Finance.³ The Secretary to the Treasury also became a voting member of the Board. Such provisions constrained the Bank's ability to implement policy in an independent manner and provided scope for a correspondingly larger role for the government.

The 1936 amendment removed restrictions on the Reserve Bank lending to the government (1936, s12, s14, s15). These changes allowed the government to borrow from the Bank to finance government activities directly. For example, the Labour government set up an account at the Reserve Bank to fund a guaranteed price system for dairy farmers, and also borrowed from the Bank to finance state housing (Sutch, 1966, pp 185, 189).

The 1936 amendments gave the government explicit responsibility for policy, but the definition of "policy" and the practical distinction between it and "implementation" were not always clear. Following disagreements about the Reserve Bank's control over credit expansion, foreign exchange, and the maintenance of low interest rates, the government tightened its control over the Reserve Bank further (Hawke, 1973, pp 66-67). The 1939 amendment to the Act stated that

The Governor and the Board of Directors shall have regard to any representations that may be made by the Minister of Finance in respect of any functions or business of the Reserve Bank, and shall give effect to any decision of the Government in relation thereto conveyed to the Governor in writing by the Minister of Finance (1939, s2).

³ For example, the introduction of exchange controls following the foreign exchange crisis of late 1938.

This amendment made it clear that the Bank enjoyed only as much operational freedom as the government of the day chose to allow it. The directive powers were never formally invoked but the possibility of direction and the regulation-making powers were sufficient to maintain effective government control over monetary policy. While the Act was amended repeatedly over the next few decades, from 1940 until the mid 1980s there was little effective change in the relationship between the Reserve Bank and government.

5 Monetary policy in the post-war period

Monetary policy, in New Zealand and most similar countries, played very little active role during World War 2 and the years immediately afterwards. The focus of policy during the war had clearly been on mobilising resources through an extensive web of controls (including on prices, wages, and financial sector activity). The controls were only slowly unwound in the subsequent decades. Consistent with the practice in a variety of similar countries influenced by the experience of the Great Depression, post-war economic management placed a very high priority on full employment.

Unlike many countries, whose exchange rates had been floated in the 1930s, New Zealand's exchange rate had remained fixed. Following the war, most countries also returned to fixed exchange rates against the US dollar, while the dollar was convertible into gold. This "Bretton Woods system" continued until 1971. There were only two discretionary adjustments to New Zealand's exchange rate during those decades.

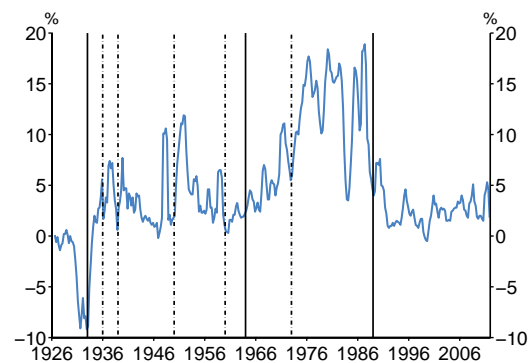
Inflation in the late 1940s was sometimes high and variable (see figure 1), and the National Party had campaigned vigorously in the 1949 election on getting the cost of living under control. Once elected, the new government amended the Act, keeping overall responsibility for monetary policy within the government's control but adding an additional requirement that

[The Bank] shall do all such things within the limits of its powers as it deems necessary or desirable to promote and safeguard a stable internal price level

and the highest degree of production, trade, and employment that can be achieved by monetary action (1950, s2).

Though domestic price stability had been discussed at the Reserve Bank's inception (Hawke, 1973), this was the first statutory reference to it. In 1950, the inclusion of price stability as an objective for the Bank preceded the single focus on price stability in the 1989 Act by some forty years.

Figure 1
CPI inflation in New Zealand and Reserve Bank legislation 1926-2011



Source: Statistics New Zealand
Note: The solid vertical lines indicate the passing of the 1933, 1950, and 1964 Reserve Bank Acts. The dashed vertical lines indicate the passing of the 1936, 1939, 1950, 1960, and 1973 Reserve Bank Act amendments.

It is also worth noting that the goals for real economic variables ("production, trade, and employment") were not absolute but were to be pursued only to "the highest degree...that can be achieved by monetary action".

The 1950 legislation also removed the power of the Minister to direct the Reserve Bank, shifting that power to Parliament:

In the exercise of their functions and powers under the principal Act the Governor and the Board of Directors shall give effect to any resolution of the House of Representatives in respect of any functions or business of the Reserve Bank (1950, s3).

This change made formal direction of the Reserve Bank more difficult (although all governments at the time had absolute majorities in Parliament), by making any such direction more transparent, and open to public scrutiny. In practice, given the nature of the instruments available to the Reserve Bank, which required ministerial approval to use or vary, the change had quite limited effect and is

probably best seen as a statement of principle (Hawke 1973, pp 76-77). Like the change to the Reserve Bank objective, it is probably more interesting for the thinking that prompted the form of the legislative change than for any concrete impact on the way in which monetary policy was subsequently conducted.

In the 1954 election, the new Social Credit Political League won a surprising 11 percent of the total vote. The Social Credit movement worried about the role of trading banks in the creation of credit and urged a greater role for interest-free central bank credit. In response, a Royal Commission on Monetary, Banking, and Credit Systems was established in 1955 (Hogan 1956, p 305). The Commission found little of substance in the Social Credit arguments.

The Commission did, however, make a number of important comments about monetary policy. It argued that following the Reserve Bank Act amendment of 1950, the government had failed to adopt clear goals for monetary policy and its overall economic programme (Hogan 1956, p 308). The Commission also argued that the relationship between the Reserve Bank and the government was still not sufficiently clear and that the government should have more explicit responsibility for monetary policy.

While the governing National Party was not receptive to the Royal Commission's recommendation, the Labour government elected in 1957 introduced the following amendment:

The Minister of Finance may from time to time communicate to the Reserve Bank the monetary policy of the Government, which shall be directed to the maintenance and promotion of economic and social welfare in New Zealand having regard to the desirability of promoting the highest degree of production, trade, and employment and of maintaining a stable internal price level (1960, s2).

The 1960 amendment also made some other shifts of emphasis. First, the amended clause made clear that the statutory objectives were for the government's monetary policy, rather than goals for the Reserve Bank itself. In a sense, this change brought the statement of objectives into line with the fact that all the effective instruments were already under the control of the Minister of Finance. In a

parallel change, the power to direct the Reserve Bank was shifted from Parliament back to the Minister of Finance.

Second, the amendment altered the emphasis of the statement of objectives. A new preamble to the objectives was introduced stating that "it is the sovereign right of the Crown to control currency and credit" (1960, s2). This change appears to have been largely symbolic in nature, aimed at those Labour supporters sympathetic to the Social Credit movement (eg see Hawke, 1973, p 74; Sinclair, 1976, p 347). In addition, internal price stability was relegated to the bottom of the list of the government's monetary policy objectives (1960, s2), and there was no longer any reference to the limits of what could be "achieved by monetary action".

In 1964, under a National government, a new consolidated Reserve Bank Act was passed, replacing the 1933 Act and its numerous amendments. Only two changes were directly relevant to the material covered in this article. The power to direct the Reserve Bank was once again shifted from the Minister to Parliament. However, and perhaps consistent with the very limited operational freedom the Reserve Bank had, an additional primary function was added, listed before responsibility for the conduct of monetary policy; "to advise the Government on matters relating to monetary policy, banking, and overseas exchange" (1964, s8).

The formal scope for the Minister of Finance to direct the Bank varied under successive amendments to the Act. However, the Minister's continuing control over specific instruments used to influence monetary and exchange conditions (e.g., required reserve ratios, exchange controls, interest rate restrictions, and restrictions on new corporate capital issues) meant that the Reserve Bank's effective independence changed very little. The Reserve Bank's impact on monetary policy was more likely to depend on its ability to influence thinking within official and government circles (and on the quality of its published analysis) than on any significant discretionary scope to operate on its own. In that respect, the Bank's position during these years was not so different from that of its counterparts in the United Kingdom and Australia.

The use of interest rates as a monetary management tool had long been contentious. Bank and Treasury

submissions to the 1955 Royal Commission were divided about whether more flexible interest rates were appropriate (RBNZ *et al*, 1955), but the Commission recommended that greater use be made of variations in overdraft rates to influence savings and investment behaviour. However, the Commission's recommendations were largely ignored as governments preferred to use tools that worked primarily by rationing credit, allowing only limited flexibility in interest rates (Hogan 1956, p 311; Quigley 1989, p 222; Singleton *et al* 2006). Scope for variation in interest rates increased only gradually over the following decades, with periodic reversals and fresh rounds of regulation.

By the late 1960s, inflation was becoming more persistent in New Zealand and various other advanced economies. In this period, Milton Friedman's research was challenging conventional views about what monetary policy could achieve. In his famous 1968 presidential address to the American Economic Association, Friedman argued that there was no long-run trade-off between inflation and variables such as real activity and unemployment, and long-lasting efforts to stimulate real activity by holding interest rates low would only result in higher inflation. Friedman and like-minded 'monetarists' argued that in a closed economy (such as the US) monetary policy should aim to maintain a modest growth rate in some definition of money to maintain inflation at low levels. Friedman's work became hugely influential as the US (and other countries) entered a period in which both inflation and unemployment were high simultaneously (so-called stagflation).

6 Monetary policy in the 1970s

The 1970s became a period of macroeconomic turbulence both in New Zealand and internationally. In 1971, the Bretton Woods system that had governed international exchange rates since 1945 broke down when the US ended the convertibility of its dollar to gold. Many larger countries let their exchange rates float. New Zealand broke its fixed exchange rate against the pound

sterling in October 1971 and instead fixed its exchange rate against the US dollar until July 1973. Thereafter, New Zealand maintained a fixed exchange rate relative to a basket of currencies, though with periodic adjustments, both up and down.⁴

In 1973, the newly-elected Labour government once again amended the Act. General powers of direction were left with Parliament but the new amendments specifically allowed the government to direct the Reserve Bank to lend to it: "the Bank shall make such loans to the Government and on such conditions as the Minister decides from time to time, in order to ensure the continuing full employment of labour and other resources of any kind" (1973, s2). It is not obvious that patterns of government borrowing from the Reserve Bank were any different after this amendment than they had been in the 1960s, however.

In a further nod in the direction of the Social Credit movement, the 1973 amendment included a requirement "to ensure that the availability and conditions of credit provided by financial institutions are not inconsistent with the sovereign right of the Crown to control money and credit in the public interest" (1973, s5). As the Reserve Bank had no independent regulatory or other policy powers, this addition can be seen as largely symbolic in nature.

New Zealand's terms of trade fell sharply after 1973, and macroeconomic policy faced major adjustment challenges through the following years. Large fiscal deficits, gradually rising unemployment, low productivity growth and the adjustment costs of various microeconomic reforms, all made it more difficult to secure support for the necessary measures to keep inflation low. Headline inflation would remain above 10 percent for most of 1974-87 (with a brief interruption associated with the wage and price freeze in 1982-84), and for much of the 1970s and early 1980s the policy emphasis on stemming the rise in unemployment limited the extent to which interest rates were allowed to rise. The government and much of the private sector borrowed at very low or negative real interest rates, complicating efforts to keep inflation in check.

Monetarist approaches of the type advocated by Friedman did not take hold strongly in New Zealand. The Reserve Bank noted its own reluctance to recommend

⁴ See the timeline in the 1973-98 historical exchange rate series at <http://www.rbnz.govt.nz/statistics/exandint/b1/>

simple monetary targets and that “governments in New Zealand have not been as inclined to strongly held monetarist type views as governments in some other countries” (Reserve Bank, 1983, p. 298).

7 Transforming the monetary policy regime

The election of the Labour government in 1984 heralded major changes in economic policy, including monetary policy. Financial markets were liberalised when interest rate and credit controls, and foreign exchange and borrowing restrictions, were removed, and the exchange rate was floated in 1985, just over a year after Australia floated its own currency.

Inflation had been high from the early 1970s (see figure 1), and additional inflationary pressure was expected as a result of a large exchange rate devaluation in 1984 and the final lifting of wage and price controls. As a result, reducing inflation became the central concern of monetary policy (Reddell 1999, p 64). This focus on inflation came a little late by international standards: the United States and the United Kingdom had successfully disinflated in the early 1980s, while countries such as Japan, Germany, and Switzerland had achieved low inflation even earlier.

By the mid-1980s the Reserve Bank and the Treasury agreed with the academic consensus that there was no long-run trade-off between inflation and real activity, a view also endorsed by the Minister of Finance. It was thus agreed that the Reserve Bank should concentrate on reducing inflation to lower, more acceptable, levels. From early 1985, only indirect instruments (affecting banking system liquidity) were used to influence interest rates, exchange rates, and financial system behaviour more generally. The reliance on indirect instruments, rather than on regulatory provisions requiring formal ministerial authorisation, assisted in the transition to operational independence.

8 Reserve Bank of New Zealand Act 1989

The 1989 Act, which continues to govern monetary policy today, markedly reshaped the nature of the Reserve Bank’s monetary policy powers and responsibilities, and the relationship between the Reserve Bank, the Minister of Finance, and Parliament. That legislation adopted insights from international experience suggesting that central banks with monetary policy independence had more success in sustaining low inflation. It also reflected the wide-ranging reform of public sector organisation and management taking place at the same time. Those reforms were designed to allow Ministers to specify objectives for public agencies, while holding the agencies themselves accountable for the achievement of those objectives (Reddell, 1999).

The preamble to the 1989 Act specifies that the purpose of the Act is “to provide, while continuing to recognize the Crown’s right to determine economic policy, for the Reserve Bank of New Zealand, as the central bank, to be responsible for formulating and implementing monetary policy designed to promote stability of the general level of prices” (1989, a). Thus, the government retains overall control of economic policy (in pursuit, no doubt, of a wider goal of improving economic well-being) while delegating operational responsibility for monetary policy to the Reserve Bank.

Although the Act explicitly grants the Reserve Bank independence to carry out monetary policy, the government retains an important influence over the overall direction of monetary policy by giving the Minister of Finance a central role in setting monetary policy objectives: “the Minister shall, before appointing, or reappointing, any person as Governor, fix, in agreement with that person, policy targets for the carrying out by the Bank of its primary function” (1989, s9). While the Minister formally appoints the Governor, such appointment is made on the recommendation of the Board of Directors of the Reserve Bank (1989, s40).

⁵ The Secretary to the Treasury is, however, no longer a member of the Board.

The Act places clear primacy on the price stability objective, stating that nothing in any other act of Parliament “limits or affects the obligation of the bank to carry out its primary functions” (1989, s13). The Act also sharpens the personal accountability and responsibility of the Governor of the Reserve Bank: “it is the duty of the Governor to ensure that the actions of the Bank in implementing monetary policy are consistent with the policy targets fixed under section 9 of this Act” (1989, s11). The Governor can be removed if, among other things, the Governor’s performance in pursuing the specific policy targets has been inadequate (1989, s49). Under this Act, the Board’s role is primarily to act as agent of the Minister of Finance in monitoring the Governor’s performance.⁵

The Act also provides substantial, but to date unused, reserve powers for the Minister of Finance and the government. Section 12 allows the government to override the section 8 objective, and specify another economic objective in its place:

The Governor-General may, from time to time, by Order in Council, on the advice of the Minister, direct the Bank to formulate and implement monetary policy for any economic objective, other than the economic objective specified in section 8 of this Act, for such period not exceeding 12 months as shall be specified in the order (1989, s12).

Imposing a new temporary objective requires negotiating a new Policy Targets Agreement (PTA) for the duration of the override period. The legislation was designed to allow the temporary imposition of a new objective, but to otherwise keep the same relationship between the Governor and the Minister with respect to the implementation of policy as in more normal times. The Act ensures that any action taken by the government under this section is known to the public as it must be tabled in Parliament and published in the New Zealand Gazette (1989, s12).

The 1989 Act also provides the government with significant powers in respect of the exchange rate. Sections 17 and 18 allow the Minister of Finance to direct the Reserve Bank to intervene to influence or even to set the level of the exchange rate. However, section 20 states

that if a direction to intervene contradicts the price stability objective of monetary policy, the Governor could refuse to give effect to the direction unless and until the Minister obtains an Order in Council under section 12 of the Act to proceed with it (1989, s20).⁶

The Reserve Bank also has an ongoing role in providing advice to governments. Section 10 of the Act requires the Reserve Bank to consult with, and give advice to, the government and any other parties whose actions (for example, fiscal policy and related matters) affect the achievement of price stability.

Another important feature of the Act is the emphasis on transparency. The Reserve Bank is required to publish policy statements specifying the policies it intends to use to satisfy the PTA, stating the reasons for using those policies, outlining its thoughts on possible future monetary policies, and reviewing and assessing previous policies (1989, s15). Parliament no longer has any powers to direct the Reserve Bank, but plays an important role in monitoring the performance of the Reserve Bank. The Bank’s *Monetary Policy Statements* are referred, by statute, to Parliament’s Finance and Expenditure Committee.

The 1989 Act, in conjunction with the first PTA, signed between the Minister of Finance and the Governor of the Reserve Bank in 1990, established the seminal inflation targeting regime (Singleton et al, 2006). This monetary policy framework was soon adopted by countries such as Canada, the United Kingdom, Australia, Sweden, and Norway, among others. Key features of this regime that have been widely adopted include an explicit inflation target, central bank operational independence, and a high degree of transparency.

9 The Policy Targets Agreement

The Act leaves considerable discretion to the Minister and Governor as to what specific targets should be agreed upon in the PTA to deliver price stability. As Singleton et

⁶ Section 19 provides a weaker limitation on the Minister. It states that if the direction to intervene contradicts the Policy Targets Agreement, the Minister has to initiate a new agreement with the Governor (1989, s19).

al point out, the particular target that the Bank adopts in pursuing price stability is not a foregone conclusion and the Bank or the Minister could suggest that “a target for the monetary aggregate, exchange rate, or nominal GDP [...] be specified in place of an inflation target, provided it was consistent with maintaining price stability” (Singleton *et al* 2006, p 136).

By the time the Act was passed, however, there was a clear consensus, shared by successive Ministers of Finance and Governors, that the policy targets were best specified in terms of a band within which consumer price inflation should be maintained (Reddell 1999, p 67). In the first few PTAs, the target band for the inflation rate was set between 0 and 2 percent per annum (PTA 1990, s1). The band has been changed twice; to 0-3 percent in 1996 (PTA 1996, s2), and to 1-3 percent in 2002 (PTA 2002, s2). Each of these changes was initiated by the government of the day.

Later PTAs also placed greater emphasis on medium-term inflation as the focus of policy (recognizing that various shocks can affect short-run inflation outcomes). The 1997 PTA noted that “the underlying trend in prices [...] is the proper focus of monetary policy” (1997, s3). The 2002 PTA went further, stating that it is the “medium-term trend of inflation, which is the focus of the policy target” (s3), and specifically that the Bank’s “target shall be to keep future CPI inflation outcomes between 1 per cent and 3 per cent on average over the medium term” (s2).

Another feature of PTAs since 1999 has been an explicit articulation of the long-recognised understanding that monetary policy can affect aggregate output and the exchange rate in the short run, and that such factors should be taken into consideration by the Reserve Bank: “In pursuing its price stability objective, the Reserve Bank shall implement monetary policy in a sustainable, consistent and transparent manner and shall seek to avoid unnecessary instability in output, interest rates and the exchange rate” (1999, s4). To guard against perceptions that monetary policy might be shaped in a vacuum, successive governments have also added to PTA’s statements about the government’s wider economic objectives and monetary policy’s role in delivering wider economic benefits.

10 Summary

The Reserve Bank’s monetary policy role, and the associated legislation, has gone through substantial change in the decades since the Reserve Bank was founded in 1934. Some of these changes have reflected specific New Zealand circumstances not mirrored elsewhere, such as the political influence of the Social Credit movement in earlier years and the public sector reforms of the late 1980s. Other changes to the monetary policy framework, arguably the more important ones, arose because the international understanding of what makes for good monetary institutions has changed substantially over the last few decades.

While precise legislative specifications differ across countries, there has been a considerable convergence in thinking about monetary policy, with operationally independent central banks pursuing long-run price stability, but with explicit emphasis on the short-run effects that policy can have on real activity, and on other financial prices.

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The New Zealand Debt Conversion Act 1933: a case study in coercive domestic public debt restructuring

Michael Reddell

New Zealand entered the Great Depression with very large public and private debts. The burden of those debts was greatly exacerbated by the unexpected size of the fall in real incomes and in the price level. In 1931 and 1932, the government passed legislation to ease pressure on private creditors, and in 1933 followed Australia's lead in using legislation to compel domestic holders of existing government debt to accept a lower interest rate on that debt. The conversion operation appears to have had a number of goals. The fiscal savings were significant, although probably not decisive. It was also hoped that cutting interest rates on outstanding domestic debt might make external creditors more receptive to lowering the cost of New Zealand's substantial offshore public debt. Perhaps as importantly, the conversion operation was one more piece in an ongoing programme of measures to adjust to, and reverse, some of the redistributive effects of the unexpected steep fall in the price level.

1 Introduction

Current sovereign debt troubles, particularly in Europe, command international news headlines and drive financial markets. But sovereign debt stresses are not new, even in advanced economies, and various authors, led by Carmen Reinhart and Ken Rogoff, have done painstaking work in documenting defaults and coercive restructurings of public debt, domestic and foreign, in a range of countries going back centuries. The New Zealand Debt Conversion Act 1933 is one of the domestic debt restructuring episodes they report.¹ This article, drawing largely on secondary sources, tells the story of that episode in its historical and international context.

2 Context

After a decade of little growth in per capita incomes, the sharp fall in the terms of trade (around 40 percent) helped to trigger a substantial fall in New Zealand's real and nominal GDP in the early 1930s. All estimates of GDP for this period are approximate,² but only a handful of advanced countries, including the US, Australia, and Canada, are estimated to have experienced a sharper fall in the level of real GDP than New Zealand did.³

New Zealand entered the Depression highly indebted. More than half the public debt had been raised in London and that share had steadily increased during the 1920s.⁴ Central government debt as a share of GDP is estimated to have been just over 150 percent of GDP in 1929,⁵ while general government debt (including local government borrowing) was around 190 percent of GDP. Both central and local government debt had increased substantially during the 1920s. In respect of private debts, the Government Statistician provided a one-off estimate⁶ of total mortgage debt (urban and rural) for 1931, equivalent to 140 percent of pre-Depression GDP. Much of the private debt in New Zealand was farm mortgage debt, vulnerable if the commodity prices fell sharply.

Other governments were also highly indebted. The positions of Britain - our principal trading partner and prime source of international borrowing - and the other Dominions (Australia, Canada, Newfoundland, South Africa) were of particular relevance to New Zealand.⁷ World War 1 spending had pushed up public debt levels in many countries including Australasia, but the effect had been particularly significant in the UK, which had had a

¹ See, for example, Reinhart and Rogoff (2011).

² In this article Rankin's estimates of New Zealand's nominal GDP are used, available at http://www.stats.govt.nz/browse_for_stats/economic_indicators/nationalaccounts/long-term-data-series.aspx. On this measure, nominal GDP fell from £172 million in 1929 to a low of £117 million in 1932.

³ Using Maddison's estimates at <http://www.ggdc.net/MADDISON/oriindex.htm>

⁴ Schedvin (1970) reports data (p 100) showing that in 1925-28, New Zealand accounted for 12 percent of all British new investment in offshore government securities, compared to 3 percent in the six years prior to World War 1.

⁵ A significant proportion of the government borrowing was on-lent, particularly in the form of rural mortgages. New Zealand Official Yearbook 1935.

⁷ Newfoundland's public debt problems became so overwhelming during the Depression that in the aftermath Newfoundland gave up its political independence, eventually becoming part of Canada.

relatively small public debt prior to the war. Public debt in the UK was around 175 percent of GDP in 1929.

The public debt ratio in Australia (combining federal and state debt) appears to have been very similar to that in New Zealand,⁸ and Australia was also heavily dependent on access to the London credit markets (and the largest single and international borrower in the 1920s). Much of the Australian debt was quite short term, and offshore lenders had become concerned about the Australian debt position, jeopardising the ability of Australian governments to go on borrowing and putting early pressure on the Australian exchange rate.

3 Responding to the Depression

The depth and duration of New Zealand's economic downturn became clear only gradually. Writing in 1932, the prominent economist Douglas Copland (1932) could note of New Zealand that "by the middle of 1930 the fall in export prices had been only 20 percent in gold [i.e., the foreign currency price], and overseas borrowing had not been interrupted. There was consequently little disturbance to national income", presumably beyond what might have been expected in a typical business cycle. Copland also quotes a League of Nations report noting that New Zealand had been in a relatively favoured position, unlike Australia, for example, at least until early 1931. The Niemeyer Report (Niemeyer 1931), commissioned by the New Zealand government to provide advice on exchange rate issues, was tabled in February 1931 and contains no reference, or sense, of anything out of the ordinary occurring in the economy.

In any event, the New Zealand government had quite limited conventional policy options to respond to downturns, and especially to one of the severity of the Great Depression. New Zealand had no central bank, and credit conditions were managed by the banks, significantly influenced by export receipts and the 'London funds'

(reserve balances) of the banks. The exchange rate was neither formally pegged and nor was it floating – it was set collectively by the banks but typically kept at around parity to sterling, and credit policies were adjusted to keep the reserve balances consistent with a relatively stable exchange rate.

As the export prices and receipts fell, the banks responded to the sharp fall in export receipts by lowering the exchange rate (increasing the cost of purchasing sterling). The extent of the adjustment in the exchange rate was modest when compared to the extent of the fall in the terms of trade (although falling imports meant that, after 1931, banks' London balances were not under particular pressure). The appropriateness of further, perhaps substantial, exchange rate adjustment became a highly contentious political issue, with many economists and farmers favouring a deeper depreciation, while urban and trade union interests resisted the implied increase in the cost of living.

The government's own accounts were materially affected by the economic downturn. Falling domestic incomes and falling external trade volumes meant that any set of tax rates and customs duties now raised less revenue. And the rapid rise in the numbers of people unemployed meant rapidly mounting pressure for additional spending to directly relieve the distress.

Even before the Depression, meeting the interest cost on the central government debt took around a third of total central government revenue. The sharp unexpected fall in the price level raised the real (inflation-adjusted) cost of servicing the debt substantially. As a share of GDP, central government interest costs rose from around 5 percent of GDP in 1929 to almost 8 percent of GDP in 1932. By 1932, the sharp fall in nominal GDP meant that general government debt had risen to almost 300 percent of GDP.

All else equal, those forces tended to push the government accounts further into deficit. But with such high levels of domestic and external debt, the government's continued ability to tap offshore funding markets was seen as a matter of pre-eminent importance. A sustained loss of the ability to roll over maturing foreign debt would have led to even more difficult economic adjustments.⁹

⁸ The *New Zealand Official Yearbook* 1931 reports that central government debt as at 31 March 1930 was £178 per capita, while Australian Federal and state debt totalled £173 per head, and the two currencies had essentially been at parity.

Access to British funding markets came under severe threat at times, largely as a result of the stresses the UK itself faced, culminating in the decision to leave the Gold Standard in September 1931. During the 1920s, British investors had, in aggregate, been large lenders of long-term funds to the Dominions, including New Zealand, financed not by current account surpluses but by large short-term inflows to the UK. Following the outflow of short-term funds around the crisis of September 1931, there was a great deal of unease about how deep the fall in sterling would be. A strong desire to limit as far as possible new capital outflows from the UK led to a “complete, though unofficial, embargo on foreign new issues.”¹⁰

At the end of 1931, the New Zealand government had been advised that it should not expect to be able to borrow in London during 1932.¹¹ The Bank of England’s official historian reports that, in December 1931, the Bank of England had had to lend secretly more than £3 million (around 2 percent of New Zealand’s GDP) to enable New Zealand to meet its London obligations.¹² The risk of being unable to borrow in the London markets was judged serious enough for the New Zealand government to impose a compulsory surrender requirement on exporters, requiring all export proceeds to be sold to the banks, to help ensure the availability of adequate foreign exchange to meet the government’s needs (without triggering a further material depreciation in the exchange rate). As it happened, under official guidance, the London markets freed up sooner than expected for official Empire borrowers, and the New Zealand government was able to issue some debt abroad. In a sense, the critical consideration was consciousness that market access could be lost. Even if they had wanted to run a more expansionary fiscal policy, governments could probably not have increased the rate of external borrowing.

There were significant increases in some taxes and charges and the government economised where possible, including, for example, cuts in public sector wages and substantial cuts to capital spending. Government capital spending (public works) fell from £9.0 million in 1930 to £2.4 million in 1933. Interest rates on new issues of domestic government debt were also reduced in 1931, but in any one year new issues were equal to only a small portion of the stock of debt outstanding. In aggregate, government spending and revenue both rose materially as a share of GDP during the Depression years and the budget remained in deficit (at around 3-4 percent of GDP, and 20 percent of revenue).

Central and local government borrowers were not the only ones who found the real cost of the debt they had taken on unexpectedly high.¹³ The sharp unexpected fall in the price level had also substantially raised the real burden of the large private debt. In 1931 and 1932, the government took various far-reaching legislative measures, overriding private contracts, to ease the burden of private interest rates on farm and other private borrowers.

The legislation had twin, conceptually separate, purposes: on the one hand, lowering the marginal interest rates facing new lenders and borrowers, and on the other hand, redistributing some of the unexpected windfall gains and losses that had resulted from the sharp fall in the price level. For example, and complementing specific provisions relating to farm mortgages, the National Expenditure Adjustment Act imposed a standard reduction of 20 percent in existing rates of interest, rent and other fixed charges in the private sector. In the same legislation, the government took power to control interest rates paid on deposits taken by banks and other deposit-taking institutions. Public debt was not subject to the provisions of the National Expenditure Adjustment Act, but an additional 10 percent tax rate was imposed on interest received on government securities.

⁹ Cain and Hopkins (2002), p 493, capture the flavour: “After 1929, what bound the Dominions to London most effectively was the crushing weight of accumulated debt, when exports had collapsed and fresh loans were few and small. It has been noted that ‘the Imperial Conference of 1930 resembled nothing so much as an interview between a bank manager and his improvident clients.’”

¹⁰ Arndt (1944) p 110.

¹¹ See Copland (1932) and Tocker (1932).

¹² Sayers (1976) p 449.

¹³ While lenders secured an unexpectedly high real return.

¹⁴ Including, in addition to those mentioned here, such measures as the Small Farms (Relief of Unemployment) Act, under which the government secured the power to compulsorily acquire and break up lands “not being utilized to their full extent”, and to use the land for the settlement, with the goal of reducing unemployment.

Depression pressures had not eased in New Zealand by the end of 1932, and, if anything, concerns about the economic situation were growing. In response, further policy measures ensued.¹⁴ The government finally decided to initiate a formal currency devaluation in January 1933,¹⁵ sparking the resignation of the then Minister of Finance, Downie Stewart.

4 Towards action on the public debt

As Minister of Finance, Downie Stewart had also opposed any sort of compulsory reduction in the interest rate on outstanding public debt, noting in Parliament in October 1931, “any compulsory reduction of interest paid to bondholders would in reality mean default by the State, and would seriously damage our credit. Whatever the position of private borrowers may be, the State is able to pay its debts. In my opinion, it could not, and should not, plead inability to pay when the bondholder demands his interest”.¹⁶

The appointment of Gordon Coates as Minister of Finance in January 1933 led to a change of stance. In his first statement to the House, Coates noted that “the Government consider it essential that interest rates on existing securities should be brought down to a lower level” (Coates 1933), noting that the issue was important for both central and local government debt.

Developments in Australia and the UK materially influenced thinking and debate in New Zealand on debt restructuring issues.

The Australian federal and state governments, under more immediate market pressure than New Zealand, had taken steps to lower the cost of their existing domestic public debt in 1931. This conversion operation was conducted as part of a package of measures to reduce private interest rates etc (similar to New Zealand’s National Expenditure Adjustment Act). Bondholders were offered the opportunity to convert existing domestic debt

into new long-term securities bearing a significantly lower interest rate than the existing securities (the aim had been to reduce the servicing cost of the debt by 22.5 percent).

Through a combination of moral suasion on major institutions, and an appeal to patriotism (easing the burden on the nation in a time of economic crisis), acceptances of around 97 percent of the debt outstanding were received. Following that success, state and federal leaders concluded that it would be unfair for those who had not accepted the offering to be left in a more favourable financial position than those who had accepted. Legislation was subsequently passed to compel the holdouts to convert.¹⁷ During the Depression, the Australian Federal government stepped in to avert the threat of outright default on state debt owed by the government of New South Wales.

The British government’s large domestic debt conversion operation in late 1932, of a single War Loan (equal in size to almost 50 percent of GDP), was undertaken more conventionally.¹⁸ The government had had the contractual right since 1929 to repay this particular loan early. The option was exercised, and holders were offered the opportunity to convert into new long-term government securities (with a range of maturities) at lower yields. The aim was to lower the fiscal cost of the debt. The choice between converting into new government securities or being paid out in cash was entirely at the discretion of each holder. The authorities had a strong interest in a successful conversion, since large-scale repayments would have posed significant liquidity management and financing issues. As it happened, the overwhelming bulk of the called debt was successfully converted – Sayers (1976) ascribes this to some mix of moral suasion on large institutions, and a widespread sense that converting would be an act for the wider good of the nation. In any case, no question of coercion or default arose.

The future of the UK government’s foreign debt was, however, still highly uncertain. Financing provided during World War 1 left the UK with a large amount of debt to the US. Intense debates about this debt were inextricably

¹⁵ The government had no formal mechanism to bring this about, and had to negotiate (under the implied threat of legislating) an agreement with the banks. Hawke (1985) notes that the indemnities offered to the banks may have inadvertently set a floor under interest rates that impeded the expansionary effects of the devaluation.

¹⁶ Quoted in Coates (1933), p. 14

¹⁷ For more discussion of the Australian experience, see Schedvin (1970), Copland (1934) and Coates (1933).

¹⁸ See Sayers (1976) for details of this operation.

linked to questions around the future of the substantial reparations payments to various countries (including New Zealand) due from Germany under the Treaty of Versailles, and the future of the substantial debts owed to the US and the UK by other World War 1 allies (including New Zealand).

Under a moratorium initiated by President Hoover in mid 1931, countries had agreed to suspend all inter-government debt service and related flows for 12 months, but this moratorium expired in mid-1932. The depreciation of sterling following the exit of the Gold Standard substantially raised the real burden of the British (US dollar) debt to the US. The UK decided only at the last minute to meet its debt service obligations to the United States in December 1932 (France and various other countries defaulted then), and made only token payments thereafter before finally defaulting on the war debt in mid 1934. Reparations payments were ended following the Lausanne Conference in 1932.

5 The New Zealand Debt Conversion Act

The Minister of Finance announced his debt conversion plan to Parliament on 28 February 1933,¹⁹ in introducing the New Zealand Debt Conversion Bill.

The plan was presented as a voluntary conversion scheme. Holders of domestic government debt were to be invited to convert their existing debt securities into new lower yielding stock, where the yield on the new stock would typically be 20 percent lower than that on the old stock, subject to a minimum taxable yield of 4 percent.²⁰ Coates (1933) notes that the Australian conversion scheme had been “of material assistance to the Government in framing this legislation”. At the same time as this legislation, Coates also announced further reductions (some imposed, some negotiated) in a variety of new borrowing and lending interest rates for private financial institutions.

This legislation prompted vigorous debate, but was passed through the House of Representatives in a single night. It was followed a week later by the introduction of further legislation providing for a 33 $\frac{1}{3}$ percent tax on any interest paid on domestic government securities that were not converted under the New Zealand Debt Conversion Act. This provision provided the coercive force in the restructuring, as any holder who did not voluntarily convert would, by Act of Parliament, be made worse off than if he had chosen to convert.

Substantive debate, both in Parliament and elsewhere, centred mostly on the question of whether it was appropriate and morally justified to use coercion. Downie Stewart, until recently Minister of Finance, spoke in opposition to any use of coercion to bring about the conversion, while the former long-serving Attorney General and (briefly) Prime Minister Sir Francis Bell staunchly opposed the direct use of legislation to reduce a country’s debt or debt service obligations. Speaking in the Legislative Council debate, Bell noted that, “those of us who have been proud of the credit of the country and its adherence to the British tradition which we have inherited are compelled to denounce a proposition which in every respect denies that the country is bound by its promises”.²¹

Outside Parliament, the British journal *Round Table*, which covered Dominion affairs extensively, went so far as to warn “in New Zealand, as in Germany, it often seems that some of the institutions of the capitalist system are in the process of being destroyed by people who profess and believe themselves to be its most ardent supporters”, while acknowledging that “it cannot be pretended that the country has been seriously perturbed by the violation of sound principle in this part of the scheme” (*Round Table*, 1933, p. 934). A local academic, Belshaw (1933), writing in a leading American economics journal, described the overall package of measures, including the debt conversion, as “an unprecedented interference with contractual rights in New Zealand”

Parallel legislation was introduced to confer on each local authority the power to convert its domestic debt securities in much the same way as the national conversion (with the same coercive taxation provision).

¹⁹ Coates (1933), published in late 1933, is the government’s own account of the thinking behind, and the conduct of, the conversion operation.

²⁰ Similar provisions were made for the significant volume of tax-free securities on issue.

²¹ Reported in the *Evening Post*, 3 March 1933.

6 Outcomes

Substantial amounts of debt were subject to the conversion legislation: £115 million of domestic central government debt (£69.5 million, or around 55 percent of GDP, privately held)²² and around £43 million of local debt covered by the parallel local authority provisions (around 35 percent of GDP). The coercive conversions applied only to domestic holders of domestic debt. The drafters of the scheme went to considerable lengths to exclude, for example, any foreign holders of domestic debt. Coates (1933, p. 43) notes that some foreign holders did nonetheless offer to convert.

It is impossible to be certain how much of the debt would have been converted voluntarily even if the coercive tax provisions had not been introduced. However, the Australian experience suggests that much, and perhaps most, of the debt would have been offered for conversion voluntarily. The use of extensive marketing campaigns, appealing to a sense of the wider public interest, is also consistent with this assessment. It is also consistent with the indications from secondary market pricing on domestic securities (Coates 1933, pp 38,39; Round Table 1933 p934). There is no indication of any significant market backlash following the coerced conversion, and no sign, for example, of an increase in the credit risk premium on New Zealand government securities more generally. Actual dissents tell us little – since those opposed to the conversion still had a financial incentive to accept the conversion – but when the conversion offer closed on 24 March 1933, holders of only 0.5 percent of the affected debt had declined to accept the offer.

Under the local authority conversion, all authorities benefited from an immediate 20 percent reduction in interest rates on existing securities, and then over the following months many followed up with formal conversions of existing debt into longer-maturity debt with lower coupon interest rates.²³

The net fiscal savings from the central government domestic debt conversion was estimated to be around £0.6 million in a full year – equivalent to around a 2 percent

cut in government spending, and around 0.5 percent of GDP (a comparable saving today would be equivalent to around \$1000 million).

Although the New Zealand government had been careful to avoid penalising private foreign lenders, the British government itself in 1932 indefinitely suspended the servicing obligations on the remaining £24 million (sterling) of New Zealand's war debt to the UK (and some other small inter-government loans).²⁴ This voluntary British initiative led to annual interest savings of around £1.2 million (sterling), offset only moderately by the loss of the reparations payments from Germany to New Zealand of £0.3 million (sterling) per annum.²⁵

In total, these net savings on the central government's debt service costs of outstanding debt and related transactions were in excess of 1 percent of GDP. That represented a significant contribution to closing the fiscal deficit, although in absolute magnitude it was swamped by other changes to the public finances, notably the public works cuts.

7 What was the government trying to achieve?

In introducing the legislation, and subsequently, Coates (1933) argued that the focus of the conversion plan was to reduce the prevailing level of interest rates in the economy, to help promote recovery, rather than being primarily to achieve fiscal savings. It is difficult to take this entirely at face value. Interest rates on new debt (public and private) should have been more important for reviving economic activity, except to the extent that fiscal savings from reducing government debt service costs eased the pressure to cut other spending or raise other taxes.

²² Substantial amounts of the remaining debt was the counterpart to private deposits held with the Post Office Savings Bank.

²³ Despite these interest rate reductions, Plumptre (1939) records that three small local authority borrowers did default, and in one of those cases central government stepped in to avoid losses to London creditors.

²⁴ These obligations had already been suspended for a year in 1931 under the terms of the "Hoover moratorium". The New Zealand government had offered to resume payments in 1932 (*Evening Post*, 24 December 1932), but the British government declined the offer. Condliffe (1959) notes that these debts remained contingent liabilities of the New Zealand government but were no longer recorded in public debt data after 1952.

²⁵ Following the devaluation of 1933, £1 sterling was equal to New Zealand £1.25.

There seem to have been at least two other considerations. The first was a strong emphasis on fairness: the price level had turned out to be much lower than that prevailing (and expected) when the debt had been taken on. In that sense, seeking a reduction in the cost of the existing debt was seen by many as a fair response to a severe shock and a large windfall gain to lenders. This strand of argument ran through debates around the earlier adjustments to private interest rates. The force of this sort of argument, in New Zealand and abroad, has already been noted: there was a substantial, genuinely voluntary, component to the various public debt conversions.

Speaking in Parliament, Coates noted that “investors were not being asked to accept a sacrifice that was greater than the fall that had already taken place in the cost of living. The latest figures from the Government Statistician showed that the cost of living had fallen from 18 to 20 percent., and that was approximately the sacrifice which the holders were being asked to make”.²⁶

The New Zealand Debt Conversion Act also appears to have been positioned as a prelude to seeking a reduction in the cost of the existing (and larger) stock of overseas debt. The domestic conversion itself had been carefully designed to exclude any overseas lenders. However, a clearly well-sourced newspaper account published the day before the New Zealand Debt Conversion Bill was introduced stated that “the Government views it as an essential prelude to continuing the negotiations which have already been opened with the British financial authorities for a reviewof about £140 million held by the British public. A successful New Zealand conversion would undoubtedly have a powerful influence on any appeal to the overseas lender for a slight lifting of the debt service burden.”²⁷

This line was also articulated in debate in Parliament a few days later by a senior Opposition spokesman who observed of the domestic conversion. “when negotiations began for the conversion of the external debt New Zealand could say that she had put her house in order first”.²⁸ In the same year, the Labour party adopted a nine point

economic policy platform, later known as “Labour’s Plan”, in which one of the points was to call for “negotiations with British government and overseas financial houses for the purpose of converting the overseas debt to a lower rate of interest, and readjustment to price levels operating at time of raising loans”.²⁹ As Sayers (1976, p. 449) notes, the British were well aware that this was regarded as an issue by each of the Dominions “and this was irrespective of political parties”. They worried that if commodity prices did not lift, the Dominions would each “point out that their position as sterling debtors would become untenable, and that they would be forced to seek a reduction in the contractual rates of interest on their bonded debt outstanding in the London market”.

The Prime Minister himself picked up this theme in May 1933, shortly after the conclusion of the domestic debt conversion. Mr Forbes observed that the domestic conversion had “created the right atmosphere for making proposals in respect of the larger portion of our indebtedness, which is domiciled overseas. This question, involving the rights of investors outside the Dominion, requires careful approach, and can in the last resort be favourably settled only by direct negotiation with the representatives of interests concerned. If success in reducing our overseas debt charges is to be achieved, it will only be possible by responsible Ministers presenting the case in London. This question I regard as one of paramount importance to our own Dominion.”³⁰

The comments were made as Ministers left for the World Economic Conference in London. High hopes were harboured by many that this conference would produce durable solutions to the world’s monetary problems. Those hopes were quickly dashed. Hopes for relief on the interest cost of the existing offshore debt, owed to private creditors, were also short-lived.

Forbes returned from London in September 1933 and reported that the British government had taken the stance that if commodity prices were higher New Zealand could afford to service its debts, and that the British policy focus was on generating a lift in global economic activity

²⁶ As reported in the *Evening Post* 7 March 1933.

²⁷ *Evening Post*, 27 February 1933.

²⁸ Hon M. Fagan, reported in the *Evening Post* 9 March 1933.

²⁹ Brown (1962) p.162.

³⁰ Quoted in the *Evening Post*, 10 May 1933.

and prices. If that was successful “we will be able to pay our way and the same necessity for a general conversion of our indebtedness will not exist”. In an editorial, the *Evening Post* observed that “Britain has honoured her own obligations, and it is not to be expected that she will readily adopt methods similar to those applied to our internal debt.”³¹ The possibility of a link between the domestic conversion and external debt relief received no mention in the government’s official account of the conversion operation published in December 1933 (Coates 1933).

An entirely voluntary conversion of a small amount of the New Zealand’s offshore debt, held by private British creditors and on which the government had the contractual right to make early repayment, was undertaken subsequently (Condliffe 1959, p41).

8 Conclusion

New Zealand borrowers, public and private, ended the 1920s carrying a very heavy burden of domestic and external debt. That burden increased materially and unexpectedly as real and nominal incomes fell. The severity of the Depression took time to become fully apparent, but as it did the New Zealand government, like its counterparts in Australia facing similar pressures, responded with some far-reaching and unconventional measures, while doing everything possible to retain the diminished access to the vital London funding markets.

The New Zealand Debt Conversion Act and its local government counterpart were coercive domestic public debt restructurings, securing material interest savings for both central and local government. The effective degree of coercion was, however, probably rather small. The substantial voluntary component to the conversion is consistent with the perception that some adjustment was fair in the wake of the steep and unexpected fall in nominal incomes. The legislation can be seen as complementing similar adjustments that had already been imposed on lenders to the private sector. A longer game appears to have been a hope that the domestic restructuring would make overseas lenders more receptive to cutting the

servicing cost of New Zealand’s large overseas debt. That came to nothing.

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³¹ Quotes in this paragraph drawn from the *Evening Post*, 18 September 1933, p8.

ANALYTICAL NOTES

AN 2012/1

House price expectations of households:

A preliminary analysis of new survey data

Graham Howard and Özer Karagedikli,

February 2012

People's expectations of future house prices appear to be an important influence on house prices and the volume of house sales. The Reserve Bank has often referred to the importance of house price expectations but unlike many other variables we have had little detailed data on these expectations for analysis. The Reserve Bank has attempted to fill this gap by adding new questions on one-year-ahead house price expectations into the Reserve Bank's quarterly survey of households' inflation expectations. The questions were piloted in the March 2011 quarter survey. We now have results available from the June, September, December 2011 and March 2012 quarter surveys. In this note we introduce the new survey questions and discuss the initial results.

NEWS RELEASES

OCR unchanged at 2.5 percent

8 December 2011

The Reserve Bank today left the Official Cash Rate (OCR) unchanged at 2.5 percent.

Reserve Bank Governor Alan Bollard said: "As foreshadowed in the September Statement, global conditions have deteriorated. Continuing difficulties related to sovereign and bank debt in a growing number of European economies have resulted in high levels of volatility in financial markets. There has also been a softening in international economic activity, including in the Asia-Pacific region.

"Global developments are having some negative impact on New Zealand, though to date it has been limited. Business confidence has declined and investment spending is likely to remain weak for some time. In addition, tightness in international markets means funding costs for New Zealand banks will increase to some degree over the coming year.

"There remains a high degree of uncertainty around the global outlook and, as discussed in the scenario in this Statement, there is a risk that conditions weaken further.

"Domestically, economic activity continues to expand, though at a modest pace. Although off their peaks, export commodity prices remain elevated. In addition, the depreciation of the New Zealand dollar provides some support for the tradable sector of the economy. Over time, repairs and reconstruction in Canterbury will also provide a significant boost to demand for an extended period.

"Annual headline inflation is estimated to have returned within the Bank's 1 to 3 percent target band in the December quarter. Underlying inflation continues to sit close to 2 percent. In addition, wage and price setting pressures have remained contained.

"Given the current unusual degree of uncertainty around global conditions and the moderate pace of domestic demand, it remains prudent for now to keep the OCR on hold at 2.5 percent."

View the *Monetary Policy Statement* page <http://www.rbnz.govt.nz/monpol/statements> for the current policy assessment, *Monetary Policy Statement*, and data file.

RBNZ consults on covered bonds legal framework

9 December 2011

The Reserve Bank released a consultation paper today proposing a legislative framework for covered bonds issued by New Zealand banks.

Covered bonds are debt securities issued by banks, where the bond holder is both an unsecured creditor of the bank and holds a secured interest in a pool of assets, called the cover pool.

Reserve Bank Deputy Governor Grant Spencer said: "Covered bonds can provide banks with access to a stable funding source, which helps support system stability during times of severe disruption in international markets.

"The proposed legislative framework aims to provide investors with legal certainty as to the treatment of cover pool assets in the unlikely event that the issuing bank becomes insolvent," he said. "Legislative frameworks exist in most other countries with covered bond markets."

Key elements of the proposed framework are that:

- covered bond issues must be registered with the Reserve Bank;
 - the cover pool assets must be held by a special purpose vehicle; and
 - an asset pool monitor must also be appointed to monitor the cover pool.
- The Reserve Bank expects that existing covered bonds can easily be brought within this proposed framework.

Following a previous consultation in October 2010, the Reserve Bank imposed an upper limit on the amount of covered bonds that can be issued by locally incorporated banks. This limit was imposed in March 2011 and was set at 10 percent of the total assets of the issuing bank, with the limit calculated on the value of assets encumbered for the benefit of covered bond holders.

The consultation paper is available from the Reserve Bank's website.

The Reserve Bank welcomes submissions by 16 March 2012.

Reserve Bank *Bulletin* released

15 December 2011

The Reserve Bank today released the last issue of the Reserve Bank *Bulletin* for 2011.

The first article in this edition looks at consumption spending. Fluctuations in this type of spending can affect pressure on resources, a key influence on monetary policy decisions. The article examines New Zealand data for the last decade and finds that the recent large increase in house prices may have influenced consumer spending less than often thought.

The topical issue of financial crises is the focus of the second article. This piece considers international literature on other countries' experiences over recent decades and reflects on New Zealand's vulnerabilities in light of that experience. The literature suggests that countries whose debt is denominated in foreign currency, or if the country is part of a fixed exchange rate arrangement, can be particularly vulnerable if offshore funding dries up. New Zealand's debt is mostly in New Zealand dollars, and it has a freely floating exchange rate.

The December *Bulletin* rounds out with a look at the Reserve Bank's new solvency (or capital adequacy) standards, being put in place for insurance companies. Of particular relevance, in light of Canterbury earthquake insurance claims, is discussion on the appropriate amount of capital that should be held by insurance companies against the risk of catastrophic events.

AA rated Kauri securities in RBNZ market operations

16 December 2011

The Reserve Bank announced today that it will accept AA rated Kauri securities in its market operations.

Action by rating agencies in the recent past to adjust their frameworks and downgrade certain sovereigns from "AAA" to lower ratings has systemic consequences for the Kauri securities market. The consequences are both in terms of acceptability in the Reserve Bank's domestic market operations and for commercial banks' liquidity calculations under the prudential liquidity policy (BS13).

The Reserve Bank has decided to clarify how such

securities will be treated if downgrades occur. For domestic market operations: when two rating agencies rate the security at AA- or higher, the security will be eligible as collateral; and the security will be allocated a haircut from its lowest applicable security rating. The Reserve Bank will update its haircut schedule as appropriate.

In parallel with these decisions for its domestic market operations, the Reserve Bank has commenced a consultation process to change BS13 regarding the treatment of Kauri securities. Such a consultation is required for changes to conditions of registration.

New condition for significant bank acquisitions

20 December 2011

The Reserve Bank has introduced a new policy applying to significant acquisitions undertaken by locally incorporated banks.

Reserve Bank Deputy Governor Grant Spencer said the policy will take effect from 31 December 2011 through a change in banks' conditions of registration and will apply to transactions planned to take effect on or after 1 April 2012.

"The new policy will strengthen the Bank's supervisory powers over significant acquisitions undertaken by New Zealand banks," Mr Spencer said. "Significant acquisitions can materially affect the risk profile of the acquiring bank."

The new condition of registration will require banks to: notify the Reserve Bank of any acquisition the bank intends to undertake which is larger than the 'notification threshold'; and obtain a notice of non-objection from the Reserve Bank prior to undertaking an acquisition which is larger than the 'non-objection' threshold. The notification threshold is reached when the total consideration for the acquisition exceeds 15 percent of the bank's capital base, or when the total value of the assets purchased exceeds 15 percent of the bank's total assets.

The non-objection threshold is defined similarly, but at the higher level of 25 percent of capital or assets.

The Reserve Bank has also issued a new banking supervision handbook document on significant acquisitions.

Reserve Bank accommodation for retail payments initiative

21 December 2011

Payments New Zealand, a banking industry owned payments body, is currently completing its plans for the introduction of a new inter-bank retail payment system in the first quarter of 2012.

At present, retail inter-bank payments are settled as bilateral net payments at the end of each day. Under the new system, Settlement Before Interchange (SBI), retail payments will be made in a number of 'payment windows' during the day. This change from end of day net settlement to payments during the day, may impact the way liquidity moves around the payment system and between banks.

To help banks adapt to the new liquidity dynamics and assist with the introduction of SBI, the Reserve Bank has decided to reduce the cost of overnight borrowing in its standing facility for three months from 30 January 2012 until 30 April 2012. During this period, the cost of overnight borrowing will reduce from 50 basis points to 25 basis points over the Official Cash Rate.

There are no monetary policy implications that follow from this short-term adjustment.

The Reserve Bank will, as always, closely monitor the payment system and short-term money market. If necessary, the Bank will act to ensure that the payment system continues to run in a stable and efficient manner.

OCR unchanged at 2.5 percent

26 January 2012

The Reserve Bank today left the Official Cash Rate (OCR) unchanged at 2.5 percent.

Reserve Bank Governor Alan Bollard said: "Since the time of the December Statement, financial market sentiment has improved slightly, with increased liquidity in European financial markets. However, the global economy remains fragile and risks to the outlook remain.

"World prices for New Zealand's export commodities have remained elevated but the recent appreciation of the New Zealand dollar is reducing exporters' returns. The European debt crisis has also increased the cost of international funding, which will likely pressure funding

costs for New Zealand banks over the coming year.

"In the domestic economy we continue to see modest growth. Over recent months there have been signs of a limited recovery in household spending and the housing market. Further ahead, repairs and reconstruction in Canterbury will also provide a significant boost for an extended period, though there may be further delays resulting from the aftershocks.

"Reassuringly, inflation pressures have remained well contained. Inflation has declined and now sits below 2 percent.

"Given ongoing uncertainty around global conditions and the moderate pace of domestic demand, it remains prudent to keep the OCR on hold at 2.5 percent."

NZ has capacity to weather shocks

27 January 2012

The European sovereign debt crisis and Canterbury earthquakes were two bad jolts to the New Zealand economy in 2011, but the economy and financial system have the capacity to weather such shocks, Reserve Bank Governor Alan Bollard said today.

In a speech to the Canterbury Employers' Chamber of Commerce in Christchurch, Dr Bollard said both events had important economic implications and had created uncertainty. While a clearer picture of the future is gradually emerging, we are moving from 'unknown unknowns' to 'known unknowns', he said.

Nonetheless, the effects of both shocks could continue to rumble on for some time.

"New Zealand's geographical isolation is no protection from economic events abroad. If major world economies have a significant economic problem, then that is going to affect us too, as New Zealand has seen in our export commodity prices, currency, and funding our foreign debt," Dr Bollard said.

While New Zealand's financial institutions depend on global credit markets, including Europe, for funding, there are buffers in place to ensure our banking system has adequate liquidity and capital, and the Reserve Bank has appropriate tools, more so than in the 2008 Global Financial Crisis.

Dr Bollard said 'unknowns' also remain in quantifying the effects of the Canterbury earthquakes. However, the domestic economy had proven relatively resilient to the challenge posed by the quakes, he said.

"New Zealand is well-placed in that insurance will fund the majority of the costs of the Canterbury earthquakes, and most of this funding comes from large offshore reinsurers. New Zealand is unusual in its degree of insurance and re-insurance. In other parts of the world, such as Japan, government, businesses and households have borne a much greater share of disaster costs.

"The challenge for all of us, policy-makers and business people alike, in 2012 will be to deal with these 'known unknowns', to get on with economic activity and to help Christchurch and New Zealand grow," Dr Bollard said."

Reserve Bank Governor not seeking another term

30 January 2012

Reserve Bank Governor Alan Bollard today announced he will not be seeking another term as Governor when his current term ends on 25 September this year.

Appointed in September 2002, Dr Bollard is in his second five-year term.

Dr Bollard said that he will be fully focused in his remaining eight months on the serious economic and financial challenges facing New Zealand.

"As I noted last week, the Bank is ready to respond to ongoing developments overseas, especially in Europe, the US and China, as well as domestically, particularly the Canterbury earthquakes. In addition, the Bank's expanded prudential regulatory responsibilities mean we will continue to introduce new prudential requirements this year, especially in the insurance and non-bank sectors."

The Chair of the Reserve Bank Board, Dr Arthur Grimes, said the Board will search in New Zealand and abroad to identify a successor to Dr Bollard. The Governor is appointed by the Minister of Finance on the recommendation of the Board.

Could we be better off than we think?

17 February 2012

International comparisons of economic statistics can be fraught with difficulties and could have resulted in New Zealand's economic performance being understated, Reserve Bank Governor Alan Bollard said today.

Different countries use different methodologies and data sources, meaning – in some cases – care needs to be taken when comparing economic statistics, Dr Bollard told a meeting of the Trans Tasman Business Circle in Auckland.

He said the Reserve Bank believed that if consistent measurement conventions were used, the income gap between New Zealand and Australia and other OECD countries would narrow.

"Our view is that in New Zealand, some conservative statistical interpretations and particular characteristics of our economy have resulted in the understatement of New Zealand's economic performance. In international league tables New Zealand is in some ways better off than is often thought."

The Reserve Bank has explored differences in the way gross domestic product (GDP) is measured in Australia and New Zealand. Allowing for these differences, our GDP could be significantly higher relative to other countries than currently measured. A very rough, broad, ballpark might put this up to 10 percent higher than official data, compared with Australia.

"These are not definitive numbers, and we accept there are counter-arguments to them."

Revising New Zealand's GDP does not lift actual incomes or purchasing power for New Zealanders, or raise tax revenues for the government, Dr Bollard said. "We cannot make ourselves better off directly just by measuring things differently."

But more comparable data is important to ensure individuals make well-informed decisions about training, migration and saving, and that financial markets have accurate measures of New Zealand's ability to borrow and repay debt.

Governments also need good data to ensure well-informed social and economic policy, and to understand

comparability with other countries, including that of our large trans-Tasman neighbour.

Dr Bollard said the Reserve Bank's analysis did not answer the question of whether New Zealand was closing the trans-Tasman gap. "However, it does argue that the gap is not as wide as most people think."

He noted that the Prime Ministers of Australia and New Zealand recently agreed that their respective Productivity Commissions would look at reforms aimed at increasing economic integration between the two countries.

"Given this aim, a useful contribution could be to improve harmonisation of statistical measurement in Australia and New Zealand, where appropriate, to improve data comparability."

He said problems with the comparability of statistics were an international issue, and his comments were not a criticism of Statistics New Zealand. Rather they were aimed at making people aware of the issues, and encouraging a greater priority being placed on improving New Zealand's economic statistics.

Dr Bollard said he was aware that, in the area of GDP, Statistics NZ has plans in place to increase the ease of comparability of data with Australia.

Organisations like the United Nations and International Monetary Fund were working to make economic statistics more comparable. But for the time being there were pitfalls in making international comparisons.

"As usual, the devil is in the detail. Compare with care."

Editor's Note

The Reserve Bank estimated the impact differences in measurement have on New Zealand's GDP relative to Australia's. Changing the way the "unobserved economy" is measured could add 2 percent to New Zealand's GDP. The unobserved economy includes cash jobs and work undertaken by households for their own use, like growing vegetables. Changing how the financial services are measured could add another 2 percent. Adjusting the way residential buildings are valued could add 1.5 percent. When New Zealand adopts a new international statistical standard in 2013/14 GDP could rise by 3 percent.

There are other measurement differences that also potentially affect GDP, though these are hard to quantify. Taking all these measurement differences into account, a rough estimate might put our GDP at up to 10% higher than official data, compared with Australia.

A copy of the speech is available at www.rbnz.govt.nz.

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, 2011-2014

Recent Reserve Bank Discussion Papers

2011

DP 2011/01	Any port in a storm? The impact of new port infrastructure on New Zealand exporter behaviour <i>Richard Fabling, Arthur Grimes and Lynda Sanderson</i>
DP 2011/02	Fluctuations in the international prices of oil, dairy products, beef and lamb between 2000 and 2008: a review of market-specific demand and supply factors <i>Phil Briggs, Carly Harker, Tim Ng and Aidan Yao</i>
DP 2011/03	Evaluating density forecasts: model combination strategies versus the RBNZ <i>Chris McDonald and Leif Anders Thorsrud</i>
DP 2011/04	An estimated small open economy model with frictional unemployment <i>Julien Albertini, Güneş Kamber and Michael Kirker</i>
DP 2011/05	Time-varying returns, intertemporal substitution and cyclical variation in consumption <i>Emmanuel De Veirman and Ashley Dunstan</i>
DP 2011/06	Cyclical changes in firm volatility <i>Emmanuel De Veirman and Andrew Levin</i>
DP 2011/07	Forecasting house price inflation: a model combination approach <i>Sarah Drought and Chris McDonald</i>
DP2011/08	Foreign acquisition and the performance of New Zealand firms <i>Richard Fabling and Lynda Sanderson</i>

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

Analytical Notes

2011

AN 2011/1	The macroeconomic impact of the Rugby World Cup <i>Adam Richardson</i>
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2012

AN 2012/1	House price expectations of households: a preliminary analysis of new survey data <i>Graham Howard and Özer Karagedikli</i>
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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

2 The Terrace, P O Box 2498

WELLINGTON

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Articles in recent issues of the Reserve Bank of New Zealand *Bulletin*

Vol. 74, No. 1, March 2011

Making sense of international interest rate movements
We're all in this together: the transmission of international shocks to open economies
Towards better data on New Zealand debt securities markets
Submission to the Savings Working Group
Looking into the crystal ball: a forecast and some risks for the year ahead

Vol. 74, No. 2, June 2011

Bank farm capital: does it cost the earth?
Stress testing New Zealand banks' dairy portfolios
Understanding financial system efficiency in New Zealand
New Zealand's emergency liquidity measures during the global financial crisis

Vol. 74, No. 3, September 2011

A primer on Open Bank Resolution
Conference summary: New Zealand's macroeconomic imbalances – causes and remedies
Recent trends and developments in currency
Submission to the Productivity Commission inquiry on housing affordability
Workshop on national accounts and financial statistics

Vol. 75, No. 4, December 2011

Towards understanding what and when households spent
Sudden stops, external debt and the exchange rate
Insurer solvency standards - reducing risk in a risk business