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## FOR THE RECORD

### DISCUSSION PAPERS

**DP2009/07**

#### **Developing stratified housing price measures for New Zealand**

*Chris McDonald and Mark Smith, August 2009*

Widely used measures of growth in mean or median housing prices will reflect changes in the composition of dwellings sold as well as changes in demand and supply conditions. Using a suburb-level dataset from the Real Estate Institute of New Zealand we use stratification techniques to adjust for compositional change and derive a timely and robust measure of housing prices for New Zealand. Results suggest this stratified measure produces estimates of housing price inflation that accord closely with the accurate but less timely figures obtained from the QV Quarterly House Price Index.

**DP2009/08**

#### **Evaluating a monetary business cycle model with unemployment for the euro area**

*Nicolas Groshenny, September 2009*

This paper estimates a medium-scale DSGE model with search unemployment by matching model and data spectra. Price markup shocks emerge as the main source of business-cycle fluctuations in the euro area. Key for the propagation of these disturbances are a high degree of inflation indexation and a persistent response of monetary policy to deviations of inflation from the target.

**DP2009/09**

#### **Entrepreneurship and aggregate merchandise trade growth in New Zealand**

*Richard Fabling and Lynda Sanderson, September 2009*

We present a descriptive analysis of firm-level merchandise trade, focussing on the role of entrepreneurial exporting behaviour. We document two aspects of the dynamics of trade – the contribution of novel export activity to aggregate trade growth and, conversely, the substantial exit rates of new

trade relationships. The unique contribution of this paper lies in the detailed and comprehensive data we have available on market and product choices. Specifically, we make use of shipment-level goods trade data, linked to information for the universe of economically active New Zealand manufacturers, to examine trade at the firm-level and at the product-country-firm nexus. Our growth decomposition and survival analysis suggest several themes: (a) novel market entry is a significant contributor to aggregate export growth; (b) the study of international entrepreneurial behaviour should encompass not just de novo entrants, but the broad range of trade innovations initiated by incumbent exporters; (c) much expansion in trade appears to be incremental in nature; (d) despite this, such innovations appear to be inherently risky; and (e) experience and scale appear to be key factors in overcoming these risks (or at least proxies for such factors).

**DP2009/10**

#### **A theoretical foundation for the Nelson and Siegel class of yield curve models**

*Leo Krippner, September 2009*

This article establishes that most models within the popular and widely used Nelson and Siegel (1987, hereafter NS) class, with one notable exception being the Svensson (1995) variant, are effectively reduced-form representations of the generic Gaussian affine term structure model outlined in Dai and Singleton (2002). That fundamental theoretical foundation provides a compelling case for applying certain NS models as standard tools for yield curve analysis in economics and finance: users get the well-established pragmatic benefits of NS models along with an assurance that they correspond to a well-accepted set of principles and assumptions for modelling the yield curve and its dynamics.

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## NEWS RELEASES

### Downturn may be nearing end, but recovery not assured

17 June 2009

Households, businesses, banks and policy-makers should be thinking how they can influence recovery and ensure it is sustainable, Reserve Bank Governor Alan Bollard said today.

Dr Bollard told a Wellington business audience that activity in New Zealand was near its low point, the global economy appeared more stable and trading-partner growth forecasts had stopped falling. New Zealand's large fiscal and monetary policy stimuli had bolstered domestic activity.

"We expect the economy to begin growing again toward the end of the year, but the recovery is likely to be slow and drawn out. It could also be erratic. To many households it may not feel like a recovery at all, with lower employment, house prices and wage increases into next year."

Households and firms were adjusting, cutting back on spending to match slower income growth, less available cheap credit, and falling asset prices. "This adjustment has further to go. It will take a long time to adjust balance sheets, especially for households. While they have largely stopped building up debt, most people have less wealth than before the recession started.

"This shock has been so big the nature of the recovery is hugely uncertain, here and overseas. Potential growth rates around the OECD are likely to be lower, but just how much is unclear."

For the New Zealand recovery and subsequent expansion to be strong and long-lasting further economic rebalancing was needed. "Growth needs to be export and investment led, rather than consumption led. Household and government consumption need to be more restrained. Saving needs to increase, and the current account deficit needs to reduce.

"However, some recent financial market developments, especially the recent upward pressure on the New Zealand dollar, are working against this rebalancing. If markets are buying the New Zealand dollar on the expectation of a strong recovery they may end up being disappointed."

Given the uncertainties surrounding the recovery, it is important fiscal and monetary policy can operate effectively.

"In this context, we are disappointed that banks have not passed on the April reduction in the OCR to short-term lending rates: they have an opportunity to help New Zealand's recovery by doing so," he said.

"Overall, we think the broader tightening in financial conditions seen over recent months risks undermining the recovery before it becomes self-sustaining.

"A premature rebound in household spending could jeopardise the next expansion. There is a risk people see the current stabilising of the housing market as a sign of another house price boom and a reason to borrow and spend up large again. We do not believe that would be sustainable. Investors who rely on this could get hurt. And they could make it harder for businesses to invest in the export-led recovery we need.

"The world is now being swept by influenza A H1N1 09. It looks likely this will impact the economy by hitting staffing, through sickness, childcare and precautionary behaviour. If the incidence is severe, it would delay recovery."

### Reserve Bank *Bulletin* released

26 June 2009

Forecasting the New Zealand economy is the main focus of the June 2009 Reserve Bank of New Zealand *Bulletin*, released today.

The issue opens with an article by Kirdan Lees describing Kiwi Inflation Targeting Technology (KITT), the new Reserve Bank economic model. KITT replaces the decade-old Forecasting and Policy System (FPS) model, and will be an important tool for Reserve Bank forecasting and economic assessment into the future.

KITT is not the only tool available for forecasting. In the second article, Chris Bloor discusses the range of models and approaches the Bank uses to extrapolate the statistical patterns in available economic data.

Another way the Bank obtains information for its economic assessments is through economic indicators. There are thousands of these indicators, covering New Zealand and elsewhere, which demand expert and careful analysis to distil the meaning. In the third article, Tim Aldridge describes

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how this style of analysis applies to business investment.

In the fourth article, Christina Leung looks in detail at how public views on inflation are formed, discussing demographic evidence about how households consistently over-estimate inflation. The Reserve Bank's inflation analysis depends heavily on understanding how the public expects the economy to develop.

The fifth article, by Lynda Sanderson, considers recent Reserve Bank work analysing the impact of exchange rates on export behaviour.

The *Bulletin* concludes with an interview with Prasanna Gai on the causes and consequences of the financial crisis. Gai is a Professor at the Australian National University and consultant to the Bank of England, who visited the Reserve Bank in early 2009.

## Reserve Bank focused on stability

**30 June 2009**

The Reserve Bank's focus for the year ahead remains on the stability of the financial system and economy in the face of an uncertain global environment, Acting Governor Grant Spencer said today, releasing the Bank's *Statement of Intent* (SOI) for 2009-2011.

The SOI is an annual document outlining the Bank's plans for the three years ahead, and its budget for the year ahead.

"The New Zealand economy has been under pressure from the international financial crisis, global recession and weak domestic spending," Mr Spencer said. "In this volatile climate, our strategic priorities, as set out in the SOI, are to ensure outcomes that we would take for granted in normal times: that our financial markets and institutions continue to operate effectively and continue to support the financing needs of the real economy.

"Inflation is less of a concern just now, but may present an important challenge once confidence returns to global markets, given the large amount of liquidity that has been injected into the global system."

The SOI describes the Bank's ongoing work program to develop and implement the new regulatory framework for

non-bank deposit takers and insurance companies. Other Bank priorities include upgrading statistical data collection systems, and establishing a small Auckland office to provide backup for essential payments and market operations in the event of a physical disaster in Wellington.

The Bank's budget for 2009-10 shows an increase in operating expenditure from \$52.1 million to \$55.1 million, mainly reflecting the expansion of regulatory responsibilities for non-bank financial institutions, the costs of establishing the Auckland office, and depreciation costs for new systems.

"As a financial institution with approximately \$29 billion in assets, the Bank faces a wide range of financial risks which are carefully managed. However, the global financial crisis, together with the Bank's policy responses, have given rise to increased volatility in the Bank's balance sheet and income." Mr Spencer said.

Key performance indicators for the Bank are included in the SOI, covering the key functions of monetary policy formulation, financial system surveillance and policy, currency, and depository and settlement services.

## Prudential liquidity policy for banks released

**30 June 2009**

The Reserve Bank today announced the release of its prudential liquidity policy for banks.

Acting Governor Grant Spencer said the policy sets various balance sheet requirements and disclosure obligations for banks around their internal liquidity management.

"The purpose of the policy is to ensure that banks maintain strong liquidity positions, making them more resilient to both short term and long-lasting funding shocks," Mr Spencer said.

"The vulnerability of the banks to liquidity shocks has been our main concern for the stability of the New Zealand financial system during the international financial crisis.

"While the funding markets have shown encouraging signs of improvement in recent months, we want to ensure that the New Zealand banking system is better protected against

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any future shocks of this sort.”

The Bank began liquidity policy discussions with banks in early 2008, and issued a consultation paper in October 2008. “We received a large number of helpful submissions and have amended the policy in a number of important respects as a result. In particular, we have made substantial changes to some of the key definitions within the original draft policy, to ensure workability and ease of implementation for the banks.”

Mr Spencer noted that, in light of the current pressures faced by banks, the new prudential liquidity requirements will be phased in over a two-year period.

“Some banks will be little affected as they are already close to the new policy requirements. Others will need to continue lengthening the maturity of their funding in a gradual and measured way,” he said.

For more information on the new policy please see the prudential liquidity policy Q & A.

## **RBNZ closes offer to purchase NZ govt July 2009 bonds**

**2 July 2009**

The Reserve Bank has closed its offer to purchase NZ government bonds maturing 15 July 2009, for liquidity management purposes.

The offer was announced on 19 May and closed at 4:00pm 1 July. The Bank repurchased \$329.865 million of the July 2009 bond. The Bank has not onsold any of the bonds to NZDMO, and will hold the bonds on its balance sheet till maturity.

The Bank said the offer was normal ahead of a government bond maturity. These purchases will help manage the large cash inflow to the banking system on 15 July as a result of the bond maturity (as at 30 April, there were \$4,197 million of the 15 July 2009 bonds on issue in the market).

The operation was undertaken to manage near-term liquidity flows and has no implications for the Bank’s monetary policy stance.

## **New Zealand bank funding costs and margins**

**6 July 2009**

The Reserve Bank today released an analysis of interest rate margins.

Reserve Bank Governor Alan Bollard said: “We have released this analysis to respond to a number of questions we have received regarding our stance on what room there still is for interest rate cuts.

“The paper notes the Reserve Bank is continuing to talk to the banks to clarify recent trends in their funding costs and margins. We will review these matters further in the Bank’s November 2009 *Financial Stability Report*.”

## **Non-bank risk management guidelines released**

**13 July 2009**

The Reserve Bank today released its risk management programme guidelines (PDF 129KB) for non-bank deposit takers.

“The development of these regulations is another positive step forward in implementing the new prudential regime for non-banks which is aimed at improving the future resilience of New Zealand’s non-bank financial sector,” said Reserve Bank Deputy Governor Grant Spencer.

Deposit-taking finance companies, building societies and credit unions are required to have a risk management programme from 1 September 2009. The programme needs to show how they will identify and manage credit risk, liquidity risk, market risk and operational risks, appropriate to each institution’s particular circumstances.

Mr Spencer said risk management programmes will also need to show how an institution plans to address stress events that could disrupt their business, and identify the responsibilities of governing bodies and senior management.

“The Bank received many useful submissions in response to the draft guidelines released for public consultation in June. Submissions were generally supportive of the guidelines,” Mr Spencer said.

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The Reserve Bank has also provided responses to questions raised in submissions, which can be found on the Bank's website ([www.rbnz.govt.nz](http://www.rbnz.govt.nz)).

## Potential impact of swine 'flu low

14 July 2009

The Reserve Bank today released a paper on the potential impact of influenza A (H1N1) (swine 'flu) on the New Zealand economy.

Reserve Bank Assistant Governor John McDermott said: "We appreciate there is a real human cost to influenza, as this strain is already unfortunately demonstrating. Given the relatively high rate of contagion of this strain, we considered it appropriate to model the possible impact on the economy from a pandemic."

Dr McDermott said the Bank's baseline result suggests that the economic impact of influenza A (H1N1) is likely to be low, with declines in output of less than 0.6 percent in the first year. These baseline numbers are smaller than some reported recently in the markets, and smaller than the historical experience of Hong Kong with SARS and the US economy with the 1918 episode, for example.

"The baseline numbers are based on Ministry of Health assumptions. We also modelled other more extreme scenarios, which we note are extremely unlikely to occur, since they are predicated on much more aggressive strains of influenza."

The paper can be read on the Reserve Bank's website ([www.rbnz.govt.nz](http://www.rbnz.govt.nz)).

## Savings, investment, funding markets are key to recovery

14 July 2009

Household savings, investment in the tradable sector, and deeper funding markets are the key to New Zealand's economic recovery, Reserve Bank Governor Alan Bollard told a Hawke's Bay business audience today.

"Early signs of global recovery have now emerged. We have avoided a repeat of the Great Depression," he said. However,

world growth will probably be subdued for the next one or two years, and the current low international interest rates, expansion of liquidity and central bank balance sheets, and fiscal stimuli will be necessary for some time.

"New Zealand looks likely to start recovering ahead of the pack. But this is an opportunity to rebalance. Getting the sort of sustainable recovery we want will be assisted by: first, greater savings by the household sector, to reduce the need for foreign funding of the economy; second, investment in the economy's productive base, particularly in the tradable sector; and third, greater durability and depth in funding markets, including a lengthened maturity structure for bank funding.

"A clear risk over the medium term is that households resume their 'borrow and spend' habits before they have paid down some of their existing debt. This could be triggered by renewed moderate house price inflation, and needs to be avoided."

With slower growth in household income expected, households would have to reduce spending growth to repay their debt. "Reliance on past experience of strong house price inflation and easy credit will be untenable."

Increased household saving would have the added advantage of providing a more stable source of funds for business investment and expansion, reducing reliance on foreign funding. This would contribute to more stable and lower interest rates, thus promoting a more sustainable growth path.

Stronger world demand and a weaker New Zealand dollar would provide the signal that investment needs to move to the tradable sector to help correct the current account gap. However, financial markets were currently focused on a US dollar correction. "We hope that, in the next phase of recovery in financial market sentiment and return of risk-seeking, the markets will be more discriminating about New Zealand," Dr Bollard said.

A priority over the coming year or so would be for New Zealand banks to diversify their funding sources more, and to increase the proportion of stable funding sources, including long-term wholesale borrowing and retail deposits. The

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Reserve Bank's recently released prudential liquidity policy for banks will reinforce this move.

The Reserve Bank appreciated that interest rates are a blunt instrument to curb excessive borrowing, Dr Bollard said. "We see prudential policy potentially playing a greater role in the future."

Attention is now focused internationally on the potential role of minimum capital and other prudential requirements on banks in dampening business cycles, the impact of smaller and peripheral financial institutions on financial system behaviour, and how cross-border financial activity should be monitored or regulated.

In the recovery, he said, the Bank's focus will be on keeping inflation expectations anchored, the macro-economy stable, system liquidity available and the financial system stable, so that funds keep flowing and relative price signals work.

The Reserve Bank would be closely watching the international debate in these areas for insights into improving its own framework. "At this point we are reasonably well positioned to adapt in light of the new thinking, with a conservative approach to bank capital adequacy, the new legislation bringing the regulation of non-bank deposit takers into our responsibilities, and long experience in managing macroeconomic stability, financial stability and prudential policy functions under one roof.

"The New Zealand economy has taken knocks in this crisis, but some form of recovery is now on the horizon. Our opportunity is to use this time to rebalance the economy for the medium term."

## **75 years for the Reserve Bank of New Zealand**

**15 July 2009**

In August 2009 the Reserve Bank of New Zealand marks its 75th year of operations, three-quarters of a century that span some of New Zealand's most tumultuous decades.

The Reserve Bank was founded in response to developments in the early twentieth century. Britain was eager for its Dominions to establish their own central banks, so they could set their monetary policies to suit specific local conditions. However, in New Zealand the wheels only began

turning with vigour after a 1931 visit by British economic expert Otto Niemeyer, who recommended a central bank to the government of Prime Minister George Forbes.

The Bank opened on 1 August 1934 with little fanfare. "We were launched last Wednesday," founding Governor Leslie Lefeaux wrote to Niemeyer. "But no flags; no trumpets, and no breaking of champagne bottles on the bow. We merely glided gently and noiselessly down the slipway. I felt in the circumstances that that was the best course."

Today's Governor, Alan Bollard, notes that from this almost imperceptible beginning, the functions of the Reserve Bank have taken on significant growth and complexity in the past 75 years. "Although stabilisation is our pressing need at present, we have not lost sight of the need to continue with enhancements to our role as New Zealand's central bank," Dr Bollard said.

The present day role of the Bank is defined by the Reserve Bank Act 1989, which identifies a wide range of functions and powers that have made it one of the few 'full service' central banks in the world.

The Reserve Bank nevertheless had an initial public impact in 1934 – all the old trading bank notes were replaced immediately by Reserve Bank tender. The Bank has supplied New Zealanders with their currency needs since, extending that role to coins in 1989.

To mark the anniversary, Howard Davies, Director of the London School of Economics, and formerly Chairman of the UK Financial Services Authority, will deliver a public lecture entitled: "The Financial Crisis – who's to blame? Problems and remedies". Registrations are necessary and seats are limited. People can register through the Reserve Bank website.

A temporary exhibition marking 75 years of Reserve Bank operations will be open to the public in the Reserve Bank Museum from 3 August 2009.

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## OCR unchanged at 2.50 percent

**30 July 2009**

The Official Cash Rate (OCR) will remain unchanged at 2.50 percent.

Reserve Bank Governor Alan Bollard said: "Despite signs of a leveling off in economic activity, the economy remains weak. We continue to expect to see a patchy recovery get underway toward the end of the year, but it will be some time before growth returns to healthy levels.

"The outlook remains highly uncertain. New Zealand's merchandise exports are heavily weighted to soft commodities. As a result, New Zealand has not benefited to any significant extent from the rebound that has occurred recently in global hard commodity prices.

"Overall economic growth is evolving broadly in line with our forecasts in the June *Monetary Policy Statement* as the low OCR and stimulatory fiscal policy take effect. However, looking forward the level of the New Zealand dollar and wholesale interest rates are higher than assumed in our forecasts. The level of the dollar in particular, is not helping the sustainability of future growth, and brings with it additional economic risks.

"The forecast recovery is based on a further easing in financial conditions. If this easing does not occur, the forecast recovery could be put at risk. In these circumstances we would reassess policy settings.

"Annual CPI inflation is currently well within the target band and it is expected to track comfortably within it over the medium term.

"We consider it appropriate to continue to provide substantial monetary policy stimulus to the economy. The OCR could still move modestly lower over the coming quarters. We continue to expect to keep the OCR at or below the current level through until the latter part of 2010."

## Howard Davies' address available on Bank's website

**31 July 2009**

To mark the Reserve Bank of New Zealand's 75th anniversary, Howard Davies, Director of the London School of Economics,

and formerly Chairman of the UK Financial Services Authority and Deputy Governor of the Bank of England, delivered a public lecture last night.

The webcast of his address, "The Financial Crisis – who's to blame? Problems and remedies", is available on the Bank's website ([www.rbnz.govt.nz](http://www.rbnz.govt.nz)).

A temporary exhibition marking 75 years of Reserve Bank operations will be open to the public in the Reserve Bank Museum from 3 August 2009.

## First exemption notice for deposit takers

**6 August 2009**

The Reserve Bank announced today that it is exempting certain deposit takers from having a mandatory credit rating, under Part 5D of the Reserve Bank of New Zealand Act 1989.

This exemption is available if the consolidated liabilities of the deposit taker are less than \$20 million (measured as an average over a 12-month period).

The exemption notice outlines certain conditions that a deposit taker must comply with in order to benefit from this class exemption. Please note that registered banks are not deposit takers under Part 5D of the Act.

A full copy of the notice can be found on the New Zealand Legislation website.

Details of future exemptions will be available on the Bank's website.

## Development of stratified housing price measures

**7 August 2009**

The Reserve Bank released today a discussion paper on the development of stratified housing price measures using the Real Estate Institute of New Zealand's (REINZ) housing market data.

Reserve Bank Assistant Governor Dr John McDermott said: "By using detailed sale price information collected by REINZ, the Bank has developed a housing price measure

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that provides a timely and regular reading of housing price movements.”

Dr McDermott said the current monthly REINZ median housing price is timely, but changes in the mix of properties sold each month can make it difficult to identify residential property price trends. A changing proportion of more (or less) expensive housing being actually sold in one month can move the median sale price even if the market prices for all properties have not changed.

The REINZ housing price index is put together using a technique known as stratification; basically it is an average of sale prices for common groups.

“Obtaining timely signals on housing prices are important for analysis of the New Zealand economy. Given their close historical linkage with household consumption, changes in housing prices can provide a useful gauge of household demand conditions. This more timely measure of housing price movements will allow the Bank to identify housing market trends more quickly,” Dr McDermott concluded.

The REINZ Monthly Housing Price Index is a new development and is based on detailed suburb-level data. Future improvements, including updating comparison periods, investigating complementary data sources, and the introduction of new regional areas will be introduced periodically.

More information on the new index and how stratification works can be found in the discussion paper “Developing stratified housing price measures for New Zealand” which is on the Bank’s website ([www.rbnz.govt.nz](http://www.rbnz.govt.nz)).

REINZ will start publishing the new monthly housing price index on 14 August.

#### ***How stratification works***

- Dwelling sales from approximately 1800 New Zealand suburbs are ranked according to their median sales price over the relevant comparison period (currently January 2005 – June 2009).
- The suburbs are allocated into ten different groups (or strata). Suburbs accounting for 10 percent of the lowest

sales by price are grouped into stratum 1; suburbs with 10 percent of the most expensive sales price are in stratum 10. The allocation of suburbs to each stratum is fixed over the comparison period.

- The number of sales and median sales prices in each stratum is used to obtain a sales-weighted median price. This puts more weight on suburbs where there are more sales while filtering out sales of very high or low priced properties, giving a more stable measure of price trends for the stratum.
- The sales-weighted median housing price in each stratum is averaged to produce a housing price measure from which the housing price index is derived.

The REINZ Monthly Housing Price Index is based on a value of 1000 in January 1992, the first month for which electronic information is available. Changes in the index represent movements in housing prices, where the mix of sales between the groups is held constant and are more likely to reflect genuine property price movements. Indexes for each of the ten strata used to calculate the REINZ Monthly Housing Price Index will also be published.

Using the same methodology, regional REINZ Monthly Housing Price Indexes have been developed for Auckland, Wellington, the rest of the North Island, Christchurch and the rest of the South Island. A REINZ Monthly Residential Section Price Index will also be published.

#### **RBNZ MPS/OCR dates for 2010**

##### ***19 August 2009***

The following is the Reserve Bank’s schedule for the release of its quarterly *Monetary Policy Statements* and Official Cash Rate announcements for 2010.

Each *Monetary Policy Statement* includes within it an OCR announcement, so, as usual, in total there will be eight OCR announcements during 2010. Each announcement will be made at 9.00 am on the day concerned.

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28 January	OCR announcement
11 March	<i>Monetary Policy Statement</i>
29 April	OCR announcement
10 June	<i>Monetary Policy Statement</i>
29 July	OCR announcement
16 September	<i>Monetary Policy Statement</i>
28 October	OCR announcement
9 December	<i>Monetary Policy Statement</i>

The Reserve Bank reserves the right to make changes to this schedule, if required due to unexpected developments. In that unlikely event, the markets and the media will be given as much warning as possible.

## Lessons from Jackson Hole

*29 August 2009*

*Dr Alan Bollard, Governor, Reserve Bank of New Zealand*

Once a year, Jackson Hole in Wyoming hosts the world's central bankers. Under the craggy ranges of the Teton Mountain Range, we met last weekend to discuss how well monetary and financial policies have worked to save the world from the worst of the crisis, having just been through the biggest economic and financial shock in 80 years. It now looks like we (and the world) have seen the worst, and we are beginning a recovery that many believe will be slow and fragile.

What lessons can be taken from this experience? How well did our policies work? What lies ahead?

### *Prudential soundness*

We were all surprised by the vulnerability of key financial institutions. It is chaos when a country's banking system does not remain stable, as in Iceland and Ireland. Ours proved stable.

A plain vanilla banking system like ours is much easier to regulate than a more complex Northern Hemisphere one. There, the banking system had significant problems with complicated instruments, non-transparent transactions, misaligned incentives and moral hazard.

Our less complex system came through well, helped by sound parent banks, good regulations here and in Australia, good management, and a little luck. Our prudential policies worked well with bank capital holding up against shocks and losses.

However, when international markets became illiquid – where it was difficult to find cash to meet obligations – Australasian banks needed help. We monitored them more closely. Government guaranteed retail deposits and wholesale funding to enable banks to secure funding. And we widened the range of securities that banks could use to access cash from us.

We also accelerated work on a prudential liquidity policy for banks – moving them from heavy reliance on short-term funding to having a bigger proportion of longer-term funding. When implemented, this policy will mitigate risks from sudden illiquidity in offshore markets.

As the recovery takes place we will also be ensuring capital requirements for farm lending are prudent.

Unfortunately, many finance companies found their weak balance sheets and flawed business models inadequate. But building societies and other smaller institutions with a loyal customer base have ridden through this period.

### *Financial system stability*

It may not hurt an economy if some financial institutions fail, provided the system remains stable. But larger economies were surprised so many institutions were too big, or too complex, or too intertwined to be allowed to fail.

In addition, the previous decade's build-up in asset prices (housing, equities, commodities and financial instruments) contributed to instability. At Jackson Hole, central bank governors bewailed how hard it is to stabilise an economy with separate regulators.

We have been in a better position. The Reserve Bank is a broad-span regulator that receives information and influences markets via our economic intelligence, prudential oversight of financial institutions, liquidity management, foreign reserves management, payments systems oversight, and provision of banknotes and coins.

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Internationally and in New Zealand two important new regulatory standards have been introduced recently: International Financial Regulatory Standards, and Basel II risk-weighted capital requirements for banks.

If not carefully implemented, these new standards could be pro-cyclical – encouraging banks to over-lend during economic booms and tighten in a downturn.

We expect new international standards with the G-20 group of countries looking to re-introduce dynamic provisioning (ensuring banks' accounts provide for potential losses as loans are made). They are also considering counter-cyclical capital instruments (with banks building up capital reserves when the economy is growing, that can be drawn down when it contracts). At the Reserve Bank, we have taken a 'through-the-cycle' approach to Basel II, to avoid pro-cyclicality, but we are following international developments with interest.

### ***Macroeconomic Stability***

Monetary and fiscal policies can promote economic stability. They achieved a long period of growth and low inflation (the 'Great Moderation'). However, they did not prevent the build-up of major global imbalances in capital – huge savings and external surpluses in some countries, significant external borrowing and deficits in others – which ultimately contributed to financial collapse.

The Jackson Hole consensus is that the US and some other economies tightened monetary policy too little and too slowly during the early years of this decade. When that happens, small open economies, like New Zealand, feel the stress (e.g. through exchange rate pressures).

When the global crash happened, monetary policies were the first line of defence. Most countries quickly slashed rates. Our nominal interest rates were higher than most: we very quickly cut the official cash rate from 8.25 percent to 2.50 percent in nine months, further and faster than ever before. Unlike some Northern economies we expect this rate to trough well above zero.

This opens the gates to significant monetary stimulus, although it takes time for the effects to flow through the economy.

In bigger Northern economies, this orthodox monetary policy stimulus was not enough. They have also used unorthodox policies, "quantitative easing", pumping liquidity into the economy to stimulate lending and free-up clogged markets. This new, risky approach seems to have eased financial markets.

This unorthodox quantitative easing has not been necessary in New Zealand. The closest we have got is with our new liquidity management and our acceptance of residential mortgage-backed securities as collateral for loans to banks. These securities are in place but likely to be used only in crisis. Our measures will be much easier to exit from, when the time comes.

Governments can also use fiscal policy for stability, and it has been used widely internationally in this crisis.

In New Zealand there has been significant fiscal stimulus by government. But concern for future government debt levels limits its ongoing use.

The mood of the Jackson Hole symposium was that the worst is now over, but we must remain wary of setbacks. New Zealand has come through reasonably well, but the crisis has also exposed some vulnerabilities that may have had harsher consequences had financial markets not stabilised earlier this year. That is why we need to keep focussing on building a stronger, more resilient financial system.

### **New bank registered**

#### ***1 September 2009***

The Reserve Bank today announced that Baroda (New Zealand) Limited has been registered as a bank in New Zealand.

The bank, which is a subsidiary of Bank of Baroda (India), will be changing its name to Bank of Baroda (New Zealand) Limited before it commences operations.

There are now 19 registered banks in New Zealand, which are listed on the Reserve Bank website.

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## OCR unchanged at 2.5 percent

*10 September 2009*

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

Reserve Bank Governor Alan Bollard said: "There is more evidence that the decline in economic activity is coming to an end, and that a patchy recovery is underway.

"This is partly due to recovery in our trading partner economies in the June quarter and these look likely to continue expanding in the short term. Domestically, retail spending appears to have stopped falling, following a rise in net immigration and a pick-up in the housing market over recent months.

"However, the medium-term growth outlook remains weak. We expect household spending to grow only modestly given weak income growth and a reduced appetite to take on debt. Business profits are under pressure because of the low level of activity and the elevated New Zealand dollar; this limits the scope for employment and investment to rebound quickly.

"For growth to be sustained in the medium term there is a need for improved competitiveness in the export sector and a continued recovery of household savings. This rebalancing is required to stabilise New Zealand's external payments position. If the exchange rate were to continue its recent appreciation and/or the recovery in house prices were to undermine the improvement in household savings, then the sustainability of the present recovery will be brought into question.

"Annual CPI inflation is currently well within the target band and is expected to track comfortably within the band over the medium term.

"As we have said previously, the forecast recovery in economic activity is based on monetary policy continuing to provide substantial support to the economy. We expect such support will be needed for some time. As a result, we continue to expect to keep the OCR at or below the current level through until the latter part of 2010."

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## PUBLICATIONS

### Regular publications

*Annual Report*

*Financial Stability Report*

*Monetary Policy Statement*

*Reserve Bank of New Zealand Statement of Intent, 2007-2010*

Published in October each year.

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

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

### Recent Reserve Bank Discussion Papers

#### 2009

DP2009/01	Revealing monetary policy preferences <i>Christie Smith</i>
DP2009/02	Real-time conditional forecasts with Bayesian VARs: An application to New Zealand <i>Chris Bloor and Troy Matheson</i>
DP2009/03	Evaluating household expenditures and their relationship with house prices at the microeconomic level <i>Mark Smith</i>
DP2009/04	Forecasting national activity using lots of international predictors: an application to New Zealand <i>Sandra Eickmeier and Tim Ng</i>
DP2009/05	Using wavelets to measure core inflation: the case in New Zealand <i>David Baqaee</i>
DP2009/06	Analysing wage and price dynamics in New Zealand <i>Ashley Dunstan, Troy Matheson and Hamish Pepper</i>
DP2009/07	Developing stratified housing price measures for New Zealand <i>Chris McDonald and Mark Smith</i>
DP2009/08	Evaluating a monetary business cycle model with unemployment for the Euro area <i>Nicolas Groshenny</i>
DP2009/09	Entrepreneurship and aggregate merchandise trade growth in New Zealand <i>Richard Fabling and Lynda Sanderson</i>
DP2009/10	A theoretical foundation for the Nelson and Siegel class of yield curve models <i>Leo Krippner</i>

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

### Selected other publications

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

### Pamphlets

*Explaining Currency*

*Explaining Monetary Policy*

*The Reserve Bank and New Zealand's Economic History*

*This is the Reserve Bank*

*Your Bank's Disclosure Statement – what's in it for you?*

*Snakes and Ladders – a guide to risk for savers and investors, by Mary Holm*

For further information, go to [www.rbnz.govt.nz](http://www.rbnz.govt.nz), or contact:

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

### Vol. 71, No. 3, September 2008

#### Inflation

Flexibility and the limits to inflation targeting

Inflation in New Zealand's trading partner economies

The costs of inflation – what have we learned?

Events precede ideas: Bob Gordon on macroeconomics and monetary policy

Financial turmoil and global imbalances: the end of Bretton Woods II?

A user's guide to credit ratings

### Vol. 71, No. 4, December 2008

#### Liquidity and the New Zealand financial system

Evolution of the Reserve Bank's liquidity facilities

The global financial crisis and its transmission to New Zealand – an external balance sheet analysis

The Reserve Bank's payment system oversight role applied to settlement risk in the retail payment system

New legislation for regulation of non-bank deposit takers

Results from the recent survey of *Bulletin* readers

### Vol. 72, No. 1, March 2009

Financial vulnerability of mortgage-indebted households in New Zealand - evidence from the Household Economic Survey

Thinking about more than one thing at a time: Eric Leeper on monetary and fiscal policy interactions

Recent trends and developments in currency

Overview of a recent Reserve Bank workshop: nowcasting with model combination

Coping with global financial and economic stresses

### Vol. 72, No. 2, June 2009

#### Forecasting the New Zealand economy

Introducing KITT: the Reserve Bank of New Zealand's new DSGE model for forecasting and policy design

The use of statistical forecasting models at the Reserve Bank of New Zealand

The Reserve Bank's process for forecasting business investment

The demographics of household inflation perceptions and expectations

Exchange rates and export performance: evidence from micro-data

The evaporation of trust: Prasanna Gai on financial crises