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## FOR THE RECORD

### DISCUSSION PAPERS

DP2009/04

#### Forecasting national activity using lots of international predictors: an application to New Zealand

*Sandra Eickmeier and Tim Ng*

We apply “data-rich” factor and shrinkage methods to understand how large international datasets can be used to improve forecasts of New Zealand GDP. We find that exploiting a large number of international predictors can improve forecasts compared to more traditional models based on small datasets. This is in spite of New Zealand survey data capturing a substantial proportion of the predictive information in the international data. The largest forecasting accuracy gains from including international predictors are at longer forecast horizons. The forecasting performance achievable with the data-rich methods differs widely, with shrinkage methods and partial least squares performing best. We also assess the type of international data that contains the most predictive information for New Zealand growth over our sample.

DP2009/06

#### Analysing wage and price dynamics in New Zealand

*Ashley Dunstan, Troy Matheson and Hamish Pepper*

This paper examines the relationship between wages and consumer prices in New Zealand over the last 15 years. Reflecting the open nature of the New Zealand economy, the headline CPI is disaggregated into non-tradable and tradable prices. We find that there is a joint causality between wages and disaggregate inflation. An increase in wage inflation forecasts an increase in non-tradable inflation. However, it is tradable inflation that drives wage inflation. While exogenous shocks to wages do not help to forecast inflation, the leading relationship from wages to non-tradable inflation implies that monitoring wages may prove useful for projecting the impact of other shocks on future inflation.

DP2009/05

#### Using wavelets to measure core inflation: the case in New Zealand

*David Baqaee*

This paper uses wavelets to develop a core inflation measure for inflation targeting central banks. The analysis is applied to the case of New Zealand – the country with the longest history of explicit inflation targeting. We compare the performance of our proposed measure against some popular alternatives. Our measure does well at identifying a reliable medium-term trend in inflation. It also has comparable forecasting performance to standard benchmarks.

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## NEWS RELEASES

### Ensuring the future health of the finance sector

*31 March 2009*

Everyone including depositors, the Reserve Bank, trustees and non-bank deposit takers has a role in ensuring the future health of the finance sector, Reserve Bank Head of Prudential Supervision, Toby Fiennes, said today.

Speaking to a business audience, Mr Fiennes said that it is important that everyone plays their part in making the new regulations work.

Mr Fiennes said non-bank deposit takers (NBDTs) - e.g. finance companies, building societies and credit unions - will be required to comply with a new set of prudential requirements. "The Reserve Bank is currently developing the relevant regulations which will be introduced in late 2009 and 2010. We are focused on ensuring these rules and regulations work for the NBDT sector."

The new prudential regime aims to provide a consistent and rigorous approach to the supervision of deposit takers, and provides a stronger basis for confidence in the deposit-taking sector. "In addition, improved disclosure and credit ratings will assist depositors to make better-informed investment decisions," he said.

It will be mandatory for all deposit takers to obtain a credit rating by March 2010. Mr Fiennes stressed that this is less than a year away, and deposit takers should be actively seeking to obtain these ratings now to avoid the risk of being unable to obtain a credit rating by March 2010 and therefore being in breach of the law.

"Credit ratings from approved rating agencies will play an important role in the new regulatory regime. Credit ratings assist depositors to better appreciate the risk they are taking and the rewards they are getting when they invest their money."

Mr Fiennes said trustees are the frontline supervisors who are responsible for monitoring trust deed compliance, reporting to the Reserve Bank and enforcing compliance. "This will require trustees to be proactive, focused and assertive with their supervisory role. The Reserve Bank Act requires the Bank to review the NBDT regime, including the role of trustees within four years.

"The Reserve Bank looks forward to an effective working relationship with trustees and other regulatory agencies. We will ensure that we continue to encourage a collaborative approach so as to achieve a more resilient and enduring NBDT sector in the future," Mr Fiennes concluded.

### Long-term interest rates out of line with RBNZ expectations

*1 April 2009*

Reserve Bank Governor Alan Bollard today expressed concern over the recent strength of long-term wholesale interest rates.

"As we said in our 12 March *Monetary Policy Statement*, the economic recovery is expected to be very gradual. Furthermore, the risks around the outlook continue to be weighted to the downside," Dr Bollard said in a statement.

"In these circumstances we believe the rise in longer-term interest rates is unwarranted and inconsistent with the monetary policy outlook.

"As indicated in our March *Statement*, we are projecting interest rates to remain at relatively low levels for an extended period."

Dr Bollard said that if this apparent distortion persists, it could put unnecessary pressure on the cost of borrowing by firms and households.

### Draft Insurance Bill released for consultation

*20 April 2009*

The Reserve Bank today announced the release of a draft Insurance (Prudential Supervision) Bill for stakeholder consultation.

The draft Bill reflects policy approvals provided by Cabinet in December 2007 and August 2008, and is being released for consultation with an expectation that respondents will focus on legal, drafting and operational issues.

Responses on matters of policy, other than those detailed in the explanatory note on the Bank's website, are not sought in this consultation.

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

Stakeholder comments in response to this draft Bill and the additional explanatory note are sought from stakeholders by no later than 22 June 2009.

Following receipt of submissions to this consultation, the Reserve Bank will finalise the Insurance (Prudential Supervision) Bill for introduction to Parliament later in 2009.

## Government appoints Reserve Bank directors

*24 April 2009*

Finance Minister Bill English announced two new appointments to the Reserve Bank's board of directors today.

They are Christchurch consultant and professional director Sue Sheldon, who will begin on May 1 and Wellington consultant and professional director Keith Taylor, who will begin on July 1.

"In consideration of the skill set needed for a top performing Reserve Bank board, the government has looked for new directors with particular accounting and financial knowledge," Mr English said.

"Sue Sheldon is a chartered accountant and brings a wealth of experience as a director across a diverse range of organisations including state-owned enterprises and private sector companies such as Freightways, Contact Energy, Smith City Group, and the Wool Industry Network.

"Keith Taylor has an insurance industry background having been the chief executive and chief financial officer of the publicly-listed company Tower. He also has experience as a director of the Earthquake Commission, Government Superannuation Fund Authority, and is a Member of the Takeovers Panel. "

The main role of the Reserve Bank's board is to review the performance of the governor and the bank, including whether monetary policy is meeting the government's policy targets.

"I'm confident these new directors have the skills necessary

to help the bank fulfil its duty of meeting its targets and promoting and maintaining a sound and efficient financial system," Mr English said.

The board normally consists of seven non-executive directors plus the governor. The new directors replace Marilyn Waring who completed a five-year term in February and Paul Baines, who leaves in June after two terms.

## OCR reduced to 2.5 percent

*30 April 2009*

The Reserve Bank today reduced the Official Cash Rate (OCR) by 50 basis points to 2.5 percent.

Reserve Bank Governor Alan Bollard said: "Overall, developments since March point to lower medium-term inflation than previously projected. The main factors behind this are weaker global growth, and an unwarranted tightening in financial conditions via both higher long-term interest rates and a stronger exchange rate than expected.

"Global financial markets have showed some tentative signs of stabilisation since the March Monetary Policy Statement and governments in the major economies are continuing to make progress in resolving their banking system difficulties. However, a large amount still needs to be done and sentiment remains fragile. Negative feedback from the global recession could also still adversely affect financial institutions.

"The world economy deteriorated further than expected in the first quarter of 2009. While monetary and fiscal policy responses in many countries have been substantial and there are some signs of stabilisation in some countries, we still expect the adverse economic forces generated by the crisis to remain dominant throughout 2009. The timing and extent of global recovery remain highly uncertain.

"While the New Zealand economy has not experienced the same extreme falls in economic activity as seen in a number of our trading partners, it remains weak. Business sentiment is low, investment has been curtailed and employment reduced.

"We expect the large decline in the OCR over the past year to pass through to more borrowers over coming quarters as existing fixed-rate mortgages come up for re-pricing.

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This, together with the stimulus from fiscal policy, will act to support the New Zealand economy and eventually see activity trough and pick up thereafter. However, the scale of the global financial crisis and domestic adjustments underway are such that it is likely to be some time before economic activity returns to robust and healthy levels.

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

## **Global financial crisis still affecting NZ, says RBNZ**

*13 May 2009*

“Despite the recent pick-up in world equity markets, New Zealand continues to be impacted by the global financial crisis,” Deputy Governor, Grant Spencer, said today when releasing the Reserve Bank’s May 2009 Financial Stability Report.

“Major government interventions have eased stresses in the international credit markets, but the adverse second-round effects of the financial crisis on global economic activity and commodity prices will take some time to play out,” he said.

“These global pressures are encouraging a recovery in household savings which should contribute to an improvement in New Zealand’s external balance over the next few years. Recent monetary and fiscal policy measures will help to ensure that the adjustment to more sustainable debt levels is an orderly one.

“The banking system has continued to lend to households and businesses over the past year, but credit growth has slowed in recent months, lending criteria have tightened and some businesses are reporting difficulties in obtaining credit. While current conditions warrant caution, it is important that the banks continue to lend to creditworthy borrowers.”

Mr Spencer said New Zealand has been fortunate that its banking system has not experienced the distress seen in some countries. However, while the overall asset quality of the banks remains strong, impaired assets have increased sharply since late last year.

“Provisioning is expected to rise further over the year ahead as business profits weaken and unemployment rises. Banks must ensure that they make adequate provisions and maintain capital levels sufficient to absorb further unexpected losses.”

As discussed in earlier Financial Stability Reports, New Zealand banks remain vulnerable to external financial shocks as a result of their dependence on offshore borrowing. Conditions in the funding markets had improved since late 2008 and one bank had issued offshore term debt using the Government’s wholesale guarantee. Mr Spencer said banks need to lengthen the maturity structure of their funding to reduce their vulnerability to offshore market disruptions. The Reserve Bank’s new prudential liquidity policy, to be released around the end of May, will help to reinforce this objective.

Lending by the non-bank sector is continuing to contract, despite the easing of liquidity pressures as a result of the Government’s Deposit Guarantee Scheme. Asset quality has continued to deteriorate as a result of the economic downturn and the weak property market in particular. In the medium term, higher standards across the non-bank sector are likely to be reinforced by the new prudential regime, which the Reserve Bank is currently implementing.

Assessing and countering potential threats to financial stability in New Zealand will remain a high priority for the Reserve Bank while the effects of the global crisis persist, Mr Spencer said.

## **RBNZ offers to purchase NZ Govt July 2009**

### **Bonds**

*19 May 2009*

As is usual ahead of a government bond maturity, the Reserve Bank offers to purchase NZ government bonds maturing 15 July 2009 for liquidity management purposes. 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 \$4,197m of the 15 July 2009 bonds on issue in the market). Purchases will be made for the Bank’s own account and we expect to hold the bonds to maturity or they may be on sold to NZDMO.

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This offer opens at 11am on 19 May 2009 and remains open until further notice.

Interested parties should telephone their offers to the Domestic Market section between 11am to 12pm and 2pm to 4pm daily.

Preferred settlement dates will be determined by projected liquidity flows to ensure that these purchases have a limited impact on the current level of settlement cash in the banking system. All transactions will be conducted on a yield to maturity (Treasury bill) basis. Details of purchases will be announced daily.

This operation has been undertaken to manage near term liquidity flows and has no implications for the Bank's monetary policy stance.

## OCR unchanged at 2.5 percent

*11 June 2009*

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

Reserve Bank Governor Alan Bollard said: "The economic outlook remains weak both in New Zealand and in other countries. However, there are signs that international economic activity is stabilising, and international financial conditions are improving. We expect the New Zealand economy to begin growing again toward the end of this year but the recovery is likely to be slow and fragile. Many key economic indicators such as unemployment are projected to keep deteriorating well into 2010.

"There remain some material downside risks to activity and inflation, but for the first time in some months we can also identify some clear upside opportunities for activity. One such area is a potential rebound in household spending and residential investment as a result of the rise in net immigration and the pick-up in the housing market. Ultimately, however, we do not think such a rebound in spending would prove sustainable given the soft outlook for employment, wages and farm incomes and high levels of household debt.

"On balance, the risks to activity remain weighted to the downside.

"The recent rise in the New Zealand dollar creates an unhelpful tension with our projections. A stronger dollar at a time of weak global growth risks delaying or even reversing the projected increase in exports, putting the sustainability of recovery at risk.

"Overall, recent developments point to lower inflationary pressure than previously projected. Annual CPI inflation is likely to fall temporarily below the bottom of the target band later this year, but we expect it to return to inside the band by early 2010 and remain comfortably there over the remainder of the projection.

"We have cut the OCR by a large amount over the year. We expect the effects to pass through to more borrowers over coming quarters as existing fixed-rate mortgages come up for re-pricing. Although rising longer-term interest rates overseas are placing upward pressure on longer-term lending rates here, there is room for further reductions in shorter-term lending rates.

"The low OCR and stimulatory fiscal policy are the main sources of support to the New Zealand economy at present. It is likely to be some time before the recovery becomes self-sustaining and monetary policy support can be withdrawn.

"We therefore 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. As we said at the time of the April OCR decision, we 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

2008

DP2008/01	Some benefits of monetary policy transparency in New Zealand <i>Aaron Drew and Özer Karagedikli, January 2008</i>
DP2008/02	Explaining movements in the NZ dollar – central bank communication and the surprise element in monetary policy? <i>Özer Karagedikli and Pierre L Siklos, January 2008</i>
DP2008/03	Changes in the transmission mechanism of monetary policy in New Zealand <i>Aaron Drew, Özer Karagedikli, Rishab Sethi and Christie Smith, February 2008</i>
DP2008/04	'Automatic' cycle-stabilising capital requirements: what can be achieved? <i>Tim Ng, February 2008</i>
DP2008/05	How do housing wealth, financial wealth and consumption interact? Evidence from New Zealand <i>Emmanuel De Veirman and Ashley Dunstan, February 2008</i>
DP2008/06	The tax system and housing demand in New Zealand <i>David Hargreaves, February 2008</i>
DP2008/07	Heterogeneous expectations, adaptive learning, and forward-looking monetary policy <i>Martin Fukac, May 2008</i>
DP2008/08	A macro stress-testing model with feedback effects <i>Mizuho Kida, May 2008</i>
DP2008/09	Analysing shock transmission in a data-rich environment: A large BVAR for New Zealand <i>Chris Bloor and Troy Matheson, May 2008</i>
DP2008/10	Incorporating judgement with DSGE models <i>Jaromír Beneš, Andrew Binning and Kirdan Lees, September 2008</i>
DP2008/11	Limited information estimation and evaluation of DSGE models <i>Martin Fukac and Adrian Pagan, September 2008</i>
DP2008/12	The relative size of New Zealand exchange rate and interest rate responses to news <i>Andrew Coleman and Özer Karagedikli, September 2008</i>
DP2008/13	Real-time prediction with UK monetary aggregates in the presence of model uncertainty <i>Anthony Garratt, Gary Koop, Shaun P Vahey and Emi Mise, September 2008</i>
DP2008/14	Over the hedge? Exporters' optimal and selective hedging choices <i>Richard Fabling and Arthur Grimes, October 2008</i>
DP2008/15	Practical monetary policies <i>Alfred V Guender and David Gillmore, October 2008</i>
DP2008/16	Inheritances and their impact on housing equity withdrawal <i>Phil Briggs, December 2008</i>

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DP2008/17	Does natural rate variation matter? Evidence from New Zealand <i>Michael Kirker, December 2008</i>
DP2008/18	Combining forecast densities from VARs with uncertain instabilities <i>Anne Sofie Jore, James Mitchell and Shaun Vahey, December 2008</i>
DP2008/19	The evolution of the Forecasting and Policy System (FPS) at the Reserve Bank of New Zealand <i>Felix Delbrück, Ashley Dunstan, David Hargreaves, Ashley Lienert, Hamish Pepper and Cath Sleeman, December 2008</i>
<b>2009</b>	
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>

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:**

Knowledge Centre  
Knowledge Services Group  
Reserve Bank of New Zealand  
2 The Terrace, P O Box 2498  
WELLINGTON  
Phone (04) 4722-029

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

### Vol. 71, No. 2, June 2008

#### The New Zealand business cycle and monetary policy

Some perspectives on past recessions

The changing transmission mechanism of New Zealand monetary policy

The relationship between financial stability and monetary policy

The themes and thinking behind New Zealand's 1967 decimal coin designs

Establishing technical specifications for New Zealand's new 10 cent, 20 cent and 50 cent coins

### 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