
DISCUSSION PAPERS

DP 2011/06

Cyclical changes in firm volatility

Emmanuel De Veirman and Andrew Levin

We estimate changes in the volatility of firm-level sales, earnings and employment growth of US firms. Our method differs from existing measures for firm-level sales and employment volatility in that it not only captures longer-run changes in volatility, but also measures cyclical changes in firm volatility. We detect substantial cyclical variation in firm-specific volatility around trend. Firm-specific volatility was low in the early 1990s, rose in the mid- and late-1990s, and was high around 2000. Our results are consistent with the hypothesis, deduced from models with financial frictions, that rising idiosyncratic volatility before 2001 contributed to the coincident rise in the external finance premium and to the 2001 recession. Endogenous pricing models imply that price adjustment is less frequent, and disinflation more costly, when firm-specific volatility is low. Consistent with endogenous pricing models, we find that the output cost of disinflation was three times larger in the early 1990s than in the early 2000s.

DP 2011/07

Forecasting house price inflation: a model combination approach

Sarah Drought and Chris McDonald

In this paper we use a range of statistical models to forecast New Zealand house price inflation. We address the issue of model uncertainty by combining forecasts using weights based on out-of-sample forecast performance. We consider how the combined forecast for house prices performs relative to both the individual model forecasts and the Reserve Bank of New Zealand's house price forecasts. We find that the combination forecast is on par with the best of the models for most forecast horizons, and has produced lower root mean squared forecast errors than the Reserve Bank's forecasts.

NEWS RELEASES

Reserve Bank *Bulletin* released

30 September 2011

The Reserve Bank today released the September 2011 edition of the Reserve Bank of New Zealand *Bulletin*.

This edition showcases the Bank's varied responsibilities, beginning by exploring an issue brought to the fore around the world by the financial crises of recent years: how best to handle a bank failure. The article explains the Open Bank Resolution (OBR) model the Bank has been developing as an option for use in the rare event of a bank failure.

The second article turns to the policy forum, New Zealand's Macroeconomic Imbalances – Causes and Remedies, organised by The Treasury, the Reserve Bank and Victoria University. The forum looked at New Zealand's macroeconomic imbalances, the country's reliance on foreign debt and equity and its persistent relatively high real interest rates. It also considered whether policy options which could reduce these imbalances might improve our longer-term growth prospects.

Article three refocuses on another core Reserve Bank function: currency. This piece outlines recent trends in currency demand and counterfeiting figures. It also details the findings of a survey on the way New Zealanders use notes and coins.

The final two *Bulletin* articles include the Bank's recent submission to the Productivity Commission inquiry into housing affordability, focused on improving the responsiveness of residential construction to fluctuations in demand, and a summary of a workshop held by the Bank on improving New Zealand's macroeconomic and financial statistics.

Reserve Bank releases 2010-11 *Annual Report*

3 October 2011

During a year of shocks and volatility, the Reserve Bank has focused on the resilience of the New Zealand economy and financial system, while staying on top of inflationary pressures, Reserve Bank Governor Alan Bollard said today.

Releasing the Bank's 2010-2011 *Annual Report*, Dr Bollard said the developed world is struggling to cope with the

aftermath of the global financial crisis and the very large accumulation of public and private debt in the last decade.

"It is now clear that we have a slow grind ahead, with surprises and disappointments that we cannot necessarily foresee. The Bank has been seeking to increase the resilience of the financial system, which will help reduce its vulnerability to external shocks."

The *Annual Report* chronicles a year marked by market volatility due to unsteady recovery in the US and ongoing sovereign debt crises in Europe, while the Canterbury earthquakes have caused significant disruption, destruction and economic uncertainty.

Offsetting this, domestic activity has been stronger than expected, and farm earnings have benefited from strong commodity prices, driven by growth in China, East Asia and Australia.

However, future inflation expectations have risen as tax changes contributed to a hefty rise in headline inflation. A very strong kiwi dollar has offset the inflationary impact to some extent.

"Overall, the Bank will need to monitor the situation carefully especially as there is now a real risk that global economic activity could slow sharply," Dr Bollard said.

The Bank reported a net profit of \$144 million for the year to 30 June 2011, and paid a dividend of \$210 million to the Crown.

The *Annual Report* notes that the Bank has continued its investigations into macro-prudential tools that may help bolster financial system resilience and moderate credit cycles, though Dr Bollard cautioned that expectations need to be realistic about what can be achieved.

Also featured in the *Annual Report* is the Bank's work on tighter prudential standards. These include Basel III and the implementation of capital models for housing and agriculture, recently introduced liquidity requirements, and progress on insurance regulation.

"At the same time, we have had to manage our own balance sheet to take into account big moves in the kiwi and fragility in offshore sovereign markets. Our foreign reserves

benchmarking project will help us to do this in the coming year.”

The *Annual Report* notes that, as the New Zealand currency ages and security features mature, work has started on a multi-year banknote upgrade project.

It also recognises the improvement to the Bank’s ability to handle significant Wellington disruptions by using its new Auckland office disaster recovery capability.

“As the current environment demonstrates, we can expect more disruption and fragility ahead, much of it originating from offshore. We cannot predict all of this, but we can plan to be resilient through it.”

Economic impacts of seismic risk: lessons for Wellington

18 October 2011

The recent earthquakes in Canterbury have provided a number of lessons that can be drawn upon to help organisations in Wellington better prepare for seismic events, Reserve Bank Governor Alan Bollard said this morning.

In his opening address entitled Economic impacts of seismic risk: lessons for Wellington, presented to a Rotary Forum held in Wellington, Dr Bollard said Canterbury’s experience had shown that events like major earthquakes have many unpredictabilities and uncertainties.

“Institutions should focus on preparedness, competency, leadership, delegation and resilience rather than detailed plans for specific situations that may not repeat themselves,” he said.

The Reserve Bank had also noted that earthquakes should not be thought of as a “short sharp event, but rather as a rolling set of shocks with a long period of continuing after-shocks. These can cause ongoing damage to land as well as buildings, continued disruption, delay assessment, and slow reconstruction,” he said.

The Bank prepared itself for such events by assigning key people from each department to support the Bank and its critical business functions should a disruptive event occur. Other preparations included establishing an Auckland office

to carry on the Bank’s core functions, should the Wellington office ever become inaccessible.

Dr Bollard also noted that disaster preparedness is necessary and desirable, but not costless. Determining the appropriate balance of such concerns in advance will always be a challenging task, he said.

Following human life and safety concerns, the Bank’s immediate focus after the Canterbury earthquakes had been ensuring essential economic activity would continue.

Dr Bollard said this had been followed by a focus on the soundness of the financial system and the financial health of key economic organisations. Throughout this period the Bank had remained focused on the aim of price stability, and had set policy appropriately to ensure this was achieved over the medium-term.

New bank registered

26 October 2011

The Reserve Bank of New Zealand today announced that PSIS Limited has been registered as a bank in New Zealand. It will remain a co-operative company and will be changing its name to The Co-operative Bank Limited.

There are now 21 registered banks in New Zealand, which are listed on the Reserve Bank’s website.

OCR unchanged at 2.5 percent

27 October 2011

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

Reserve Bank Governor Alan Bollard said: “Domestic activity has continued to expand at only a modest pace despite relatively strong commodity prices. More recently, domestic business confidence has fallen back somewhat. Further ahead, earthquake repairs and reconstruction in Canterbury are still expected to provide significant impetus for demand.

“As foreshadowed at the time of the September *Monetary Policy Statement*, there is a real risk that the European sovereign debt crisis could cause a further slowing in global activity, putting downward pressure on New Zealand’s

commodity export prices. The difficult international market conditions could also result in increased New Zealand bank funding costs over the coming year.

“Annual headline CPI inflation continues to be above the Bank’s 1 to 3 percent target band. That largely reflects the one-off effect of last year’s increase in the rate of GST. September quarter inflation data suggest that, once GST and other one-off influences have passed, underlying inflation is settling near 2 percent.

“Given the ongoing global economic and financial risks, it remains prudent to continue to keep the OCR on hold at 2.5 percent for now. However, if global developments have only a mild impact on the New Zealand economy, it is likely that gradually increasing pressure on domestic resources will require future OCR increases.”

RBNZ consults on Basel III capital adequacy reforms

8 November 2011

The Reserve Bank today released a consultation paper on the implementation of Basel III capital adequacy requirements in New Zealand.

The Basel III reforms, developed by the Basel Committee on Banking Supervision, aim to strengthen the regulation, supervision and risk management of the banking sector, in light of the global financial crisis.

Reserve Bank Deputy Governor Grant Spencer said: “Capital provides a buffer to reduce the risk of a bank becoming insolvent as a result of unexpected losses, for example arising from a severe economic downturn. Robust bank capital requirements are therefore a critical part of a sound and efficient financial system.”

The Basel capital adequacy standards apply to all locally incorporated New Zealand banks.

“The Reserve Bank is proposing to adopt most of the Basel III proposals into its standards, except for those that are less conservative than already in place, or that are not suited to New Zealand circumstances,” Mr Spencer said.

“Our New Zealand banks are well capitalised and therefore

relatively well positioned to meet the proposals set out in the consultation paper. The banks have been asked to submit a quantitative impact assessment to confirm the specific impact of the new proposals.”

The Reserve Bank welcomes submissions on the consultation paper by 27 January 2012.

RBNZ appoints new Head of Risk Assessment and Assurance

9 November 2011

The Reserve Bank of New Zealand has appointed Steve Gordon as Head of Risk Assessment and Assurance, effective 28 November 2011. The Reserve Bank’s Risk Assessment and Assurance unit is responsible for ensuring that the wide range of risks faced by the Bank are identified, monitored and managed in line with best practice. Risks include financial, operational, and reputational risks. The unit includes the Bank’s internal audit function. Mr Gordon has been with Bank of New Zealand since 2002, where he held Head of Risk – Business Support and Head of Audit New Zealand roles. Prior to joining BNZ he worked at WestpacTrust (1995-2002) and National Bank of New Zealand (1988-1995), specialising in IT audit.

He is a Chartered Accountant and has a Bachelor of Commerce and Administration from Victoria University.

Turbulent global markets continue to affect NZ

10 November 2011

Risks to New Zealand’s economy and financial system have increased in recent months, Reserve Bank Governor Alan Bollard said today, when releasing the Bank’s November 2011 *Financial Stability Report*.

“Despite progress in reshaping regulatory frameworks, financial systems in many countries remain under stress due to an overhang of private and public debt. Markets have been particularly concerned about the sovereign debt situation in Greece, and the potential for contagion to other European countries. This has made access to offshore debt markets more challenging for New Zealand’s banks.

“In New Zealand, households and businesses have been containing debt, which has helped to reduce the country’s overall external imbalance. However, these efforts have been offset, in part, by rising levels of public debt.

Further, many households and farmers remain highly leveraged, which leaves them vulnerable to a sharp slowdown in global growth.”

Deputy Governor Grant Spencer said the New Zealand banking system is better placed to weather the current market turbulence than at the outbreak of the financial crisis in 2008.

“The banks have increased their capital and liquidity buffers over the past few years. They now have a stronger retail deposit base and their wholesale funding is at longer terms, making the banks less vulnerable to disruptions in offshore markets.

“Given the current market tensions, however, the Reserve Bank has decided to defer by six months its planned further

increase in the core funding ratio (CFR) which was to have occurred in July 2012. It is now intended that the CFR will increase from 70 percent to 75 percent on 1 January 2013, giving the banks more latitude in managing their funding programmes.

“We have continued to progress a number of regulatory policy initiatives. We are currently consulting with the banks on the new Basel III capital regime, with an expectation that capital requirements will be increased to match the new international standards. We have also been in discussion with the banks on pre-positioning their systems for Open Bank Resolution.

“In the insurance sector, the Bank has issued new solvency standards for insurers and is currently processing applications under the new licensing regime,” Mr Spencer said.

PUBLICATIONS

Regular publications

Annual Report

Financial Stability Report

Monetary Policy Statement

Reserve Bank of New Zealand Statement of Intent, 2011-2014

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

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, Güne 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>

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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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, or contact:

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

Vol. 73, No. 4, December 2010

Regulating non-bank deposit takers

Bringing financial stability legislation to the insurance industry – the Insurance (Prudential Supervision) Act 2010

Global currency trends through the financial crisis

New Zealand's imbalances in a cross-country contest

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