EconomicOverview

May 2013

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Note from Dominick

We titled our February *Economic Overview* "A Goldilocks moment" in anticipation of a period of strong growth and low inflation. The New Zealand economy has certainly lived up to that appellation. Annual GDP growth hit a five-year high in December. Annual inflation is hovering about a 13-year low.

This *Economic Overview* continues the theme of strong growth versus low inflation. But there have been changes to our forecasts. We have updated our thinking to account for two recent surprises.

The first surprise was the severe drought that gripped the North Island. Our new Agricultural Outlook section traces the impact on the New Zealand economy. As with past droughts, economic activity will be hit hard. But unlike previous droughts, the "Big Dry" caused a sharp increase in the price of exported dairy products, which will produce an offsetting flow of income into the economy.

The second surprise was the extent of Japanese quantitative easing. The Japanese yen has dropped sharply, and the reverberations will be felt around the world. In New Zealand the weak yen will make Japanese imports cheaper, thereby suppressing inflation. Low inflation will require the Reserve Bank to keep interest rates low for longer. Low-for-longer interest rates will stoke the already-hot housing market. And rising house prices will generate more consumer spending and GDP growth.

As we have warned in the past, strong growth and low inflation sounds nice for now. But we may be sowing the seeds of worsening economic imbalances in the future.

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New Zealand Economy

Living in the moment

The New Zealand economy has clearly lived up to the 'Goldilocks moment' that we described in our February Economic Overview. The economy is on an even stronger footing than we suspected, but inflation has remained low and could go even lower in the near term. Low interest rates and the Canterbury rebuild will underpin growth over the next couple of years, but conditions could become much tougher once these factors eventually run their course.

Three months ago, we noted that New Zealand is in something of a sweet spot: not too hot, not too cold. The economy is clearly on a recovery path, and surging house prices may be cause for alarm in some circles. But the subdued pace of inflation suggests that the economy is not overheating, giving the Reserve Bank room to watch and wait.

The major changes to our forecasts since then are a natural extension of these 'Goldilocks' conditions. The first is that we now expect a later start and a slower pace of monetary tightening, with the first OCR increase coming in the March quarter next year. With a subdued global economy and the high New Zealand dollar all but ensuring that imported inflation will remain absent for some time, the need for the RBNZ to tap the brakes on the domestic economy is less pressing.

Of course, a lower profile for interest rates implies that the upswing in the housing market can extend even further, which leads into the second major change in our forecasts. Beyond the immediate impact of the drought, we've substantially raised our GDP growth forecast for the 2014 calendar year, as low interest rates continue to spur on the housing market and domestic demand.

Both housing booms and construction upswings are notorious for generating home-grown inflation, which will eventually require a policy response - in fact we have raised our inflation forecasts for 2015 onward, and we still expect the OCR to peak at a higher level than markets are currently factoring in. By this stage, higher interest rates and an end to the growth impulse from the Canterbury rebuild could leave house values looking distinctly overcooked.

Recent developments

The latest GDP figures emphatically confirmed that the economy has regained its footing after a soft patch in the middle of 2012. GDP expanded by 1.5% in the December 2012 quarter - well above the range of market forecasts, and enough to lift the annual rate

of growth to 2.5%, the highest since early 2008. The rebound was also notably widespread, with only one major segment (petrochemical processing) recording a decline. Growth in the service sectors was particularly strong, underscoring the domestically-led nature of this upturn. This shouldn't come as a surprise - low interest rates and a massive spending injection from the Canterbury rebuild should be increasingly felt across the domestic economy.

Figure 1: Contributions to GDP growth in 2012 Professional service Construction Retail trade Rental, hiring and real estate Finance and insurance Wholesale trade Personal services Transport and warehousing

March quarter. The Quarterly Survey of Business Opinion saw firms report their best quarter in nearly six years, led by builders and manufacturers (the two industries are substantially linked). Retail turnover rose an estimated 1%, even with the early Easter holiday creating a mild drag. House sales and prices have accelerated to new highs. Net migration flows have turned positive, suggesting that New Zealand's relative appeal versus Australia has improved. And building consents point to an increasing amount of construction work in the pipeline.

Recent indicators point to more of the same in the

The major stumbling block for growth in the near term is the drought that developed over much of the country this summer. The early slaughter of livestock will mask some of the impact in the March quarter, but the full brunt of the drought will show up in the data relating to the middle of the year - we have revised down our June guarter GDP forecast to just 0.2% growth.



The shortfall in New Zealand's milk production has led to a sharp rise in world dairy prices. This will provide an offsetting income boost to the dairy sector (see the Agricultural Outlook section on page 10). The timing of this extra income means that consumer spending growth could see a further lift over late 2013 and early 2014.

It's been a hard row to hoe for other export sectors. The NZ dollar has reached a new post-float high on a trade-weighted basis, reflecting New Zealand's relatively attractive prospects and the extension of unconventional monetary policy in other parts of the world. While volumes of meat, wood and manufactured exports have all risen strongly in the last year, it's largely been in an environment of falling prices.

The high NZD has also played a significant role in keeping overall inflation down, by depressing the prices of imported and import-competing goods. Slower inflation has given consumers more bang for their buck, and has made a sizeable contribution to the strong recent growth in retail sales volumes.

Low inflation has cemented financial markets' expectations of low interest rates for an extended period, helping to keep fixed-term mortgage rates at historic lows and boosting the housing market. House prices rose 8.6% in the year to March, the fastest pace in nearly six years. The Auckland market has been particularly rampant — perhaps even beyond what the region's shortage of housing would warrant. Nonetheless, rising house prices are increasingly a nationwide feature, pointing to the common factor of low interest rates as the main cause.

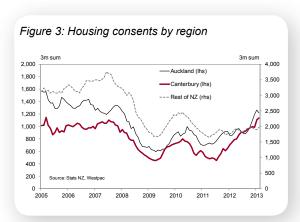
The economic outlook

Our forecasts are much along the lines of the narrative we have laid out in previous *Economic Overviews*. The Canterbury rebuild will play a major role in driving an upturn in growth, while a high exchange rate will keep inflation and interest rates low for some time. During that time house prices will rise and the domestically-focused parts of the economy will outperform. But by 2015 we expect the growth impulse from reconstruction to fade as the level of building activity hits its peak. Interest rates will need to rise further as domestic inflation pressures become increasingly widespread, creating a further drag on the pace of growth.

We have nudged down our GDP growth forecast for this year from 3.0% to 2.8%, reflecting the hit to activity from the drought through the middle of the year. But for next year we've substantially raised our forecast from 3.2% to 3.6%, thanks to a combination of improving momentum in the domestic economy, the restoration of activity after the drought, and low interest rates continuing to spur on the housing market and domestic demand.

The link from the housing market to household consumption is a crucial aspect of our stronger GDP forecasts for next year. Notably, this link is a key point of difference between our forecasts and those of the RBNZ (its views on house prices themselves are not substantially different from ours). The withdrawal of housing equity has made a significant contribution to consumption in the past, and the trend here is clearly turning up again. Indeed, household debt is once again growing faster than incomes.

We continue to expect double-digit growth in housing construction over the next two years — led by the Canterbury rebuild, but also with an upturn in the under-supplied Auckland market and modest growth elsewhere. Building consents in the Canterbury region indicate that activity is starting to shift away from the outer regions and towards Christchurch proper, where there is a lot more work to come.





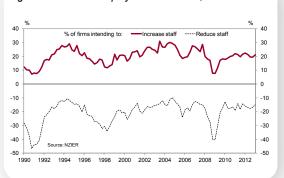
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Since we finalised our forecasts, official estimates of the scale of the rebuild have been revised up from \$30bn to \$40bn. We don't have enough detail yet to formally alter our projections of rebuild activity and GDP – though we suspect that, as with the previous revision, some of the increase includes planned improvements that will need to attract backing from private investors; not all of them will come to pass. Nevertheless, the most likely implication is that the construction industry will be running at full capacity for even longer than previously thought. That will mean more sustained pressure on the nation's resources, more persistent increases in construction costs, and ultimately a more persistent uptick in domestic inflation.

The outlook for exporters remains mixed. We expect global growth next year to be as underwhelming as it has been in the past two years, in contrast to the market consensus for a sustained recovery in the US and an end to the protracted euro zone crisis. Aside from a rebound in dairy products, growth in export volumes may be hard to come by over the next couple of years. Meanwhile, New Zealand's relatively strong domestic economy and loose monetary policy elsewhere suggest the NZ dollar will remain elevated over the next year.

Even with perkier domestic growth, we expect only a gradual improvement in the unemployment rate over the next year. Recent analysis by Statistics NZ on movements with the labour force shows that layoffs are not the driving factor – shifts from employment to unemployment have slowed since 2009 to around average levels. Rather, the weak point is the rate of movement into employment – firms appear reluctant to make the investment in new staff. Job advertisements and surveys of hiring intentions suggest there's no pending change in that situation.

Figure 4: Business employment intentions, next 3 months



The other major laggard is the public sector. Stronger economic growth has seen the fiscal deficit narrow quicker than expected in recent months, which indicates that further spending caps beyond what was set out in last year's Budget will not be required. Even so, the spending restraint needed to return the books to surplus by 2015 will create a substantial drag on economic growth over the next few years, offsetting some of the impact of the ramp-up in rebuilding activity in Canterbury.

Figure 5: Impact of fiscal policy on GDP growth

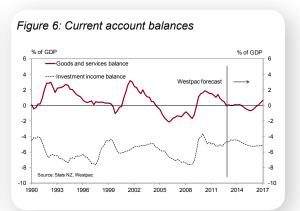
% of GDP

Source: The Treasury

Projection

June years

In all, these forces suggest that growth will remain lopsided over the next few years, with a strong dependence on construction activity and household spending. While higher dairy prices will help to underpin export earnings this year, we expect the current account deficit to worsen over 2014 as household demand and the Canterbury rebuild suck in more imported goods and materials. While there's no real concern around the rest of the world's willingness to fund this gap, the likely widening of the deficit underscores the point that these are not sustainable sources of growth over the long term.





New Zealand Dollar

Oh my darling

The New Zealand dollar (NZD) remains a darling of global currency markets. Local growth has greater momentum than international peers. The Reserve Bank's next move will be to lift interest rates, whereas most central banks are looking to maintain easy monetary policy. None of this looks likely to change soon. So we expect NZD strength to be maintained for the whole of 2013.

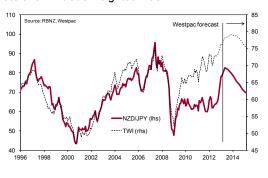
The major move in global currency markets this year has come as Japan has boldly expanded its quantitative easing program. The measures announced exceeded market expectations as well as our own. Markets responded by selling off the yen against all the major currencies. The New Zealand dollar followed and its rise against the yen explains most of the recent rise in New Zealand's TWI. For New Zealand, the impact of the weaker yen will be lower prices for many imported goods. This will play out over the course of a year or more.

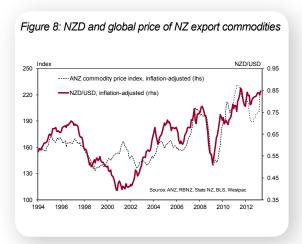
We suspect the fall in the yen has done its dash from here, we expect the yen will gradually appreciate vis-à-vis the New Zealand dollar. We are unconvinced that Japanese households and businesses will stop saving and start spending sufficiently to generate inflation. Moreover, the Abe government's public spending plans will, in time, boost the yen.

Meanwhile, a range of New Zealand-specific factors seem set to support the NZD this year. Surging dairy prices will underpin the terms of trade. World dairy prices have jumped over 50% in 2013 and although a pullback is expected, the average for the year will be well ahead of 2012.

As New Zealand growth picks up pace, elsewhere in the developed world economic growth remains lacklustre. Through the middle of this year New Zealand

Figure 7: New Zealand dollar / Japanese yen cross rate and NZ trade weighted index





economic data will deteriorate on the back of the drought, but we expect the economy to gather pace again later in 2013. And as the New Zealand Economy and International Outlook sections explain, we believe post-earthquake reconstruction will generate stronger growth in New Zealand than most other developed countries in 2014.

Finally, New Zealand Government debt is one of a shrinking number of options for global investors who are seeking "safe" assets. New Zealand has not become safer – it has merely treaded water as other governments flail. For example, Fitch lowered the UK's sovereign rating to AA+ in April.

| Exchange Rates | Forecasts | (end of quarter) |
|----------------|-----------|------------------|
|----------------|-----------|------------------|

| | _ | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------|
| | NZD/ USD | NZD/ AUD | NZD/ EUR | NZD/ GBP | NZD/ JPY | TWI |
| Mar-13 | 0.83 | 0.80 | 0.63 | 0.54 | 77.1 | 75.9 |
| Jun-13 | 0.86 | 0.83 | 0.66 | 0.57 | 82.6 | 79.1 |
| Sep-13 | 0.86 | 0.84 | 0.67 | 0.57 | 81.7 | 79.4 |
| Dec-13 | 0.86 | 0.85 | 0.69 | 0.57 | 80.0 | 80.0 |
| Mar-14 | 0.85 | 0.86 | 0.70 | 0.57 | 78.2 | 79.9 |
| Jun-14 | 0.84 | 0.87 | 0.71 | 0.56 | 75.6 | 79.6 |
| Sep-14 | 0.83 | 0.86 | 0.70 | 0.55 | 73.9 | 78.8 |
| Dec-14 | 0.82 | 0.85 | 0.69 | 0.53 | 71.3 | 77.5 |
| Mar-15 | 0.81 | 0.85 | 0.69 | 0.52 | 69.9 | 76.7 |
| Jun-15 | 0.80 | 0.85 | 0.68 | 0.52 | 68.4 | 75.8 |



Inflation and Interest Rates

Tug-of-war

The inflation outlook in New Zealand is a tug-of-war between two powerful opposing forces. At one end of the rope, the high exchange rate is suppressing inflation in the near term. At the other end, the Canterbury rebuild and buoyant housing market will generate inflation over time. With inflation currently low, the Reserve Bank can remain a passive observer for the remainder of this year. But eventually we expect domestically-generated inflation will prevail, forcing the RBNZ to hike rates.

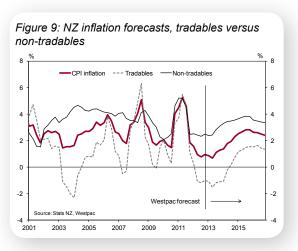
The intensity of the tug-of-war over inflation is most starkly illustrated by the split between prices for tradable goods and services – those exposed to global influences, including the exchange rate – and non-tradables, which are more influenced by domestic conditions. Tradables inflation is running at -1.1%, while non-tradables inflation is 2.4%.

To date, the high exchange rate has been the more powerful force. Annual inflation stands at just 0.9%. And given that petrol prices have fallen recently and the exchange rate has risen further, our forecast for inflation over the full year of 2013 is just 1.3%.

But the balance of power is changing. Unless the exchange rate rises substantially from here, its power to suppress inflation will wane. Meanwhile, construction cost inflation in the Canterbury region is now quite intense, and could begin leaking to other regions. And house prices show no sign of slowing their ascent. Over history, construction activity and rising house prices have been important sources of domestic inflation pressures, and we believe that pattern will repeat. So our forecasts feature inflation rising above the Reserve Bank's 2% forecast in years to come.

The Reserve Bank broadly shares our views on future inflation (although it is less persuaded about the inflationary potential of the Canterbury rebuild and rising house prices). But there are great uncertainties in a forecast composed of two powerful but opposing forces. Fortunately, the Reserve Bank is under no particular pressure to decide definitively which force is going to win the tug-of-war. It has sensibly opted to play spectator, signalling no impending change in the OCR.

Barring major surprises, the Reserve Bank will remain in wait-and-see mode for the remainder of 2013. However, we firmly expect the Canterbury rebuild and rising house prices to have inflationary consequences. We expect the Reserve Bank will increase the OCR in March 2014, kicking off a hiking cycle that lasts until 2016. While modest by historical



standards, we expect this cycle will be greater in extent than financial markets are currently pricing.

Of course, ongoing low interest rates are themselves a reason to expect house prices to rise aggressively this year. The Reserve Bank may become concerned that overvaluation in the housing market poses a risk to the financial system. Our special topic, "Why use Macroprudential Tools?", explains how these tools might operate.

Annual Inflation and Interest Rate Forecasts (end of quarter)

| (0 | | | | | |
|--------|------------------|------|----------------|----------------|----------------|
| | CPI Inflation | OCR | 90 day bill | 2 year swap | 5 year swap |
| Mar-13 | 0.9 | 2.50 | 2.65 | 2.89 | 3.40 |
| Jun-13 | 0.7 | 2.50 | 2.65 | 2.90 | 3.40 |
| Sep-13 | 1.1 | 2.50 | 2.70 | 3.00 | 3.45 |
| Dec-13 | 1.3 | 2.50 | 2.75 | 3.10 | 3.50 |
| Mar-14 | 1.4 | 2.75 | 3.00 | 3.30 | 3.60 |
| Jun-14 | 1.8 | 3.00 | 3.25 | 3.50 | 3.70 |
| Sep-14 | 1.9 | 3.25 | 3.50 | 3.70 | 3.85 |
| Dec-14 | 2.3 | 3.50 | 3.75 | 3.90 | 4.00 |
| Mar-15 | 2.5 | 3.75 | 4.00 | 4.20 | 4.20 |
| Jun-15 | 2.7 | 4.00 | 4.25 | 4.40 | 4.40 |



International Outlook

Another spoonful of sugar

Central banks have given the global economy a massive dose of monetary stimulus, with the Bank of Japan the latest to weigh in. While this has boosted asset prices, we have yet to be convinced that it will lead to a sustained pickup in global growth.

Monetary policy is a powerful force. By boosting asset prices and keeping debt servicing costs down, low interest rates can make balance sheets look healthier and encourage both lenders and borrowers to take on more risk. In New Zealand this is arguably starting to happen.

We've taken a close look at whether we're seeing a similar revival of debt-fuelled spending in the world's major economies. What we've found hasn't left us very impressed. In particular, we continue to have serious questions around the US housing market. The Japanese central bank is up against decades of low economic confidence, and it's too early to tell if this time will be different. Closer to home, Australia is at a very different stage of its economic cycle than New Zealand, and the response to interest rate cuts to date has been underwhelming.

Other economies' central banks are constrained in how much they can or will do to boost their economies. The European Central Bank has already taken plenty of risk onto its balance sheet, and will probably do more in time. But it can only go so far – it won't bail out insolvent governments (or their creditors). The Chinese authorities have their own concerns around managing economic imbalances, and their easing efforts have been comparatively selective and grudging as a result.

Three months ago we said that "reducing private and public debt levels is a prerequisite for the developed world to return to sustained growth." We stand by that view. We continue to believe that substantial monetary easing will be needed just to keep the global economy in second gear in 2014.

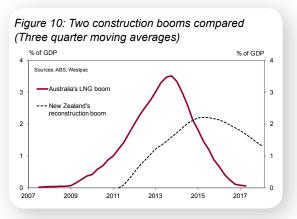
Australia

While New Zealand is currently in the upswing of its construction boom, Australia's is peaking. The Reserve Bank of Australia has been shepherding the economy through the transition, cutting the cash rate by 1.75% since late 2011.

Recent data have shown a mixed record of success. Consumer confidence has bottomed out, retail activity has picked up, and house prices are rising. Businesses outside mining have said they plan to

increase their investment next year. However businesses have also scaled back their earlier investment plans for this year and are reluctant to hire – unemployment is edging up.

Given the scale of interest rate cuts this is pretty lacklustre. Over the next few years we do expect that low interest rates will boost house prices and construction further, which will be good news for New Zealand exporters. However, the upswing is likely to stay modest. The Australian housing market is at a different stage from ours – over 2009-2010, Australian house prices rebounded 19% while New Zealand's rose just 4%. That means less scope for further price rises in Australia.



The US

The US economy is a balance between the negative forces of high debt, weak confidence, and fractious politics versus the stimulatory effect of the US Federal Reserve's easy monetary policy.

There have been signs that the Fed's monetary easing is winning out. The housing market has been making consistent gains, equity prices have surged, and consumer spending saw decent growth in the first few months of the year.

It remains to be seen whether this year will be different from previous false starts. We're open to the possibility, but not yet convinced. In particular, a big part of the recent housing market upswing has been



driven by cash-rich bottom-feeders, while banks remain reluctant to lend. As for equity price rises, there is little evidence that they have significantly boosted the wealth of the '99 percent' or even encouraged widespread interest in the stock market.

Meanwhile, improvement in the US labour market remains tentative at best. Until we see a stronger pickup in US lending and jobs, we're retaining our view that US growth will remain below trend – and that the Fed will have to keep injecting monetary stimulus.

Japan

In April, the new governor of the Bank of Japan exceeded already high expectations for more aggressive monetary easing with his new 'Quantitative and Qualitative Monetary Easing' (QQME) program. Since February the yen has fallen further.

Earlier this year the new Japanese government announced ambitious fiscal stimulus plans, and we upgraded our Japanese growth forecasts in response. Why have we not gone even further this time? For the same reasons we're sceptical about the US growth outlook. We'd need to see the Bank of Japan's printing of central bank money translate into stronger private sector lending and investment. That would mark a major break with Japan's history over the past twenty years.

China

Where Chinese government policy goes, the Chinese economy tends to follow. In 2009 the government, spooked by the Global Financial Crisis, unleashed a massive lending boom, which sent growth soaring to over 10% in 2010. By 2011 the authorities were making serious efforts to rein in the resulting overheating economy, and growth fell below 8% in 2012.

Last year monetary and fiscal settings were once again loosened, and we are seeing the results. Granted, the latest GDP figures were surprisingly soft, but these numbers are notoriously 'man-made' (to quote the new Chinese premier). All other indicators point to a solid start to the year. If anything, lending and the housing market have beaten expectations.

But the policy mix is again shifting. We currently assess it as 'grudgingly neutral' – neither strongly stimulatory nor restrictive. The government is concerned to avoid economic imbalances, and has again tightened the screws on property investors. This stance is in line with our long-held view that Chinese growth will plateau in the second half of this year and start slowing closer to 2014.

Europe

The euro zone remains the developed world's problem child. In the latest round of drama, Italian elections have resulted in hopeless gridlock, the bailout of Cyprus has been appallingly managed, and Slovenia is starting to look like the next bailout candidate.

Remarkably, all this bad news hasn't thrown financial markets into a tailspin. The hope seems to be that the European Central Bank will keep doing 'all it takes' to keep the euro zone from breaking apart. At some point that will have to include a greater willingness to ease monetary policy. The ECB already seems to be leaning in that direction, though it's not quite there yet.

What the ECB is very unlikely to do is to is rescue recalcitrant or insolvent governments - at least without putting up a fight. European politics will therefore continue to have the power to generate crises. For the European economy, that means low confidence and weak growth. Our forecasts are for the region to suffer two more years of recession this year and next.

Economic forecasts (calendar years)

| Real GDP %yr | 2009 | 2010 | 2011 | 2012 | 2013f | 2014f |
|---------------------|------|------|------|------|-------|-------|
| New Zealand | -1.6 | 1.7 | 1.4 | 2.5 | 2.8 | 3.6 |
| Australia | 1.4 | 2.6 | 2.4 | 3.6 | 2.5 | 2.3 |
| China | 9.2 | 10.4 | 9.3 | 7.7 | 8.0 | 7.8 |
| United States | -3.1 | 2.4 | 1.8 | 2.2 | 1.7 | 1.6 |
| Japan | -5.5 | 4.9 | -0.4 | 1.9 | 1.3 | 1.9 |
| East Asia ex China | 0.5 | 7.8 | 4.3 | 3.8 | 4.6 | 3.4 |
| India | 6.4 | 9.8 | 7.3 | 5.1 | 6.3 | 6.6 |
| Euro zone | -4.4 | 1.9 | 1.5 | -0.5 | -0.5 | -0.5 |
| United Kingdom | -4.0 | 1.8 | 1.0 | 0.3 | 0.7 | 0.2 |
| NZ Trading Partners | -0.1 | 4.9 | 3.5 | 3.6 | 3.6 | 3.4 |
| World | -0.6 | 5.1 | 3.9 | 2.9 | 3.4 | 3.1 |

Forecasts finalised 30 April 2013



Agricultural Outlook

A drought like no other

This drought has had a massive impact. Locally, milk production has dived while record slaughtering has overwhelmed meat processors. The drought has also dealt a severe blow to farming morale. But globally, our drought has not gone unnoticed. Lower dairy production here has pushed world dairy prices to record highs, and softened the blow to the economy.

The drought will have two massive opposing effects on the New Zealand economy. It will hit agricultural production and downstream processing hard. We are bracing for low GDP growth and a run of poor economic data in the June quarter of 2013 in particular. Fonterra forecasts that milk production will be in line with last season (we expect a 1% fall) – a disappointing reversal from the 6% growth at the halfway point of the season. Moreover, for farmers the effects of the drought will linger for years.

On the other hand, the recent unexpected surge in dairy export prices will inject about a billion dollars back into the economy. GlobalDairyTrade auction prices have risen over 50% in just ten weeks. To date there has been little or no price movement in other dairy or food markets, indicating that this 50% rise is due to our drought.

This will provide a major boost to dairy payouts this season and next (see table below). Incredibly, total revenue earned by the whole of the New Zealand dairy sector will be higher than we expected before the drought struck (although some regions will be worse off). This implies Fonterra has market power, particularly in the key Chinese market. This market power, if maintained, may mean that in future droughts dairy prices may rise and again soften the blow from lost production.

Westpac forecasts of Fonterra's dairy payout

| | 2012 | 2/13 | 2013/14 | | |
|-----------------------|-----------------|--------|-----------------|--------|--|
| | Pre- drought | Now | Pre- drought | Now | |
| Total Payout* | \$6.00 | \$6.60 | \$6.40 | \$6.70 | |
| Including: Milk Price | \$5.50 | \$6.10 | \$5.90 | \$6.20 | |

^{*}Before retentions for a fully shared-up farmer.

Results will differ widely between farms, islands, and sectors...

Some dairy farmers' situations will be much worse than the average across New Zealand. Anecdotally, some farms' production has fallen by 10-20% this season. For these farmers, the 10% increase in the total payout will not offset the lost revenue from lower production; higher costs will further exacerbate their plight.

The drought has redistributed dairy profits from the North Island to the South Island as South Island production has remained strong. Another way to look at this is that profits have been redistributed to farmers with better access to water or irrigation from those without.

Fonterra milk solids collected North South New Island Island Zealand Season to March 2013

-0.9%

+9.8%

+28%

to March 2012

compared to season

For the meat sector, there has been no increase in prices to offset the pain of lost production. Incomes will fall hard, particularly for sheep farmers, and the effects will persist for years. The euro and pound have been weak since the end of 2012, and despite world prices holding up, farmgate prices for meat farmers have fallen.

Looking beyond the drought, generally the agricultural outlook remains positive. We expect strong Chinese growth over 2013. Moreover, as populations of other developing countries become richer and improve their diets, demand for food and other commodities will increase. At the same time, overseas producers remain constrained in their ability to increase supply.

World commodity price outlook

| | minounty price eathern | | |
|----------|--|-------------------|------------------|
| Sector | Trend | Last 12 months | Next 6 months |
| Dairy | Dairy prices to peak and then fall back, but remain high by historical standards. | A | • |
| Lamb | The fall in lamb prices may have a touch more to go. Recovery may come later in 2013. | * | * |
| Beef | Weaker in the next 6 months, but heading back up after that. | > | * |
| Forestry | Improving on strong Chinese demand and a recovering US housing market. | A | A |
| Wool | We expect Chinese demand to underpin prices, but more so for fine wool than for coarse. | 1 | 1 |



Why use Macroprudential Tools?

There is a reasonable chance that the Reserve Bank will make use of its suite of new 'macroprudential' policy tools within the next year. But it has been careful not to portray these tools as the silver bullet for dealing with New Zealand's economic imbalances, with good reason.

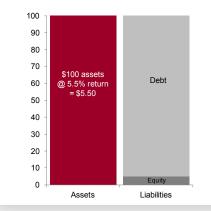
The public perception of these tools seems to be that they provide a new way to cool the housing market or to run monetary policy without aggravating other parts of the economy, in particular the exchange rate. Our view, however, is that their value largely lies in making the banking system safer over the course of the cycle, with only a limited role in managing the cycle itself.

To demonstrate why, we give a numerical example of the countercyclical capital buffer (CCB), which we regard as the most likely of the four tools to be deployed in the near future.

A bank's balance sheet is made up of its assets (mainly loans) on one side and its funding (debt and equity) on the other. The required return on assets – that is, the interest rates charged on loans – depends on the total cost of funding: the interest paid on debt, and the return on equity required by shareholders. Equity is a more expensive form of funding, since shareholders bear the most risk of failure; it also tends to be a small fraction of total bank funding. Figure 11 gives a simplified example, using figures that are roughly in the ballpark of current figures.

Applying the CCB would mean that during an upswing in the credit cycle, banks would be required to increase the share of their balance sheet that is funded from equity. (We use 'equity' and 'capital' interchangeably here, though they are slightly different concepts.) Raising the share of equity will increase the total cost

Figure 11: Stylised bank balance sheet



of funding, which in turn will be passed on in the form of higher lending rates. In our example, increasing the level of equity from 5% to 6% of the balance sheet increases the total cost of funds from 5.5% to 5.6%. In practice the impact could be even less: more equity makes the bank safer, which may lower the rate of return required by shareholders.

There are two points to note here. The first is that the impact on lending rates is small – less than a single incremental change in the OCR. And if the price of loans doesn't change significantly, we shouldn't expect a significant change in the behaviour of borrowers and lenders.

The second point is that while a CCB of 1% would be a relatively small part of the total balance sheet, it would be large relative to the bank's equity buffer - a 20% increase. Put these two points together, and it's clear that this tool is much more potent at making banks safer during credit booms and busts, than leaning against the credit cycle itself. In that light, the case for deploying these tools is less straightforward, resting on evidence that banks are becoming excessively exposed to the risk of a downturn in the credit cycle. Rising house prices are not sufficient evidence on their own.

Macroprudential policy is a big topic that we can't do justice to here. For more detail, see our recent bulletin on the RBNZ's proposed policy tools. We will be publishing further articles on how these tools are likely to operate here and their track record elsewhere.

Effect of equity ratio on cost of bank liability

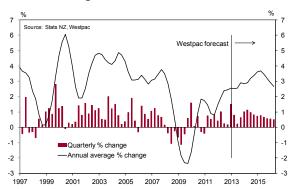
| Equity Ratio | 5% | 6% |
|-----------------------|--------|--------|
| Cost of debt @ 5% | \$4.75 | \$4.70 |
| Cost of equity @ 15% | \$0.75 | \$0.90 |
| Blended cost of funds | \$5.50 | \$5.60 |



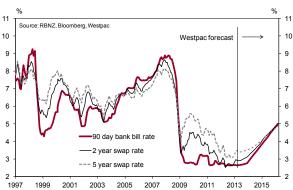
^{1 &}quot;Tool time", 4 March 2013. Available at http://www.westpac.co.nz/business/economic-updates/economic-research-and-market-strategy/

| Annual Average % change | March years | | | Calendar years | | | | |
|---|-------------|-------|-------|----------------|------|-------|-------|-------|
| | 2012 | 2013f | 2014f | 2015f | 2012 | 2013f | 2014f | 2015f |
| Private consumption | 2.5 | 2.0 | 3.6 | 3.9 | 2.1 | 3.2 | 4.0 | 3.0 |
| Government consumption | 1.8 | 0.3 | 0.2 | 0.8 | 0.3 | 0.1 | 0.8 | 0.7 |
| Residential investment | -10.7 | 15.5 | 15.3 | 17.8 | 10.9 | 14.9 | 18.5 | 10.1 |
| Business investment | 6.0 | 5.1 | 7.7 | 2.7 | 5.4 | 6.9 | 3.8 | 2.8 |
| Stocks (% contribution) | 0.5 | -0.9 | 0.4 | 0.4 | 0.1 | -0.5 | 0.8 | 0.1 |
| GNE | 3.2 | 1.6 | 4.2 | 4.0 | 2.7 | 2.6 | 4.7 | 2.9 |
| Exports | 2.6 | 3.3 | 1.4 | 3.9 | 2.1 | 3.6 | 2.4 | 3.3 |
| Imports | 6.1 | -0.2 | 6.3 | 4.8 | 1.4 | 4.4 | 5.6 | 3.3 |
| GDP (production) | 1.9 | 2.5 | 2.9 | 3.7 | 2.5 | 2.8 | 3.6 | 2.9 |
| Employment (% annual) | 1.0 | -0.4 | 2.8 | 2.7 | -1.4 | 3.1 | 3.2 | 1.4 |
| Unemployment rate (% s.a. end of period) | 6.7 | 6.9 | 5.7 | 4.9 | 6.9 | 6.3 | 5.0 | 4.9 |
| Labour cost index (all sectors, % annual) | 2.0 | 1.7 | 1.3 | 2.0 | 1.8 | 1.4 | 1.8 | 2.5 |
| Inflation (% annual) | 1.6 | 0.9 | 1.4 | 2.5 | 0.9 | 1.3 | 2.3 | 2.8 |
| Current account balance (% of GDP) | -4.4 | -4.9 | -4.6 | -5.6 | -5.0 | -4.5 | -5.3 | -5.9 |
| Terms of trade (% annual) | -2.1 | -5.7 | 10.6 | -4.2 | -9.1 | 13.2 | -4.9 | 1.9 |
| 90 day bank bill (end of period) | 2.74 | 2.65 | 3.00 | 4.00 | 2.65 | 2.75 | 3.75 | 4.75 |
| 5 year swap (end of period) | 3.59 | 3.40 | 3.60 | 4.20 | 3.07 | 3.50 | 4.00 | 4.70 |
| TWI (end of period) | 72.5 | 75.9 | 79.9 | 76.7 | 73.6 | 80.0 | 77.5 | 74.2 |
| NZD/USD (end of period) | 0.82 | 0.83 | 0.85 | 0.81 | 0.82 | 0.86 | 0.82 | 0.78 |
| NZD/AUD (end of period) | 0.78 | 0.80 | 0.86 | 0.85 | 0.79 | 0.85 | 0.85 | 0.85 |
| NZD/EUR (end of period) | 0.62 | 0.63 | 0.70 | 0.69 | 0.64 | 0.69 | 0.69 | 0.67 |
| NZD/GBP (end of period) | 0.52 | 0.54 | 0.57 | 0.52 | 0.51 | 0.57 | 0.53 | 0.50 |
| | | | | | | | | |

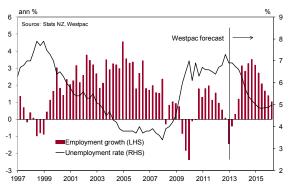
New Zealand GDP growth



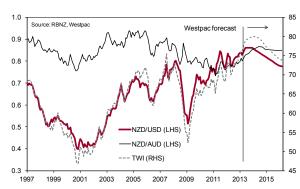
90 day bank bill, 2 year and 5 year swap rates



New Zealand employment and unemployment



NZD/USD, NZD/AUD and TWI



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