A tale of two crises

A speech delivered to Canterbury Employers' Chamber of Commerce in Christchurch

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Introduction

As New Zealanders get back to work they are looking back over the year as a guide to the challenges that will lie ahead. The year has been marked by two slow-burning but dramatic events that all are having to continue to adjust to: the European sovereign debt crisis and the Canterbury earthquake aftershocks.

These crises were not predicted, and they have shocked the New Zealand economy in quite different ways, evoking different responses. We look at the economic effects and how New Zealand is responding.

Part 1: The European Sovereign Debt Crisis

The European Crisis to Date

A sovereign debt crisis starting among the peripheral euro-economies, and accelerated by the global financial crisis (GFC), has blown out with the threat of contagion to larger European economies, affecting funding markets for all countries, including New Zealand.

The peripheral and central European economies are still threatened, with recession looming, despite a number of policy initiatives. The New Year has opened less bleakly than some feared, but credit downgrades and funding market nervousness in Europe also indicate clearly that it is too early to call an end to the uncertainty and volatility.

The GFC and sovereign debt crises have both severely shaken global financial markets, and reduced wealth and economic activity. They are related crises to a large extent, but they are different crises, and their different natures mean different responses and resolutions.

The GFC was essentially a credit and bank crisis, with interbank lending and liquidity freezing as banks lost trust in one another, nervous as to who would be left holding worthless subprime paper hidden in opaque derivatives.

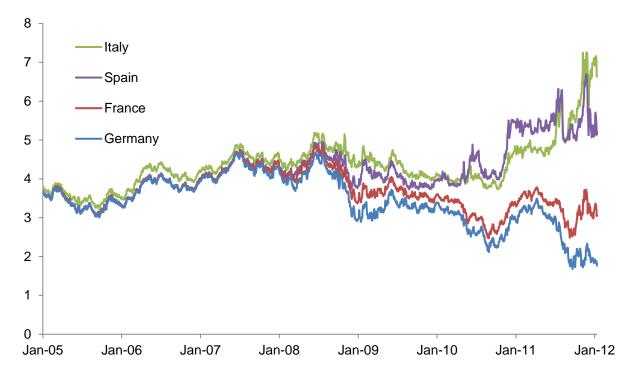
It was a crisis that taught us about tail-end risk and the fragility of market liquidity, despite the depth of the market. Funding markets (even highly liquid conventional ones) can freeze up under stress, despite the apparent availability of funds and credit-worthy borrowers.

The European crisis has highlighted the crucial role of sovereign debt markets, where banks have managed to transfer unfunded liabilities to governments, and governments have issued debt to fund the transfers.

The European sovereign debt crisis owed much of its origin to the GFC, but also to the imbalances that had built up in many economies, through large unsustainable fiscal deficits, persistent current account

deficits, and demographic and other public liabilities. When governments in a poor fiscal state were required to issue more debt, either to bail out banks or fund ongoing fiscal programmes, the pressure on the sovereign balance sheets became intolerable to markets. New and even roll-over funding became difficult to access and much more expensive.

Different crises bring different market responses. Whereas a banking debt crisis can flare up, the sovereign debt crisis has manifested itself in a 'slow-burn', and financial markets have reassessed their capacity to fund large and growing levels of government debt. Markets are now incorporating different levels of credit risk for member states, and assessing the differing degrees and credibility of government support – whereas, before the crisis, sovereign debt in the euro zone was viewed as being largely free of default risk. Policymakers are still struggling to come up with credible policy responses that will reduce these credit risk premiums without creating the moral hazard that would encourage continued indiscipline by some countries.



10-year government bond yields

Source: Bloomberg

With economic activity at stalling speed, short-term inflation risk is very low. In these conditions, inflation-targeting countries, including New Zealand, have seen scope for big cuts in interest rates during the GFC and persisting through the subsequent sovereign debt crisis. However, monetary policy in Europe, unlike in New Zealand, has had to operate a lot closer to the 'zero bound', where policy interest rates are near zero with no scope for further cuts.

This has left quantitative easing (QE) and other unorthodox monetary policy as options still in Europe and the US, as their economies have failed to restart. These tools are worth considering at the zero-

interest bound, but they can have unpredictable effects and may be hard to exit. Where QE has been employed, it is still too early to judge the overall impact. Moreover, monetary policies around the world have begun to take on some features that we tend to associate with fiscal policy, assisting the private sector directly. This casts central banks in a non-traditional role.

Another lesson from the sovereign debt crisis has been the benefit that New Zealand derives from retaining a flexible exchange rate, especially where there are country-specific sources of economic stress. In Europe, while the depreciation in the euro generally makes European exports more competitive, the one-size-fits-all currency presents adjustment difficulties for the much weaker peripheral countries. The fact that New Zealand has its own flexible currency, on the other hand, means our economy has the ability to cushion some effect of adverse external shocks.

We have also learned about the effectiveness of various exchange rate interventions, ranging from a variety of capital controls to (so far) apparently 'successful' interventions like the Swiss, and 'unsuccessful' ones like the Japanese.

Fiscal policy can also provide useful stimulus if the recession is deep and/or long. But it needs to be swiftly identified and implemented, credibly sun-setted, and coordinated with monetary policy. The sovereign debt crisis has underlined the importance of maintaining a strong fiscal position and effective institutions leading into a crisis, which otherwise can contribute to longer-term structural and financing problems.

A major crisis, however, can deliver a severe combination of reduced revenue, higher transfers, and ballooning government debt (potentially exacerbated by bailed-out bank debts being transferred on to a government's balance sheet). That exposes other structural problems like population ageing and long-term savings and investment imbalances.

As this crisis persists, it is evident that public borrowing capacity is being much more tightly constrained by credit ratings, fiscal projections and market discipline. This limits what governments can do to stimulate economies in the future, or bolster bank balance sheets, if there were to be a double dip. And governments also need to be aware of the risks of consolidating budgets too quickly and damaging growth.

In Greece, worsening fiscal numbers led markets and credit rating agencies to demand more austerity measures, which in the short term at least led to further worsening in the fiscal numbers, as the economy weakened. It is difficult for them to get out of this vicious circle, and avoid the consequent broader impacts on their society.

The sovereign funding markets have put a premium on public transparency, foresight, exchange rate flexibility, credible debt management, and good political economy. Governments are consequently becoming more focussed on achieving structural budget balance, or at least a credible timeframe for achieving these.

The European sovereign crisis has demonstrated that banks must have adequate capital and long-term funding to ensure survival in tough times. Following the GFC, international regulators have agreed to bolster the minimum capital adequacy and liquidity requirements of banks, as set out under the 'Basel III' proposals on prudential standards. The Reserve Bank expects these new standards to be broadly applied to the New Zealand system, with some tailoring for local circumstances.

The sovereign debt crisis in part owes its origin to government assistance, sometimes specifically for institutions judged 'too big to fail', or more broadly in the form of guarantees to wholesale and retail investors. The former was not seen in New Zealand, but guarantees have left their mark. Relative to overseas experience, New Zealand got off lightly, but taxpayers still bore sizeable losses as guaranteed non-bank deposit takers collapsed for a variety of reasons.

The issue of 'too big to fail' needs to be addressed. For this reason, the Reserve Bank is focussing on alternative 'failure resolution' options. For example, the Bank is requiring the large banks to preposition for its 'Open Bank Resolution' (OBR) policy.

Fortunately, the New Zealand banking system was relatively well-positioned to handle the fallout from the European crisis as it moved from credit risk to funding risk. The major banks all have similar risk profiles; their predominant risk exposures are to the local housing market and to agriculture, two sectors that held up relatively well. We are alert to the possibility that the next crisis could impact these sectors in a more systematic way and have moved to enforce capital requirements (under the Basel II framework) that are relatively conservative by international standards.

We should not over-state what bank regulators can do. Sophisticated international regulators were unable to predict and control the crisis. Financial innovation was, and will continue to be, an integral part of a growing banking sector. The next crisis will be different, but as in the past, will likely involve the less-regulated parts of the financial system. Regulators must be as innovative as the practitioners.

There are technical economic solutions to Europe's dilemma, but we cannot just assume that politicians can deliver them, given their differing governmental structures, complex coalition agreements, the role of officials, and public sentiment (e.g. broad-based Greek opposition to austerity, Washington gridlock on debt ceilings). It is worth noting that all the peripheral euro-economies have changed governments since the beginning of the crisis.

In the medium term, political stances will need to respond to market pressures, but meantime we are already seeing the enormous political challenges some countries are facing in moving towards sustainable fiscal policies. There is more public concern and engagement on economic and financial problems – take note of the 'Occupy' movement. Social media are playing a new role in reflecting public concerns about crisis and debt.

How the Euro Crisis May Develop

The euro area debt crisis has exposed flaws in the current structure of the European monetary union. In particular, unified monetary policy has not been supported by political union or a set of credible fiscal rules. The outlook for the euro zone remains very uncertain, partly because the outcome will in large part be determined by political considerations rather than purely economic ones. What may be economically optimal (e.g. risk sharing among euro zone countries, moves towards fiscal union) may not be politically optimal. Many of the proposed solutions would involve some surrender of national policy sovereignty, which would not be palatable for member states.

Although governments in several countries are facing funding difficulties, the country most likely to default, or restructure its debt, is Greece.

Avoiding default or managing an orderly default, with 'fire breaks' in place to limit contagion, would provide an opportunity for the euro zone to reform its institutions. We saw the first step towards this with the 'fiscal compact' agreed in principle by euro zone members and nine other EU states last December. However, a disorderly Greek default, with funding markets seizing up for other governments and banks, would have a major negative effect on the euro zone and the rest of the world economy. In a worst-case scenario this could lead to the break-up of the European Union.

Progress with European Banks

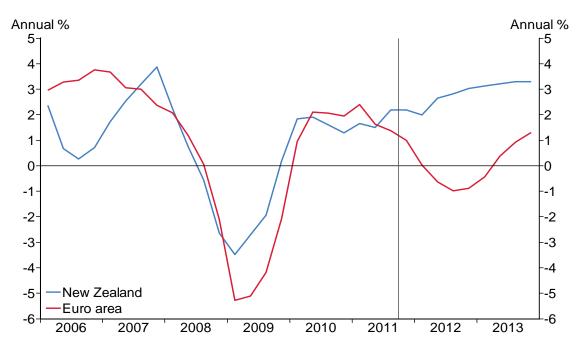
| | What's Happening | What's Needed |
|------------------|---|-----------------------------------|
| <u>Liquidity</u> | Cheap funding | Interbank market reopen |
| <u>Capital</u> | Banks deleveraging Creative accounting | Market capital Renewed lending |

Progress with European Governments

| | What's Happening | What's Needed |
|---------------|--|---|
| <u>PIIGS</u> | Possible defaults ECB bond purchases Austerity budgets | Long-term funding Restructuring and growth Euro exit? |
| <u>Others</u> | Sovereign downgrades Euro dropping Recession | Fiscal re-discipline Rebalancing Growth |

Despite the problems facing the Greek economy, and financial markets factoring in a rising risk of default, we believe the most likely outcome is that the euro zone will stay intact. A country choosing to leave the euro zone might also have to leave the European Union, depriving it of free access to export markets that would be needed to drive its recovery. Converting its public debt from euro into a less valuable new domestic currency would also cause significant damage to the domestic banking system and banking systems in the rest of the euro zone.

So far, progress has been made in providing liquidity to banks and roll-over funding for governments. But this has not changed the fundamental picture about bank solvency and fiscal discipline. As long as uncertainty remains high, and funding conditions are difficult, growth in Europe is likely to remain weak, with several countries possibly entering a recession. Looking ahead, the current economic recovery is very slow and fragile and there will be more problems ahead; it may take some years for Europe to get back on to the previous growth track.



Growth Forecasts

Source: Haver Analytics, RBNZ

Implications for New Zealand

The world's recovery from the GFC and the European sovereign debt crisis has been disappointingly slow and fragile. Rogoff and Reinhardt's review of global financial crises in their book 'This Time it is Different', suggests that, where banking crises are involved, it takes economies several years to recover (like in the 1930s Depression), whereas recoveries post-war have typically taken several quarters. As economies work off their debt overhang, they will continue to suffer through asset price adjustments.

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

Experience shows that regions cannot 'decouple' themselves from global financial events, though the timing and transmission of shocks can be quite different. For example, New Zealand's increasing reliance on Asia as a trading partner reflects export market flexibility and has helped growth, but could not shield us from the slowdown in world demand, or the drying up of financing, even if it has meant a smaller drop in demand for our exports. Economies in the Asia-Pacific region (including Australia) account for around 60 percent of New Zealand's merchandise exports by value, a significantly larger share than exports to the euro area (at just 7 percent).

Europe accounts for a significant share of global economic activity, and is an important trading partner for many Asia-Pacific economies. Spillovers from a recession in Europe could spark a slowdown in Asia, pushing down commodity prices, and having a marked impact on Australia and New Zealand.

When large economies take remedial measures such as the bailouts in the euro zone and quantitative easing in the United States, and the consequent fiscal austerity, it can have major distortionary effects on the global economy and New Zealand. Such measures affect financial market pricing, access to international credit and international capital flows. Funding may not be available to banks or to sovereigns.

European banks have been deleveraging worldwide and, while this has not yet had much direct impact on New Zealand, they have been significantly involved in funding and trade in the Asia/Pacific region, so indirect effects are likely.

International markets are an important source of funding for our domestic banks. Although New Zealand banks are currently well funded, bank funding costs are likely to increase to some degree over the coming year. This is likely to put some upward pressure on retail interest rates relative to the Official Cash Rate (OCR). Monetary policy will need to take account of such pressures.

The Reserve Bank's new prudential liquidity policy, introduced in 2010, has helped to reduce this vulnerability of the banks to liquidity shocks, by requiring banks to hold more 'core funding' (i.e. retail deposits and long-term wholesale funding). However, the underlying vulnerability will remain until New Zealand achieves a sustained improvement in national savings.

Part 2: The Domestic Earthquake Crisis

While the whole world is focused on the European crisis, New Zealand has been suffering from its own domestic dramatic events – the Canterbury earthquakes.

The Earthquake to Date

The earthquakes have been a debilitating, chronic event, with a profound human and economic impact that will continue to be felt for many years. It has been 16 months since the first of the major earthquakes. The location and timing of the quakes has been quite acute. There has been an unusual propensity to liquefaction. Significant aftershocks are still occurring – there have been more than 400 greater than Richter magnitude 4, including more than 40 greater than Richter magnitude 5 since September 2010 – and this has been a shock to everyone's hopes for recovery and rebuilding. The scale of impacts and ongoing activity means the rebuild is unprecedented.

The Reserve Bank is interested in the ongoing economic effects of this shock and how we expect rebuild to happen.

I will focus on the economic effects and what we expect to happen, and the limitations surrounding what we are doing.

To date, demolition has progressed and basic repairs have begun, and this will continue for some time. However, widespread reconstruction is on hold while aftershocks continue. When it does begin, major reconstruction is assumed to take more than five years, with housing and essential infrastructure first. Reconstruction of commercial structures could be even more protracted.

The availability of insurance has been an important factor in the timing of the rebuild. There are some unique or unusual aspects (e.g., CBD closure, building code changes, land remediation, damage on damage) which mean that assessing the value of claims is complex and takes time. Additionally, with the risk of ongoing damage from aftershocks and still high levels of uncertainty, insurers are not currently increasing their overall exposure to Canterbury and some insurance holders are having difficulties getting cover for new risks or increased limits.

We now know that damage to buildings is only part of the story. We generally understand structural remediation. But in addition, land has been damaged by subsidence, lateral spread, cliff collapse and by soil liquefaction, all of which present major technical, insurance and economic problems for rebuild.

It has proved very difficult to calculate the complete cost of the damage resulting from the earthquakes, and we found that early cost estimates could be unreliable. The earthquakes resulted in significant damage to housing, as well as commercial buildings and infrastructure.

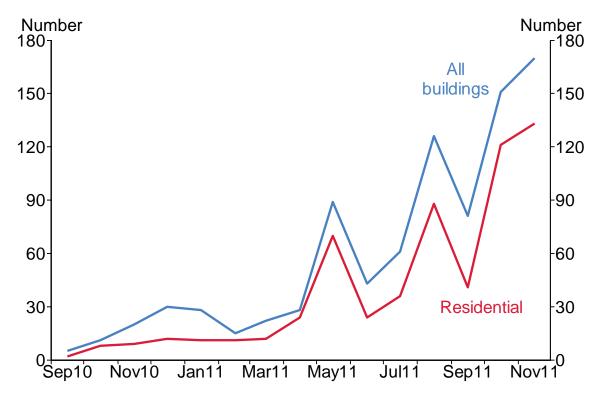
Our working assumption before the December 2011 aftershocks was that around \$20 billion (in current dollars) of *damaged property* would be rebuilt. This would be equivalent to around 10 percent of GDP – a very large shock indeed. (As a comparison, the massive earthquake that struck Japan in March 2011 is estimated to have caused damage equivalent to around 3 to 4 percent of Japan's annual GDP.)

The nominal cost of rebuilding could be higher as construction costs and prices for materials may well increase over the coming years, and as reconstruction incorporates quality improvements.

Furthermore, we estimate that the total cost of *claims* stemming from the earthquakes could be much higher – around \$30 billion – as this includes claim handling expenses, claims for business interruption, temporary accommodation, consequential loss and other non-rebuild related costs.

Recent aftershocks are likely to have added to nominal insurance costs, but the costs of the rebuilding in real terms may not be significantly affected (i.e., you only rebuild a house once).

As the main rebuild is yet to get underway, and various regulatory (e.g., building standards) and legal issues are still to be resolved, there remains considerable uncertainty around these numbers. Revisions are likely to continue for some time, and the final cost will be known only once all claims have been settled, which could be some years away.



Earthquake-related building consents

Source: Statistics New Zealand

In addition, the longer the delays to rebuilding, the greater the human cost and the risk of leakage of businesses and residents from Christchurch to other centres. Delays could also mean the rebuild is done more quickly, albeit starting later, so exacerbating inflationary pressures.

Central and local government have faced significant costs as a result of the earthquakes. The largest of these has been the \$11.7 billion EQC insurance cost (and the more recent aftershocks are likely to increase EQC's costs). The costs of the February 2011 quake have exceeded EQC's reinsurance cover of \$2.5 billion per event, and EQC and Government, as guarantor, bear the cost of any subsequent cost increase for that event. The total claims are expected to exhaust EQC's available assets – that is, the National Disaster Fund.

The Government also faces significant expenses related to the purchase of residential properties in the red zone, support for AMI, and costs associated with damage to infrastructure.

In addition to these expenses, there are significant costs related to welfare and emergency responses (totaling around \$363 million at end of June 2011). Following the earthquakes, the employment situation of many individuals was at risk with around 40,000 employees and 9,000 sole traders seeking assistance. It was also necessary for the Government to increase spending related to healthcare, social services and public administration and safety services.

Earthquake-related public expenditure estimated at \$13.6 billion contributed to a marked deterioration in the Government's operating deficit over the 2010/2011 year, and further earthquake related expenditure will be required over the coming years. The resulting pressure on the Government's debt position was highlighted by Standard and Poor's when they downgraded New Zealand's long-term sovereign rating to 'AA' earlier this year. Fitch also noted some concerns about the impact of the earthquakes on the fiscal debt in their latest assessment.

In response to the costs associated with the earthquakes, the Government's June *Budget* incorporated an increased focus on fiscal consolidation with a reduction in new discretionary spending over the coming four years. In addition, the Government has recently announced an increase in the earthquake cover levy component of home insurance, to cover the costs faced by the EQC and to rebuild its Natural Disaster Fund.

Banks and other financial institutions may have to absorb bad debts from some households and businesses as a result of the earthquakes. The impact on the New Zealand banking sector is expected to be manageable, based on banks' bad debt provisioning estimates.

Banks report that the Canterbury earthquakes have had a relatively small impact on aggregate asset quality. Three of the major banks commented on their earthquake provisioning in their results for the half-year to March 2011, and these banks have made additional provisions in the region of \$125 million – well under 0.1 percent of their total lending.

Overall, there still remains a great deal of uncertainty in quantifying the effects of the earthquakes. Provisioning estimates have been based on many unknowns, and these will be subject to change as the insurance climate and other uncertainties become clearer.

As the regulator for insurers, the Reserve Bank is now responsible for overseeing the introduction of new prudential requirements for insurers, including new solvency standards, fit and proper requirements for directors and other senior officers, and a requirement that insurers have appropriate risk management programmes. All insurers wanting to continue insurance business in New Zealand must obtain a licence by March 2012.

It is well known that one large insurer (AMI) has faced financial difficulties associated with meeting the large value of claims, while some small niche insurers have indicated they intend to selectively withdraw coverage nationally or from certain regions. Insurers remain cautious about writing new insurance in this environment. Balance sheets of other insurers have been significantly impacted, in some cases requiring more capital, and shareholders, including foreign owners, are providing this, as is appropriate.

The Reserve Bank continues to monitor the effects on balance sheets in the insurance sector. Our focus is on the soundness of the sector, and so we are particularly interested in levels of existing and future catastrophe cover. We are starting to see higher global reinsurance costs being reflected in increased non-life insurance premiums for New Zealand customers.

We are yet to see how the industry realigns itself as a result of these events. There is the prospect of some consolidation with the purchase of AMI by IAG (subject to regulatory approvals), and we are seeing changes to reinsurance capital requirements and availability of insurance. We can expect that there will be changes, and that the industry will adjust.

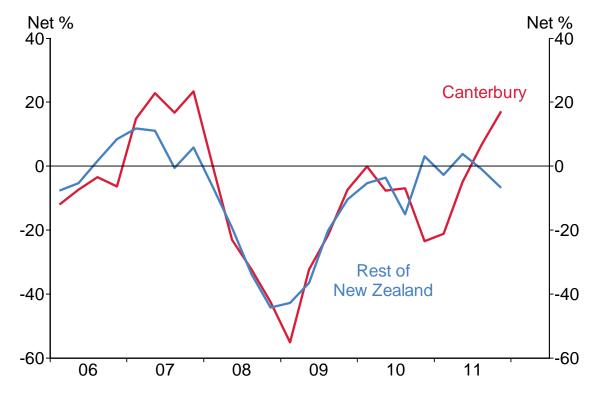
New Zealand is well-placed in that insurance will fund the majority of the costs of the Canterbury earthquakes, and most of this funding comes from large offshore reinsurers. New Zealand is unusual in its degree of insurance and re-insurance. In other parts of the world, such as Japan, government, businesses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

The Wider Impacts of the Earthquakes

Following the earthquakes, we saw sharp declines in consumer confidence and business sentiment throughout the economy. Short-term economic activity was severely disrupted, mainly due to reduced household and business spending, as well as lost exports and production in Canterbury. Sectors most affected have been tourism, education and central business district retailing.

The domestic economy has proven relatively resilient to the challenges posed by the Canterbury earthquakes, encouragingly including some of the significant contributors to Canterbury's economy, particularly agriculture, manufacturing and professional services.

In Christchurch we are currently seeing residential investment and consumption picking up more than elsewhere in New Zealand.



Domestic trading activity

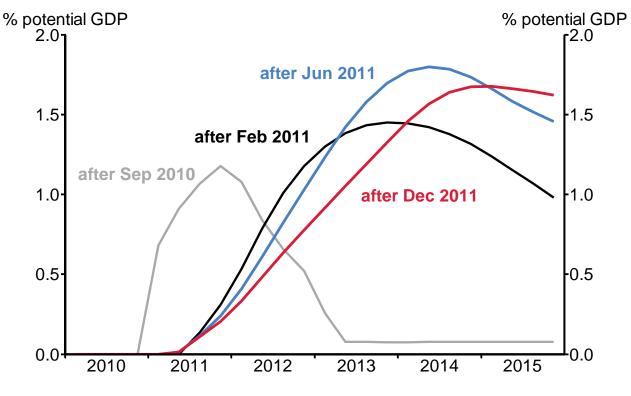
Source: NZIER Quarterly Survey of Business Opinion

Business investment spending is also expected to increase over the coming years, as damaged assets are rebuilt and replaced, as well as a more general lift in investment spending as activity in Canterbury and other regions recovers.

We have continuously updated our reviews of the Official Cash Rate to take into account the impact on economic activity and inflationary pressures. We cut the OCR in March 2011 as an "insurance cut" following the February 2011 aftershock. The deepening Euro crisis and ongoing aftershocks in Christchurch have led us to leave the OCR unchanged over seven successive reviews.

Reconstruction, is projected to eventually provide a boost to demand similar to the mid-2000s housing boom. Residential and non-residential investment will lift growth sharply. Spare capacity and labour will be absorbed rapidly, and inflation pressures will pick up from current low levels. We will need to keep monitoring this to judge whether the level of the OCR continues to be appropriate.

The outlook for rebuilding in Canterbury remains subject to a high degree of uncertainty. In the January OCR Review, we took account of the latest aftershocks and pushed out our assumption of the rebuild by a few months, with a gradual lift in activity over 2012, consistent with demolition and repairs to housing and infrastructure getting underway, with reconstruction getting underway in earnest in 2013.



Reconstruction Spending

Source: RBNZ

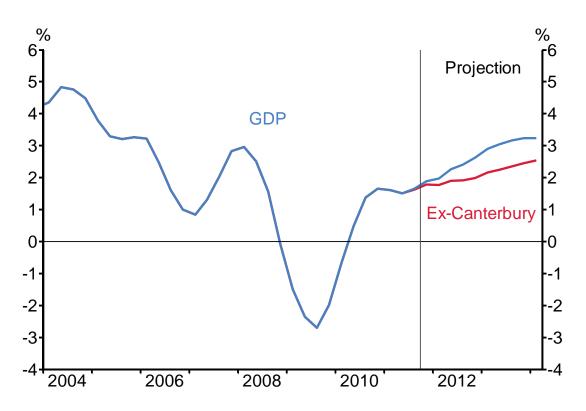
One learning from other large earthquakes overseas (e.g. Kobe, San Francisco, Chile) has been that activity bounces back relatively quickly once major shocks have stopped. Additionally, even if activity is

delayed, pressure on resources may not be avoided. Building regulations will play a key role in not only the rebuild in Christchurch but potentially in other earthquake-prone regions.

In Christchurch businesses have proved adaptable and innovative in getting operations back up and running after the quakes and aftershocks. Their resilience and tenacity is reflected in how few have actually left the city and in visible fight-backs such as the new container shopping mall and the business 'hub'.

With 80 percent of Christchurch insured, capital could prove less of an issue than in other disaster-hit countries such as Japan or China, with much lower insurance rates. A further boost will come from a large temporary reconstruction workforce that will require accommodation and services.

The earthquake reconstruction in Christchurch is very big in relation to the national economy. Along with strong commodity prices it represents the major driver of growth over the next few years. How well Christchurch manages that will reflect on all New Zealand.



GDP Growth (Annual Average)

Source: Statistics New Zealand, RBNZ

Conclusion

2011 saw two bad jolts hitting the New Zealand economy. These have already had their initial impacts, showing up in lower actual growth numbers. But the New Zealand financial system has so far stood up well, and the people of Canterbury have comprehensively insured their structures sufficiently. These preparations have meant we are weathering the shocks well.

Both events have important economic implications and have created uncertainty, but we now have a clearer picture of the future. In the terms made famous by Donald Rumsfeld, we are moving from "unknown unknowns" to "known unknowns". We cannot expect to have complete clarity for 2012. Unexpected things will continue to happen and there will be more aftershocks, both financial and seismic; the effects of both shocks could continue to rumble on for some time.

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