



# ANZ RESEARCH QUARTERLY

Economics, Commodities and Markets

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In this edition we discuss the outlook for 2012. We apply our usual focus to the Asia-Pacific region, within the context of the global economy. That context has changed markedly in recent months with a deterioration in Europe's outlook, extreme market volatility and growing risks of a global credit event. Our analysis shows that no area is immune from the events in Europe and the channels of contagion are, in most cases, manifold. However, in the absence of any worsening of the situation in Europe and financial markets, there is cause for quiet optimism. The US and Japan are recovering, Australia is transitioning to the second phase of the commodity boom, and many countries in the Asia-Pacific (including Australia and China) have ample scope for policy intervention if global growth threatens to contract significantly.

## EXECUTIVE SUMMARY

- > The US continues to recover slowly but remains vulnerable to any disruptions in Europe and fiscal drag next year. Its ability to enact important stimulus packages may continue to be hampered by domestic political resistance. We are also cautiously optimistic about Japan's outlook, following solid Q3 GDP growth, a boost from reconstruction and increased resilience to its currency strength. Europe, however, is a serious concern and its outlook has deteriorated sharply in recent months with PMI and other indicators suggesting that a recession is imminent. Political/policy incompetence, an ageing population, increased capital requirements for its banks, and loss of local confidence in the financial system all point towards a protracted slump.
- > Australia's reliance on offshore funding means it is susceptible to a global event such as further fracturing in the euro zone (EZ). The concentration of its growth base around resource industries means Australia would also be affected by any further falls in Chinese demand. Recent drops in commodity prices highlight this exposure. We believe Australia's economy will continue to grow despite these risks.
- > Economic growth in China has eased and authorities have begun to ease monetary policy. Whether this slowing develops into a hard landing will, to a large extent, depend on policy responses and the performance of a softening property market. We expect China to implement some significant policy reforms in 2012 in response to global and domestic challenges. Interest rate liberalisation, revisiting the deposit rate ceiling and enlarging the RMB trading band would all be welcome reforms.
- > Emerging Asia is experiencing a slowdown, with European events affecting the region primarily through lower growth and trade and balance of payments financing. Inflation remains high across the region but its momentum is fading, suggesting there will be scope for policy makers to ease settings shortly. In the face of global developments, intra-regional trade is reasonably robust and countries like Indonesia continue to outperform.
- > A range of complementary and conflicting forces continue to play through the NZ economy, only now there is the additional factor of downside risk to the global outlook. This risk could manifest itself in five ways: a crisis of confidence, softening demand from China, changes in commodity prices, changes in the NZD, and higher costs of credit. At present the NZ economy is performing quite well, albeit fitfully, and we forecast it to expand modestly, averaging 2.5% per year for the next two years.
- > Despite the USD's shaky fundamentals, we expect its current rally to become increasingly broad as the credit crunch gathers steam. Medium-term, however, we still favour a less prominent role for the USD. European issues will affect currency markets via deleveraging European banks, tighter trade finance conditions, possible knock-on weakness in the US, and redemptions. In these circumstances, the outlook for the AUD, KRW, IDR and MYR is weaker, while the USD, CNY, SGD and PHP will all perform relatively well.
- > Most commodities will have a slow start to 2012 but the medium-to-long-term fundamentals are still solid. Price volatility will continue as there are enough financial unknowns to trigger pockets of risk aversion. Again, much depends on China's policy response to its domestic slowdown. Handled well, domestic demand will reignite and bulk prices will barely dip.
- > Our first feature article examines the impact of speculative investment on commodity markets. Commodities have emerged as a genuine investor asset class as investors seek an 'inflation hedge' and greater exposure to emerging markets. This has added an 'equity style' short-term volatility to many exchange traded commodity markets. As a result commodity prices can now be more easily driven away from fundamentals, which create opportunities for investors with a sound knowledge of underlying supply and demand dynamics.
- > The second feature article identifies the factors that have driven elevated returns in the Australian sovereign bond market and the relatively low volatility in that market. We assess whether these features can be sustained, particularly if there is any intensification of European balance sheet risk.

*Ivan Colhoun  
Acting Chief Economist, ANZ*

## IT'S (STILL) ALL ABOUT EUROPE

Financial markets have become even more volatile over the past three months. Concerns have continued to grow about:

- > the sustainability of sovereign finances in a number of European countries;
- > the slow policy progress toward a solution; and
- > the potential for a disorderly resolution, with severe consequences for already weakened economies and financial systems in other advanced economies.

Reflecting these concerns, bond yields have declined sharply except in European countries where markets are questioning the sustainability of sovereign debt. Commodity prices have also generally fallen, with the exception of oil, while interestingly, equity markets have been volatile about a mainly flat trend. Late in the quarter these uncertainties saw pressures re-emerge in funding markets with issuance volumes declining and pricing deteriorating. There was continuing commentary about the potential for countries to exit the Euro or the complete demise of the Euro.

Is the world on the cusp of a second global financial crisis (GFC)? There are a number of scary parallels to 2007-08, but also a number of important differences, at least to date. The most obvious parallels are:

- > the existence of a significant and in both cases slow-burning negative economic and financial shock (namely the sub-prime crisis in 2007-08 and the sovereign debt crisis of 2010-11);
- > and the extent to which the Chinese economy in particular, but other large parts of the globe also, remained decoupled from the initial negative developments in the US and European economies. The 'scariness' of the current situation is no doubt amplified by the relative lack of room to manoeuvre on both monetary and fiscal policy in the major advanced economies.

### THINGS TO WATCH

Global growth remains desynchronised relative to 2008-09, with the US and Japan recovering.

Downside risks continue to mount in Europe with the region and the world at risk of a disorderly financial shock. China's growth is also slowing.

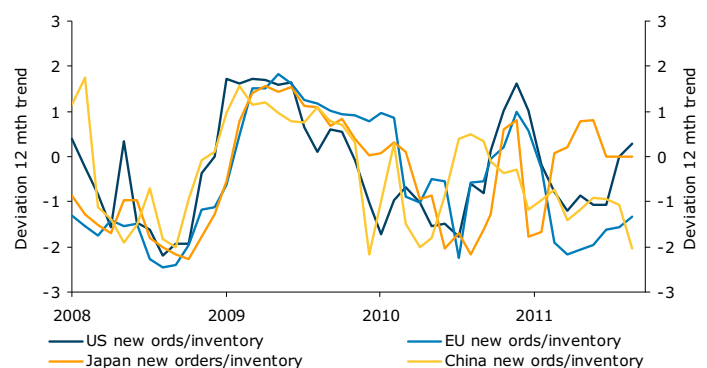
Bond and credit markets have the greatest ability to desynchronise markets and economies to the downside.

However, there are a number of important differences so far compared to 2007-08. These include:

- > Global growth is considerably less synchronised than during the GFC (see Figure 1). While European indicators have clearly weakened and China's economy is slowing moderately, the US economy continues to recover, (albeit more slowly than desired by the authorities), while the Japanese economy is being boosted by reconstruction from the tragic tsunami of earlier this year.

As shown, with inventories generally lean, the ratio of new orders to inventories (a reliable and important lead indicator of the highly cyclical global industrial production cycle) is evolving in a quite different and much desynchronised manner to date than in 2008 across the four major economic regions of the world.

**FIGURE 1. GLOBAL INVENTORY PULSE**



Sources: Bloomberg, ANZ

There are the first signs of a very modest improvement in the US housing market, also an extremely important cyclical sector (Figure 2). Encouragingly we are unlikely to see a repeat of the significant contraction in US housing construction and prices that we saw over 2006-08.

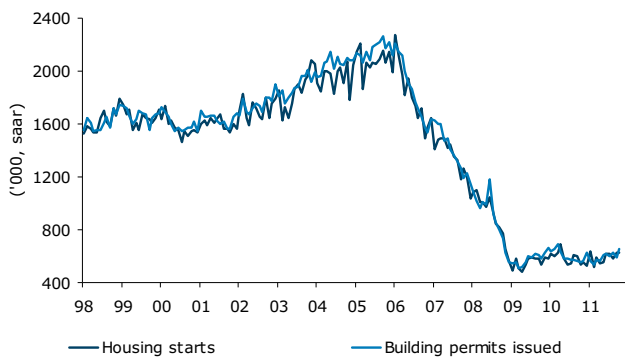
- > Corporate profitability remains relatively strong across the globe and especially in the US (Figures 3 and 4); and
- > until very recently, funding markets had continued to function though pressures have escalated recently especially for European institutions.

The net result, to date, has been that the deterioration in most leading economic indicators has been significantly less severe than experienced 2008-09, but that European indicators are weak.

The next step is to ask, what were the circumstances and/or transmission mechanisms that caused the downturn during the GFC to become synchronised and consequently deeper? And what are the risks of a re-run of this experience?

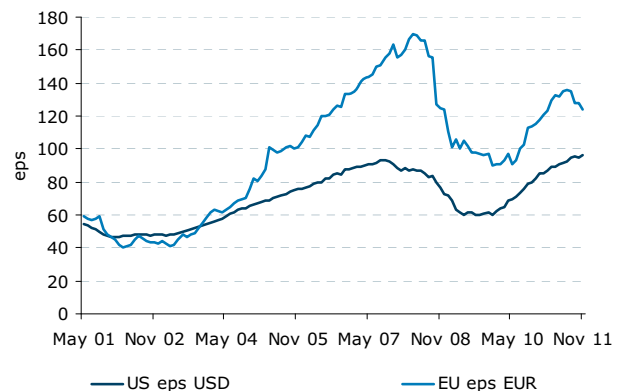
As most of the previous charts have shown and as Figure 5 illustrates, the collapse of Lehman Brothers, and the associated spike in funding pressures, were the two key events that synchronised negative financial market and economic momentum globally in 2008 and caused the sharp retrenchment in activity in Q3 and Q4 of 2008. Figure 6 shows the substantial deterioration in global PMIs after the September 2008 collapse of Lehman Brothers.

**FIGURE 2. US HOUSING PERMITS**



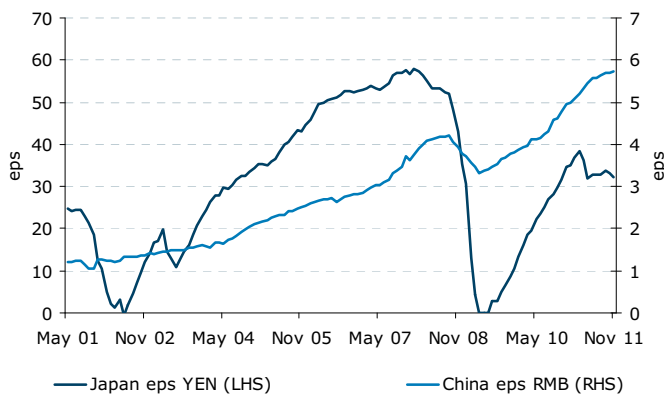
Source: Datastream

**FIGURE 3. CORPORATE PROFITABILITY**



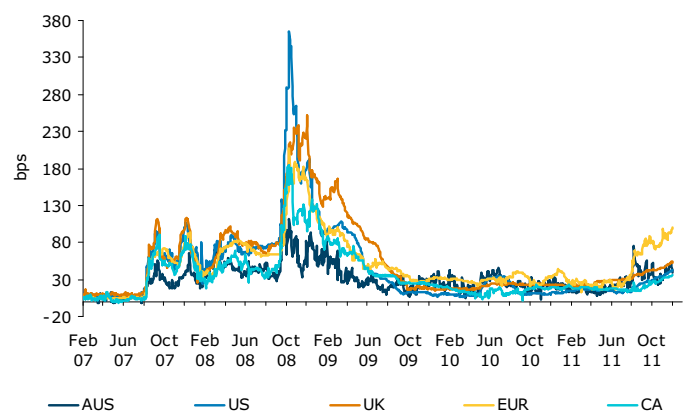
Source: Datastream

**FIGURE 4. CORPORATE PROFITABILITY**



Source: Datastream

**FIGURE 5. THREE MONTH SWAP VERSUS OIS**



Source: Bloomberg

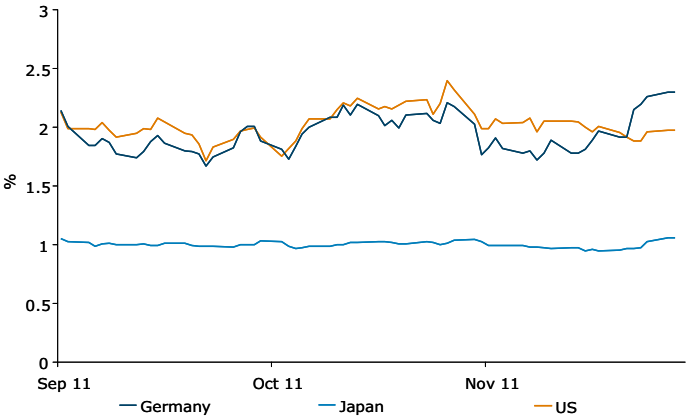
At face value, and as argued in the G3 outlook and other sections of this report, there are grounds for cautious optimism considering how the macroeconomic data is evolving. However, attention must be paid to developments in sovereign debt yields and funding as it was the financial linkages and contagion that ultimately proved so damaging to growth in the second half of 2008. In light of this, the beginnings of the recent sell-off in former safe haven long bond markets is troubling (Figure 7). Equally, a continuing slowdown in Chinese growth is a worrying signal of what may be ahead

Despite all of the above, the Australian and New Zealand economies continue to perform relatively well, largely due to low levels of net government debt and record commodity prices. Markets in Australia however are discounting further significant interest rate easing, implicitly factoring a major negative credit and economic shock. New Zealand markets have also moved to fully discount a further interest rate reduction by the RBNZ.

Taken together, the outlook remains relatively challenging. Markets and economies will remain volatile for the foreseeable future, until a more satisfactory resolution can be achieved in Europe.

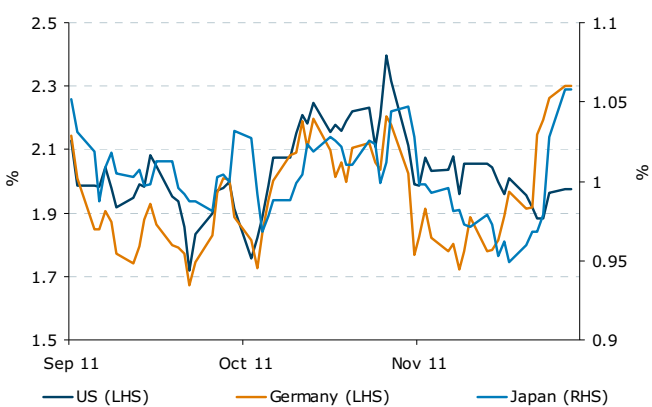
*Ivan Colhoun*  
Acting Chief Economist

**FIGURE 6. PMIS AROUND POST LEHMAN'S COLLAPSE**



Source: Bloomberg

**FIGURE 7. 10 YEAR BOND YIELDS**



Source: Bloomberg

## US – RECESSION FEARS EASE

Recent data from the US has been encouraging, especially given the mid-year collapse in confidence. Six months ago, political wrangling over the debt ceiling and heightened fears about growth prospects saw consumer confidence slumping to levels not seen since the early 1980s. The jobs market was treading water and there were fears the US would lapse into recession. A solid Q3 2011 GDP outcome has allayed those fears somewhat but the US remains vulnerable to events in Europe and domestically to a recalcitrant Republican-dominated US Congress.

The US economy grew at 2.0% annualised (ann) rate in Q3 2011, taking the level of output past its 2008 peak. Some positives in the GDP details provide grounds for optimism about the outlook. In particular, household spending and business investment made strong contributions to growth. Spending on services and motor vehicles was particularly strong, with the former growing at near 3.0% annualised, the fastest pace since 2006. We have been relatively positive about the prospects for consumption for some time given US households have made good progress in repairing their balance sheets and because the savings rate stabilised in late 2010 at around 5% (although more recently this has fallen a touch).

Another positive from the Q3 2011 GDP outcome was the contribution from residential investment. This was the first back-to-back contribution to growth by dwelling investment since 2005 and largely reflects a step up in renovation activity. Partial indicators suggest this segment of housing investment will pick up sharply in coming quarters. In addition, tight vacancy rates in apartment markets across the US portend a brighter outlook for construction of multi-unit dwellings. This view is supported by a pick up in multi-unit permits.

That said, pivotal to the strength and durability of the US recovery going forward will be prospects for jobs and the housing markets. Recent job growth has not made much of a dent into a very high unemployment rate. A dissection of the employment data shows that hiring by the private sector has been slightly above its long-run trend (Figure 1). A number of leading indicators (eg temporary help services and jobless claims) suggest that private-sector job creation is set to step up moderately. However, jobs are being shed in the public sector. The latter trend is likely to remain in place for a while yet.

### THINGS TO WATCH

US recession fears have eased but the economy remains vulnerable to European developments and the domestic political resistance to stimulus packages.

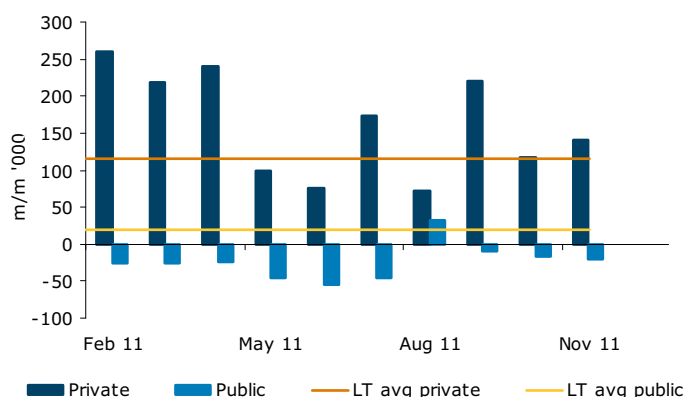
Japan is not as susceptible as it once was to Yen strength.

Downside risks continue to mount in Europe with the region and the world at risk of a disorderly financial shock.

Although there are some positive aspects to the housing story, the overall prognosis is glum. There is a sizable overhang of distressed and foreclosed houses and around 25% of mortgages have negative equity. Although the Federal Housing Finance Administration has modified its Home Affordability Refinance Program (HARP) so that a greater number of borrowers with negative equity can refinance their mortgages, the overall impact of the program is likely to be limited. Indeed, only around one million households are expected to benefit, with a total saving of USD2 to 4bn.

The subdued pace of the recovery has spurred the Federal Open Market Committee (FOMC) to ease monetary policy further in the last few months. In August the FOMC made a commitment to keep rates low until at least mid 2013 and in September it introduced 'Operation Twist'. The latter is a strategy to extend the duration of its Treasury portfolio by selling USD400bn of short-term securities and buying long-term bonds. This is expected to lower long-term rates by around 15-20bp.

FIGURE 1. LABOUR AND US NON-FARM PAYROLLS



More recently a number of FOMC members have become more vocal about the need to boost the housing market. In early October Ben Bernanke identified the sluggish housing sector as a major factor behind the subdued pace of the US recovery. In addition, at his press conference following the November FOMC meeting, the Fed Chairman said buying MBS securities was one of two options the Committee was considering should the central bank need to ease policy further. There has also been plenty of FOMC "speak" arguing that support of the US economy should not be left to monetary policy alone.

In our opinion, alongside a disruptive event arising out of Europe, fiscal policy poses the biggest threat to US growth in 2012. As it stands, fiscal drag is expected to be around 2 percentage points next year as previous stimulatory measures expire. Although President Obama's "Jobs Act" would largely counter this negative impact by extending those measures, there will be some difficulty passing this bill. Indeed, it requires support from the Republican-dominated house, which seems a stretch given passage would enhance Obama's re-election prospects next year.

Since our September 2011 *ANZ Research Quarterly* we have revised down our 2012 GDP forecast (to 1.7% from 2.7%) largely owing to a more pessimistic assumption about the fiscal situation.

### JAPAN'S GROWTH OUTLOOK IMPROVING

Japan's economy has recovered robustly after the Tohoku earthquake and tsunami. GDP expanded by 1.5% q/q in Q3 2011, the first positive reading in four quarters and the fastest pace since Q1 2010. The bounce back largely reflects a swift recovery in productive capacity, which has now more or less returned to pre-earthquake levels. The supply side of Japan's economy took a significant hit (industrial production fell by over 15% m/m in March 2011 the largest ever monthly decline) as a result of the physical destruction of production facilities, power outages and supply chain disruptions.

Underlying demand has remained resilient despite fears the slump in confidence following the earthquake would undermine spending. Indeed, a pleasing feature of the economy has been the labour market. Companies responded to the temporary loss in productive capacity by cutting back hours rather than workers. More recently hiring has picked up solidly. The unemployment rate has fallen by over 1 percentage point to 4.1% in the year to September 2011.

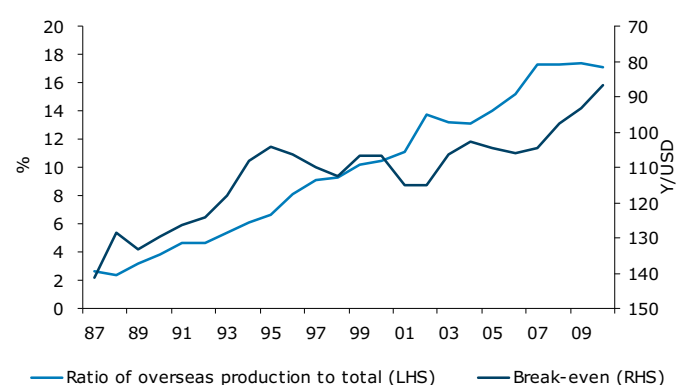
This is the lowest rate of unemployment since the collapse of Lehman Brothers, a strong contrast to other major advanced economies where unemployment rates remain elevated.

The recovery in productive capacity suggests that demand will now feature more prominently as a driver of growth. Although there is likely to be some slowing in Q4 2011 after a solid Q3 outcome, the outlook is relatively promising. In particular, prospects for the labour market are encouraging as the jobs to applicant ratio (a key leading indicator of labour demand) continues to track higher. This should support incomes and boost confidence which augurs well for household spending. That said, a possible negative to consumption is the implementation later this year of the third 2011 financial year (FY) supplementary budget of ¥12.2trn for reconstruction. The government is proposing to fund part of this package via reduced household assistance (eg child support allowance) and some tax increases.

While the outlook for exports and investment isn't as sanguine amid cooling global growth and Yen strength, there are grounds to believe the rise in the currency isn't as big a threat as it once was. Over the past two decades large Japanese manufacturers have expanded their operations offshore — the proportion of output produced overseas has climbed to around 20% from 2% in 1987 (Figure 2). This offshore expansion has resulted in a ratcheting down in the so called 'break-even' exchange rate for Japanese manufacturers from ¥140 in 1987 to ¥86 now.

This geographical diversification is expected to continue at a reasonably rapid rate over the next year or so, according to a recent survey of large Japanese manufacturers by the Development Bank of Japan. The survey results suggest Japanese companies intend to increase the offshore share of their capex spend from 29.6% in FY 2009 to 42.6% in FY 2011.

**FIGURE 2. OVERSEAS PRODUCTION AND THE BREAK-EVEN EXCHANGE RATE**



Sources: Economic and Social Research Institute, ANZ

Both monetary and fiscal policy will be supportive of growth over the next couple of years. The Bank of Japan (BoJ) is actively stimulating growth via its “comprehensive easing program”. This strategy has the central bank committing to keeping rates low until price stability is achieved. In addition, it also includes a new asset purchase program. Since its inception in October 2010, the BoJ has expanded its asset purchases three times taking its total acquisitions to ¥55trn from an initial size of ¥35trn. The BoJ has acquired both private and public sector securities. More recently the purchases have been skewed toward Japanese government bonds to try and satisfy a dual objective of lowering longer term interest rates and limiting demand for the Yen.

The government’s third supplementary budget looks set to be passed before the end of 2011. The ¥12.2trn package includes measures of around ¥9.0trn for reconstruction. The package is expected to be funded in part by expenditure cutbacks and higher taxes. As a consequence, the overall contribution to growth is expected to be around 1 percentage point in FY12.

### EUROPE – DOWNSIDE RISKS ARE SIGNIFICANT

The outlook for the Euro zone (EZ) has darkened in recent months. Q3 2011 GDP rose by just 0.2% q/q and more recent data (eg PMI surveys) suggest the EZ is headed for recession (Figure 3). Indeed, this is partly why the European Central Bank (ECB) cut interest rates in November. The new President Mario Draghi said the region was headed for recession. At this stage we expect a mild recession given the traditional drivers of the business cycle (eg inventories and housing) are already weak. That said, risks are skewed to the downside.

Prospects for the EZ (and the world) depend on how the sovereign debt crisis is resolved. To date, progress has been unsatisfactory with policy-makers failing to act decisively and comprehensively. As such, borrowing costs for many sovereigns are rising to unsustainable levels. In addition, some policy measures have been misplaced. Stringent austerity measures are squeezing growth and undermining fiscal positions, not making them better. In our opinion, policies to support growth in the short-term combined with credible medium-term fiscal consolidation programs are required.

Compounding Europe’s woes over the longer term is an ageing population. This will undermine growth and put greater stress on sovereign budgets. Italy is particularly vulnerable in this regard, with the United Nations projecting its population will start declining within five years.

Another major risk in the near term stems from plans to recapitalise banks. This requires European banks to raise their tier-1 capital levels to 9% by mid-2012. Private investors are unlikely to invest money into banks given the banks have sizable exposures to EZ sovereigns, companies and other banks. Thus, absent a public injection of capital, banks can only achieve the 9% target by deleveraging (selling existing assets). This would see banks cut back lending to EZ residents, particularly businesses, which would in turn limit growth prospects.

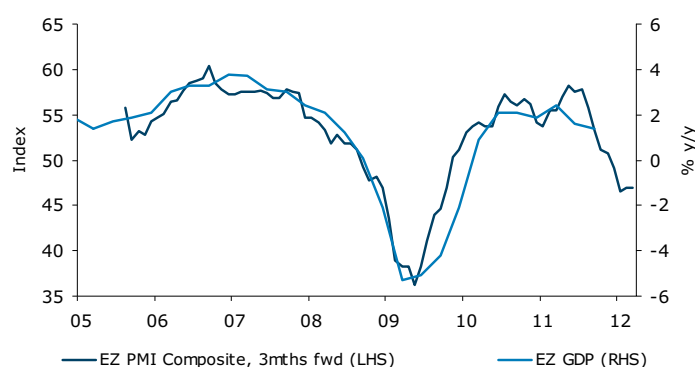
The EZ is nearing a breaking point and politicians must make hard decisions and soon. The proposal to increase the fire power of the European Financing Stability Facility to around €1trn (from €440bn) has fallen short. Regardless of whether the increased size was achieved, the fund is insufficient in itself to fend off a liquidity crisis and/or limit contagion. Indeed, Italian government debt alone is near €1.9trn. The ECB remains reluctant to counter this liquidity crisis — its current mandate seems to preclude it from making sizable purchases of EZ sovereign bonds. The central bank may step up its bond buying if European leaders commit to a fiscal framework that ensures disciplined fiscal management and involves some form of fiscal union. The world awaits the EU summit on 9 December on what fiscal reforms will be made and thus which direction Europe heads. We expect Europe to remain intact, but worse for wear.

We have revised down significantly our GDP forecasts for 2012 and 2013. We are now expecting 0.0% and 1.0% respectively, compared to 1.9% and 1.5% previously.

*Tom Kenny*  
Senior Economist

*Amber Rabinov*  
Senior Economist

FIGURE 3. EZ GDP AND PMI



Sources: Bloomberg, ANZ

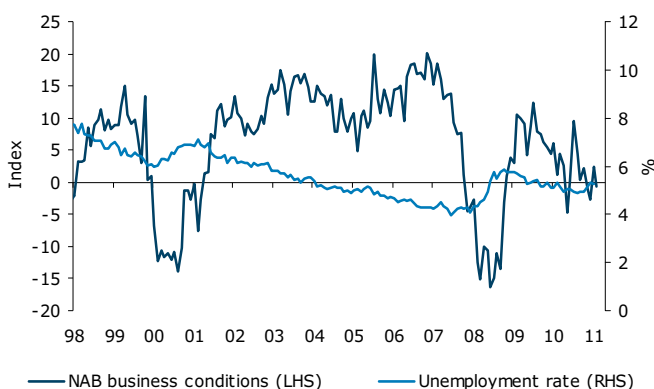
## PHASE TWO OF THE COMMODITY BOOM STILL INTACT

The Australian economy continues to be buffeted by a number of unprecedented and conflicting forces. These include: a record terms of trade and resources investment boom, multi-decade highs in the AUD, the new 'cautious' (but not substantially deleveraging) household, tight fiscal policy settings, the Queensland floods and now, heightened global uncertainty. This last factor is particularly significant for a current account deficit country as it presents risks to the cost and availability of external credit.

These conflicting forces are, unsurprisingly, producing volatile conditions, complicating the task of gaining a 'true' picture of economic momentum. Most high-frequency indicators relate to the current weak areas of the economy, with a paucity of regular data available for the outperforming resources and commodity sector. The range of indicators for the non-resources sector, in net terms, however now appears consistent with some tentative stabilisation after the mid-2011 soft patch (Figure 1). This stabilisation should be further supported by the recent easing in monetary policy by the RBA, which cut its cash rate by 25bps to a more neutral level of 4.25% in November. A recent reacceleration in net long-term overseas arrivals, which should lift population growth is another positive and stabilising force in this environment.

Our long-standing core view has been that economic growth would endure a choppy 2011, with a significant uplift in mining investment to drive an overall acceleration in GDP growth to trend or above-trend rates in 2012-13.

**FIGURE 1. TENTATIVE STABILISATION**



Sources: NAB, ABS

### THINGS TO WATCH

**Chinese steel production.** The largest barometer of Australian bulk commodity demand. Another sharp move down would require aggressive policy action.

**The investment pipeline.** The data are not regular, but the news flow on this is. Signs that some major projects are being cancelled or significantly delayed would lead to a fundamental reassessment of our Australian view.

This is the second stage of the commodity boom, as record resource sector profits over the last decade are recycled through the economy via higher investment and, ultimately, exports. As mining investment, and eventually exports, pick up strongly, other parts of the economy are expected to 'underperform' (ie grow at below trend rates and, in some cases, such as housing and government investment, shrink). Is our core view now under threat?

### IS AUSTRALIA MORE VULNERABLE THIS TIME?

Amidst the latest intensification of global troubles, Australia undoubtedly remains better placed than most advanced economies, with strong public balance sheets, plenty of monetary policy ammunition and strong growth links with the (better-placed) emerging world.

However, as with most regions, there are vulnerabilities. Indeed, on some metrics, Australia is even more vulnerable than during the 2008 crisis. In particular we point to:

- > an already slightly higher unemployment rate than in 2008.
- > a significantly narrower growth base (concentrated largely in resources-related industries which are sensitive to global growth)
- > the now substantially higher AUD. This has accelerated structural change across some of the highest-employing segments of the economy. If the AUD stays elevated amidst slower global demand, its role as an 'automatic stabiliser' will be limited.
- > Continued elevated household gearing levels (with the household debt-to-income ratio little changed since its previous 2008 peak).
- > The smaller, but still comparatively large funding gap of Australia's financial sector, which ensures

# AUSTRALIA OUTLOOK

Australian credit costs are still highly sensitive to offshore funding markets.

## LOWER TERMS OF TRADE BUT GROWTH TO CONTINUE

In our view global turmoil will be felt, particularly in commodity prices, but not enough to derail growth. Ample policy ammunition and a well advanced investment pipeline will insulate the economy from the worst effects. We have substantially downgraded our outlook for Australia's terms of trade. We expect this ratio has now peaked in this cycle, approximately two quarters earlier than our previous expectations. We now expect a sharp fall in export prices will cause the terms of trade to fall by 15% by the end of 2013, before stabilising in 2014.

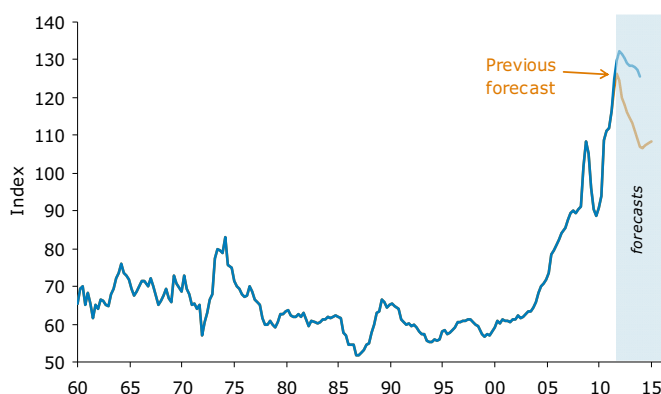
This forecast downgrade does not change our view that Australia's terms of trade will remain structurally high for many years to come. On our new forecasts, the terms of trade still cyclically troughs just 2% under its previous 2008 peak (Figure 2). That said, history does point to some downside risks to this view. The average peak-to-trough cycle in Australia's terms of trade is a fall of 50% over seven years, with the first 20% fall occurring in the first two years of the downswing.

Importantly, we do not expect the mining and infrastructure investment pipeline to be significantly disrupted by either this weaker outlook for commodity prices, or even the tightening in global funding markets. Indeed, as Australian bulk commodity prices were falling in recent months, the investment pipeline was being further advanced, with an additional \$30bn of new projects announced. This is not to say that some marginal projects will not be cancelled or that some large projects will not be delayed. However, the pipeline is now so large, and relatively advanced, that it would take a hard landing in China (which is not ANZ's forecast) for us to revisit our expectations for double-digit investment growth over 2012-13 and into 2013-14.

Our new more pessimistic forecasts for the terms of trade have not translated, one-for-one, into increased pessimism across the economy. We have downgraded our Australian growth profile but we still expect growth to pick up to over 3% in 2012, and sustain 3% growth over 2013-14.

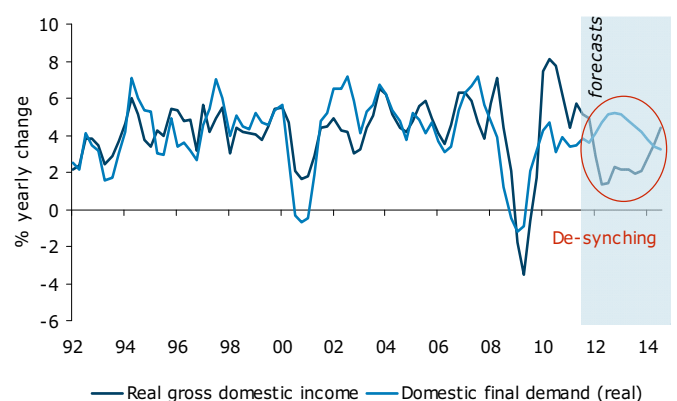
The biggest direct effect from our new lower terms of trade forecasts will be via a squeeze on company profits, which could well be flat to negative for at least one to two years. This will create a significant headwind for employment, which was already expected to underperform relative to headline economic growth. Lower commodity prices will also have significant implications for fiscal policy, which is now likely to be even tighter than previously forecast as the Government has maintained its surplus commitment.

**FIGURE 2. TERMS OF TRADE – STILL A RELATIVELY MILD CYCLE**



Sources: ABS, ANZ

**FIGURE 3. REAL GDI VS DOMESTIC FINAL DEMAND**



Sources: ABS, ANZ

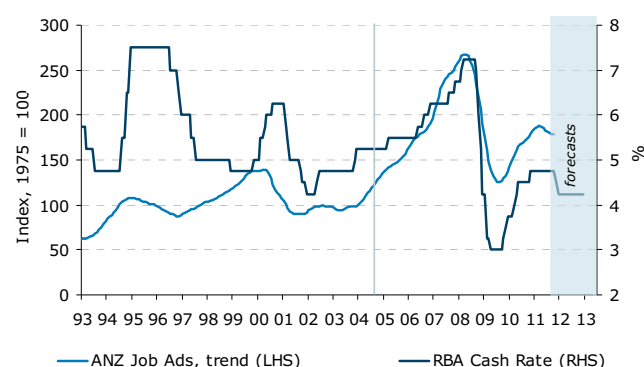
## THE DREADED DECOUPLING CALL

If we are right, and aggregate economic growth is still able to pick up amidst currently challenging global circumstances, it will lead to some interesting, and unusual 'decouplings' for the economy. This of course assumes the global economy does not worsen significantly.

Firstly, we could potentially see some 'decoupling' in the momentum of Asian and Australian growth with Australia accelerating whilst Asia stabilises or even slows. Locally, we expect some decoupling of domestic economic growth and employment growth because investment, which will be the driver of growth, is entering a less labour intensive period. We also expect, unusually, a de-synchronising in the real gross domestic income and domestic demand cycles. (Figure 3).

Putting short-term pressures aside, such decouplings raise some interesting issues for monetary policy over the next couple of years. They suggest that the typical monetary policy response to a pick up in domestic demand (ie higher interest rates) may be inappropriate. That is, the pick up in domestic demand, if it does not flow through to profitability, employment growth and wages pressures, may not generate the usual broader inflationary consequences.

**FIGURE 4. LEADING INDICATORS CONFIRM RBA HAS SCOPE TO EASE FURTHER**



Newspaper Job Ads till 2004. Total Job Ads from 2004.

Sources: RBA, ANZ

## RBA CAN EASE FURTHER

For now, our view is that the inflationary consequences of 'the second stage of Australia's commodity boom', will be relatively contained, or at least considerably more contained than the first stage. In the current environment, the risks to the RBA's modest inflation outlook are increasingly tilted to the downside. These risks include (a) a persistently stronger AUD, (b) an absence of global consumer and industrial price pressure, given persistently weak conditions in the G2, (c) continued sub-trend growth in household-sensitive sectors of the economy, partly as a high debt burden and patchy labour market increases the pressure on a cautious consumer, and (d) escalating risks of a global credit event. Hence, while we continue to expect underlying inflation to rise over the next few years, we view the risks of it rising sharply above the RBA's 2-3% target band, at least over the next eighteen months, as only modest. Our medium-term view is therefore that the RBA will keep its policy at around neutral setting until at least the end of 2013.

In the short-term, we suspect the pressure is still on for a further easing in policy (Figure 4). The biggest downside risk is from external forces. But market expectations, which, at the time of writing, discount more than 150bps of easing, to bring the cash rate to a low of around 3.0%, are unlikely to be met unless we see dire global circumstances. If global risks were to intensify, and in particular threaten the global financial system, then we could expect the RBA to act swiftly and savagely. Similar to 2008, we would see large cuts in the RBA cash rate in a short time period, but given the neutral starting point, perhaps in 50bp sized moves.

With the solid medium-term view for Australia still intact, and global credit still flowing (albeit at now elevated prices), the RBA is unlikely to pre-emptively set local monetary policy for such an extreme global event. Indeed, with lending rates in the economy now around their 15-year averages, it could be argued that the RBA's cash rate is at a neutral setting, and that this is appropriate for the outlook. Our view is that with local inflationary pressures under control and the unemployment rate at risk of rising further in the short-term, a fine-tuning of monetary policy, which would involve at least one further 25bps cut over the next couple of months, would provide good insurance to the domestic economy as it faces the still very large downside global risks.

*Katie Dean*  
Head of Australian Economics

## CHINA: POLICY EASING NECESSARY TO REGAIN GROWTH MOMENTUM

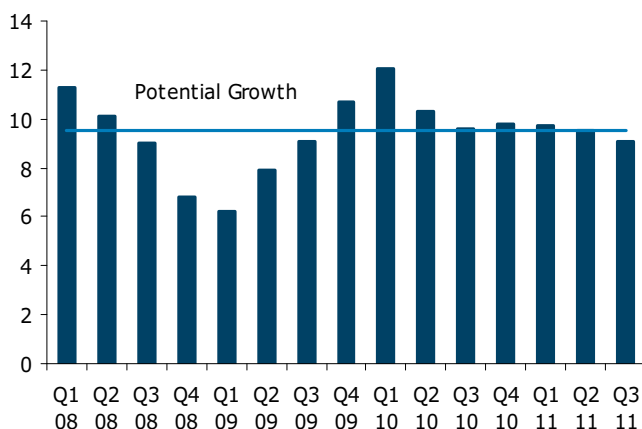
Q3 GDP growth slowed to 9.1% y/y, down 0.4ppt from Q2, led by a moderation in both investment and domestic consumption as a result of tight monetary policy (Figure 1). Investment contributed 5.0ppt in the first three quarters of 2011, compared with 5.1ppt in the first half of this year. Meanwhile, consumption contributed 4.5ppt to GDP growth by the end of Q3 2011, down 0.1ppt from the end of Q2. Net exports remained a drag on economic growth, contributing negatively to growth by 0.1ppt (Figure 2).

### DOWNSIDE RISKS HAVE RISEN

Short of a monetary policy easing, China's economy is likely to slow further in the following quarters, owing to an imminent recession in the EU and a domestic property market slump weighed down by tight monetary policy and restrictive demand policy. These intensified downside risks led to the People's Bank of China cutting the reserve requirement ratio (RRR) by 50bps on 30 November 2011. In our view, as more monetary policy easing kicks in, China's economy will achieve soft landing in the coming quarters.

The renewed financial market turbulence originating from the euro debt crisis has started to impact Chinese business confidence and investment plans for 2012. A sentiment shift has also been reflected in both the October and November official PMI data, which surprised the market on the downside. In particular, both new orders and new export orders fell significantly, suggesting the downside risk in China's manufacturing activities has increased substantially.

**FIGURE 1. GDP GROWTH SLOWED IN Q3 ON MODERATING INVESTMENT & CONSUMPTION**



Sources: CEIC, ANZ

### THINGS TO WATCH

**Property risks rise.** Property prices appear to have softened. Any extension of that trend threatens tax revenues and local economic growth.

**Inflation to moderate.** This should allow policy easing via a lowered reserve requirement ratio (RRR).

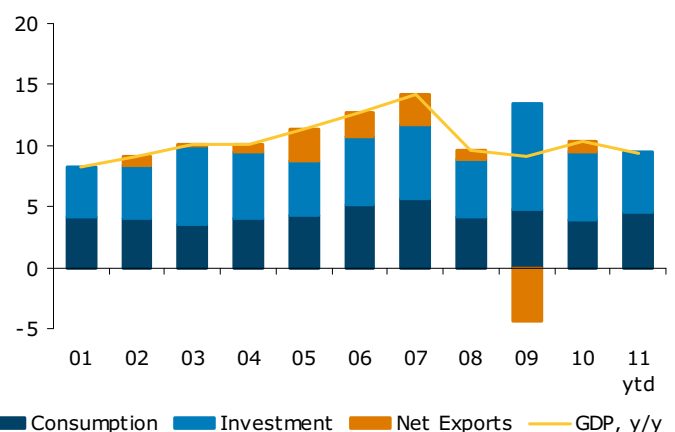
**RMB/USD trading band to be enlarged.** This will allow a more flexible RMB exchange rate and will see more institutions using FX derivatives.

### THE PROPERTY MARKET MAY EXPERIENCE A SLUMP

More worrisome is the property market, which has softened significantly with widespread price cuts across the country. Given the property sector is an important contributor to local government tax revenues and economic growth, further weakness will likely affect future real estate investment in China and rekindle fears of potential default among local government financing vehicles.

Property developers have, in particular, been squeezed by the current credit control policy and the restrictive purchasing policy. With large inventories, developers have started to offer discounts of as much as 10% to 30%. As many property loans will mature at year end, developers, including some of China's largest residential developers, have started to aggressively off load unsold stock in order to repay bank loans at the year end.

**FIGURE 2. GROWTH IN EXTERNAL DEMAND COMES TO A STANDSTILL**



Sources: CEIC, ANZ

# GREATER CHINA OUTLOOK

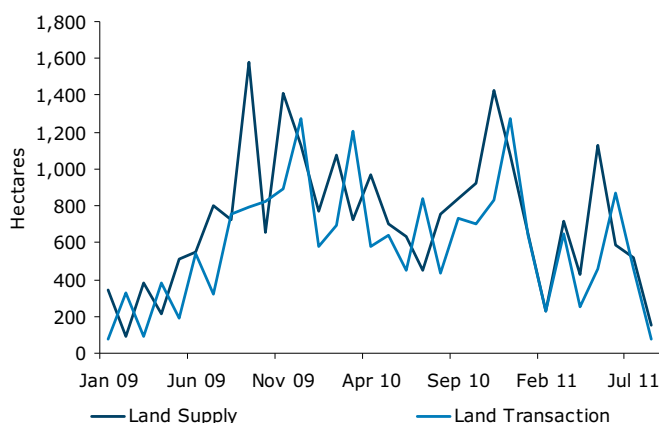
While the Chinese Statistical Bureau no longer publishes a nationwide index, the disaggregated 70 city indices show signs of softening prices (Figures 3 and 4). Some private real estate indices, such as the China Real Estate Index System covering 100 cities, have reported that average house prices have fallen for a second straight month in October, down 0.23% when compared with the previous month.

If a sharp fall in house prices materialises, private housing investment will also slow in the coming year, thus potentially lowering overall economic growth, especially when other engines of growth remain weak. Real estate investment is crucial for many mid-stream industrial sectors, such as steel, cement and building materials. There is a close relationship between China's property sales and GDP growth, with housing sales leading GDP growth by 5-6 months, suggesting that economic growth could moderate further should the property market continue to cool.

Meanwhile, as local governments rely on land sale revenue to finance the debt of local government financial platforms, the shortfall in land prices raises concerns on debt sustainability. Notably, as cash flow projections for local government financing platforms are closely linked to the property market outlook, a sharp fall in property prices will also result in a liquidity squeeze for these financing vehicles. Although most local governments will likely be able to tap into the bond market next year, an easing in the credit market at this point will help local governments better manage their budgetary needs next year and prevent a 'stop and go' pattern in some local government investment projects.

It should be noted that Chinese banks' preferred collateral is land and property. If land and property projects fall sharply, bank collateral will decline in value, forcing banks to increase their provisions.

**FIGURE 3. LAND SALES KEY TO FINANCING LOCAL GOVERNMENT DEBT**



Sources: CEIC, ANZ

This will then lead to a second round of credit contraction. If a property market panic materialises, commercial banks under pressure could call back loans, further squeezing liquidity in the whole economy.

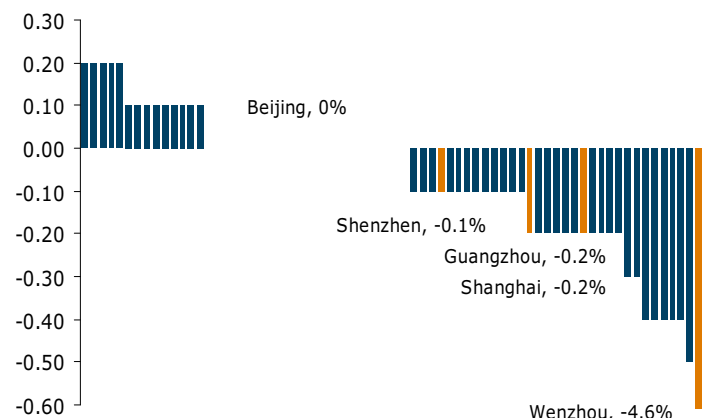
In our view, the existing administrative measures applied to control the strong demand for property and squeeze developers via a tight credit policy look increasingly unnecessary. The lack of flexibility in such a property market control regime risks a hard landing. While caution on rapid property price appreciation is much needed, the Chinese authorities should use interest rate policy and tax-related policies, rather than administrative policies, to steer the developing property market to a soft landing.

## INFLATION RISKS HAVE STARTED TO DIMINISH, ALLOWING FOR POLICY EASING

With global demand slowing and onshore property prices starting to cool, China's inflation risks have declined sharply. Global commodity prices have fallen rapidly due to the weaker outlook in the EZ and US economy in particular. Meanwhile, onshore iron ore prices have also fallen sharply by more than 20% from the peak set this year, suggesting that China's PPI inflation is likely to follow suit in coming months. As such, we believe that China's inflation risks have diminished.

The October CPI slowed to 5.5% y/y, down sharply from September's 6.1% y/y and this year's peak level of 6.5%. As we have previously argued, in periods of low growth, global commodity prices are usually subdued. As a result, China's producer price index should start to moderate, followed by CPI inflation. If inflation is no longer a risk to macroeconomic stability, the PBoC can then afford to ease its already tight monetary conditions, further providing a stimulus to growth.

**FIGURE 4. PROPERTY MARKET AT RISK OF A HARD LANDING**



Sources: CEIC, ANZ

## OUTLOOK FOR 2012

As the economy has started to show signs of a slowdown, we think that further policy response will be needed to reduce the downside risk to the economy, thus consolidating a soft landing in Q4 2011 and ensuring sustained economic growth in 2012. We view that an outright policy easing, meaning further cuts in the RRR in the next year is highly likely, along with moderating CPI inflation.

We forecast China GDP to grow 9.3% y/y in 2011, with average CPI inflation at 5.5% for the whole year. Meanwhile, the economy will likely expand 9.0% in 2012, and CPI inflation decline to 4.0%. Economic growth could slow to 9% (or slightly below) in Q4 2011 and Q1 2012, but gradually pick up towards the end of 2012 (Figure 5).

**FIGURE 5. THE QUARTERLY PATH OF GDP AND INFLATION FORECASTS**

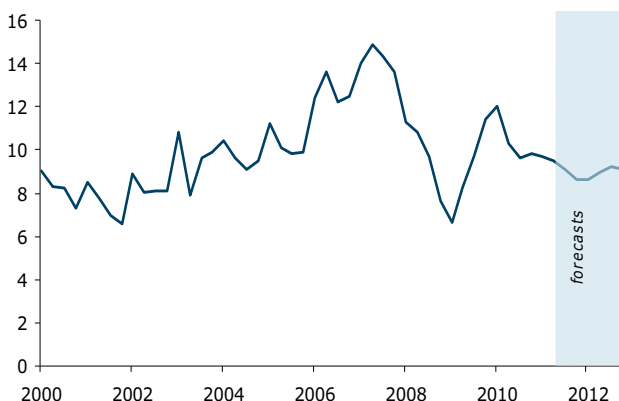
	GDP (y/y)	CPI (y/y)
Q4 2011	9.0%	4.9
Q1 2012	8.6%	3.8
Q2 2012	8.9%	4.0
Q3 2012	9.2%	3.8
Q4 2012	9.1%	3.9

Source: ANZ

Our forecasts are based on the following assumptions:

- > The G7 economies will grow by around 1.6%, slightly stronger than our 2011 forecast of 1.4%. This suggests that Chinese exports will continue to be affected by a euro zone recession, but external

**FIGURE 6. CHINA – GDP PICKS UP TOWARDS 2012-END**

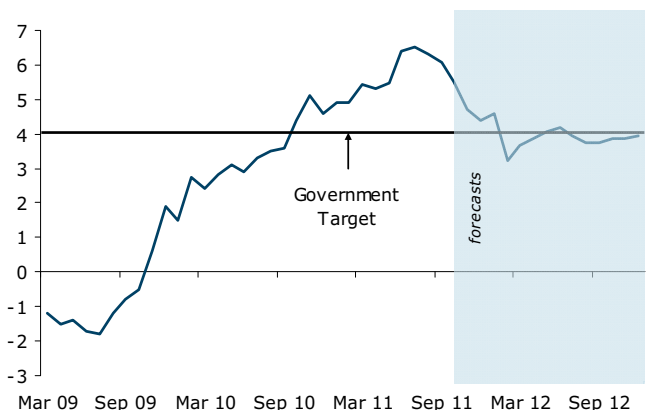


Sources: CEIC, ANZ

demand from the non-euro zone will hold reasonably well. In particular, Chinese exports to the US and Japan will tend to outperform on improving economic conditions. Chinese exports to emerging market economies will continue to hold up at the current level.

- > Chinese investment, led by the ongoing public housing program and infrastructure investment projects, will remain solid at around 25%, similar to the growth rate in 2011. The expected monetary policy easing and the access to the bond market by many provincial governments in 2012 suggests that local financing conditions will start to ease. Favourable financing conditions will also be added to by an ongoing political business cycle in China. That is, as many provincial governors and party chiefs are newly installed, they have a great incentive to engage in activities that can speed up provincial economic growth. Investment is therefore likely to surprise on the upside.
- > Chinese consumption will likely pick up further on rising farm incomes, manufacturing wages, personal income tax cuts and the full implementation of the medical reform package by the end of 2011. We believe these factors will help uphold consumption growth roughly to the level of 2011.
- > As such, we forecast that the economy will be affected by weakening exports and slowing private investment, resulting in a slower rate of growth at the beginning of next year. However, with the policy easing gradually taking effect and market liquidity conditions improving, the economy will pick up from the second quarter and be back to above 9% growth rate in the second half of 2012 (Figure 6). As growth moderates next year, the overall inflationary pressures will diminish, with inflation stabilising towards the government target of 4% (Figure 7).

**FIGURE 7. INFLATION TO MATCH THE GOVERNMENT'S TARGET**



Sources: CEIC, ANZ

## RMB APPRECIATION MAY STAGNATE

RMB appreciation stagnated in the past month, largely due to stronger demand for the US dollar and rising risk aversion. The onshore USDCNY spot rate hit the upper limit (weak side) several times in the past few weeks despite the central bank continuing to set the USDCNY fixing rate on the strong side (Figure 8). As offshore CNH rates were weaker than onshore CNY rates, cross border arbitrage flourished to take advantage of the large CNYCNH spreads, resulting in a large sell-off of CNY in the onshore market (Figure 9). Clearly, the offshore CNH market has significantly affected the onshore CNY rates, highlighting the need for reform of the current rigid RMB exchange rate regime.

We believe that the RMB's trading band against the USD will likely be enlarged to allow a more flexible RMB exchange rate. As a result, the two-sided risk of USDCNY rates will also rise, forcing corporates and financial institutions to utilise more FX derivatives to hedge their FX exposure, helping deepen and broaden onshore financial markets. As export growth is likely to moderate in the coming year due to a weaker global economic outlook, we expect that RMB appreciation will slow somewhat, with RMB strengthening by only 3% against the US dollar in 2012.

## RISKS SURROUNDING OUR FORECASTS

Our baseline forecasts will be affected by a number of upside and downside risks. On the upside, a surge in investment growth could take place on relaxed monetary policy and the ongoing upward political business cycle in China, leading to renewed economic overheating with surging inflation.

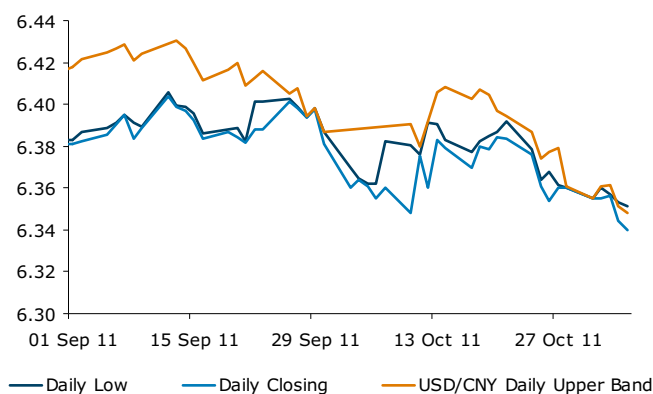
On the downside, the existing property control policies could last longer than expected, leading to a hard landing in the property market and therefore a sharp decline in property investment next year. This would then lead to a sharper than expected deceleration of growth. In addition, China's exports may experience slower than expected growth on increased trade frictions between China and the rest of the world. Protectionist sentiments in the US will also likely intensify during a presidential election year.

## STRUCTURAL REFORMS ARE NEEDED TO SUSTAIN LONG-TERM GROWTH

As structural imbalances continue to worsen, structural reforms are needed to restore the economy to a more sustainable growth model. Some of the problems facing the economy, such as the rapid emergence of a shadow banking system, the credit crunch facing small and medium-sized enterprises, and local government indebtedness will not be resolved by relying on macroeconomic policies alone. Structural policy reforms must be a part of the solution. For example, interest rate liberalisation, with the removal of the deposit rate ceiling, remains a high policy priority to reduce the systemic risk to financial institutions. We believe this could be an important policy event in 2012. Meanwhile, as expectations of RMB appreciation have started to ease, and the rigid RMB exchange rate regime is often speculated on by cross border arbitrage activities, we think the enlargement of the RMB trading band could be another important policy reform in the coming year.

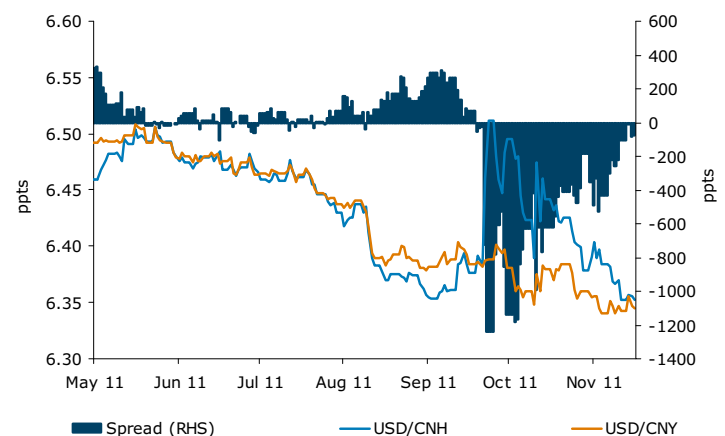
*Li-Gang Liu*  
Head of Greater China Economics

**FIGURE 8. USDCNY SPOT ON THE STRONG SIDE**



Sources: CEIC, ANZ

**FIGURE 9. ARBITRAGE OPPORTUNITIES FOUND IN LARGE CNYCNH SPREADS**



Sources: CEIC, ANZ

## ACTIVITY DRAGGED DOWN BY EUROPE – SOFT 2012 IN STORE

The impact on Emerging Asia from uncertainty over the European debt crisis intensified in the past quarter. We now see measurable negative effects not only on financial variables (which began in late July) but on a range of real sector variables as well. This is most clearly seen in exports and PMIs and more strongly outside of the larger economies.

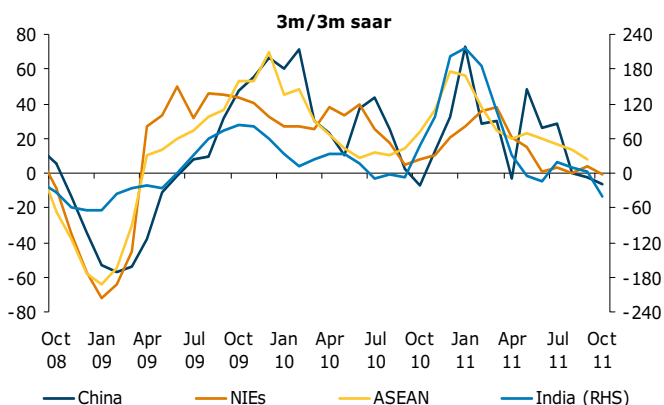
In contrast, and encouragingly, consumption is actually holding up rather well. With a few exceptions, policy-makers have held their fire so far, although their bias has moved toward easing. Looking ahead, 2012 will be a sub-par year for the region, particularly in the smaller economies and we continue to see the risks as being on the downside.

### EXPORTS AND PMIS TELL THE STORY

The slowdown in Emerging Asia has been concentrated in exports and Purchasing Managers' Indices (PMIs). Export momentum remains flat, with the data continuing to disappoint (Figure 1). Electronics exports have been underperforming although shipments within the region have remained fairly buoyant.

PMIs have continued to weaken and signal contractions in Korea, Singapore and Taiwan as orders remain soft (Figure 2). PMIs for China and India have fallen as well, with China's PMI slipping into contractionary territory in October.

FIGURE 1. EXPORT MOMENTUM HAS FLATTENED OUT



Sources: CEIC, ANZ

### THINGS TO WATCH

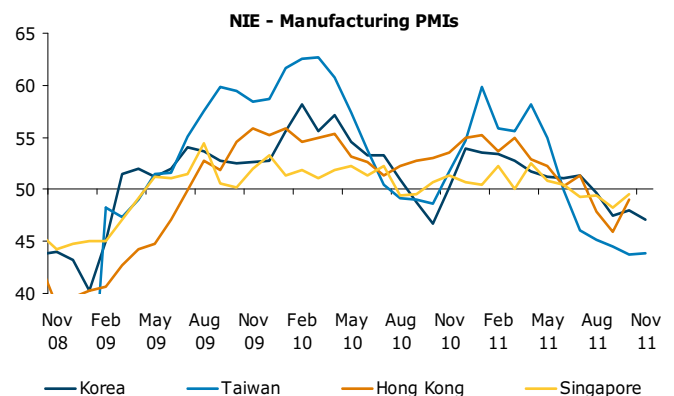
The pace of activity has been dragged down by uncertainty over Europe. Expect more to come particularly in H1 2012, and the smaller Asian economies to be more affected. Most PMIs are now below 50.

Central banks in Asia had been slow to ease monetary settings, but are now starting to move. If growth worsens, the pace of rate cuts will pick up.

Contagion to date has mainly been through growth betas and balance of payments financing. We expect bank funding stress to remain moderate as loan to deposit ratios are high. Will this persist?

On the positive side, consumption is holding up well in most of the region. This is consistent with post-GFC trends and suggests some degree of resilience with respect to the ongoing negative external environment. Putting this all together, growth has slowed in the smaller economies but has fallen less in others. Importantly, while the pace of activity has slowed, this has been moderate and output gaps remain close to zero.

FIGURE 2. PMIS SUGGEST THAT MANUFACTURING ACTIVITY IN THE NIEs WILL CONTRACT



Sources: CEIC, ANZ

# EMERGING ASIA OUTLOOK

## INFLATION PRESSURES ARE EASING (SLOWLY)

Early this year we identified rising inflation, rather than slowing growth, as the main macroeconomic challenge facing Emerging Asia. However, this has changed as the financial market 'tail' wags the real economy 'dog'.

Headline inflation remains relatively elevated across the region, even after excluding the outliers of Vietnam (21.6%) and India (9.7%). The unweighted average y/y inflation rate of the remaining nine economies we cover is 4.3%, above the 10-year average of 3.0%.

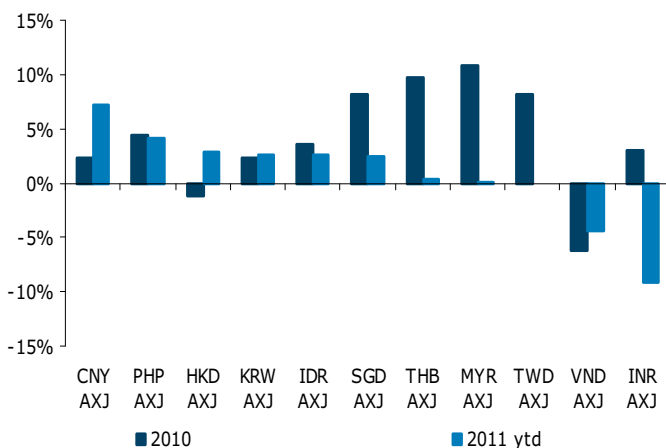
But this picture changes materially when we look at momentum. Under this measure (3m/3m, saar) Vietnam and India are 15.7% and 6.5% respectively, while the rest of the region averages 2.7%. Moreover, momentum has been falling, signalling lower y/y rates ahead.

## CURRENCIES WEAKEN, CDS SPREADS WIDEN

The risk-off tone of the markets has been felt across all asset classes. USDAXJ has generally moved higher since July with a downtrend in September being short-lived. We think the fundamentals for USDAXJ trending lower are still in place, but these have taken a back seat. The usual high-beta currencies (KRW, INR) have underperformed the regional average whilst the USD "peggers" (CNY, HKD) have led the region this year (Figure 3).

Sovereign CDS spreads in Emerging Asia have risen, albeit much less so than in peripheral Europe. The increase since end-July has ranged from 23bps in Singapore to 74 bps in Vietnam. While these wider spreads imply a higher probability of default, we think they reflect more global than Asian or country-specific factors.

FIGURE 3. AXJ CURRENCY PERFORMANCE



Sorted by 2011 performance

Sources: Bloomberg, ANZ

Indeed, as we noted in the September 2011 ANZ *Research Quarterly*, fiscal balance sheets look robust across the region.

## TIME TO EASE POLICY SETTINGS?

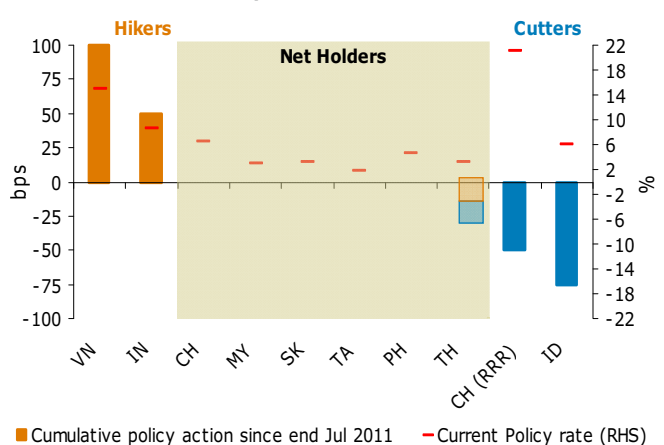
How should policymakers react to slower growth and weaker inflation? What should be the mix between fiscal and monetary easing? Is there space to manoeuvre? On monetary policy, projected inflation rates have fallen as the growth outlook has weakened. Does this imply that central banks can now begin to lower policy rates?

As we go to press, the pace of monetary policy easing has increased in Emerging Asia. Initially only Indonesia had cut rates since end-July (and Singapore had lowered the slope of the appreciation path for SGDNEER). However, on November 30, the People's Bank of China lowered banks' required reserve ratios by 50 bps and the Bank of Thailand lowered policy interest rates by 25 bps, (Figure 5).

Most central banks in the region have (correctly) adopted a downside bias toward future changes in monetary conditions. Central banks that have moved to more neutral rate stances over the past two years (China, India) have more space to cut than those who have not (Korea). Weaker currencies have also helped to ease monetary conditions, with this effect being stronger in the more open economies given their higher weight on trade in monetary conditions and import prices.

On fiscal policy, most governments have space to ease if needed, except possibly India and Malaysia. If the slowdown remains moderate, we would expect most of this easing to take place through fiscal stabilisers. If the downside risks materialise, more direct injections of spending, as we saw in the GFC, would be expected.

FIGURE 4. AXJ RATE/RRR MOVES SINCE END-JULY



Sources: Bloomberg, ANZ

## 2012 OUTLOOK AND RISKS

We are forecasting 2012 as a sub-par year for Emerging Asia, particularly in the first half. For the region as a whole, we see growth slowing from 9.1% in 2010 to 7.5% in both 2011 and 2012, with H2 2011 and H1 2012 having the slowest growth rates. Excluding China and India (which account for three quarters of EM Asia GDP), growth decreased from 7.6% in 2010 to 4.5% in 2011 and 4.8% in 2012, again with some pick-up in H2 2012 growth.

What is driving this view? As we noted in the previous *ANZ Research Quarterly*, the main contagion channels from Europe are:

- (i) lower growth and trade;
- (ii) stress in wholesale bank funding; and
- (iii) balance of payments financing.

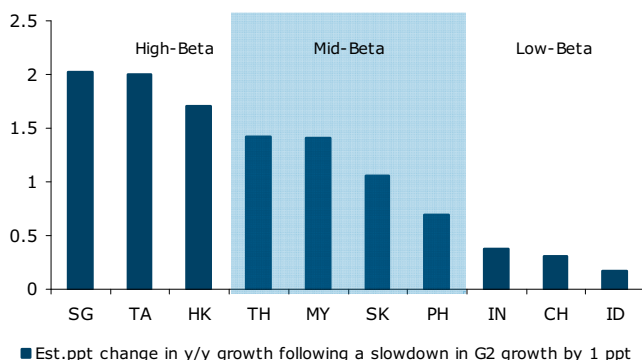
To date, (i) and (iii) have been the strongest. High growth beta economies, save Malaysia, have been flirting with recession (Figure 5).

Growth in the low beta economies of China, India and Indonesia has been less affected. On BOP financing, India has taken the biggest hit with the rupee now the weakest performing currency in the region. Bank funding is less of an issue than during 2009 since loan to deposit ratios across the region remain below unity, with Korea improving the most.

The risks to our outlook are on the downside on balance. The largest of these risks is Europe, where the still-unfolding debt crisis could play out unfavourably and severely, negatively impacting Emerging Asia through the channels noted above. In contrast, we see much less risk around our US growth forecast. In Asia, the risk of a hard landing in China has increased, although we maintain our baseline call for a more moderate reduction in growth. On the upside, intra-regional trade remains reasonably solid, suggesting that Asian demand for Asian products could be more resilient than assumed. In this regard our 'Rise of the Asian Consumer' theme will gain added importance given the lack of growth impetus elsewhere.

*Paul Gruenwald*  
Chief Economist, Asia-Pacific

**FIGURE 5. VULNERABILITY OF ASIAN GDP GROWTH TO A G2 GROWTH SHOCK**



Source: IMF

## GRUMPY GROWTH

The New Zealand economy is navigating four large events simultaneously: debt payback growth, rebalancing, the Canterbury earthquakes, and a large terms of trade boost. At the same time there are growing downside risks to the global outlook. The interaction of these shocks will see more volatility across the business cycle amidst a lower trend growth rate.

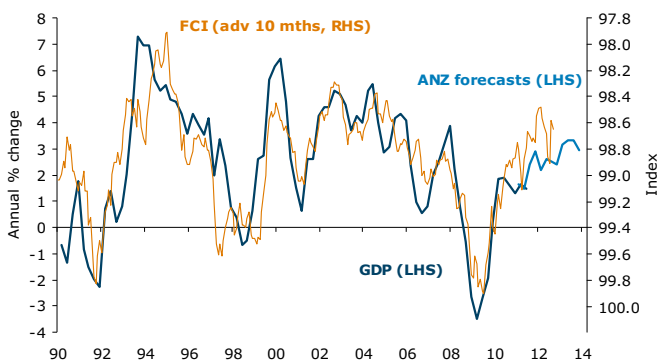
We've pencilled in around 2½% growth over the next two years and continue to characterise the outlook as one of "grumpy growth" that is coming off a low base (Figure 1). A better national balance sheet is a precursor to a stronger pro-cyclical upswing. We are not there yet, but progress is being made.

## THE BIG PICTURE

In earlier editions we've started our analysis of the economy by paying homage to **four large shocks, which represent structural anchors and themes that are strongly influential on the outlook.** They are so influential that they bear repeating.

- > **Getting our balance sheet in order.** There has been substantial improvement in the household savings rate (Figure 2) and the national balance sheet over the past three years. However, debt levels remain high (e.g. the net international liability position is 70% of GDP) and are acting to limit typical cyclical recovery. Increased saving by households and farmers still needs to be at the expense of growth in the near term, but is essential for sustainable medium-term growth.

FIGURE 1. FINANCIAL CONDITIONS AND NZ GDP



Sources: Statistics NZ, Bloomberg, ANZ

## THINGS TO WATCH

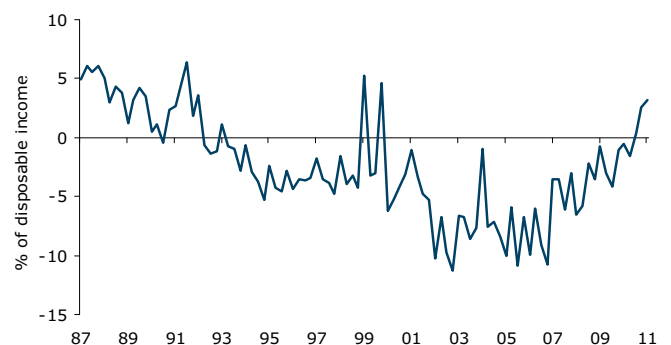
The global scene and five key channels to NZ: confidence, commodity prices, cost of funds, China and the currency.

The prospective rebuild in Christchurch. Continued seismic activity is deferring the rebuild. Best case scenario now looks to be late 2012.

The NZDUSD. It is acting as an appropriate buffer to absorb global risks.

- > **Rebalancing.** The economy remains lopsided with excessive concentration in spendthrift activity. This is at the expense of earning. Since 2004 the tradable sector has gone backwards and income growth has not kept up with spending. It will take years for resources (ie labour and capital) to respond to different price signals, for opportunities to be unlocked and the DNA of society to change. This means we are set to see some job displacement in certain sectors over the coming years in response to structural and cyclical challenges, with these resources inevitably remobilised to other sectors.
- > **A positive income shock.** We're seeing structurally higher demand for commodities, which is manifesting in the terms of trade for New Zealand goods remaining close to multi-decade highs. This is a positive income shock. Asia is increasingly relevant for New Zealand as an export market (accounting for 39% of merchandise exports) and we're getting better connected in regard to the Asian region, with a free trade agreement with India being negotiated at present.

FIGURE 2. NZ QUARTERLY HOUSEHOLD SAVING RATE



Sources: National Bank, Statistics NZ, ANZ

- > **The Canterbury earthquakes.** The impact channels for this event are endless. A lot of wealth has been destroyed and Canterbury's population will not be the same. There will eventually be a massive rebuild, though the ground needs to stop shaking first. Over time the costs of Canterbury will hit consumers' pockets via increased Earthquake Commission levies, higher insurance premiums and less government spending in other areas.
- > **Currency.** The NZD typically acts as a 'shock absorber' and is down from its August high. At around 78 US cents, however, the NZD is more than one quarter above post 1990 averages against the USD (around 10% above average on a TWI basis).
- > High commodity prices provide an offset to a high currency, but the non-commodity exporting sectors of the economy, namely tourism and manufacturing, will feel the brunt. On the whole, the currency is flip-flopping but it's acting as a key shock absorber to global developments. It is a safety valve pockets of Europe would love to have.
- > **Cost of credit.** The escalation of the European debt crisis has sent shock waves through funding markets. The major local banks remain well funded, but the longer the turmoil persists, the greater the likelihood that higher funding costs will need to be built into retail interest rates. The cost of borrowing internationally remains expensive and is a key source of vulnerability to a nation that has a large external borrowing requirement. Wholesale interest rates have fallen to compensate.

**These four shocks are complementary in some facets but opposing in others.** The income shock is helping New Zealand get its balance sheet back in order via income generation. Conversely, rebuilding Canterbury will involve dedicating huge amounts of resources to rebuilding domestic capital (ie housing and infrastructure) at a time we're also supposed to be investing in other regions and sectors. **The interaction of these shocks will see more volatility across the business cycle amid a lower trend growth rate.** While our forecasts portray a fairly smooth path of economic activity going forward, the reality is likely to be very different, considering the multitude of cyclical and structural influences, not to mention the high degree of economic tensions at play. And while we see growth, it is coming off a low base so in level terms will take time to get critical mass.

### GLOBAL TRANSMISSION MECHANISMS

**An uncertain global scene complicates the picture further.** Suffice to say that while the global economy is still moving forward at present, challenges abound. **For New Zealand, we're closely watching the five Cs:**

- > **Confidence.** Global lead indicators have weakened of late. While we've seen some softening in New Zealand's confidence indicators, the levels remain healthy – for now. But the trend is easing and we are detecting more caution.
- > **Commodity prices.** They've softened since May but remain at historically high levels. We are assuming this remains the case – a crucial assumption and by no means a sure thing.
- > **China.** A strong Chinese economy is good for the New Zealand (and world) economy. The realignment in Chinese activity towards domestically driven expansion may affect our other major trading partners, notably Australia. Increased spending by Chinese households provides opportunities for New Zealand's agricultural exports. However, questions surround how durable China's outlook can remain in the absence of a pick-up in domestic demand in the US and Europe.

Given the multitude of complementary and competing shocks and risks, **it is not surprising to find mixed messages in the data. The indicators are polarised.** The retailing environment remains tough beyond the one-off boost provided by the Rugby World Cup. Building consents are lifting, but off record lows. The level of house sales remains low, credit growth is weak, but the average days to sell a house is trending lower. Farmers are pulling in record cashflow, but much of this is being directed at debt repayment, while farm sales are lifting. Capital imports have been picking up, suggesting businesses are starting to invest after a period of hibernation. The unemployment rate is moving sideways. In aggregate the economy is performing reasonably well. There is growth **but it's spasmodic and patchy.**

We expect the economy to expand at a modest pace over the coming two years with growth averaging 2½% per year. The Reserve Bank is expected to lift interest rates in a slow and gradual manner from the second half of 2012. However, the balance of risks around our activity forecasts is predominantly to the downside. Tail risks posed by a global downturn are becoming increasingly probable. Greater global uncertainty could also scupper domestic momentum by causing local firms to re-evaluate their employment and investment plans.

*Cameron Bagrie  
Chief Economist, New Zealand*

## A BROADENING DOLLAR RALLY

On the cusp of 2012, the relatively orderly currency environment of much of the year is gradually giving way to an environment which is likely to become more indiscriminate. Even with risk-off themes dominating through large segments of the past year, conditions in FX were reasonably orderly. There was no unseemly flight. This was no doubt in part because the USD's carry and fundamentals are far below what is justified (ideally) in a safe-haven. If the credit crunch continues to gather steam, the USD's rally is likely to become increasingly broad. Over the medium-term we remain bearish about the USD's prospects, but Europe needs a credible policy effort before we consider the 'snapback'.

## HOW TO FACTOR EUROPE

As we enter 2012 it seems increasingly unlikely that Europe will be the beneficiary of the sort of aggressive monetary policy response which the Fed ultimately delivered in 2008/09. As such, currency markets will likely look for more concrete forms of improvement.

If an emerging market was having a balance of payments crisis (which some countries in Europe are) the market would likely be fixated on the trade numbers. The troubled countries need to, at the very least, start running trade surpluses, keeping foreign investors satisfied is typically more demanding than residents.

In Figure 1 we present some data on the trade adjustment process in Europe. We scale each country's total trade position by its exports to give an idea of the adjustment in imports that will be necessary for each country to run a trade surplus. For France, Spain and Greece, exports need to rise by between 20 and 50% relative to imports on a sustained basis. Italy's task is a much more manageable 10%. What makes this task more demanding than at the beginning of the year, however, is that exports from Europe have now peaked (Figure 2).

## THINGS TO WATCH

**Trade finance and deleveraging.** Trade finance conditions have continued to tighten, with funds becoming less freely available and more expensive.

**The US data pulse.** The resilience in the US data has allowed markets to look beyond the stresses in some segments.

**Redemptions.** Real money redemptions have been extremely modest thus far, suggesting significant scope for such activity if conditions continue to deteriorate.

**Europe's policy response.** This needs to be quickly more credible to turn the negative feedback loop.

Beyond these credit related issues, the widening in French spreads in recent weeks has generated most significant concern for us. It's difficult to rationalise the French selloff on fiscal concerns alone. Either the market is factoring in some prospect that France is forced to guarantee banks, or we are witnessing the return of currency risk in the euro zone, as investors seriously contemplate the risk of a EUR breakup. Once a currency peg starts losing credibility, policy typically needs to overshoot to claw credibility back.

FIGURE 1. REQUIRED EURO ZONE TRADE ADJUSTMENT

Trade Adjustment	3M Trade Bal / 3M Exports (%)	12M Trade Bal / 12M Exports (%)
<b>Euro zone</b>	-0.7	-0.1
<b>Cyprus</b>	-416.9	-409.0
<b>Greece</b>	-107.4	-67.0
<b>Malta</b>	-45.6	-45.4
<b>Portugal</b>	-44.6	-32.1
<b>Luxembourg</b>	-25.6	-39.2
<b>Spain</b>	-23.2	-21.0
<b>France</b>	-19.5	-19.5
<b>Italy</b>	-9.7	-3.8
<b>Austria</b>	-6.0	-8.1
<b>Estonia</b>	-4.6	-6.0
<b>Slovenia</b>	-2.4	0.9
<b>Slovakia</b>	0.0	1.3
<b>Finland</b>	0.1	-0.3
<b>Belgium</b>	2.7	2.9
<b>Netherlands</b>	10.0	8.9
<b>Germany</b>	15.0	13.4
<b>Ireland</b>	47.5	51.3

# FOREIGN EXCHANGE OUTLOOK

## THE CREDIT CRUNCH

With European issues likely to remain a key feature of the macro landscape for the foreseeable future, we are focussed on the following key transmission mechanisms into currency markets:

- > Trade finance and deleveraging. Deleveraging of European banks has become more noticeable, both anecdotally and in the data. Foreign bank cash deposits at the Fed have declined by around USD200bn over the past two months, and nearly USD400bn from the June peak (Figure 3) (this is also probably a key reason the EUR has performed relatively well). Related to this, conditions in Australian credit markets have deteriorated, and trade finance is showing some accentuated trends.
- > We first updated on trade finance in early October. Since then, while conditions remain orderly, finance has continued to tighten. Funds are less freely available and more expensive, as counter-party risk and country risk limits become more relevant. Reflecting the deterioration in conditions, the International Finance Corporation (an arm of the World Bank) has taken out a USD500m insurance policy to support trade finance. This doesn't seem large against the volume of global trade, however.
- > The US data. The resilience in the US data has become key. This has allowed markets (to some degree) to look beyond the stresses in some segments of the markets. In our client visits, we cannot recall a time talking about the US so little. The US data pulse has certainly been more constructive, but developments in European sovereign and global funding markets, as well as the announced bank deleveraging suggest that markets will increasingly worry about this being unsustainable. An emerging trend to weakness in the US numbers would likely cause an extension in existing market trends.

- > Redemptions and positioning. Following our recent client visits it seems that investors generally have a 'risk off' bent. Certainly this fits with the large negative correlation between hedge fund returns and emerging market bonds. The difficulty of holding positions, however, suggests that size is not aggressive. Investors generally appear to be either aggressively neutral, or short risk through relatively low beta trades such as EURUSD put spreads or currency crosses. In sympathy with this, our sense is that real money has not yet faced meaningful redemptions. If conditions continue to deteriorate, as is our expectation, then there seems to be plenty of room for positions to be scaled up, and funds to face cash calls.

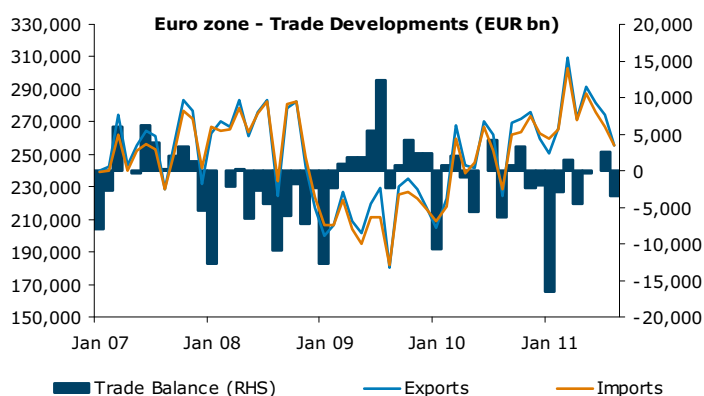
## WHERE TO POSITION

While structurally flawed, the USD should increasingly benefit against most currencies in the near term, with the exception of JPY (selling crosses against the JPY still recommends itself).

- > AUD: of the antipodeans we feel the AUD has the most to lose as repatriation gathers steam. Domestic credit markets are trading poorly and the hurdle to further rate cuts is lower than in other markets.
- > Asia shorts: KRW, IDR and MYR will all likely be most vulnerable to the repatriation flows which should increasingly characterise market dynamics as these are where fixed income positions are the largest. The THB should also have further domestic-driven underperformance.
- > Asia longs: CNY, SGD and PHP are likely to perform relatively well on the crosses. The S\$NEER is very close to the bottom of the band, and the PHP's current account flows make it a regional standout.

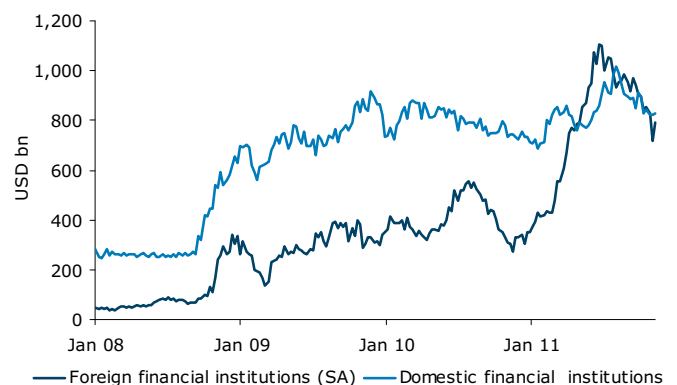
*Richard Yetsenga*  
Global Head of FX Strategy

FIGURE 2. EURO ZONE TRADE



Source: Datastream

FIGURE 3. CASH DEPOSITS AT THE FED



Sources: Federal Reserve, ANZ

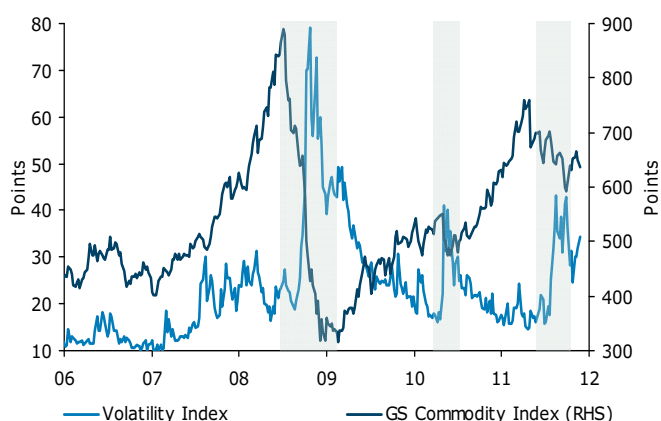
## ROCKY ROAD AHEAD

Commodity markets will start 2012 on a much more cautious footing than they did in 2011. Entrenched concerns over European sovereign stability, safe-haven support for the US dollar and question marks over China's domestic demand is not a good recipe for a growth oriented market. Concerns of European contagion on US and Asian demand and the expected stimulatory responses from China will create additional volatility in an otherwise weak first half year. That said, we expect the mood and price performance to swing more positive in the second half as heightened risk aversion (Figure 1) loses steam and investment funds move quickly to price in still solid medium to long-term market fundamentals.

The recent bounce in prices suggests that short-term investment funds continue to dictate market sentiment. Heavy selling in key commodity indices in the second and third quarter of 2011 – down \$100 billion or 25% (Figure 2) – may have been overdone, but highlights how quickly funds can exit and re-enter as the mood changes. We expect this to be a key feature for 2012, particularly in the first half, as sentiment swings between negative top down (wider financial market weakness) and positive bottom-up (tight supply and China demand) influences.

Ultimately, the market will gravitate towards the China outlook – now consuming over 40% of most commodity groups. As it stands, there appears to be more downside rather than upside risks in the short-term. However, funds will be more interested in China's flexible policy response rather than the headwinds impacting its growth. We also think that the market has, and will continue to, underestimate underlying demand in China – which will remain very commodity intensive. Any move to relax lending to SME's will be particularly positive.

FIGURE 1. COMMODITY INDEX AND VIX



Source: Bloomberg

## THINGS TO WATCH

A weaker first half has as negative top-down sentiment impacts on growth orientated commodity markets.

A more positive second half as risk aversion eases and funds quickly price-in a still positive medium to longer term fundamental backdrop.

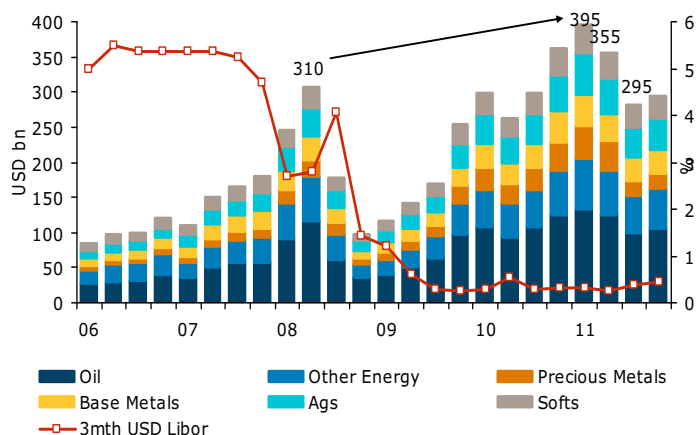
The outlook for China, particularly the government policy response influencing SME demand.

The supply-side for most commodities will be generally positive for prices. Difficult funding markets post the 2008 GFC have pushed out a meaningful supply response until at least 2013-14. The bulks (coal and iron) are most vulnerable to commissioning delays due to the large scale of the new projects. Copper and corn could also be tight, with rising industrial disputes and low year-ending crop stock levels impacting available supply. Despite current high inventory levels, the oil market will become structurally tight over the next five years as the key supply response swings to price sensitive OPEC supply.

## ENERGY

Oil markets should closely track macro conditions with funds using the benchmark commodity as a bellwether for global growth. Fluctuating Middle East tensions, with focus on Iran's nuclear ambitions, could create pockets of divergence, but we expect prices to firm in the second half of 2012 as demand confidence starts to return – particularly to the key US consumer.

FIGURE 2. COMMODITY INDICES FUND POSITIONS



Source: ANZ

# COMMODITY MARKETS OUTLOOK

We expect a mixed price performance between the key US WTI and UK Brent crude markets in the short-term. The deep \$25/bbl WTI price discount to Brent which prevailed for most of 2011 is expected to close over 2012 as high US crude oil stockpiles begin to draw down and the logistical bottleneck between Cushing, Oklahoma and the Gulf Coast is addressed. Inelastic US oil imports have also finally started to ease which should better balance the lower post GFC demand conditions.

On the flipside, Brent prices are expected to come under pressure as previously restricted Libyan supply returns to the market. Supply from the war-torn region virtually halted in the first quarter of 2011, but is now on track to return to normal levels of 1.5mbbls/day over the next 12 months – much earlier than previously forecast. In addition, Europe's economic woes and China's slowing growth are having a bigger impact on the seaborne based Brent oil market than the US centric WTI market.

## BULK COMMODITIES

Bulk prices are expected to ease in 2012 off heightened levels in 2011. Very strong demand and tight supply conditions in 2011, particularly for coking coal, are unlikely to be repeated in 2012. However, price downside will be limited, with the key market China showing increasing reliance on imported material. We expect prices to potentially firm in the second half as China shows clearer guidance on a policy response to slowing external and internal demand.

Iron ore remains heavily dependent on Chinese steel output. Steel demand has eased recently, but domestic output still remains near record levels. Focus will be on the key Chinese housing market which has increasingly become two-speed. Ultimately, a robust public housing program should underpin a positive backdrop.

The iron ore supply side remains supportive for high prices. Indian iron ore export supply (10-12% of seaborne supply) continues to shrink as domestic demand conditions rise while the rapid rise in low quality Chinese iron ore supply has structurally shifted the global cost curve and floor price (north of \$120/t).

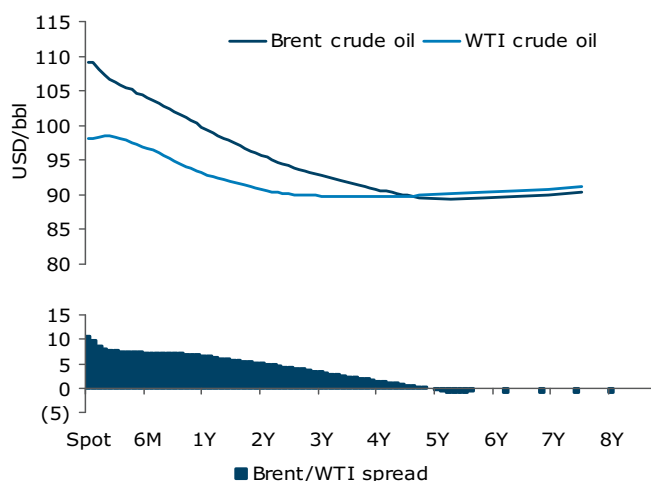
We see more upside rather than downside risk to coking coal. The market is heavily dependent on Queensland coal exports (contributing 55% of seaborne supply). The rub is that the bulk of the supply is prone to severe seasonal flooding. The floods in Q1 2011 were the worst in 100 years, forcing the closure of 80% of Queensland coal output for two months. Although it's hard to predict, there are some similarities in weather patterns for the coming wet season to this time last year.

The thermal coal market is likely to trade in a fairly tight range in 2012. Active Chinese buying through 2011 and seasonally slow demand has inflated power plant stockpiles, creating a supply overhang in the short-term. China will remain the price-setter, arbitraging domestic and international supply. We expect this to become more prevalent in the second and third quarter of 2012 when high domestic stockpiles are run down. Reports that China's National Development and Reform Commission (NDRC) have put a cap on domestic contract coal price increases (of within 5%) will likely mirror the seaborne price outcome.

## PRECIOUS METALS

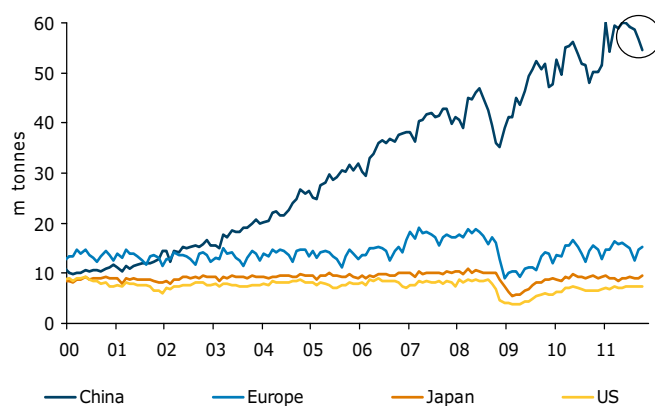
Gold prices should see continuing support from investment demand through 2012. We expect strong buying by Central Banks (CB) and retail investors looking for ways to diversify their portfolios, in particular to insulate themselves from the risks posed by the banking crisis in Europe and to benefit from potential liquidity injections by the ECB and Federal Reserve.

FIGURE 3. WTI AND BRENT PRICE SPREAD



Source: Bloomberg

FIGURE 4. GLOBAL STEEL PRODUCTION



Source: ANZ

# COMMODITY MARKETS OUTLOOK

Data from the World Gold Council shows Central Bank purchases rose sixfold in the third quarter from the same period in 2010 to 148t (Figure 5). Jewellery demand from China grew by 13% to 131t. Jewellery demand from India slowed 26% in response to high prices but we expect seasonal demand from the sub-continent to remain strong looking ahead.

We have tweaked the profile for gold a little, trimming our high to \$2,100/oz from \$2,200/oz and extending the rally to the third quarter of next year after the slower paced recovery from the steep losses in September. Our average for next year is \$1,994/oz, a reduction of 3.3% from our previous outlook.

In silver, slowing demand growth from China's solar industry and other industrial applications has prompted us to cut our 2012 forecast by 5.7% to \$41/oz.

## BASE METALS

Concerns about Europe and ongoing restrictions to property development in China may limit the upside for copper in 2012, however we expect demand from continuing urbanisation and the power sector will keep prices around the \$9,000/t-mark. Antaika predicts a 6.4% rise in Chinese demand from 8.5% in 2011. Our Chinese GDP forecast of 9.0% for next year versus 9.3% in 2011 suggests a more positive number.

We see copper at \$4.11/lb next year, down from our previous forecast of \$4.40/lb. Nevertheless, this represents a handsome rise from current levels of \$3.3/lb and prices may still challenge the record high of \$10,190/t (\$4.62/lb), although we do not expect to see an extended period with prices above \$10,000/t.

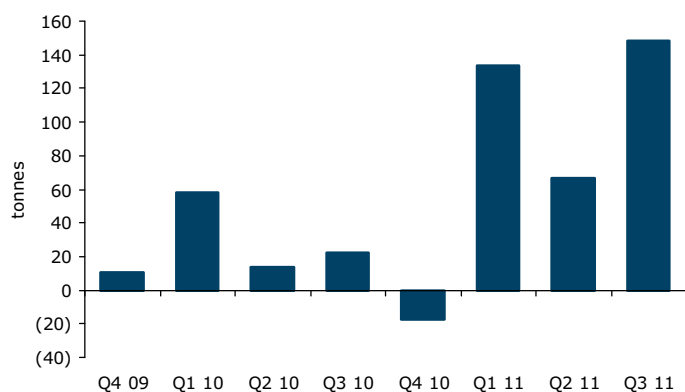
Oversupply and slower auto demand growth in China and Europe are likely to cap the outlook for aluminium (Figure 6). As much as a third of the world's smelters are losing money at current prices and we could see more smelter closures centred on Europe and North America. Chinese output is likely to remain strong, barring any meaningful government crackdowns on the sector. The main feature of the aluminium market (the 4.56 million tonne stock overhang in London Metal Exchange warehouses and potentially a further 3-5 million tonnes stored off warrant), remains, and while that exists, it will be hard to be bullish about the metal.

*Mark Pervan*  
Global Head of Commodity Strategy

*Nicholas Trevethan*  
Senior Metals Strategist

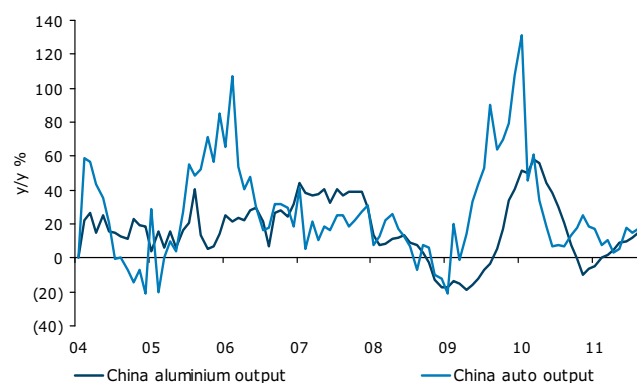
*Natalie Robertson*  
Commodity Strategist

**FIGURE 5. CENTRAL BANK GOLD RESERVES**



Sources: World Gold Council, ANZ

**FIGURE 6. CHINA ALUMINIUM & AUTO OUTPUT**



Sources: Bloomberg, CME Group, ANZ

# COMMODITY MARKETS OUTLOOK

## AGRICULTURAL COMMODITIES

Some agricultural commodity prices reached new record highs in 2011, pushing global food costs higher. However, we expect global inflationary pressures will ease over the course of 2012, given that prices for several key food staples are not expected to re-test the highs reached over the last 12 months.

The global supply situation remains tight. Global stock levels across many agricultural commodities remain low and only a modest rebuilding in inventories is likely across most of the ags complex. Investor interest in this space has progressively fallen over the last three quarters after reaching a record in early 2011.

Speculative investors are largely underweight agricultural commodities, leaving room for an improvement in financial market conditions to flow through to a rebuild of speculative positions and support prices.

China's impact on the global soybean trade has been felt for a number of years. We expect that China will continue to broaden its scope for imports as it moves from self-sufficiency to import dependency across a number of agricultural commodities.

Weather continues to remain an influential wildcard for markets. We expect that a severe and unforeseen supply shock (unfavourable weather and/or severe trade disruptions) similar to that experienced over the past 18 months, will be required for prices to advance toward record highs.

## STOCK LEVELS REMAIN TIGHT

Since the late 1980s, world grain stocks have fallen from 19 weeks of global consumption to 10 weeks in 2011, close to the historical low of the past few decades. Additionally, the composition of the world's stock of grain has changed. India and China, combined, are forecast to account for almost 50% of world stocks by the end of 2012, compared to 40% in the late 1970s (Figure 7).

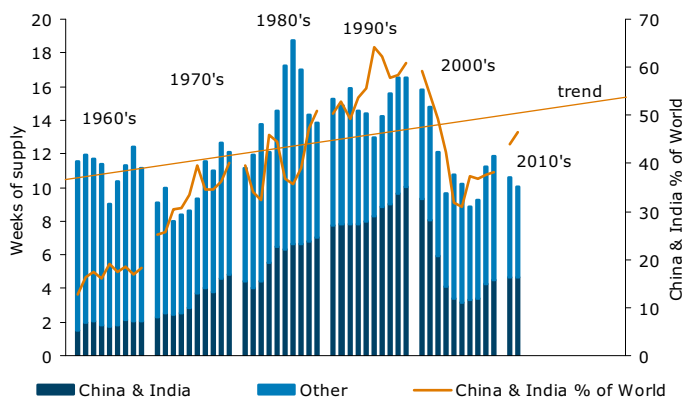
These stocks are largely 'captive' and unavailable to the export market. At the margin, India's reserves of rice and wheat remain well above minimum requirements at present, allowing for some exports. However, both of these countries will continue to hold a significant degree of the world's stocks given their large populations and ambitions for food security.

## SPECULATIVE POSITIONING WOUND BACK

Speculative positioning in agricultural commodity markets reached an all-time high in early 2011 (Figure 8). Since then, several periods of financial market turmoil have occurred, progressively prompting investors to liquidate holdings across commodity markets. Speculative positioning is now largely underweight agricultural commodities. An improvement in financial market conditions will likely flow through to a rebuild of speculative positions in agricultural markets and provide a price support.

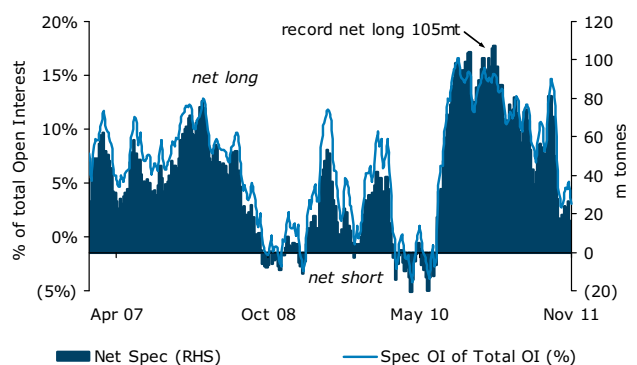
Based on current positioning across the US ag derivative markets, some markets are better placed than others to benefit from any improvement in broad sentiment.

FIGURE 7. WEEKS OF SUPPLY OF GLOBAL GRAIN STOCKS



Source: Bloomberg

FIGURE 8. CFTC NET SPECULATIVE POSITIONING IN US MARKETS



Sources: Reuters, ANZ

# COMMODITY MARKETS OUTLOOK

The ag commodities that appear most 'oversold' include ICE cotton, ICE sugar, CBOT soybean oil, ICE coffee, CBOT soybeans, ICE cocoa, CBOT soybean meal and CBOT wheat (where speculative positioning is near record short).

At the other extreme, fund flows have aggressively moved into the US livestock derivatives market – cattle and hogs – leaving these markets more prone to weakness should we see a further escalation of financial market turmoil.

## THE CHINESE INFLUENCE

A milestone for ag markets in 2011 was China increasing import volumes across a number of ag commodities (Figure 9). For much of the last decade, China's demand and influence in global ag markets was largely confined to the oilseeds complex. However last year, China was also influential in the world sugar and corn market through a sharp jump in net imports. We expect this trend to continue in 2012, where China's urbanisation and rising wealth over the last decade begin to culminate in China becoming a consistent net importer across multiple ag commodities.

## WEATHER THE WILD CARD

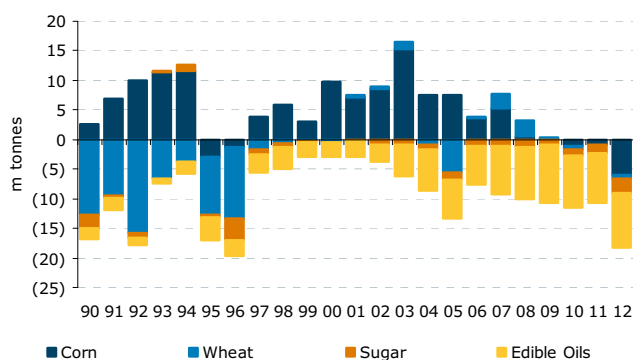
The focus in the short-term will be the Pacific Ocean La Niña phase. The timing of this is similar to the 2010 La Niña event (Figure 10). However the strength and associated risks of the current event are lower than last year. In Australia, the two major implications for commodity markets resulting from last year's La Niña were flooding in the Bowen Basin, causing a major disruption to global coking coal supply and a large proportion of the Australian wheat crop being downgraded into animal feed quality.

The 2010 La Niña also had an impact on South America, causing above average rainfall in some parts of Brazil, but below average rainfall in Argentina. Due to a below trend US soybean yield in 2011, vegetable oil and meal consumers are relying on large oilseed crops from these countries in 2012. Current estimates are pointing to a record combined soybean crop, implying that any negative effects from the current La Niña are not being priced into markets. This could quickly turn if the weather begins to look unfavourable, and could push soybean and product prices higher if conditions deteriorate.

*Paul Deane*  
Senior Agricultural Economist

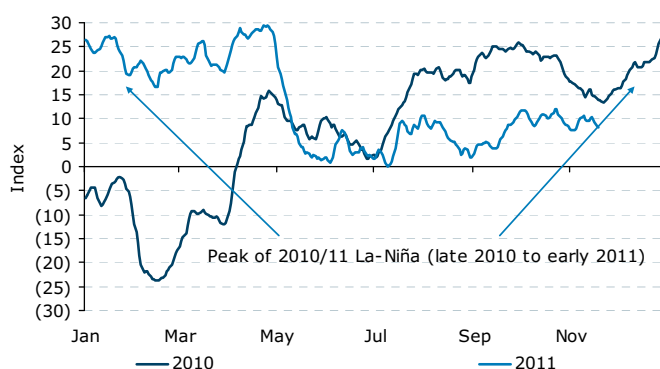
*Victor Thianpiriya*  
Agricultural Commodity Analyst

FIGURE 9. CHINA'S NET TRADE IN SELECTED AGS



Sources: USDA, ANZ

FIGURE 10. SOUTHERN OSCILLATION INDEX



Sources: Bureau of Meteorology, ANZ

# SPECULATIVE INVESTMENT IN COMMODITIES

## THE IMPACT OF SPECULATIVE INVESTMENT IN COMMODITY MARKETS

In this article, we explore the development and motivation of investor participation in commodity markets over the past decade and some of the impacts this has had on prices. In doing so, we consider:

- > the emergence of commodities as a legitimate investor asset class;
- > the closer relationship emerging between commodity and equity markets;
- > the sensitivity of commodity prices to inflows and outflows of investment positions;
- > a comparative analysis between exchange traded and contract based markets; and
- > periods where investor sentiment strays too far from fundamentals and highlight the potential opportunities to exploit such pricing mismatches.

Within this discussion, a distinction in timeframes is essential. For example, in agricultural markets, we have yet to see any clear evidence that medium-term prices (one to two year horizon) are being influenced by additional investor interest. However, over the short-term (0-3 months), the influence of broader market sentiment on commodity markets has never been higher.

Greater investment flows into commodities appear to be adding an 'equity style' short-term volatility to many exchange traded commodity markets. Traditional participants - traders, producers, consumers and merchants - all now face greater exposure to short-term sentiment in financial markets. For market participants, this creates an additional dynamic where short-term commodity prices can now be more easily driven away from "fundamentals" in periods of extreme risk taking or conservatism.

Opportunities are created when prices move away from fundamentals. Investors with a sound knowledge of underlying supply, demand and market structures can benefit in the periods where broad market sentiment forces commodity prices away from fundamental fair value.

### THINGS TO WATCH

An increase in short-term correlations between equity and commodity markets, making commodity prices more vulnerable to swings in risk sentiment.

A substantial change in speculative positioning that could signify "overbought" or "oversold" conditions.

Periods of high volatility when commodity prices move away from fundamentals can provide profitable opportunities.

### COMMODITIES AS AN ASSET CLASS

A 40-fold increase in investment fund positions in commodity markets over the past 10 years suggests that commodities have become a legitimate investment asset class. Three key forces appear to have driven investors' desire for commodity exposure - an inflation hedge, portfolio diversification and exposure to increased demand from emerging markets. Since 2000, the latter has driven the strategic asset allocation of institutional investors into commodities, coinciding with the rise of the BRIC (Brazil, Russia, India, China) economies. The extent and persistence of this rise in commodity investment signifies the widespread acceptance of commodities as a stand-alone asset class.

The concept of commodities as an asset class first started to gain traction in the early 2000s. In time, increased allocations to commodity markets were motivated by the desire to achieve real returns in an environment of low real interest rates. Studies highlighting the benefits of commodities in portfolio diversification began to gain wider acceptance. Around the same time, the BRIC influence was becoming apparent across a broad spectrum of commodity markets.

# SPECULATIVE INVESTMENT IN COMMODITIES

In recent years, the “inflation hedge” has gained prominence as the primary investment motivation. As commodities are predominantly an input cost for many end users, raw material prices are a good leading indicator of inflationary trends for finished products and hence act as an inflation hedge. Total investment in commodity markets were pushed to an all time record in early 2011 (Figure 1). Fund flows began to rise strongly from August 2010 when the US Federal Reserve signaled that further quantitative easing (QEII) would be undertaken. By early 2011, total assets under management in commodities were estimated to have risen to just under USD400 billion. In 2000, the estimated value of all funds invested in commodity markets was just USD10 billion.

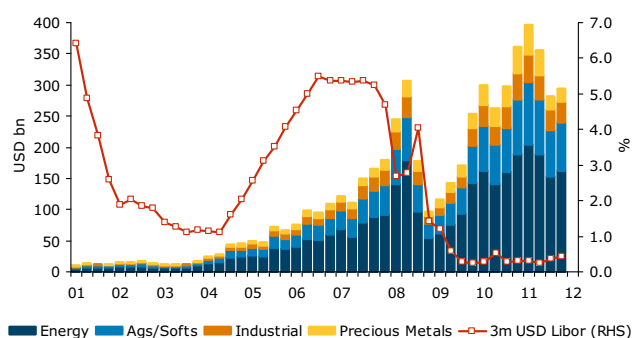
## THE RISING CORRELATION BETWEEN COMMODITY AND EQUITY MARKETS

Coinciding with the marked increase in commodity investment has been a noticeable change in commodity price behaviour. It now seems that commodity prices move much more closely with the ups and downs of equity markets than they have in the past.

Over the last three years, the relationship between the US equity and commodity markets has never been stronger (Figure 2). The 1-year rolling statistical regression over the last 25 years illustrates how rare it is for the coefficients of the four selected commodities – WTI crude oil, copper, gold and wheat to be positive at the same time against the S&P 500.

The increasing relationship between copper and US equities throughout the last decade is also noteworthy, coinciding with the rise of investor interest in base metals and hard commodities. We suspect copper’s ubiquitous end use and close strategic link to Chinese economic growth would have acted as a strong bellwether for US investor sentiment.

**FIGURE 1. INVESTMENT IN COMMODITY MARKETS**



Source: ANZ

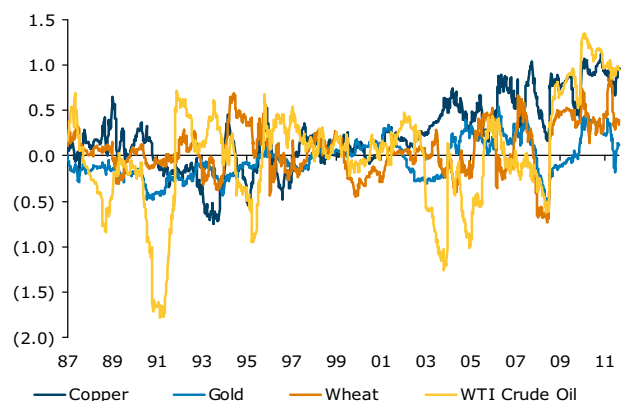
## PRICE SENSITIVITY TO CHANGES IN INVESTMENT POSITIONS

In addition to a close correlation to equity markets, commodity prices are now more sensitive to the magnitude of investment positions than they were in the past. The six key markets we studied – WTI crude oil, gold, silver, copper, wheat and soybeans – all now show a greater propensity to fluctuate in line with movements in investment positions than they did in the past.

The US Commodity Futures Trading Commission (CFTC) provides a significant history of positioning by different market participants through the *Commitment of Traders* report. Those deemed to be ‘non-commercial’ traders are not engaged in hedging business activities through the use of the commodity futures or options market. Therefore, this provides a useful proxy for the magnitude of investor or speculative interest in exchange traded commodity markets, though not all participation undertaken by “non-commercial” entities can be regarded as investment in nature.

Our analysis shows that for the six key markets, non-commercial positioning has had a significant impact on commodity returns in recent years. Separating the available data into two series representing the period before commodity investing gained wider acceptance (1995-2003) and after (2004-2011), we are able to analyse the influence of investor positioning within the context of two distinct market conditions.

**FIGURE 2. US EQUITY MARKET REGRESSION COEFFICIENTS TO COMMODITY PRICES (ONE YEAR ROLLING AVERAGE)**



Source: ANZ

# SPECULATIVE INVESTMENT IN COMMODITIES

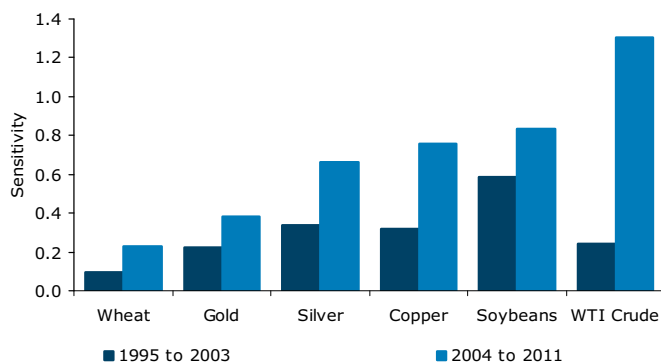
Changes in net non-commercial positions appear to be having a larger impact on prices since 2003 compared with the prior decade. In all cases, the impact of a one percentage point (ppt) change in the net non-commercial position as a percentage of total open interest (a measure of the magnitude of non-commercial positioning relative to the rest of the market) had a much greater impact on price during the second period (2004-2011) than the first (1995-2003) (Figure 3).

Not only is there a substantial difference in sensitivities between these periods, these differences are also statistically significant.

WTI Crude Oil has shown a considerably larger increase in sensitivity between the two periods than the other commodities. We suspect this is the result of the strong link to global economic growth, an attractive dynamic for investors. Oil's importance to the US economy would give it additional non-commercial influence with many of the larger and more active investment funds being North American domiciled. This could explain oil's more volatile correlation with the S&P 500, with inflated prices actually creating a drag on US growth and the equity market.

The investor mix in WTI Crude Oil should also be noted. Many of the non-commercial participants in oil – the investment banks – are also operating as commercial participants through large direct and indirect hedging activities. Their overall positions would tend to be mutually motivated, multiplying the impact of non-commercial moves on the underlying oil market.

**FIGURE 3. PRICE SENSITIVITY TO A 1PPT CHANGE IN NET NON-COMMERCIAL POSITIONS (AS A % OF OPEN INTEREST)**



Source: ANZ

## EXCHANGE TRADED AND CONTRACT BASED MARKETS – THE CASE OF NICKEL AND COBALT

A distinct way of determining the speculative impact on commodity prices is to compare two similar end use markets that operate within different pricing structures – exchange and contract-based pricing. We know that speculative investment will naturally gravitate towards exchange traded markets where physical delivery can be avoided.

We can achieve this analysis by looking at the competing input products for stainless steel – nickel and cobalt. The price volatility of nickel and cobalt have both increased over time. However, over the two different time periods 1992-2005 and 2006-2011, the price volatility in nickel rose 18ppts, whereas for cobalt it rose only 6ppts. The key difference is that cobalt was not, until 2010, traded on exchange and remained purely a contract based market. Fabrication demand for nickel and cobalt share a similar profile and annual production volatility. However, nickel is publicly traded on the London Metal Exchange (LME) while cobalt has only traded privately amongst commercial participants until 2010, when it was listed on the LME. Separating the weekly returns of the metals into two distinct periods, we see that the annual volatility of returns for both markets was markedly different between 1992-2005 and 2006-2011 (Figure 4).

The annual volatility of returns of both exchanged-traded nickel and privately contracted cobalt increased significantly between the two periods. However, excluding the period of the Global Financial Crisis (GFC), the price volatility of cobalt in 2006-2011 is actually lower than the 1992-2005 period. The same cannot be said for nickel, with price volatility in 2006-2011 higher than the 1992-2005 period, regardless of whether the 2008 GFC is included.

**FIGURE 4. ANNUAL PRICE VOLATILITIES**

Annual Volatility	Cobalt	Nickel
1992-2005	31%	29%
2006-2011	37%	47%
2006-2011 (excluding GFC)	27%	40%

Source: ANZ

# SPECULATIVE INVESTMENT IN COMMODITIES

## INVESTOR FLOWS MOVING TOO FAR FROM FUNDAMENTALS

The challenge now becomes the monitoring of investor flows and net positions in order to identify those commodity markets that are susceptible to large swings in investor sentiment. In the US, where the CFTC provides position summaries by participant type, monitoring of the 'Managed Money' category or non-commercial positions is essential.

A heavily 'overbought' market in terms of speculative positioning leaves prices vulnerable to a change in global risk sentiment (or indeed growth sentiment). This was illustrated in 2008. Investors were particularly 'long' commodities going into the period when Lehman Brothers failed. Some commodity prices fell by 30-40% in the two months after this event (Figure 5).

The monitoring of speculative positions after a period of net outflows is equally valuable. For example, in US agricultural derivative markets, a significant liquidation of speculative flows has occurred from extremely high levels 12 months ago (Figure 6). Inherently, those commodities which are 'oversold' in terms of speculative positioning are less predisposed to substantial further weakness from another severe rout on equity markets should it occur.

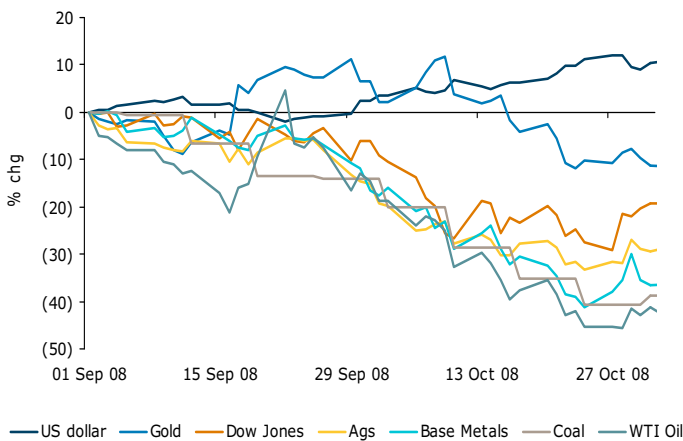
## CREATING OPPORTUNITIES

It is now easier for commodity prices to move away from fundamentals or 'fair value' for a short period of time, as a result of the greater correlation with financial markets. This creates opportunities for those with an understanding of the important fundamentals of underlying prices based on supply and demand, market structures and trade flows.

One example in agricultural markets is the increased importance of the relationship between US and China corn prices. In the last 12 months, China has become a net importer of corn to help replenish dwindling domestic stocks. This trend is expected to intensify, with China potentially importing a record 7mt in the current marketing year.

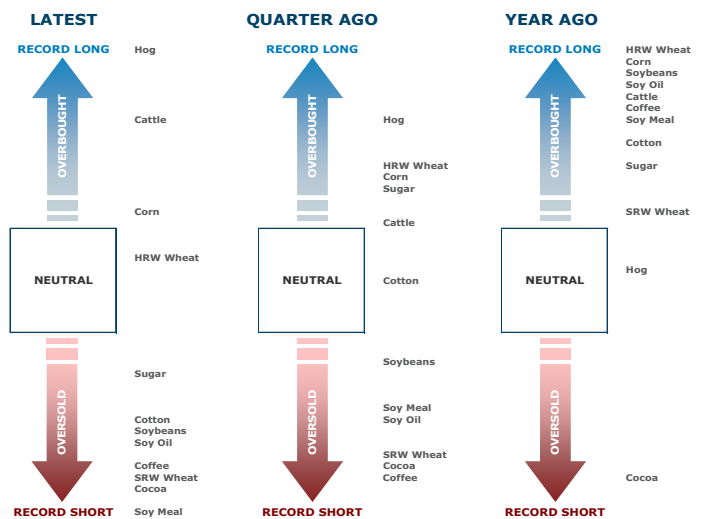
So far through 2011, financial market uncertainty has pushed US corn futures sharply lower at least four times. Each of these times, announcements of US corn sales to China or an 'unknown' destination has occurred (see blue circles on Figure 7).

**FIGURE 5. PRICE PERFORMANCE OF COMMODITY AND FINANCIAL MARKETS FOLLOWING LEHMAN BROTHERS COLLAPSE**



Sources: Bloomberg, ANZ

**FIGURE 6. RELATIVE NET SPEC POSITIONING FOR US AG EXCHANGE MARKETS**



Sources: CFTC, ANZ

# SPECULATIVE INVESTMENT IN COMMODITIES

Presently, the price arbitrage for China to profitably import corn from the US still exists. If a scenario developed where US corn prices fell further due to negative sentiment in broader markets, without a corresponding fall in physical corn prices in China, a short-term window is likely to be opened where corn would be fundamentally undervalued – presenting a potential buying opportunity.

The bulk commodity market is another example of how changing market dynamics, in this case iron ore production cost structures, can guide underlying valuations or fair value of prices.

Iron ore is an interesting example, given the 30% drop in spot iron prices in October this year. Pricing in the iron ore market tends to be dominated by Chinese demand and the seaborne supply from Australia and Brazil. One reason we viewed the recent sell-off in this market as approaching overdone levels was the underlying producer cost structure, which has changed significantly over the last five years. A deterioration in the grade of iron ore mined domestically in China (see Figure 8), now means China's marginal production cost on a standard 62% iron (Fe) basis is as high as US\$120-130/tonne. On a larger scale, 30% of the China and seaborne trade has a marginal cost greater than US\$90/tonne on a Cost, Insurance and Freight (CIF) basis. Prices falling to these levels for a sustained period would flow through to lower production – something which would trigger a rapid correction in prices.

It is this type of analysis across commodities, with an understanding of marginal production costs and supply responses at various prices, that allows underlying value to be determined.

Prices across a range of commodity markets are now more sensitive to the inflows and outflows of investment funds than they were in the past. These flows, which are short-term in nature, have added 'equity style' volatility to many exchange traded commodity markets. Should prices move sharply away from fundamentals during brief periods of heightened volatility, opportunities present themselves.

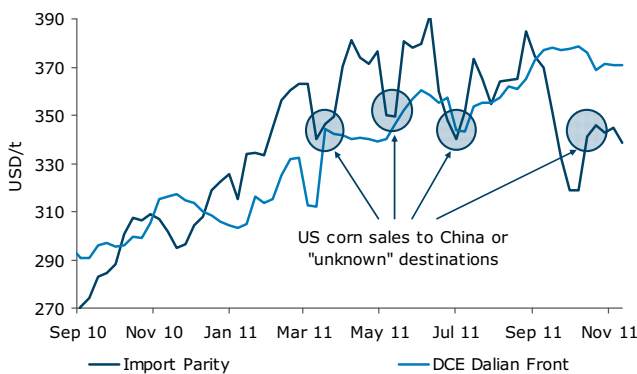
*Mark Pervan*  
Global Head of Commodity Strategy

*Paul Deane*  
Senior Agricultural Economist

*Victor Thianpiriya*  
Agricultural Commodity Analyst

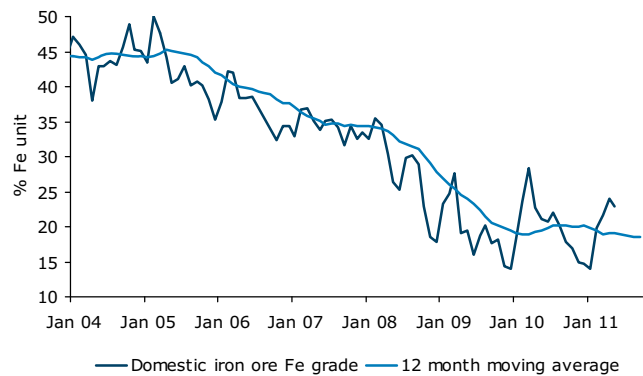
*Wei Liang Chang*  
Multi-Product Strategy Analyst

**FIGURE 7. CHINA CORN MARKET PRICES: DOMESTIC VERSUS IMPORT PARITY**



Sources: Bloomberg, ANZ

**FIGURE 8. QUALITY OF CHINA'S DOMESTIC IRON ORE**



Sources: Bloomberg, ANZ

## WHERE TO FIND STABLE HIGH RETURNS IN A VOLATILE WORLD

The fracturing of the euro zone (EZ) demonstrates the political challenges facing most of the developed world to stabilise and gradually reduce debt. Compared to the last 20 years we consider the developed economies are on the threshold of major change in macroeconomic management. This will involve significant political challenges too. Debt sustainability will be the key policy objective for the coming decade.

A relatively small group of satellite developed economies have already achieved "sustainable safe yield". The sharp spike in financial stress radiating from the fracture of the EZ has revealed the resilience of the SACS bloc: Switzerland, Australasia, Canada and Scandinavia. In addition, a group of emerging markets have either broadly held, or narrowed, spreads to core markets.

Figure 1 tracks the spread for an "all maturities" sovereign bond to the US for the EU, Asia and Australia. Through the current bout of acute financial stress associated with the fracturing of the EZ, Australian spreads have narrowed, Asian spreads have moved out modestly whilst EU spreads to the US are out around 100bp.

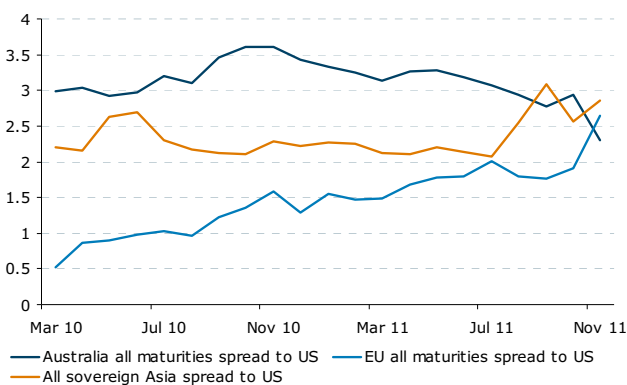
Figure 2 ranks the change in the spread to the US Treasury market over the last three months. Australia has experienced the largest spread compression, followed by the UK, Sweden, Canada, and Swiss markets. Across the emerging markets the Philippines has been resilient followed by Mexico, Brazil and Singapore.

In this article we will assess the durability of this sharp re-rating of the Australian sovereign bond market. We conclude the current spread compression for Australia is well anchored, although we see key medium-term vulnerabilities in productivity and private household debt.

Our key focus is to:

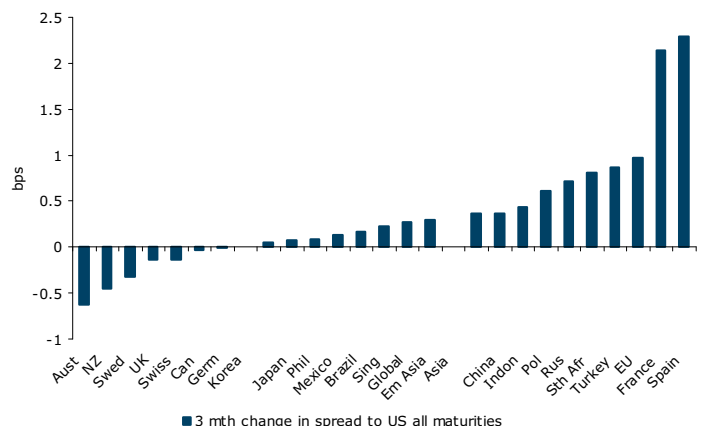
- > Identify the factors that have driven elevated sovereign returns for Australia relative to a basket of developed markets;
- > compare the volatility of Australian sovereign returns to a basket of developed markets and identify the factors that have contributed to the relatively low volatility of the Australian sovereign market; and
- > assess whether these factors can be sustained, particularly if developed economy balance sheet risk was to intensify and global growth declines sharply. We will test sustainability against the ANZ credibility indicators and the stability of the spread to the US Treasury as a measure of resilience.

**FIGURE 1. EZ SPREADS CONVERGE WITH AUSTRALIA AND ASIA**



Sources: Datastream, Bank of America Merrill Lynch, ANZ estimates

**FIGURE 2. GAUGING RESILIENCE - 3 MONTH CHANGE SPREAD TO US TREASURY**



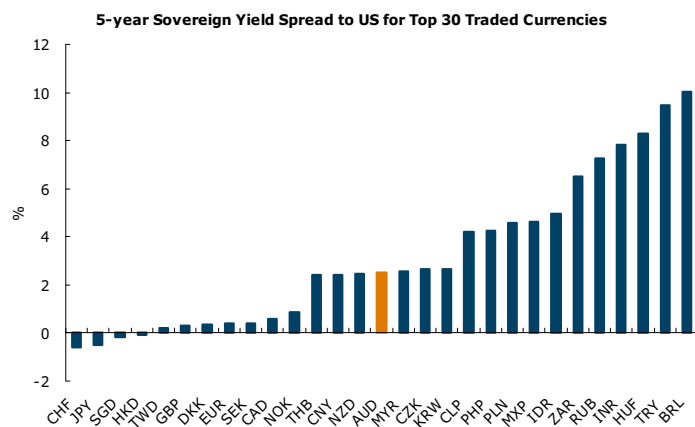
Sources: Bank of America Merrill Lynch, Thomson, ANZ estimates

Figure 3 highlights the collapse in yields that has occurred across most of the developed world and the huge yield dispersion that has opened between low yield markets and high yield developed and emerging markets. The key challenge for investors is to identify markets which can re-rate.

Of the high yield developed markets, since mid 2010 Australia has offered the widest sovereign bond yield premia (around 2-3%) in association with relatively low volatility of sovereign bond returns (in local currency terms).

With traditional safe havens like the Swiss franc and Japanese yen offering a negative spread to the US, the challenge for investors searching for 'high safe yield' is to identify those markets that will continue to offer sustained yield with spreads capped to the US (and scope to ease policy if required).

**FIGURE 3. THE GREAT SPREAD DIVIDE – WHICH MARKETS CAN RE-RATE?**



Sources: Bloomberg, ANZ estimates

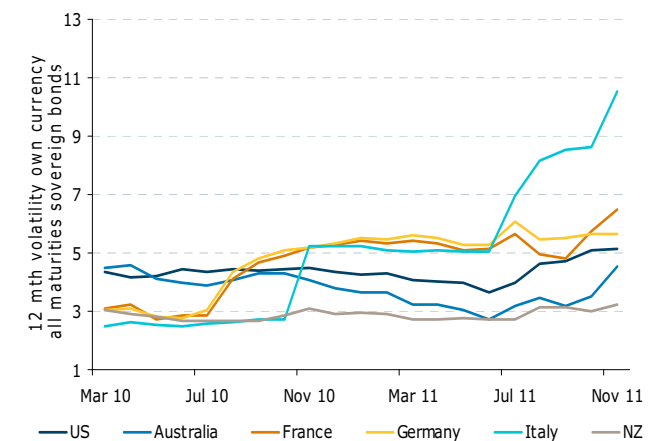
## VOLATILITY OF SOVEREIGN RETURNS – AUSTRALIA RESILIENT TO EUROPEAN SHOCK

How resilient are high yield sovereign bond returns (primarily Australian) to European shocks? And what would be the impact of an intensification of EZ balance sheet risk?

To assess the relative resilience of historical and prospective sovereign returns we have set Australian sovereign returns relative to a basket of developed markets that includes the UK, the US, Canada, Switzerland, Japan, Italy, France, and Germany.

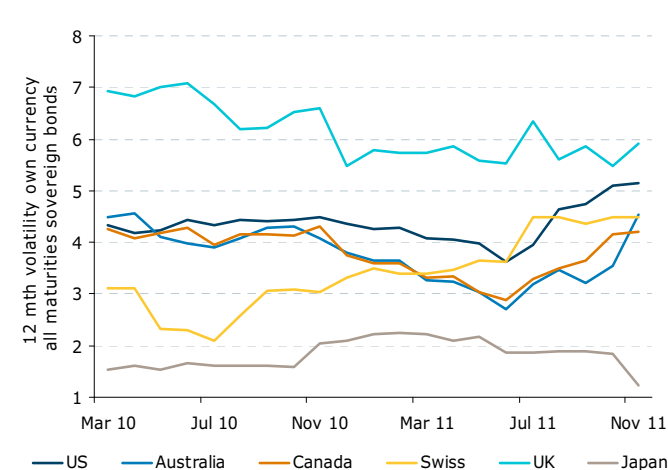
Figures 4 and 5 trace the volatility of sovereign bond total returns in local currency terms across this basket of developed markets. The charts show that the EZ balance sheet shock has resulted in a sharp divergence across developed economy sovereign bond volatility<sup>1</sup>.

**FIGURE 5. EZ VOLATILITY SURGES**



Sources: Bank of America Merrill Lynch, Thomson Reuters, ANZ estimates

**FIGURE 4. AUSTRALIA SOVEREIGN VOLATILITY SUBDUED**



Sources: Bank of America Merrill Lynch, Thomson Reuters, ANZ estimates

<sup>1</sup> In this section of report volatility is estimated as the 12 month rolling standard deviation of total sovereign bond returns as estimated from the Bank of America Merrill Lynch sovereign bond indices in own currency terms.

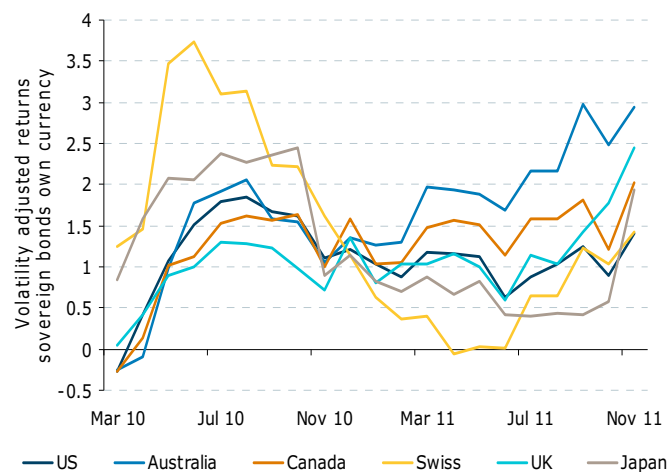
More recently, the intensification of the EZ crisis through 2011 has seen a spike in volatility across most markets, except Japan, and to a much lesser extent Australia. This has resulted in a sharp lift in the dispersion of volatility across markets, with Australian bonds anchored towards the bottom of the developed market volatility range.

Figures 6 and 7 show that the combination of high returns and well anchored volatility has underpinned the sharp lift in volatility adjusted returns for Australia through a period of higher market volatility. In addition, both Japanese and UK bonds have lifted strongly over recent months, while the EZ bond market has been de-rated, although Germany is now gaining support.

## AUSTRALIA – SUSTAINING STABLE ELEVATED RETURNS

While Australia has sustained elevated and relatively low volatility returns, past performance may not be a good guide to prospective returns particularly if EZ balance sheet risk was to spread to the global banking system. The key issue is to determine the scope for Australian sovereign bonds to hold, or even narrow, their spread to the US if the EZ balance sheet crisis was to intensify.

**FIGURE 6. AUSTRALIA HIGH RETURNS, LOW VOLATILITY**



Sources: Bank of America Merrill Lynch, Thomson Reuters, ANZ estimates

To determine this, we assess medium-term sovereign resilience across three credibility factors:

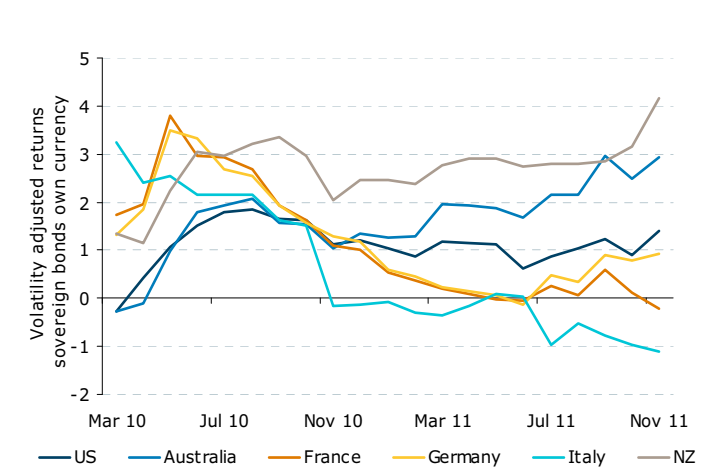
1. Fiscal Credibility
  - a. Gross sovereign debt to GDP;
  - b. Fiscal Space<sup>2</sup>;
  - c. Fiscal Speed.
2. Monetary Credibility
  - a. Safe real yield.
3. Structural Credibility
  - a. Private debt and foreign exposure;
  - b. Productivity and unit labour costs;
  - c. Demographics and retirement income.

## 1A. FISCAL CREDIBILITY – GROSS SOVEREIGN DEBT TO GDP

### Australia low and stable

Figure 8 shows gross public debt to GDP since 1980 as a decade average. Australian gross sovereign debt has been low (around half of the OECD average) and stable since 1980.

**FIGURE 7. EZ HIGHER VOLATILITY, LOWER RETURNS**



Sources: Bank of America Merrill Lynch, Thomson Reuters, ANZ estimates

<sup>2</sup> Fiscal space is defined as the size of the primary general government fiscal balance required to stabilise debt at the current level based on current IMF growth, interest rates and stock of debt assumptions.

However, a potential fiscal vulnerability is the increased sensitivity of Australia's fiscal position to commodity prices, which may heighten the cyclical nature of the budget. The Commonwealth Treasury estimates that a 1% fall in nominal GDP due to a fall in the terms of trade would cut some \$9.1bn, 0.6% of GDP, from the budget bottom line over two years. This is a relatively small amount, given that in the decade to 2008 the Australian budget surplus averaged 1.1% of GDP per annum. ANZ Research estimates (ceteris paribus) that a fall in the terms of trade of at least 7% is necessary to generate a 1% decline in nominal GDP (and subsequent 0.6% of GDP decline in the fiscal balance).

The current ANZ forecast is for a fall in Australia's terms of trade of around 15% over the next three years. However, note that the average cycle in the terms of trade over Australia's history, peak to trough, is around 50%, over seven years. If an average cycle in the terms of trade were to unfold Commonwealth Treasury estimates this would flow to a deterioration in the budget of around 4.2ppts of GDP over seven years.

This is a notable hit, but in our view not something that would put the budget at structural risk, particularly if a subsequently weaker Australian dollar and lower interest rates saw other parts of the tax base grow more quickly.

We therefore judge that the increased sensitivity of the fiscal position to global commodity cycles is meaningful but not of magnitude to pose a significant structural vulnerability to Australia's public finances.

## 1B. FISCAL CREDIBILITY - FISCAL SPACE

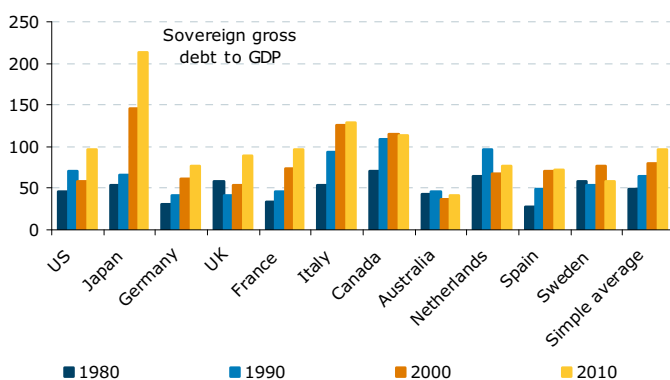
### Australia modest task to stabilise very low debt burden

Our second measure of fiscal credibility is fiscal space. This indicator captures the size of the primary general government fiscal balance required to stabilise debt at the current level of gross debt.

We estimate that in order to stabilise gross debt at 29% of GDP (very low), the Australian primary deficit would need to be some 2-3% tighter as a share of GDP in 2012 than currently estimated by the IMF. In contrast the US and the EZ face a much larger task.

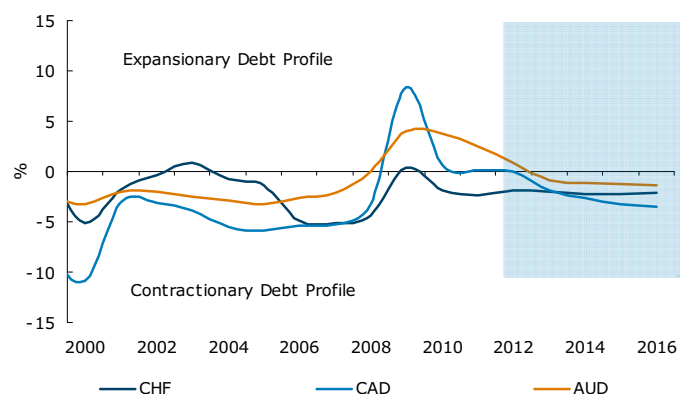
Figures 9 and 10 on fiscal space provides more detail.

**FIGURE 8. AUSTRALIA HAS SUSTAINED LOW PUBLIC DEBT**



Sources: Cecchetti data from presentation at Fed Jackson Hole 2011, OECD, ANZ estimates

**FIGURE 9. THE 'FISCAL SPACE' GAP BETWEEN THE 'DEBT STABILISING' AND IMF FORECAST PRIMARY BALANCE AS A % OF GDP (G4)**



Sources: Bank of America Merrill Lynch, MSCI, Thomson Reuters, ANZ estimates

## 1C. FISCAL CREDIBILITY - FISCAL SPEED

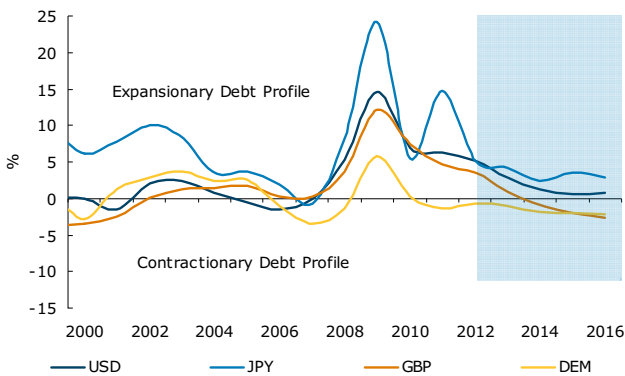
### Australia large scope to lift outlays

Fiscal speed is the magnitude of the fiscal adjustment on an annual basis required to stabilise gross government debt at 60% of GDP. The EU has identified 60% as a useful benchmark for fiscal speed.

As illustrated in Figure 11, at the extreme end of the fiscal speed range Japan would need to cut expenditure by 38% per annum over five years to bring gross debt back to 60% of GDP. In contrast, Norway could increase outlays by 8% per annum for five years to lift debt to 60% of GDP (everything else held constant). Australia could increase outlays by 2% per annum in excess of current estimates over five years in order to lift gross debt to GDP from 29% to 60%.

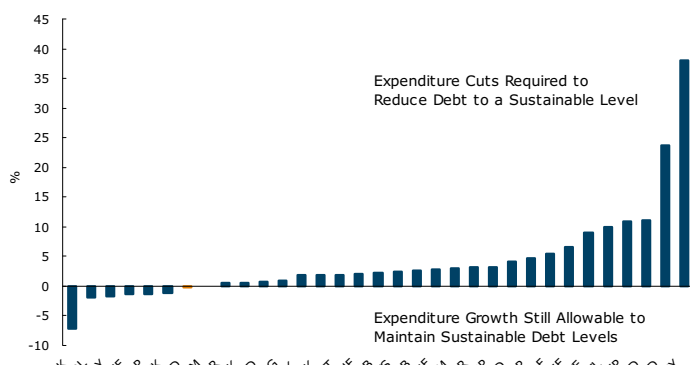
On this measure, Australia has a moderate speed limit on fiscal expansion, with scope to provide fiscal stimulus of an extra 2% of GDP if required over the next five years just to approach the 60% gross debt level.

**FIGURE 10. THE 'FISCAL SPACE' GAP BETWEEN THE 'DEBT STABILISING' AND IMF FORECAST PRIMARY BALANCE AS A % OF GDP (G4)**



Sources: Cecchetti, OECD, ANZ estimates

**FIGURE 11. AUSTRALIA POSITIVE FISCAL SPEED**



Sources: Bank of America Merrill Lynch, MSCI, Thomson Reuters, ANZ estimates

## 2. MONETARY CREDIBILITY - SAFE REAL YIELD

### Considerable scope to ease

Figure 12 shows that Australian monetary policy is neutral and located at the extreme tight end of the policy spectrum. In order to approach the developed economy average Australian rates could drop by some 3-4%.

## 3. STRUCTURAL CREDIBILITY

### Productivity and household debt are the Achilles' heel

Our analysis suggests that fiscal and monetary credibility provides considerable scope for policy to be eased and at the same time remain supportive for Australian spreads and risk premia if EZ balance sheet risk was to spike sharply higher. That said, we believe that the structural backdrop for sustainable medium-term growth is slightly less supportive.

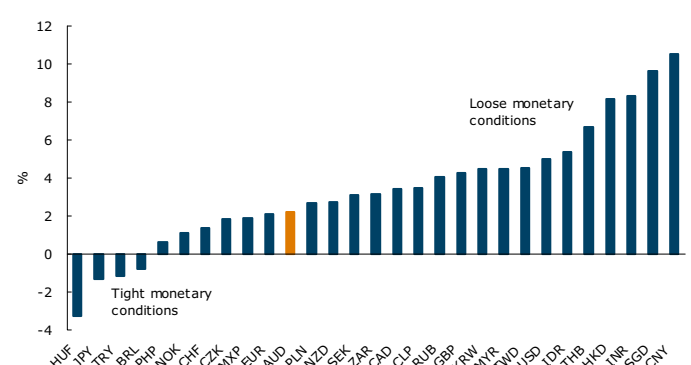
Briefly, while the general trend over the last decade has been a steady reduction in sovereign debt and enhanced monetary policy credibility, these trends have, to some extent, been offset by higher household debt and slower productivity growth.

## 3A. STRUCTURAL CREDIBILITY - PRIVATE SECTOR

### Balance sheet and foreign exposure

While the private corporate non financial sector has made progress in restoring balance sheets, the household sector has made less progress in stabilising and reducing leverage.

**FIGURE 12. AUSTRALIA NEUTRAL REAL YIELDS**



Sources: Bank of America Merrill Lynch, MSCI, Thomson Reuters, ANZ estimates

The non-financial corporate balance sheet is strong, with a trend decline in leverage since 2007. A noticeable improvement has occurred in corporate sector savings since 2007, reflecting a solid profit recovery (dominated by the mining sector), as well as lower borrowing (falling debt levels) (Figure 13). Corporate gearing has been reduced and interest cover has recovered somewhat (Figure 14). These trends have been reflected in very strong returns to Australian corporate credit. That said, part of this trend does reflect the elevated terms of trade flowing to the cash rich mining sector which tends to be relatively lightly geared.

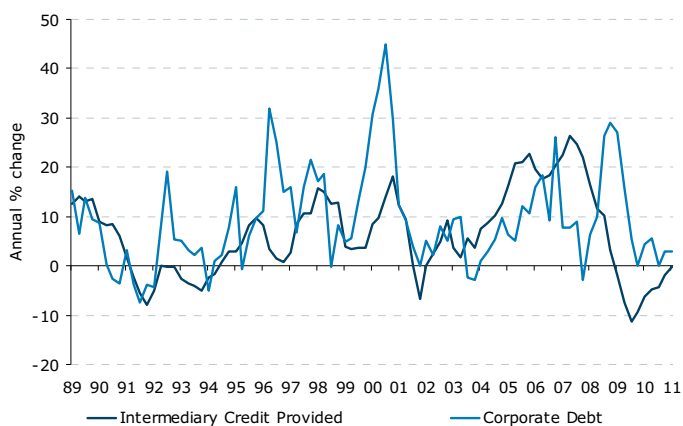
However, the repair of household balance sheets has been less marked than for the corporate sector and we consider the need to stabilise and reduce household leverage in conjunction with weak productivity as the main medium-term vulnerabilities (Figure 17).

We gauge household debt vulnerability via two key indicators: the household debt-to-income ratio; and the household debt servicing ratio.

As seen in Figures 17 and 18 both indicators remain elevated and are vulnerability if growth momentum eases sharply or global financing costs rise sharply. At around 120%, Australia's household debt to income ratio is high by global standards and little changed from the peaks achieved prior to the global financial crisis. Whilst household savings have increased, these savings have not been used to reduce leverage. The household debt servicing ratio, at just over 9% currently, is particularly high given the current 'neutral' setting of monetary policy.

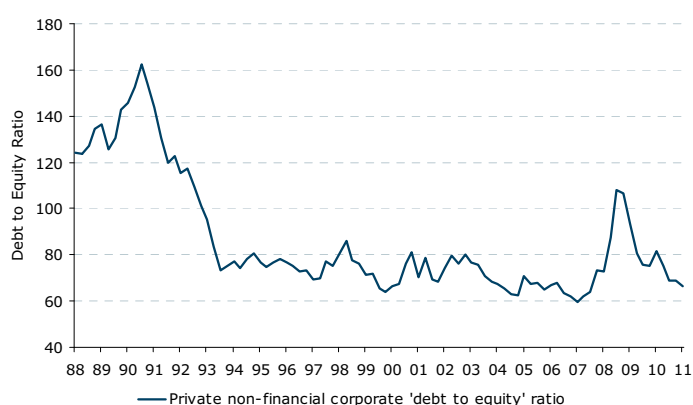
Tempering the risk suggested by these aggregate measures is the micro details of Australian household debt. Importantly, lending standards in Australia are significantly tighter than in many other countries, which is reflected in very low rates of non-performing loans (NPLs) (mortgage NPLs are currently less than 1%). 'Sub-prime' loans, for example – which precipitated the collapse of the US housing market in 2007 – are almost non-existent in the Australian market. Furthermore, two-thirds of households have little or no debt, and so are not as vulnerable to sharp rises in interest rates or sharp increases in unemployment (Figure 15).

**FIGURE 13. CORPORATE DEBT GROWTH IS LOW AND STABILISING**



Sources: ABS, ANZ Estimates

**FIGURE 14. CORPORATE GEARING RATIO IS LOW**

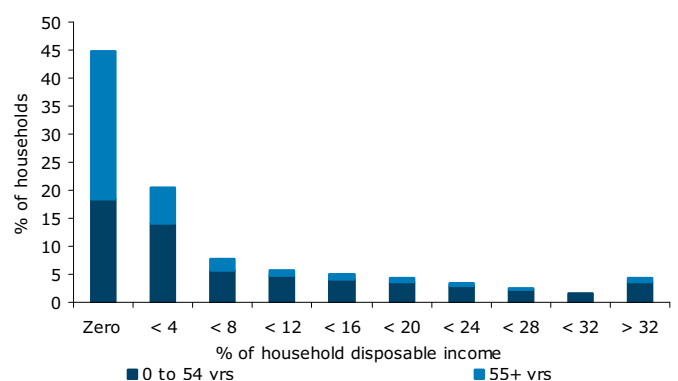


Sources: ABS, ANZ Estimates

That said, dependence on external financing remains a vulnerability. Australia's net external liabilities and current account deficit (CAD) as a share of GDP are relatively high. ANZ forecasts the CAD to widen further over the next few years, to around 6% of GDP in 2013. These relatively high external financing requirements leave Australia vulnerable to sudden shocks to the supply and/or cost of foreign capital.

Low public debt (which limits Australia's gross external debt – at 94% of GDP this is low by foreign standards), the health of the Australian banking sector (which remains highly rated relative to peers) and Australia's floating exchange rate will provide some buffer. But they won't completely offset the transmission of external credit shocks to the economy.

**FIGURE 15. DEBT-SERVICING RATIOS ARE LOW FOR MOST HOUSEHOLDS**



Source: ABS unpublished data

## 3B. STRUCTURAL CREDIBILITY

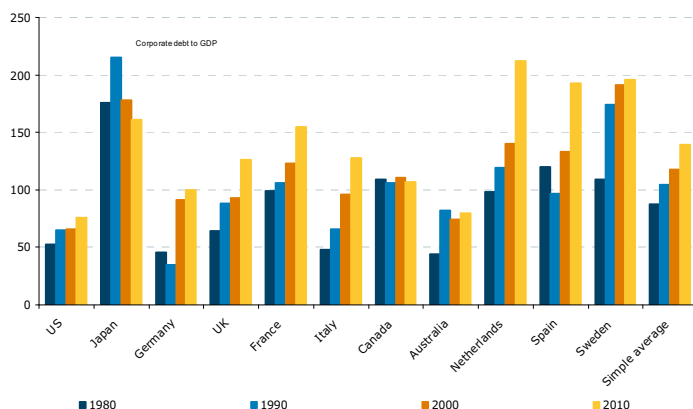
### Productivity and unit labour costs

The marked slowdown in Australian productivity growth (and sharp rise in unit labour costs), is the key factor that could act to intensify the vulnerability of the household balance sheet. After rising in the 1990s, labour force productivity slowed markedly in the 2000s and this has been associated with a steady increase in unit labour costs over the last decade (Figure 19). Australia has slipped in OECD productivity growth rankings from 11th to 17th. Unless productivity growth picks up, Australia's medium-term sustainable level of economic growth will decline, and interest rates may well need to be structurally higher to keep inflation in check.

That said, some part of Australia's productivity slowdown since 2009 is due to the current rapid capital investment in mining. Given the long lead times in typical mining projects, measured productivity in the mining sector has declined since labour inputs have increased without a significant increase in output yet. Therefore, as these projects come on stream, we can expect mining sector productivity growth to increase substantially.

However, beyond these investment cycle causes, there has still been a broad slowing in structural productivity growth across most industries. Without further efficiency gains across a range of public and private industries, coupled with ongoing economic reform, lacklustre productivity growth will remain a headwind to the medium-term outlook and elevated household debt.

**FIGURE 16. AUSTRALIAN CORPORATE SECTOR RELATIVELY LOWLY GEARED**



Sources: Cecchetti, ANZ estimates

## 3C. STRUCTURAL CREDIBILITY - DEMOGRAPHICS AND RETIREMENT INCOME

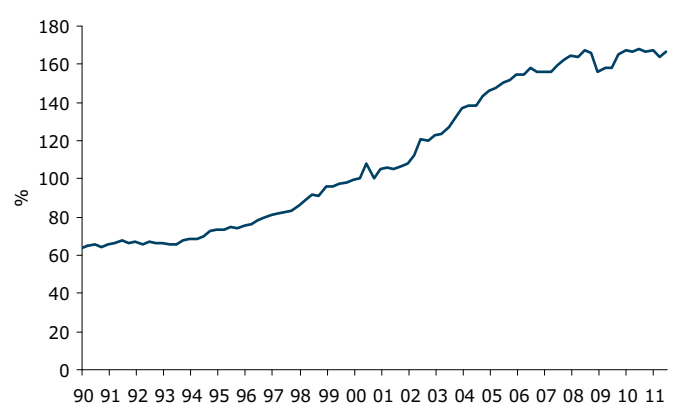
### Australia's demographic strength

Whilst subdued productivity is a weakness, solid medium-term demographic trends, in conjunction with compulsory retirement provisions, are clearly relative strengths.

Australia, like most advanced economies, is experiencing an ageing of its population albeit at a much more subdued pace than many other countries. We consider that growth in Australia's working age population will ease from an average pace of 1.4% pa over the last 40 years to 1.2% pa over the next 40 years. Slower population growth will feed through to a lift in the dependency ratio for Australia (the ratio of people aged under 15 years and over 64 years to those of working age) from currently around 48% in 2010 to 65% in 2050.

As shown in Figures 20 and 21 Australia sits near the top of projected population growth and around the bottom of the likely lift in the dependency rate. Immigration remains the main swing factor for medium-term population projections.

**FIGURE 17. HOUSEHOLD DEBT TO INCOME RATIO REMAINS ELEVATED**



Sources: ABS, ANZ

Demography will lead to slower potential economic growth over the same period and more severe fiscal pressures. For example, on current policy settings, the Commonwealth Treasury projects government spending (from all levels of government) to rise from 22.4% of GDP to 27.1% of GDP by 2050, suggesting a higher per capita tax burden will be required to maintain a balanced fiscal position. This would lift net debt to GDP to 20% of GDP by 2050. Given that immigration is the major demographic swing factor, we believe medium-term fiscal balance would be assisted by a medium-term immigration policy.

## CONCLUSION

We have assessed the Australian sovereign bond market against three key measures of medium-term sovereign credibility – fiscal, monetary and structural. Australia strongly satisfies our fiscal and monetary policy credibility indicators, whilst still offering very high spread to the US Treasury market. Therefore in an environment where EZ sovereign credibility is fracturing we consider the Australian sovereign market can maintain its “high quality high yield status”.

That said, over the medium-term we have concerns on two structural vulnerabilities – elevated household debt with foreign exposure; and relatively poor underlying productivity growth. Our other structural criteria of corporate debt, the ageing population criteria and retirement income provision are solid. However, given the key role of immigration, we consider a medium-term immigration policy needs to be established.

Lacklustre productivity remains the Achilles heel for Australia over the medium-term. Without further efficiency gains across a range of public and private industries, and without ongoing economic reform, weak productivity growth will remain a headwind to the medium-term outlook and has the potential to threaten sustainable safe yields.

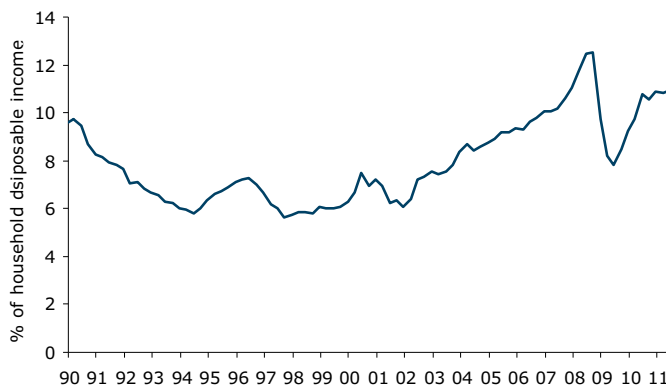
*Kerry Duce*  
Senior Credit Strategist

*Katie Dean*  
Head of Australian Economics

*Craig Michaels*  
Senior Economist

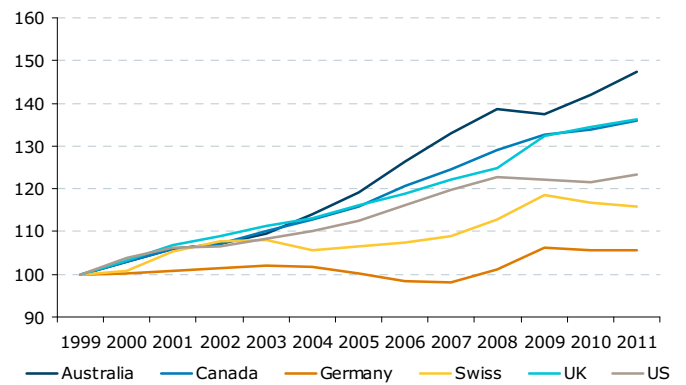
*Carl Ang*  
Interest Rate Strategist

**FIGURE 18. HOUSEHOLD DEBT-SERVICING RATIO STILL HIGH**



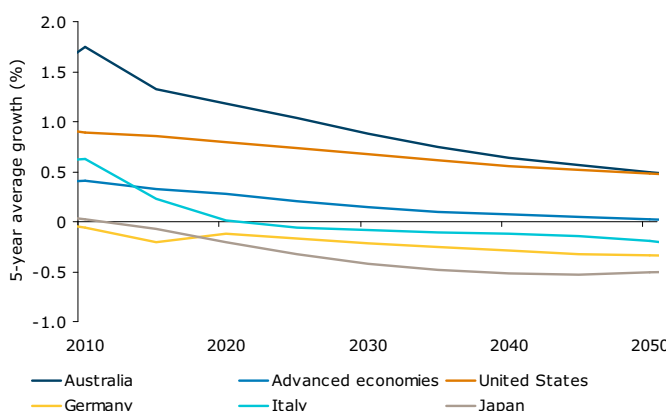
Sources: ABS, ANZ

**FIGURE 19. PRODUCTIVITY AND UNIT LABOUR COSTS A VULNERABILITY**



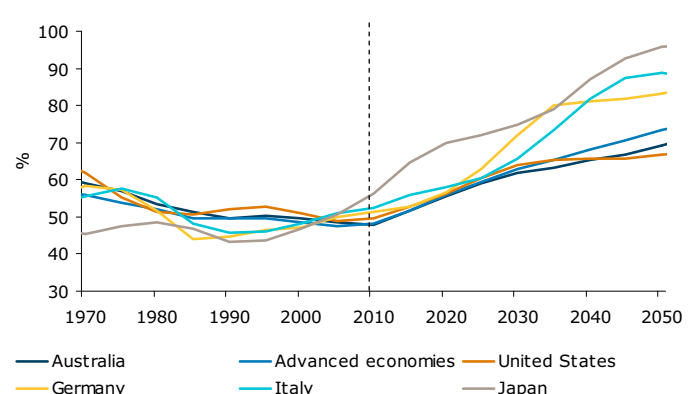
Sources: OECD, ANZ estimates

**FIGURE 20. POPULATION GROWTH TOP OF OECD**



Sources: UN, ANZ estimates

**FIGURE 21. DEPENDENCY RATIOS BOTTOM OF OECD**



Sources: UN, ANZ estimates

# FORECASTS

## COMMODITIES

COMMODITY	Unit	Dec 10	Mar 11	Jun 11	Sep 11	Dec 11	Mar 12	Jun 12	Sep 12	Dec 12	Mar 13
<b>Base metals</b>											
Aluminium	USD/lb	1.12	1.18	1.14	1.00	1.00	1.05	1.08	1.08	1.10	1.05
Copper	USD/lb	4.38	4.39	4.27	3.28	3.50	3.90	4.30	4.30	4.40	4.40
Nickel	USD/lb	11.21	12.27	10.61	8.38	8.50	9.50	10.00	10.60	10.90	10.80
Zinc	USD/lb	1.11	1.07	1.06	0.87	0.91	0.98	1.02	1.04	1.05	1.04
Lead	USD/lb	1.16	1.23	1.21	0.92	0.95	1.02	1.05	1.06	1.08	1.06
<b>Precious metals</b>											
Gold	USD/oz	1,421	1,430	1,500	1,609	1,800	1,950	2,050	2,100	1,950	1,750
Platinum	USD/oz	1,770	1,752	1,720	1,526	1,700	1,900	1,950	2,100	2,000	1,975
Palladium	USD/oz	802	751	757	620	620	720	850	950	1000	950
Silver	USD/oz	30.9	37.3	34.7	29.9	34.0	38.0	42.0	45.3	43.5	42.0
<b>Energy</b>											
WTI NYMEX	USD/bbl	91	105	95	79	103	106	110	111	113	115
Brent IPE	US\$/bbl	94	116	112	104	113	110	112	115	116	118
Uranium	US\$/lb	61.50	53.0	54.1	53.0	52.0	56.0	60.0	64.0	67.0	70.0
<b>Bulks</b>											
Thermal coal	USD/t	98	98	130	130	130	130	125	125	125	125
Premium hard coking	USD/t	210	225	330	315	285	235	240	220	230	230
Hard coking	USD/t	190	205	300	290	260	210	215	200	210	210
Semi-soft coking coal	USD/t	160	185	275	230	215	175	185	175	185	185
Iron ore lump	USD/t	153.7	178.5	206.1	202.0	186.0	180.0	186.0	192.0	193.6	193.6
Iron ore fines	USD/t	128	149	172	168	155	150	155	160	160	160
<b>Other metals</b>											
Alumina	USD/t	365	400	384	361	353	370	369	369	364	347
Molybdenum	USD/lb	16.70	16.7	15.1	14.3	15.8	16.5	17.0	17.3	17.5	17.5
Cobalt	USD/lb	18.95	18.7	16.9	17.0	18.0	18.5	19.0	19.5	19.5	19.0
<b>Agriculture</b>											
Corn	US¢/bu	562	670	731	696	622	648	627	585	621	585
Wheat	US¢/bu	707	786	745	690	616	661	647	677	667	622
Soybeans	US¢/bu	1245	1379	1361	1356	1153	1139	1116	1104	1150	1176
Sugar	US¢/lb	29	31	24	29	25	27	23	24	25	19
Cotton	US¢/lb	130	180	168	107	97	105	98	91	103	90
Palm Oil	MYR/t	3293	3675	3362	3097	3030	3069	3007	3038	3131	3060

Hard commodity forecasts are end of period prices and ags/softs forecasts are average quarterly prices.

Source: ANZ

## CONSUMER PRICE INDEX

Country/region	Average	2008	2009	2010	2011	2012	2013
<b>World<sup>1</sup></b>	4.8	5.2	1.7	3.4	4.2	3.5	3.0
<b>G7</b>	2.4	3.3	-0.1	1.3	2.5	1.5	1.6
<b>US</b>	2.9	3.8	-0.4	1.6	3.0	1.7	1.8
<b>Euro zone</b>	2.8	3.2	0.3	1.6	2.7	1.8	1.8
<b>Japan</b>	0.6	1.7	-1.3	-0.7	-0.2	-0.2	0.2
<b>UK</b>	2.6	4.3	1.9	3.3	4.5	2.5	2.0
<b>China</b>	5.1	5.9	-0.7	3.3	5.5	4.0	4.5
<b>Australia</b>	2.8	4.4	1.8	2.8	3.4	2.4	3.3
<b>New Zealand</b>	2.3	3.4	2.0	4.0	2.5	2.6	2.7
<b>OECD</b>	2.5	3.3	0.0	1.5	2.6	1.6	1.7
<b>East Asia</b>	5.3	6.3	0.3	3.3	5.3	3.9	4.0
<b>South Asia</b>	7.4	6.9	6.0	10.5	8.6	8.1	4.3
<b>Emerging Economies<sup>1</sup></b>	9.5	7.5	3.7	5.6	6.0	5.5	4.4

Sources: Datastream, Consensus Economics, ANZ

<sup>1</sup>Long-Term average from 1995

## GROSS DOMESTIC PRODUCT

	1990-2007	Forecasts					
	Average	2008	2009	2010	2011	2012	2013
<b>World (PPP)</b>	3.4	2.5	-0.7	5.0	3.7	3.7	4.5
<b>World (Market)</b>	3.0	1.6	-2.3	3.8	2.6	2.5	3.3
<b>G7</b>	2.5	-0.1	-3.7	2.9	1.4	1.6	2.5
<b>US</b>	3.0	0.0	-2.6	2.9	1.7	1.7	3.0
<b>Euro zone</b>	2.4	0.4	-4.0	1.8	1.5	0.0	1.0
<b>Japan</b>	1.6	-1.2	-6.3	4.0	-0.2	2.6	2.0
<b>UK</b>	2.4	-0.1	-4.9	1.8	1.5	0.7	2.8
<b>Canada</b>	2.7	0.5	-2.5	3.1	2.8	1.8	2.5
<b>Asia-Pacific</b>	5.3	4.9	3.6	7.9	6.0	6.6	7.0
<b>Asia-Pacific less Japan</b>	6.9	6.4	5.8	8.7	7.2	7.3	7.9
<b>Australia</b>	3.2	2.6	1.4	2.7	1.5	3.5	3.4
<b>New Zealand</b>	3.0	-0.1	-2.0	1.7	2.1	2.4	3.2
<b>China</b>	9.9	9.6	9.1	10.3	9.3	9.0	9.3
<b>Hong Kong</b>	4.2	2.4	-2.7	7.0	4.8	3.9	4.1
<b>India</b>	6.1	7.4	7.0	8.9	7.5	7.6	8.6
<b>Indonesia</b>	4.9	6.0	4.6	6.1	6.3	6.3	7.4
<b>Malaysia</b>	6.5	4.7	-1.7	7.2	5.2	4.5	6.1
<b>Philippines</b>	3.6	3.7	1.1	7.3	3.9	4.0	5.2
<b>Singapore</b>	6.8	1.5	-0.8	14.5	5.0	3.0	6.7
<b>South Korea</b>	5.8	2.3	0.2	6.2	3.7	3.9	5.1
<b>Taiwan</b>	5.4	1.1	-1.9	10.8	4.3	4.1	5.1
<b>Thailand</b>	5.2	2.5	-2.3	7.8	1.9	5.3	5.4
<b>Vietnam</b>	7.5	6.3	5.3	6.8	5.9	6.7	6.7
<b>Latin America<sup>1</sup></b>	2.7	4.2	-2.4	6.2	4.3	4.1	3.8
<b>Brazil</b>	1.2	5.1	-0.1	7.5	3.4	4.1	4.1
<b>Mexico</b>	3.2	1.4	-6.9	5.4	3.8	4.0	3.4
<b>Argentina</b>	3.8	7.0	-2.5	9.2	7.3	4.2	4.2
<b>OECD</b>	2.6	0.1	-3.5	2.6	1.4	1.2	2.2
<b>Emerging Economies</b>	4.8	5.7	2.6	7.6	6.3	6.3	6.7

Sources: Datastream, Consensus Economics, ANZ

<sup>1</sup> Forecasts sourced from Latin America Consensus Economics

## RATES (%)

	Dec 11	Mar 12	Jun 12	Sep 12	Dec 12	Mar 13	Jun 13
<b>G4</b>							
US	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Euro zone	1.00	0.75	0.75	0.75	0.75	0.75	0.75
Japan	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1
UK	0.50	0.50	0.50	0.50	0.50	0.50	0.50
<b>Commodity</b>							
Canada	1.00	1.00	1.00	1.00	1.00	1.50	1.50
Australia	4.25	4.25	4.25	4.25	4.25	4.25	4.25
New Zealand	2.50	2.50	2.50	2.50	2.75	3.25	3.50
<b>Emerging Asia</b>							
China	6.56	6.56	6.56	6.81	6.81	6.81	6.81
Hong Kong	0.50	0.50	0.50	0.50	0.50	0.50	0.50
India	8.50	8.50	8.25	8.25	8.00		
Indonesia	6.00	6.00	6.00	6.00	6.25		
Malaysia	3.00	3.00	3.00	3.00	3.25		
Philippines	4.50	4.50	4.25	4.25	4.25		
Singapore	0.38	0.38	0.38	0.38	0.38		
South Korea	3.25	3.50	3.75	3.75	4.00		
Taiwan	1.87	1.875	2.00	2.12	2.25	2.37	2.50
Thailand	3.25	3.00	3.00	3.00	3.25		
Vietnam	15.00	15.00	14.00	13.00	12.00		
<b>Australia</b>							
	<b>Actual</b>	<b>Current</b>					
	<b>Jun 11</b>	<b>1 Dec 11</b>	<b>Dec 11</b>	<b>Mar 12</b>	<b>Jun 12</b>	<b>Sep 12</b>	<b>Dec 12</b>
Official cash	4.50	4.50	4.25	4.00	4.00	4.00	4.00
90 day bill	5.03	4.55	4.35	4.20	4.20	4.20	4.20
3 year bond	4.76	3.24	3.10	2.90	3.00	3.10	3.20
10 Year bond	5.21	4.02	3.90	3.80	3.80	3.90	4.00
Cash spread to US	4.50	4.50	4.25	4.00	4.00	4.00	4.00
10yr spread to US	2.05	1.95	2.00	1.90	1.90	1.90	1.80
3/10yrs yield curve	0.44	0.78	0.80	0.90	0.80	0.80	0.80
3yr swap rate	5.17	3.95	3.70	3.50	3.50	3.55	3.65
10yr swap rate	5.85	4.81	4.60	4.50	4.40	4.45	4.55
<b>New Zealand</b>							
Official cash rate	2.50	2.50	2.50	2.50	2.50	2.50	2.75
90 day bill	2.66	2.73	2.72	2.73	2.75	2.75	3.17
<b>United States</b>							
3-mth LIBOR	0.25	0.25	0.35	0.35	0.35	0.35	0.35
2 year bond	0.46	0.25	0.20	0.20	0.20	0.20	0.40
10 year bond	3.16	2.07	1.90	1.90	1.90	2.00	2.20
2/10yrs yield curve	2.70	1.81	1.70	1.70	1.70	1.80	1.80

Sources: Relevant Central Banks, Bloomberg, ANZ

## FOREIGN EXCHANGE RATES

	CURRENT	FORECASTS					FORWARDS		
	1 Dec 11	Mar 12	Jun 12	Sep 12	Dec 12	Mar 13	3 mths	6 mths	12 mths
EUR USD	1.34	1.37	1.40	1.42	1.45	1.45	1.332	1.334	1.337
GBP USD	1.57	1.57	1.59	1.61	1.63	1.63	1.549	1.548	1.546
USD JPY	77.7	75.0	72.0	72.0	72.0	70.0	77.92	77.70	77.19
AUD USD	1.02	1.00	1.05	1.10	1.10	1.10	0.978	0.971	0.958
NZD USD	0.78	0.80	0.83	0.86	0.89	0.90	0.748	0.745	0.737
USD CNY	6.36	6.35	6.29	6.23	6.17	6.12	6.380	6.369	6.351
USD IDR	9116	8747	8572	8400	8232	8067	9305	9398.5	9595
USD INR	51.8	48.4	47.4	46.5	45.6	44.7	52.61	53.01	53.62
USD KRW	1128	1171	1148	1125	1102	1080	1160	1163	1164
USD MYR	3.14	3.16	3.13	3.10	3.06	3.03	3.193	3.196	3.205
USD PHP	43.3	43.2	42.6	42.0	41.3	40.7	44.07	44.31	44.57
USD SGD	1.28	1.30	1.28	1.27	1.26	1.25	1.301	1.299	1.295
USD THB	31.0	31.0	30.9	30.7	30.6	30.4	31.48	31.62	31.83
USD TWD	30.1	30.4	30.3	30.1	30.0	29.8	30.38	30.28	30.07
USD VND	21008	21400	22000	22400	22400	22900	21543	21825	22650

Sources: Bloomberg, ANZ

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