



ANZ  
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Economics, Commodities and Markets

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## EXECUTIVE SUMMARY

Global economic activity remains weak going into the final quarter of the year. But markets are performing well, partly in response to recent policy announcement from the G3 economies. Like the markets, we believe the global economy can stage a modest recovery in 2013 if Chinese policymakers and US politicians do their part, the euro zone continues to stabilise, and geopolitical tensions in the Middle East and elsewhere do not escalate.

- > **G3** In our opinion, the foundations for a US recovery are slowly falling into place - household balance sheets are looking better than they have since the 1990s and the housing sector is showing encouraging signs of life. Moreover, the FOMC has signalled its intention to continue easing until the stubborn unemployment figures materially improve. Europe too, is showing the first signs of emerging from crisis. The slow down appears to be stabilising and a comprehensive rescue package, in the form of the ECB's sovereign bond buying policy, is taking shape. However, while the risks of a euro break up have eased, we still expect growth to contract by 0.5% in 2012 and struggle to get much above 0.7% in 2013. Japan faces challenges in the remainder of 2012 as well. We believe it will slow in the back half of 2012, hurt by softer domestic demand and slowing external demand. The high yen is not helping their cause.
- > **AUSTRALIA** The uncertain global backdrop and China's slowing economy in particular, have caused sharp falls in iron ore and coal prices. This, coupled with a high AUD, is producing very challenging conditions for mining. We expect economic activity generally to remain relatively sluggish as Australia transitions to slower real income growth, with terms of trade returning to pre-crisis levels. Dwelling and non-mining investment will fill some of the breach, rising from their very low current levels. But overall weaker national income growth and fiscal tightening will see the RBA retain an easing bias even after the modest interest rate cuts that we expect to see in coming months.
- > **CHINA** China's poor PMI reading, disappointing trade figures and domestic indicators all suggest China's economic activity will remain lacklustre in Q3. We believe the cyclical rebound will be postponed beyond Q4 and have lowered our 2012 GDP forecast to 7.8% from 8.2%. The People's Bank of China (PBoC) has been slow to implement fiscal policy and inconsistent in its implementation of monetary policy, chopping between Reserve Requirement Ratio (RRR) cuts and less effective interest rate cuts. We maintain our view that the PBoC will cut the RRR by 150bps by the end of the year which should see the economy rebound in the second or third quarter of 2013.
- > **EMERGING ASIA** Weak global growth and uncertainty about Europe have dampened activity in Emerging Asia. Trade growth is falling across the region, with exports contracting outright in most countries, investment growth and PMIs declining steadily, and consumption falling too. But the 'low beta' economies like Indonesia, the Philippines and Malaysia continue to grow well and financial markets have remained upbeat. Q3 saw largely uninterrupted capital flows into Emerging Asia, higher asset prices, lower CDS spreads, and most AXJ currencies appreciating against the USD. If the US recovery remains on track and China avoids any significant slow down, we believe the region will rebound in Q4. Clearly, some downside risks remain, especially in relation to Europe. Should the markets flare up again in response to European policy inertia, the impact on growth would be felt across the region.
- > **NZ** Our outlook for NZ remains largely unchanged from the *June 2012 ANZ Research Quarterly*. The NZ economy continues to navigate five significant, and often opposing, shocks: an uncertain global scene; deleveraging; rebalancing from spending to investment and exports; the positive effect of commodity prices and Asian connectivity; and rebuilding from the Canterbury earthquakes. The net effect of these tensions is likely to be subdued and bumpy growth for the next five years. But the medium-term outlook remains strong, and there are still near-term opportunities for those businesses which can distinguish themselves through microeconomic factors such as superior management and governance.
- > **FX** With a number of stimulatory policy moves underway or likely in Europe, the USA, China and Australia, and some reduction in the risk of a euro zone break up, we expect to see the EUR normalise. We also expect strong performance from currencies such as KRW, SGD, PHP, CNY and NZD, as the search for yield and diversification continues to drive flows into solid Asian currencies. By contrast, we continue to view the USD as a structurally weak currency. The USD is set apart by the most activist central bank, the largest current account deficit, and over-ownership as a result of its role as the reserve currency.
- > **COMMODITIES** Industrial commodities look over-sold, even after the recent rallies. Political risk associated with the leadership transition in China and elections in the US, uncertainty over the efficacy of China's stimulus measures, and supply over-hangs should all keep price gains in check for the short-term. We expect more sustained gains in these markets towards the end of the year as some of these uncertainties resolve and longer-term investors begin to 'buy the recovery'. In soft commodities, we believe the fundamentals driving wheat, corn and soybeans to record highs will persist for at least another 6-12 months. In particular, stock-to-use ratios remain at low levels.

## EXECUTIVE SUMMARY

- > **AUD AND NZD INTERVENTION** This article makes the case against central bank intervention in relation to the AUD and NZD. While the AUD and NZD are clearly expensive by most measures, there are global factors causing that, particularly the portfolio diversification trend mentioned in *AUD AND NZD Intervention*. Moreover, intervention is unlikely to be effective, and therefore risk needless financial loss, in circumstances where global investors are driving the levels.
- > **ASIAN BOND MARKETS** This article tracks developments in Emerging Asia's bond market over the last decade. It finds that bond issuance in the region has grown rapidly since 2000, exceeding the growth in GDP and bank lending over the same period, which suggests that the bond market is deepening and that regional finance is no longer the preserve of the banks. Other interesting findings include: China's share of the market has exploded to almost 70%; bond issuance by State Owned Enterprises has grown the fastest (although corporate issuance is growing fast again after the GFC); and Asian investors appear, on the limited evidence, to be taking up a greater portion of debt issued by Asian financial institutions.
- > **AUD: TRULY UNIQUE TIMES** This article argues that the AUD is likely to remain high for some time yet. An examination of past mining booms shows that the currency remains above its pre-boom levels for 15-20 years on average. And the demographic shift underway in China, particularly the amount of urbanisation yet to run, suggests that this boom will be more sustained. Equally important is the change occurring in financial markets, as investors diversify their portfolios by reducing their exposure to the core markets of Europe and the USA in favour of assets like AUD.

*Warren Hogan*  
*Chief Economist, ANZ*

## MARKETS PRICING IN A 2013 RECOVERY?

The global economy remains soft as we enter the final quarter of 2012. Europe is still mired, the US economy is struggling to generate jobs and Japan looks set for softer activity as the yen strengthens. Serious questions hang over the Chinese economic outlook as well. Our system of global leading indicators remains weak (albeit with tentative evidence of a base developing in global growth momentum over the second half). There are certainly no signs of momentum building yet.

Despite this, financial markets have performed strongly on the back of seemingly credible policy actions across the G3 economies. Financial markets and commentators have welcomed the Federal Reserve's open ended commitment to balance sheet expansion in announcing QE3. European economic and financial reform appears to be making progress. Even the BoJ has renewed its commitment to balance sheet expansion in the wake of the US Fed's actions.

The missing link remains China where officials appear to be dragging their feet on further policy accommodation. While we are concerned that this delay risks a more severe cyclical downturn, many other economists are less concerned about the extent of the slowing in China, putting it down to structural factors. Chinese policymakers may feel comfortable that easy US money will leak into their financial system and act as a stimulus to domestic economic activity.

As a leading indicator of world economic conditions, financial markets are suggesting that renewed growth momentum in the world's largest economies should become evident by the end of the year. Equity markets are rallying, credit spreads have compressed and primary issuance in the major bond markets have picked-up. This also tells us that the Fed's policy of monetary expansion is having the desired effect.

In the past three months, quantitative easing in the major economies appears to be filtering down the capital structure. Rapid monetary expansion is not just supporting core government bond markets but is helping to compress credit spreads and drive up equity values. Global bond markets have had a particularly strong run in September. High levels of liquidity in the global financial system combined with declining risks of a European shock have given investors the confidence to deploy capital once again.

### THINGS TO WATCH

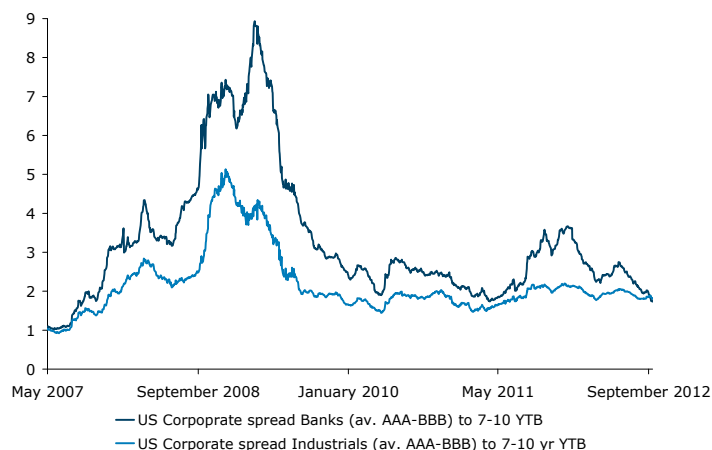
**Chinese policymakers.** Any further delays in easing could cause a sharp downturn in China, with serious consequences for global growth.

**Monetary transmission in the US.** The US banking system is looking much healthier but we need to see the liquidity enter the real economy through more bank lending and more corporate borrowing/investing.

**European consolidation.** Europe must continue progressing with its reform and harmonisation initiatives if markets are to remain positive.

Importantly, we are seeing strong performance from banks in the corporate debt market. Primary issuance levels have picked-up markedly in recent months and yield spreads have declined, out-performing broader industrials (Figure 1). The spreads on bank paper are now coming in below industrials for the first time in the post-crisis period. This is an important indicator of the improving health of the US banking system and the capacity of US banks to extend credit more generally.

**FIGURE 1. US BANK SPREADS CONVERGE TO INDUSTRIAL SPREADS FOR THE FIRST TIME SINCE 2007**



Sources: Bank of America Merrill Lynch, Thomson Reuters DataStream

## GLOBAL OUTLOOK

Ideally, the next phase of monetary transmission would see this liquidity escape into the real economy via an increase in bank lending and growing capital investment. It is only when the liquidity in the financial system finds its way into the real economy that we can be confident that the liquidity trap is broken and a sustained economic expansion is underway. There is little evidence of this in the US yet.

The final requirement is a rising demand for loanable funds. Despite strong balance sheets, corporate America has shown little propensity to lead the way on investment and spending in recent years. Corporate spending has been steady but not spectacular.

In our view, the key will be consumers and the housing market. All the fundamentals are in place: affordability at multi-decade highs, rental vacancies falling, and household income growth solid. Most indicators of housing conditions (be that prices, turnover or construction), are now rising. The core inventory overhang has been worked through. Ongoing recovery in housing through the first half of 2013 could lay the foundation for strong economic growth in the US in 12 to 18 months time.

But political uncertainty and the so-called 'fiscal cliff' will continue to act as a headwind to broader spending in the near-term. Once the new President is elected, and assuming the broader political elite in Washington make the right decisions and avoid a sudden fiscal contraction, then we are confident of a much stronger US economy in 2013.

Europe, on the other hand, will remain soft even if reform and harmonisation of economic conditions across the continent progresses. Confidence will continue to be affected by the ongoing changes required to stabilise the monetary union. More importantly, European banks remain capital deficient. This will effectively short-circuit the intermediation process as banks look to gradually shrink balance sheets in the face of capital shortages.

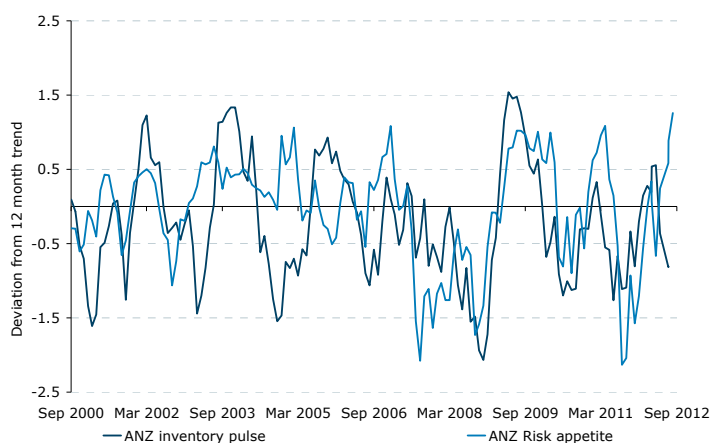
As for China, despite our concerns about delayed policy measures, we still believe China will lower its Reserve Requirement Ratio before the end of the year, thereby averting any dramatic decline in growth. And we expect a return to 7-8% growth in China next year (see *China Economic Outlook* page 13).

Financial market pricing seems to reflect this generally positive view of the global economy for 2013. As Figure 2 shows, financial market risk appetite has risen strongly despite soft leading economic indicators. We do not believe that markets will be badly disappointed over the next few months. However, any unexpected shocks could, once again do considerable harm to markets.

In addition to any deterioration in the euro zone, other sources of shock could be escalating tensions in the Middle East or worsening territorial disputes in East Asian waters. These 'unforecastables' will also be a feature of the global scene. The core economic and financial dynamics do, however, seem to be improving.

Warren Hogan  
Chief Economist, ANZ

**FIGURE 2. ANZ RISK APPETITE SURGES DESPITE LOSS OF GLOBAL ECONOMIC MOMENTUM**



Sources: Markit, Thomson Reuters DataStream, Bloomberg

## US – FOMC PUMPS IN MORE LIQUIDITY

Since 2009 the US economy has struggled to get much momentum and has grown in fits and starts. The performance of the job market has been particularly disheartening, with limited progress made in draining the sizeable pool of underemployed workers. The US Federal Reserve Chairman, Ben Bernanke has for some time warned of the unpalatable economic and social costs associated with this situation if it is not remedied.

US GDP grew by 1.7% saar (seasonally adjusted annualised rate) in Q2 2012 slightly down on Q1 2012. Private consumption grew at 1.5% saar, the slowest pace since Q2 2011. The easing largely reflected weaker motor vehicle sales following very strong demand in the previous quarter. Investment in housing rose sharply (up 9.7% saar) following an impressive increase in the previous quarter (20% saar). The housing recovery looks encouraging, with recent contributions to growth above long-run trends. Business investment continues to provide solid support to the economy, while the government remains a drag with public spending declining for an unprecedented eight straight quarters.

We expect US GDP to grow by around 2.0% saar in Q3 2012 and slightly more the following quarter. The current and expected pace of growth isn't sufficient to make meaningful inroads into an elevated unemployment rate. Indeed, in recent times non-farm payrolls have been sluggish, averaging just under 90k m/m in the last five months (to August), while the unemployment rate has been relatively static at just over 8.0%. Partial labour demand indicators aren't pointing to an improvement anytime soon.

As a result of ongoing sluggish job creation, the Federal Open Market Committee (FOMC) decided to deliver a suite of easing measures on 13 September.

1. The timing of the first hike in the Fed Fund rate was pushed back to mid 2015 (from 2014).
2. A new open-ended asset-buying program targeting mortgage back securities (MBS) at a pace of USD 40bn/month was introduced. This will be run in conjunction with the maturity extension program which is buying longer-dated UST at a pace of USD 45bn/month until the end of 2012.
3. Policy will be kept highly accommodative for a 'considerable time after the recovery strengthens'.

### THINGS TO WATCH

The FOMC wants a substantial and sustained improvement in the labour market and is prepared to keep easing until it gets what it wants.

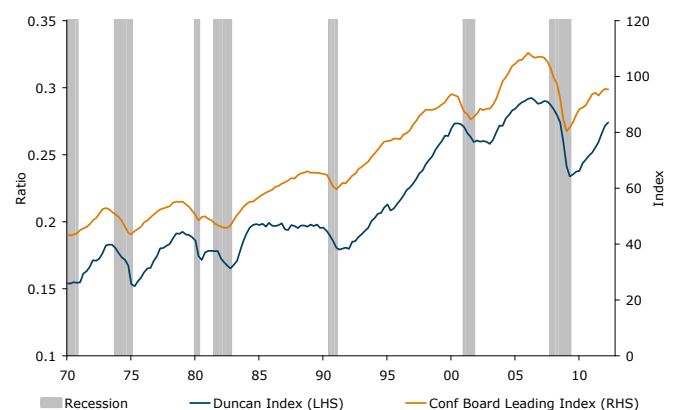
Japan's economy is set to slow in H2 2012 amid softer domestic demand and external weakness, which is feeling the pinch from yen strength.

Europe is making slow but steady progress on reform. That said, growth prospects remain glum.

The last point highlights that the FOMC will be prepared to keep policy easier for longer than past traditional rules may have implied. Indeed, the central bank looks set to keep buying until there has been a substantial and sustained improvement in the labour market. This suggests that the central bank may be happy to tolerate a little more inflation to ensure that the recovery takes off.

It's notable that the FOMC action is about generating an even faster expansion, not a reaction to weakening prospects. While some commentators believe that the US is closer to recession, a couple of lead indicators we watch closely do not support that concern. In particular, the Duncan lead indicator (which looks at the relative strength of the cyclical components of growth – durable household spending and private sector investment) suggests that the economy has reasonable momentum. This index has had a good track record in predicting downturns (Figure 1). Another lead indicator with a reasonable track record is the Conference Board. Although this index isn't as encouraging as the Duncan index, it isn't foretelling a recession.

FIGURE 1. US LEAD INDICATORS OF ACTIVITY



Sources: Bloomberg, ANZ

In our opinion, the foundations are falling slowly into place for a reasonable US recovery. Foremost, significant progress has been made on balance sheet repair across a number of sectors. In particular, a number of key household balance sheet metrics (eg debt to income, gearing and debt servicing ratios) are at levels not seen since the mid to late 1990s.

There are also encouraging signs that the housing sector is gaining traction and building momentum. In particular, the NAHB Builder index (which provides a good lead on housing starts) has risen sharply in 2012 and in September the index was standing at 40, the highest since mid 2006. In addition, housing starts (a precursor to residential construction activity) are up nearly 30% y/y in August 2012. A recovery in housing should spawn new jobs and ensure a more substantial, sustained, broad-based pick-up in the US recovery.

Perhaps the most promising sign is evidence that nominal house prices may have bottomed. After bottoming in February, prices (as measured by Core Logic), increased by 3.8% y/y in July 2012, the fastest pace since September 2006. Core Logic reports that gains are broadly based across geography. House prices have a significant influence on the macroeconomy through a number of channels, including on consumption (via a wealth effect), collateral and confidence.

There are a couple of hurdles standing in the way of a sustainable housing recovery, namely: lending standards for mortgages remain restrictive; and, there remains a sizeable amount of housing inventory outstanding.

However, these problems seem set to diminish in stature. First, rising house prices may induce easier lending criteria as banks will be more willing to provide finance if the value of an underlying asset is appreciating rather than depreciating. Second, recent data highlight that both conventional stock (ie unsold new homes) and shadow inventory (eg distressed property) are falling. The latter is likely partly attributable to rising house prices as the proportion of mortgages with negative equity is falling.

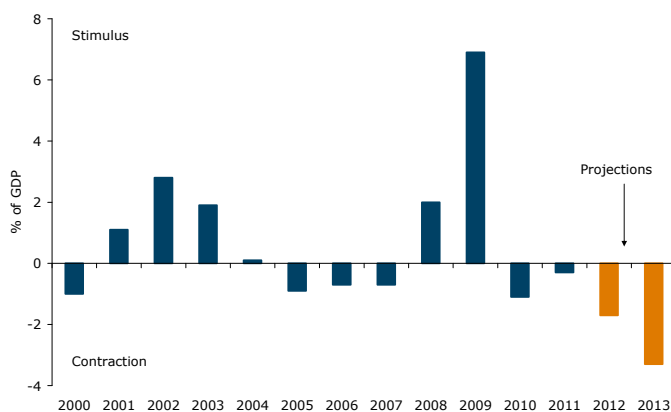
Perhaps the biggest threat to the US economy is fiscal policy. According to the Congressional Budget Office (CBO) the economy could slide into recession in early 2013 if legislated fiscal measures take place. At the end of 2012 a number of stimulus measures are set to expire, including: the 'Bush' tax cuts; payroll tax cuts; and benefits for long-term unemployed. This is due to occur alongside the 'sequestered' cuts to government spending as specified in the Budget Control Act — around USD1trn in cuts will be applied over 10 years. The sequestered cuts were drafted as part of the deal struck to raise the US government's fiscal debt ceiling in August 2011.

The CBO estimates that these policy changes will reduce the Federal Budget deficit to USD641bn in 2013, about USD500bn below the 2012 deficit. This represents a contraction of 3.3% of GDP (Figure 2). The greatest impact is expected to take place in early 2013. It's highly unlikely that all of the above-mentioned measures will take effect. Thus the fiscal drag next year could be anywhere between 0 to 3.3% of GDP. The worst case scenario is popularly referred to as the 'fiscal cliff'.

If the worst case scenario occurs, it would be one of the largest fiscal contractions in US history. In a European context, perhaps only Spain and Greece will experience a harsher fiscal retrenchment program. Needless to say, these economies are among the worst performing in the euro zone (EZ), both beset by sizeable recessions and elevated unemployment rates (over 20%).

Although the 'fiscal cliff' scenario is unlikely to eventuate, the fiscal road ahead may be volatile. Recent polling shows that President Barack Obama (Democrat), is likely to succeed for a second-term in the 6 November elections, while the Republicans would retain the balance of power in Congress. Such a scenario would make legislation problematic. It's also possible we could get a repeat of the unwelcome political wrangling that occurred in mid 2011 when the government tried to lift the debt ceiling. The government is expected to bump up against its legislated debt ceiling late this year or early next.

FIGURE 2. FISCAL IMPULSE (CONTRIBUTION TO GDP)



Sources: CBO, ANZ



## JAPAN – GROWTH PROSPECTS WANE

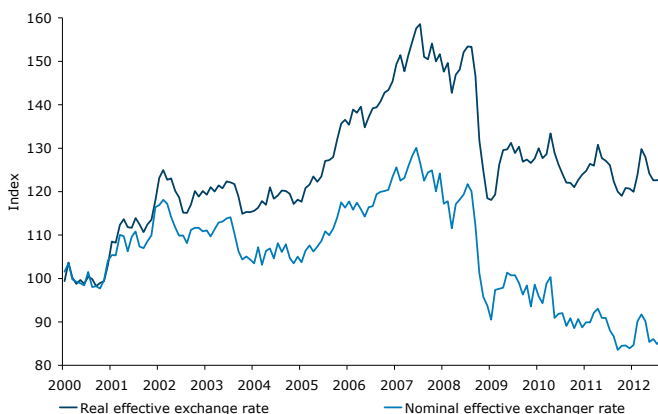
Japan's economy performed solidly in H1 2012, albeit growth was uneven with 5.5% saar in Q1 2012 and 0.7% saar in Q2 2012. This was the best outturn of any of the G7 economies. This reflected strong auto sales (related to government subsidies to spend on eco cars) and ongoing reconstruction spending in the wake of last year's devastating earthquake and tsunami.

Economic growth is set to slow in H2 2012 amid softer domestic demand (largely household) and external weakness. Spending related to reconstruction should remain solid. Recent industrial production data suggest GDP may contract in Q3 2012. Industrial production fell by 1.2% m/m in July and is expected to fall further over August and September.

There has been a lot of focus on the performance of the traded good sector in recent times. In July, Japan recorded its 17<sup>th</sup> straight monthly trade deficit. The current account balance was just ¥1.3trn (or 1.1% of GDP) in Q2 2012, the smallest surplus since 1997. Weakening exports are the main factor behind the shrinking surplus with receipts sapped by yen strength and cooling external demand, particularly from Europe and China.

In a speech on 6 September, the Bank of Japan Governor (BoJ) Shirakawa noted that yen strength was having a negative impact on Japan's economy, particularly on exports, corporate profit and sentiment. He highlighted two main factors for the appreciation of the local currency since 2009: the unwind of the yen carry trade as rates went to zero elsewhere after the collapse of Lehman's, and safe-haven flows.

**FIGURE 3. YEN - REAL AND NOMINAL EFFECTIVE EXCHANGE RATE**



Sources: Bank of Japan, ANZ

However, Shirakawa questioned why the rising yen is a big negative for Japanese exporters. First, he highlighted that in real terms the yen hasn't changed much — since early 2009 the yen has appreciated by over 25% (against the USD), in nominal terms but is little changed in real terms (Figure 3). This suggests that Japanese exports have not endured that much of a loss in competitiveness. Second, he said that an appreciating currency need not necessarily result in reduced demand for exports. On this point, he compared the recent performance of Switzerland and Japan. The former country has had an even more marked rise in its currency relative to Japan, yet its exports have outperformed by a sizeable margin.

BoJ remains focused on overcoming deflation and returning growth to a sustainable path with price stability. At present the central bank is pursuing its comprehensive monetary easing strategy. This has two main elements: the pursuit of zero interest rates until price stability is achieved (1% y/y); and, an asset purchase program.

In its latest asset buying program (initiated in October 2010) the BoJ has purchased around ¥60trn, with another ¥20trn to be purchased by December 2013. The central bank most recently expanded its program by ¥10trn on 19 September in response to a weaker external sector. The move was also likely aimed at limiting further upward pressure on the currency from recent easing measures from other major central banks.

In June the government announced plans to lift the consumption tax rate from 5% to 10%. The move is aimed at partially addressing Japan's chronic fiscal problems. The increase will be levied in two stages (a 3% increase in April 2014, and a 2% rise in October 2015). The lift in the consumption tax rate will have both temporary and permanent impacts on spending — there is the volatility (ie bring forward) around the timing of increase and the lasting reduction in spending due to reduction in disposable income.

There is concern that raising the tax may cause Japan's economy to fall into recession, particularly if growth is fragile at the time of the introduction. The last time the government lifted the tax rate in 1997 the economy fell into recession. Although the circumstances are different now, the government has said it is prepared to delay implementation if the economy is not ready.

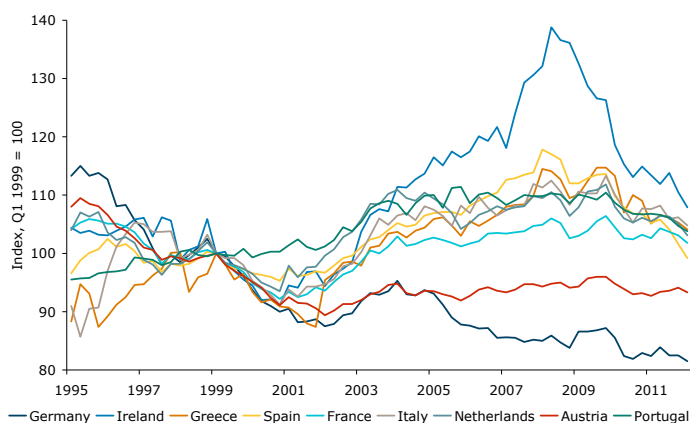
## IS EUROPE FINDING A BASE?

The EZ is showing tentative signs of emerging from crisis. Developments in macro momentum, policy decisions and structural change have all been achingly slow, but the improvement is evident: the growth slow down looks to be finding a base; a comprehensive rescue package is being cobbled together; and structural improvements are slowly coming to fruition. While there remains much to do, the risk of an EZ implosion has certainly eased.

Conditions in the EZ are recessionary: GDP contracted by 0.5% y/y in Q2, with domestic demand remaining very weak and the unemployment rate reaching a new high of 11.3% in July. The recent data shows the purchasing manager's indices are consolidating at levels consistent with activity contracting. There was a modest improvement in both lending conditions and demand for credit in Q2 2012 but demand remains very weak and consistent with contractionary conditions.

From a longer-term perspective there are some encouraging signs that much needed structural adjustment is occurring. In particular, there has been an improvement in peripheral EZ labour cost competitiveness (Figure 4). However, there is still some way to go given the gaping divide between the majority of the EZ and Germany. In addition, recent developments in the trade balances of many peripheral economies suggest that structural change is occurring. Indeed, the trade deficit has narrowed for many, with Italy a standout. That said, this has been primarily driven by falling imports amid soft domestic demand, with export growth remaining sluggish. Thus some of this improvement is cyclical rather than structural.

FIGURE 4. EZ UNIT LABOUR COST COMPETITIVENESS



Sources: ECB, ANZ

Although the structural adjustment process is evolving, more is still required. Wage restraint remains a priority for the periphery, while the core should consider a higher pace of inflation. All countries need to further liberalise their labour markets – reform is needed across and within borders to enhance the responsiveness of labour to demand and price signals. Problematic government debt and deficits are also slowly being addressed: while fiscal consolidation is required in the medium to longer-term, the policy leadership is beginning to realise the need for austerity to be loosened to encourage growth to return.

Notable progress has also been made in terms of a rescue package for the EZ over the past quarter. Primarily, the ECB's sovereign bond buying policy, dubbed Outright Monetary Transactions (OMT), was a major step. This will help cap a struggling state's sovereign bond yields from rising too high on the condition that it is attached to either a macroeconomic adjustment program or precautionary program. The ECB is prepared to purchase an unlimited sum of bonds with a 1-to-3 year maturity and will terminate the OMT on completion of the program or if a country breaches the conditions of the program. The ECB's purchases will not have seniority (like they did in the Securities Market Program) and will be sterilised. Thus far, news of the OMT program (without actual ECB buying) has seen Spanish and Italian bond yields move materially lower.

Other encouraging developments include:

- > The German Constitutional Court ruled in favour of the German Parliament's ratification of the European Stability Mechanism (ESM). The ESM may now be up and running in October a few months behind the planned July start.
- > A proposal for an EZ-wide banking union has been put forward. This recommends a 'single supervisory mechanism' (the ECB) to oversee the EZ banking system. This is a vital step if the ESM is to be allowed to directly recapitalise EZ banks. This would help break the troubling nexus between sovereigns and banks which has been hindering stability and growth.

While there have been some positive activity and policy developments, prospects for growth remains poor. In the near-term, there is at least one more quarter of negative GDP growth on the cards. We expect GDP to contract by 0.5% in 2012 and grow at a lacklustre 0.7% in 2013.

*Tom Kenny*  
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Senior Economist, Global Economics & Strategy

# AUSTRALIA OUTLOOK

## ECONOMY AND POLICYMAKERS FACE SIGNIFICANT CHALLENGES

Australia's economy and policymakers face substantial challenges over the next few years from lower commodity prices and a composition of growth that, in our view, will be less conducive to generating employment. At the same time the responsiveness of the economy to policy stimulus may have waned.

We expect the unemployment rate to drift higher as much slower national income growth squeezes businesses' profitability and hiring and also creates tighter fiscal positions. The policy mix is already moving towards more accommodative monetary policy and tighter fiscal policy. We expect this to continue, with the likelihood that the RBA maintains an easing bias after delivering further interest rate cuts in coming months.

Looking backwards, the Australian economy has performed relatively well since the financial crisis despite facing many challenges. Strong growth in emerging economies, particularly China, has benefited resources and related sectors, while other sectors have endured softer conditions, largely due to the stronger Australian dollar and a return to rates of credit growth that are more in line with long-run norms.

In particular, while employment in mining and the services parts of the economy have expanded over the past three years, 'goods' sectors and construction have shed jobs (Figure 1). Nevertheless, the net effect of the different conditions experienced in the economy has resulted in Australia's unemployment rate so far remaining at a low level, albeit with recent labour market conditions softer than indicated by the jobless rate.

### THINGS TO WATCH

**Commodity prices and the AUD.** If the AUD remains high and bulk commodity prices stay relatively low, this will weigh on Australian economic activity.

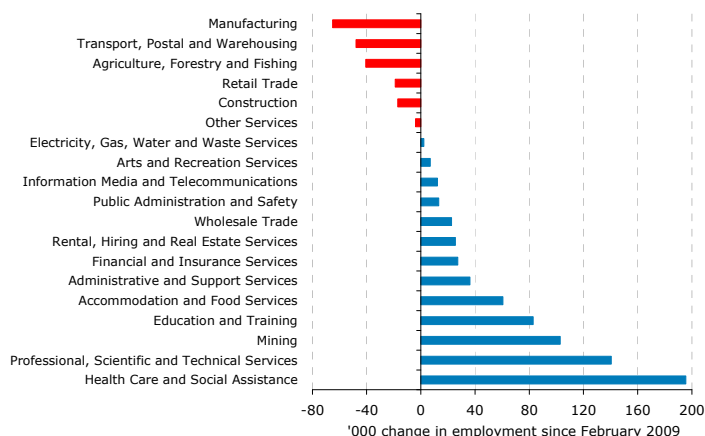
**Labour market data.** The labour market is currently softer than indicated by the unemployment rate. We are watching ANZ Job Ads<sup>1</sup> closely as they have already fallen in each of the past five months.

**Further government cutbacks.** The policy mix is leaning towards additional monetary easing amid a tighter fiscal stance.

This year, however, the global economic backdrop has deteriorated once again, with risks to global growth firmly skewed to the downside. Of particular relevance to Australia has been the slowing in the Chinese economy, which has been more protracted than previously expected, in part due to reluctance among Chinese policymakers to significantly loosen policy amid the current leadership transition and to avoid property prices re-accelerating.

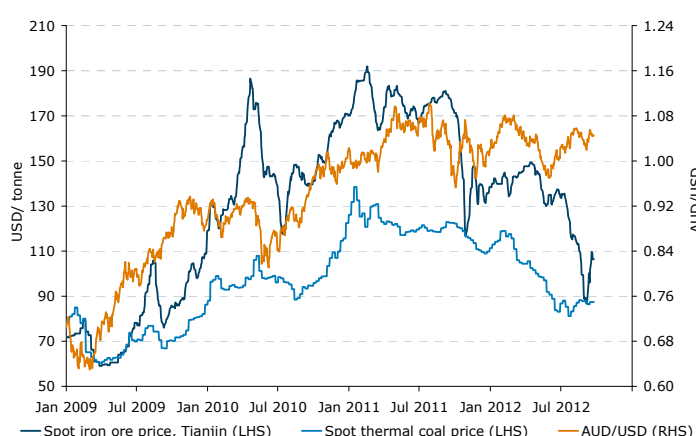
One implication of this has been sharp falls in the prices of commodity exports important to Australia – iron ore and coal. Concurrently, the Australian dollar has remained at a high level such that it is not playing its typical cushioning role, at least so far, and profits of Australian miners are being squeezed (Figure 2).

FIGURE 1. EMPLOYMENT GROWTH BY INDUSTRY



Source: ABS

FIGURE 2. AUD/USD AND BULK COMMODITY PRICES



Source: Bloomberg

<sup>1</sup> The ANZ Job Advertisement series measures the number of jobs advertised in the major daily newspapers and internet sites covering the capital cities each month.

# AUSTRALIA OUTLOOK

Our central forecast is for Australia’s terms of trade – the ratio of export to import prices – to return to around its pre-crisis level. While this is still high, it will no longer be increasing as it did for much of the past decade. Our view is that this will mean that Australia’s real income growth – ie GDP growth adjusted for the terms of trade – over the next few years will be, on average, at best half the rate experienced during the run up in the terms of trade (Figure 3). As a result, economic activity is likely to feel relatively sluggish. Moreover, there is a risk of even stronger adverse flow-on effects throughout the economy from the shift to slower real income growth.

The changing composition of economic growth in Australia is also likely to pose significant challenges for policymakers (Figure 4). Despite some recent mining project delays, we are confident that the outlook for growth in business investment is robust over the next 18 months or so due to the high share accounted for by a limited number of mega LNG projects, which are committed. This changing composition of investment towards LNG, however, also suggests that a higher share of total investment spending will leak from the economy as these projects tend to have a higher import component than other types of mining investment.

And after business investment peaks (as a share of GDP), sometime in 2013-14, the resulting ramp up in exports is likely to be less labour intensive than the current investment phase of the mining boom. Additionally, the relatively high foreign ownership shares in the LNG industry will ensure that a reasonable share of the profits from sharply higher LNG exports will flow to foreign investors (although government revenue will also receive a boost).

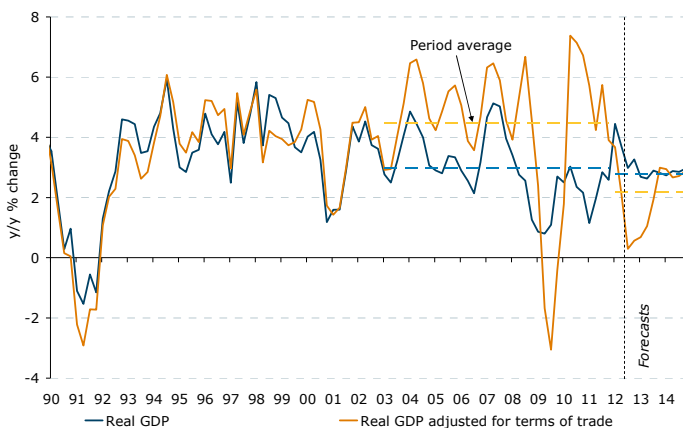
At the same time, however, our view is that dwelling and non-mining investment will strengthen from their current weak rates. In particular, dwelling investment is currently at very low levels in Australia and current fundamentals – strong net immigration and improving affordability and rental yields – are conducive to stronger growth over the next few years.

We expect that this mix of output growth, coupled with weaker national income growth compared with most of the past decade and additional fiscal tightening, will see monetary policy carry an easing bias forward even after interest rates are lowered modestly in coming months.

This easing bias is also likely to be necessary, in our view, because those parts of the economy traditionally sensitive to interest rates will not respond to lower rates as aggressively as they did over the past decade or two. The key reason for this is that the appetite for debt, or ‘gearing up’, among households and businesses has generally waned significantly since the financial crisis. The days of double-digit credit growth for extended periods are gone and we should expect credit to grow more in line with the broader economy going forward.

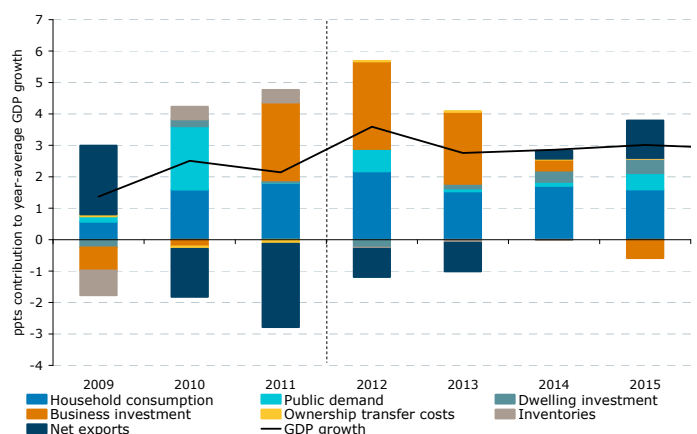
*Justin Fabo  
Senior Economist, Australian Economics*

FIGURE 3. TERMS OF TRADE EFFECT ON GROWTH



Sources: ABS, ANZ

FIGURE 4. COMPOSITION OF GDP GROWTH



Sources: ABS, ANZ

## GROWTH MOMENTUM WEAKENED FURTHER BY POLICY INACTION

China's August official PMI fell to below 50, the lowest in nine months, triggering more concerns about China's growth. A weaker than expected PMI and sluggish July and August activity data suggest that Q3 economic activity will remain lacklustre. In addition to this, China's domestic indicators and trade figures extended the recent feebleness in August (Figure 1).

### POLICY RESPONSES HAVE NOT INSTILLED MUCH CONFIDENCE

When forecasting China's growth at the start of the year, we believed that despite the external weakness and despite domestic demand being the main growth driver, the economy could start to rebound in the second or third quarter using proactive and consistent implementation of fiscal and monetary policies. However, fiscal policy implementation has been slow, monetary policy implementation has been inconsistent, and there was a switch of game plan. Instead of relying on consistent Reserve Requirement Ratio (RRR) cuts, interest rate cuts were issued after May and short-term reverse repos used to inject liquidity to the markets. In our view, these policy responses failed to instil confidence and deliver the intended results.

### FISCAL POLICY IMPLEMENTATION SLOWER THAN EXPECTED

Out of the 60% of central government budgeted spending items that we can track, less than 35% had been dispersed by end of May. It is not clear whether China is able to honour its ambitious public housing programme in 2012 as private property market investment has fallen sharply.

FIGURE 1. LATEST MONTHLY DATA DISAPPOINTED

y/y	August	Prior	Consensus (Median)
Exports	2.7	1.0	2.9
Imports	-2.6	4.7	3.5
Trade surplus (USD bn)	26.7	25.2	19.5
Industrial production	8.9	9.2	9.0
Fixed asset investment YTD	20.2	20.4	20.4
Retail sales	13.2	13.1	13.2

Source: ANZ

### THINGS TO WATCH

We revised down China's GDP forecast to 7.8% from 8.2% previously, due to lacklustre July and August data. Notably, the Q3 GDP growth could be lower than 7.5%.

The policy response so far has not yet delivered the intended results. Encouragingly, the Chinese authorities appear to have accelerated the fiscal programmes lately.

We maintain our view that the People's Bank of China (PBoC) will need to inject permanent liquidity to the banking system, equivalent to RRR cuts of 150bps for the remainder of this year.

Although the central government had allocated 15% more to public housing construction than last year, less than a quarter of the budgeted CNY402bn had been spent by end of May. Similarly, for the funds allocated to education (CNY1.8trn) and the rural sector (CNY1.1trn), less than 35% and 33% had been spent by end of May (Figure 2).

Demand for steel and other heavy industry products fell sharply as public investment remained weak and private property investment also fell sharply due to market control policies (Figure 3). Steel prices collapsed and fell to their lowest in 32 months. As heavy industry makes up around 65% of China's industrial output, a depressed housing and infrastructure market suggests a significant rebound in economic activity would be difficult. However, fiscal implementation figures at end July were encouraging and suggest the central government has sped up funding dispersal. On average, over 54% of the central government budget has been spent, a significant improvement over the end of May number (Figure 4).

Many have argued for another fiscal stimulus package to boost growth. We believe further fiscal stimulus is not needed. Assuming 20% fixed asset investment growth this year, which was exceeded in H1, China's investment program will end the year at around CNY27trn. Our view is that as long as this huge fiscal program can be implemented, investment alone can contribute to 4-5 ppts of GDP. A successful implementation will also depend on China's monetary policy implementation and monetary conditions, a topic we turn to next.

# CHINA OUTLOOK

## INTEREST RATE CUTS HAVE NOT BROUGHT DOWN FUNDING COSTS

After two RRR cuts, with the last in May, the PBoC changed tack and started to cut interest rates in June and July. By looking at all short-term monetary market rates, it seems the interest rate cuts so far have failed to bring down the cost of funds. In fact, market interest rates surprisingly increased after the first rate cut on 8 June. All short-term interest rates are now much higher than those before 8 June, except for the 3-month SHIBOR rate (Figure 5).

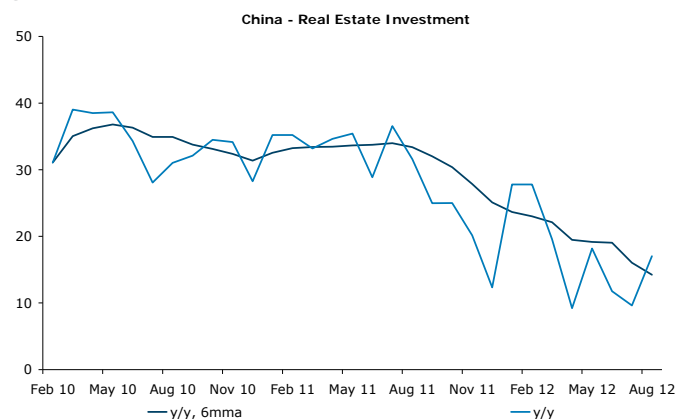
For example, government bond yields rebounded significantly after the two rate cuts (Figure 6). Even more troubling, not only have the two interest rate cuts failed to achieve their intended results, they have rekindled the rise of property prices. Given consumers expect that mortgage rates will be cut next year, the interest rate cuts have boosted property prices and nullified the effect of the property control policies.

FIGURE 2. CENTRAL GOVERNMENT BUDGET IMPLEMENTATION BY THE END OF MAY

	January -May Spending (CNY, bn)	Share of total expenditure to be allocated	2012 Target (CNY bn)
Education	608	34.0	1790.0
Culture & Media	56.0	28.4	197.1
Medical Care	235.8	32.5	726.4
Social Insurance	541.9	43.8	1236.7
Public Housing	99.7	24.8	402.4
Rural Sector	353	32.6	1081.6
Community	313.9	36.6	858.6
Transportation	256.6	32.9	779.0

Sources: MOF, ANZ

FIGURE 3. PROPERTY INVESTMENT GROWTH SLOWED SHARPLY



Sources: CEIC, ANZ

FIGURE 4. CENTRAL GOVERNMENT BUDGET IMPLEMENTATION BY THE END OF JULY: A SIGN OF IMPROVEMENT

	January -July Spending (CNY bn)	Share of total expenditure to be allocated	2012 Target (CNY bn)
Education	932.6	52.1	1790.0
Culture & Media	92.5	46.9	197.1
Medical Care	366.2	50.4	726.4
Social Insurance	751.7	60.8	1236.7
Public Housing	202.9	50.4	402.4
Rural Sector	537.6	49.7	1081.6
Community	489.3	57.0	858.6
Transportation	445.2	57.2	779.0

Sources: MOF, ANZ

FIGURE 5. TWO RATE CUTS AND REVERSE REPO OPERATIONS HAVE NOT LOWERED THE COSTS OF FUNDS

	5 July to Present	8 June to 5 July	One month before 8 June
Overnight SHIBOR	2.70	2.88	1.99
7-day repo	3.42	3.55	2.65
1-month SHIBOR	3.55	3.76	3.11
3-month SHIBOR	3.71	4.07	4.34
1-year government	2.44	2.26	2.31
1-year IRS	2.76	2.58	2.65

Note: the PBoC cut the policy rates on 8 June and 5 July, respectively.

Sources: Bloomberg, ANZ

# CHINA OUTLOOK

## REVERSE REPO OPERATIONS HAVE INJECTED LITTLE LIQUIDITY INTO THE BANKING SYSTEM

Since June, the PBoC increased the use of open market operations by relying mainly on reverse repos to ease market liquidity conditions. The central bank injected CNY344bn into the money market in August, the highest in 14 months and almost equivalent to a 45bps RRR cut (Figure 7).

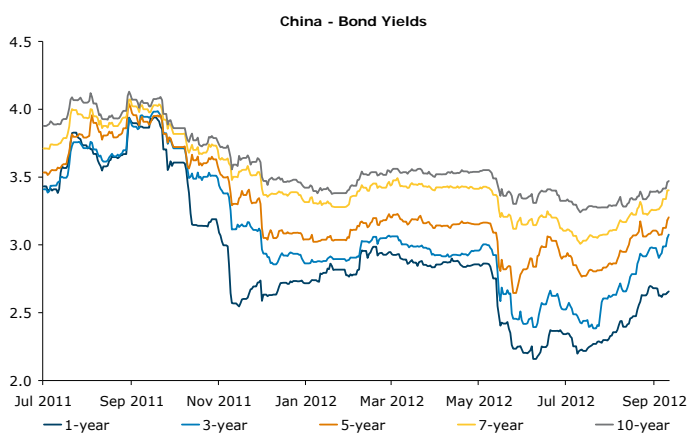
Though such operations can inject liquidity into the market quickly, they are very short-term in nature, usually lasting 7 to 14 days. From the banks' point of view, it is difficult to lend out long-term loans if the liquidity injected will have to be repaid within two weeks.

In addition, the 7-day repo rate remained sticky at 3.3-3.9% in August, compared with the one year benchmark deposit rate of 3.0% (Figure 8). This means that it is better to lend money in the money markets and get a decent return, than lend money to the real economy and be exposed to corporates' rising credit risk in a downward economic cycle.

Given the short-term nature of the liquidity injection, we have not seen any relief in the credit market. Indeed, the rise in market interest rates also proved that the supply of reverse repo cannot meet the market demand.

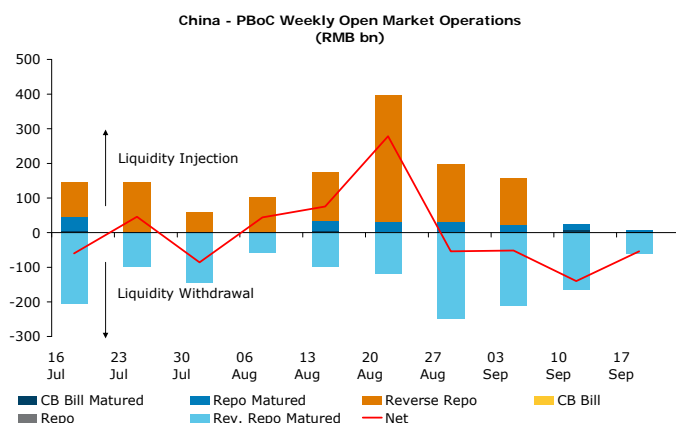
Furthermore, the markets are not yet convinced that such a policy operation mode will be here to stay as the PBoC has not been forthcoming in managing market expectations. Because of the uncertainty, banks are basically waiting on the sidelines and have refrained from lending to corporates. Thus, Chinese corporates still find it difficult to get sufficient credit support from the commercial banks.

FIGURE 6. BOND YIELDS ALSO REBOUNDED



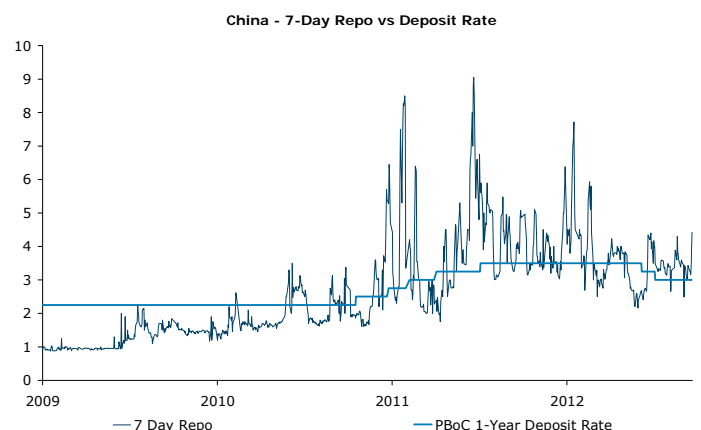
Sources: Bloomberg, ANZ

FIGURE 7. PBOC CONDUCTED REVERSE REPO OPERATIONS TO INJECT LIQUIDITIES



Sources: CEIC, Bloomberg, ANZ

FIGURE 8. 7-DAY REPO RATES HIGHER THAN THE BENCHMARK ONE-YEAR DEPOSIT RATE



Sources: CEIC, Bloomberg, ANZ

# CHINA OUTLOOK

## POLICY UNCERTAINTIES MEAN INCREASED DOWNSIDE RISK IN Q3 AND Q4

Given the policy response lag, we believe a cyclical rebound will be postponed further, possibly leading to lower than expected Q3 and Q4 economic growth. Therefore, we have decided to lower our growth outlook further for the rest of the year.

- > We lower China 2012 GDP forecast to 7.8%, from 8.2% previously (Figure 9). This means that the economy is expected to grow 7.4% and 7.9% y/y in Q3 and Q4 respectively. While the q/q growth could improve somewhat in Q3 and Q4, it is not able to drive the economy to above 8% due to a high base last year.
- > Inflationary pressures should remain subdued this year, but the momentum could pick-up in Q4 due to rising food and rental prices. So we maintain our CPI forecast at 3.0% for 2012 (Figure 10).
- > Note that these forecasts still hinge on further monetary policy easing. We maintain our view that the PBoC will need to inject liquidity permanently to the banking system, equivalent to RRR cuts of 150bps by year-end, to encourage commercial banks' credit expansion. We think the likelihood of further policy rate cuts is minimal as that would only increase the risk of property prices rebounding.

- > As China's exports could perform worse than expected and global bulk commodity prices have fallen sharply, we think the RMB will not appreciate against the USD this year, and will trade within 6.30-6.35 band for the remainder of the year.
- > The risk of our GDP forecast is biased to the downside. If the PBoC were to refrain from further RRR cuts, the risk of a sharp deceleration of growth will only increase. If this happens, China's growth rate could fall below 7%, raising the risk of a hard landing scenario. Chinese corporates' profits could then be squeezed further due to weak final demand, potentially raising levels of non-performing loans and increasing overall risk of the banking system.

*Li-Gang Liu*  
Chief Economist, Greater China

*Zhou Hao*  
Economist, China

FIGURE 9. GDP GROWTH COULD PICK-UP MODESTLY IN Q4



Sources: CEIC, ANZ

FIGURE 10. INFLATION WILL REMAIN SUBDUED



Sources: CEIC, ANZ



# EMERGING ASIA OUTLOOK

## EMERGING ASIA: Q3 REBOUND R.I.P

We have closed the book on a Q3 recovery in Emerging Asia. The much anticipated rebound failed to materialise in almost every country. Ever hopeful, we have pushed out our recovery start date to Q4, but recognise that risks remain on the downside. In our view, the cause was weak global growth and confidence stemming largely from developments in Europe. The resulting uncertainty has put a damper on activity, trade in particular, throughout Emerging Asia. Interestingly, Q3 has seen a moderate return of 'risk on' following a 'risk off' Q2 despite the weak data flow. Given the above, what should we be watching?

### ALL INDICATORS STILL HEADING SOUTH

The best term to describe data flow in the past two quarters is 'lifeless'. To use a flight analogy, none of the engines of the plane are running near full force.

Trade growth continues to fall steadily across the region, and exports are now contracting outright in most economies (Figure 1). By destination, shipments to Europe consistently underperform those to the US and within Asia. Investment growth has declined steadily and Purchasing Managers' Indices have declined for five straight months (Figure 2). The investment slow down has been most notable in trade dependent economies where the linkage between exports and investment is strongest. Finally, consumption continues to fall as well. But it represents a modest share of GDP in key economies, so it is typically not a large contributor to growth.

### THINGS TO WATCH

Trade continues to contract across the entire region. Put simply: no trade, no growth.

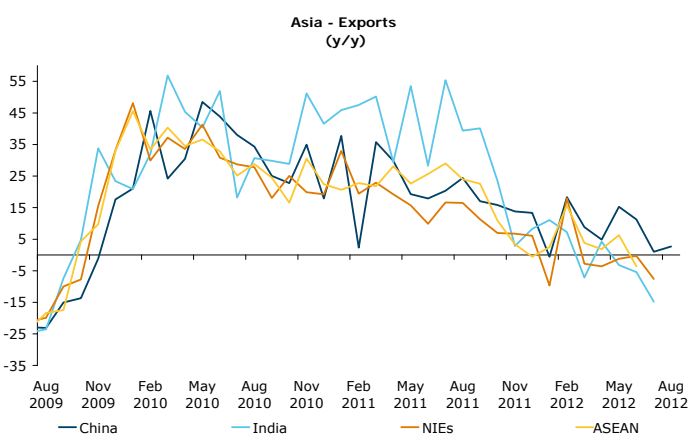
Capital inflows and ongoing weak macro data strike us as inconsistent. Which one will give?

Will the pace of policy easing pick-up? Authorities have been quite conservative on both fiscal and monetary fronts so far.

That is not to say that the region has no bright spots. 'Low beta' economies such as Indonesia and, increasingly, the Philippines and Malaysia, have seen growth hold up well. These economies are largely domestic driven (Indonesia) and/or have growth sources that largely insulate them from growth shocks (business processing operations in the Philippines, and capital and infrastructure spending in Malaysia). We are also encouraged by the recent positive moves to liberalise the foreign investment regime in India.

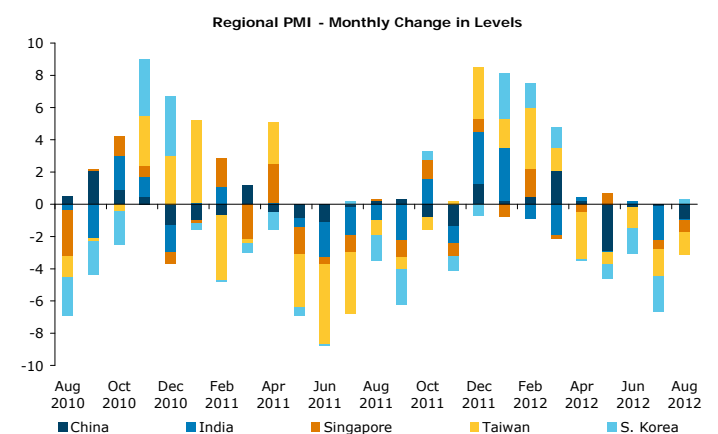
In contrast to the gloomy activity picture, markets have been relatively upbeat. Q3 has seen almost uninterrupted capital inflows into Emerging Asia, resulting in higher asset prices and lower CDS sovereign spreads. Consequently, AXJ currencies have been reasonably strong with most appreciating against the USD, driven by the usual risk-on leaders such as the Singapore dollar, Korean won and Malaysian ringgit, plus the new member: the Philippine peso (Figure 3).

FIGURE 1. EXPORTS REMAIN LIFELESS



Sources: CEIC, ANZ

FIGURE 2. PMIS CONTINUE TO SINK



Sources: CEIC, ANZ

# EMERGING ASIA OUTLOOK

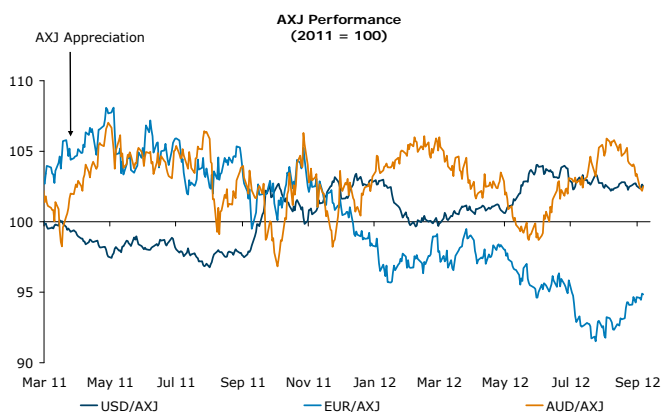
## WHAT WILL TURN THINGS AROUND?

Our recovery scenario for Emerging Asia remains dependent mainly on a pick-up in US and Chinese growth. The US remains a key driver of Asian production and, as reported in the previous *ANZ Research Quarterly*<sup>1</sup>, China is becoming an important driver of growth in the rest of Asia as well. Overall, we see Asia Pacific (less Japan) growth slowing from 7.2% in 2011 to 6.2% in 2012 (see *GDP Forecasts* page 47).

The best we can hope from Europe is that it will 'do no harm'. Europe remains Emerging Asia's largest trading partner, but we do not see it as a meaningful driver of production in the region in the near-term as demand will remain soft. The most important factor is market stability and here a reduction in uncertainty around the future of the euro zone, as well as the exit strategy, will help to spur consumption and investment. Arguably this reduction in uncertainty is occurring now as explained in our G3 Outlook (see Page 7).

Emerging Asia's policy response to slower growth will play an important supporting role. Policy makers have been slow to cut rates further, with only the Bank of Korea (July, September) and Bangko Sentral ng Pilipinas (July) cutting rates in Q3. Although output gaps have opened up in many economies and could widen as growth continues to run below potential, core inflation remains relatively high and could cause monetary policy makers to be cautious (Figure 4). Indeed, we continue to expect the majority of Emerging Asia's central banks to be on hold over the next few quarters. There is ample fiscal policy space as well and it has been used sparingly to date for combating slower growth.

FIGURE 3. RISK ON? USD/AXJ DRIFTING LOWER



Sources: CEIC, Bloomberg, ANZ

<sup>1</sup>ANZ Research Quarterly Issue 8 Q2 2012

## RISKS: GENERAL AND SPECIFIC

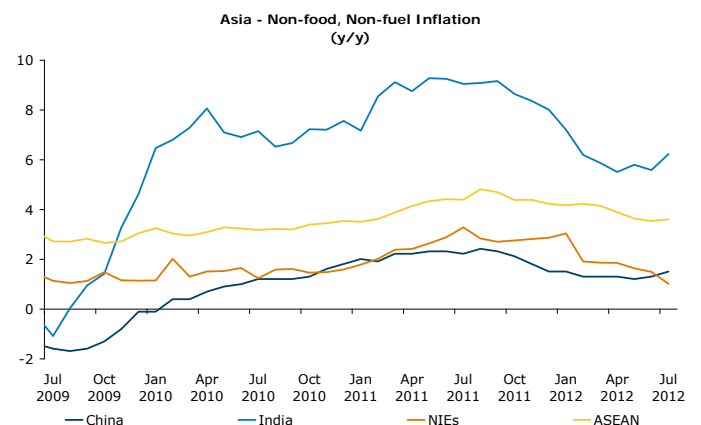
The main risk to our forecast remains the external environment and the biggest source of risk is the euro zone. Should market stresses flare up again in response to lack of policy action surrounding the ongoing debt crisis, the knock-on effects on Asian growth would be felt across the board. In our view, US and Chinese growth pose a much smaller risk. If these fail to pick-up as envisaged, Emerging Asia would feel a less severe effect.

Finally, we would like to highlight a recent case of external risk and one banking sector risk in the region. Indonesia has run into balance of payments pressures in recent quarters. Whilst this economy tends to be relatively immune to swings in global growth, the flip-side is that its imports stay high as exports plunge when global growth slows, which puts pressure on the balance of payments and currency. Vietnam has a home grown challenge of addressing its growing bad loans problem, which is impairing the credit creation process and causing growth to slow below the authorities' comfort level.

On balance, given its relatively strong fundamentals and manageable risks, we continue to see Emerging Asia as relatively resilient and well-placed to withstand a protracted global slow down.

*Paul Gruenwald*  
Chief Economist, Asia-Pacific

FIGURE 4. CORE INFLATION IS NOT FALLING



Sources: CEIC, Bloomberg, ANZ

# NEW ZEALAND OUTLOOK

## FROM MACRO TO MICRO

The New Zealand economy continues to navigate four large events simultaneously: debt payback, rebalancing, the Canterbury earthquakes, and a terms of trade/Asia connectivity boost. At the same time there is a growing risk of a nasty fifth shock, via the global outlook.

The interaction of these shocks is resulting in mixed economic signals which will continue for some time. We've pencilled in around 2.5% growth over the next two years with an earthquake fillip assisting growth. A better national balance sheet is a precursor to a more pronounced upswing, but this will take time. Economic growth will be volatile and bumpy, and in such an environment, microeconomic factors (management, leadership, governance, strategic ability) will come to the fore as key differentiators for business.

### CONSTANCY

**The interaction of five shocks is still the key theme in our economic view.** These shocks are causing huge tensions across the New Zealand economy, and include:

- > A wobbly global scene;
- > Fixing the national balance sheet (deleveraging);
- > Rebalancing – a shift from spending-centric growth to a model that is dominated by investment and exports;
- > A positive (but receding) income shock from commodity prices and increasing connectivity with the faster growing Asia region; and
- > Seismic events – rebuilding New Zealand's second largest city.

**These events are colliding with typical cyclical influences** such as easier monetary policy, which would normally be leading to a strong rebound as the more cyclical sectors recover from low levels. At the same time, a number of economies are 'exporting' their own problems via currency weakness, and this is delivering a mix of monetary conditions that is less than ideal.

In the absence of clear macroeconomic trends, and confronted by **mixed economic signals, a firm's microeconomic foundations become more important as a determinant of success or failure.** A lot of businesses can hide and be shielded in a strong performing economy. In a patchy environment, poor management, limited leadership, weak governance and a lack of strategic foresight can be exposed. The converse also applies for these dynamics. That is, a business can perform strongly in a patchy environment where its peers

### THINGS TO WATCH

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

The prospective rebuild in Christchurch. Activity is lifting but critical mass is a 2013 story.

The Australian economy – New Zealand's largest export destination.

fail to recognise structural changes across the economy. Across most sectors we are seeing growing divergence in terms of performance, and the common denominator is microeconomics.

**Last year was dominated by a deleveraging headwind and we expect the same dynamic to be influential over the coming year.** Restoring a modicum of health to the national balance sheet is a prerequisite to any sustained cyclical upturn.

Still supporting the economy will be the high (but declining) terms of trade, steady (but not spectacular) labour income growth, and lower effective mortgage rates. With an effective borrowing rate just below 6 percent, **monetary policy is delivering stimulus by doing nothing**, given that some borrowing rates now sit around 5 to 5.5%.

**Financial conditions remain supportive**, although the **stimulus being imparted by low interest rates continues to be blunted by ongoing deleveraging** (Figure 1). The housing market is strengthening from cyclically low levels, but the flow-through to economic activity is reasonably muted. Credit growth remains subdued, with limited flow-through to consumer spending.

**Momentum is expected to slowly build over 2013, with further growth in private investment and a recovery in ex-primary exports**, although the latter is dependent upon the global scene stabilising. Growth in private consumption will remain modest as ongoing deleveraging and a patchy labour market recovery keep saving front-of-brain for households (Figure 2). Public sector deleveraging will also be in full swing.

# NEW ZEALAND OUTLOOK

We assume 2013 will be the year in which the pace of earthquake reconstruction steps up and gets critical mass. The damage to the nationwide capital stock is massive, at around \$30bn. **Earthquake reconstruction work, estimated at around \$20bn in 2011 dollars, will be a multi-year undertaking**, equivalent to 0.75% of GDP per annum over the next five to seven years.

There will be far-reaching implications for resource allocation within the economy, as reconstruction will take up resources that could have been used elsewhere. Natural disasters are inflationary. In the absence of OCR moves, **the sacrificial pawn must be consumer spending**. The economy cannot accommodate a consumption and building boom simultaneously, without the current account blowing out, resource pressures intensifying, and the RBNZ having to step in.

Abstracting from the multi-year boost to economic activity caused by earthquake reconstruction, **we expect a modest lift in base momentum with a sluggish trend growth rate as resources take time to respond to economic signals**. The combined headwinds of ongoing deleveraging, fiscal consolidation, a fickle global scene, and a less than ideal mix of monetary conditions will also temper growth.

**One of the key themes we have been emphasising for a while is the need for the New Zealand economy to rebalance**. This looks challenging over the next few years given global problems, the still-high NZD/USD, and the resource requirements of the Canterbury rebuild. Mother nature has been supportive in boosting primary sector production, but biological constraints limit how much more we can achieve in the short-term. Prospects for non-primary exports (particularly tourism) remain difficult given the elevated NZD and uncertain global outlook. A surge in the

NZD/AUD, which currently favours New Zealand exporters, would be most unwelcome.

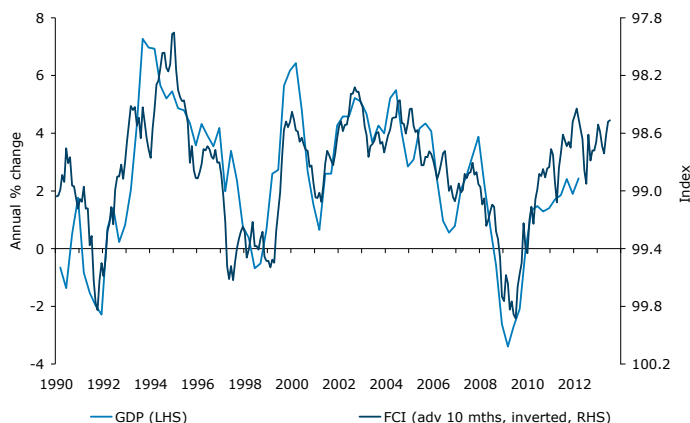
**The recovery so far has been considerably more muted than past cyclical recoveries, and we forecast this to continue**. By the end of 2015 the level of GDP will be around 10% above pre-recession peaks (Q4 2007). Per capita output will be just back to late 2007 levels.

**Our assessment is built around five key notions**. We continue to expect a sustained period of **heightened volatility**. We also expect the next few years to result in **disparate rates of sector performance**, as there will be winners and losers from this re-orientation of growth. There is **more downside risk than up**, though this is partly mitigated by NZ's macro framework and the shock-absorbers provided by a floating currency and NZD-denominated debt. The **trend rate** of growth for the New Zealand economy will be **subdued** for another five years.

Despite this, the **medium-term story for NZ.Inc remains strong**. This is built around New Zealand's emerging connectivity with Asia, the growth in consumerism across emerging markets, and a positive outlook in the medium-term for New Zealand's terms of trade. Moreover, in a world facing clear macroeconomic challenges, microeconomic differentiation will become increasingly important. This is manifesting itself via a mandate for fiscal austerity, lifting household saving and a real 'getting back to basics' attitude. A host of countries (notably Europe), are resisting, which will invariably make their adjustments more difficult.

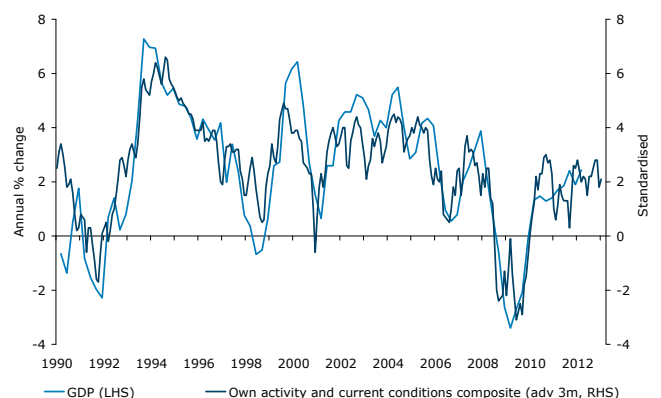
*Cameron Bagrie  
Chief Economist, New Zealand*

FIGURE 1. FINANCIAL CONDITIONS



Sources: Statistics NZ, ANZ

FIGURE 2. BUSINESS/CONSUMER CONFIDENCE COMPOSITE



Sources: National Bank, Statistics NZ, Westpac McDermott Miller, ANZ

# FOREIGN EXCHANGE OUTLOOK

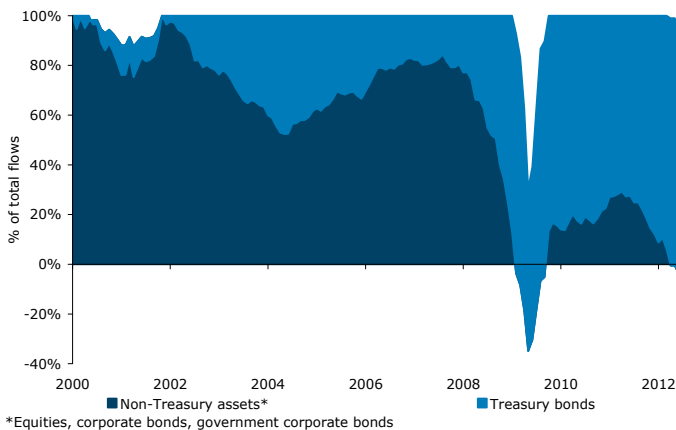
## DEFAULT DRIVES DIVERSIFICATION

This quarter's document is being put together at a particularly sensitive time. As we go to print currencies are being driven by a powerful combination of upside data surprises, stimulatory policy moves (in Europe, the US, China and also likely Australia) and some diminishment in the risk of a euro zone break up. This combination leads us to expect EUR normalisation (against both the dollar and the crosses), as well as some solid outperformance from high quality currencies such as KRW, SGD, PHP, CNY and NZD.

At this stage, however, we choose to express most of our views through cross rates, rather than through particularly strong views against the USD. Not only do very fundamental questions about Europe still remain, but most importantly, our global leading indicators have yet to turn higher. If the global data pulse does turn up, and shows a clear turn soon, then that will set conditions up for the USD to again be the weakest of the weak currencies.

In fact, we continue to view the USD as a structurally weak currency. While US growth compares favourably with the EU, UK and JPY, the USD is set apart by the most activist central bank (keeping monetary conditions loose), the largest current account deficit, and over-ownership by virtue of the USD's role as the reserve currency. In fact, the entire US current account deficit is currently being funded by bond flows (Figure 1), attracted not by carry, but as a result of deleveraging decisions taken globally. The combination of these factors suggest to us that the dollar will remain weak against higher quality currencies.

FIGURE 1. US CURRENT ACCOUNT FUNDING



Sources: Bloomberg, US Treasury, ANZ

### THINGS TO WATCH

Global lead indicators. If these turn upwards, the sell-off in the USD will escalate.

Indonesia. With foreign investment still heavy, domestic monetary policy needs to be tighter.

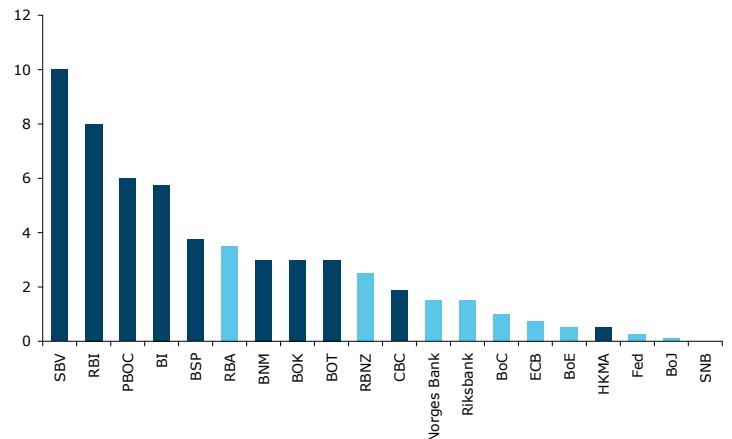
The RBNZ. Given monetary policy is constrained by a robust housing sector, the RBNZ seems the most likely of the antipodeans to consider intervention. But in our view this is still a low probability.

None of this is to dispute the EUR's serious structural problems. But with a credible central bank backstop in place now, the EUR's largest challenges come from weak growth and the unwillingness of countries to sign up for the conditions that accompany the bond market support program. If our global lead indicators remain weak, then the EUR is likely to struggle to sustain rallies through 1.30. If, however, our global indicators do turn higher, then the EUR's weak growth headwind will diminish, and 1.35 could well be within reach.

### ASIA

The search for yield and diversification away from traditional currencies has seen strong inflows into Asian currencies, despite growth concerns in the region. In the end, it is a relative game. Asian currencies still offer higher interest rates and better growth prospects than the USD, EUR or JPY. We expect the diversification theme to dominate so long as China can avoid a hard landing, and we do not get a repeat of a 'risk off' move triggered by concerns over the US fiscal cliff or renewed euro zone worries.

FIGURE 2. CENTRAL BANK POLICY RATES



Sources: Bloomberg, ANZ

## FOREIGN EXCHANGE OUTLOOK

Our preferred exposures in the Asian currency space are KRW, PHP, SGD and MYR. Though domestic economic momentum is weakening in Korea, KRW offers a higher credit rating than Japan, with higher yield and better medium-term growth prospects. This has seen strong foreign investor inflows into Korea, which is supportive of KRW. We expect KRW to be one of the prime beneficiaries of the diversification flow away from developed markets, with a strong external position providing a positive support for the currency as well.

A sound external position, improving growth and strong policy credibility also imply a potential upgrade to an 'investment grade' sovereign rating for the Philippines by 2013. While this is already priced in to some extent, the path to investment grade status will continue to support the PHP. Steady remittance flows, which are near 10% of GDP, and the increasing importance of Business Process Outsourcing, which is now around 5% of GDP and has grown by a compound annual rate of 23% over the past five years, will provide a solid backdrop of support for PHP.

SGD has the greatest safe haven appeal among Asian currencies given its AAA credit rating and a consistently strong external position. In addition, we expect MAS to continue with their policy of a gradual and modest appreciation of the currency. With the SGD NEER trading near the top of the band, significant outperformance is unlikely, but it should continue to move close to the upper bound.

MYR has the benefit of a large current account surplus and exposure to commodity prices, but the fiscal situation and upcoming election are potential headwinds. We expect MYR to perform well following Budget 2013 on 28 September, once the election is out of the way.

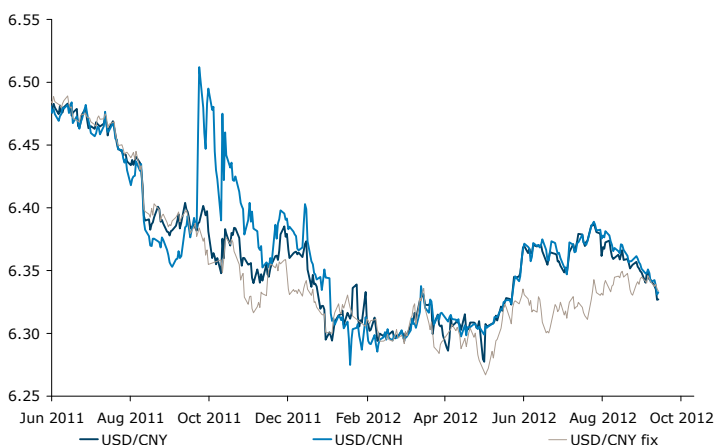
As for the currencies we would avoid, it will be the only two economies in Asia that are running external deficits – INR and IDR. The rationale is simple. When an economy runs a current account deficit, its currency is more reliant on short-term capital flows, which can be fickle. A weaker currency is also an obvious remedy to turn the deficit around, particularly when external demand is weak but domestic demand is still strong as in the case of Indonesia. While investors may pin some hope on the governments of Indonesia and India restarting their much needed reform programmes, the political reality is that we are likely to see further stalling of reforms instead.

With CNY, the People's Bank of China (PBoC) has been keeping the fix very stable and predictable, indicating that they do not want to pursue a policy of aggressive RMB depreciation despite slowing export growth. The move in USD/CNY towards the top of the 1% band in July was on the back of capital outflows as markets were expecting RMB depreciation. But since then, USD/CNY has converged back to the fix (Figure 3), indicating that capital outflows are easing. In addition, China continues to run trade surpluses, which will support RMB. With our expectation that economic activity in China will start to rebound next year, we expect to see RMB on a modest appreciation path once again, but not until next year.

### AUD AND NZD – STUBBORNLY HIGH

For some time the Australian and New Zealand dollars have been trading above levels implied by commodity prices and interest rate differentials. Their rise is also at odds with the slowly appreciating US dollar (as an appreciating USD implies the AUD and NZD should be weaker). The missing link is likely a fundamental change currently afoot in the global financial system. At its core, this process is being driven by the deleveraging of balance sheets. Households, businesses

FIGURE 3. USD/CNY AND USD/CNH AGAINST FIX



Sources: Bloomberg, ANZ

FIGURE 4. CENTRAL BANK BALANCE SHEETS (% OF GDP)

ANZ Currency "Beauty Contest" Scorecard					
CATEGORY	NZD	AUD	USD	EUR	GBP
Economic Growth	2.4%	3.7%	2.3%	-0.5%	-0.5%
Policy rate	2.5%	3.5%	0.25%	0.75%	0.50%
10yr Bond Yield	3.6%	3.2%	1.8%	1.6% (GE)	1.8%
Unemployment	6.8%	5.1%	8.1%	11.3%	8.1%
C/A Balance*	-5.2%	-3.9%	-3.7%	1.0%	-2.1%
Budget Balance*	-4.4%	-2.2%	-8.3%	-3.0%	-7.7%
Govt Debt to GDP*	15.5%	7.3%	85.3%	62.7%	74.4%
Overall Rank	2nd	1st	Last	Mid Field	Mid Field
Deviation from Fair Value	+13%	+18%	0% (DXY)	-4%	-7%

1st place in each category shaded dark blue, 2nd place shaded light blue, and last place shaded red.

Sources: Bloomberg, OECD Economic outlook 2012 for items marked \*, ANZ

## FOREIGN EXCHANGE OUTLOOK

and governments are paying down excess debt that was built up prior to the global financial crisis. This dynamic, and concerns about Europe and the USA more generally, have caused an outflow of capital from core markets, and inflows into peripheral markets.

As we argue in a couple of thematic articles in this publication, we expect this dynamic to persist for quite some time. Figure 4 encapsulates things nicely. We are in a cycle where currencies are genuinely pricing off relative fundamentals. We are used to the AUD and NZD following the (absolute) global cycle. On some measures, the NZD and NZD offer collective fundamentals which are the most attractive in the G20.

The question is, will this process persist? The truth is no one knows with certainty. Such flows are notoriously hard to predict. And deleveraging is a process that only resolves itself slowly. The current cycle began with the onset of the financial crisis, and is in full and silent swing in the major advanced economies. Some observers expect it may have between 2-10 years to progress. This is easily consistent with other episodes from history. So with this outlook in mind we expect the AUD and NZD will indeed remain supported for some time above the level implied by the 'traditional' fundamentals.

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*Head of Global Markets Research*

*Khoon Goh*  
*Senior FX Strategist*

*Andrew Salter*  
*FX Strategist*

*David Croy*  
*Head of Global Markets Research, NZ*

# COMMODITY MARKETS OUTLOOK

## AN UPSIDE BIAS

We expect commodities to remain volatile in the coming quarter with an upside bias. Most industrial-based commodities look over-sold, and recent relief rallies suggest funds are ready to return. That said, we see enough political risk (US elections and the China leadership changeover), to keep price gains in check for the short-term. China's growth rate has also disappointed this year, so many will want to see actual, rather than promised, growth initiatives before committing further. The positive supply-side issues that have propped up agricultural markets are likely to prevail, and we think it is too early to take profits while stock-to-use ratios remain at low levels.

Recent strength in markets looks to have been a combination of stimulus hopes, reduced worries about Europe and some short-term positioning ahead of the week long National Day holidays in China. However, the gains look weakly based, more from short covering than a material build in long positions. We expect more sustainable price gains to emerge towards the later part of the fourth quarter as the more seasoned (longer-term) investors look to buy the second rally (or recovery) in commodity markets.

Most of the interest will be in the over-sold China-based bulk and base metal markets. Investors have aggressively shorted these markets following the negative turn in domestic demand conditions in the past six months (Figures 1 and 2). The ineffectiveness in government stimulus in China has also created a level of unease, which means the market will be more sensitive to actual growth data rather than the promise of fresh stimulus. Further blurring the picture will be the change in China's leadership, which could delay economic reform until much later in the quarter.

### THINGS TO WATCH

Short-term direction is hard to pick, but risks are to the upside if Chinese government stimulus starts to show in the data.

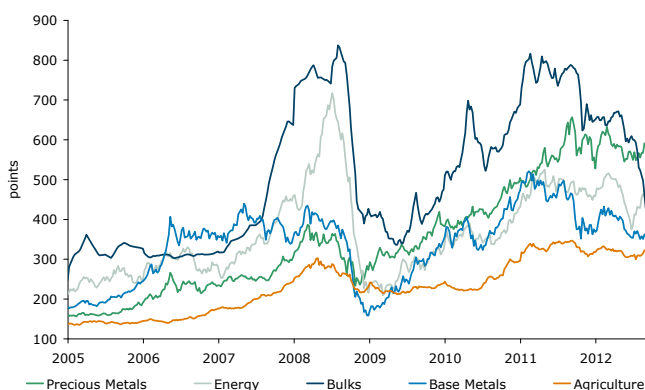
Industrial markets look oversold although a stock overhang will hold back strong gains.

Near record high price levels in agricultural markets are sustainable while stock-to-use ratios remain low.

We do expect demand conditions to improve marginally in the fourth quarter. Seasonally, Chinese consumers will restock most commodities ahead of the cooler end of year period. However, a low base affect and high current inventories in some markets like steel, suggests the pick-up in consumption will only be mildly felt. Energy markets will also feel the support of stronger northern hemisphere heating demand, although we feel a lot of upside has already been priced into this market.

The western economic landscape will also continue to influence sentiment – with the US political backdrop joining the European one. The November US elections could hold back trading activity, but should ultimately prove positive for commodity markets, with both parties keen to sustain an economic recovery. More importantly, the US Federal Reserve's stance to roll-out continuous stimulus is likely to have most investors taking a more positive view on US commodity demand and a sanguine view on the US dollar.

FIGURE 1. ANZ CCI BULK AND US S&P 500



Sources: Bloomberg, ANZ

FIGURE 2. IRON ORE AND CHINA DOMESTIC STEEL PRICE



Sources: Bloomberg, ANZ



# COMMODITY MARKETS OUTLOOK

## BULKS

Despite over-sold conditions, a supply overhang is likely to hold back better price gains for the bulks in the fourth quarter. Iron ore and coking coal have been trounced by speculative short trading in Chinese futures markets in the past quarter as steel demand wanes. Blatant overcapacity by Chinese steel mills has added to the negative sentiment and we expect the excess steel inventory build (as much as 40m tonnes) could take 6-9 months to wash out. Accordingly, steel production growth should slow together with iron ore and coking coal demand over the near-term. The recent price gains in iron ore are off an over-sold base and will likely be capped unless a large proportion of high-cost Chinese iron ore supply is forced to shut – something we are yet to see.

The thermal coal market appears to have based and may find slightly better support as we enter the seasonally strong winter demand period. However, the drag will be very high levels of Chinese power plant coal inventories and the ramp up in domestic coal production – dampening China’s coal import demand. The rapid rise in Chinese hydro dam capacity (following heavy rains in the first half of the year) should also limit the swing to thermal power over the period.

## BASE METALS

Copper has held up remarkably well considering slow Chinese demand conditions. Relatively tight exchange stockpile levels have helped, along with reports that rising Chinese bonded warehouse supply has passed. We think inventories will continue to decline in the fourth quarter, but the pace will be slower than in the third quarter and the demand recovery will be more modest than in previous years.

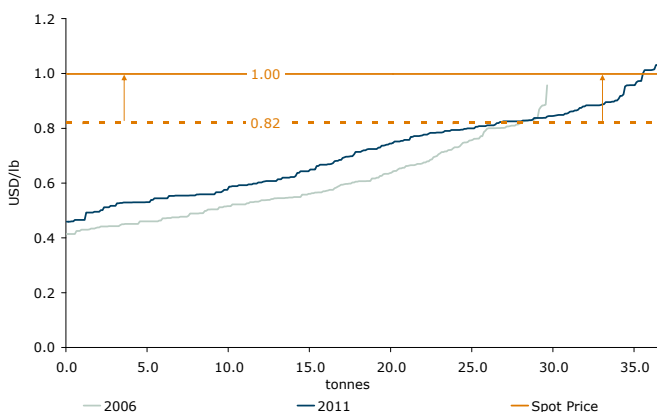
We see potential for further gains in lead as tightness in the market increases. A long hot US summer has set the stage for a wave of auto starter battery failures this winter. Available inventories in Singapore have fallen to nearly zero from 50,000 tonnes since mid August, and stocks globally have dropped 100,000 tonnes to 190,000 tonnes in the same period.

Aluminium prices have broken sharply out of a downtrend started back in March. Low prices have cut deeply into the cost curve (Figure 3) pushing smelters around the world to review output. This led us to reduce our estimate of the 2012 market surplus by 15% to 1m tonnes, and to 800,000 tonnes in 2013. But if prices continue to rally, some of those plans may be reversed and add to conditions that are already oversupplied.

## ENERGY

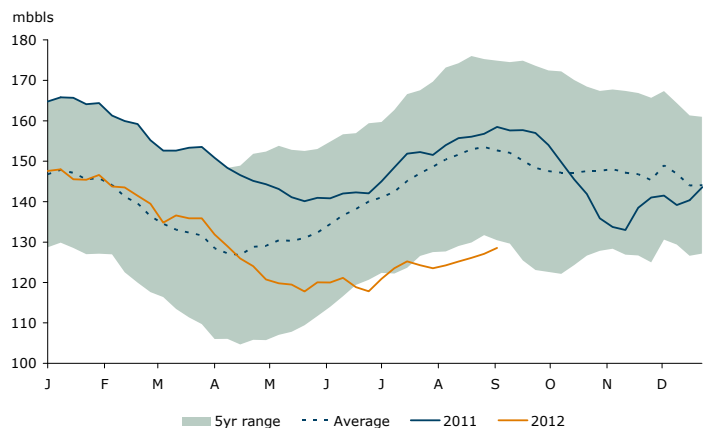
We see upside risks to the oil market in the coming quarter. Bullish market sentiment from recently announced stimulus measures should offset demand concerns in the US. However, the US election in November creates uncertainty to our outlook. China also remains a risk if it does not offer further help to its troubled lending markets. We are particularly concerned about the state of demand from Chinese refiners who face high prices for imported crude, and capped product prices in the domestic market.

FIGURE 3. ALUMINIUM COST CURVE AND LME PRICE



Sources: Wood Mackenzie, ANZ

FIGURE 4. US DOE DISTILLATE SUPPLIES



Sources: Bloomberg, ANZ

## COMMODITY MARKETS OUTLOOK

Supply dynamics look more supportive. Supply outages from the hurricane season have pushed product inventories below five-year averages (Figure 4) and we expect Northern hemisphere winter demand to tighten products markets further when the weather turns cold. Talks of strategic stockpile releases could create some volatility, albeit temporarily. Supply dynamics elsewhere will also continue to support, with reduced North Sea and Iranian oil supply tightening the balance. Geopolitical tensions in the Middle East continue to bubble in the background, maintaining the risk premium in oil markets.

### PRECIOUS METALS

The gold market looks set to rise further as prices have pushed up through a stubborn \$1,550-1,630/oz trading range over the past four months. The trigger appears to have been the European Central Bank and US Federal Reserve launch of open-ended stimulus programmes recently. Investors have also driven exchange-traded gold holdings to record levels and we think this trend can continue while open-ended stimulus remains in place. These factors will more than offset slower demand from India, where the weak rupee and introduction of import duties has pushed up domestic prices and choked gold import flows.

Silver prices have seen an even sharper rebound than gold, living up to the metal's reputation for volatility. The rapid surge is a cause for concern for consumers in the solar panel industry especially. Demand destruction becomes apparent when prices move above USD30/oz and will accelerate if the rally extends above USD35.

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*Natalie Rampono*  
Commodity Strategist

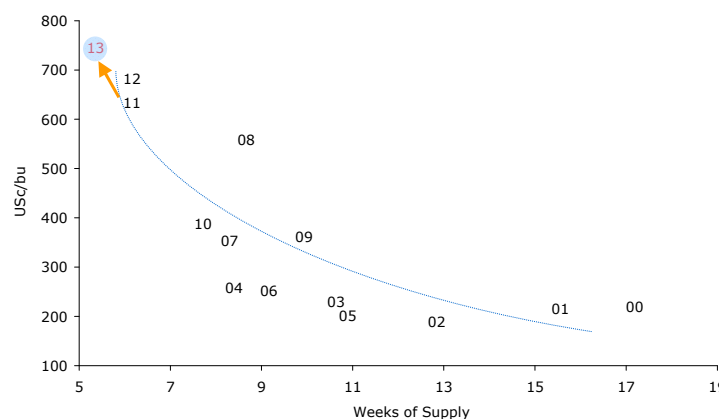
### HIGH GRAIN AND OILSEED PRICES TO PERSIST

The last quarter has proven the ability of agricultural commodities to diverge significantly from financial market sentiment and broader commodity markets. Global grain and soybean prices have risen dramatically to record highs over the last quarter. While in recent weeks prices have pulled back, fundamentals in both wheat, corn and soybeans suggest these high price levels are likely to persist for at least another 6-12 months (Figure 5).

But further price gains in grains and oilseeds over the next quarter are likely to be harder fought, even with the tailwind of another round of global monetary easing. Short-term investor flows have already built a near record net long position in grains and the oilseeds complex in recent months. This is in direct contrast to most other commodity markets where investor inflows were contained through much of the last quarter. With grain and oilseeds prices extremely high by historical standards and funds already with a large exposure, we don't see further quantitative easing as a major catalyst in these markets.

By the end of Q4, however, grain prices could start another upward leg and outperform soybeans in the first half of 2013. At the moment, Brazil's high corn supplies and available export capacity, and aggressive Black Sea wheat offers are keeping a lid on physical prices. But towards the end of this quarter, we expect the selling pressure from both these countries to have subsided as stocks are run down, forcing consumers to switch origins to countries such as Australia and USA.

FIGURE 5. PRICE VERSUS GLOBAL CORN STOCKS



Note: Numbers in chart represent years.  
Sources: USDA, ANZ

## COMMODITY MARKETS OUTLOOK

Despite corn and soybean prices above 2008 highs, the divergence in other ag markets such as rice, sugar and cotton remains stark. For sugar and cotton, ample supplies continue to weigh on the market. Even a poor 2012 Indian monsoon, which is likely to cut India's cotton and sugarcane yields, has failed to provide any support. With the recent correction in both cotton and sugar markets, we expect prices to track sideways in the coming quarter for these two markets.

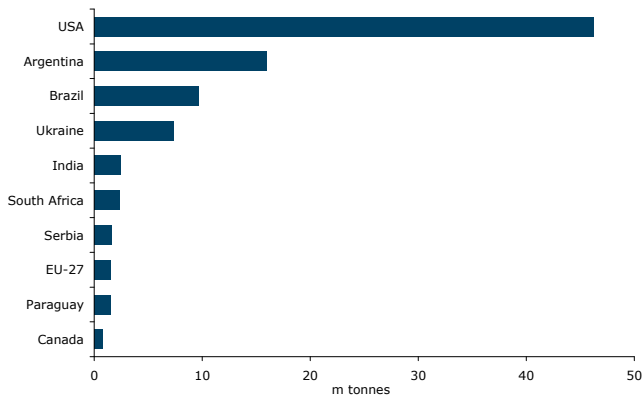
Weather impacts on upcoming crops will remain a key focus. The most dominant weather issue for the upcoming quarter is the forecast development of a Pacific Ocean 'El Niño' or negative Southern Oscillation Index. This event has the potential to significantly impact the Pacific Rim. In Australia, the chances of below average Spring rainfall and consequently lower winter crop yields increases with an El Niño. Already, first half September 2012 rainfall has been disappointing on the East Coast of Australia. Our latest forecast is for Australian wheat production to fall to 20m tonnes in 2012 - a 30% decline year-on-year.

Further north, late arriving monsoonal rains in Indonesia and general dryness in South East Asia is typical of an El Niño. If these conditions were to eventuate, this could also be supportive of grain markets, as corn production declines in some areas. However the greatest implications from an El Niño on agricultural markets relates to South America production, where Pacific Ocean climate is an important driver of rainfall. Combined, Brazil and Argentina account for 45% of world soybean production and 12% of world corn production (Figure 6). Planting of both these crops starts shortly, so price moves will increasingly be driven by South American weather.

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Agricultural Commodity Analyst

FIGURE 6. MAJOR CORN EXPORTERS



Sources: Bloomberg, ANZ

# AUD AND NZD INTERVENTION

## ANTIPODEAN INTERVENTION CONTENTION

Intervention. It seems everyone has a view at present. In this piece we wrap some science around the rhetoric. We conclude that intervention is unlikely because neither the AUD nor the NZD are over-valued enough for the case to be self-evident given the risks associated with any intervention operation. Expect, however, continued commentary on the issue from policymakers on both sides of the Tasman.

In addition, there are some deeper issues to ponder. Consider that much of the way we traditionally view these currencies has been turned on its head. Both currencies used to trade very much as absolute plays on the global cycle. Now, however, relative attributes have become more important. These currencies, therefore, may not play their traditional buffer role in global downturns as well as they once did.

If the global conditions driving the asset diversification trend persist, and that seems a reasonable prospect - at least for a while, then we need to consider that we may be in the early stages of a secular shift in monetary conditions. Interest rates in Australia and New Zealand may need to be somewhat lower over time to offset currencies that cycle around averages which are somewhat higher.

### FIRST THINGS FIRST: VALUATION

For the Reserve Bank of New Zealand and the Reserve Bank of Australia, intervention in the exchange rate has historically occurred in two conditions: where markets have become disorderly, or when the exchange rate is fundamentally misaligned. (The RBNZ has more clearly defined criteria for intervention, which we discuss a little further on.)

### THINGS TO WATCH

Direct currency intervention is highly unlikely in Australia or New Zealand in the near-term.

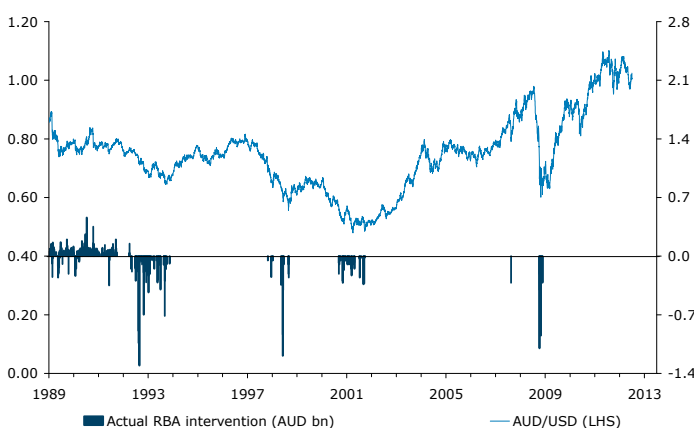
Neither currency is sufficiently over-valued, and it seems unlikely that intervention would be effective.

More broadly, we may be in the early stages of a secular shift in the mix of monetary conditions, involving the combination of stronger currencies and lower interest rates.

Markets are orderly and are functioning well for the moment, so the case for intervention hinges on misalignment. Figure 1 shows estimates of RBA intervention, and it is clear that intervention tends to occur around the bottom and, less often, the tops of the currency cycle. In the New Zealand context, the RBNZ has only overtly intervened on a handful of occasions over a one month period in 2007, at which time the TWI was at an all-time high (where it remains).

When we model fair value, there appears little question that the AUD and NZD are expensive. In Figure 2 we present a range of valuation measures (with full detail in the Appendix). The long-run PPP-style measures show the AUD and NZD around 50% and 30% over-valued respectively. Measures which take into account other fundamental drivers also show overvaluation, albeit to a lesser extent. Those measures suggest the currencies are 5-15% over-valued. But, simple rule-of-thumb metrics such as the level of commodity prices suggest that while both currencies are a little expensive, they are well within the range of historical experience (Figures 3 and 4). The AUD appears to be moderately more expensive than the NZD, as reflected in the relatively high level of the AUD/NZD cross.

FIGURE 1. AUSTRALIAN INTERVENTION



Sources: RBA, ANZ

FIGURE 2. DEVIATION FROM ESTIMATED FAIR VALUE (%)

Measure	AUD/USD	NZD/USD
Relative PPP	50	30
Augmented relative PPP	35	25
Error correction model	10-15	5-10
AR(1) model	10-15	5-10

Source: ANZ

## AUD AND NZD INTERVENTION

### FROM THE ABSOLUTE, TO THE GENUINELY RELATIVE

If we accept that there is some valuation premium in both currencies as the models suggest, albeit not one that is entirely unprecedented, the question then is whether this is an unjustified overshoot, or one where a different set of drivers might be taking both currencies away from fair value. In our view, it is very much the latter. And **for intervention the driver of misalignment is critical.** While this necessarily involves some judgement, it is a view which needs to be taken.

Perhaps the key consideration this cycle is that much of the way we traditionally view currencies has been turned on its head. The NZD and AUD have typically been viewed as peripheral global assets, which on average are of poorer quality than the large markets which form the core of a global investment portfolio. This has meant that one of the foundation principles for analysing these currencies is that a significant part of currency movement was driven by the state of the global cycle.

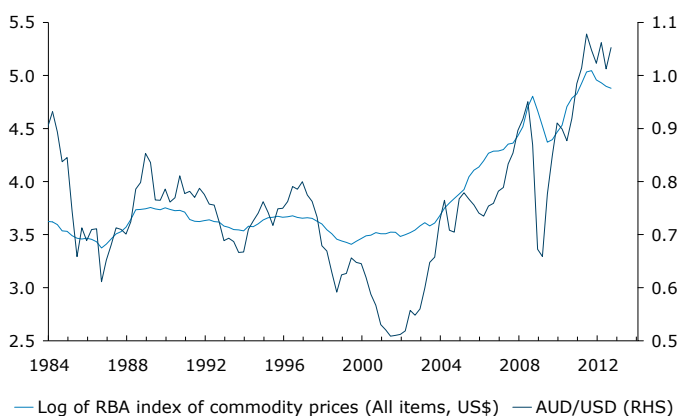
In recent years this has become known as the risk-on/risk-off framework (which we shorten to 'riskonoff'). In our AUD and NZD models this is captured via commodity prices, the global leading index and the US equity market. **In other words, both currencies used to trade very much as absolute plays on the global cycle, with their relative fundamentals a secondary consideration. What has occurred this cycle, however, is that relative attributes have genuinely become the most important.** (Most recently we discussed this in the monthly ANZ *Global FX Outlook*: 'Riskonoff is too binary' July 2012).

Witness, for instance, the way in which the AUD has traded against European CDS (Figure 5). While the short-term swings in the AUD broadly match that of Europe's credit risk, the AUD's response to level adjustments in CDS has changed radically in recent years. Until 2010, a wider European CDS (ie greater European credit risk) resulted in a lower AUD. Since then, however, the opposite has occurred. **The risk centric nature of traditional AUD and NZD models have simply struggled with this changing global credit dynamic.**

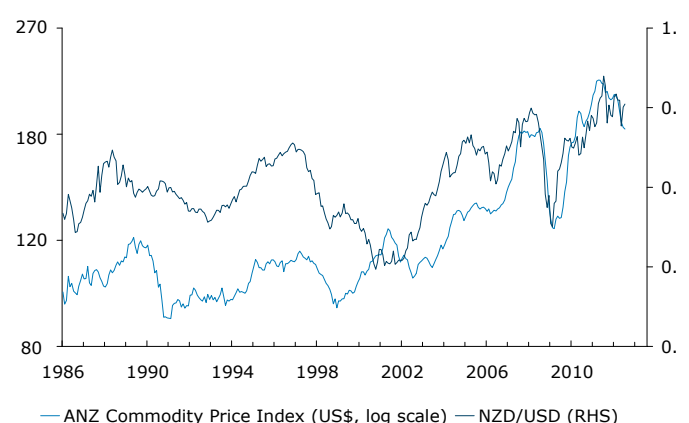
The currencies that are typically the core of global investment portfolios - the USD and the EUR - offer the lowest returns (as measured by short-term interest rates) but also have some of the highest fiscal risks. In 2007-08 it became clear the world's reserve currency has some serious structural issues. In 2011-12, the euro developed serious structural issues of its own. Global asset managers of all types are facing very fundamental questions about how to structure their portfolios, which assets are safe, and what is their best store of value. (While recent press has often focused on sovereign asset managers, private sector managers are facing much the same quandaries).

As a result, as global conditions have deteriorated, the AUD and NZD have actually become relatively more attractive. Their underlying fiscal and credit standings are affected only modestly, in part because they have started from a better base. In Europe, and perhaps also in the US, however, genuine concerns about solvency have grown as the post-crisis lethargy has persisted. The largest driver of a country's fiscal health is economic growth, without which credit risk slowly, but almost inexorably, rises. In fact, while the most recent focus has been on Europe, the US fiscal metrics are likely to come into focus at some point again. Consider, for instance, that the IMF suggests that the gap between the US primary budget balance and that required to reduce debt to 60% of GDP is wider than for any country except Japan.

FIGURE 3. AUSTRALIAN DOLLAR AND COMMODITY PRICES      FIGURE 4. NZ DOLLAR AND COMMODITY PRICES



Sources: Bloomberg, ANZ



Sources: Bloomberg, ANZ

## AUD AND NZD INTERVENTION

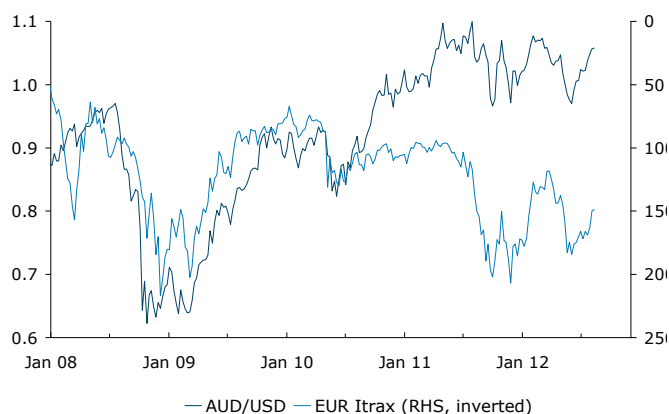
The US fiscal financing task for 2013 (as a share of GDP), is also higher than for any country except Japan. At its most obvious, the net result is large foreign flows into Australian fixed income markets (in addition to other assets). Foreign ownership in the Commonwealth government bond market reached 83% in the first quarter of 2012. New Zealand is yet to see the surge of foreign flow that has been seen in Australia, with ownership in government bonds around 63%, although in dollar terms non-resident ownership of New Zealand bonds is at record levels. The NZD is also less expensive on many of our metrics.

### DISCOMFORT DOES NOT EQUAL INTERVENTION

All of this suggests that while we might argue that both currencies are expensive, it is difficult to argue that this is unjustified by the fundamentals. As such, they don't meet the 'misalignment' condition for intervention. Currency levels may be uncomfortable for those of us thinking about what is best for Australia and New Zealand. But that is not the same as saying that the current situation is irrational.

Intervention is typically thought of as impacting the exchange rate through two key channels. The first is the flow channel - the quantity of currency transacted by the central bank and how it influences the exchange rate. The second channel is signalling - the act sends information about fundamentals which the market might be ignoring or underplaying. For a small economy, the second channel is typically thought of as being the more powerful. This is simply because it is difficult to do enough 'flow' to significantly and persistently alter the exchange rate. It is also the reason why both central banks have never entered the market to defend a particular level of the exchange rate.

FIGURE 5. EUROPEAN CREDIT RISK AND THE AUD



Sources: Bloomberg, ANZ

If there is a signal to be sent by intervention, then it is unlikely to be successful in the current environment given our assessment of what is driving the exchange rates (at least without considering more radical policy steps – an issue we discuss below). New Zealand has this issue more formally reflected in its criteria for intervention<sup>1</sup>. The last of the four criteria is 'conditions in markets must be opportune and allow intervention a reasonable chance of success'. Observe the experience of other countries in recent years. Turkey and Brazil offer examples of countries that have tried to take on the markets and what efforts are needed.

Brazil from pre-crisis and Turkey from 2010 began to lean progressively more heavily against currency appreciation. Brazil's intervention took the form of progressively more severe regulatory controls and taxes on flows, whereas Turkey radically re-designed domestic monetary policy. Rather than adjusting reserve requirements and interest rates in the same direction, as would normally occur in an emerging market which uses reserve requirements as an instrument of monetary policy, Turkey began cutting interest rates and raising reserve requirements. The shift in rates was designed to make the currency less attractive, while the shift in reserve requirements was designed to keep domestic monetary policy tight. Both currencies eventually began to weaken, but only after very sustained efforts which came at significant domestic cost, and in fact ended up weakening to such an extent that both central banks have since sold reserves to stem the moves.

### ... OR GET RADICAL?

So why not consider a policy response that is more radical? Something that perhaps involves large scale intervention? Aside from the obvious criticism that neither the AUD nor NZD have overshot wildly, there are a handful of key reasons why taking a cautious approach to currencies is prudent, and in fact is the most likely path the RBA and RBNZ will take.

The first is the opportunity cost. Despite the oft-argued social benefits to intervention, with interest rates in both New Zealand and Australia substantially above the real rates of the G3 economies, this opportunity cost of maintaining foreign assets is high. The second is that it is not obvious which assets either central bank might buy that offer the sort of credit risk one would want. And thirdly, the most significant consideration when

<sup>1</sup> See 'The Reserve Bank's new foreign exchange intervention policy', Reserve Bank of New Zealand Bulletin, Vol 68, No 1

## AUD AND NZD INTERVENTION

conducting intervention is the risk of financial loss, and the associated reputation risks. The RBNZ explicitly recognises this in its intervention policy. Since the current misalignment from fundamentals is most likely being driven by investment diversification, the likelihood of effective intervention is modest. Add to this that the central banks believe that identifying a tangible impact of intervention on exchange rates is difficult<sup>2</sup>, then the current case for intervention is weak.

### CUTTING INTEREST RATES?

One proposal which has been put forward is that if the currency is too high, then the central bank should simply cut interest rates, particularly if it has the capacity to do so and if high interest rates are judged to be a contributing factor to the high exchange rate. Certainly there is something in this. At the very least it requires there to be a desire for easier monetary conditions. And while there is probably a bias for that in Australia at present (though not New Zealand), it does not seem to be one which is particularly urgent. Both economies appear to have been performing reasonably well, labour markets are broadly healthy and inflation forecasts remain consistent with the respective target ranges.

In addition, a particular nuance is worth emphasising. **Reducing interest rates with the aim of offsetting the contractionary effects of excessive currency appreciation (if that were occurring) is one thing. But reducing interest rates to try and drive the currency down is entirely another. In the current environment, we doubt that modest interest rate cuts would have much impact on the exchange rates.** Consider the experience of Australia and New Zealand in this cycle so far. The RBNZ eased by 50bp following the Christchurch earthquake in February 2011. The RBA has eased by a total of 125bp this cycle. Neither currency has shown any particular weakness as a result of those steps. Similarly, in Asia, the Bank of Korea and the BSP in the Philippines have both reduced interest rates in the past month. Both currencies have remained quite strong. Cutting interest rates could of course have prevented these currencies from turning out to be much stronger, but it hasn't generated any obvious weakness.

In addition, central banks which target the currency with interest rates or other monetary policy tools, often find that excessive volatility is the result. The experiences of

Turkey and Brazil this cycle are instructive. Both countries demonstrate that there are uncomfortable non-linearities when a floating exchange rate system starts to twist domestic monetary policy to target the exchange rate. A sequence of seemingly significant steps can prove to be insufficient in changing the currency's trajectory. But some minor additional steps seem to be able to shift the entire dynamic, so that depreciation starts to feel uncomfortably uncontrolled.

The foundation objective of a floating exchange rate regime is that while the currency is more volatile, it allows domestic policy settings, and the domestic economy, to be more stable<sup>3</sup>. That is, **there can be a cost of currency volatility, but the benefit is domestic stability. Targeting the currency with domestic monetary policy risks upsetting that trade-off, and in fact risks reversing the costs and benefits.**

### DOWN THE TRACK

None of this is to say that a direct policy response to currency strength, such as intervention or even an easing of monetary policy, might not become appropriate at some point. Certainly if the global economy continues to slow, and commodity prices fall, the news flow that would result from the Australian and New Zealand mining and farming sectors would presumably heighten concern about both interest rates and currencies (absent a meaningful depreciation).

In this situation, it is of course possible that some of the traditional relationships might start to reassert themselves, and the AUD and NZD depreciate meaningfully as a response. We are struggling, however, to reach this conclusion. And we need to start with a question. If investors divest AUD and NZD assets, what would they buy? In the event of a global slow down, which assets would have greatest appeal, those in Australia and New Zealand (and other peripheral markets with healthy government and banking sectors), or those in the global core?

If the global economy really is that weak, then fiscal and political issues in Europe will continue to pose risks to investors. US fiscal issues may also re-enter the rating agencies' frame of reference. With net debt of 83.4% of GDP and a forecast budget deficit this year of 8.1% of GDP, significantly slower economic growth is likely to

<sup>2</sup> As discussed in Newman V, C Potter and M Wright (2011), 'Foreign Exchange Market Intervention', RBA Bulletin, December, pp 67-76

<sup>3</sup> See the RBA's website on international market operations, <http://www.rba.gov.au/publications/bulletin/2011/dec/7.html>

## AUD AND NZD INTERVENTION

cause US debt projections to escalate sharply. It is thus conceivable, and perhaps even likely, that both the AUD and NZD stay quite strong as conditions in other markets continue to encourage the diversification flow which has been so important in recent years. The absolute attractiveness of Australia and New Zealand would unquestionably decline, but the relative attractiveness may actually improve.

Of course even if there are good capital account reasons for the AUD and NZD to stay strong, this is likely to come at some cost to the domestic economy over time. There is no free lunch. Downstream consequences in the form of unwanted structural adjustment in the domestic economy will progressively develop. Both central banks are clearly monitoring for these effects. For monetary policy the implications would seem to be clear: expect a sustained easing bias over time.

### CONCLUSION

It is clear that both the AUD and NZD are over-valued, particularly when measured against traditional benchmarks such as PPP. However, it is also equally clear that global factors are contributing to AUD and NZD strength in a way that we can intuitively understand.

Intervention has been proposed by many commentators, but in our view, it simply does not pass the 'reasonableness' test. Intervention stands the greatest chance of success when it is pitted against speculative overshoots. Yet at the moment, when we consider some of the drivers of the exchange rate, although portfolio diversification has taken much of the blame in the media, this is not a fleeting flow, and does in part reflect 'real' factors such as the terms of trade and interest rates, even if these are only *relative* strengths. Furthermore, not only is success not guaranteed, but intervention could lead to unintended consequences and, potentially, financial costs.

With intervention off the agenda for now, the reality is that Australia and New Zealand simply have to brace for a shift in the mix of monetary conditions, even if this is not ideal from an internal economic perspective.

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# AUD AND NZD INTERVENTION

## APPENDIX A: SINGLE EQUATION MODELS OF THE AUD/USD AND NZD/USD

### Error-correction model

$$\Delta ccy_t = \gamma_1 + \gamma_2(ccy_{t-1} - \gamma_3 com_{t-1} - \gamma_4 diff_{t-1}) + \gamma_5 \Delta com_t + \gamma_6 \Delta s_t + \gamma_7 \Delta oecd_t + \gamma_8 D_t + \omega_t$$

Where:

*ccy* = US dollars per Australian dollar and New Zealand dollar

*com* = the RBA index of commodity prices, USD terms, all items; ANZ index of NZ commodity prices, world price

*diff* = the difference between the US and Australian and NZ policy rates

*s* = the detrended S&P500 Accumulation index (using HP filter, lambda = 1600)

*oecd* = OECD Leading index of OECD nations plus major six NMEs, amplitude adjusted

*D* = dummy variable for 1999-2000 US dollar bubble

TABLE A1. ESTIMATION RESULTS FOR ERROR-CORRECTION MODEL

Coefficient	Variable	AUD/USD		NZD/USD	
		Value	t-stat	Value	t-stat
$\gamma_1$	Constant	0.00	3.50	-0.30	-10.59
$\gamma_2$	Error correction term	-0.17	-4.63	-0.20	-3.61
$\gamma_3$	Commodities	0.25	10.48	0.69	8.96
$\gamma_4$	Interest rate differential (basis points)	0.98	2.56	1.85	1.70
$\gamma_5$	Change in commodities	0.30	4.21	0.30	2.24
$\gamma_6$	Change in de-trended equity returns	0.12	1.87	-	-
$\gamma_7$	Change in leading index	4.80	5.34	5.51	5.21
$\gamma_8$	Dummy	-0.04	-2.93	-0.03	-2.55
Adjusted R <sup>2</sup>		0.51		0.54	
S.e. regression		0.11		0.06	
Durbin Watson		1.79		1.51	

Regressions for both AUD and NZD are estimated separately. All data are in quarterly averages in logged form, except for interest rates which are expressed as decimals. Sample window is Q4 1983 to Q3 2012 for the AUD; Q1 1999 to Q3 2012 for the NZD.

### AR(1) model

$$ccy_t = \gamma_0 + \rho ccy_{t-1} + \gamma_1 \Delta com_t + \gamma_2 \Delta oecd_t$$

*ccy* = US dollars per Australian dollar and NZ dollar

*com* = the RBA index of commodity prices, USD terms, all items; ANZ index of NZ commodity prices, world price

*oecd* = OECD Leading index of OECD nations plus major six NMEs, amplitude adjusted

TABLE A2. ESTIMATION RESULTS FOR AR(1) MODEL

Coefficient	Variable	AUD/USD		NZD/USD	
		Value	t-stat	Value	t-stat
$\gamma_0$	Constant	-0.29	-2.36	-0.39	-2.43
$\rho$	Rho	0.96	29.62	0.97	29.44
$\gamma_1$	Change in commodities	0.53	5.18	0.23	2.13
$\gamma_2$	Change in leading index	3.89	3.22	2.33	1.70
Adjusted R <sup>2</sup>		0.90		0.92	
Durbin Watson		d=1.70		d=1.24	
Ljung-Box		Q=25.07 (sig 0.5)		Q=36.3 (sig 0.06)	
S.e. regression		0.04		0.04	

Regressions for both AUD and NZD are estimated separately. All data are in quarterly averages in logged form. Sample window is Q4 1983 to Q3 2012, Q1 1999 to Q3 2012 for the NZD.

# AUD AND NZD INTERVENTION

## APPENDIX B: MEASURES OF MISALIGNMENT

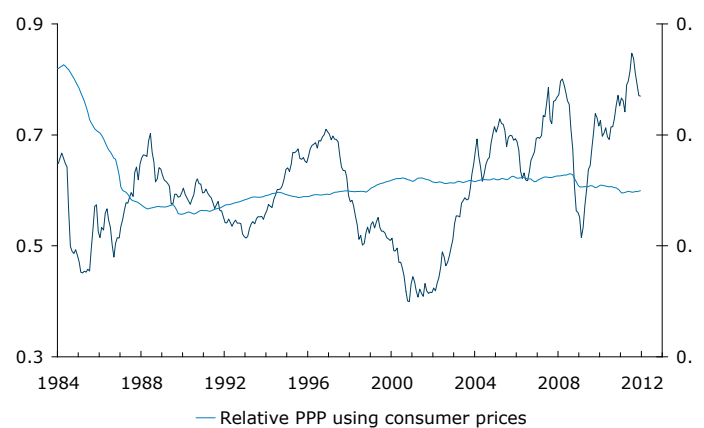
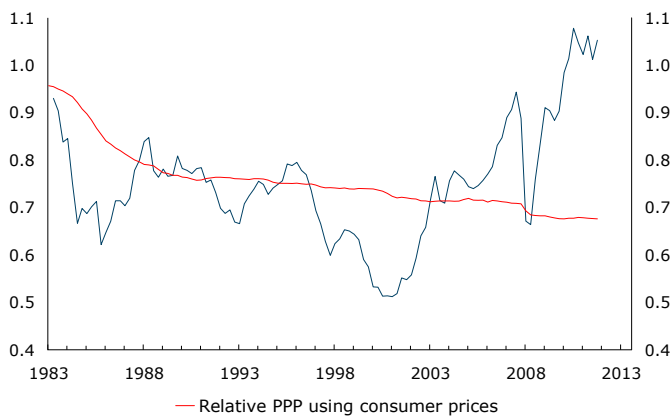
### Purchasing power parity

Most economists have at their core an expectation that currency valuation, in the long-run, is intimately connected to purchasing power parity (PPP). The law of one price is the simple idea that goods in all economies should be equally priced. The simplicity of PPP is not definitively supported by empirical observation, especially in the short-run. But most accept the proposition that PPP should act as an anchor over the very long-term.

Current estimates of relative PPP for the Australian dollar are around USD0.65-0.75, depending on how one estimates the base period. We place the PPP-implied level of the currency around USD0.69 currently and on this basis the current nominal value of the AUD/USD is around 50% over-valued (Figure A1).

FIGURE A1. AUD/USD AND PPP (QUARTERLY AVERAGE)

FIGURE A2. NZD/USD AND PPP (MONTHLY AVERAGE)



Sources: ABS, BEA, Bloomberg, ANZ

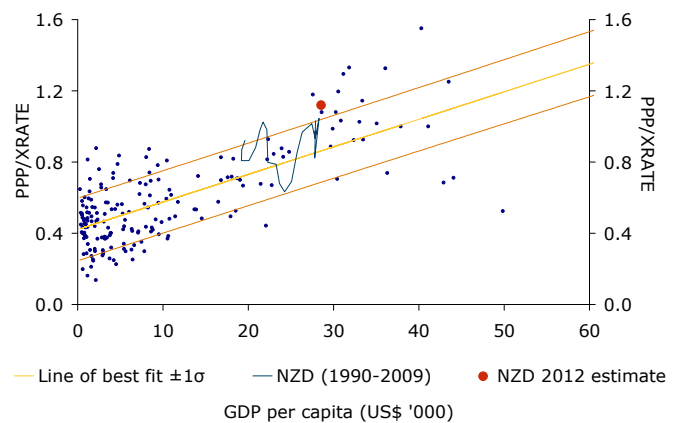
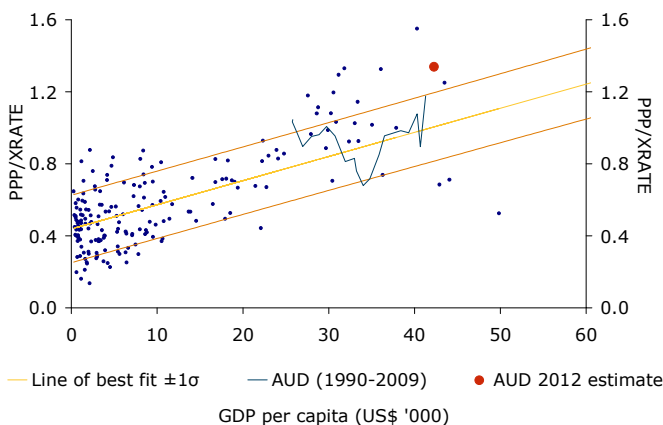
Sources: ABS, BEA, Bloomberg, ANZ

### Productivity-augmented purchasing power parity

While some authors question the validity of PPP, one corner of consensus is the Balassa-Samulson hypothesis, which says that deviations from PPP can persist for long periods of time because of productivity differentials between economies. The Penn Effect is the long-standing empirical manifestation of the Balassa Samulson effect and permits an alternative measure of long-term currency misalignment that accounts for productivity differentials. Figures A3 depict this relationship – the upward sloping line-of-best-fit is consistent with the notion that GDP per capita is positively related to currency valuation and has been cited as an empirical representation of the Balassa-Samulson hypothesis in the literature (see Rogoff, 1996). Tests show that the regression parameters are stable for sub-sections of the sample – that is for large and small economies – as well as through time, suggesting the Penn Effect is time invariate. This measure suggests the currency is around 35% over-valued and thus that the ‘fair’ long-term rate is around USD0.78.

FIGURE A3. THE PENN EFFECT AS A TOOL FOR CURRENCY VALUATION - AUD

FIGURE A3. THE PENN EFFECT AS A TOOL FOR CURRENCY VALUATION - NZD



Sources: Penn World Tables 7.0, ANZ

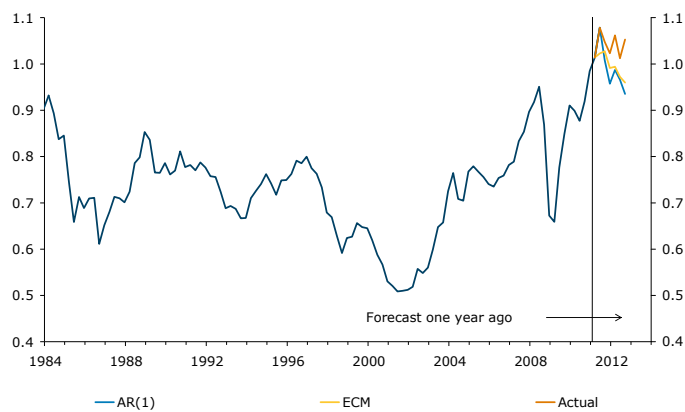
Sources: Penn World Tables 7.0, ANZ

# AUD AND NZD INTERVENTION

## FUNDAMENTAL FAIR-VALUE MODELS

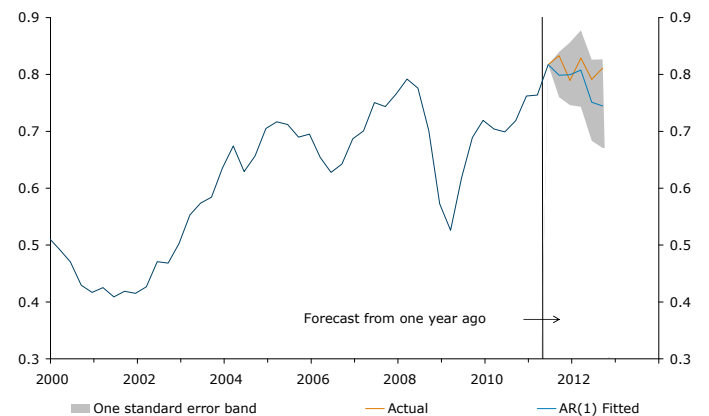
Our favoured models – the error correction model and AR(1) models presented in Appendix A – suggest current deviation from fair value of around 10-15% in the case of the AUD, and around 5-10% in the case of the NZD. Since both models use observations of prior realised exchange rates as anchor points for current valuation, we obtain fair value by halting model estimation around mid-2011 and running out-of-sample forecasts using the realised inputs. This departure point conceptually is satisfying since most anecdotal evidence is consistent with a pick-up in diversification activity around the same time. In the case of the AUD the exercise yields fair value estimates of around USD0.93 for the third quarter 2012 (Figure A4). Given known uncertainty around parameter estimation, we call this an over-valuation of 10-15% with a current exchange rate of USD1.05.

**FIGURE A4. ESTIMATES OF AUD FAIR VALUE**



Sources: Bloomberg, RBA, Thomson Reuters DataStream, ANZ

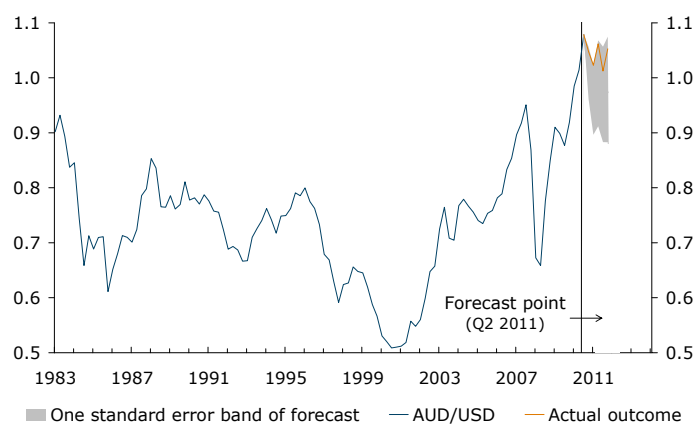
**FIGURE A5. ESTIMATES OF NZD FAIR VALUE**



Sources: Bloomberg, RBA, Thomson Reuters DataStream, ANZ

Taking into account the historical standard errors of these models, it is also possible to see that current exchange rates are pushing up against the boundaries of what might be considered 'normal'. In the case of the AR(1) model the one standard deviation upper bound of the September 2012 quarter forecast, made in June 2011 is around USD1.07½ (Figure A6). While in recent weeks the currency has traded towards 1.0610, this suggests the unit is right on the cusp of what would consider acceptable. Similar results are found using the AUD error correction model.

**FIGURE A6. AUD/USD AR(1) MODEL OUTPUT**



Sources: Bloomberg, RBA, Thomson Reuters DataStream, ANZ

# ASIAN BOND MARKETS

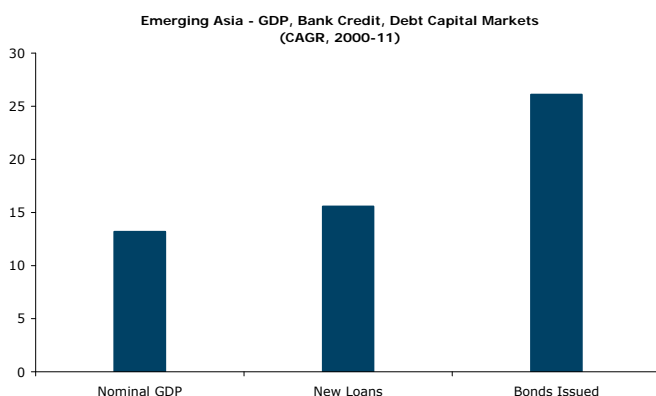
## EMERGING ASIA'S FAST GROWING BOND MARKETS

Emerging Asian economies have historically over-relied on bank lending as a source of funding and under-relied on capital markets. Indeed, this was cited as one of the main causes of the Asian Financial Crisis of 1997-98. Specifically, the cozy relationship between banks and borrowers led to a deterioration of credit quality and thus a misallocation of capital and a rise in financial vulnerabilities.

A greater reliance on the capital markets in general and the bond market in particular was prescribed in response<sup>1</sup>. The idea was that the greater information requirements of the capital markets would increase transparency on the part of debtors and thereby allow the creditors to be more discriminating and so more efficient in their allocation of capital.

In this article we track developments in Emerging Asia's bond market over the past decade. Encouragingly, we find that bond issuance has indeed grown quickly<sup>2</sup>. Measured on a compound annual growth rate (CAGR) basis the rise was 26.1% over the period 2000-11. Excluding China, where bond market development was the fastest in the region by a wide margin, the rise was a still a solid 13.7%.

**FIGURE 1. BOND ISSUANCE, NOMINAL GDP AND BANK LENDING GROWTH**



Sources: Dealogic, CEIC, ANZ

<sup>1</sup>For example, see ADB, IMF, others.

<sup>2</sup>We focus on issuance in this note as opposed to outstanding debt. In particular, we analyze 55,000 bond issues across Emerging Asia since 2000. Our database includes information on issuers, amounts and sectors, thus allowing us to 'slice and dice' the results in a number of different ways. For US dollar denominated issues it also contains information on the geographic location of the investor, which allows us to gauge to what extent Asia is buying Asia.

### KEY POINTS

Bond issuance in Emerging Asia has grown more rapidly than nominal GDP or bank lending since 2000, suggesting financial deepening in the region.

China's share of Emerging Asian bond issuance has exploded, rising from zero in 2000 to more than two-thirds in 2011. South Korea, the largest issuer a decade ago, is now in the second position.

Measured by entity type, state-owned enterprise (SOE) bond issuance has grown fastest, although corporate issuance picked up sharply post-GFC. SOEs now comprise one-half of all issuance.

We found mixed evidence that Asia is increasingly financing Asia in bond markets. Our smaller (US dollar) sample shows that Asian investors favour the bonds of Asian financial institutions.

In nominal amounts, the increase in bond issuance in Emerging Asia over the period was nearly 13-fold, rising from the equivalent of USD94bn in 2000 to USD1.2trn in 2011.

We interpret this fast rate of bond issuance as evidence of financial deepening. A straightforward way to see this is to compare bond issuance growth with nominal GDP, which grew by an (compound annual) average of 13.2% over the period, and with the growth of bank lending, which grew by 15.6% (Figure 1) on the same basis. On both measures we see that bond issuance growth was relatively high, suggesting that the bond market is deepening and that the share of financing in aggregate in Emerging Asia has moved away from banks.

## ASIAN BOND MARKETS

### BONDS BY ISSUING ECONOMY: CHINA'S RISE IS UNMISTAKABLE

Drilling down to the individual economy level, bond issuance varied widely over our sample period, led by China (Figure 2). Chinese debt issuance grew by a staggering 90.9% per annum on average over the period, far outpacing every other economy in Emerging Asia. The only other economies with bond issuance growth faster than the regional average were India and Indonesia. Taiwan and Singapore were the laggards with CAGRs of 2.2% and 5.8%, respectively.

Despite the fast growth, country issuance saw a strong break around the GFC. China's CAGR fell from 155.5% over 2000-07 to 'only' 31.9% over 2008-11. Meanwhile, India's CAGR fell from 73.3% pre-GFC to *minus* 12.0% post-GFC. Indeed, four of the ten economies in Emerging Asia experienced declines in issuance in the post-GFC period. (Vietnam had a short sample so was excluded from the growth calculations.) But this pattern did not hold everywhere. The growth of issuance picked up post-GFC in Hong Kong, the Philippines and South Korea.

Not surprisingly given the above, China's rise in the share of total Emerging Asian bond issuance was astronomical (Figures 3 and 4). From just 0.7% of the region's issuance in 2000, China accounted for 68.3% in 2011. This took China's bond issuance to USD823bn. Most of the rise in China's share contribution was at the expense of South Korea, which saw its share of total Emerging Asia's issuance fall from 55.3% in 2000 to just 14.8% in 2011; this despite having an 11.9% CAGR increase over the period. In actual amounts Korea's issuance in 2011 was USD179bn, 3½ times higher than in 2000.

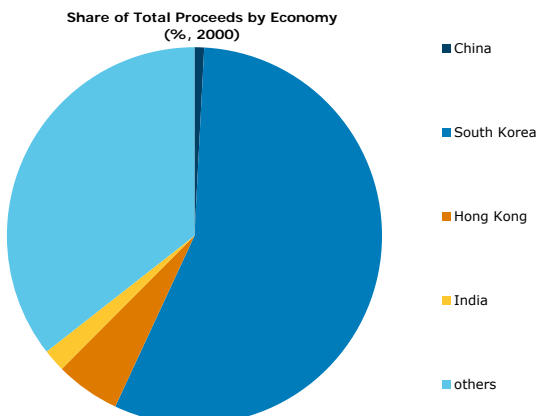
Our final variable is average issuance size, which has been falling in most economies over our sample. China again outperformed on this measure, with average bond issuance size growing 19.2% over 2000-11, followed by Indonesia at 15.4%. But average issuance size fell in the majority of economies in our sample. Like our value measure, there was a sharp drop in the overall growth in average issue size post-GFC, which fell to 5.2% from 18.6% pre-GFC. China's average issuance growth declined 15.2% post-GFC, whilst India's fell 17.6%. Philippine post-GFC average issuance size rose by 20.2%.

FIGURE 2. EMERGING ASIAN BONDS – ISSUES BY ECONOMY

	Total Value of Issues (USD bn)			Total Value of Issues (CAGR)			Average Size of Issues (CAGR)		
	2000	2007	2011	2011/00	2007/00	2011/08	2011/00	2007/00	2011/08
China	0.7	476.1	823.8	90.9	155.5	31.9	19.2	50.2	-15.5
Hong Kong	5.2	8.5	42.8	21.1	7.3	79.5	-6.4	-1.5	0.8
India	1.8	86.3	47.9	34.5	73.3	-12.0	-15.3	-11.6	-17.6
Indonesia	0.6	7.1	10.2	29.6	42.7	19.8	15.4	17.3	2.9
Malaysia	3.6	28.5	35.4	23.0	34.1	19.5	-0.1	-3.6	16.4
Philippines	4.0	2.9	10.5	13.7	7.0	29.7	-6.0	-12.2	20.2
Singapore	8.6	22.7	16.1	5.8	14.9	-7.2	-1.3	0.8	-12.9
South Korea	51.9	79.3	178.8	11.9	6.2	23.4	0.6	-1.1	8.6
Taiwan	13.4	16.7	17.0	2.2	3.2	-12.4	3.6	15.1	-15.7
Thailand	2.5	8.3	10.2	13.7	18.9	-5.8	-2.7	-2.1	0.4
Vietnam	0.0	1.3	0.1						
Total	92.4	737.8	1192.8	26.1	34.4	24.3	9.2	18.6	5.2
Total Ex China	91.7	261.7	369.0	13.7	16.3	12.5	28.8	73.8	-19.8

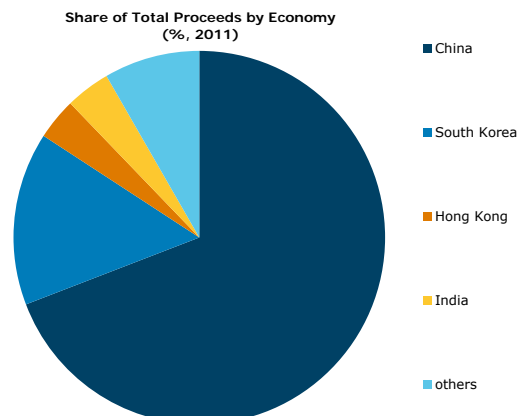
Sources: Dealogic, ANZ

FIGURE 3. SHARE OF EMERGING ASIA BOND ISSUANCE BY ECONOMY IN 2000



Sources: Dealogic, ANZ

FIGURE 4. SHARE OF EMERGING ASIA BOND ISSUANCE BY ECONOMY IN 2011



Sources: Dealogic, ANZ

## ASIAN BOND MARKETS

Why would average issuance size be falling? We can think of two interpretations. First, the market might be tighter (in line with tighter funding conditions globally), meaning that issuers needed to settle for smaller amounts. Second, a larger number of issuers might mean that credit quality is falling at the margin as lower rated entities gain market access, and that investors would respond by providing lower amounts.

### BOND ISSUANCE BY ENTITY: SOES RULE BUT CORPORATES ARE COMING BACK

We now turn to analyzing bond issuance by entity type. Our sample contains five categories: sovereigns, state owned enterprises (SOEs), financial institutions, corporates, and special purpose vehicles (SPVs).

SOEs were the fastest growing issuers over the period 2000-11 (Figure 5). The CAGR for this sub-group was over 50%, almost twice the rate of growth for sovereigns and financial institutions. SOE issuance in 2011 was almost USD600bn as against just USD7bn in 2000 (Figure 5). Corporate growth lagged at 17.2%. Issuance by SPVs, which dominated at the start of our sample, contracted over the period.

As we saw for the economy-level data, issuance by entity saw a sharp GFC-related break. SOEs and sovereigns outperformed before the GFC whilst corporates outperformed after. Pre-GFC SOE issuance grew by 61.7%, followed closely by sovereigns at 55.3%; corporates were the pre-GFC laggards with 9% CAGR growth. However, the GFC generated a large change in the issuance pattern by entity. The post-GFC growth of corporate issuance rose by 30ppts to 39%; this was the only entity type that improved. Issuance growth post-GFC fell by 42ppts for sovereigns and 30ppts for SOEs.

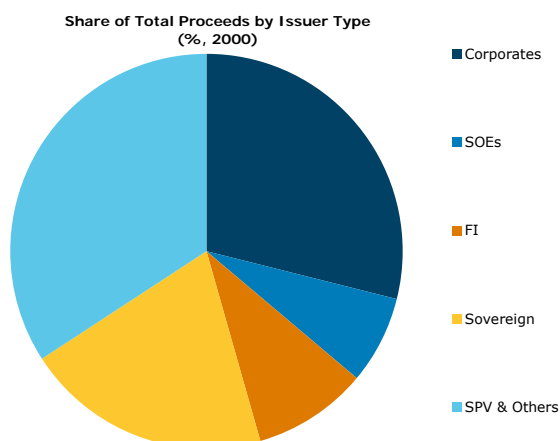
Like the issuance data sorted by economy, the composition of issuance across entities has changed markedly over the period (Figures 6 and 7). SOEs have gone from having the smallest share (7.4%) in 2000 to the largest in 2011 (50.0%). Meanwhile, SPVs went from having the largest share in 2000 (34.1%) to having the smallest in 2011 (1.8%). The sovereign share rose sharply pre-GFC, but has since fallen back whilst the share for corporates has done the opposite. The share for financial institutions has been stable.

FIGURE 5. EMERGING ASIAN BONDS – ISSUANCE BY ENTITY TYPE

	Total Value of Issues (USD bn)			Total Value of Issues (CAGR)			Average Size of Issues (CAGR)		
	2000	2007	2011	2011/00	2007/00	2011/08	2011/00	2007/00	2011/08
Corporates	26.6	48.6	153.1	17.2	9.0	39.1	7.9	6.4	9.8
SOEs	6.8	196.7	595.8	50.2	61.7	31.9	11.5	18.4	4.2
FI	8.8	54.7	130.5	27.8	29.9	22.4	-5.5	-6.3	0.0
Sovereign	18.7	408.4	292.1	28.4	55.3	12.3	8.9	17.4	17.6
SPV & Others	31.5	29.5	21.3	-3.5	-1.0	-6.4	-4.9	-7.3	2.3
Total	92.4	737.8	1192.8	26.2	34.6	24.4	9.3	18.9	5.0

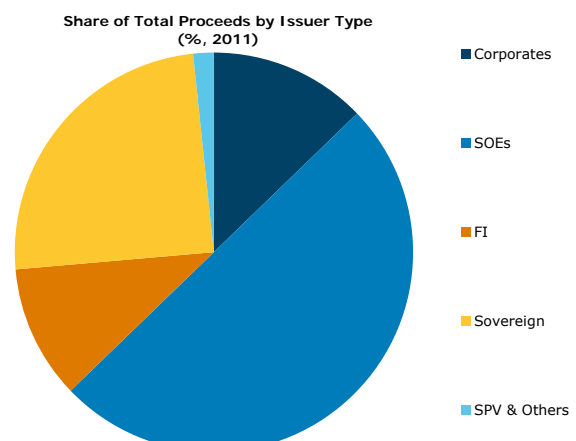
Sources: Dealogic, ANZ

FIGURE 6. SHARE OF EMERGING ASIA BOND ISSUANCE BY ENTITY TYPE IN 2000



Sources: Dealogic, ANZ

FIGURE 7. SHARE OF EMERGING ASIA BOND ISSUANCE BY ENTITY TYPE IN 2011



Sources: Dealogic, ANZ

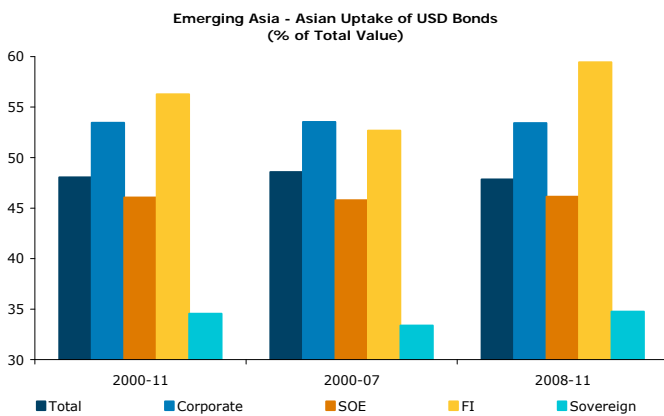
## ASIAN BOND MARKETS

Regarding average issuance size, the post-GFC period has seen improvement for most entity types. SOEs, corporates, and sovereigns all showed an annual growth rate in the range of 7.9% to 11.5% for the whole sample whilst financial institutions and SPVs contracted. In the pre-GFC period, SOEs and sovereigns led the pack with growth of 17%-18% per annum. Post-GFC, average issuance size fell sharply for SOEs, but was stable (sovereigns) or increasing for all other.

### ARE ASIAN INVESTORS INCREASINGLY TAKING UP ASIAN BONDS?

We will now check to what extent Asian investors are buying Asian bond issues. This will be an important measure of intra-regional financial integration in the sense that a high and/or rising level of 'Asia buying Asia' would imply less reliance on US and European investors for funding. This, in turn, would imply less dependency on investor demand from those regions. We explored a related issue in Asia Financing Asia<sup>3</sup>.

**FIGURE 8. ASIAN INVESTOR TAKE-UP RATE FOR ASIAN BONDS**



Sources: Dealogic, ANZ

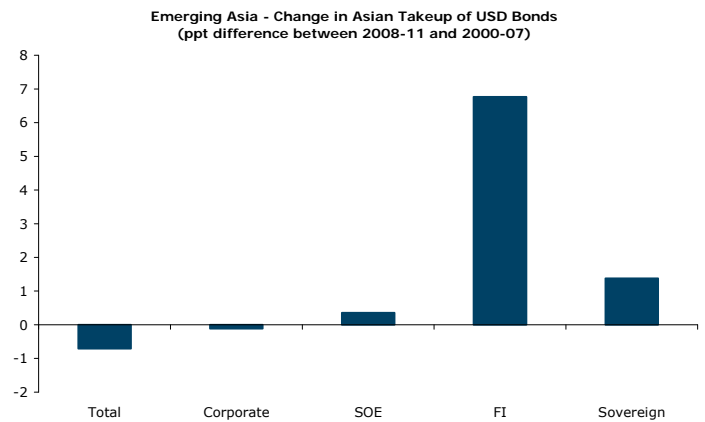
<sup>3</sup> *Asia Financing Asia - ANZ Research for Asian Development Bank 45th Annual Meeting, May 2012*

While not a perfect measure from an intra-regional financing perspective (since the bonds can be resold in the secondary market, including to investors from a different region), it does give us a sense of both the level of Asian investor interest in Asian fixed income claims, and its change over time. But a word of caution is in order regarding this final exercise. Data availability is more restricted than for the analysis in the previous sections since the bond investors are identified only for US dollar denominated issues. Given that over 90% of bonds are local currency denominated this vastly reduces our sample size to around 400. Not all USD bonds report the geographic location of the issuers. Also, USD bond issuance is skewed toward Korea and Hong Kong. Thus, while the size of this restricted sample is large enough to ensure robust results, we have no guarantee that it is representative of the entire data set.

What did we find? First, Asian investor take-up rates for the debt of Asian issuers were just under 50% on average over our sample but varied across entity types (Figure 8). Financial institutions garnered the highest level of Asian investor interest at 57%, a full 10ppts above the group average corporate issues had an above average Asian investor take-up as well. Sovereign issues had the lowest Asian participation rate by a wide margin, some 15ppts below the group average. Put alternatively, sovereign Asian issues generated the most 'foreign' interest whilst the bonds of Asian financial institutions generated the least.

How did these shares move over time? In most cases the answer is: not much. Indeed, the overall rate of Asian investor take-up of Asian bonds showed little change between the pre and post-GFC periods. The largest change between 2000-07 and 2008-11 was in financial institutions, which saw Asian investor take-up rise by 7ppts (Figure 9) to almost 60%. This solidified its lead as the most popular entity type for Asian investors.

**FIGURE 9. CHANGES IN ASIAN INVESTOR TAKE-UP RATE FOR ASIAN BONDS**



Sources: Dealogic, ANZ

# ASIAN BOND MARKETS

## WHERE TO FROM HERE?

Fast growth and financial deepening notwithstanding, Emerging Asian bond markets remain modest in global terms. In terms of securities outstanding (Figure 10), US bond markets are larger than those in Emerging Asia by a factor of five to six (with European markets almost as large as those in the US). Japan's debt markets are more than twice the size of Emerging Asia's.

So what does the future hold? We see two opposing factors at work.

1. The factor that will tend to continue to increase debt (issuance) levels in Emerging Asia is continued financial development and market deepening. As financial systems continue to develop and as a broader class of entities (including provincial governments, particularly in China) gain/are allowed market access, debt levels should rise faster than nominal GDP and bank lending. Given that the region will continue to converge with the advanced economies across a number of metrics, we would expect that the fast growth of debt markets will continue.

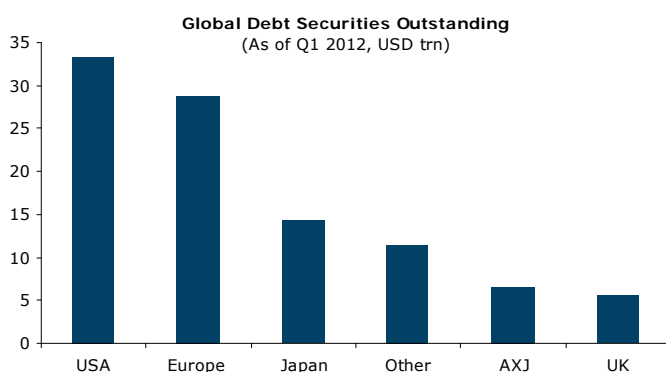
2. The moderating factor will be fiscal conservatism in Emerging Asia. Whilst financial developments will tend to deepen debt markets in Emerging Asia and move key metrics toward advanced economy levels, a key difference will be the debt levels of the public sector. Here, we find it unlikely that governments in the region will amass debts on the scale we have seen in the US and Europe. This will serve as a brake on the rate of convergence between Emerging Asian and US and EU debt metrics.

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Analyst

**FIGURE 10. EMERGING ASIAN BOND MARKETS IN A GLOBAL CONTEXT**





# AUD: TRULY UNIQUE TIMES

## BREAKING HISTORIC RANGES

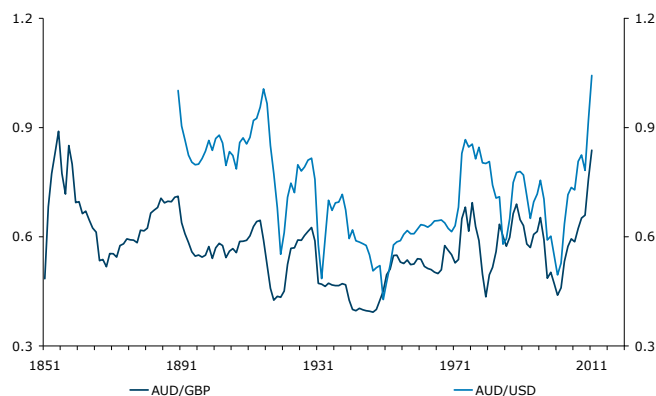
There have been some truly unprecedented developments in Australia's exchange rate in recent years. Out of favour during the explosion of the US technology sector during the late 1990s and reaching a low of USD0.47<sup>3</sup>/<sub>4</sub>, the Australian dollar navigated the travails of the global financial crisis to eventually trade above USD1.10 in 2011. During the last five years Australia's generally laissez-faire central bank has been engaged in both intervention to support the currency when it was weak and in watering down speculation that it would intervene to cap its appreciation when it was strong - an indication of just how extreme these changes have been.

Taking a panoramic perspective on the exchange rate, looking back on the last 160 years, it is clear that recent moves are some of the largest and sharpest in the country's history.

Measured in real annual average terms, the AUD/USD traded to a low of USD0.43 during the depths of World War II and to a high of USD1.04 in 2011. The real AUD/GBP, for which data exist going back much further, shows a low of GBP0.395 around the same time as the AUD/USD and a high of GBP0.89 in the years following the Victorian gold rush of the 1850s (Figure 1).

So not only have historic ranges been tested, and in some cases exceeded, on the upper and lower ends over the last few years, this has all happened within a few short years. In the past, such extreme changes took decades to occur.

FIGURE 1. LONG-TERM REAL AUD



Sources: ABS, Butlin (1985), MeasuringWorth, Vamplew (1987), (References #2 and #4), Thomson Reuters DataStream, ANZ

### THINGS TO WATCH

While recent falls in bulk commodity prices present a near-term risk, the long-term outlook is positive.

History, China's urbanisation, and diversification of investor assets all suggest the exchange rate is set to remain high for some time yet.

In the near-term we favour AUD/NZD lower as our strongest AUD view.

With this perspective in mind we review the recent performance of the Australian dollar, identifying the key drivers and issues, and offer an outlook. An outline of the material changes is sketched out. We conclude by offering an outlook and assess how and where the currency may surprise in years ahead.

### 1. COMMODITIES AND THE RECENT 'DIVERGENCE'

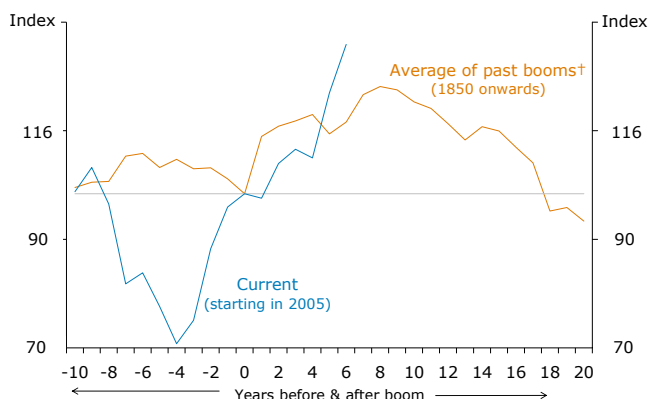
The most important determinants of the currency's present value is the industrial revolution proceeding in China, the associated acceleration of mining production in Australia, and the increase in Australia's terms of trade (the ratio of export prices to import prices).

## AUD: TRULY UNIQUE TIMES

We do not expect the Australian dollar to fall substantially as commodity prices moderate and Australia transitions to the second phase of the boom. This outlook is not only supported by the very large volume of exports likely to be shipped during this phase, but also by historical experience. In the course of Australia's last four mining booms since 1850 the exchange rate has remained above its pre-boom level for around 15-20 years on average (Figure 2, *References #1*). Typically it only reaches its peak around 8-9 years after the start of the boom. So if the current boom is dated from 2005, history implies another year or so before the exchange rate peaks in real year-average terms. And even after that the decline is likely to be quite gradual.

But history alone may not be a good guide given the remarkable changes we have seen recently. There is an even more compelling reason to believe that the AUD will stay high; no boom in Australia's history has ever been accompanied by the kind of demographic change that is gathering pace in China. Most booms have been created by temporary demand or supply shocks. Chinese urbanisation and an increase in living standards is ultimately the driver of Australian output. These factors are unlikely to moderate any time soon. By 2025 it is estimated an additional 325m people will live in China's cities, with the city population expected to top 1bn by 2030 (*References #3*). The path to Chinese urbanisation may only be one-quarter complete right now.

**FIGURE 2. REAL 'EFFECTIVE' AUD DURING PAST MINING BOOMS (START OF BOOM = 100)**



† Past booms are 1850, late 1890s, late 1960s and early 1980s, following Battellino (2010). Real effective AUD is equally weighted basket of AUD/USD and AUD/GBP.

Sources: ABS, Butlin (1985) MeasuringWorth, Vamplew (1987), (*References #2 and #4*), Thomson Reuters DataStream, ANZ

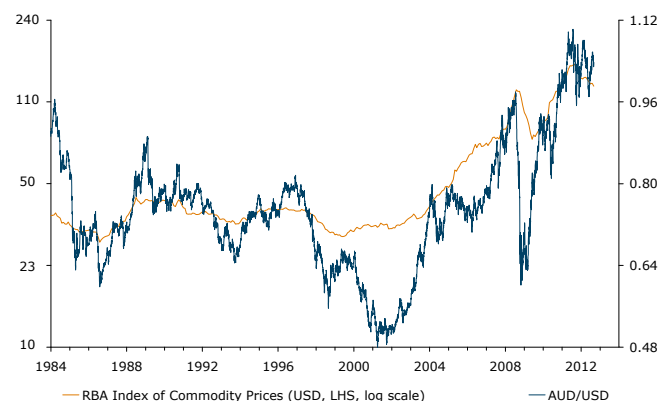
In more recent months the exchange rate has diverged somewhat from Australia's key bulk commodity prices. Iron ore has fallen below USD90 per tonne, with declines in coking and thermal coal prices also very noticeable, while the AUD has remained largely unaffected. Such divergences are historically common. And it is quite normal to see the exchange rate swing around the level implied by these commodity prices alone (Figure 3). Changes in interest rate differentials and changes in the base currency – the US dollar – are typically the driving factor.

Yet neither the interest rate differential (which is around average levels), or the US dollar (which has slowly strengthened over the past 12 months) can account for the present divergence.

### 2. DIVERSIFICATION

The missing piece is likely to be a fundamental change in the global financial system. Global investors are now faced with extraordinarily low returns in the core sovereign bond markets, primarily a result of the global deleveraging cycle, large output gaps, and the associated low return on capital that appears set to dog savers in these markets for years to come. The threat of future inflation emerging from the expansion of central bank balance sheets (Figure 4) in developed economies and has re-focused savers' attention on the real return of core markets. A growing possibility of sovereign default has also increased the risk profile in these markets. These developments appear to have driven savers out of core markets and into alternatives such as the Australia dollar. Although limited in availability, Australian dollar assets offer a stable inflation environment, a transparent

**FIGURE 3. AUD AND COMMODITY PRICES (DAILY)**



Sources: RBA, Thomson Reuters DataStream, ANZ

# AUD: TRULY UNIQUE TIMES

exchange rate policy and a positive credit outlook, coupled, importantly, with a relatively attractive return on capital.

Amid this change in private portfolio preferences is another related process: a concerted attempt by some major central banks to weaken their currencies via the accumulation of foreign exchange reserves. This process is aimed at creating instant external competitiveness in a world with very soft aggregate demand. Some central banks, for example the Swiss National Bank, have re-engineered their entire monetary policy around the anchor of external valuation. And in recent months it has been argued that the Swiss National Bank in particular has driven the global foreign exchange market. The IMF reports the SNB's foreign exchange reserves have increased by roughly USD120bn in the last three months, vastly more than any other major central bank (Figure 5). Since the AUD is included in the SNB's portfolio, this increase is likely to have been responsible for the currency's recent strength. Anecdotes in the media also support the contention that other central banks have purchased AUD denominated assets.

### 3. SAFE HAVEN?

The currency is arguably acquiring 'safe haven' status. The governor of the Reserve Bank of Australia recently suggested that Australian assets could actually see an increase in the flow of funds in the event of a euro break up (*References #5*).

Take the AUD/EUR. Its correlation with BBB spreads has diverged from the AUD/USD correlation with BBB spreads in recent months. So AUD/EUR now falls by less than it used to when risk rises.

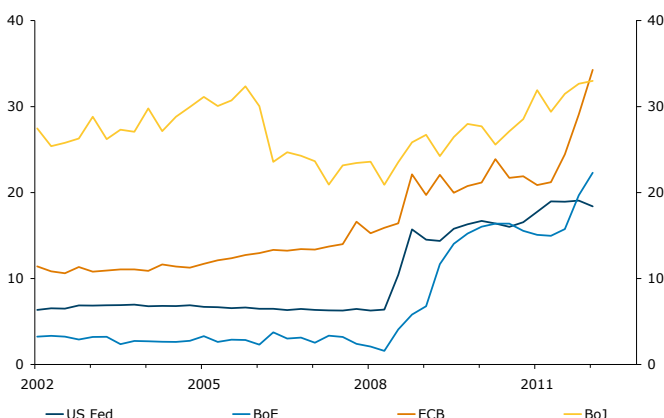
### 4. VOLATILITY

If indeed the currency has some safe haven status, one implication is more mild day-to-day variation. The euro, the US dollar and the yen all – all core global reserve currencies – exhibit relatively stable behaviour. On empirical estimates, volatility is at its lowest level since July 2007 and much lower than its long-term average (Figure 6).

This outcome is a subtle consequence of the diversification flows outlined earlier. The key is the portfolio rebalancing process. As foreign exchange enters the portfolios of central banks and private real money accounts, the managers of these portfolios are increasingly transacting on both sides of the spot market. This process is required to ensure their exposures remain within the risk limits mandated by their benchmarks. Each manager has different benchmarks and thus different rebalancing frequencies. For example, investors that are more conservative will rebalance more frequently.

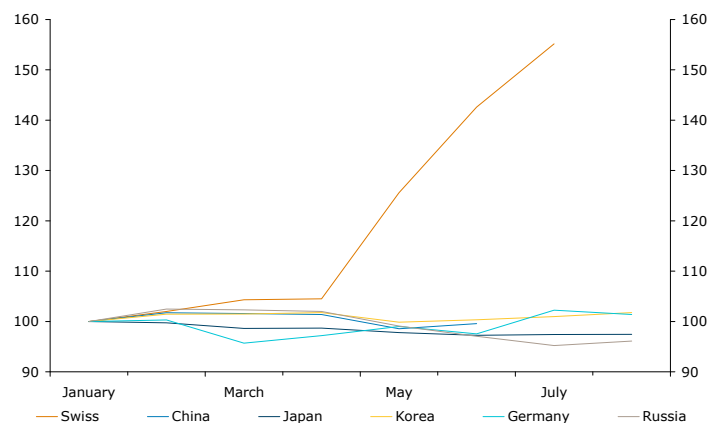
Rebalancing has the effect of topping and tailing large currency moves. Managers are inclined to buy when the currency depreciates. In contrast, they will be inclined to sell when the currency appreciates. Both actions have the effect of 'trimming' movements in the exchange rate, and thereby moderating volatility in general.

FIGURE 4. CENTRAL BANK BALANCE SHEETS (% OF GDP)



Sources: Central banks, Thomson Reuters DataStream, ANZ

FIGURE 5. GLOBAL FX RESERVES IN USD TERMS (JANUARY 2012 = 100)



Sources: Thomson Reuters DataStream, ANZ

## AUD: TRULY UNIQUE TIMES

So long as core global bond markets provide minimal yield to investors and the credit environment remains questionable, the Australian dollar should continue to see volatility moderate. The old adage that the currency 'goes up by the stairs but down by the elevator' may no longer be appropriate.

### 5. LOOKING AHEAD

All the factors lending support to the currency in recent times are semi-permanent in nature and look set to continue for the foreseeable future.

- > Commodity prices should remain at high levels, despite recent falls, so long as the industrialisation and urbanisation process in China continues. Though there may be bumps along the way, this is a 10-20 year process.
- > Investor and central bank diversification flows should persist so long as returns in the core global economies remain weak and the credit profile shaky.
- > In a related vein, central banks around the world, but particularly in the euro zone, will continue to run loose monetary policies, with the global deleveraging process set to continue for a number of years.

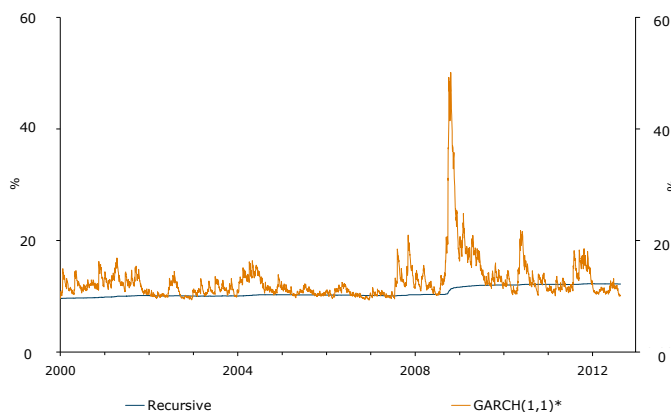
So while the fall in commodity prices presents near-term downside risk, the long-term outlook remains solid and our forecasts anticipate the AUD remaining at high levels over the next two years (Figure 7).

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FX Strategist

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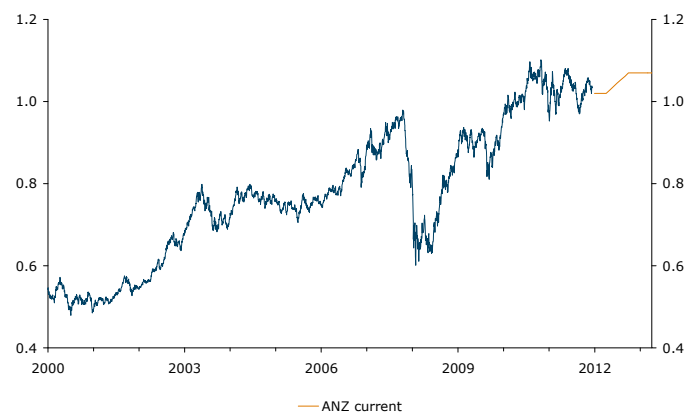
FIGURE 6. AUD VOLATILITY  
(ANNUALISED DAILY LOG CHANGES)



\*Alpha = 5%, Beta = 90%

Sources: Bloomberg, Thomson Reuters DataStream, ANZ

FIGURE 7. AUD/USD FORECASTS



Sources: Bloomberg, ANZ

## FORECASTS

## COMMODITIES

COMMODITY	Unit	Jun 12	Sep 12	Dec 12	Mar 13	Jun 13	Sep 13	Dec 13	Mar 14	Jun 14
<b>Base metals</b>										
Copper	USD/lb	3.49	3.70	3.80	4.00	4.12	4.15	4.25	4.15	4.05
Aluminium	USD/lb	0.85	0.96	0.98	0.96	1.02	1.05	1.06	1.05	1.04
Lead	USD/lb	0.84	0.98	1.02	1.04	1.05	1.06	1.07	1.08	1.09
Nickel	USD/lb	7.57	7.80	8.00	8.85	8.40	9.00	9.40	9.30	9.20
Zinc	USD/lb	0.85	0.92	0.96	0.95	1.00	1.02	1.04	1.06	1.08
<b>Precious metals</b>										
Gold	USD/oz	1,597	1,740	1,780	1,820	1,850	1,870	1,890	1,870	1,850
Silver	USD/oz	27.5	33.5	34.1	35.0	35.5	36.0	37.0	36.6	35.0
Platinum	USD/oz	1,447	1,660	1,700	1,760	1,820	1,835	1,860	1,850	1,840
Palladium	USD/oz	583	670	700	740	790	830	825	820	813
<b>Energy</b>										
WTI Crude	USD/bbl	85	96	102	108	112	112	111	110	109
Dated Brent	USD/bbl	97	112	116	120	120	118	116	115	114
<b>Bulks</b>										
Iron Ore Spot (CIF China)	USD/t	134	102	110	115	120	125	128	130	130
Iron Ore Contract (FOB Aust)	USD/t	128	118	96	104	108	113	117	119	121
Coking coal - Premium Hard	USD/t	210	225	170	180	195	205	205	200	195
Coking coal - Hard	USD/t	205	220	160	170	180	190	190	180	175
Coking coal - Semi soft	USD/t	147	150	105	120	140	155	155	160	155
Newc Thermal Coal (Spot)	USD/t	87	84	90	95	102	104	106	107	110
Newc Thermal Coal (JPY Contract)	USD/t	115	115	115	115	105	105	105	105	110
<b>Other metals</b>										
Alumina (spot)	USD/t	308	349	356	349	371	382	385	370	367
Molybdenum	USD/lb	12.9	14.0	14.3	14.8	15.0	15.5	16.0	16.5	16.5
Cobalt	USD/lb	13.6	14.6	15.5	16.0	17.0	17.0	17.5	17.5	17.0
<b>Agriculture</b>										
Corn	USc/bu	617	779	740	732	742	661	665	596	604
Wheat	USc/bu	641	873	826	770	753	764	761	624	617
Soybeans	USc/bu	1452	1650	1600	1500	1450	1350	1300	1200	1200
Soybean Oil	USc/lb	54	54	53	52	53	52	52	52	52
Palm Oil	MYR/t	3200	2960	2800	2850	2900	2900	2900	3000	3000
Canola	CAD/t	570	570	560	580	590	570	560	450	450
Sugar	USc/lb	21	21	20	21	20	21	22	19	19
Beef	USc/lb	118	123	131	126	126	126	126	105	105
Milk Powder	USD/t	3031	2963	2950	3200	3300	3400	3500	3300	3200
Cotton	USc/lb	90	84	84	80	79	78	82	95	93
Wool	AUD/kg	11.3	10.1	10.0	10.7	11.0	10.0	9.5	10.7	11.0

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

Source: ANZ

## FORECASTS

## CONSUMER PRICE INDEX INFLATION (YEAR-AVERAGE)

Country/region	1990-2007	Forecasts				
	Average	2009	2010	2011	2012	2013
<b>World<sup>1</sup></b>	4.8	1.7	3.0	4.2	3.6	3.3
<b>G7</b>	2.4	-0.1	1.4	2.6	1.8	1.6
<b>US</b>	2.9	-0.3	1.6	3.1	2.0	1.7
<b>Euro zone</b>	2.8	0.3	1.6	2.7	2.2	1.6
<b>Japan</b>	0.6	-1.4	-0.7	-0.3	-0.1	0.0
<b>UK</b>	2.6	2.2	3.3	4.5	2.7	2.2
<b>China</b>	5.1	-0.7	3.3	5.4	3.0	4.0
<b>Australia</b>	2.8	1.8	2.8	3.4	1.7	3.2
<b>New Zealand</b>	2.3	2.1	2.3	4.0	1.3	2.3
<b>OECD</b>	2.5	0.0	1.5	2.6	1.8	1.5
<b>East Asia</b>	5.3	0.3	3.3	5.2	3.3	3.9
<b>South Asia</b>	7.4	6.0	6.0	9.2	7.4	6.9
<b>Emerging Economies<sup>1</sup></b>	9.5	3.7	4.7	6.0	5.5	5.0

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

Sources: Consensus Economics, Thomson Reuters DataStream, ANZ

## FORECASTS

## GROSS DOMESTIC PRODUCT (YEAR-AVERAGE % CHANGE)

	1990-2007	Forecasts				
	Average	2009	2010	2011	2012	2013
<b>World (PPP)</b>	3.6	0.8	5.1	3.7	3.2	3.8
<b>World (Market)</b>	3.0	-0.7	4.2	2.9	2.4	3.0
<b>G7</b>	2.4	-3.7	3.0	1.4	1.5	1.9
<b>US</b>	3.0	-2.6	3.0	1.7	2.2	2.5
<b>Euro zone</b>	2.2	-3.4	1.7	1.4	-0.5	0.7
<b>Japan</b>	1.2	-6.3	4.5	-0.7	2.4	1.6
<b>UK</b>	2.6	-4.9	2.1	0.7	-0.4	1.0
<b>Canada</b>	2.7	-2.5	3.2	2.4	2.1	2.2
<b>Asia-Pacific</b>	5.2	4.2	8.2	5.9	5.6	6.0
<b>Asia-Pacific less Japan</b>	7.0	6.5	8.9	7.2	6.2	6.8
<b>Australia</b>	3.2	1.4	2.5	2.1	3.6	2.8
<b>New Zealand</b>	3.0	-2.3	1.7	1.3	2.5	2.6
<b>China</b>	10.0	10.4	10.4	9.2	7.8	7.9
<b>Hong Kong</b>	4.2	-2.7	7.0	5.0	2.4	5.5
<b>India</b>	6.1	7.0	9.6	7.5	5.5	6.9
<b>Indonesia</b>	4.9	4.6	6.1	6.3	6.3	6.6
<b>Malaysia</b>	6.5	-1.7	7.2	5.2	4.6	5.5
<b>Philippines</b>	3.7	1.1	7.6	3.9	5.6	5.3
<b>Singapore</b>	6.8	-0.8	14.8	5.0	2.2	4.5
<b>South Korea</b>	5.8	0.2	6.2	3.7	2.5	4.1
<b>Taiwan</b>	5.5	-1.9	10.9	4.0	2.4	3.6
<b>Thailand</b>	5.2	-2.3	7.8	1.9	5.2	4.6
<b>Vietnam</b>	7.5	5.3	6.8	5.9	5.5	6.6
<b>Latin America<sup>1</sup></b>	3.5	3.9	6.2	4.4	3.4	3.9
<b>Brazil</b>	2.3	4.2	7.5	2.7	2.4	4.2
<b>Mexico</b>	3.2	3.5	5.4	3.9	3.8	3.5
<b>Argentina</b>	3.8	2.9	9.2	8.9	2.4	2.9
<b>OECD</b>	2.5	-3.3	2.6	1.3	1.3	1.7
<b>Emerging Economies</b>	5.8	5.6	7.8	6.4	5.2	5.9

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

Sources: Consensus Economics, Thomson Reuters DataStream, ANZ

## FORECASTS

## RATES (%)

	Dec 12	Mar 13	Jun 13	Sep 13	Dec 13
<b>Europe</b>					
Refinance rate	0.50	0.50	0.50	0.50	0.50
3m euribor	0.50	0.50	0.50	0.50	0.50
10y bund	1.50	1.70	2.00	2.20	2.40
<b>UK</b>					
Base rate	0.50	0.50	0.50	0.50	0.50
3m libor	0.70	0.70	0.70	0.70	0.70
10y gilt	1.80	2.00	2.20	2.40	2.60
<b>Canada</b>					
Discount rate	1.00	1.25	1.50	1.50	1.50
3m libor	1.60	1.70	1.80	1.80	1.80
10y bond	1.80	2.00	2.10	2.20	2.40
<b>Japan</b>					
Target rate	0.10	0.10	0.10	0.10	0.10
3m tiber	0.35	0.35	0.35	0.35	0.35
10y JGB	1.00	1.10	1.20	1.40	1.60
<b>US</b>					
Fed funds rate	0.25	0.25	0.25	0.25	0.25
3m libor	0.35	0.35	0.35	0.35	0.35
6m libor	0.60	0.60	0.60	0.60	0.60
2y note	0.30	0.30	0.40	0.50	0.60
5y note	0.80	0.80	1.00	1.20	1.40
10y note	1.90	1.90	2.10	2.30	2.50
30y bond	3.10	3.20	3.40	3.60	3.80
<b>Australia</b>					
RBA cash rate	3.00	3.00	3.00	3.00	3.00
90-day bank bills	3.15	3.15	3.15	3.15	3.15
3y bond	2.40	2.30	2.50	2.70	2.90
10y bond	3.20	3.00	3.20	3.40	3.60
3y swap	3.00	2.90	3.10	3.20	3.40
5y swap	3.52	3.33	3.53	3.63	3.83
10y swap	4.00	3.70	3.90	4.00	4.20
10y spread to US	1.30	1.10	1.10	1.10	1.10
3s10s bond	0.80	0.70	0.70	0.70	0.70
<b>New Zealand</b>					
NZ OCR	2.50	2.50	2.50	2.50	2.50
90-day rate	2.75	2.75	2.75	2.75	2.75
180-day rate	2.80	2.80	2.80	2.80	2.80
3y bond	3.22	3.46	3.55	3.75	4.03
10y bond	3.74	3.81	3.88	4.15	4.38
NZ-US 10 year	1.74	1.71	1.68	1.65	1.58
<b>United States</b>					
3-mth LIBOR	0.35	0.35	0.35	0.35	0.35
2 year bond	0.30	0.30	0.40	0.50	0.60
10 year bond	1.90	1.90	2.10	2.30	2.50
2/10yrs yield	160	160	170	180	190



## FORECASTS

## RATES CONTINUED (%)

POLICY RATES	Sep 12	Dec 12	Mar 13	Jun 13	Sep 13	Dec 13
<i>G4</i>						
US	0.25	0.25	0.25	0.25	0.25	0.25
Euro zone	0.50	0.50	0.50	0.50	0.50	0.50
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
UK	0.50	0.50	0.50	0.50	0.50	0.50
<i>Commodity</i>						
Canada	1.00	1.00	1.00	1.00	1.25	1.25
Australia	3.50	3.00	3.00	3.00	3.00	3.00
New Zealand	2.50	2.50	2.50	2.50	2.50	2.50
<i>Emerging Asia</i>						
China	6.00	6.00	6.00	6.00	6.25	6.50
Hong Kong	0.50	0.50	0.50	0.50	0.50	0.50
India	8.00	8.00	8.00	7.75	7.75	7.75
Indonesia	5.75	5.75	6.00	6.00	6.25	6.25
Malaysia	3.00	3.00	3.00	3.25	3.25	3.25
Philippines	3.75	3.75	3.75	3.75	4.00	4.00
South Korea	3.00	2.75	2.75	3.00	3.00	3.25
Taiwan	1.875	1.875	2.000	2.125	2.250	2.375
Thailand	3.00	2.75	2.75	2.75	3.00	3.00
Vietnam	10.00	9.00	9.00	9.00	9.00	9.00

Sources: Relevant Central Banks, Bloomberg, ANZ

## FORECASTS

## FOREIGN EXCHANGE RATES

	CURRENT		FORECASTS				FORWARDS		
	Sep 12	Dec 12	Mar 13	Jun 13	Sep 13	Dec 13	3-mths	6-mths	12-mths
<b>EUR/USD</b>	1.29	1.25	1.27	1.29	1.30	1.31	1.291	1.29	1.30
<b>GBP/USD</b>	1.62	1.63	1.63	1.63	1.63	1.61	1.621	1.62	1.62
<b>USD/JPY</b>	78.02	76.00	76.00	76.00	76.00	76.00	77.96	77.87	77.67
<b>AUD/USD</b>	1.04	1.02	1.05	1.07	1.07	1.07	1.032	1.025	1.011
<b>NZD/USD</b>	0.82	0.80	0.83	0.85	0.85	0.85	0.82	0.81	0.803
<b>USD/CNY</b>	6.31	6.30	6.25	6.20	6.20	6.15	6.36	6.40	6.46
<b>USD/IDR</b>	9590	9800	9800	9700	9600	9500	9699	9825	10095
<b>USD/INR</b>	53.44	54.0	53.0	52.5	52.0	51.5	54.27	55.07	56.48
<b>USD/KRW</b>	1121	1120	1110	1100	1080	1060	1125	1130	1137
<b>USD/MYR</b>	3.072	3.10	3.08	3.06	3.04	3.02	3.09	3.106	3.134
<b>USD/PHP</b>	41.79	41.5	41.5	41.0	41.0	41.0	41.85	41.92	42.19
<b>USD/SGD</b>	1.23	1.25	1.24	1.23	1.22	1.21	1.23	1.23	1.22
<b>USD/THB</b>	30.95	31.6	31.4	31.2	31.0	30.8	31.13	31.29	31.63
<b>USD/TWD</b>	29.37	30.0	29.5	29.4	29.3	29.2	29.47	29.42	29.31
<b>USD/VND</b>	20870	21200	21300	21500	21500	21500	21161	21451	22034
<b>USD/HKD</b>	7.75	7.80	7.80	7.80	7.80	7.80	7.75	7.75	7.75

Sources: Bloomberg, ANZ

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