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CONTENTS

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OVERVIEW

This edition of the *ANZ Research Quarterly* provides detailed analysis to support the views below.

ECONOMIC OUTLOOK

- The global recovery has moderated but we don't believe another recession is imminent.
- The conditions for a sustained economic recovery are being put in place in the US and elsewhere.
- China's growth has eased to a more sustainable level.
- Australia's surging economy will face capacity constraints and inflation challenges.
- Australia's exposure to the commodity cycle needs careful management.

CURRENCY OUTLOOK

- We expect improvement for the USD over the course of 2011, particularly in relation to the EUR.
- The Asia ex-Japan (AXJ) currencies will reassert their strength against the USD towards the end of 2011.
- High commodity prices will support the AUD and, to a lesser extent, the NZD.

COMMODITIES

- Easing Chinese growth and uncertain Western demand have tempered the mood in commodity markets.
- There are signs that a bottom may have formed, with investment funds returning to soft and hard commodity markets, but we expect volatility ahead.

GOLD

- Gold's outstanding performance over the past decade is set to continue.
- Dynamics at play in the gold market include rising investment demand, emerging physical demand and a lack of new gold discoveries to meet it.

INFRASTRUCTURE

- Australia needs to upgrade its infrastructure at an estimated cost of 8% of GDP over the next six years.
- Sourcing the necessary funding and skilled labour for this program will be a challenge.
- Emerging Asia's development path requires substantial infrastructure investment over the next decade.

ECONOMIC OUTLOOK

GLOBAL OUTLOOK

IT APPEARS THAT THE GLOBAL RECOVERY STALLED IN MID-2010. IF MARKETS ARE TO BE BELIEVED WE ARE ON THE VERGE OF ANOTHER RECESSION. WE DISAGREE.

It started as a European debt crisis, then lurched to concerns over the extent of China's slowdown, and is now a fully-fledged fear of renewed recession in the world's largest economy, the US. There is no doubt that the rapid rebound in global growth in the 12 months to March 2010 has lost momentum. This rebound was led by fiscal stimulus augmented by a rebuild of inventories in the business sector. Without an equally impressive resurgence in final private demand, the recovery was always going to revert to a more moderate pace of growth.

A number of factors are justifiably raising concern over the prospects for global economic growth. Many European countries, including the United Kingdom, have taken the route of fiscal austerity to avoid the harsh treatment by bond markets seen with Greece. Europe's growth will suffer in the transition from fiscal stimulus to consolidation. Growth expectations for the next few years have been trimmed accordingly. But at the centre of Europe is one of the world's strongest national economies, Germany. And with Germany heavily linked into China's economic success we believe Europe will muddle through.

In the US, the end of government incentives has seen a collapse in demand for new housing, pushing up the inventory of unsold homes and raising concerns that a new round of house price declines and delinquencies is just around the corner. Corporate America appears reluctant to invest and employ until these risks have abated. The US household sector is not out of the woods but record low mortgage rates and a stable unemployment rate should avert a worst-case scenario. The US economy may remain troubled for some time yet, but the conditions for recovery are being put in place.

With the release of weaker than expected Japanese Q2 GDP figures in early August, China officially became the world's second largest economy. As we note in our section on China, a more sustainable rate of growth appears to have been achieved after a surge in activity in late 2009 and early 2010. With inflation risks easing (though not eliminated) we expect China to grow at around 9% over the next year, a pace that when combined with the strong growth in most other parts of the emerging world, suggests that the global economy can sustain above trend growth of 4-5% in the years ahead.

THINGS TO WATCH

The corporate sector holds the key to global growth prospects in 2011. Companies must convert strong cash positions into real capital investment to drive economic growth.

Protectionist voices are likely to increase with stubbornly high unemployment, especially in the US.

Deflation risks are overstated although this will ensure low interest rates for the foreseeable future.

PROTECTIONISM MUST BE AVERTED!

Global current account imbalances are likely to cause increasing tensions, particularly from a US perspective where unemployment is high and exports will be an important ingredient in the recovery. Indeed, the chorus for protectionism from within the US will grow louder until a meaningful decline in unemployment can be achieved.

This will intensify pressure on China to adopt a more flexible exchange rate regime. The ability of the US and Chinese leadership to manage these pressures will be critical to both economic and political stability. China will need to allow its currency to strengthen, even if gradually. This will not only help contain domestic US political pressures for a more aggressive stance with China, but will also be an important ingredient in re-balancing the world economy over the decade ahead. In China, a stronger renminbi (RMB) will help contain inflation pressures while at the same time allowing domestic wages to increase. Higher wages will be a key element in driving stronger domestic consumption over the years ahead.

ECONOMIC OUTLOOK

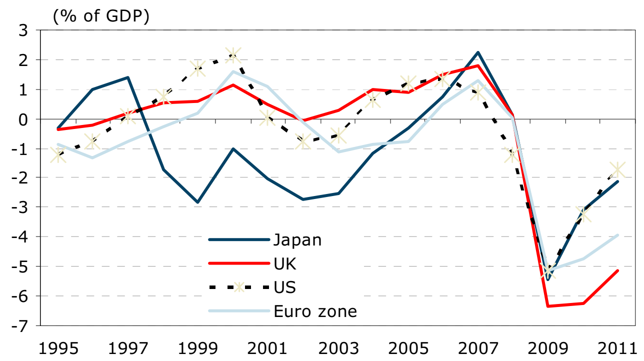
DEFLATION RISKS ENSURE LOW INTEREST RATES

Inflation pressures in advanced economies will be subdued as output gaps are substantial (figure 1). A worry for many advanced economies is the continued decline in inflation in 2010. Japan already endures deflation and now the US and Europe are facing a core inflation pulse barely above zero. At this juncture, inflation expectations seem well anchored at rates that are consistent with central bank targets. That is, households and markets are not expecting prices to fall.

It's crucial that policy makers do all they can to prevent deflation from occurring. A persistent decline in prices driven by a lowering of inflation expectations and weak nominal wage growth will only slow, if not retard, the necessary household balance sheet adjustments going on in many of these economies. The woeful economic experience of Japan over the past decade is a testament to the problem of deflation for a heavily indebted economy.

The upside to deflation risks is low interest rates. Most industrialised economies have short-term rates set near zero. Recent market fragilities and renewed concerns over growth have seen long-term interest rates decline as well. To make sure term rates remain low, the US Federal Open Market Committee is threatening another bout of quantitative easing. While low long-term interest rates reflect an expectation of persistently weak nominal economic growth, these low rates will also encourage both balance sheet adjustment and a pick up in demand. While it is hard to envisage long bond yields declining much further, it is clear that with low inflation and unusually large output gaps, policy rates will remain near zero for the foreseeable future.

FIGURE 1. OUTPUT GAPS



Source: OECD

MARKETS REMAIN VULNERABLE BUT SHOULD IMPROVE IN LINE WITH THE ECONOMY

Global markets have been under persistent pressure since the eruption of the European sovereign debt crisis. Economic and financial uncertainty has plagued investor sentiment with the events of late 2008 still front of mind. Even though there will be on-going problems for household balance sheets in some jurisdictions and government finances in others, the one bright spot across the world economy is corporate balance sheets.

One of the stand-out features of the corporate balance sheet is the strong cash position. Whether the cash is deployed in the form of investment in real capital stock or in buying back shares in the market, this strong position should put a floor under equity prices. Indeed, evidence of economic recovery could quickly translate into a rally in risky assets given the strong liquidity conditions in global markets.

Strong corporate balance sheets are also supporting credit spreads, particularly in the non-financial sector. One of the encouraging features of market conditions at mid-year was the strength in corporate bond markets. Despite concerns about economic stability and a strong rally in core government bond markets, corporate bond yields largely matched the decline in the government sector.

We expect economic and financial conditions to improve over the final months of 2010. The pace of recovery in risk appetite will largely be dictated by underlying economic conditions. If economic recovery remains elusive we may not see a concerted rally in equity markets for some months, and economic conditions in the major Western economies will continue to be fragile for sometime. But conditions for a sustained economic recovery are being put in place, particularly in the US, and by mid 2011 we expect to see a more robust global economic environment emerge.

Warren Hogan
Chief Economist, Australia
Head of Global Markets Research

ECONOMIC OUTLOOK

G3 OUTLOOK

THE US ECONOMY INCHES CLOSER TO A SUSTAINED RECOVERY.

Recent US economic data show the economy is losing momentum at an abrupt pace, with most activity indicators coming in below expectations. The short term outlook is gloomy as the economy faces significant headwinds, namely: ongoing household deleveraging; a soggy housing market; and a politically hamstrung fiscal policy.

Corporate America is the bright spot as balance sheets are healthy and many have sizable cash positions. At this stage there does not appear to be much of an incentive for companies to invest as final demand is subdued. The latter reflects the perilous state of US households who are focused on repairing their balance sheets and rebuilding savings (figure 1). US households' conservative attitude will continue in the short term as further house price declines are likely as housing supply mounts amid an end to the housing tax credit and rising foreclosures. Based on the existing supply of vacant housing stock we estimate house prices could fall by around 10% from current levels (figure 2).

We think the risk of a double dip recession in the US is low. Outside of an exogenous shock (e.g. a credit event in Europe) it is hard to see what would trigger another recession as many of the cyclical drivers of the US economy, like the housing market, are already at low levels. The likelihood of a recession arising from a monetary policy mistake is remote given the US Federal Reserve is committed to keeping its policy rate low for an extended period. Moreover, the Federal Open Market Committee stands ready to use non-conventional monetary policy tools to support growth should the need arise.

THINGS TO WATCH

US house prices are set to weaken again. This could prolong the slump in household spending.

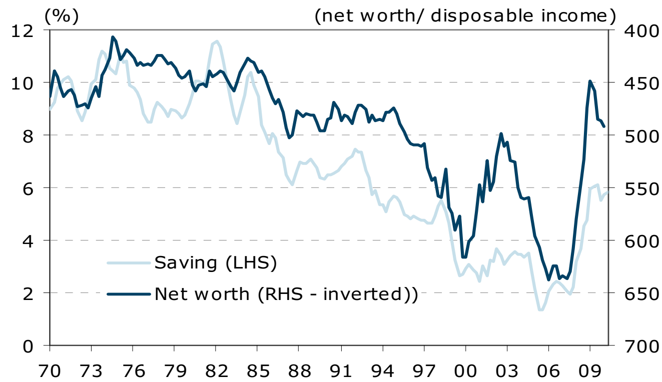
Will Japan tackle fundamental reform? This is necessary for growth but looks unlikely.

Germany's resurgence is likely to be short-lived. Sustained recover needs more than exports.

The US economy has the potential to surprise on the upside in the latter half of 2011. Indeed, the platform for a reasonable rebound is gradually falling into place. First, financial conditions (including monetary policy) will remain conducive to growth for some time. Second, the US banking system is in better shape than it was during the Global Financial Crisis (GFC) — US banks have written off a sizable amount of bad debts and have replenished capital. Banks are also easing their lending criteria (figure 3). This suggests the credit channel should be supportive of growth, unlike during the GFC. The final plank will be a partially revitalised household balance sheet. Although consolidation has further to run in the short term, we believe the most intensive period of household de-leveraging is now behind us.

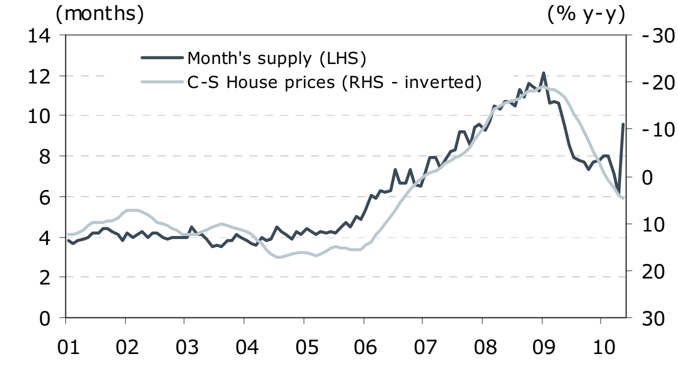
Although households remain at the epicentre of US economic uncertainty, the key to a sustained recovery

FIGURE 1. HOUSEHOLD SAVINGS AND NET WORTH



Source: Bloomberg

FIGURE 2. HOUSING SUPPLY AND HOUSE PRICES



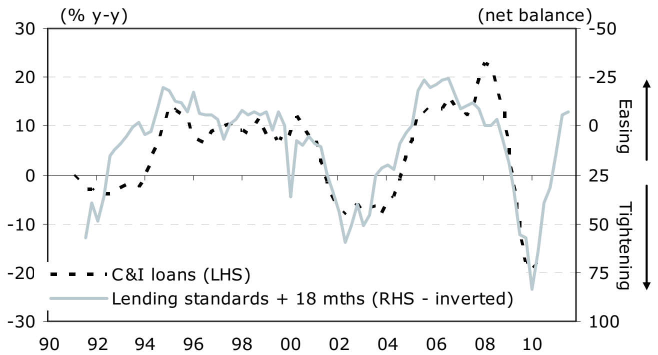
Source: Bloomberg

ECONOMIC OUTLOOK

is likely to be the willingness of corporate America to invest and employ. Given the significant cash position, corporations will seek to utilise these resources, as the return to holding cash on balance sheet with such low interest rates, is unacceptably low. The speed of the US economic recovery will be determined by the degree to which these cash assets are deployed as investment in real capital assets versus the alternative of buying back equity in the open market.

Our GDP forecast for the US economy is 2.5% in 2010 and 2011, with a weak profile over 2H10 and 1H11 and a pick up in 2H11. Inflation is likely to continue to fall amid weak demand and a sizable output gap. Although deflation is a possibility, it is not our baseline scenario—we forecast headline inflation to be 1.5% in 2010 and 1% in 2011.

FIGURE 3. C&I LOAN GROWTH AND LENDING STANDARDS



Source: US Federal Reserve

JAPAN'S OUTLOOK REMAINS DOUR

Japan's economy remains too reliant on external demand. This shortcoming has left it exposed to the current slowing. Domestic demand is virtually non-existent and there is little prospect it will support growth anytime soon. Household spending will be the Achilles heel amid a withdrawal of fiscal stimulus and deflation. Falling prices are expected to persist over the next couple of years and will act as a disincentive to spend. Business surveys portray an optimistic outlook for the corporate sector which should augur well for capital expenditure. That said, the recent strengthening in the yen will test the resilience of Japanese businesses.

In response to the slowing in global growth, the Bank of Japan extended its quantitative easing program. This was a meek effort and will do little to spur growth or arrest deflation. We are forecasting GDP growth to average around 1 to 1.5% (annualised) over the next 18 months and deflation to persist. Japan's longer-term prospects are dour amid poor fundamentals (an ageing and declining population) and a mounting pension liability. Indeed, its underlying fundamentals suggest that the Japanese economy will struggle to register positive nominal GDP growth in the foreseeable future. In the absence of fundamental structural reforms, we see little that traditional macroeconomic policy can do to arrest the decline.

EUROPE FACES MANY FINANCIAL HEADWINDS

Despite worries of sovereign credit problems intensifying in recent times, the run of economic data in the Euro zone has been surprisingly good. However, this is largely owing to an exceptional performance by Germany, where GDP rose by 2.2% in Q2 2010, the fastest pace since reunification. This exceptional strength is likely to be short-lived as the German expansion is largely being driven by external demand. Forward looking indicators show this demand has peaked and is rolling over. The initial weakness in the euro has also reversed in recent months, no doubt a factor in supporting German exports through the middle of 2010. That said, the prospects in Germany are better than for most other European countries. There will continue to be a substantial divergence between core (north-west) and peripheral (south-east) Europe, with the former outperforming.

Household spending in the Euro zone is likely to be anaemic amid high unemployment and a sizable debt overhang. In addition, fiscal policy is set to be a major drag as a number of governments will be implementing austerity measures. Fiscal drag is likely to be a major obstacle to growth for some time. We expect the Euro zone to expand by around 1.5% in 2010 and 2011. A key to a stronger European economy will be German domestic demand. The German household sector is in much better shape than most industrialised economies. If this can be translated into actual demand and imports, the necessary financial adjustments in other European economies can occur more quickly.

The lacklustre growth outlook for the Euro zone means the output gap will remain sizable. As a consequence, core inflation pressures will be muted. We forecast Euro zone inflation to average around 1.5% over the next couple of years. With demand sluggish and inflationary pressures absent, the European Central Bank is set to stay on the sidelines for an extended period.

Tom Kenny
Senior Economist

ECONOMIC OUTLOOK

AUSTRALIA: THE OUTPERFOMER

EXTERNAL FACTORS WILL BE THE PRIMARY DRIVER OF AUSTRALIA'S OUT PERFORMANCE.

In what is becoming a recurring theme, Australia is expected to outperform most of its advanced economy peers in 2011 and 2012. While the short-term outlook could be a little bumpy, economic growth is forecast to accelerate strongly over the next two years.

Australia's ever-growing exposure to China and the wider Asian region will be the main driver of this out-performance. Surging commodity prices will lift the terms of trade to record highs in 2010. Indeed, Australia's current account deficit turnaround by a massive AUS$11bn in the June quarter 2010 has lifted mining profits by 61% from a year ago. Even with global growth slowing, we see a strong prospect for further rises in Australia's terms of trade in 2011.

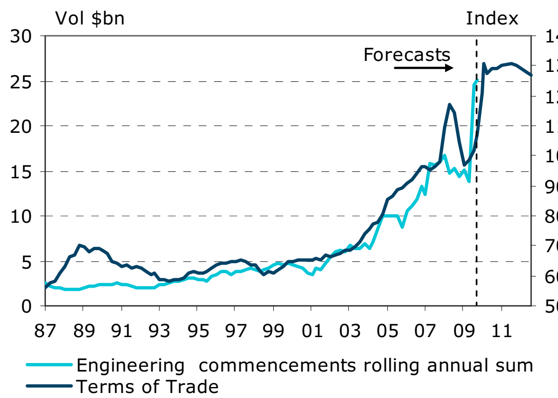
This surge in national income has Australia poised for an investment boom. Investment plans in the mining industry are at record levels. The latest official capital expenditure survey suggests a 60% surge in the value of mining projects in 2010-11. Engineering work in the pipeline has already exploded by 93% in the six months to March.

MAKING ROOM FOR THE INVESTMENT BOOM

The immediate challenge for policy makers is to accommodate this intended investment boom. The strong starting point for the Australian economy suggests the potential for tremendous pressure on capacity and ultimately inflation, which are already high for such an early stage of the economic cycle.

The legacy of 'Commodity Boom I' in 2007-08 means that while price pressures have moderated over the last year, inflation is still relatively high.

FIGURE 1. COMMODITY PRICE BOOM MARK II



Sources: ABS, ANZ

THINGS TO WATCH

Investment is set to boom yet again. How will policy makers handle the challenges, including capacity and inflation?

Are we too sanguine on house prices? We don't think so, although many analysts see an accident waiting to happen.

A two-speed economy poses risks. A loss of competitiveness in non-resource sectors and distribution pressures are the foremost.

Core inflation appears to have troughed at 2.7% in the June quarter 2010, in the upper part of the Reserve Bank Australia's (RBA) 2-3% target band. Moreover, the labour market is already tight. Participation rates are near record highs and the unemployment rate, at just over 5%, is barely above the NAIRU, which is 4.5- 5.0% on our estimates.

The biggest domestic risk therefore looks to be twin household and investment upswings. Any reacceleration in household spending, would risk an inflation burst in this already capacity constrained economy. With a solid employment outlook expected to underpin household income growth, we believe the RBA will need to lean on households further to avoid severe inflationary consequences. We therefore look for a further 150bps of policy tightening to bring the cash rate to 6.0% by end-2011.

A BUMPY, LUMPY ROAD

While we are bullish on the commodity cycle and therefore the Australian economy, the short-term outlook could still be bumpy. Growth is now transitioning from the public to the private sector and such changeovers are rarely smooth. Moreover, the large, lumpy nature of mining investment projects suggests a potentially uneven profile for economic activity with some 'gap' quarters, particularly if other parts of domestic demand respond to monetary policy tightening. This could persist until late 2011. After that, most large investment projects should be in full train and thus support a smoother growth profile.

It is also worth noting that the transmission to the household sector from the mining boom will be less

ECONOMIC OUTLOOK

direct under ‘Commodity Boom II’. Under ‘Commodity Boom I’, income gains from the surging terms of trade were redistributed directly back to households via income tax cuts. This time the windfall gains are being used to return the budget to surplus. Income tax cuts are unlikely and this could help cap household spending, and thus inflation, allowing policy rates to stay a little below our projected peak.

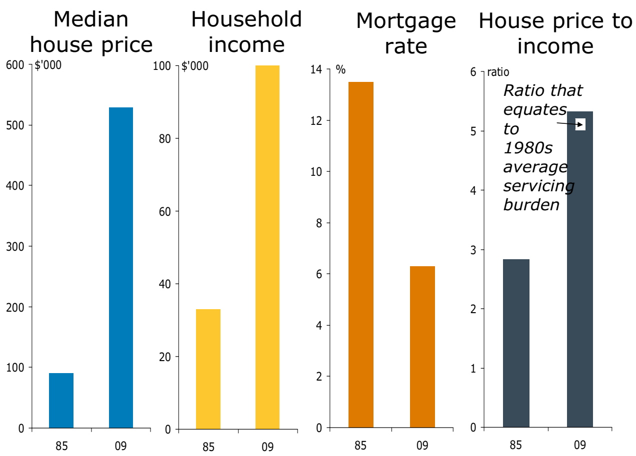
The external environment, as always, remains crucial. A hard landing in China (not our core forecast) of course remains a risk, and a re-freezing of global credit markets would inhibit the flow of funds to planned investment projects. In this event, monetary and fiscal policy makers have significant ammunition to take action to support growth.

HOUSING: NOT A FUTURE ACCIDENT

Many analysts (including the IMF, *The Economist* and several major global hedge funds) have identified the housing market as a bubble that is set to burst.

Much of the negative analysis has relied heavily on inter-temporal and cross border perceptions of ‘fair’ value based on metrics such as house price to income and house price to rent ratios. However, these metrics are dangerously simplistic and ignore a whole range of factors that influence prices including interest rates, credit availability, lending criteria, population concentrations, demand/supply balance, other asset yields, market risk appetite and investor sentiment.

FIGURE 2. HOUSE PRICES ‘FAIRLY VALUED’



Source: CEIC

The proponents of the housing bubble story argue elevated house price to income ratios must revert to their long-term historical average in order to return housing affordability to sustainable levels. But simply taking account of the structural decline in mortgage rates reveals the Australian house price to income ratio is almost exactly where you would expect it to be as lower interest rates have been capitalised into house prices. That is, housing affordability as measured by debt servicing costs remain comparable to where it was in 1985 when the median house price was just $85k compared with today’s $560k.

Moreover, we believe the critical shortage of housing (with near record-low vacancy rates in most capital cities) combined with conservative lending, a robust economy, falling unemployment and negligible forced selling, effectively places a floor under house prices.

With interest rates expected to rise significantly further, we do expect house price growth to temporarily slow to low single digits in the year ahead. Nonetheless, in the absence of a major economic downturn, we believe house prices and rents will continue to grind higher in the medium term.

STRUCTURAL CHANGE TO BRING CHALLENGES

Longer-term, increasing reliance on the global cycle for commodity demand will bring benefits but also challenges. One challenge is the increased sensitivity of the economy to the volatile global commodity cycle. This could see higher volatility in income flows, including government budgets, and economic activity. It will be important to save/invest the proceeds of commodity price upswings to create a buffer.

There are other potential structural implications. The current investment outlook is an extraordinary capital deepening story. The investment-GDP ratio will rise from 14% to nearly 20% by 2012. Australia’s capital stock will increase substantially, which in turn should drive higher capacity and productivity in at least the mining sector. Exports as a share of GDP should also start to rise, although this may eventually come at the expense of, not in addition to, the investment share.

Strong demand in the resources sector may also divert capital and labour from other sectors of the economy, potentially inhibiting growth and increasing costs in these sectors. A higher Australian dollar owing to elevated commodity prices may reduce the international competitiveness of the non-resource tradeable sector. While we believe Australia is some way off from full-blown ‘Dutch Disease’, a ‘two-speed’ economy will remain a feature and a challenge, for policy makers. Pressures for a redistribution of wealth from the resources sector to the broader economy, be it through tax reform (income tax cuts, resource rent tax mark III), or simply via increased direct industry assistance to non-mining industries, will build.

Katie Dean, Head of Macro Australia
Paul Braddick, Head of Property

ECONOMIC OUTLOOK

NEW ZEALAND: A CAUTIOUS RECOVERY

NEW ZEALAND CONTINUES TO RECOVER FROM ITS DEEPEST AND LONGEST RECESSION SINCE THE 1970S.

After a peak to trough decline of 3.4% between Q4 2007 and Q1 2009, we estimate that the level of activity has only recovered around three quarters of that lost output by Q3 2010. We envisage ongoing economic growth ahead, but at a pace that is more muted compared to past cycles. This is because alongside a cyclical recovery, the New Zealand economy is also undergoing structural changes that will affect its trend growth rate.

HOUSEHOLD SPENDING ALONE IS NOT ENOUGH

The recovery to date has been driven by normal cyclical dynamics, such as extraordinary monetary and fiscal policy support, alongside an inventory rebuilding cycle. However, deleveraging is an important backdrop which is having a near-term impact on growth, and will continue to do so for some time.

Unlike the previous two periods of economic recoveries–from the early 1990s recession and the Asian and drought related recession of 1997/98–the household sector is not able, and indeed is unwilling, to take advantage of low interest rates this time around to increase their debt levels and spur increased economic activity. Though the unemployment rate has stabilised, ongoing uncertainty over job prospects has resulted in consumers being more cautious, leading to an increase in precautionary savings.

In addition, house prices are still relatively stretched compared to incomes, and we envisage nominal house prices to flat line over the next two years. With around three quarters of New Zealand household's assets tied up in housing, this absence of a wealth effect will act as a drag on consumption growth over the next couple of years.

To date, the recovery has been more akin to the post 1990/91 recession, compared to the strong rebound which occurred following the 1997/98 recession. We are forecasting a recovery path that more closely resembles the early to mid 1990s experience, though the composition will be different.

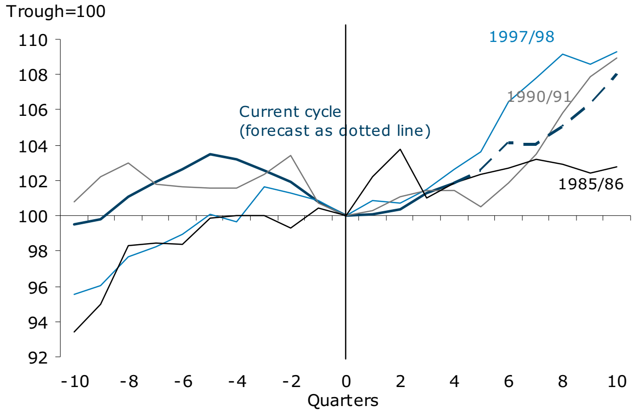
THINGS TO WATCH

The pace of recovery has been weak. How long will de-leveraging continue to hold down growth?

How quickly can the economy rebalance? Shifting resources to the tradeable sector takes time, but will be aided by favourable export prices.

The monetary tightening cycle has commenced. Have neutral rates declined? And when will we get there?

FIGURE 1. NZ GDP LEVEL



Sources: ANZ, Statistics NZ

REBALANCING MUST ALSO SUPPORT THE RECOVERY

Alongside deleveraging, another critical dynamic during the recovery process is rebalancing. Since 2004, the non-tradable sector of the economy has continued to expand at an annualised rate of 2.6%. In contrast, the tradable sector has contracted at an annualised rate of 1.1%. Such a divergence has resulted in widening imbalances in the economy, such as a large current account deficit.

ECONOMIC OUTLOOK

Going forward, the non-tradable sector cannot drive the recovery process. It is the tradable sector that has to be the main driver in order for growth to be sustainable.

However, it takes time for resources to shift to the earning side of the economy from the spending side. But assisting this rebalancing process are very favourable prices for New Zealand's major export commodities, as well as ongoing strong growth from major trading partners in the Asian region, including Australia.

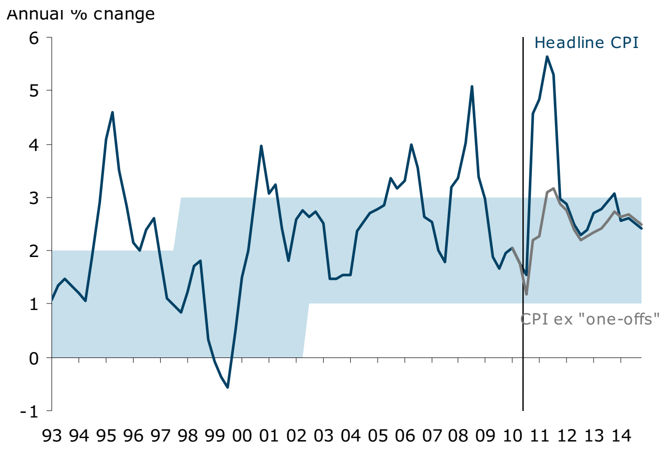
We expect near-term growth to be subdued and patchy, with bouts of volatility induced by the increase in the goods and services tax (GST) to 15% from 12.5% on 1 October, with income tax cuts being delivered from that date.

THE OUTLOOK

The outlook for the economy is more favourable for 2011. Earthquake related reconstruction will provide a temporary boost as will the unleashing of some pent-up demand and the hosting of the 2011 Rugby World Cup. However, the broad spirit of our forecasts for the New Zealand economy remains that there will be positive growth, but at a lower rate on average compared to what was achieved in the previous decade.

The GST increase will result in headline inflation spiking above 5% by early 2011. However, we expect underlying inflation to remain within the Reserve Bank of New Zealand's target band of between 1 and 3%.

FIGURE 2. NZ CPI INFLATION



Sources: ANZ, Statistics NZ

WHAT IS THE "NEW NEUTRAL"?

The Reserve Bank of New Zealand started to remove policy stimulus from June. But after delivering two 25bp hikes in June and July, a pause is now expected before the tightening cycle commences from March next year. Due to the higher bank funding costs, we now see a lower neutral Official Cash Rate of around 5%, compared to the 6-6.5% range previously.

Khoon Goh
Head of Market Economics and Strategy

ECONOMIC OUTLOOK

EMERGING ASIA

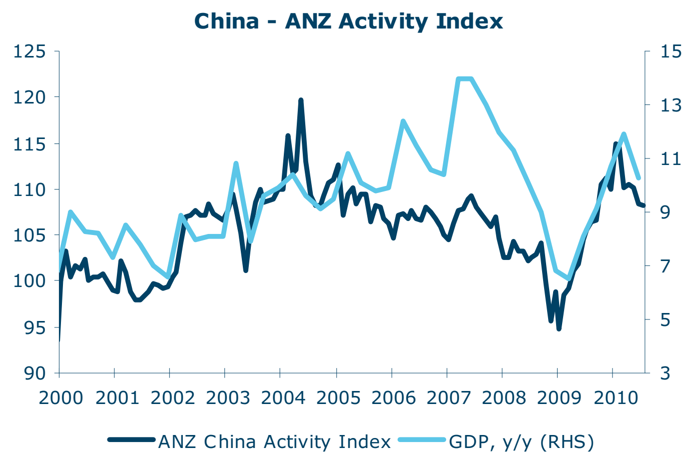
Q2 WAS THE FIFTH CONSECUTIVE QUARTER OF SOLID GROWTH, WITH ALL 11 ECONOMIES IN OUR SAMPLE REGISTERING A SOLID PACE OF EXPANSION. BUT WHAT NOW?

Emerging Asia's strong recovery continued into mid-2010. Q2 was the fifth consecutive quarter of solid growth in the region, with all 11 economies in our sample registering a solid pace of expansion. As to the numbers, year-on-year GDP growth rates ranged from 6.2% in Indonesia to 18.8% in Singapore.

Growth momentum eased in Q2 but the composition has improved. Despite the still impressive year-on-year rates, sequential growth moderated across Emerging Asia. This reflected the fading effects of the strong inventory rebuild that propelled the recovery last year, as well as a smaller contribution from public spending as governments start to wind down their stimulus plans. The contributions to growth from net exports and consumption have generally risen, with some economies registering positive contributions to growth from all expenditure components.

However, recent monthly indicators suggest a moderation in growth. This is most noticeable in the purchasing managers' indices (PMIs), an important leading indicator for investment. Data from key economies in the region show not only that PMIs peaked in the first half of the year, but that they have breached the critical level of 50 in bellwether economies such as Singapore and Taiwan. As of publication China's PMI seems to have stabilised above 50 and India's looks healthy, but the depth of decline in PMIs across Emerging Asia needs to be monitored.

FIGURE 1. CHINA-ANZ ACTIVITY INDEX



THINGS TO WATCH

Moderation vs. slowdown. The pace of activity is easing, but how much domestic demand is really there to support growth?

Is inflation pressure truly gone? Our former #1 risk for 2010 has disappeared (ex-China), but is that going to last?

Asia remains attractive to foreign investors. How will policy makers address currency appreciation?

China, the region's largest economy by far, looks on track for a soft landing. The Middle Kingdom led Emerging Asia's recovery early last year with its massive (and largely successful) infrastructure-heavy stimulus plan. Fears of overheating have subsided for the most part as the government has adopted a series of administrative measures to cool the pace of lending and growth since late last year.[1] Our proprietary ANZ China Activity Index now suggests that growth is on a sustainable track of around 9.5%. However, we argue that there is still work to be done on the monetary policy front given ongoing broad-based price pressures.

A key thematic issue is to whether the fast growth in Emerging Asia has been sustainable. While disentangling the various components of growth is difficult, we are able to make a "first approximation" by stripping out the effects of re-stocking and government spending. What this reveals is a striking split between the Newly Industrialised Economies or NIEs (Hong Kong, Singapore, South Korea and Taiwan) and the ASEAN group (Indonesia, Malaysia, the Philippines and Thailand).[2] In short, underlying growth in the NIEs is below the official data whilst in the ASEAN group underlying growth is somewhat above the official numbers. Indonesia in particular

[1] We would argue that the "liberalisation" of the exchange rate in May 2010 was a non-event.

[2] China, India and Vietnam were excluded due to the availability of data.

ECONOMIC OUTLOOK

stands out. The intuitive result that recent growth in the ASEAN group has been more sustainable than the NIEs since countries in this group are on average less trade dependent (with smaller inventory cycles) and had smaller stimulus plans.

Inflation pressures have come off across the region (although the year-on-year rate remains high in India and Vietnam). This is consistent with the moderation in growth described above. Specifically, at that time our "momentum" measures for inflation were all above the year-on-year measures and rising, suggesting that price pressures were also rising.[3]

Inflation	3m/3m saar	y/y
Indonesia	6.2	6.2
India	5.4	10.6
Singapore	2.9	2.7
China	2.9	3.5
S. Korea	6.8	2.6
Vietnam	1.6	8.2
Hong Kong	1.4	2.8
Malaysia	0.2	1.7
Philippines	-0.8	3.9
Thailand	-2.2	3.5
Taiwan	-2.2	1.3

Source: CEIC

This situation has changed dramatically in recent months, and we now see momentum inflation below the year-on-year measure everywhere except in Singapore and South Korea.

As a result, the pace of monetary policy tightening has been measured and we expect it to remain so. Most central banks have raised their policy rate, imposed some type of administrative measures, and/or used their policy levers to withdraw liquidity from the banking system. With the pace of activity slowing, the pressure to move quickly on the policy front has waned. That said, given the amount of stimulatory stance in some economies and the still-fast pace of activity (with output gaps still closing) there remains a strong case to raise policy interest rates. We see this as being highest in China, India, South Korea and Taiwan.

Capital flows have been choppy in Q3 and exchange rates have drifted sideways. Our view is that these flows have been driven mainly by shifts in global risk appetite, which has already gone through at least three incarnations this year (very bullish through April, bearish in May with the PIIGS debt crisis, and choppy since, including worries about a slow US recovery). Fundamentally, Emerging Asia remains an attractive destination for capital given that the region is an out-performer in the global economy (the pull factor). Flows should also be pushed toward the region given low policy interest rates in the advanced countries. Reflecting the key role of global risk sentiment, discrimination across Emerging Asia currencies has been relatively low this year so far.

Our outlook is for a moderation of growth for the reminder of 2010 and early next year. We believe the fundamentals remain strong. In particular, balance sheets are healthy across all sectors in contrast with "the West," which is still working through de-leveraging of household and bank balance sheets, and is increasingly dealing with a bloated public sector. Sentiment remains high on average in Emerging Asia and intra-regional trade, with a growing role for Chinese consumers, remains robust. While the region will continue to out-perform on the global stage, we would stress that a full, private-sector led recovery will require a normalisation in foreign demand; namely, a resumption of discretionary consumption in the US and Europe. Until this happens, underlying growth in Asia will remain below trend.

The risks to our outlook are on the downside, on balance. While slower global (and, more recently, US) growth has been priced in, a further down-leg in discretionary consumption, which is what matters for Asia, cannot be ruled out. Also, the ongoing moderation in growth as seen in the PMIs could be more broad-based than currently forecast. Our main upside risk is the increased robustness of consumption in the region and the implications for intra-regional trade and "de-linking."

Paul Gruenwald
Chief Economist, Asia

[3] Our momentum measure is defined as the most recent three months of data, seasonally adjusted, expressed as an annual growth rate. This construction intentionally magnifies recent price trends.

CHINA: SURPASSING EXPECTATIONS

GROWTH TO CONSOLIDATE WITH MONETARY POLICY FINE TUNING

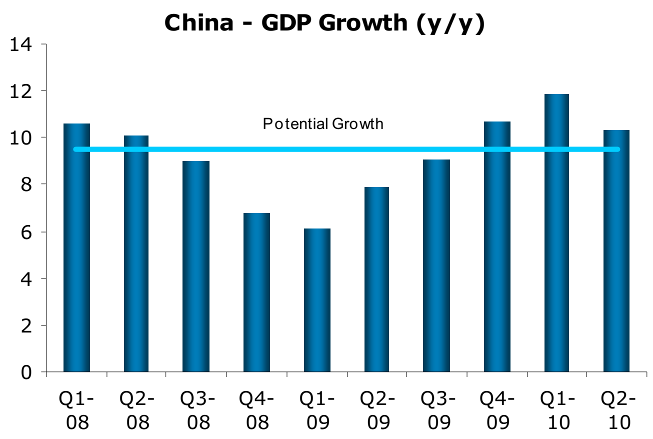
GDP growth in the first half of 2010 was 11.1% (y/y). However, the pace is easing as Q2 growth, led by strong domestic demand, fell to 10.3% from 11.9% in Q1. Investment in H1 expanded solidly, up 25.5%, contributing 6.6 percentage points to growth; consumption remained steady, contributing 3.9 percentage points to H1 growth.

China's export growth rebounded strongly, increasing by 35.7% in H1. Exports to the US and the EU grew 32.2%, from a sharp decline of 12.0% in H2 2009. Net exports delivered 0.6 percentage points to H1 growth (following a negative contribution in 2009) and we expect it to contribute positively to 2010 growth, which could lead to rising sentiment for trade protectionism.

Inflation pressures continue to rise reflecting a positive output gap and large money overhang. In the first half of the year, inflation reached 2.6%, well within the government's target of 3%. CPI inflation picked up rapidly in Q3, and August CPI inflation rose to 3.5% (y/y), up from a 3.3% gain in July.

We believe China's inflation is yet to peak. First, PPI inflation remains elevated and will continue to pass through to CPI inflation. Second, food prices will rise as a result of July's devastating floods in southern China. Overall, domestic demand remains robust due to rising minimum wages and strong wage increases in the manufacturing sector.

FIGURE 1. GROWTH HAS MODERATED TO A MORE SUSTAINABLE PATH



Sources: Bloomberg, ANZ Economics

THINGS TO WATCH

Growth is expected to moderate due to base effects, weaker external demand, and further monetary tightening.

Inflation pressures will remain high. A persistently negative real interest rate will push depositors to search elsewhere for higher returns. Will this result in asset price bubbles?

Asset price developments have been mixed. China's stock market was Asia's worst performer in H1, falling 26% since January on tighter monetary conditions and retail investors' growing appetite for the property market. With the introduction of strong administrative measures, the hot property market has started to cool as property prices declined marginally on a month-on-month basis in Q3. Meanwhile, year-on-year growth was still high at 9.3% in August, delivering a good return when compared with the stock market and bank deposits. While property market transaction volumes fell, the rental yield in major cities started to rise, suggesting that the underlying demand for housing remains strong and property owners continue to enjoy considerable returns.

Monetary conditions have tightened. The People's Bank of China (PBoC) raised the reserve requirement ratio three times in H1 with intensified open market operations. As a result, the excess reserve ratio turned negative, which in turn pushed the short-term interest rate above the one-year rate. In response, the central bank injected liquidity back into the banking system. While quantitative tightening was effective in draining liquidity, it also caused significant volatility in the interbank market. Going forward, we think a policy switch to interest rate adjustments in H2 will be a better option.

On exchange rate policy, the PBoC ended the renminbi's 23-month peg to the US dollar on 19 June, but maintained the existing trading band at +/-0.5%. Given the substantial weakening of the euro, the PBoC stated that it will not tolerate large-scale appreciation. It appears that the renminbi has returned to the gradual appreciation path of Jul 2005 to Sept 2008.

ECONOMIC OUTLOOK

We think a return to the old regime is not an optimal solution, as one-way betting on the renminbi's appreciation will continue. More "hot money" will flow into the country, making it difficult for the PBoC to maintain price stability. Going forward, we think further policy actions are warranted to enlarge the trading band at a progressive pace. Because of the overall need for the renminbi to appreciate in the long run, a crawling band exchange rate system could be adopted, with the long-run appreciation trend determined by market supply and demand conditions.

SECOND-HALF ECONOMIC OUTLOOK

We maintain our 2010 GDP forecast at 10.1%. We also maintain our CPI inflation forecast at 3.4% for 2010 in the belief that monetary tightening polices will continue in H2. The extraordinary growth seen in the first half of the year will subside as restocking activities have more or less finished. China is now returning to a "normal" growth path which is more sustainable. We would emphasize that slowing growth does not point to a double-dip recession, but rather a normalisation in the growth profile.

Consumption and investment will continue to be the major drivers, but the contribution of investment will moderate due to base effects. Meanwhile, the positive contribution from net exports will grow as external demand steadily picks up, but we are unlikely to see it return to its pre-crisis average.

RISKS

Negative real interest rates may trigger asset inflation. As inflation picks up and policy rates remain at historical lows, the real interest rate, which has been negative for seven consecutive months, is likely to trigger asset inflation. The experience of 2007 and 2008 shows that a negative real interest rate encourages investors to move their bank deposits into the property market, which, at that time, resulted in a 10% jump in house prices. With CPI inflation at 3%, the real mortgage rate−a measure of the real funding cost−has, since Q1 2009, declined in tandem with housing price surges. This shows that many investors were taking advantage of funding subsidies. Looking ahead, as long as investment options remain limited in China and as the effects of the administrative tightening measures on the property market diminish and the negative real funding costs persist, property market speculation is expected to continue.

Inflation could rise higher than market expectations. Although we estimate that CPI inflation will average close to the government's full-year target, the balance of risks is on the upside due to a large money overhang and strong underlying demand. Food prices could surge because of the unprecedented floods in southern China. The 1998 flood experience saw food prices rise by close to two percentage points. The recent price rise in rental property has also increased inflation pressures. In addition, inflation expectations continue rising, despite the PBoC draining a significant amount of liquidity from the banking system.

INTEREST RATE ADJUSTMENTS ARE REQUIRED

We prefer interest rate adjustments in H2. While the quantitative tightening measures in H1 were effective in containing rapid credit extension, they have had a limited effect in managing demand pressures. As Chinese depositors have suffered from negative real interest rates in H1, there will be strong demand for high-yield assets. As a result, the property market is unlikely to cool and risks of a bubble remain.

Thus, the PBoC will need to switch to a new mode of monetary operations by relying not only on open market operations, but also on interest rate adjustments in order to address the effects of a negative real interest rate. Given the size of the negative real interest, we reckon two interest rate hikes, each by 27 bps, in Q3 and Q4 are needed.

We believe there are two possible hike scenarios. The first is that the PBoC raises the deposit rate only, leaving the policy lending rate unchanged while maintaining the current intensity of open market operations. Or, the PBoC raises the interest rate in a symmetric fashion, while reducing the intensity of open market operations.

On the renminbi exchange rate, the PBoC will prefer a gradual increase as they did between 2005 and 2008, although the volatility will increase. We expect the trading band will be progressively widened, by another 0.5% by year end. Overall, the renminbi is expected to gain 3 to 5% against the US dollar in 2011.

Li-Gang Liu
Head of China Economic Research

CURRENCY OUTLOOK

CERTAIN ABOUT UNCERTAINTY

COMMODITY CURRENCIES ARE INCREASINGLY A REFLECTION OF THE FORTUNES OF ASIA AND THE EMERGING ECONOMIES.

As financial markets face the end of 2010, uncertainties are as high as at any point during the year. Euphoria over a strong "V" shaped recovery in the first half of this year has now given way to fears of a double dip. Consequently, the USD has become even more of a barometer of market emotion as the year progressed. Constant fluctuations in risk sentiment, with markets quick to turn on a dime, are signs of a market that lacks direction and conviction.

USD PROFILE IS POSITIVE FOR 2011

While general risk aversion will remain high, we see the USD remaining weak against the other majors into year end on two major events. First, US data releases will likely under whelm for a few months yet, leading markets to romance further quantitative easing measures from the US Federal Reserve, which will weigh on the USD. Secondly, November's US mid-term elections will increasingly become a major focal point with the prospect of a shift in power to the Republicans increasing the chances of policy paralysis in Washington. Japanese authorities have finally intervened, but in the absence of a coordinated move with other central banks a trend reversal in USDJPY is unlikely.

Although concerns over the European sovereign debt crisis have abated since the EU/IMF stability package, the underlying problems of fiscal profligacy in periphery countries remain. The intricate nature of cross holdings of both sovereign and private debt across the European banking sector means that these issues will remain a pan Euro zone problem for the most part. Over the longer term, the resolution of these debts combined with fiscal consolidation will result in sub-trend growth across the region.

We expect to see some improvement for the USD over the course of 2011 as the US economy starts to respond to extreme levels of accommodative policy. A large part of that strength is anticipated to be driven by a weaker EUR, partly on the back of a re-emergence of European debt concerns, and as the toll of austerity measures start to impact on economic activity, leading to increasing social discord.

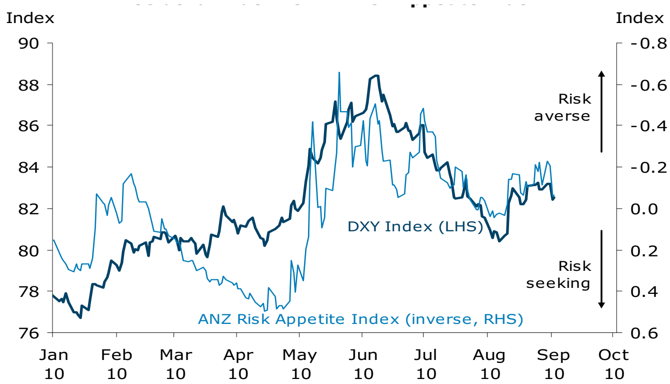
THINGS TO WATCH

A positive USD profile will emerge in 2011. Better US growth prospects relative to the austerity bound Euro zone will be a key driver.

However, USD will under perform AXJ currencies once the cloud of uncertainty dissipates. This is a pre-requisite for broader global rebalancing to take place.

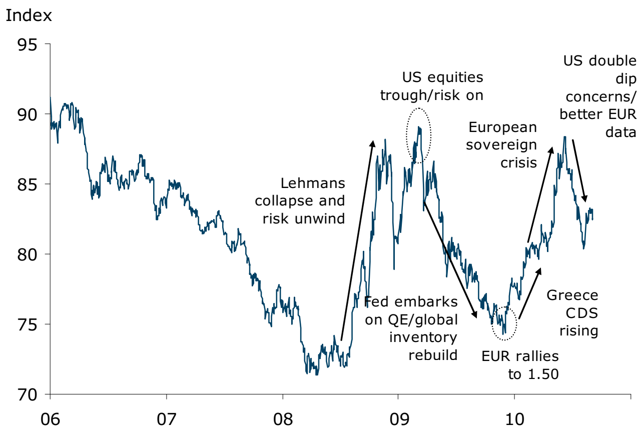
Solid fundamentals will keep AUD strong. High commodity prices will support the NZD, but we expect it to under perform the AUD.

FIGURE 1. US DOLLAR INDEX VS. ANZ RISK APPETITE INDEX



Sources: ANZ, Bloomberg

FIGURE 2. US DOLLAR INDEX



Sources: ANZ, Bloomberg

CURRENCY OUTLOOK

AXJ LOOKS TO STRENGTHEN AS WELL

The story, however, will be different for the Asia ex-Japan (AXJ) currencies. Near-term uncertainty about the sustainability of the recovery is likely to present a temporary setback for AXJ currencies over the next three to six months, but they are expected to reassert strength against the USD during the latter part of 2011.

A predominate focus for AXJ currency markets will be the pace of renminbi (RMB) appreciation. We expect China's economic growth to remain sufficiently robust to warrant gains to 6.21 by end December 2011, representing a gain of roughly 8% from current levels. Also of interest will be further progress towards the internationalisation of the RMB, where an offshore market has already sprung to life in Hong Kong. Other AXJ currencies to watch are the Korean won (KRW) and Indonesian rupiah (IDR). The KRW should be a primary beneficiary once global demand gains traction in 2011, while the IDR will be buoyed by a host of factors, including attractive yields, a strong growth outlook, and the prospect of gaining investment grade status. S&P and Moody's both rate Indonesia just two notches below investment grade, while in January Fitch upgraded Indonesia to BB+, just one notch below.

AUD SUPPORTED BY COMMODITY PRICES

In the Antipodean currencies, the outlook for the AUD remains very positive. Momentum in the domestic economy is likely to be strong over the next 12 to 18 months, reflecting both strong fundamentals—linkages with fast-growing Asia—and the impact from the surge in commodity prices for Australia's exports (Commodity Boom II).

However, uncertainty about the global outlook is limiting the AUD's topside momentum at present. Importantly, we believe that the market is underestimating the Australian growth/inflation outlook (and risks), and consequently the likelihood of further rate hikes by the Reserve Bank later this year and through next year. Only in recent weeks has stronger economic data from Australia forced money markets to take out rate cuts from market pricing.

In terms of ranges, with the USD under severe pressure as the market anticipates further quantitative measures from the Fed which saw the AUD push through the 0.9400 level which had proved to be very strong resistance since October 2009. In this period of exceptional USD weakness, we certainly do not rule out a strong commodity price scenario which would see the AUD to eventually revisit the 2008 high of USD0.9850.

The NZD's fortunes will continue to be dominated by global forces. A structural improvement in soft commodity prices and favourable yield differentials will underpin the NZD to some extent. Increased risk aversion also means that the NZD is less attractive as a carry currency compared to the past, with Japanese retail FX margin traders more focused on the AUD.

The need for the New Zealand economy to rebalance and be driven by the tradable sector requires a lower currency. We estimate that structural fair value resides at 0.66. However, domestic developments will largely play second fiddle to wider global moves. We see the NZD staying within a 0.69 to 0.73 range, and while an expected strengthening in the USD over 2011 should see some downward pressure on the NZD, a stronger AUD profile will lend support.

We see the AUD/NZD cross very much trapped within the current familiar 1.22 to 1.28 ranges into early next year. With Australia to experience stronger economic growth compared to New Zealand next year, the NZD should under perform the AUD and see AUD/NZD trade closer towards the top of that range. Based purely on fundamentals, a case can be made for AUD/NZD to exceed 1.30 easily. But in the past these fundamentals have given way to a lack of conviction by the market to take the AUD that far above the NZD.

Khoon Goh, Head of Market Economics and Strategy NZ;
Tamara Henderson, Head of FX Research Asia;
Tim Riddell, Senior Strategist, EU;
& Grant Turley, Senior FX Strategist, AU

FIGURE 3. CURRENCY FORECAST TABLE

	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11
US dollar index	84.1	86.4	86.6	87.1	88.1
EURUSD	1.25	1.20	1.20	1.20	1.18
USDJPY	85.0	87.0	89.0	92.0	94.0
GBPUSD	1.54	1.55	1.55	1.55	1.56
AUDUSD	0.94	0.96	0.98	0.96	0.94
NZDUSD	0.71	0.72	0.73	0.73	0.72
AUDNZD	1.32	1.33	1.34	1.32	1.31
USDCNY	6.62	6.52	6.42	6.32	6.21
USDKRW	1245	1290	1200	1100	1000
USDIDR	9300	9525	9200	9000	8900

COMMODITY COMPLEX

BOTTOM FORMING BUT VOLATILITY AHEAD

WITH THE OUTLOOK COOLING, COMMODITY MARKETS HAVE CONSOLIDATED, BUT WITH EXTRAORDINARY UNCERTAINTY ABOUT US AND EU DEMAND, BEWARE OF VOLATILITY.

Commodity markets moved into consolidation mode in the first half of 2010, holding on to most of the strong gains experienced in 2009. The performance was always going to be choppy, with the market overshooting on the up and downside through 2009. However, the focus has very much swung from value trading to fundamental trading in the past six months. The cooling of strong Chinese growth in the first half of the year and the emergence of heightened sovereign risk in Europe in the second quarter have had a large impact on sentiment.

Encouragingly, we think the market has priced in much of the downside in the current cycle. Key leading indicators, including the OECD leading Index and the Purchasing Managers Indices (PMI's) have turned downwards in the past three months, but commodity prices appear to be three to six months ahead of the curve. We believe the economic cycle will bottom-out in the first to second quarter of 2011, implying commodity prices could resume a recovery by the end of 2010.

China's growth outlook may be uncertain, but we feel the juggernaut economy is returning to a more sustainable growth path. Key growth platforms of investment, consumption and net exports should steady the ship, while pro-active quantitative tightening should keep inflation fears in check. The recent slowdown is also partly seasonal. The domestic steel industry is a good case in point. Heavy restocking in the first quarter, together with easing government spending in the second quarter prompted as much as 40% of steel capacity to close down. Many mills in China extended maintenance programs through July triggering a de-stocking phase and accentuating the perceived slow down in demand.

Investment fund activity has eased over the first half of 2010, but off a very high base at the start of the year. The bulk of the non-commercial (speculative) funds are domiciled in the West, so the headwinds of European sovereign risks and disappointing US

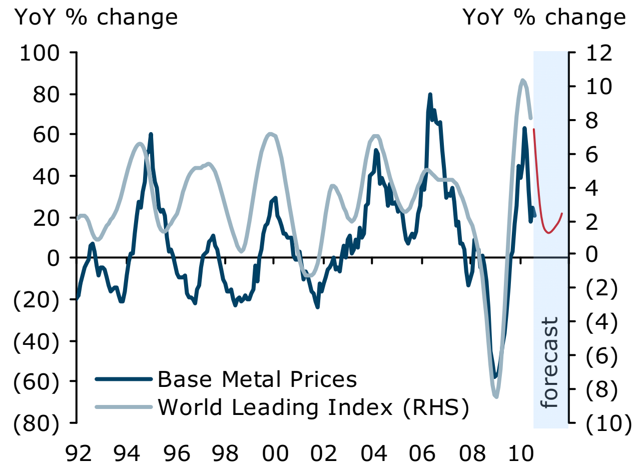
THINGS TO WATCH

Has a bottom formed? Easing Chinese growth and uncertain Western demand have tempered the mood in what were overheated commodity markets in the first half of 2010**.**

Will volatility pick up? Bruised sentiment should create volatile conditions, with the behaviour of speculative funds a wildcard.

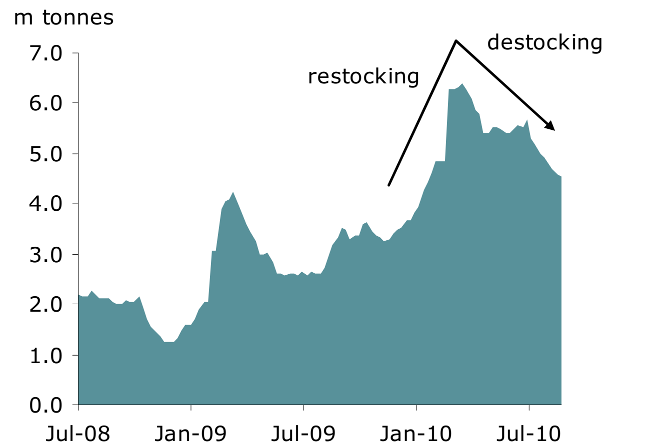
The US corn crop could have an outsized effect on markets this year given that stocks are at a six-year low**.**

FIGURE 1. LEADING INDEX & BASE METAL PRICES



Sources: Bloomberg

FIGURE 2. CHINA STEEL LONG PRODUCT & REBAR INVENTORIES



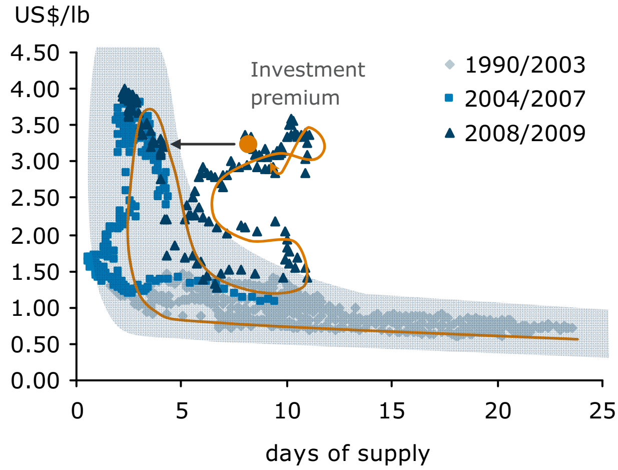
Sources: Bloomberg

economic data has had an extra influence on sentiment. Most net long positions have been wound-back from heavily bought levels in the first quarter to fair value currently. In fact, funds are wading back into soft and hard commodity markets implying further downside risks may be limited. However, we expect fund and price volatility ahead, with an uncertain US and European economic backdrop meeting the re-emergence of stockpiling and a seasonal pick up in Chinese demand.

HARD AND ENERGY COMMODITIES

It has been a mixed performance for the hard (metals and bulks) and energy markets in the first half, with mixed economic data, government withdrawal of stimulus and a change in contract bulk price negotiations creating some volatile price outcomes. Prices were always going to struggle after impressive gains in 2009 coming from heavily overbought positions earlier in the year. The presence of a strong investment premium, particularly in the base metals was also hard to justify as economic signals started to wane.

FIGURE 3. LME PRICE & DAYS OF SUPPLY RATIO'S



Sources: Bloomberg

Iron ore has been the standout performer in the past six months, bucking an otherwise weaker tone elsewhere. The introduction of shorter term quarterly contract prices has been the positive catalyst. This has increased trader and fund activity into the previous annual-based contract producer and consumer only market. The more volatile quarterly based pricing has not been welcomed by the global steel mills, the key customers for iron ore. A drop in Chinese steel output in June and July has slowed the pace of activity. However increasing acceptance of the new pricing system is gaining momentum, suggesting steel mills should start to return to the seaborne market in the coming quarter.

The base metal markets have, on average, been weaker over the past six months. Very strong gains in 2009 priced in much of the upside for 2010. However, growing concerns about the US and European economic recovery and Chinese cooling tactics have prompted funds to reassess the upside. We think this indecision will continue in the second half while the economic recovery plays out in the West. Falling metal stockpiles will likely limit any downside risks.

For energy markets, oil prices remain handicapped by the large exposure to the US economy. The US consumes just under 20% of the world's oil, compared with 10% for China. The decline in confidence of the US economy is mirrored in oil markets. We think prices will remain range-bound in the second half given current high inventory levels. US stocks are uniformly above the five year average: high–crude oil +13%, gasoline +14% and distillate swelling +23. Demand is also entering a seasonal slow patch in between the mid-year US driving season and the end of year heating oil season. However, we don't see much downside risk given that the investment premium in oil is a lot lower than other commodities. Funds will also be keen to position in the relatively cheaper market as clearer signs of a global economic recovery become apparent in 2011.

Heightened global financial risk has spurred safe-haven demand for gold in the past three to four months. Rising sovereign risk in Europe has been the key catalyst with short Euro/long gold carry trades proving very popular. Increasing talk of central bank buying has also increased interest in gold. Most developing economies have a low weighting in gold to total foreign reserves. We think prices will continue to be well supported in the second half, notwithstanding some unwinding on Euro/gold carry trades as sovereign debt concerns ease. The upside should come from growth in high consuming gold regions in India, the Middle East, and China. We expect China will have the additional incentive of diversifying its growing wealth from overheated housing and equity markets to opening a less-regulated domestic gold market, particularly for gold bars and coins.

Coal markets have been mixed. Metallurgical coal has swung positive to negative with the cooling in Chinese steel markets. We don't expect much downside in the second half. Supply conditions remain tight and China is likely to return to the seaborne coal markets as higher capacity levels return. Thermal coal markets

COMMODITY COMPLEX

have been softer than expected in the past couple of months reflecting a sharp drop in Chinese demand and a rise in non-traditional seaborne supply. We believe further price declines are unlikely, with stronger seasonal demand in China emerging and a pick up in freight rates reducing long haul seaborne supply from North and South America into Asia. An upside for both metallurgical and thermal coal should become more apparent in 2011 as India starts stockpiling supply ahead of the commissioning of large new power and steel producing capacity.

AGRICULTURAL COMMODITIES

Sentiment in agricultural and softs markets was generally subdued for much of the first half of 2010. However, since June we have seen a remarkable turnaround, with global prices rallying strongly across key segments.

Wheat and raw sugar prices have recorded the largest moves, up by 60% and 45% respectively over the last quarter. Meanwhile, corn and coffee have rallied by 30% and 40% since June. Recently, both coffee and cotton have hit a ten-year high while across most of the remainder of the ags/softs complex prices are within the top 10% of prices for the decade.

Underlying this change has been several major weather events reducing global supplies, ranging from a drought in Russia, floods in Pakistan and below average rainfall in South Central Brazil.

Such events however are not uncommon and indeed something global agricultural markets face every year. The key difference this year is the relatively depleted stock situation across the pipeline. In general, global stocks in agricultural markets have not been rebuilt since the rundown in the years leading up to 2008. This has left the market more vulnerable to short term supply disruptions than would have historically been the case.

On a fundamental basis, with northern hemisphere harvests commencing or due to start in coming months, new crop supplies are likely to add downward pressure to prices.

The other factor of major significance over the last three months has been the aggressive long positioning by (speculative) funds across the broader ags/softs complex. This poses a significant short term risk to the market. Speculative fund positioning in ags/softs appears to be being driven by outside market influences with any major sell-off in equities or flight to US dollars a potential trigger for these funds to liquidate.

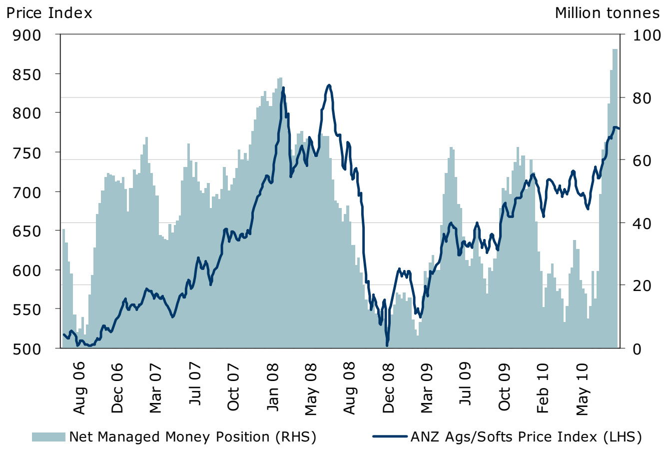
One key area to watch over the next two months relates to the US corn crop, which by size dwarves any other grain crop in the world.

Key analysts have started downgrading US corn yields significantly in the last week from the US Department of Agriculture's (USDA) August forecast of 165 bushels/acre. Most private forecasts are now in the 160 to 163 range. The September World Agricultural Supply and Demand Estimates report confirms this, with USDA's September corn yields being revised lower to the upper end of private forecasts.

Why is a three to five bushel per acre swing so significant? Because even at the USDA's 165 bushel/acre forecast (a record yield for the US crop), US corn ending-stocks for 2010-11 were already unlikely to rebuild. Part of this relates to an expected spill-over in demand from lower grain production in the former Soviet Union, which should result in a strong rise in US corn exports. Add to this the fact US corn stocks declined in 2009-10 (with the lowest stocks-to-use ratio in six years) provides some idea as to how delicately balanced the supply and demand situation is for US and global corn.

If the lower end of private forecasts of US corn yields (160 or below) do eventuate, corn prices will likely push through the key resistance level of 440-450 US c/bu. This could well spark a new upward price leg across the grains complex.

FIGURE 4. TOTAL SPECULATIVE FUND FLOWS ACROSS THE 14 AGS/SOFTS US FUTURES MARKETS



Mark Pervan, Head of Commodities Research
Paul Deane, Senior Agricultural Economist

FEATURE NOTES

INFRASTRUCTURE INVESTMENT: A SUPER-REGIONAL OVERVIEW

THERE IS MUCH TO BE DONE ACROSS THE REGION, FROM UPGRADING AND MAINTENANCE IN AUSTRALIA TO GREENFIELD INVESTMENT IN ASIA. WHO IS TO PAY?

This article provides an overview of infrastructure issues in Australia and Emerging Asia. We cover the current state of play, look at key sectors in terms of both maintenance and new investment requirements. We then turn to projected infrastructure needs, and finish with some cost estimates.

KEY TAKEAWAYS

Australia's infrastructure scores are poor, roughly on a par with the US. Upgrading will cost 8% of GDP over the next six years. Are governments and the private sector up to the task?

Emerging Asia's growth path implies a large infrastructure investment over the next decade. This will be led by greenfield projects. Since infrastructure needs are concentrated in deficit countries, funding the $8trn will be a challenge.

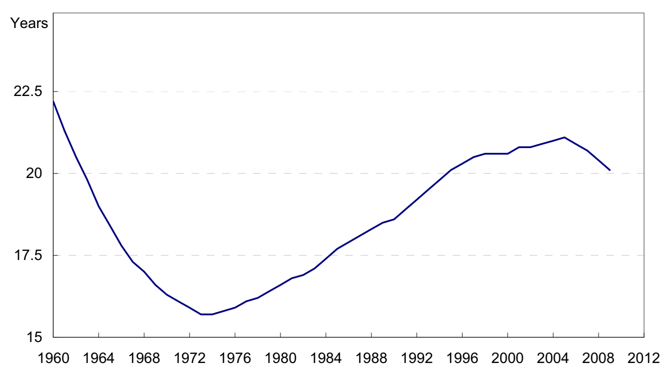
AUSTRALIA

The current outlook for spending on economic and social infrastructure in developed countries, such as Australia, are mostly a result of insufficient or poorly directed spending over a long period of time. In the case of Australia this inadequate spending from the 1970s on has resulted in the average age of Australia's infrastructure rising from 15.7 years to 21.1 years in 2005. Despite the AUS$427bn spent since that year, the age of the stock of infrastructure has only declined to 20.1 years (figure 1).

Moreover, we estimate that to lower the average age of the capital stock from its current level back to the long-run average (18.6 years), around $A600bn in investment would be required at the current rate of depreciation over the next six years.

Qualitative data on the condition of Australian infrastructure supports the capital stock data and indicates that Australia's infrastructure is underperforming. Moreover, qualitative data for the US suggests that it faces similar challenges to Australia (figure 2).

FIGURE 1. AGE OF THE AUSTRALIAN CAPITAL STOCK: STRUCTURES EX DWELLINGS*



The report cards are constructed on a similar basis, so it allows a comparison of the quality of Australia's infrastructure relative to the US. The US report, completed in 2009, suggests that US infrastructure is of poorer quality than the Australian states that were analysed in 2010. The possible exception is in the rail sector. It is also noteworthy that the condition of roads in both countries is equally below average.

Time series data on spending across the various sectors in both countries allows further comparison. Cycles tend to have large durations and this makes it difficult to determine the steady-state amount of spending that is required. However, it is worth looking at the level of spending in Australia relative to a comparable country such as the US over the long run.

The US dedicated on average 1.5% of GDP to roads in the 1930s prior to the WWII slump (figure 3). Following WWII it rose to about 1.0% of GDP from the 1950s to the 1970s before settling at around 0.5% of GDP from the 1980s. Road quality in the US has deteriorated since 1988 and this suggests that the average of the ten-year period prior to 1988 (0.6% of GDP) is well short.

FEATURE NOTES

FIGURE 2. INFRASTRUCTURE REPORT CARDS: AUSTRALIA AND THE US

United States				Australia 2010						AU 2005	AU 2001
	2009	2005	1988		ACT	TAS	VIC	SA	NSW		
Aviation	D	D+	B+	Roads	B	C-	C+	C-	C-	C	n/r
Bridges	C	C	B-	Rail	F	F	D	C-	D-	C-	D-
Dams	D	D		Ports	n/r	B-	C+	B-	C	C+	B
Drinking water	D-	D-	B+	Airports	B-	B	B	B-	B	B	B
Energy	D+	D		Potable Water	B-	B-	C	B	B-	B-	C
Hazardous Waste	D	D	D	Waste Water	C+	C	B-	B-	C+	C+	C-
Navigable Waterways	D-	D-		Storm Water	C+	C-	C-	D	C	C-	D
Levees	D-			Irrigation	n/r	B-	C-	C+	C	C-	D-
Public Parks & Recreation	C-	C-		Electricity	B+	B-	C-	B-	C-	C+	B-
Rail	C-	C-		Gas	A-	C	C	B+	C	C+	C
Roads	D-	D	C+	Telecommun's	B-	C+	C	C	C-	n/r	B
Schools	D	D									
Solid Waste	C+	C+	C-								
Transit	D	D+	C-								
Waste Water	D-	D-	C								

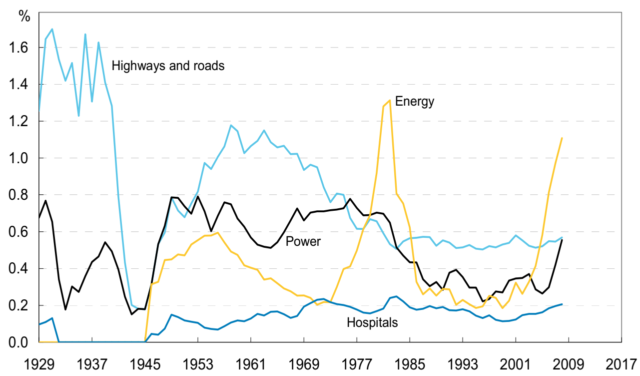
Source: Engineers Australia, the American Society of Civil Engineers

In Australia, investment in roads averaged 0.8% between 1986 and 2004 and has only been above 1% since 2005. The fact that road quality has not improved since 2005 suggests that Australia needs to dedicate well above 1% of GDP to roads over the years ahead in order to recover the underinvestment of the past 25 years. Indeed, the US data seems to suggest that around 1% of GDP is probably close to the average that is required over the long term in order to achieve good quality road infrastructure.

In power, the US invested heavily between the end of WWII and 1980 (average of 0.6% of GDP), but this declined to an average of 0.3% of GDP between 1986 and 2007. Since then it accelerated back to around 0.6% of GDP. By comparison, investment in Australia averaged only 0.3% of GDP between 1987 and 2000. This has risen steadily to around 0.8% of GDP, but the relatively weak investment in the 1980s and 1990s suggests this pace of spending growth may need to be maintained for some time. Investment in petroleum and energy infrastructure seems to follow cycles in oil and gas prices.

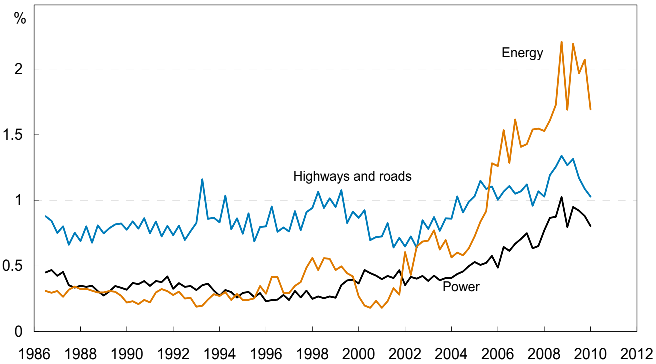
Investment in water and sewerage in the US averaged 0.3% of GDP in the ten-year period prior to WWII and between 1950 and 1990 (figure 5). In 1988, the American Society of Civil Engineers gave water and sewerage reasonable grades, B+ and C respectively, and this would suggest that 0.3% of GDP is probably an adequate level of investment over the long run.

FIGURE 3: US INFRASTRUCTURE INVESTMENT AS A PERCENTAGE OF GDP



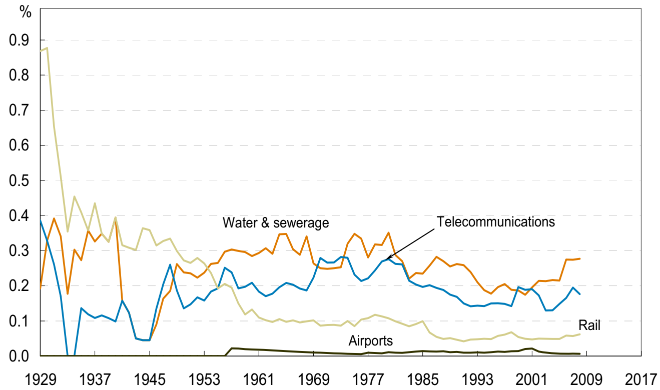
FEATURE NOTES

FIGURE 4: AUSTRALIAN INFRASTRUCTURE INVESTMENT AS A PERCENTAGE OF GDP



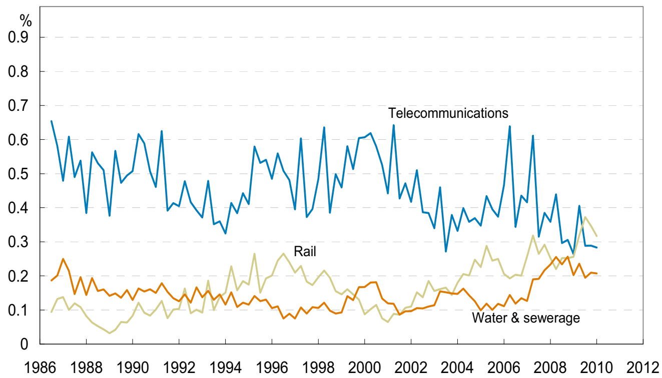
Source; ABS, US Bureau of Economic Analysis

FIGURE 5: US INFRASTRUCTURE INVESTMENT AS A PERCENTAGE OF GDP



Source; ABS, US Bureau of Economic Analysis

FIGURE 6: AUSTRALIAN INFRASTRUCTURE INVESTMENT AS A PERCENTAGE OF GDP



Source; ABS, US Bureau of Economic Analysis

The problem, however, is that since 1990 investment has averaged only 0.2% of GDP and as a result the quality of water (now D-) and sewerage (now D-) has fallen dramatically. In 2008 and 2009 spending bounced back to 0.3% of GDP, but more substantial investment is required to compensate for the underinvestment of the period 1990-2007.

It is surprising that even though Australia has been under investing for the past 25 years relative to the US, infrastructure quality seems marginally better (figure 6). Indeed, the relatively weaker spending in Australia over such a long period would normally lead to relatively poorer quality infrastructure.

However, this may be explained by fact that water supply considerations are not made in the Engineers assessment. For example, the infrastructure quality may not be marked down in Australia under water restrictions during drought even though the implementation of water restrictions implies that the infrastructure is not meeting community needs. The recent investment in desalination plants in most Australian state capital cities is now addressing the risk that the infrastructure can not meet community demands during drought.

The spending on Australian telecommunications (average 0.5% of GDP) over the past 25 years seems adequate given that in 2001 it was rated B. However, since 2001 spending has dropped to an average only 0.4% of GDP and infrastructure quality has begun to decline. Investment in the National Broadband Network will soon begin to impact the data and this should lead substantially investment in the sector over the next eight years. By comparison, US investment has been relatively weak.

In rail, the US invested heavily between 1930 and 1960 (average 0.4% of GDP), but it has been below 0.1% of GDP since. This is reflected in the C- rating for rail infrastructure since 2005. In Australia, investment in rail averaged only 0.1% of GDP between 1985 and 2003 and despite the pick up in spending since 2003 (to 0.2% of GDP) the quality of Australia's rail infrastructure is poor. The experience in the US would suggest that 0.4% of GDP is excessive over the long run, but 0.1% of GDP is too low.

FEATURE NOTES

FINANCIAL AND RESOURCE CONSTRAINTS

The available data for Australia and the US, along with the qualitative assessments of infrastructure quality, suggest that industrialised countries face considerable demand for new infrastructure. In Australia, we estimate that around $A600bn in investment over the next six years would raise infrastructure quality to acceptable standards. This is around 8% of GDP over this period and be a major challenge for both state and federal government balance sheets. The federal government has recovered from the global recession with debt only 7% of GDP can clearly has the capacity to fund investment in infrastructure over the long term. Similarly, the state governments, apart from Queensland, are well placed to provide funding.

The Australian major banks have recovered from the financial crisis in good shape and are well placed to provide funding on projects where commercial returns can be realised. Similarly, pension funds with long-duration liabilities also have a natural fit with the long-duration investment opportunities in both debt and equity that infrastructure assets provide.

It appears likely that a combination of private sector financial institutions and government treasuries will have the ability to finance the required investment. However, it seems likely that the major constraint will be skilled labour.

Engineers Australia latest estimate of the professional engineering workforce (2006) indicated that there were 161,000 professional engineers working in industry. Even though the demand for engineering skills has been strong, the average annual growth rate of the number of professional engineers in the work force has slowed from 2.9% in the two-year period to 2001 to 1.5% in the five-year period ending in 2006. The decline in the age of the non-residential capital stock between the 1970s and 2001 lowered the demand for engineers in the workforce. Average annual growth in the number of engineers fell from 7.8% in the 1950s-1960s to 4.9% between 1970 and 2001.

FIGURE 7: AUSTRALIA'S PROFESSIONAL ENGINEERING LABOUR FORCE

	1949	1954	1959	1964	1969	1974	1979	1984	1989	1994	1999	2001	2006
PROFESSIONAL ENGINEERS (NO.)	9,717	14,867	19,015	25,247	35,992	50,549	63,200	74,742	92,279	117,260	142,270	150,409	161,798
AVERAGE ANNUAL GRTH (%)		10.6	5.6	6.6	8.5	8.1	5.0	3.7	4.7	5.4	4.3	2.9	1.5
REAL INVESTMENT PER ENGINEER ($M)	1.7	1.5	1.5	1.6	1.4	1.1	0.5	1.0	1.0	0.8	0.7	0.6	0.3

Source: Engineers Australia, RBA Building

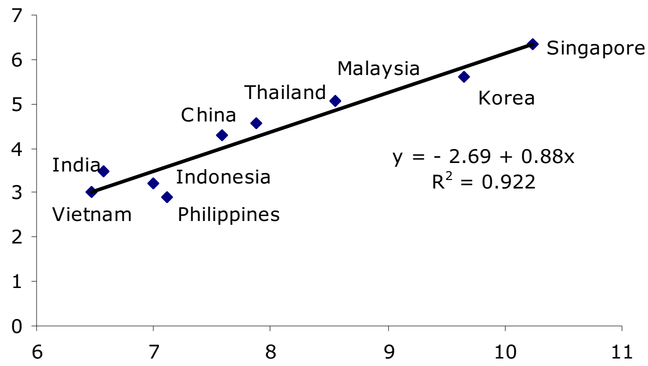
EMERGING ASIA

Emerging Asia enjoys the highest growth rate of any region in the global economy and is expected to be the world's growth engine during the recovery from global financial crisis. However, most of the region still lags far behind the West in terms of standards of living across a range of metrics. For instance, power consumption per capita in the United States is seven times the level in China and 25 times that of India. Vietnam and the Philippines have road densities comparable to the developed world, but little more than 20% of their roads are paved. That said, Emerging Asia's most developed economies, such as Singapore, are broadly on a par with "the West."

This suggests two things. First, there still exists a sizeable infrastructure gap between Emerging Asia, on average, and the developed world. Second, we would expect there to be a wide variation in infrastructure quality within the region. These have been shown to indeed be the case. As a simple illustration, the chart below shows a strong positive relationship between infrastructure quality as measured by the 2010 World Economic Forum and (the logarithm of) per capita output. Indeed, variations in per capita outcome seem to explain an overwhelming proportion (92%) of the variation in infrastructure. [5]

FEATURE NOTES

FIGURE 8. INFRASTRUCTURE SCORE VS. GDP (IN LOGS)



Source: World Economic Forum 2010, ANZ

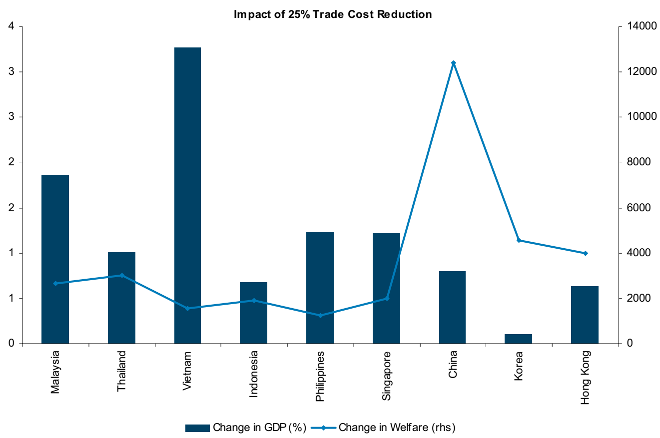
The implication is clear. As Emerging Asia continues to grow relatively fast and converge with the developed world, infrastructure quality (and spending) will need to also increase sharply. Much of this pressure will stem from population growth and urbanisation. China, India and the ASEAN group are expected to see a combined increase of 387 million people from 2008 to 2020. An increasing proportion of the population is also converging to urban areas, with most countries in the region outside of the Newly Industrialised Economies expecting to see the percentage of their population in urban areas rise by 10 percentage points or more. This will raise the need for further outlays in development of new energy generating capacity, transport as well as water and sanitation.

How much will all of this cost? For Emerging Asia to attain its projected growth path, substantial investments in its transport, energy, communications and water infrastructure will be required. Estimating the total cost is a difficult exercise, but according to the Asian Development Board (ADB) it would amount to around $8trn over the next decade. Around half of this is forecasted to be needed in the energy sector, and another $2.5trn is required for transport. Most of the new capacity development will be demanded in these two sectors as well, with over 70% of the investment needs in greenfield projects (as opposed to maintenance).[6] Communications and water new capacity needs, on the other hand, are only 30% and 40% of the total, respectively. This massive ramp up could translate into real income in Emerging Asia increasing by $13trn, of which $4.4trn is expected to be realised before 2020.

SECTOR FOCUS

Energy continues to be the most prominent infrastructure sector. Energy was the most heavily-invested sector over the last two decades, accounting for 37% of private infrastructure investment in Asia. The investments were dominated by greenfield projects in the electricity sub-sector, mostly in China and India. This sector will continue to see the bulk of investments in the next decade, as populations rise and energy consumption grows. China alone is estimated to consume around two billion Tons of Oil Equivalent of energy by 2020, around 45% of world consumption.

Transport investments will remain strong, especially in roads. Transport had a 22% share in infrastructure investments over the last two decades. Chinese investments were the highest for most of the period, but towards the mid 2000s, large numbers were also seen in India. 2006 was the best year, with strong investment commitments across all sub-sectors. Most projects were either concessions or greenfields. Investments in the next decade will be dominated by roads, which will require funds of $2.25tn. A majority of investments will be made by India, which urgently requires a high transport infrastructure ramp up. Meanwhile, China is expected to reap huge benefits from its past and current investments. Other sub-sectors will also see sizeable investments, though much smaller than roads. As to the benefits, the ADB estimates that a 25% reduction in trade costs could boost GDP in the export-dependent economies of East and Southeast Asia by an average of 1.2%.



Source: ADB, ANZ

Telecom investments will slow due to saturated markets and decreasing profit margins. Not far behind energy, telecom accounted for 35% of the investment share in the last two decades. South Asia was the main investor, with around half of its private investment moving into communications. The greenfield investments in both mobile and telephone networks have tremendously improved telecom standards in India and the ASEAN region, which are expected to be rewarded with huge benefits in 2010-2020. However, the next decade's prospects are small, owing to an already saturated telecom market which presents few "low hanging fruits". Hence, the $1trn worth investments required will mostly be devoted to replacing existing infrastructure.

Water has been a neglected sector, and may unfortunately remain so. Water and sewerage had a 6% share in private investments between 1992 and 2009. The sector, which was mostly dominated by concession arrangement projects, saw large investment commitments before the Asian crisis years. With the exception of China, post-AFC investments in Asia have remained low due mostly to unattractive tariff structures. The picture ahead is not so encouraging: demand for water is ever increasing, while the recent trends in private investment hardly suggest that this demand will be met.

Overall, we expect Asian infrastructure investments to be strong over the next decade, mostly led by greenfield projects. However, the $8trn funding requirement will be challenging to meet given that the concentration of funding need in the region's deficit countries. Better capital markets access and viable tariff structures would help.

Shane Lee
Senior Economist

Paul Gruenwald
Chief Economist, Asia

[5.] The exact nature and direction of this relationship is difficult to determine. On the one hand, as incomes increase, some of the disparities mentioned above will decline as infrastructure becomes more affordable. On the other hand, underinvestment in key infrastructure sectors may put a cap on potential growth by constraining productivity, competitiveness and trade.

[6.] Not surprisingly, infrastructure requirements as a percentage of GDP are higher in Emerging Asia (and developing countries in general) than in developed countries. Moreover, the ratio of green field to maintenance expenditure is higher in developing countries as well.

FEATURE NOTES

GOLD OUTLOOK
DEMAND OUTSTRIPS SUPPLY

We see more upside for gold prices in the coming year as key drivers of safe-haven and currency-hedge demand are joined by the emergence of rising investment and fabricating demand in China and India. Additional support from limited mine supply growth means prices are expected to reach US$1,350/oz by mid to late 2011 and stay there for at least 12 months.

THE BEST ASSET CLASS TO BE IN

Gold has been the strongest performing and least volatile major commodity and financial asset class in the past ten years–we expect this trend to continue going forward. Gold prices have risen a stellar 320% since Jan 2000, well above an impressive 185% rally in copper and 130% gain in oil. Alternative asset classes, the bond and equity markets, have been much less appealing. In fact, US equities declined 5% over the same period, at the benefit of gold as a safe-haven alternative.

We believe this low-volatility strong-performance track record will continue to attract increased investment for gold in the next two to three years, particularly in light of an uncertain macro and financial market backdrop.

A CURRENCY HEDGE BOTH WAYS

The recent break down in the inverse relationship with the US dollar (USD) has been a key catalyst for our more favourable outlook on gold. Gold has been a major beneficiary of a falling USD over the past ten years. But with the USD now showing signs of bottoming, gold's negative correlation has disappeared. Effectively, both gold and the USD have become safe haven assets in the post GFC world. What is not clear is whether this positive correlation will last. At the very least the price of gold now appears somewhat independent of the USD. Given the strong underlying fundamentals for the value of gold we outline below, we are comfortable forecasting further gains in the USD value of gold without further significant USD depreciation.

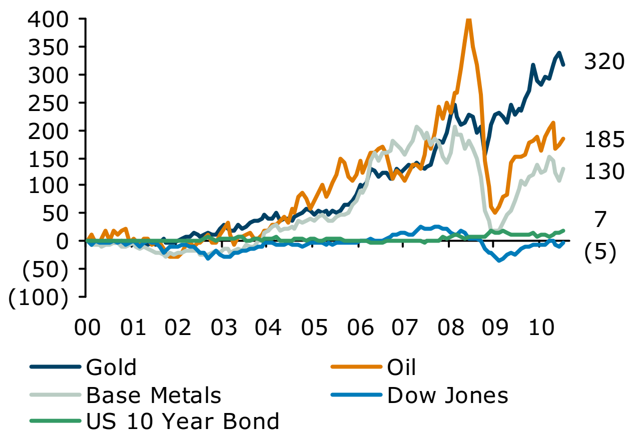
THINGS TO WATCH

USD correlation. Can gold continue to rally without USD weakness?

Strong demand from China. How quickly will Chinese gold markets and internal demand develop over the years ahead?

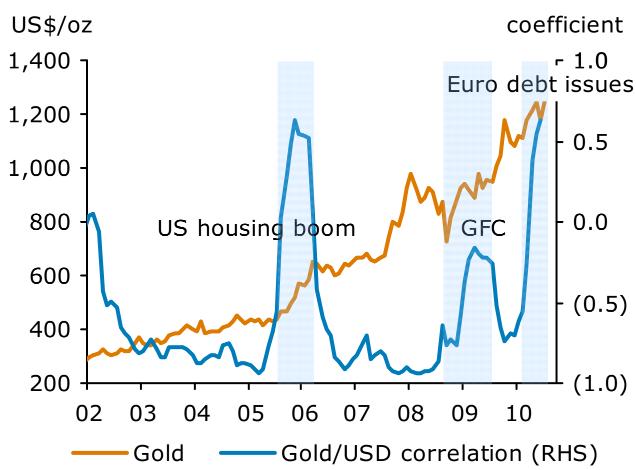
A supply response. Prospects for increased supply must come from either increased production in South Africa and Australia, or increased scrap supply.

FIGURE 1. RELATIVE PRICE PERFORMANCES



Sources: Bloomberg

FIGURE 2. GOLD PRICE & GOLD/US DOLLAR 1-YR ROLLING CORRELATION



Sources: Bloomberg

FEATURE NOTES

RISING INVESTMENT DEMAND

The emergence of gold exchange traded funds (ETFs) from late 2003 has opened up a new market for gold demand supporting higher prices. The physically-backed listed funds have become popular investment tools for institutional investors looking for large direct exposure to gold without having to take delivery (the gold warehoused by the funds). The fund performances have also been less volatile than the underlying gold price, mainly reflecting the longer term outlook taken by the fund holders. Encouragingly, the performances have tracked the overall trend in gold prices, something futures-backed ETFs like oil have been unable to achieve in the past 12 months. We believe this will be a key feature for ongoing support for gold ETFs.

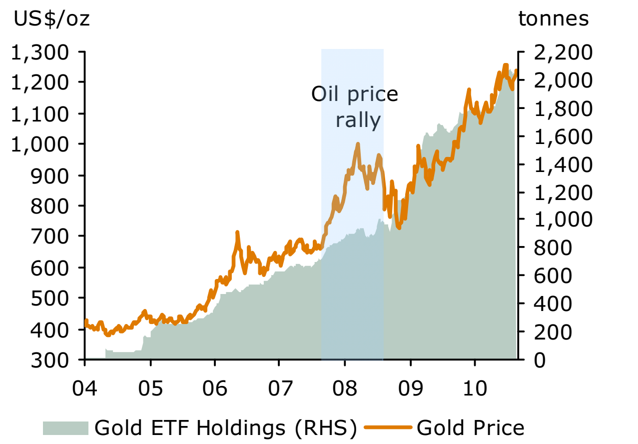
To date, most of the ETF demand has come from large US and European investment funds looking for a safe-haven diversification from riskier investment markets. This trend should continue while heightened uncertainty prevails over global financial conditions. The upside is likely to come from emerging market demand in China and India, where a lack of investment options and a high propensity to hold gold will be the underlying motive to invest in gold ETFs. To put this in perspective, western world holdings of ETF gold stood at about 1,700 tonnes in 2009 compared to only 50 tonnes in China and India.

EMERGING PHYSICAL DEMAND

Global gold demand has been relatively flat over the past ten years, rising an average 0.7% on an annual basis. However, the demand mix has changed significantly, with implied investment demand (mainly ETF and OTC buying) rising from nothing in 2000 to 33% of global demand in 2009. On the flipside, the mainstay demand from jewellery has weakened from 80% to 41% in the same time period. We see this trend reversing somewhat in the coming year, with jewellery demand set to recover, particularly from the more resilient emerging economies of China, India and the Middle East.

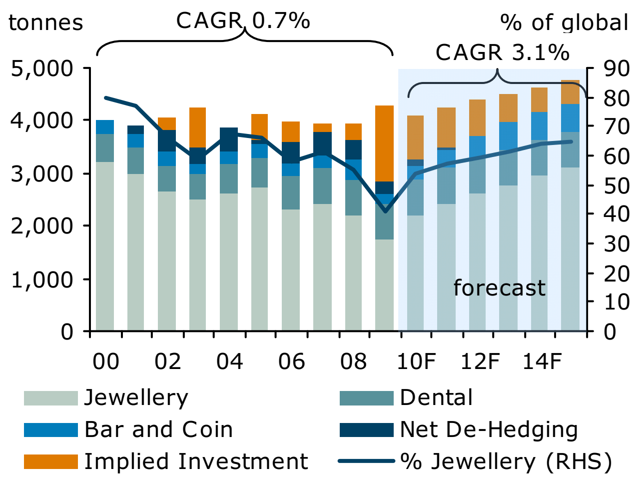
The upside could appear from buoyant investment demand and increased bar hoarding. China is likely to take the lead, with the incentive growing to diversify its rising wealth away from housing and equity markets to a fast emerging domestic gold market.

FIGURE 3. GOLD PRICE & GOLD ETF HOLDINGS



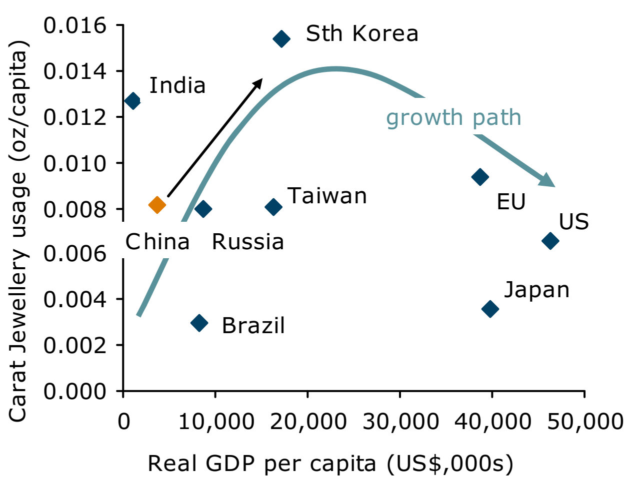
Source: Bloomberg

FIGURE 4. GLOBAL GOLD DEMAND



Sources: GFMS, ANZ

FIGURE 5. JEWELLERY DEMAND INTENSITY



Sources: GFMS, IMF, ANZ

FEATURE NOTES

Recent government policy changes allowing more commercial banks to import and export gold appear to be accommodating this view. Ongoing uncertainty over the health of Western economies, particularly in Europe, will also keep the appetite for gold investment strong as a safe-haven play.

Surprisingly, China is already a large consumer of gold jewellery, consuming 353 tonnes in 2009, second only to India. However, on a consumption per capita basis, the demand level looks more modest, in line with Russia and Europe. That said, with still limited investment choices, and a strong affinity to gold, we believe China could match per capita consumption levels of India in the next three to four years, which would require a 60% jump or 200 tonne increase in gold jewellery demand to 540 tonnes.

CENTRAL BANK BUYING

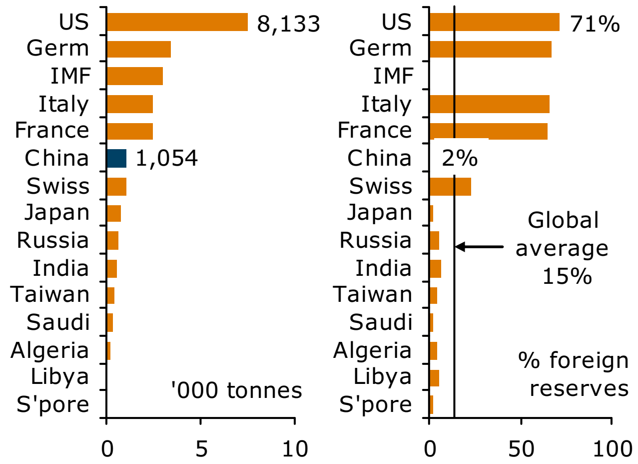
Central Banks have been net sellers of gold, having supplied an average 450 tonnes of gold per year over the past ten years. However, net official sales in 2009 dropped to 41 tonnes, the lowest level in over 20 years. In fact, Central Banks swung from net sellers of gold in the March 2009 quarter to a net buyers in the June, September and December quarters. The motivation appears to have been a reassessment of gold holdings strategic position, with increased uncertainty surrounding other foreign exchange holdings.

The upside becomes apparent in observing the very low level of official gold holdings in emerging markets. China's latest official gold holdings look reasonably substantial at 1,054 tonnes, but on a percentage to total foreign reserves basis, is much lower at 2%. This compares to a global average of 15% gold holdings to foreign reserves, suggesting China could substantially increase its gold holdings, particularly as the domestic financial sector becomes more open. A modest scenario of moving gold holdings to 5% of total reserves would require China to purchase 2,400 tonnes of gold, almost the same level as annual global mine supply in 2009.

SWITCH IN GOLD SUPPLY

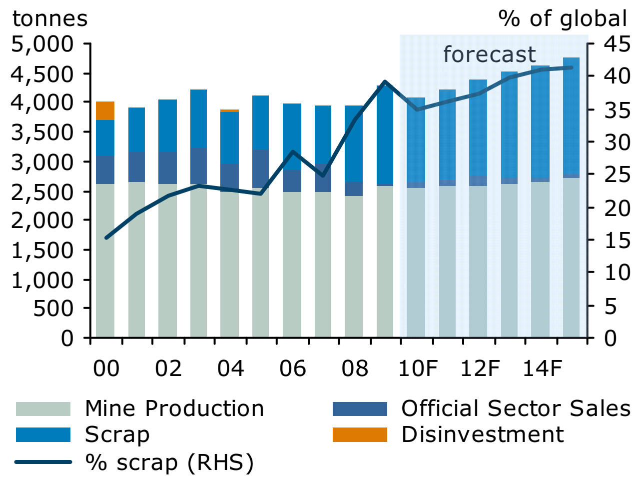
Total global mine supply is sourced from a combination of new mine production, recycled scrap and official sector (central bank) sales. An emerging trend in the past ten years has been the lack of new mine supply: In fact, total gold production has fallen 2% in the past ten years, despite a 7% increase in total gold demand. The shortfall has been

FIGURE 6. GLOBAL CENTRAL BANK GOLD HOLDINGS



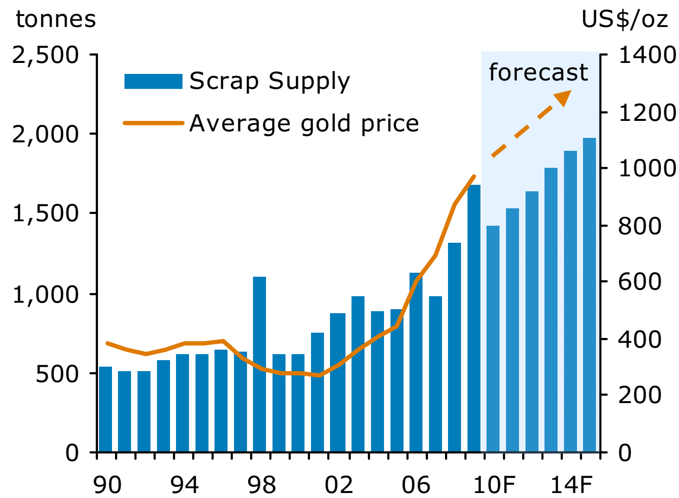
Sources: WGC

FIGURE 7. GLOBAL GOLD SUPPLY



Sources: GFMS, ANZ

FIGURE 8. GLOBAL SCRAP SUPPLY



Sources: GFMS, ANZ

FEATURE NOTES

made up by official sector sales and increased scrap supply. With central banks lower propensity to sell gold, and in the absence of increased mine production (a likely scenario in our opinion), the shortfall in supply will increasingly rely on higher availability of recycled gold scrap.

Increased gold scrap supply is traditionally triggered by higher gold prices or periods of heightened economic stress; gold holdings being liquidated (or recycled) to reduce debt burdens. The latter was apparent in 2009, with strong increases in the supply of scrap reported in Europe (up 38%) and the US (up 33%). Notwithstanding a higher than normal level of economic anxiety, we think increased levels of scrap supply going forward will increasingly require higher gold prices. This will be particularly apparent in large fabricated gold holding economies, such as India and the Middle East.

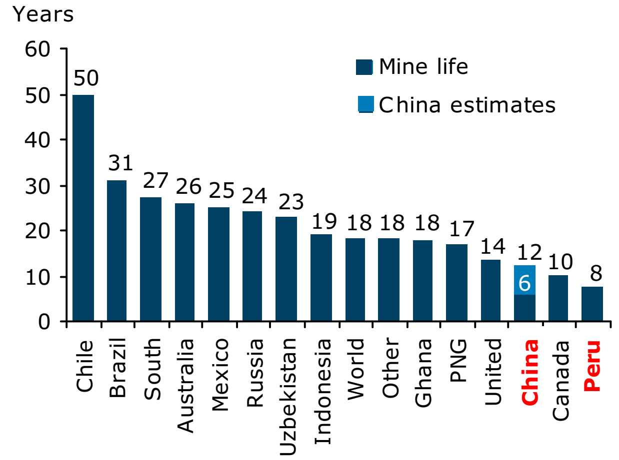
LACK OF NEW DISCOVERIES

Global gold mine output has traditionally supplied 70-75% of total gold supply. However, in the past ten years that percentage slid to 60% by 2009, with most of the declines coming from traditionally large producing regions in South Africa, Australia and the US. In fact, South African gold production has nearly halved in the past ten years, losing its number one producer status to China in 2003. We can't see this trend reversing, with South Africa (and Australia and the US), increasing, transitioning to deeper, higher cost mine deposits. The rub may come from large emerging production in China and South America, where gold output has ramped up aggressively in the past ten years. These regions are now facing limited mine life reserves, potentially slowing further output expansions.

A lack of new major gold discoveries is also flagging a tight supply scenario. Gold exploration expenditure dropped substantially in the early 2000s reacting to very low gold prices in the late 1990s. Cheap gold equity valuations also spurred a major industry consolidation phase (particularly in Australia) which increased the preference to acquire gold production and reserves (through mergers and acquisitions) rather than to explore for it.

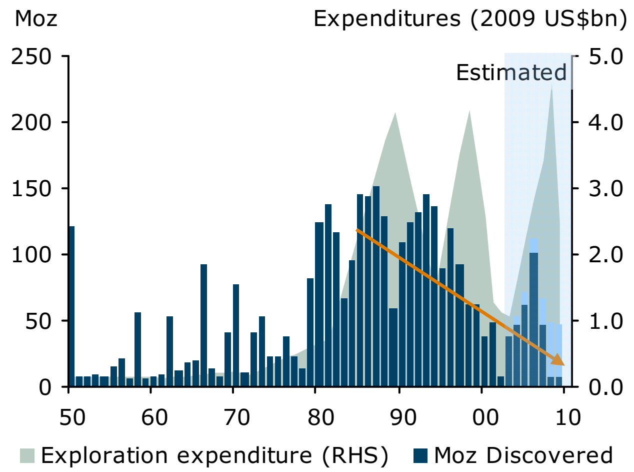
Mark Pervan
Head of Commodities Research

FIGURE 9. COUNTRY GOLD MINE LIFE



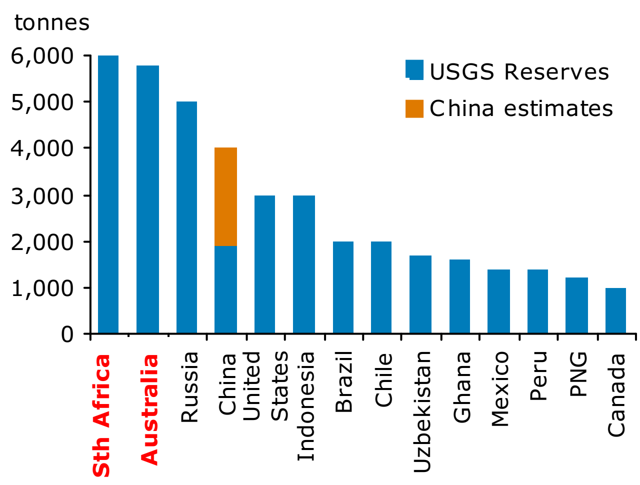
Sources: USGS, GFMS, ANZ

FIGURE 10. GLOBAL GOLD EXPLORATION & DISCOVERIES



Source: MinEx Consulting

FIGURE 11. COUNTRY GOLD RESERVES



Sources: USGS, GFMS, ANZ

FORECASTS

COMMODITIES

COMMODITY	Unit	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
BASE METALS											
Aluminium	US$/lb	0.93	0.95	0.97	0.98	1.00	1.00	0.99	0.95	0.93	0.92
Copper	US$/lb	3.40	3.80	4.00	4.05	4.20	4.20	4.30	4.30	4.10	4.00
Nickel	US$/lb	10.10	10.30	10.50	11.00	11.00	10.80	10.60	10.60	10.20	10.00
Zinc	US$/lb	0.95	0.98	1.00	1.02	1.04	1.05	1.06	1.07	1.04	1.02
Lead	US$/lb	0.97	0.99	1.01	1.02	1.02	1.03	1.03	1.02	1.00	0.98
Tin	US$/lb	9.20	9.30	9.50	9.50	9.60	9.40	9.40	9.20	9.10	8.80
PRECIOUS METALS											
Gold	US$/oz	1,240	1,280	1,325	1,350	1,375	1,375	1,350	1,350	1,325	1,300
Platinum	US$/oz	1,550	1,684	1,791	1,849	1,910	1,937	1,929	1,929	1,866	1,806
Palladium	US$/oz	517	543	560	578	579	587	567	567	533	516
Silver	US$/oz	18.5	19.4	20.4	21.1	21.8	21.8	21.8	21.8	21.7	20.6
ENERGY											
WTI NYMEX	US$/bbl	77.0	82.0	84.0	88.0	90.0	95.0	98.0	100.0	102.0	105.0
Brent IPE	US$/bbl	76.0	81.0	83.0	87.0	89.0	94.0	97.0	98.8	100.8	103.8
Uranium	US$/lb	43.0	45.0	48.0	52.0	55.0	58.0	60.0	63.0	65.0	65.0
BULKS											
Thermal coal	US$/t	98.0	98.0	98.0	110.0	110.0	110.0	110.0	120.0	120.0	120.0
Premium hard coking	US$/t	225.0	210.0	215.0	230.0	230.0	240.0	250.0	250.0	250.0	245.0
Hard coking	US$/t	200.0	190.0	195.0	200.0	195.0	205.0	220.0	220.0	222.0	220.0
Semi-soft coking coal	US$/t	172.0	160.0	175.0	180.0	170.0	180.0	195.0	195.0	197.0	195.0
Iron ore lump	US¢/dltu	165.0	140.0	155.0	165.0	170.0	175.0	175.0	165.0	160.0	155.0
Iron ore fines	US¢/dltu	150.0	127.0	140.0	150.0	155.0	160.0	160.0	150.0	145.0	140.0
OTHER METALS											
Alumina	US$/t	340	345	342	335	335	331	327	310	303	296
Molybdenum	US$/lb	15.2	15.8	16.2	16.5	16.8	17.0	17.3	17.2	17.0	17.0
Cobalt	US$/lb	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.0	21.8	21.8

FORECASTS

CONSUMER PRICE INDEX

	1990-2006					Forecasts	
	Average	2007	2008	2009	2010	2011	2012
World[1]	4.8	3.6	5.2	1.7	3.4	2.9	2.6
G7	2.4	2.2	3.3	-0.1	1.4	1.4	1.6
US	2.9	2.9	3.8	-0.4	1.6	1.4	2.0
Euro zone	2.8	2.0	3.2	0.3	1.4	1.4	1.4
Japan	0.6	0.1	1.7	-1.3	-1.0	-0.2	0.1
United Kingdom	2.6	3.2	4.3	1.9	4.4	3.3	1.9
China	3.4	1.8	3.4	0.8	1.5	1.7	1.8
Australia	2.8	2.3	4.4	1.8	2.9	2.8	3.3
New Zealand	2.2	3.2	3.4	2.0	4.6	3.0	2.4
OECD	2.5	2.2	3.4	0.0	1.4	1.4	1.6
East Asia (ex Japan)	5.3	4.2	6.3	0.3	3.1	3.3	2.4
South Asia	7.4	6.7	6.9	6.0	12.6	5.8	4.4
Emerging Economies 1	9.5	5.4	7.5	3.7	5.7	4.4	3.7

Source: Datastream, Consensus Economics, ANZ

[1]Long-Term average from 1995

FORECASTS

GROSS DOMESTIC PRODUCT

	1990-2006				Forecasts		
	Average	2007	2008	2009	2010	2011	2012
World (PPP)	3.4	5.0	2.8	-0.6	4.5	4.2	4.7
World (Market)	3.0	3.9	1.9	-2.1	3.3	3.0	3.4
G7	*2.5*	*2.2*	*0.2*	*-3.4*	*2.6*	*2.2*	*2.6*
US	3.0	2.1	0.4	-2.4	2.7	2.5	3.3
Euro zone	2.3	2.6	0.6	-4.0	1.3	1.2	1.8
Japan	1.6	2.3	-1.2	-5.1	2.5	1.5	2.0
United Kingdom	2.4	2.6	0.5	-4.9	1.5	2.0	2.0
Canada	2.7	2.2	0.5	-2.5	3.4	2.7	3.1
Asia-Pacific	*5.3*	*8.0*	*5.0*	*3.7*	*7.4*	*6.8*	*7.2*
Asia-Pacific less Japan	*6.9*	*9.5*	*6.6*	*5.6*	*8.4*	*7.9*	*8.2*
Australia	3.2	4.8	2.3	1.3	3.0	3.8	3.9
New Zealand	2.9	2.8	-0.1	-1.7	2.7	3.9	2.1
China	9.9	13.0	9.0	8.9	10.2	9.6	9.8
Hong Kong	4.2	6.4	2.4	-2.7	5.5	5.0	5.2
India	6.1	9.5	7.4	6.7	8.5	8.8	9.3
Indonesia	4.9	6.3	6.1	4.6	6.0	6.1	5.6
Malaysia	6.5	6.5	4.7	-1.7	7.2	4.9	5.6
Philippines	3.6	7.1	3.8	0.9	5.8	4.1	4.5
Singapore	6.8	8.5	1.8	-1.3	11.4	4.2	5.5
South Korea	5.8	5.1	2.3	0.2	6.2	4.0	4.7
Taiwan	5.4	5.7	0.1	-1.7	6.2	5.1	5.4
Thailand	5.2	4.9	2.5	-2.3	6.1	4.0	5.6
Vietnam	7.5	8.5	6.3	5.3	6.4	6.9	7.0
Latin America	*2.7*	*5.6*	*4.2*	*-2.4*	*5.3*	*4.0*	*4.2*
Brazil	1.2	5.7	5.1	-0.1	7.2	4.4	4.1
Mexico	3.2	3.3	1.4	-6.9	4.5	3.7	5.2
Argentina	3.8	8.7	7.0	-2.5	6.8	4.1	3.0
OECD	*2.5*	*2.4*	*0.3*	*-3.3*	*2.2*	*2.0*	*2.6*
Emerging	*4.8*	*8.3*	*5.8*	*2.5*	*7.2*	*6.6*	*6.9*

Source: Datastream, Consensus Economics, ANZ

FORECASTS

RATES*

	Latest	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
	02-Sep-10										
Policy rates											
G4											
US	0.25	0.25	0.25	0.25	0.25	0.50	0.75	1.25	1.75	2.25	2.50
Euro zone	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.50	1.75	2.00
Japan	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
United Kingdom	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.50	2.00	2.50	3.00
Commodity											
Canada	1.00	1.00	1.00	1.25	1.50	2.00	2.25	2.75	3.25	3.75	4.00
Australia	4.50	4.50	5.00	5.25	5.50	5.75	6.00	6.00	6.00	6.00	6.00
New Zealand	3.00	3.00	3.25	3.50	4.00	4.50	5.00	5.50	5.50	5.50	5.50
South Africa	6.50										
Russia	7.75										
Brazil	10.75										
Emerging Asia											
China	5.31	5.58	5.85	6.12	6.39	6.66	6.66	n.a.	n.a.	n.a.	n.a.
Hong Kong	0.50	0.50	0.50	0.50	0.50	0.50	0.75	n.a.	n.a.	n.a.	n.a.
India	5.75	6.00	6.25	6.50	6.50	6.50	6.50	n.a.	n.a.	n.a.	n.a.
Indonesia	6.50	6.50	6.75	7.00	7.25	7.50	7.75	n.a.	n.a.	n.a.	n.a.
Malaysia	2.75	2.75	2.75	3.00	3.00	3.25	3.25	n.a.	n.a.	n.a.	n.a.
Philippines	4.00	4.00	4.00	4.25	4.50	4.75	5.00	n.a.	n.a.	n.a.	n.a.
Singapore	0.55	0.55	0.55	0.55	0.55	0.55	0.60	n.a.	n.a.	n.a.	n.a.
South Korea	2.25	2.50	2.75	3.00	3.50	4.00	4.25	n.a.	n.a.	n.a.	n.a.
Taiwan	1.38	1.50	1.63	1.88	2.00	2.00	2.13	n.a.	n.a.	n.a.	n.a.
Thailand	1.75	1.75	2.00	2.25	2.50	2.75	3.00	n.a.	n.a.	n.a.	n.a.
Vietnam	8.00	8.00	8.00	8.00	8.00	8.00	8.00	n.a.	n.a.	n.a.	n.a.
	Latest 02-Sep-10	**Sep-10**	**Dec-10**	**Mar-11**	**Jun-11**	**Sep-11**	**Dec-11**	**Mar-12**	**Jun-12**	**Sep-12**	**Dec-12**
2-year bond yield #											
US	0.57	0.49	1.00	1.20	1.50	2.00	2.30	2.50	2.80	3.10	3.40
Germany											
Japan											
United Kingdom											
Canada											
Australia[1]	4.37	4.37	5.10	5.50	5.70	6.00	6.00	5.90	5.80	5.90	6.10
New Zealand[1]	4.09	4.09	4.63	4.95	5.30	5.75	5.93	5.98	5.93	5.95	6.06
10-year bond yield											
US	2.79	2.62	3.20	3.30	3.30	3.60	3.60	3.60	3.60	3.70	4.00
Germany	2.40	2.28	2.80	2.90	3.00	3.20	3.50	3.70	3.80	4.00	4.20
Japan	1.16	1.12	1.40	1.40	1.50	1.50	1.60	1.70	1.80	1.80	1.80
United Kingdom	3.01	2.96	3.80	3.80	4.00	4.20	4.20	4.30	4.40	4.30	4.30
Canada	2.95	2.87	3.80	4.00	4.25	4.30	4.50	4.50	4.70	4.90	4.90
Australia	4.84	4.85	5.50	5.70	5.80	6.00	5.90	5.80	5.60	5.70	6.00
New Zealand	5.28	5.28	5.50	5.60	5.75	6.20	6.18	6.10	6.02	6.05	6.25

[1] Three year rate *Source: Relevant Central Banks # Source: Bloomberg, ANZ

FORECASTS

FOREIGN EXCHANGE RATES

	Latest 15-Sep-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
International FX Rates											
USD/JPY	85.4	85.0	85.0	87.0	89.0	92.0	94.0	98.0	100.0	100.0	100.0
EUR/USD	1.30	1.28	1.25	1.20	1.20	1.20	1.18	1.18	1.20	1.20	1.20
EUR/JPY	111.0	108.8	106.3	104.4	106.8	110.4	110.9	115.6	120.0	120.0	120.0
GBP/USD	1.55	1.53	1.54	1.55	1.55	1.55	1.56	1.58	1.62	1.62	1.62
EUR/GBP	0.84	0.84	0.81	0.77	0.77	0.77	0.76	0.75	0.74	0.74	0.74
USD/CAD	1.03	1.03	1.05	1.05	1.04	1.04	1.04	1.05	1.06	1.06	1.08
USD/CHF	1.00	1.00	1.06	1.08	1.09	1.10	1.11	1.13	1.15	1.15	1.15
AUD/USD	0.94	0.93	0.94	0.96	0.98	0.96	0.94	0.92	0.90	0.88	0.86
NZD/USD	0.73	0.71	0.71	0.72	0.73	0.73	0.72	0.71	0.70	0.68	0.67
US$ Index	81.6	82.7	84.1	86.4	86.6	87.1	88.1	88.5	87.6	87.6	87.7
Asian FX Rates											
USD/CNY	6.74	6.73	6.62	6.52	6.42	6.32	6.21	6.15	6.09	6.03	5.97
USD/HKD	7.77	7.76	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
USD/IDR	8975	9150	9300	9525	9200	9000	8900	8811	8723	8636	8549
USD/INR	46.36	47.70	48.60	49.90	48.00	46.00	44.00	43.56	43.12	42.69	42.27
USD/KRW	1161	1220	1245	1290	1200	1100	1000	990	980	970	961
USD/MYR	3.11	3.20	3.25	3.31	3.20	3.15	3.10	3.07	3.04	3.01	3.00
USD/PHP	44.26	46.00	46.90	48.30	46.00	45.50	45.00	44.55	44.10	43.66	43.23
USD/SGD	1.34	1.38	1.40	1.43	1.39	1.36	1.34	1.33	1.31	1.30	1.30
USD/THB	30.83	31.90	32.50	33.30	32.00	31.50	31.00	30.69	30.38	30.08	30.00
USD/TWD	31.77	32.50	32.90	33.30	32.70	32.20	31.00	30.69	30.38	30.08	29.78
USD/VND	19480	19500	19500	20000	20000	20000	20000	20000	20000	20000	20000

Source: Bloomberg, ANZ

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