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ANZ Economic Outlook

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Our Vision:

For Economics@ANZ to be the most respected, sought-after and commercially valued source of economics research and information on Australia, New Zealand, the Pacific and Asia.

Inside

International overview

One of the enduring surprises of this global economic cycle is the persistence of relatively low inflation. Signs that the global economy is reaccelerating have led to concerns about how long the low inflation environment can last. This will prompt further modest monetary tightening in 2007-08. *Page 2*

Australian outlook

Australians have never had it so good. Slightly higher interest rates are the price we will pay for the longest period of prosperity in our history – the new Golden Age. *Page 12*

New Zealand outlook

The New Zealand economy has picked up momentum after a soft patch in the middle of last year. With limited inflation headroom, the bias now shifts to a further rate hike and sooner rather than later. *Page 16*

Financial market update

Global bond yields have risen and curves have steepened in response to improved growth prospects and expectations of higher inflation. The A$ has rallied to an 18-year high above US$0.87 and we now expect the A$ will hold above US$0.80 over the next 18 months. *Page 18*

Feature article

Underlying productivity growth in Australia has slowed since the 1990s, but only to around its long-term average. Productivity growth will become an increasingly important source of economic growth as population ageing begins to weigh on labour utilisation. Further economic reforms will be needed to reinvigorate productivity growth going forward. *Page 21*

Australian and New Zealand economic forecast table *Page 25*

Financial markets forecast table *Page 26*

List of contacts *Page 27*

World economic forecasts

	2006	2007(f)	2008(f)	2009(f)
Australia	**2.7**	**4.1**	**4.0**	**4.1**
New Zealand	**1.5**	**2.5**	**1.5**	**3.7**
United States	3.3	2.2	3.0	3.2
Euro zone	2.6	2.5	2.2	2.2
Japan	2.2	2.4	1.9	2.1
China	10.7	10.5	9.8	9.0
Other East Asia	5.5	5.3	5.2	4.9
World	**5.1**	**4.8**	**4.7**	**4.5**

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International Overview

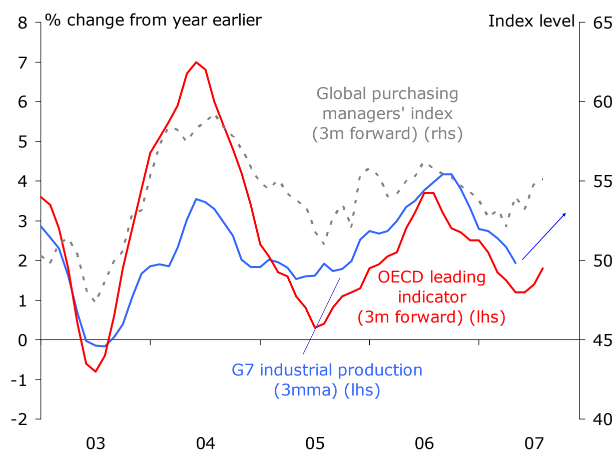
Amy Auster, Head of International Economics

Katie Dean, Senior Economist, International

Global growth reaccelerates

After a slight easing in activity over the past three quarters, the global economy will find momentum in the coming months. Manufacturing orders have reaccelerated, the OECD leading indicator is on the rise and industrial production growth is showing signs of picking up. Overall, global activity remains well on track to grow by a strong 4¾% this year.

Indicators suggest renewed global momentum



Sources: Datastream, Economics@ANZ

The reacceleration will mainly be courtesy of the US, where a sharp first quarter slowdown represented a drag on G7 growth. The slowdown appears to have levelled out in the second quarter as the corporate sector continues to perform well, underpinned by a bottoming of the inventory cycle, solid sales, high capacity utilisation, strong profitability and rising confidence. Meanwhile an upturn in employment in the second quarter, which is keeping unemployment near cyclical lows, is helping to insulate households from the continued downturn in the housing sector.

The main risk to our favourable outlook is the potential for the sharp downturn in the US housing market to spread to the broader economy. Tighter lending standards, the accelerated rollover of adjustable rate mortgages and further losses from the sub-prime mortgage market have the potential to hurt household and business spending in the period ahead. Employment growth may yet be more negatively affected by the construction sector than has been the case thus far. As such, it is too early to tell whether the US is experiencing a 'late-cycle upturn' or a 'mid-cycle pause'. It remains a case of 'watching the data' with the US growth path now the biggest uncertainty to the global outlook.

While the US slowdown is levelling out, activity in Europe may be set to slow. The impact of eight consecutive interest rate rises since 2005 and the record high value of the euro are starting to impact the manufacturing sector as industrial production has moderated in recent months. Nevertheless, growth remains well above trend with European exporters continuing to benefit from growing market share and strong sales in the booming Asian region. Meanwhile, other G7 countries, notably Canada and the UK, are continuing to perform well. Recent indicators out of Japan, including further positive signs on capital expenditure and strong exports, confirm that the recovery in this economy also has further to run.

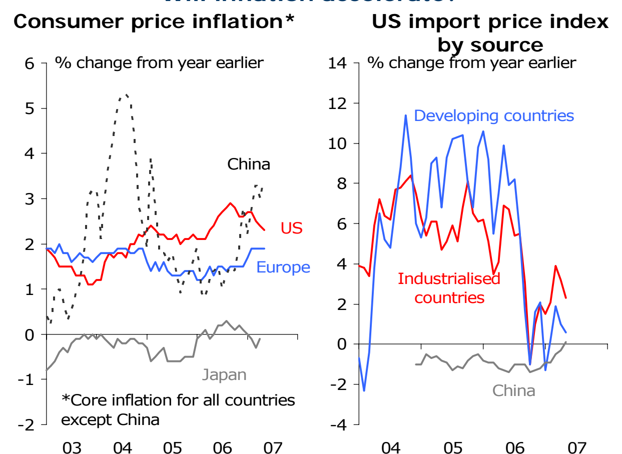
The increasingly important Asian region continues to boom, led by the indefatigable Chinese economy. After expanding by an annual rate of 11.1% in the March quarter, China lost little momentum in the June quarter with fixed asset investment, industrial production and domestic consumption all accelerating. Export growth remains strong and import growth weak, allowing the trade balance to balloon to US$66 bn in the June quarter, although export growth may have been temporarily lifted by pending deadlines for increases in taxes and tariffs. Meanwhile, despite best attempts, authorities are unlikely to have much luck in slowing investment spending ahead of the 17th Chinese Communist Party Congress in late 2007. In all it appears that the Chinese economy is well on track for its fifth consecutive year of above-10% growth.

Outside of China, other East Asian economies are also growing above trend. Strong demand is driving robust export growth across Asia and in a further positive sign for this region the global electronics cycle is beginning to recover from this year's earlier inventory adjustment. Buoyant global financial conditions and abundant liquidity is also supporting growth by spurring high foreign investor inflows into this region, particularly into manufacturing, natural resources and property sectors.

Inflation under the spotlight

One of the enduring surprises of this economic cycle is the persistence of relatively low inflation. Core inflation in the G7 has only just returned to trend levels, and while consumer prices are rising in the EU and are on the verge of showing signs of life in Japan, inflation is now decelerating in the US. Signs that the global economy is now possibly reaccelerating has, understandably, led to concerns of near-term risks for higher inflation.

Will inflation accelerate?



Sources: Bloomberg, Datastream

Will China stop exporting 'deflation'?

Many observers have speculated that an imminent end to low inflation is at hand, with one favourite cause being that higher domestic prices in China will soon force up the price of world imports, and therefore tradables inflation. Proponents point to a recent rise in Chinese export prices to the US, which are now in positive territory for the first time in this data series.

While it is true that some export prices from China are rising, this is a slow process and we see the chance of a sharp price shock as unlikely. Emerging labour shortages are pushing up wages in some locations, but this is not an economy-wide phenomenon. Moreover, China's manufacturing wages are still extremely low when compared to OECD economies. As China moves up the value add chain of production from low-end consumer goods to electronics and appliances, its relatively low cost of labour will continue to exert the same downward pressure on goods prices seen in the recent past.

It is also true that input costs other than labour are rising in China. This is occurring as the Chinese government introduces measures to ease trade tensions and reduce incentives for exporters, including removing VAT rebates, introducing export tariffs and imposing restrictions on the use of land and power. While these measures imply a rising cost basis for affected firms, we suspect it will take some time before this will be passed through into higher final prices. The absorption of higher costs into existing profit margins and industry consolidation is the most likely initial response.

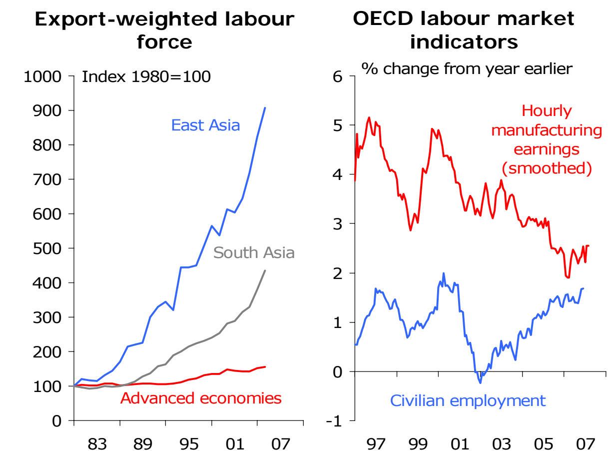
Globalisation still a force

A further concern around the global inflation outlook is that tight labour markets will start to generate broad-based wage pressures. Certainly, the traditional drivers for this type of 'demand-pull' inflation appear in place. Unemployment rates are falling across the world, to cyclic lows in the US, EU, Japan, Australia, New Zealand and parts of East Asia. Impressively, these falls in unemployment have occurred as labour force participation rates have increased in many countries. Yet, to date, wage inflation has been relatively low.

The generally benign wage outcomes are largely a factor of globalisation. Globalisation has brought advanced cross-border supply chain solutions, such that manufacturing capacity has progressively relocated from the G7 economies to lower-cost production centres. This process has resulted in a massive increase in the global supply of labour, particularly for low-end manufacturing.

This supply shock to the global labour market is highlighted in the chart below. The IMF have calculated the labour force of every country, and weighted the labour force by the export-to-GDP ratio. The more a country exports, the more that its labour supply is contributing to global production. By this measure, the IMF estimates that that the effective global labour supply has quadrupled since 1980, with most of the increase taking place after 1990. East Asia has contributed about half of that increase, and most of East Asia's increase can be attributed to China.

Global labour supply boost capping wage inflation



Sources: IMF

This process has meant that the low-cost manufacturing sector has faced surplus labour conditions for more than a decade now. Labour market deregulation across the industrialised world has also made labour markets more fluid and reduced the non-salary cost of labour for firms. The result has been strong employment growth with low aggregate wage inflation.

Will this suddenly reverse? In the short-term it seems unlikely. The UN projects that the world's working-age population will rise by 40% by 2050. On the basis that trade openness continues to grow, the IMF estimates this will see the effective global labour supply more than double in this period. Moreover, it is expected that expansion of imports and immigration will allow advanced economies increased access to this fast-growing global pool of labour. In other words, the 'China effect' is still out there. These projections suggest that downward pressure on global wages, particularly in the low-skilled or semi-skilled sectors, will persist.

Asset prices need closer attention

With neither global import prices nor global wages likely to provide a 'shock' to consumer price inflation, the traditional indicators that central banks have monitored to assess consumer price inflation expectations are likely to remain moderate. As such, we forecast that the recent reacceleration of global growth will prompt only modest monetary policy tightening in 2007-08.

However, one important outcome of persistent low wage inflation is that workers around the world are increasing their participation in the property and asset markets, with important flow-on effects for personal income and spending power. To date, central banks have disregarded asset price inflation in terms of its potential impact on consumer price inflation; this may be the main source of upside risk to monetary policy expectations in the period ahead.

US Outlook

Paul Braddick, Head of Financial System Analysis

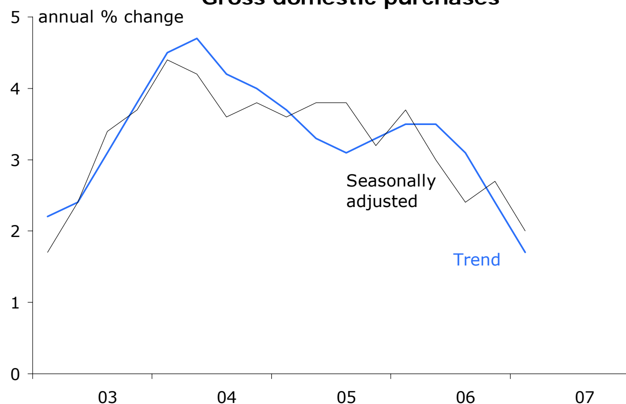
Renewed optimism is premature

US economic growth slumped to an annualised rate of just 0.7% in the March quarter led by a further sharp fall in housing investment and an ongoing inventory adjustment.

Since then, markets have reacted positively to early signs of a stabilisation in certain partial economic indicators, and growth expectations have strengthened. The ISM index has rebounded in recent months and durable goods orders and new home sales have improved. The market consensus is now counting on a solid rebound in economic growth over the remainder of the year and for the Federal Reserve to remain on hold until at least the end of this year.

However, we view the renewed optimism as premature, and are more cautious on our outlook for the US economy. While a turn in the inventory cycle will boost growth in the near term, the majority of housing and business indicators remain very soft. Downside risks are being exacerbated by rising oil prices, record domestic fuel costs, falling house prices and weakening consumer sentiment.

Domestic spending continues to slow



Sources: Datastream, Economics@ANZ

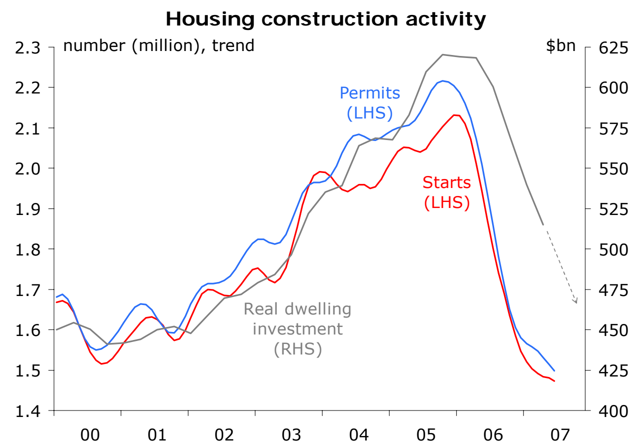
Housing slump has further to run

The housing sector continues to weaken, with dwelling investment having declined over the year to March and dwelling starts falling to a 10-year low in May. In addition, after stabilising early in 2007, the NAHB housing index plummeted to a new 16-year low in June and house prices are now falling.

Ongoing trend declines in both housing starts and permits foreshadow further substantial falls in dwelling investment in the quarters ahead, while growing inventories of unsold new homes and the collapse in developer sentiment suggest little prospect for a recovery until at least early 2008.

We expect negative headlines about developments in the housing sector to grab centre stage again in the September quarter, and possibly to further dampen consumer sentiment. While sub-prime mortgage delinquencies have continued to rise, to date, the spillover to the prime mortgage market has been minimal. However, the rate of resets on adjustable rate mortgages in the US will rise quickly in the second half of 2007, exacerbating the debt-servicing burden for the household sector. ('Resets' refer to the resetting of the interest rate and also the start of principle repayments, after an initial two-year honeymoon period on a low interest rate.) This is occurring in an environment of higher term yields, with 10-year US Treasury bonds now trading above 5%. Trends in the housing market continue to raise the threat of contagion and present further downside risks to loan delinquencies, house prices and dwelling investment.

Housing slump still deepening

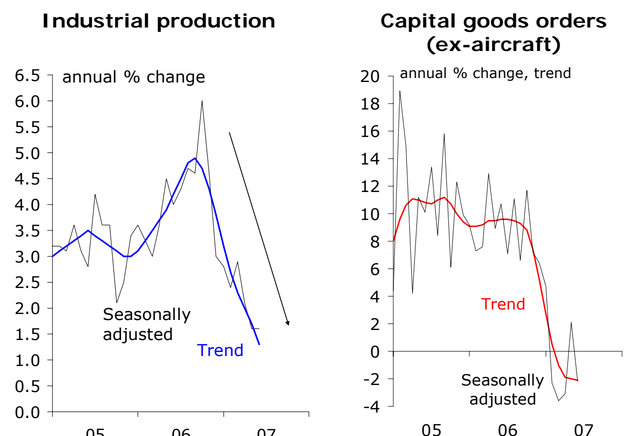


Sources: Datastream, Economics@ANZ

Industrial activity remains soft

Despite a welcome rebound in both the manufacturing and non-manufacturing ISM indices, most other indicators suggest industry conditions remain soft. Industrial production growth slowed to just 1.3% over the year to May, manufacturing employment has *fallen* by 1.2% over the same period and factory orders and shipments remain weak. Moreover, despite a dead-cat bounce in capital goods orders in April (which has subsequently retraced), the near-term business investment outlook remains subdued.

Manufacturing activity remains weak



Sources: Datastream, Economics@ANZ

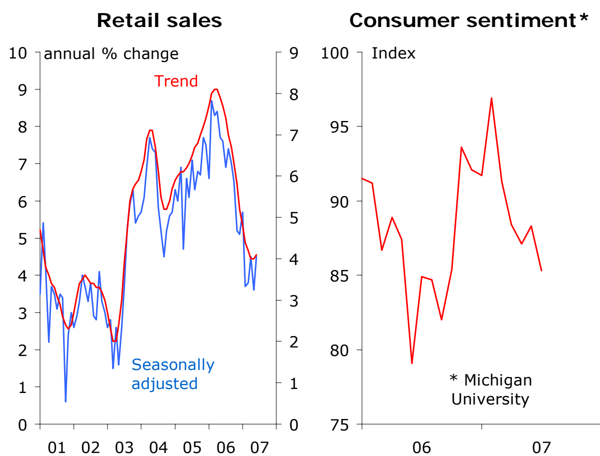
Nonetheless, a bottoming of the inventory cycle will remove what has been a significant negative

influence on growth and modest stock rebuilding may provide support to growth in the quarters ahead. In addition, a weakening US dollar will give some respite to the export and import competing sectors, and the recent rebound in several measures of surveyed business sentiment is encouraging.

Consumers still the key

With housing in freefall and business investment stalling, the US economy is more critically dependent on consumer spending than ever. In recent quarters the US consumer has been the sole bastion of strength and has, to date, been largely immune to the broader economic downturn. Real consumer spending rose by a solid 3.1% over the year to May and household income growth has remained supportive.

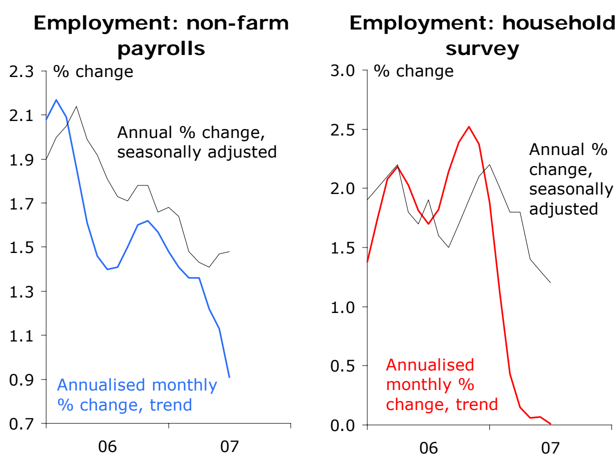
Consumer spending to slow?



Sources: Datastream, Economics@ANZ

However, several indicators raise doubt over the sustainability of growth in household spending. Retail sales have already slowed from their peak in the middle of last year and measures of consumer sentiment have weakened sharply in recent months, as households confront record gasoline fuel bills and falling house prices. Household borrowing has boosted purchasing power and spending significantly in recent years, but mortgage equity withdrawal has dried up in recent quarters as wealth gains slow and confidence wanes.

Employment has slowed



Sources: Datastream, Economics@ANZ

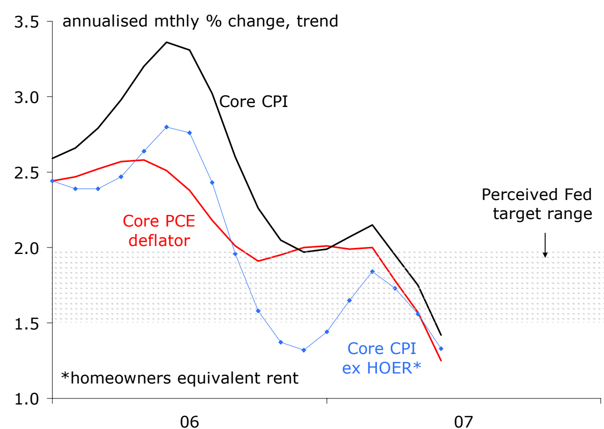
Most importantly, employment growth has continued to slow. Growth in trend hours worked halved over the year to May and weakening leading indicators including overtime hours worked and temporary professional services employment foreshadow further softening in the months ahead. Moreover, stalling industrial production and an overdue decline in construction employment present further downside risks.

Inflation pressures continue to ease

The Fed's rhetoric has remained relatively hawkish and financial markets are still concerned about inflation, despite the fact that actual core inflation has continued to fall sharply.

Trailing annual inflation rates remain elevated, but this largely reflects strong prices growth in the middle of last year. Since then, consumer prices have slowed significantly. In annualised trend terms, core CPI inflation fell to just 1.4% in May and growth in the much watched core private consumption deflator slowed to just 1.3%.

Inflation continues to ease sharply



Sources: Datastream, Economics@ANZ

In recent years in Australia, focus has shifted from trailing annual inflation rates to quarterly (or annualized quarterly growth) reflecting the desire to take into account more up to date price movements in the setting of monetary policy. However, in the US where monthly inflation data allows more up to date readings on inflation, analysts and markets still appear to place a remarkable degree of emphasis on the 'through the year' measures of inflation. This has resulted in scant recognition of the dramatic improvement in core inflation experienced in 2007.

Rising fuel prices and a tight labour market present upside risks to inflation, and hawkish Fed rhetoric would suggest that Board members remain wary of inflation risks. Nonetheless, subdued economic activity should continue to cap core inflation pressures over coming quarters. Unless the economy experiences an upturn that is significantly sharper than current data suggest, the next move for interest rates is still more likely to be down than up.

Euro zone and UK Outlook

Amber Rabinov, Economist

On the surface, economic activity in the euro zone and UK economies has been remarkably well synchronised in recent times. Growth, after accelerating from mid 2005, has levelled off to 3% in annual terms and is expected to ease to around 2½% and then 2¼% in 2007 and 2008 in both areas. Business and consumer confidence remain strong on both sides of the English Channel, and interest rates have also been rising in step, with the Bank of England (BoE) and the European Central Bank (ECB) both hiking rates by 125bps at measured 25bp intervals since mid 2006. However, things are not as similar as they appear at first glance…

Consumers of a different breed

Much of the recent growth in the UK has been generated by consumers. Household consumption expenditure growth has accelerated to 2.9% in the March quarter (in annual terms) from just 1% a year ago. However, the buoyancy in consumer demand is not being supported by concomitant growth in household incomes, but by a sharp drop in the household savings ratio, which has fallen to a mere 2.1% from 6.3% over the year. In contrast, annual growth in real personal disposable incomes has plummeted to just 0.3% in the March quarter from almost 4% in the December quarter 2005. This situation has been of concern to the BoE and has been part of the reason behind the spate of rate hikes in recent quarters.

In contrast, household consumption over on the continent remains weak, growing at just 1.2% in annual terms in the March quarter (and down from an average of 1.8% in 2006). German and Italian households in particular have not been pulling their weight. Meanwhile, French consumers are about to be kicked into spending action by their new President Nicolas Sarkozy, who plans to cut taxes by €11bn in order to apply a "growth and confidence shock" to the French economy.

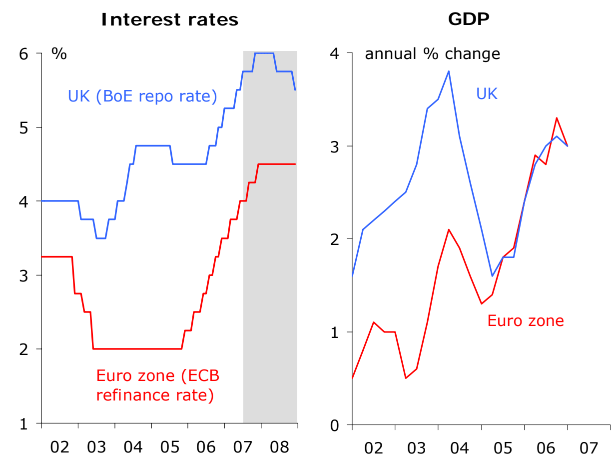
Wages remain in check

Growth in wages has been relatively well-behaved, despite the euro zone unemployment rate having dropped to a record low of 7% and despite fears raised each time a new negotiation round begins with one of the region's powerful labour unions. Although the unemployment rate in the UK has been lower of around 5.5% over the past year, labour costs have also remained largely contained.

Interest rates still on the rise

Particular nuances can also be found in the central banks' respective attitudes towards interest rates. Although rates have been rising at roughly the same pace, the reasons for the monetary policy tightening differ greatly. The case for the ECB has been made quite clear up until very recently: continued normalisation in a gradually strengthening economy combined with upside inflation risks. ECB President Jean-Claude Trichet has persisted in targeting money supply growth (to little effect, with annual growth rising to 10.7% in May, far above the Bank's 4.5% target, and close to the fastest pace in 24 years), believing that the second pillar of euro zone monetary policy cannot be ignored without grave risk to medium-term inflation. Despite communication from the ECB president and council members stating that monetary policy remains accommodative and medium-term risks to inflation persist, there is increasing uncertainty in the language surrounding further rate hikes, with the ECB getting very close to pausing. ANZ (as well as most market forecasters) expect the refinance rate to plateau at 4.5% in December 2007.

Both economies can handle further rate hikes



Sources: Bloomberg, Economics@ANZ

In contrast, policy makers in the UK have remained quite concerned about the current rate of inflation. The BoE has taken an increasingly hard line on the upside risks to inflation, citing concerns about the impact of robust global growth on the solidly growing UK economy, business capacity pressures, and rapid growth in credit and broad money. Inflation fell to 2.5% in May from a recent peak of 3.1% in March and is expected to fall back to the BoE's medium-term target of 2% by the end of the year. Nonetheless, Bank rhetoric continues to emphasise the upside risks to inflation over the downside risks to domestic demand from the five interest rate hikes delivered since August 2006 (despite the fact the higher household debt levels mean that the impact of any further rate hikes will be intensified). Given the BoE's preference to act in a "timely fashion," we believe it will deliver one more interest rate rise by year's end, taking the repo rate to 6%.

Widening interest rate differentials continue to push both the € and the £ higher, with the € above US$1.38 and the £ trading over US$2.05 (its highest level since the early 1980s). Given forecast developments in monetary policy, it will be some time before a significant turnaround will occur, with only minor depreciations expected in the near term.

Japan Outlook

Amy Auster, Head of International Economics

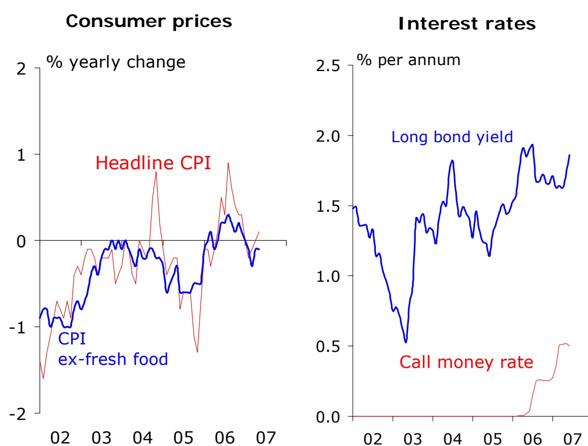
The coming quarter should herald two significant events in Japan. First, voters go the polls on 29 July for upper house elections that may spell trouble for embattled Prime Minister Shinzo Abe. Second, the Bank of Japan is expected to raise interest rates for the third time since the BOJ began its drive to normalise monetary policy in early 2006.

Upcoming elections a key focus

As the July elections are for the upper house only, the vote itself cannot unseat Prime Minister Abe. However, with polls putting Abe's popularity rating at around 30% and a number of ministers generating unhelpful headlines in recent months, the outcome of this election is viewed as crucial to Abe's future. Out on the campaign trail, Abe has pointed at job creation and promised to reform the Social Insurance Agency, which appears to have lost thousands of files. However, he may not have the chance as conventional wisdom is that Abe may be forced to resign if the ruling LDP should lose its majority in the upper house at the end of this month. Even if the LDP hangs on, a greatly reduced majority would mean an increasingly weakened Abe who would have great difficulty pushing through more economic reform, particularly on the fiscal front.

Little wonder then of the broad consensus that the Bank of Japan will avoid lifting interest rates in July, and wait until August for the next anticipated rate hike. Inflation has been slightly negative in the past few months, a result that was anticipated in recent BOJ policy statements. However, August represents twelve months since the release of a revised CPI index that increased the weight of digital items and forced the index lower. A year later, it is expected that the base effect will allow inflation to accelerate from August, providing clear impetus for further interest rate rises. Market participants are clearly anticipating the move, with term yields having risen significantly in Japan over the past month.

Rate hikes can wait given low inflation



Source: Datastream

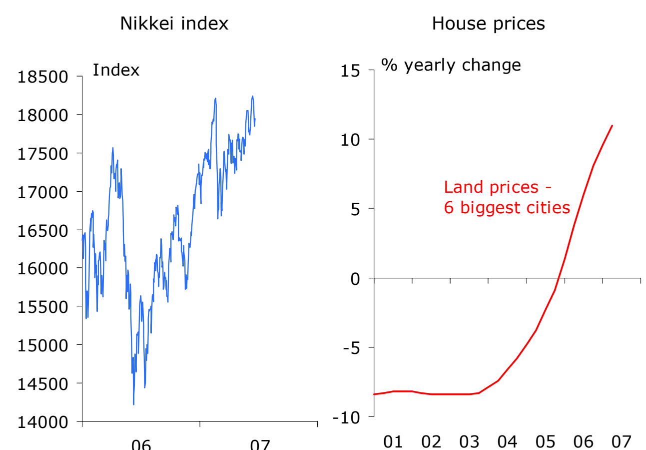
Economy continues to move along

Amid speculation on the election and pending BOJ moves, indicators on how the economy is travelling remain inconclusive. Industrial production has been weaker than expected, with annual growth falling from 3.6% in the first quarter to 2.4% in the second. Growth in household disposable income has remained positive, but the growth rate slowed to 0.3% on average over the second quarter from 3.7% in the first. Most concerning, machinery orders have been contracting on an annual basis for this entire year.

Yet, other indicators have improved, suggesting that the second quarter may have been a soft patch. Exports rose from 9% annual growth in February and March to 10.2% in April and 13.1% in May. Renewed yen weakness will further support exports; the yen has been below US$/¥120 since early May and fallen further against the €; against rising trading rival China, the yen has fallen by 5.2% since the beginning of this year. The cabinet office has upgraded its economic assessment for the year, citing strong exports and continued falls in unemployment. While a sustained improvement in household demand is what is really required to get the economy on a sustainable growth track, a continued strong performance from the corporate sector is a second-best option that should eventually lead to improving fortunes for households.

Households may also receive a lift from improving domestic asset prices, with the equity and real estate markets in Japan marking solid gains over the quarter. Land prices in the six biggest cities rose at an average annual pace of 11% in the first quarter, as against 6.8% growth last year. Moreover, the equity market has reached recent highs after a first quarter slump.

Rising asset prices may help sentiment



Source: Datastream

Rising asset prices and low unemployment appear to be bolstering consumer sentiment. Household expenditure recorded positive growth in April and May, while household net savings declined on an annual basis in May for the first time in four years. The Japanese consumer may indeed be about to emerge at last.

Asia Outlook

Amy Auster, Head of International Economics
Cherelle Murphy, Senior Economist, Markets
Jasmine Robinson, Senior Economist, International

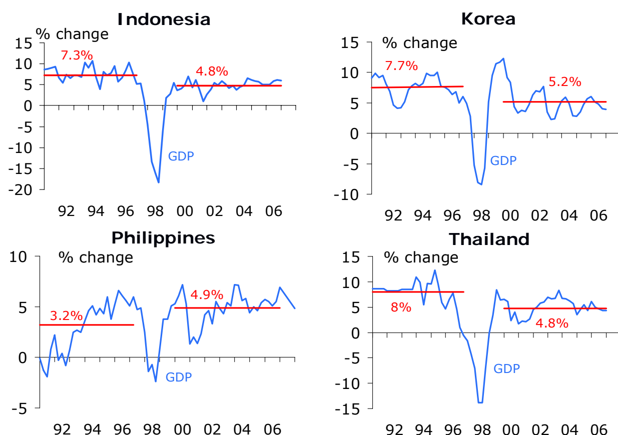
Asia – 10 years after the crisis

This month marks a decade since the Asian financial meltdown that began with the float of the Thai baht on 2 July 1997. The Thai baht promptly fell by 16% against the US dollar, leading to capital flight from East Asia and the subsequent collapse of the region's financial markets and banking system. Indonesia and Korea floated their currencies and rescheduled debt; Malaysia imposed capital controls and the Philippines' markets froze. The turmoil of 1997-1998 has collectively become known as the Asian financial crisis.

The breadth and depth of the crisis is difficult to fathom, even to this day. The relatively high rates of GDP growth and even higher rates of return in recent years in East Asia make the crisis seem like ancient history. Yet, it is important to realize that the countries that were most deeply affected by the crisis are still – to this day – finding their feet.

It is true that the five "crisis" economies experienced a v-shaped recovery after recording negative growth of between 5-15% in 1998, as seen in the chart below. However, the pace of economic activity thereafter has been decidedly slower than pre-crisis growth rates. On average, annual growth rates over the past five years have been two-thirds of their average over the five years prior to the crisis. Korea, Indonesia and Thailand have been expanding at sub-5½% rates per annum in contrast to 7½-8% pa. achieved earlier. The Philippines has been the exception, with the economy tracking at around 4.9% per year as against 3.2% in the early 1990s.

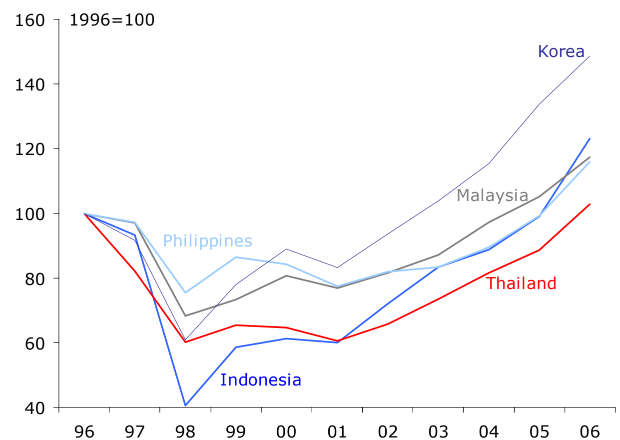
Only the Philippines has regained its pre-crisis growth rate



Note: horizontal lines show average annual growth rates for Q2 90-Q2 97 and Q1 00-Q1 07
Sources: National statistical agencies, Datastream, Economics@ANZ

As a result of this slower growth track, it is only in the past year that GDP per capita returned to its pre-crisis level in Indonesia, the Philippines and Thailand. Korea achieved this mark earliest, in 2003, followed by Malaysia in 2005. It is fair to say that East Asia took nearly a decade to fully recover from the destruction of wealth wrought by the 1997-1998 crisis.

GDP per capita now above pre-crisis levels

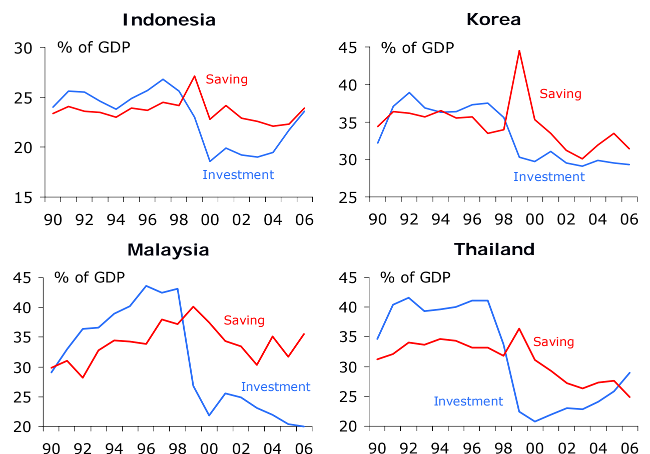


Sources: International Monetary Fund, Economics@ANZ

Investment fails to regain momentum

This lower growth profile in the post-crisis era can largely be explained by a fall in investment as a share of GDP since the crisis. Investment was running at an average of around 31% of GDP between 1990 and 1996 but has dropped considerably to around 22% of GDP currently. As can be seen in the charts below, it has also been the case that investment has failed to even absorb all domestic savings in most of the countries until recently. Malaysia and Korea are still experiencing substantial surplus savings. While it was anticipated that investment would fall in the aftermath of the crisis, it is surprising that it has not regained the same momentum as in the early 1990s given that corporate profitability is strong and above-trend global growth continues to underpin external demand, which bodes well for these export-oriented economies.

Investment has fallen as a share of GDP

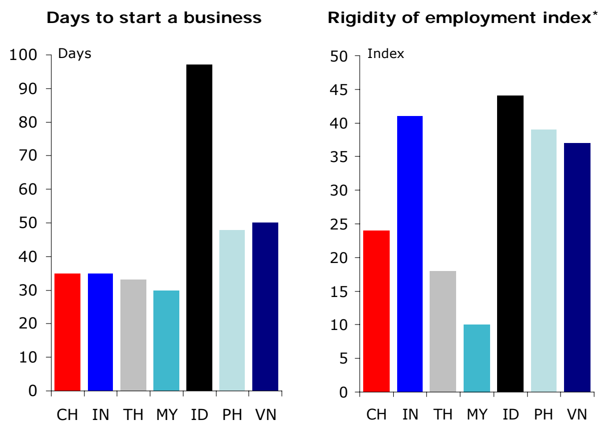


Sources: Economist Intelligence Unit, Economics@ANZ

The failure of investment to return to pre-crisis levels can in some instances be explained by a restrictive regulatory environment and/or an uncertain political landscape. Indonesia, which

suffered the worst downturn in the crisis, has experienced four changes of leadership since 1997. Political uncertainty combined with a legacy of complicated regulatory framework and the need to restructure and recapitalise the banking system left Indonesia struggling with multiple issues in the post-crisis period. However, this year is proving to be a turning point with ongoing reform pursued by the current government beginning to pay off, as evidenced by a strong upturn in investment. In Thailand, progress was made in the immediate post-crisis period, but the change in the political landscape over the past 18 months has restrained investment and is expected to continue to be the key risk. In Malaysia, the progressive lifting of capital controls imposed in the late 1990s has failed to halt the slide in investment, which as a percentage of GDP is the lowest in the region. In Korea, investment has remained stuck at around 30% of GDP since the crisis.

Regulatory platform improving but still some way to go



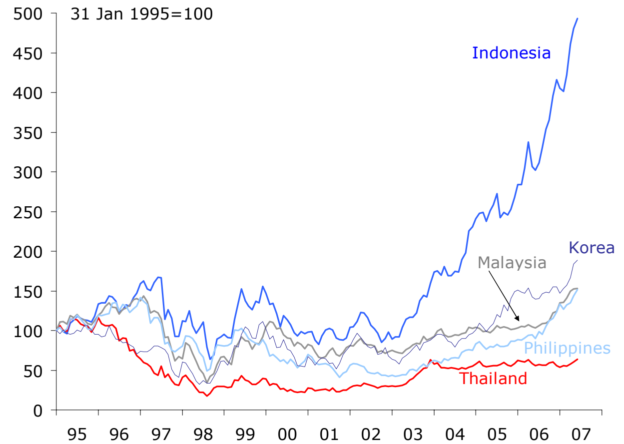
* Index runs 0-100 with 100 being most rigid.
Source: World Bank, *Doing Business 2006* database.

Indonesia, Thailand and the Philippines have the strongest potential to lift investment with further reform, a streamlining of processes and an improvement in political climate contributing to a more conducive operating environment. Their long-term targets to lift economic growth over the medium term is also likely to prompt further measures to raise investment as a share of GDP as current rates are too low to generate a much stronger economic growth trajectory over the medium term.

Recovery in asset markets varied

The performance of the asset markets in the crisis countries appears to have followed their relative performance in attracting investment. While Malaysia and Korea were the first crisis countries to regain their pre-crisis GDP/capita levels, their investment levels have remained low and as such their equity markets have only just recovered to pre-crisis levels. Thailand's investment level is low, and its equity market has never fully recovered to its pre-crisis valuation. Indonesia's stockmarket, on the other hand, has taken off quite sharply.

Stock market indexes



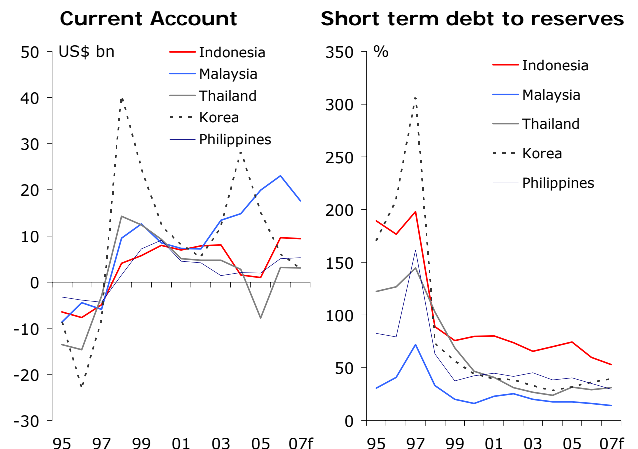
Sources: Datastream, Economics@ANZ

The Indonesian equity market has recorded the biggest rise in equity prices in Southeast Asia over the past five years with a 373% increase between January 2002 and June 2007. It was also the best performer prior to the crisis with a 157% rise between January 1992 and June 1997.

Crisis hangover stymieing investment

A distinct feature of the post-crisis period has been the generation of strong current account surpluses in Southeast Asia thanks to high trade surpluses and a low net income deficit. The immediate response of the corporate and banking sector to the crisis was to nearly eliminate foreign currency debt exposure; the great majority of corporate borrowing in Asia is now either denominated in local currency or fully hedged. The decline in foreign currency borrowing has caused the net income deficit to collapse, so that the current account surpluses are now between 1-5% of GDP, with Malaysia posting a surplus of 15.8% of GDP in 2006. This is compared with deficits of as high as 9% in the years prior to the crisis, when most Southeast Asian countries experienced both trade deficits and large net income deficits as a result of large overseas borrowings.

Strong external balances



Sources: Economist Intelligence Unit, Datastream

Governments of the crisis countries have welcomed the shift toward surpluses in the external accounts, as they imply reduced exposure to external shocks. This exposure has also been reduced by the de-

stocking of foreign debt; in particular, short-term foreign debt as a share of foreign exchange reserves is now at much lower levels than prior to the crisis. For instance, the ratio of Indonesia's short-term foreign debt to reserves has dropped dramatically from 198% in 1997 to 60% in 2006. Likewise, Korea, which was the most vulnerable with short-term debt to reserves at more than 300%, has now cut that down to 35%.

The surplus in the external accounts and reduced foreign currency debt position means that the countries affected by the crisis in 1997-1998 can be considered nearly immune to a severe balance of payments adjustment along the lines of what they suffered a decade ago. Should global capital retreat from Asia for some reason in a repeat of the 1997 performance, the domestic savings that is currently being held offshore can be repatriated to boost domestic consumption. Moreover, exchange rates could be allowed to weaken – thereby supporting exports – and governments would be in a position to support the economy through deficit spending. The reduction of foreign currency risk in the balance sheets of banks and corporates have left the private sector far less exposed to shifts in the exchange rate.

However, the strong surpluses in the external accounts also represent an opportunity cost for the crisis economies. Since 1998, the five crisis economies have exported some US$380 bn of capital, as measured by their current account surpluses. The export of savings can also help explain low investment rates – and hence slower growth – in the crisis economies. If the East Asian economies ran lower current account surpluses – or even small deficits – their investment and growth rates would surely be higher than they are today.

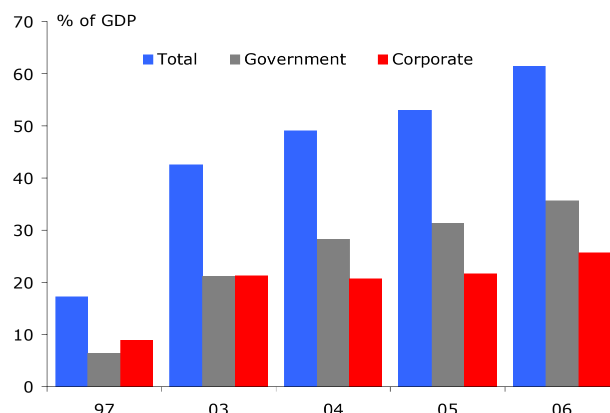
Debt capital markets have a long way to go

One of the factors that is contributing to the perpetuation of current account surpluses in East Asia is the thin, illiquid nature of many of the domestic capital markets. Domestic savings exceed 20% of GDP, and simply cannot find sufficient assets to purchase at home.

Governments in the crisis economies have been strong proponents of developing domestic markets; the absence of a local currency bond market was seen by many at the time to be a major cause of the crisis since it relied on offshore borrowing. East Asia's debt capital markets have come a long way in the decade since the crisis, with both government and corporate bond markets growing in size relative to the size of their economies. Improvements have been partly driven by government initiatives to develop the bond markets, and partly by the private sector seeking to reduce foreign currency risk and improve balance sheet structures.

There have also been regional initiatives to foster the development of the bond market. On the supply side, in 2003 the ASEAN+3 (Association of South East Asian Nations plus China, Japan and South Korea) announced the Asian Bond Market Initiative. This aims to improve regional integration in Asia by developing regional financial infrastructure such as a regional clearing and settlement system, a bond rating agency and a trading system. This has also been pushed along by the Asia Cooperation Dialogue, which aims to raise political support and public awareness. However this process has gained little traction, leaving Asia's bond markets still highly segmented.

Total East Asia: debt securities stock



Sources: ADB Asian Bond Monitor, various issues

Today, East Asia's bond markets total around 60% of GDP as against 20% in 1997, while the equity markets represent more than 150% of GDP as against 65% of GDP in the pre-crisis period. However, Asia's bond markets are still very small by international standards, particularly the corporate bond market. Indeed, much of the growth in the tradeable debt stock has been due to the expansion of the government debt stock. The growth of the corporate bond markets has been limited to Korea and Malaysia, where there is a good range of issuers across government, financial institutions and corporations. Liquidity in the corporate sector is still low and investors find the market difficult to access despite high liquidity levels around the globe and good appetite for risk.

Without accurate price signals for the financial markets, some problems in the banking sector that led to the 1997 Asian financial crisis remain. Foreign exchange risks have been removed from banks' balance sheets, and banks are subject to a far more rigorous regulation than in the past. In the post crisis era legal structures, disclosure rules and protection of outsiders has been improved. Nonetheless, the lack of efficient market pricing around corporate risk and the predominance of relationship banking implies poor transparency around corporate performance, leaving the banking system of Southeast Asia still exposed to issues around profitability, and potentially systemic risk. Although the corporate sector in Southeast Asia is far less leveraged than it was in the pre-crisis period, the median return on assets (ROA) is still far below that of economies in other regions. The World Bank estimates an ROA of 4% in Indonesia, the Philippines and Malaysia as against 6% in Singapore and 8% in the United States. Presumably, a lower

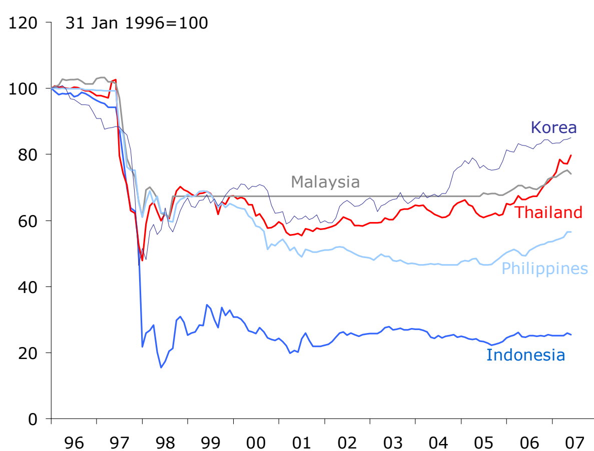
ROA is tolerated in an environment where there is high market concentration, low shareholder rights and weak corporate governance and transparency[1].

Slow market growth could affect FX policies

The slow development of the domestic capital markets may also affect the region's efforts to pursue independent monetary policies, which has been a major focus since the crisis. Prior to 1997, four of the five "crisis" countries based their monetary policy on a pegged exchange rate system, using the US$. With an export-led growth model, and the US as a major trading partner, this approach was viewed as a prudent way to ensure an alignment between domestic and external demand, and to keep domestic inflation low. However, it also meant that the crisis economies did not have much control over domestic interest rates, as the pegged exchange rate necessitated that domestic interest rates move in line with the US Federal Reserve.

With the float of currencies that sparked the crisis, central banks across the region have been moving towards targeting inflation and using interest rates as the anchor for inflation expectations. Central banks do continue to intervene in the foreign exchange market to reduce currency volatility and to maintain regional export competitiveness, but there is no question that the crisis economies have moved progressively toward floating exchange rates and using interest rates to manage inflation. Malaysia, the only crisis country to maintain a pegged regime, moved to a managed float in July 2005 and continues to liberalise its capital account and modernise its monetary policy.

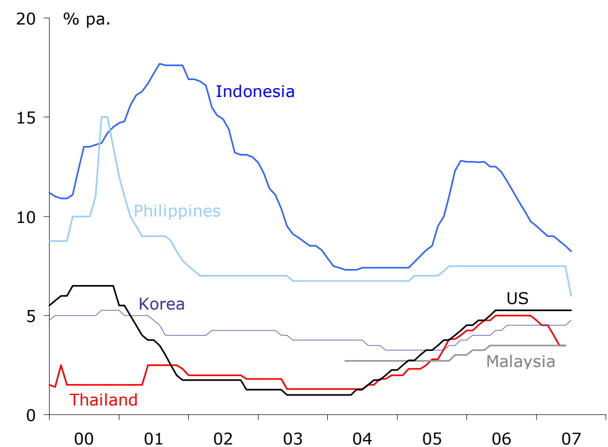
Exchange rate trends



Sources: Datastream, Economics@ANZ

The growing independence of monetary policy in Southeast Asia is evidenced by diverging interest rate trends over the past two years. Indonesia began cutting interest rates in May 2006, as the US Fed continued to raise rates. Thailand is expected to reduce interest rates further in coming months while the Philippines cut its key rate by 150 bps this month. Malaysia has held its interest rate steady since April 2006 but an easing bias is expected. Korea has been able to lag US Fed rate rises in order to support domestic demand in the face of the credit card bubble burst, only lifting rates this month after keeping them steady for almost a year.

Diverging interest rates



Sources: Bloomberg

At the same time, some dark clouds have appeared on the horizon of a progressively more liberal FX and interest rate policy in several crisis countries. That cloud is the massive influx of capital into East Asia, brought about by high global liquidity and the search for yield.

If East Asia's capital markets were broader and deeper, say of the magnitude of the G10, the influx of capital could be absorbed and utilised for the much-needed domestic investment. However, given the still relatively low amount of investable assets, cross-border inflows have led to rapid asset price inflation, which has caused concern among policymakers. In the event, policymakers have focused on preventing overly strong inflows for fear that eventual outflows would cause market declines.

The end result is that some governments have moved backwards on monetary and exchange rate policies. Thailand, which adopted capital controls in December 2006, is the most outstanding case, although the authorities have since relaxed most controls amidst a downturn in business confidence. Other governments have looked at various ways to slow market gains, including re-regulation of cross-border capital flows and capital gains taxes.

On the other hand, some governments have moved forward. Malaysia is the starkest example, as Bank Negara has progressively opened the capital account while progressively liberalising its exchange rate regime. In Indonesia, a poorly executed experiment with controls in the foreign exchange derivatives market in 2005 led Bank Indonesia to re-focus on its core mandate of controlling prices by using a benchmark interest rate. While the FX derivatives market is not nearly as deep or liquid as might be desired, there is plenty of room for Indonesia to move in this direction. Similarly, both Bangko Sentral in the Philippines and the Bank of Korea have in recent months loosened 1997-era restrictions on capital outflows, to allow for a greater balance in cross-border flows.

[1] Ghosh, Swati, "The Road to Robust Markets," World Bank 2006

Australian Outlook

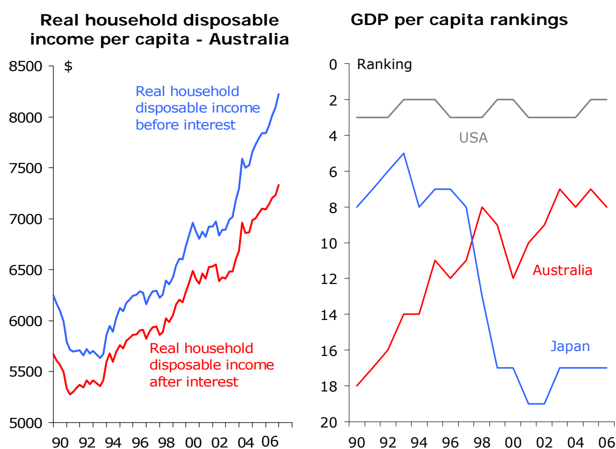
Tony Pearson, Head of Australian Economics

The new golden age

Australia is enjoying an unprecedented period of economic prosperity. Economic growth has continued unabated for 16 years, the longest period of continuous expansion since Federation. Business profitability is strong and business conditions and confidence are high. Households are also doing very well. The economy is creating jobs at a ferocious pace and the unemployment rate is down to around its lowest levels in 32 years. Real household disposable income per capita (after tax and interest) has increased by over one third since the March quarter 1992.

This long period of expansion has lifted our performance on the global stage. Over the years 1992 through 2006 Australia recorded an average annual growth rate of 3.6%, more than 1ppt higher than the average for developed countries of 2.5%. And our world ranking is now rising again, with our GDP per capita among OECD countries increasing from 18th in 1990 to 7th in 2005, about on par with the Netherlands, just behind Switzerland, but ahead of Denmark (US$ at PPP exchange rates). Almost any way you cut it, Australians have never had it so good!

Australia lifts its ranking on the world stage



Sources: Australian Bureau of Statistics, GDC Total Economy Database

It is worthwhile to ponder the reasons for this success. Is it luck or good management? The answer is that it is a bit of both. The lucky part is that for the past five years much of the expansion has been linked to the strong global growth story and the resultant boom in demand for and prices of commodities. This has delivered huge wealth gains to Australia and has spurred a business investment surge. But that is not to say the Australian economy would not have performed well in the absence of the commodities story. It would still have chugged along quite nicely (as indeed it did for the previous decade) but the drivers of growth would have been different, with a stronger thrust from internal drivers, particularly dwelling investment (which has had to be squeezed to make room for the expansion of mining and related infrastructure).

The good management stems from the high quality macro and micro economic decision making of the past 25 years. There has been a program of wide-ranging and deep economic reforms which have exposed the Australian economy to internal and external competition and to the discipline of market forces. There have also been fundamental reforms to fiscal and monetary management which have led to a surer touch from the policy makers. This has made the Australian economy much more robust and resilient – to the point where it has been able to sail along quite nicely in the face of some severe headwinds, such as the Asian financial crisis of 1997-98 and the developed world recession of 2001. I like to call this the victory of the economic rationalists, which at times have been a maligned species (although I have never understood why anyone would want to be called an economic irrationalist).

The dream run has continued into 2007, with real GDP expanding by 1.6% in the March quarter. Together with revisions to earlier quarters, this saw the annual rate of growth pick up to 3.8%. Not only is this the strongest annual pace of growth since 2004, it is also the first time we have actually seen annual growth with a '3' in front of it since that time.

The signs are good that this expansion will continue into its 17th and 18th years. Rural production is expected to largely recover over the next 12 months on the back of recent widespread rains. Dwelling investment will continue to rebound. Information on business intentions suggests investment spending will remain solid, and this investment program will be complemented by increased spending on infrastructure by state governments. Household consumption will remain strong, supported by solid employment and wages growth, and a further round of Federal Government income tax cuts and increases to support payments. In short, the very good times are expected to continue for some years yet. We forecast GDP growth will accelerate to around 4% in 2007, from 2.7% in 2006, and will broadly maintain this stronger pace of growth through 2008 and 2009.

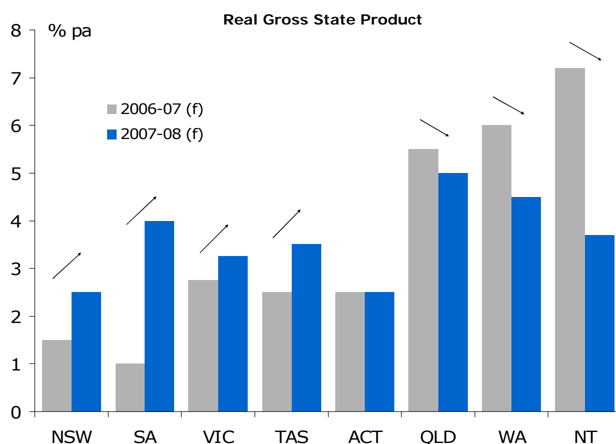
A more even performance across the states

One of the issues with prosperity is how the fruits are shared. Over the past half decade the strongest growth has been in the resource-rich regions of Western Australia, Northern Territory and Queensland, while the south-eastern seaboard has been languishing (in a relative sense). The good news is that this performance gap now seems to be narrowing.

The big improvers are New South Wales and Tasmania. Trend data show New South Wales state final demand has steadily accelerated over the past year, with an increase in the March quarter of a robust 1.1%, the strongest of the south eastern

seaboard regions. This reflected robust spending by households and very strong private investment. Tasmanian domestic demand has also lifted steadily from the June 2006 low when the economy was going backwards at an alarming rate; the March quarter increase of 0.3% is still soft, but at least it is positive. Victoria and South Australia have broadly maintained their moderate growth momentum, with growth in state final demand in the quarter of 0.6% and 0.7% respectively.

A more balanced performance across the states is in prospect



Source: State and Territory budget papers

All states and territories have released new economic forecasts in their 2007-08 budgets. All of the resource-rich states and territories are forecasting slower growth in 2007-08, while all the states on the south-eastern seaboard are forecasting stronger growth. This will continue the narrowing in the growth gap between the resource "haves" and "have nots".

Rains at last, but rural producers still doing it tough

The one sector of the economy which has been doing it tough amid the good times is the rural sector, with the drought continuing to weigh on economic outcomes, despite recent rains. In the March quarter 2007, real (that is, inflation-adjusted) farm GDP was broadly flat, to be down 23% over the year. All told, we expect the farm economy to have contracted by almost 20% in 2006-07, reducing overall GDP by ½ppt.

Recent rains provide some hope that 2007-08 will see easier growing conditions. The Bureau of Meteorology indicates average to above-average rainfall was received over most of inland NSW and Victoria, Tasmania and South Australia during autumn (which, importantly, encompasses the planting cycle for winter crops). However, parts of Western Australia missed out, as did central and south east Queensland, although significant rainfall in the last few weeks has improved prospects there.

ABARE is forecasting total winter crop production to rebound sharply in 2007-08 – to 37Mt – more than double production in 2006-07 and around 90% of pre-drought levels.[2] There will be large increases in production across all winter crops, including wheat (up 129%), barley (up 143%) and canola (up 173%). The anticipated rebound will be less pronounced in Queensland and Western Australia, reflecting ongoing dry conditions across much of those states.

Total summer crop production is estimated to have fallen by almost 60% in 2006-07 to 1.9Mt, but assuming average seasonal conditions over the next six months should rebound similarly as the winter crop.

While prospects for dry land producers are looking better than they have in some time, the situation remains critical for irrigators and rural communities more broadly. Cumulative water inflows in the southern Murray-Darling Basin since the start of 2007 are less than for the same period last year, which itself was a record low. Opening water allocations across the southern Murray-Darling Basin for the 2007-08 irrigation season have been set at zero or otherwise minimal levels. The longer it takes for more normal water allocations to be restored, the greater the risk to permanent plantings of irrigated crops including citrus and stone fruits, olives and almonds.

Overall, we expect farm GDP to rebound by around 23% in 2007-08, adding ½ a percentage point to total GDP growth.

Infrastructure spending will lift

One consequence of the very long period of economic growth is that a number of bottlenecks to further expansion are now emerging. This is most clearly seen in the mining sector, where demand has in some cases outstripped ship loading capacity, leading to long queues of ships and lengthy delays. The good news is that both the private and public sectors are investing heavily to expand capacity, thereby boosting the supply side of the economy, and lifting the speed limits to growth.

Construction activity is running at record levels. Over the year to the March quarter 2007, the value of construction work done by both the private and public sectors rose by 13.8% to an annual total of $117.1bn. Engineering work done rose by 24% to $50.56bn, while building work done rose by 7% to $66.6bn. And there remains a significant pipeline of unfinished construction work - for example, in the March quarter 2007 engineering work yet to be done totalled $33bn.

Adding further impetus, the state governments have announced significant increases in forward capital works programs in their 2007-08 budgets. Total spending is planned to increase by nearly 18% to a record $39.2bn, the fourth year of double-digit expansion, and by a cumulative $146bn over the four years to 2010-11.

[2] ABARE, *Australian Crop Report*, June 2007.

State capital works programs

	2006-07 $bn	2007-08 $bn	4 years to 2010-11 $bn
NSW	9.7	12.5	49.6
ACT	0.3	0.4	0.6
SA	1.2	1.5	6.4
VIC	3.4	3.6	13.3
WA	5.5	5.8	21.6
QLD	12.1	14.0	48.3
NT	0.3	0.6	3.0
TAS	0.6	0.7	2.7
TOTAL	33.2	39.2	145.5

Source: State Budget Papers

There is no doubt this additional investment is required, but there are concerns on two fronts. The first is that there may be insufficient skilled workers/managers and materials to complete all private and public projects on time and on budget. In effect, the juxtaposition of private and public sector projects may "clog" the system, leading to increases in costs and to delays in delivering projects.

State and Federal borrowings

	2006-07	2007-08	4 years to 2010-11
NSW	2.8	7.0	23.2
ACT	0	0	-0.5
SA	0.3	0.5	1.3
VIC	2.0	2.7	8.4
WA	0.4	0.8	1.2
QLD	5.8	8.5	27.8
NT	0.1	0.1	0.2
TAS	0.1	0.1	0.2
TOTAL STATES	11.5	19.9	61.9
Federal	-11.9	-10.0	-49.7

Source: State budget papers

The second concern is that the increased public sector capital works program is being financed in part by a hefty increase in state borrowings. In 2007-08 the states public sector borrowings will rise by $20bn. In contrast, the Federal government will increase its financial assets by $10bn. At a time of solid private sector economic activity and strong private sector demand for credit, this additional demand on the capital markets by the state governments can only intensify upward pressure on interest rates. It would have been preferable to fund the capital works program entirely from current year revenue.

Strong growth leads to more jobs

The most pleasing aspect of the long period of economic growth has been the steady reduction in the rate of unemployment. The unemployment rate peaked at 10.9% in December 1992 as a lagged response to the 1990-91 recession. In May 2007 it reached just 4.2%, the lowest since the December quarter 1974, before rising slightly to 4.3% in June. Over the six months to June an additional 118,000 jobs were created, most of them (114,000) full-time.

Leading indicators of the demand for labour such as our ANZ Job Vacancies index suggest this strong pace of employment growth will continue for some time yet. Over the next few months there may nevertheless be a small increase in the measured rate of unemployment as the result of the latest elements of the Federal Governments' *Welfare-to-Work* program. This requires recipients of parenting payments (mainly sole parents) and some recipients of disability payments to seek work. These new entrants will be counted as unemployed until they find employment. Once this transition is complete the unemployment rate will recommence its downward trend, and it is highly likely we will see a "3" in front of the unemployment rate within the next year.

Beyond that, it is difficult to say how much lower the unemployment rate can go. In the 1960s the unemployment rate was less than 2%, but we doubt we can get it that low today. One difference is that the economy is now more dynamic and subject to change with a higher degree of labour mobility between jobs and between industries. This leads to a higher underlying level of "frictional" unemployment. Also, welfare arrangements are more generous today, so there is perhaps not the same imperative to quickly get a job, although we don't want to make too much of that.

In any event, the labour market is now tight in the sense that employers report it is difficult to find and retain workers. In this environment, one of the big surprises is that wages pressures remain contained. There are pockets of wages pressure in key industries, particularly mining and construction, but overall wage pressures across the economy as a whole are remarkably contained. Overall wages growth is running at around 4% pa, up from around 3% at end 2000. Mining is now running at 6.1% pa, and construction at 4.5%.

We believe a number of "safety valves" have acted to increase the supply of labour in response to the strong demand. The labour force participation rate has risen to record peace time highs; long-term international net immigration has more than doubled since 1997 to a current annual rate of 226,000; short-term immigration specifically for the purposes of employment has increased sharply over the past year to an annual rate of about 40,000. Changes to the industrial relations system, from centralised collective bargaining through enterprise

bargaining and on to individual agreements, may also have been a factor in limiting the contagion of high wage rise sectors to other parts of the economy (this has been a key element of the structural reforms we noted earlier). And the generous personal income tax reductions over the past four years may have lessened the pressure for wage increases.

Whatever the reasons, the muted behaviour of wage outcomes has been an important element in allowing the economic expansion to continue because it has meant the authorities have not had to stamp on the brakes to cool an overheating labour market. The question is: how long can this benign state of affairs continue?

Benign inflation won't last

This leads us to perhaps the most remarkable feature of this period of prosperity, which is that price pressures remain muted after 16 years of continuous expansion. Headline inflation eased to an annual rate of 2.4% in the March quarter, with the RBA measures of core inflation easing to 2.7%. Both measures are comfortably within the RBA target band of 2% to 3%.

It might however be premature to celebrate the death of inflation. Recent swings in inflation have been the product of unusually large changes (both rises and falls) in the price of a few volatile items, particularly fuel and fruit and vegetables. Abstracting from these volatile items shows that inflation is on a gently rising trend and is running at the highest rate in four years.

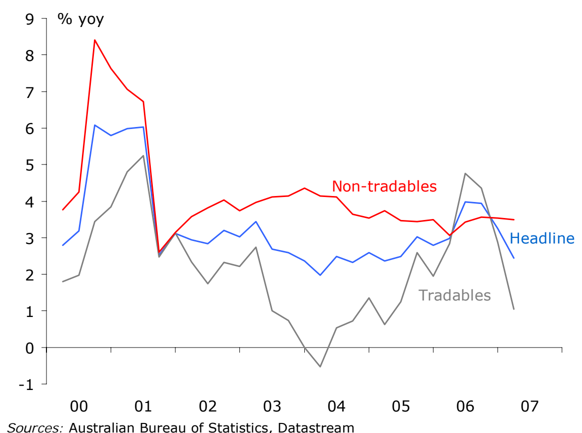
More generally, the benign performance of inflation in trend terms has been the result of muted tradable inflation (those goods and services which are exposed to international price pressures). This in turn has been primarily the result of the continued appreciation of the A$.

In contrast, the component of inflation which is primarily determined by domestic price pressures – non-tradable inflation – has not been so well behaved. This has accelerated over the past year to 3.5% from 3.1%, notwithstanding a slight tick down in the March quarter 2007. This means that domestically-sourced inflation continues to run above the top of the RBA comfort zone. Non-tradable inflation is driven by domestic costs of production such as wages (unit labour costs) and raw materials, and the profit margins of producers and retailers. These variables are in turn influenced by how hard the economy is running relative to potential.

With economic growth forecast to lift into 2008, and with the labour market expected to tighten further, the risks are increasing that domestically-induced price pressures will accelerate. On top of that, we believe the appreciation of the A$ has run its course, and that there will be a gentle fall in the currency from mid 2008. This will act to push up tradable inflation from its current muted pace. And there are several special factors which pose risks in an upward direction in the short term. Oil prices are again on the rise; the average price through the June quarter was US$67 per barrel, a rise of 8.3% from the March quarter low. The shortage of water for irrigation in the Murray-Darling basin could lead to increases in the prices of some fruit, vegetable and dairy produce. Tight residential vacancy rates are pushing up rents. And electricity prices have risen due to drought-induced water shortages.

Our forecasts suggest the quarterly rate of headline inflation will pick up in the June and September quarters, although the annual rate will continue to ease due to base effects. The annual rate of inflation will begin to rise from late 2007 and will be in the upper half of the RBA target band from early 2008.

Domestic inflation remains uncomfortably high



Sources: Australian Bureau of Statistics, Datastream

RBA confirms interest rates will rise again

With the economy set to expand at an above trend pace and with price pressures likely to lift from the second half of this year, it is becoming inevitable that the Reserve Bank will need to tighten monetary policy further. RBA Governor Glenn Stevens as much as confirmed this in an address on 14 June, noting that "the medium-term concerns about inflation remain. That is cause enough to err on the cautious side in setting policy, and to ask whether current settings are restrictive enough… [There is] some additional time in which to assess trends in demand and the economy's capacity to meet them, while still leaving scope to implement a further response by monetary policy as and when needed."

We continue to believe there will be an increase in interest rates shortly after the Federal election. The most likely month is February, following the release of the December quarter inflation data. This could be followed by a further increase in May. But it is worth noting that in raising interest rates again the Reserve Bank will not be trying to end the party. Rather, it will be aiming to moderate demand to a more sustainable pace so as to prolong the expansion. Slightly higher interest rates are the price we will pay for the privilege of enjoying the longest period of prosperity in our history – the new Golden Age.

New Zealand Outlook

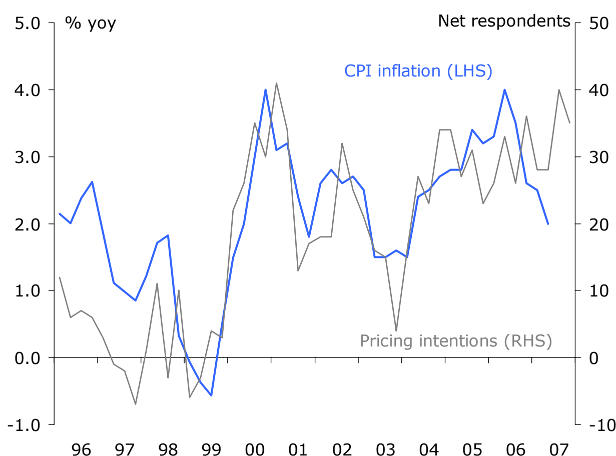
Khoon Goh, Senior Economist, New Zealand

Growth has rebounded strongly but will not be sustained

The economy has picked up momentum after a soft patch in the middle of last year. Growth rebounded in the final quarter of 2006, increasing by 0.8%. Activity accelerated further in the March quarter 2007, expanding by 1.0% and lifting year-on-year growth to 2.5%. Partial data point to the momentum in economic activity continuing into the middle of this year, though not at the same pace as in previous quarters.

Inflation pressure remains the key theme shaping the business cycle and necessitating a sustained period of slower growth. Two years of 2% growth has so far failed to tame inflationary pressures. Recent economic momentum has placed more upward pressure on prices. Non-tradable inflation remains elevated over the first half of this year, remaining above 4%. Anecdotes and pricing intention surveys continue to highlight a worrying inflation undercurrent. Resource pressures within the economy remain tight, and ongoing difficulty in finding labour will continue to place upward pressure on wage inflation.

Inflation and pricing intentions



Sources: ANZ National, Statistics NZ, NZIER

The economy remains capacity constrained, with the unemployment rate residing at 3.8%, productivity growth weak, and capacity utilisation running high. Such forces are restraining the ability of the economy to expand strongly without generating more inflation pressure.

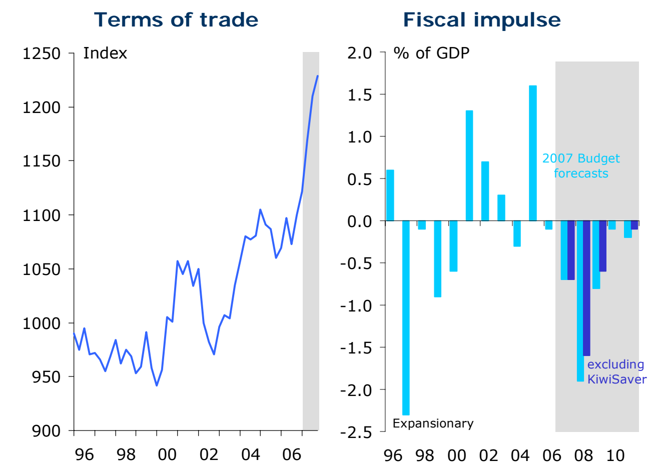
Financial conditions pointing to slower growth ahead

Financial conditions have tightened considerably and are pointing towards a slowdown in growth. This is courtesy of the three hikes to the official cash rate delivered by the Reserve Bank this year, increased mortgage lending rates and the NZ$ at record high levels. While surging commodity prices and still elevated house price growth are providing an offset, financial conditions are consistent with growth of 1½% in twelve months time.

Although it is early days, the momentum looks to be moderating gradually. Consumer confidence has fallen, no doubt a result of the recent increases in mortgage rates. Net migration inflows have eased further and will continue to provide less impetus to the housing market. Retail spending has slowed after a bumper March quarter. Business confidence fell dramatically, then rebounded, but remains consistent with 1½% to 2% growth. Anecdotally, the nuances are starting to turn decidedly more bearish.

But there are still strong pillars of support

Against this backdrop, there are strong forces that will support the economy. Global demand remains strong across our trading partners, excluding housing-related softness in the US. Rising world commodity prices, particularly for dairy, will provide a significant boost to farmers' incomes. With further increases in commodity prices likely in the near term, a substantial increase in the terms of trade look likely for the rest of this year.



Sources: ANZ National, Statistics NZ, The Treasury

In addition, there is a strong likelihood of more expansionary fiscal policy from the Government next year. The 2007 Budget revealed a larger fiscal impulse in 2007-08 than initially flagged late last year. Even if the cost of the KiwiSaver enhancements are excluded, there is still a sizeable fiscal impulse to the tune of 1.6% of GDP at a time when inflation is expected to head towards the upper range of the policy target band. With an election looming in 2008, the reality is that further fiscal stimulus will be on the cards, particularly if the Government finds itself behind in the political polls.

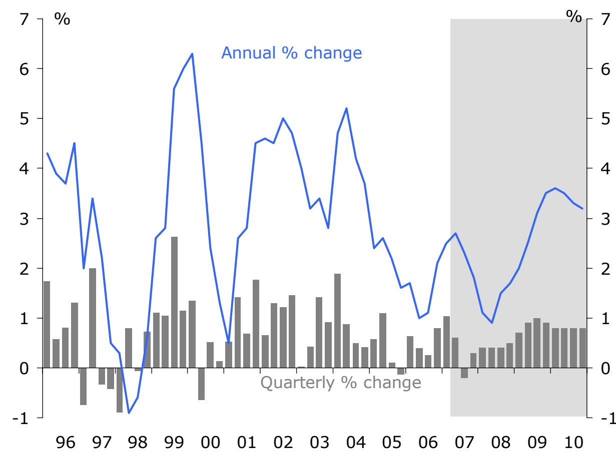
Economic adjustment benign, but risks remain

Our quantitative forecasts include a relatively benign soft landing for the economy, before rebounding thereafter courtesy of a weaker currency. Households bare the brunt of the adjustment with consumption growth easing substantially in

response to tighter monetary policy and moderating wealth gains from the property market. Part of the strong consumption growth in recent years has been debt-funded, backed by rising house prices. Going forward, we expect household appetite for further debt to wane in the face of higher servicing costs.

The recent run-up in the currency is expected to weaken export performance, but the impact varies across the export sector. The dairy sector is on fire and tourism numbers have so far held up well, although average spend is easing. Looking forward, we expect tourism numbers to show their normal six month response to the currency, which implies a subdued summer peak season. There is genuine stress in the meat industry, although strong balance sheets are providing support. Seafood and horticulture are struggling. Forestry sector activity is slowing after a good first half of the year.

Economic growth forecast



Sources: ANZ National, Statistics NZ

Manufacturing exporters are expected to bear the full brunt of the high currency. Though imported raw materials are cheaper, the currency will further erode exporters' margins, which are already coming under pressure from rising domestic input costs – courtesy of higher wage and compliance costs. With a strong global backdrop, demand for New Zealand's manufacturing exports will remain firm. But increased third party competition and falling profits mean manufacturing exports will remain subdued for most of this year and part of next year, with a rebound only from late-2008 due to the lagged effect of a depreciating currency. We expect the high currency to accelerate relocation plans to Asia.

With corporate profits coming under pressure (from costs), business investment will remain weak as firms shelve investment plans. We are forecasting declining business investment over the second half of this year as the focus goes towards cost containment across corporate New Zealand. We expect the cost focus to eventually shift to the labour market, resulting in the unemployment rate rising towards 4.5%.

Our central forecasts depict a gradual and orderly adjustment in the economy, where the imbalances slowly unwind. However, qualitatively, we harbour some concerns over how this business cycle will unfold. Domestically, we remain wary of the housing market, which is the Reserve Bank's key focal point. Household debt servicing as a share of income stands at 13.3% and continues to rise. There are now around 120 basis points of policy tightening in the pipeline for mortgages rolling off over the coming year.

The real issue facing the economy at present is one of vulnerability. The combination of a low savings rate, high housing leverage, unsustainable current account deficit and high asset valuations leave the economy vulnerable to a change in sentiment or some sort of adverse shock.

Against this backdrop, the longer-term prospects remain bullish. Rising per capita incomes in Asia will underpin demand for soft commodities, and a surfeit of manufacturing capacity will see New Zealand's terms of trade at a structurally higher level. But the near-term cyclical challenges of inflation pressure, poor productivity performance and external imbalances need to be addressed first.

Key financial market views

Monetary policy faces different challenges when the economy is close to full capacity. Despite a slowdown in growth over the past two years, resources still remain stretched. The unemployment rate remains below 4% and capacity utilisation has stayed high. Although there are early signs of growth easing, it is still far from conclusive that this will be sustained.

On balance, and with limited inflation headroom, the bias now shifts to a further rate hike from the Reserve Bank and sooner rather than later. With the market now fully pricing in a hike over the next two meetings following the June quarter CPI report, we suspect such pricing may prove too tempting to the Reserve Bank, and we now expect the Reserve Bank to hike at the July Review. The only areas likely to be standing in the way of a further late cycle move look to be some potential sensitivity surrounding the pending inquiry into monetary policy and level of the NZ$.

The NZ$ will remain well supported on yield, particularly with a July hike priced in. Strong risk appetites around the globe, a weak US$ and ¥, and strong A$ all suggest further upside prodding. The entire commodity bloc continues to perform well given the global growth backdrop. The currency market is on an upward trend, and these do tend to extend further than what all and sundry expect.

We continue to look for an aggressive move in the NZ$ when the economy turns. The NZ$ is defying forecasters in a similar fashion to 2000, when it was reciprocally weak. We struggle to see the economy remaining strong for another six months given where financial conditions reside, particularly if the Reserve Bank hikes again in late July. This errs us towards an earlier correction in the NZ$ relative to consensus expectations.

Financial Market Update

Cherelle Murphy, Senior Economist, Markets
Warren Hogan, Head of Markets Research

Good times roll on… but markets are wary

Global leveraging has continued to grow amid generally sunny economic conditions. Government bond market yields have risen and yield curves have steepened reflecting better economic growth prospects and the threat of slightly higher inflation. Central banks around the globe have continued to lift interest rates to contain inflationary pressures, although the pace of tightening has remained moderate and encouraged further growth rather than stifling it. Markets' outlook for the US fed funds rate has shifted from cuts to no change for the remainder of 2007 with data in the last couple of months providing tentative evidence that the US economy is on a firmer growth footing.

Equity markets have continued to rally. The pace of growth in industrialised nations has slowed in the past six months but emerging economies' equities markets have continued to power ahead. Corporate bond spreads remain narrow relative to historical averages, although concerns about exposure to sub-prime mortgage assets in the US have spurred some modest widening of credit and swap spreads in recent weeks. Commodity prices, including oil, have continued to rally, driven by both strong demand and short-term supply concerns. Commodity and emerging market currencies have continued to move higher, especially the NZ$ and A$, which have both hit multi-year highs. Investors have also shown a strong appetite for risk with interest in carry trades continuing to expand, while emerging markets have benefited as investors searching for yield have diversified their portfolios into peripheral markets.

Markets benefit from risk appetite

Variable	% change Dec-06 to Jun-07	% change Jun-06 to Dec-06
A$/US$	7.7%	6.2%
NZ$/US$	9.8%	15.7%
A$/¥	11.4%	10.5%
Crude oil (WTI)	7.9%	-13.9%
Gold	2.0%	3.4%
London Metal Exchange	7.8%	5.3%
US S&P 500	6.0%	11.7%
Australia ASX 200	10.7%	11.7%
Shanghai SE Composite	42.8%	60.0%
Korea KOSPI	21.5%	10.7%
Jakarta Composite	18.5%	37.8%

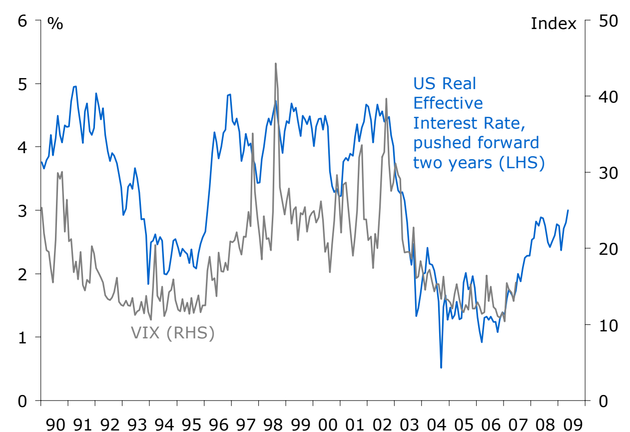
Source: Bloomberg

But investors are becoming wary of the possibility that the bull market is maturing. In a highly leveraged world, investors are aware of the potential for a nasty fallout with leveraging exaggerating moves both on the upside and the downside. In this environment, markets are likely to show little tolerance for potentially damaging events. The danger is that this causes markets to overshoot on the downside, as investors hastily reassess the price they are paying for risk.

In February, a relatively mild fall in Chinese equity prices caused a global correction at a time when former Federal Reserve Chairman Alan Greenspan warned that markets were underpricing risk. Sub-prime mortgage defaults in the US were creating concerns about credit quality. These concerns have not faded. The latest event to jolt markets surrounded losses sustained by two Bear Stearns hedge funds, related to sub-prime mortgage troubles. Markets are rightly concerned that these events may be followed by other endogenous shocks as liquid conditions very gradually dry up in response to synchronised central bank tightening. A decline in credit quality is synonymous with increased financial market volatility.

One indicator of financial market volatility is the VIX index. This is a measure of the implied volatility of options on the US S&P500 equity index. As the chart below highlights, there is a fundamental cyclical link between the economic cycle, as represented by US real interest rates and financial market volatility. Financial market volatility rises, with a lag, when real interest rates rise.

Rising rates suggest market volatility will rise



Source: Bloomberg

The broad cyclical relationship depicted here suggests investors are right to be concerned. We think the prevailing themes for financial markets over the next six to twelve months will centre around rising volatility and the turn of the credit cycle. As liquidity tightens in response to past monetary policy tightening, more episodes of financial distress can be expected.

Whether or not market volatility will have any impact on real economies remains unclear. Market focus will remain in the US, where the combination of ongoing sub-prime concerns, higher term interest rates and looming mortgage adjustable rate resets

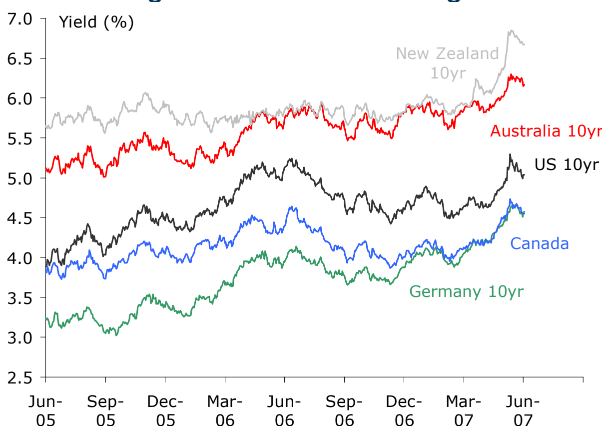
(at substantially higher interest rates) are keeping markets on a knife edge over US growth prospects.

Bond markets bearish

Central banks, including those in the UK, New Zealand, Canada, China, Europe, South Africa and Switzerland continued to lift interest rates in the second quarter. In Australia, the RBA has resisted pressure to hike further, but the market is pricing one 25bps hike, by the end of the year. Despite the relatively prolonged global hiking cycle, rates remain close to or just above neutral, with most central banks having executed a gradual tightening process. This caution helps explain the still high levels of liquidity currently buoying markets. One of the few exceptions to the neutral status of policy is seen in New Zealand, where the RBNZ took short rates to 8% in early June. This was the third rise this year and the highest policy rate since 1998.

As noted above, long rates have risen too, although in line with the long-term trend towards lower inflation, they remain low by historical standards. US 10-year yields sold off 38bps over the second quarter, moving as highs as 5.10% in mid June, an 11-month high. US 2-year Treasury yields sold off 28bps. In Australia, similar moves were recorded. The 3-year yield sold off 23bps to a 7-year high, while the 10-year yield rose to a 5-year high of 6.29% after selling off 38bps over the last quarter. Swap spreads also widened markedly at the long end of the yield curve. The Australian 10-year swap spread reached a peak of just over 62bps in the quarter. The 2-year swap spread, in contrast, narrowed to around 33bps.

Long rates rise around the globe



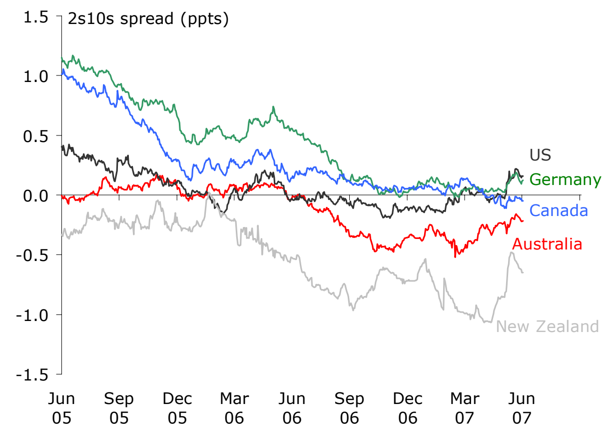
Source: Bloomberg

There has been some minor steepening of yield curves, but despite the large moves in outright rates, the shape of global yield curves hasn't changed much. They remain flat or even inverse.

But as with the US equity market, interest rate volatility has increased. The Merrill Lynch MOVE index, which seeks to measure implied volatility on US Treasury market bond options, rose to a two-year high in June.

In the current environment of monetary tightening, we expect the recent moves higher in global bond yields to be sustained. In fact in our opinion, there could be a further modest increase in yields and widening of swap spreads. However these are expected to remain contained by historical standards in the absence of a widespread credit event or financial market disruption. With short rates likely to go higher this year in many industrialised countries, yield curves should have little scope to steepen much further.

Yield curves steepen but remain flat or inverse



Source: Bloomberg

Australian interest rate markets remain under pressure with higher yields, wider 10-year swap spreads and a flatter yield curve. Ongoing strength in the domestic economy and the threat of further interest rate hikes from the RBA is keeping local market interest rates in a rising trend. While the outlook for inflation remains of some concern, we believe the RBA will be reticent to raise interest rates while actual inflation is within the target zone (and falling). For financial markets, the June quarter CPI report, due on July 25, will be critical. In our view, the quarter rate of core inflation would have to reach around 1% to trigger a rate hike in August. ANZ's preliminary forecast is for a 0.7% increase.

We expect Australian front-end yields to be range bound in the short term. The Australian 3s10s curve, currently around -20bps looks to be in a -25bps to -12bps trading range. A benign monetary policy outlook will likely reinforce the curve's near term steepening bias. We expect good resistance at -12bps. Strategically, we expect the 3s10s curve to make new lows as the RBA delivers more rate hikes. These could challenge lows of around -30bps when the RBA last lifted the cash rate in November 2006.

The spread between Australian and US 10-year bond yields has remained relatively stable at around 120bps and is likely to trade a 100-130bps range near term. The near term risk lies towards contraction if US monetary policy expectations are repriced and long rates head higher.

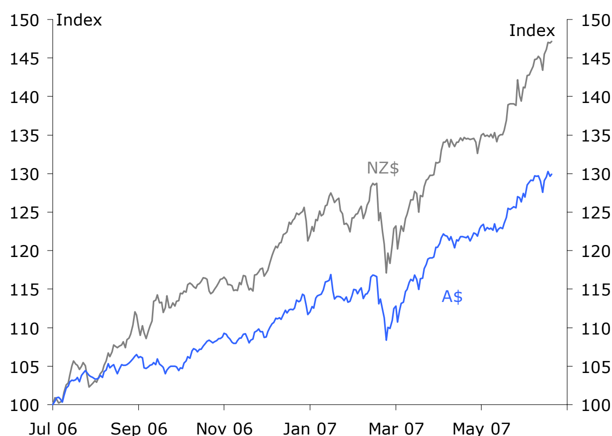
A$ gets comfortable above US$0.80

During the June quarter, US$ weakness, Australia's rising yield differentials, solid global growth and

continued strong appetite for risk allowed the A$ to rally to an 18-year high above US$0.87. We have revised our forecasts to reflect the fact that we expect strong global conditions to persist for longer and Australia's positive yield differential with most of the world's currencies to persist. We now expect that, in the absence of the kind of credit market shocks that we warn of above, the A$ will hold above US$0.80 over the next 18 months. We have forecast A$/US$ to move to 0.88 by December 2007 and 0.81 by December 2008, from 0.81 and 0.74 respectively at the time of last publication.

Many of the negative factors that we had expected to weigh on the A$ have not eventuated. In particular, there has not been a reversal of negative sentiment toward the ¥. Japanese monetary policy continues to be tightened at a very gradual pace while in many other major centres, including Australia and New Zealand, the case for higher rates has strengthened. Therefore, there is yet no incentive for Japanese retail investors and global speculators borrowing ¥ to withdraw their now substantial asset holdings in Australia and New Zealand. The returns from carry trades, where investors borrow in ¥ and invest in A$ or NZ$ have produced substantial returns over the past twelve months, as shown below.

Returns from AUD/JPY and NZD/JPY carry trades



Source: Bloomberg

We have revised our US$/¥ and A$/¥ forecasts higher to reflect the rising interest rate differentials between global and Japanese interest rates. We now expect US$/¥ to reach 126.00 and the A$/¥ to reach 111.00 by December this year from 112.0 and 90.70 respectively at the time of our last publication. By the end of December 2008, we now expect the US$/¥ to be 122.00 and the A$/¥ to be 98.82 compared with forecasts of 110.0 and 81.40 respectively at the time of last publication.

Other factors may also work at the margin to keep the A$ bid, including the possibility that rapidly growing sovereign wealth funds broaden their investment portfolios. Additionally, real money interest in Australian corporations and further M&A activity may lift demand for A$'s where foreign bidders are involved. The main risk for the A$ is that it moves higher above US$0.90.

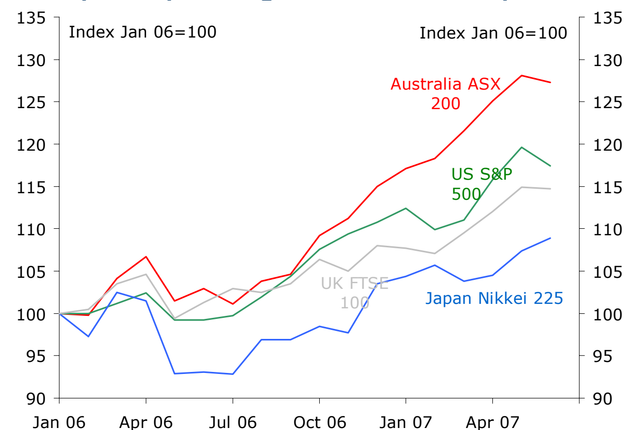
After the significant appreciation of the NZ$, we still also expect the A$ to make gains against the NZ$ later in the year. We expect NZ growth to falter from the weight of high rates and a strong currency, while Australia's economy is set to strengthen. We have forecast A$/NZ$ of 1.24 at the end of 2007, and 1.33 by the end of 2008. That's from 1.27 and 1.30 respectively.

The A$ will remain vulnerable to bouts of global risk aversion, but for the A$ to sustain a break back below $US0.80 we think the global growth outlook would have to deteriorate substantially and the US$ would have to recover strongly.

Bourses continue to rally

Global equity markets continued to rally through the June quarter, albeit at a slightly slower pace than in the first quarter of 2007. The ASX 200 hit a record high above 6400 in July, after appreciating 5% over the second quarter. Significant rises in base metals prices were a positive for the market as was higher oil prices. The last month of the 2006-07 financial year proved to be tumultuous for local stocks, in line with greater volatility across stock markets globally, many of which also ended June lower. The market was affected by the bearish bond market.

Equities push higher but at slower pace



Source: Bloomberg

A major source of good news came from continued M&A activity, with major deals, including Cemex's $16.6B bid for Rinker Group proceeding. Investors also bid up prices of potential takeover targets, due to the promise of more consolidation. However, there were signs that highly leveraged plays are being affected by more volatile markets conditions. Wesfarmers private equity partners and rival private equity firms pulled out of the Coles Group bid. Wesfarmers made a $21.9bn cash/scrip bid for the Coles Group alone in early July.

Despite the strong rally through the financial year, which took the index 23.7% higher in year–ended terms, the price-earnings ratio of the index was only around 17 at the end of the quarter. This is not high by historical standards, suggesting stock prices have further to rally, especially given our optimistic outlook for the global economy.

Feature Article: The truth about productivity

Mark Rodrigues, Senior Economist, Australia

While productivity is now central to the national economic debate, it is still not that well understood. The volatility and cyclicality of the data suggest only long-term trends have any meaning. Our analysis suggests that underlying productivity growth has indeed slowed since the 1990s, but only to around its long-term average. It remains too early to know whether the most recent data portend a further weakening in Australia's productivity performance. Irrespective, productivity growth will become an increasingly important source of growth in GDP per capita as population ageing begins to weigh on labour utilisation. It seems clear that further economic reforms will be needed to reinvigorate productivity growth going forward.

Productivity in the spotlight

It's a testament to the level of economic debate in this country that the word 'productivity' has entered the public lexicon. Nowadays it is difficult to open a newspaper, watch the news or listen to talkback radio without encountering some reference to it – be it the need to enhance productivity growth as the population ages, the productivity benefits of industrial relations reform, or the need to link wage claims with productivity growth. Politicians now have to extol the productivity-enhancing virtues of their policies to be considered 'economically responsible'.

The focus on productivity as an objective of public policy is well founded. As eminent US economist Paul Krugman so eloquently put it:

Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.[3]

However, and perhaps not surprisingly, something appears to have been lost in translation from abstract economic concept understood only in the hallowed halls of university economics departments and the bureaucracy, to mainstream economic catchword. Too often genuine economic debate is derailed by a fundamental misunderstanding of productivity and its drivers, or inappropriate use of the data. Take the recent kerfuffle over whether productivity growth has actually picked up in the last two quarters. As we'll explain below, this is entirely the wrong debate to be having since little useful can be said about productivity growth over such a short period!

In what follows we analyse productivity from a range of perspectives with a view to providing an informed assessment of Australia's recent productivity performance. This seems particularly important at present with the economy shaping up as a battleground issue in the upcoming federal election. We conclude with a general discussion of areas where reform could generate significant productivity benefits.

Understanding productivity

At its most fundamental level, productivity is simply the amount of output produced per unit of input. The more you produce for a given level of input, the greater the level of productivity. When talking about economies, output is generally given by real (inflation-adjusted) GDP and the level of input is given by hours worked. Hence, real GDP per hour worked is a standard measure of labour productivity in the economy, and for simplicity, the one used throughout this note.

To understand what the big deal about productivity is one need only look at the determinants of GDP per capita (a widely applied measure of living standards):

GDP per capita = hours worked per capita × GDP per hour worked (i.e. labour productivity)

This says that GDP per capita is the product of average hours worked and labour productivity. In other words, living standards can increase by working more hours, raising the amount produced for each hour of work, or some combination of both.[4] While the average amount of hours worked by people in a country is largely a matter of choice, reflecting, among other things, cultural values and labour market and social security institutions, it is worth remembering that there's a physical limit to the amount of hours a person can work. Productivity growth on the other hand offers a (theoretically) unbounded means of raising living standards. This will become an increasingly important source of growth in living standards as populations in industrialized countries – including Australia – age, and labour utilisation rates fall.

Recent trends

National Accounts data show that labour productivity increased by 1.3% in the March quarter 2007 after increasing by 1.1% in the December quarter. This follows negative productivity growth in the previous two quarters, and has been taken by some to indicate that productivity growth is picking up after a period of weakness.

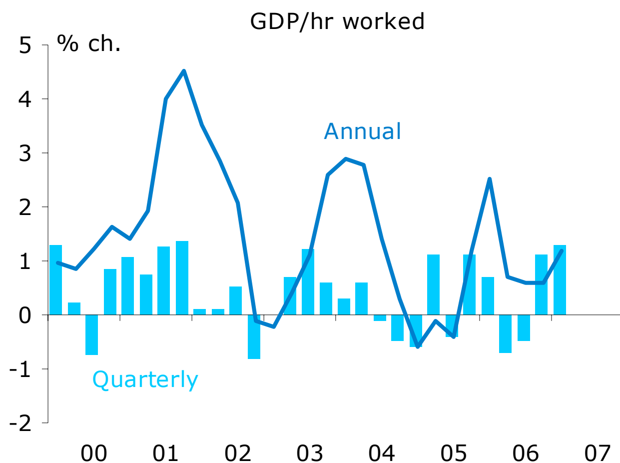
However, care should be exercised when interpreting quarterly movements in productivity. In practice, productivity is relatively difficult to measure accurately, in part because it can't be observed, and therefore measured directly. Rather, it is derived from two separately measured variables – real GDP and hours worked – both of which are

[3] Krugman, P. (1990), *The Age of Diminished Expectations*, MIT Press, Cambridge MA.

[4] See Statement 4 of Budget Paper No. 1 in the 2007-08 Budget for a more detailed treatment of the link between labour utilisation and productivity.

subject to measurement error. As such, changes in productivity measured over short spans of time can be highly volatile and subject to frequent revision.

Productivity trends are difficult to discern over short time spans



Source: Australian Bureau of Statistics

Productivity data are also highly cyclical, reflecting changes in resource utilisation over the economic cycle. When the economy is booming, labour and capital tend to be fully employed producing as much output as possible. As the economy slows, these factors remain largely employed (even in recessions), but are not required to produce as much output, implying a fall in productivity growth. This facet of the data make it difficult to discern *underlying* trends in productivity from cyclical variations over short time periods.

Longer term trends are more meaningful

The above discussion suggests it makes more sense to look at productivity data over longer periods of time. More precisely, economists look at average annual productivity growth between productivity growth cycle peaks. Using annual data should remove most of the variability present in higher frequency data while comparing productivity at similar points in the economic cycle accounts for the impact of cyclical variation in the data.

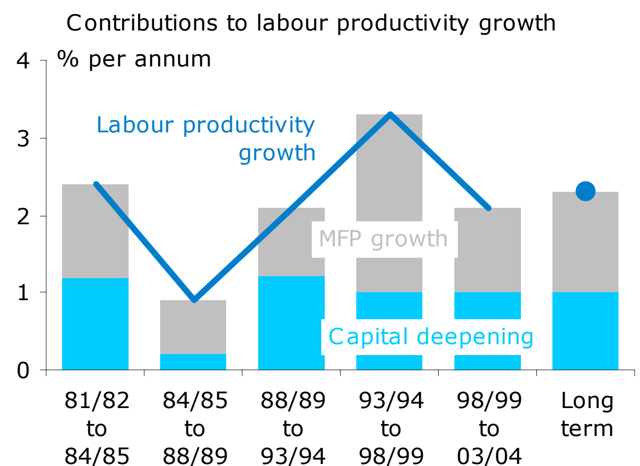
The Australian Bureau of Statistics has defined growth cycle peaks in 1964-65, 1968-69, 1973-74, 1981-82, 1984-85, 1988-89, 1993-94, 1998-99 and 2003-04.

Over the latest productivity growth cycle, between 1998-99 and 2003-04, labour productivity grew at an average rate of 2.1% per annum. This is down from the impressive rate of 3.3% per annum recorded between 1993-94 and 1998-99, but not dissimilar from the average productivity growth rate of 2.3% recorded over the past forty years.

Delving a little deeper into the data we can decompose labour productivity growth into that driven by capital deepening (that is, giving workers more equipment to produce output), and multifactor productivity (which captures everything else such as the impact of improved technology, better management practices, and education and training).

With the exception of the cycle between 1984-85 and 1988-89, the contribution of capital deepening to growth in labour productivity has been relatively stable at around 1% per annum. Variations in labour productivity appear to be driven by changes in the rate of multifactor productivity growth between cycles. For example, the slowdown in labour productivity growth to 2.1% per annum between 1998-99 and 2003-04 from 3.2% per annum between 1993-94 and 1998-99 is entirely accounted for by a decline in the rate of multifactor productivity growth from 2.3% to 1.1%.

Variations in labour productivity growth are driven by changes in multifactor productivity



Source: Australian Bureau of Statistics

Since 2003-04, productivity growth has further waned, growing by just 0.3% in 2004-05 and 1% in 2005-06. However, since the current productivity growth cycle is not yet complete, it remains too early to know whether the most recent data portend a further weakening in Australia's productivity performance or merely reflect natural cyclical variation in the data.

Notwithstanding this, even on the (somewhat dated) evidence we have, it seems clear that productivity growth has slowed from the helter-skelter pace recorded in the previous growth cycle, but remains consistent with historical norms.

Australia is slipping down the international productivity scale

The slowdown in productivity growth in Australia since the late 1990s has seen it slide back down the global productivity rankings.

Benchmarked against the United States, which is widely considered to be the global productivity leader, Australian productivity levels increased from a low of around 80% at the start of the 1990s peaking at a little over 88% by the late 1990s. However, the slowdown in productivity growth since then has seen most of those gains unwound, with productivity in Australia now just 83% of US

productivity levels, not much above where it was at the start of the 1990s.[5]

Australia's productivity performance has slipped relative to the United States

Source: University of Groningen Growth, Development Centre Total Economy Database

An industry perspective

Looking at productivity by industry, it appears that much of the slowdown in the most recent cycle is related to the underperformance of a few industries.

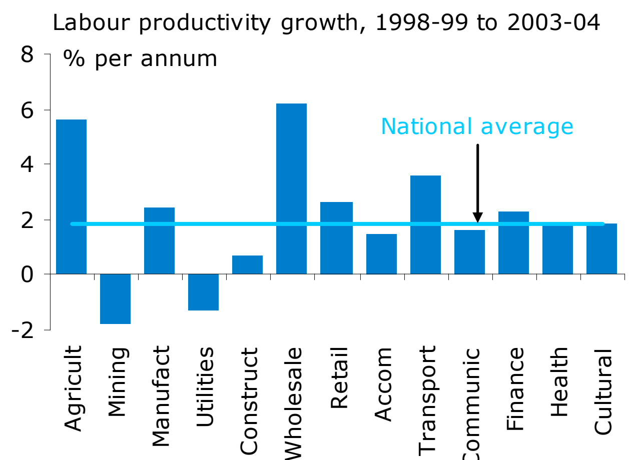
Labour productivity in the mining sector fell by an average of 1.8% per annum between 1998-99 and 2003-04, after rising by an impressive 5.3% per annum in the prior growth cycle between 1993-94 and 1998-99. Similarly, productivity in the electricity, gas and water supply sector went backwards to the tune of 1.3% per annum in the most recent cycle, after increasing by 7.1% per annum in the previous growth cycle. Construction was also disappointing, managing productivity growth of just 0.7% per annum between 1993-94 and 1998-99 compared with 2.6% per annum in the prior growth cycle.

Excluding these industries, growth in gross value added per hour worked would have been over 0.3ppts per annum higher in the most recent growth cycle.[6]

In the case of mining, part of the explanation for the productivity slowdown lay with the ramp up in investment in new capacity since 2001-02 to meet surging global demand for resource commodities, which was accompanied by a massive increase in employment. Since the start of 2001, employment in the mining industry has increased at an average annual rate of 9.6% per annum. Given the lag between investment and output, the increase in employment in the industry saw mining productivity fall. Productivity in the mining industry has continued to weaken since 2003-04, but is expected to improve markedly in coming years as the investment and employment boom plateaus and as earlier investment begins to yield output.

Output, and therefore productivity in the construction industry between 1998-99 and 2003-04 was affected by building downturns associated with the completion of works related to the 2000 Sydney Olympics and the introduction of the GST in 2000.

Mining, utilities and construction have weighed on productivity growth in the most recent cycle

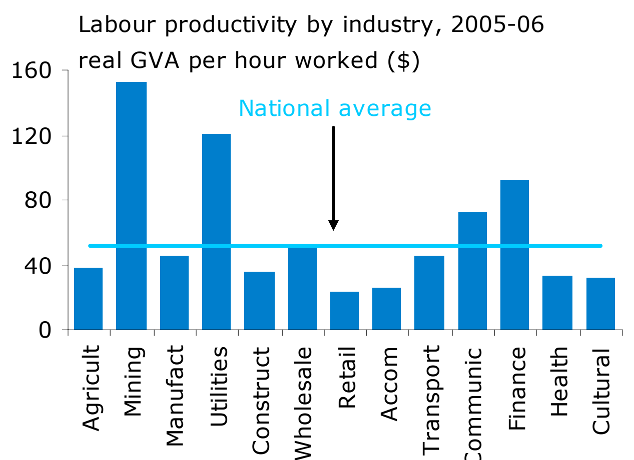


Sources: Australian Bureau of Statistics and Economics@ANZ

Aside from industry-specific factors, it is also worth noting that each of the industries that underperformed relative to the national average during the most recent growth cycle experienced remarkably high productivity growth in the growth cycle immediately prior. This suggests at least part of the slowdown reflects an easing from unsustainably high rates of productivity growth in these industries.

Notwithstanding slower productivity *growth* over the previous productivity growth cycle, mining and electricity, gas and water supply remain the most productive industries in terms of productivity *levels*.

Mining and utilities are the most productive industries



Sources: Australian Bureau of Statistics, Economics@ANZ

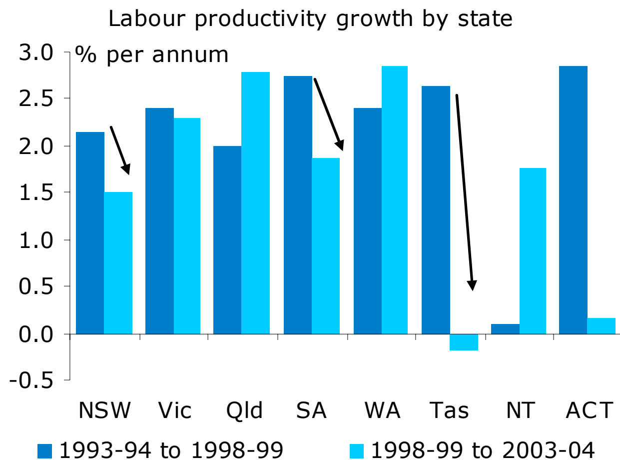
[5] Note that the aggregate productivity level in the United States may not be a realistic target for Australia because of its different industrial composition. See Dolman, B, D. Parham and S Zheng (2007), *Can Australia Match US Productivity Performance?* Productivity Commission Staff Working Paper, Canberra.

[6] Note that hours worked for each industry are sourced from the ABS Labour Force Survey. As a result, aggregate productivity measures may differ slightly from National Accounts measures reported elsewhere in this paper.

A state perspective

Turning to the states, it seems that most of the slowdown in productivity growth in the latest growth cycle occurred in Tasmania, the Australian Capital Territory and New South Wales. Conversely, Queensland, Western Australia and the Northern Territory actually picked up their productivity performance, while Victoria held broadly steady.

Productivity growth in NSW, SA and Tasmania has slowed markedly in the latest cycle



Sources: Australian Bureau of Statistics, Economics@ANZ

In level terms, New South Wales remains a little bit above the national productivity average. Queensland, despite stronger productivity growth in recent years, remains a productivity laggard, as does South Australia and Tasmania, reflecting the composition of their respective state economies. Not surprisingly, the mining intensive regions of Western Australia and the Northern Territory lead the nation in terms of productivity.

Mining-dominated states and the ACT lead the nation in productivity

Sources: Australian Bureau of Statistics and Economics@ANZ

Concluding remarks

Our analysis suggests that, considered over an extended period, productivity growth has indeed slowed since the peak in the mid to late 1990s, but remains at around historical norms. This slowing has seen Australia slide back down international productivity rankings.

To some extent, the easing in productivity growth in the latest growth cycle appears to be located in industries that experienced unsustainable productivity gains in the previous cycle, particularly mining, electricity, gas and water supply and construction.

More current data (since the end of the last productivity growth cycle in 2003-04) show a further deterioration in Australia's productivity performance. However, it remains too soon to tell if this is a signal of underlying trends in the nation's productivity performance, or merely a natural (and temporary) expression of the economic cycle. Indeed, there are good reasons to think that productivity growth will enter a cyclical upswing over the next few years, with investment in new capacity in the mining sector expected to boost output and agricultural production likely to rebound strongly in 2007-08.

Irrespective, productivity growth will become an increasingly important source of growth in GDP per capita as population ageing begins to weigh on labour utilisation. It seems clear that further economic reforms will be needed to reinvigorate productivity growth going forward.

Australian and New Zealand Economic Forecasts

	Annual (period average)% ch.				Quarter% ch.			
	2006	2007(f)	2008(f)	2009(f)	Mar-07	Jun-07(f)	Sep-07(f)	Dec-07(f)
Australia								
GDP	2.7	4.1	4.0	4.1	1.6	0.6	1.0	1.2
Household consumption	3.1	4.3	4.0	3.9	1.5	0.5	1.3	1.2
Dwelling investment	-1.5	5.6	5.0	11.9	1.5	0.3	-0.2	2.0
Business investment	8.6	8.1	5.2	3.4	5.8	0.3	2.0	1.4
Public demand	5.5	2.3	4.7	4.0	-1.8	1.6	1.2	1.2
Domestic final demand	4.1	4.5	4.4	4.4	1.5	0.7	1.3	1.3
Net Exports (cont. to growth)	-1.0	-1.6	-0.5	-0.1	-0.2	-0.4	-0.1	-0.1
CPI	3.5	2.2	2.7	2.8	0.1	1.0	0.8	0.5
Wages	4.0	4.1	4.2	4.2	1.0	1.1	1.0	1.1
Employment	2.1	3.0	2.9	2.0	0.7	0.8	0.9	0.8
Unemployment rate (%)	4.8	4.4	3.9	3.8	4.5	4.3	4.7	4.3
Current account balance (A$ bn)	-54.9	-61.7	-62.5	-67.9	-15.4	-15.3	-15.5	-15.5
(% of GDP)	-5.5	-5.7	-5.3	-5.4	-5.8	-5.7	-5.7	-5.5
New Zealand								
GDP	1.5	2.3	1.3	2.8	1.0	0.6	-0.2	0.3
CPI	2.6	2.7	2.8	2.5	0.5	1.0	0.6	0.6
Wages	5.0	4.6	4.1	3.7	1.0	1.5	1.1	0.8
Employment	2.1	1.3	0.2	0.9	1.2	0.2	-0.2	0.0
Unemployment rate (%)	3.7	4.1	4.3	4.5	3.8	3.8	3.9	4.1
Current account balance (NZ$ bn)	-14.5	-13.0	-13.1	-13.8	-2.2	-2.5	-4.7	-3.5
(% of GDP)	-9.0	-7.5	-7.3	-7.3	-8.5	-8.0	-7.9	-7.5

Financial Market Forecasts

	Annual (period end)				Quarter (period end)			
	2006	2007(f)	2008(f)	2009(f)	Mar-07(f)	Jun-07(f)	Sep-07(f)	Dec-07(f)
Interest rates (% p.a.)								
Australia								
90 day bank bills	6.44	6.43	6.93	6.93	6.52	6.44	6.43	6.43
10 year bond rate	5.88	6.15	6.45	6.40	5.88	6.26	6.15	6.15
United States								
3 month LIBOR	5.36	5.35	5.50	6.10	5.35	5.36	5.35	5.35
10 year bond rate	4.70	5.00	5.45	5.40	4.64	5.02	5.10	5.00
Euro area								
3 month LIBOR	3.73	4.65	3.60	4.60	3.92	4.18	4.40	4.65
New Zealand								
90 day bank bills	7.75	8.15	7.48	6.65	7.93	8.36	8.25	8.15
Exchange rates								
A$/US$	0.7886	0.8800	0.8100	0.8100	0.8086	0.8493	0.8700	0.8800
NZ$/US$	0.7039	0.7100	0.6100	0.6100	0.7144	0.7726	0.7700	0.7100
A$/¥	93.90	110.88	98.82	98.82	95.28	104.62	107.88	110.88
A$/€	0.5975	0.6331	0.6231	0.6231	0.6055	0.6272	0.6214	0.6331
A$/£	0.4026	0.4422	0.4286	0.4286	0.4109	0.4228	0.4307	0.4422
A$/NZ$	1.1203	1.2394	1.3279	1.3279	1.1319	1.0993	1.1299	1.2394
US$/¥	119.1	126.0	122.0	122.0	117.8	123.2	124.0	126.0
€/US$	1.320	1.390	1.300	1.300	1.335	1.354	1.400	1.390
A$TWI	64.90	70.93	65.97	65.97	65.90	68.90	69.90	70.93

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