Economics, interest rates and currencies chart pack

Presentation to ANZ Senior Management

9th December 2008

Saul Eslake
Chief Economist
## Summary of economic forecasts

<table>
<thead>
<tr>
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<th>2007</th>
<th>2008f</th>
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<td>¾</td>
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<td>Real GDP growth (%)</td>
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<td>6½</td>
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<td>‘Underlying’ inflation (year-end, %)</td>
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<td>Current account deficit (% of GDP)</td>
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<td>-4¼</td>
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## Summary of financial market forecasts

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<td>10-year bond yield (% pa)</td>
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The global credit crunch is continuing despite concerted efforts to recapitalize banking systems and stabilize money markets.

- The global financial crisis which began with the sub-prime mortgage market meltdown in July 2007 took a much more ominous turn following the US Treasury’s decision to allow Lehman Brothers to fail in mid-September, the subsequent decisions to take AIG, Fannie Mae and Freddie Mac into ‘conservatorship’ and the failure of Washington Mutual. These events triggered an almost complete shut-down of the credit and money markets and an ‘investor’ run on the global banking system, and raised the spectre of a retail depositor run on the banking systems of some countries.

- In mid-October, governments and central banks of most Western economies and many emerging economies undertook to guarantee their banking systems’ wholesale borrowings and retail deposits, and (where necessary) to inject substantial amounts of equity capital into banks.

- Bank asset write-downs and credit losses since the beginning of 2007 now total US$711bn ($230bn more than three months ago), while losses at other financial institutions are approaching $260bn. The IMF has revised upward its estimate of the eventual total losses on all loans and securities (including losses on commercial real estate, consumer finance and corporate loans and securities) to US$1,405bn (from $950bn in August), of which banks’ losses could eventually reach US$950-$1,110bn (from $450-510bn in August).

- Banks have thus far raised US$762bn in fresh capital, of which governments have provided US $345bn. Banks have also announced job losses in excess of 175,000 worldwide.

- Central banks have dramatically expanded their balance sheets (in the Fed’s case, from just over US$900bn to over US$2.1trn; for the ECB, from €1.2trn to €1.9trn; for the RBA, from A$90bn to A$160bn) in order to provide liquidity to their respective banking systems and securities markets, as well as aggressively slashing official interest rates.

- These measures have largely succeeded in narrowing spreads between official cash rates and wholesale borrowing costs (although these may drift wider again ahead of year-end balance dates), and in the US at least in reviving the CP market. US banks have so far issued US$44bn of FDIC-guaranteed bonds but will need to refinance $360bn of maturing debt next year. However other securities markets have remained moribund with spreads continuing to widen in many cases.
US house and MBS prices are continuing to decline, but bank losses are now matched by capital raisings

**US existing home prices**

- Jan 2000 = 100
- Down 23.4% from peak

**US mortgage delinquencies**

- % of mortgages outstanding 90 days or more in arrears
- Sub-prime
- Prime

**Losses & write-downs announced since mid-2007**

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Total (US$ bn)</th>
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<tr>
<td>US banks</td>
<td>414.6</td>
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<td>European banks</td>
<td>258.4</td>
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<td>Canadian banks</td>
<td>10.2</td>
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<td>Asian and other banks</td>
<td>27.8</td>
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<td><strong>Total banks</strong></td>
<td><strong>711.0</strong></td>
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<td>Other institutions*</td>
<td>257.9</td>
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</table>

* 'Other institutions’ include insurance companies and the US GSEs.

**Capital raised by banks since mid-2007**

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Total (US$ bn)</th>
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<tbody>
<tr>
<td>US</td>
<td>397.2</td>
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<tr>
<td>European</td>
<td>300.7</td>
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<tr>
<td>Canadian</td>
<td>19.3</td>
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<tr>
<td>Asian and other</td>
<td>44.9</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>762.1</strong></td>
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<tr>
<td>of which, from governments</td>
<td>344.8</td>
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</table>
Central bank balance sheets have ballooned as they seek to keep their banking systems and money markets functioning.

**Assets of the Federal Reserve Board System Open Market Account**

- **US$ trillion**
  - AIG loan & CDO purchases
  - Bear Stearns loan
  - Commercial Paper Funding Facility
  - ABOP Money Mkt Mutual Fund Liquidity Facility
  - Term Securities Lending Facility
  - Primary Dealer Credit Facility
  - Term Auction Facility
  - Discount window
  - Swaps & other assets
  - Treasury & agency securities

**Assets of the European Central Bank**

- **€ trillion**
  - Other assets
  - Other loans to euro area FIs
  - Foreign currency swaps
  - Longer term refinancing operations
  - Main refinancing operations

Policy interest rates have been (or will soon be) reduced to multi-decade lows

Monetary policy interest rates

**US Fed funds rate**

**Euro area refi rate**

**Japan call money rate**

**UK base rate**

Measures announced by governments since mid-October are slowly working to ease financial market stress

3-month inter-bank borrowing rates and official cash rates

**United States**

- 3-mth inter-bank rate
- 3-mth overnight index swap rate

**United Kingdom**

- 3-mth inter-bank rate
- 3-mth overnight index swap rate

**Euro area**

- 3-mth inter-bank rate
- 3-mth overnight index swap rate

**Australia**

- 3-mth bank bill swap rate
- 3-mth overnight index swap rate

*Note:* The 3-mth overnight index swap (OIS) rate shows market expectations of the average official cash rate over the following three months. *Source:* Bloomberg.
Except in the UK, spreads between market expectations of official cash rates and wholesale funding costs have narrowed.

**Spreads between 3-mth wholesale funding and OIS rates**

**United States**

[Graph showing basis points from Dec-06 to Dec-08]

**United Kingdom**

[Graph showing basis points from Dec-06 to Dec-08]

**Euro area**

[Graph showing basis points from Dec-06 to Dec-08]

**Australia**

[Graph showing basis points from Dec-06 to Dec-08]

*Note:* The 3-mth overnight index swap (OIS) rate shows market expectations of the average official cash rate over the following three months. *Source:* Bloomberg.
However, spreads between corporate and government bond yields have remained wide.

**AA 5-7 year corporate bond yield spread over governments**

**United States**

**United Kingdom**

**Euro area**

**Australia**

_Sources:_ Thomson Financial Datastream; Reserve Bank of Australia.
Since the Fed began buying MBS outright, mortgage rates have fallen and applications for mortgages have risen.

**30-year fixed mortgage rate**

Fed commences outright purchase of mortgage-backed securities

**Applications for mortgages for home purchase**

Week ended 16 Mar 1990 = 100

4-week moving average

Source: Thomson Financial Datastream; Mortgage Bankers’ Association of America.
The Fed’s decision to start buying CP outright has prompted a modest revival in CP issuance

Source: Federal Reserve.
Indicators of ‘fear’ in financial markets have retreated a bit from October’s all-time peaks but remain elevated.

‘TED’ spread between 3-month inter-bank US$ rates and 3-month US Treasury bill yields

‘VIX’ index of implied volatility of the US S&P 500 share index

Sources: US Federal Reserve; Datastream; ANZ.
Banks in the US and the euro area are continuing to tighten credit standards

**US banks**

**Commercial & industrial loans**

- Large
- Small

**Euro area banks**

**Loans to enterprises**

- Net balance tightening standards (%)

**Mortgage and consumer loans**

- Consumer
- Mortgage*

* Weighted average of prime & sub-prime after June 2007

**Sources:** US Federal Reserve and European Central Bank surveys of loan officers.
Share market investors around the world have lost almost US$30 trillion since the end of October 2007.

**Capitalization of world equity markets**

Peak-to-trough decline from 31 Oct 2007: US$28.8 tm (53% of 2007 world GDP)

Source: Datastream.
Stockmarkets have rallied since 20 November despite uniformly bad economic data, on hopes of major stimulus

**United States S&P 500**
- Up 18.3% from 20/11

**Japan Nikkei**
- Up 8.1% from 20/11
  - (16.3% from 27/10 low)

**United Kingdom FTSE 100**
- Up 11.0% from 20/11

**Australia All Ords**
- Up 6.6% from 20/11

*Source: Thomson Financial Datastream.*
The global credit crunch is continuing despite concerted efforts to recapitalize banking systems and stabilize money markets.

- Growth in the world economy has slowed abruptly during the current half, with all of the major industrialized economies experiencing negative, or only barely positive, growth and many of the more important developing economies also exhibiting pronounced slowdowns.
- The US National Bureau of Economic Research has concluded that the US economy entered recession in December 2007 – even though the US has yet to experience consecutive quarters of negative growth (which is a sufficient but not necessary condition for a US recession). The current recession is already longer than the post-war average (10 months) and will almost certainly end up being longer than the two previous longest post-war recessions, those of 1973-75 and 1981-82 (both of which lasted 16 months). It also seems likely to entail a greater contraction in real GDP than the 2.3% average for post-war recessions.
- Other countries do not have counterparts to the NBER, and tend to use the ‘consecutive quarters of negative real GDP growth’ rule-of-thumb to designate recessions. By that standard, Japan, the Euro zone, the UK, Hong Kong and Singapore entered recession in the second quarter of 2008.
- China’s annual real GDP growth rate slowed to 9% in the September quarter, the slowest since the 2003 SARS outbreak, and (based on monthly data) has almost certainly slowed to less than 8% in the current quarter. China’s slowdown owes more to an abrupt downturn in its property and construction sectors than to weakening exports, although the latter will become more apparent in 2009. India’s growth rate slowed to 7.6% in the September quarter, also the slowest since 2003, as a result of slowing household spending and a deteriorating trade account.
- The abrupt slowdown in global economic growth and the accompanying sharp fall in commodity prices has halted the sharp rise in inflation which dominated the thinking of most central banks (apart from the Fed) until about two months ago. In some countries – especially those whose currencies have appreciated (including the US, Japan and China), deflation is a real possibility in 2009.
- Although monetary policy is now being eased rapidly around the world, lower interest rates combined with ‘quantitative easing’ will by themselves do little to ease the downturn in activity or revive growth. Major fiscal policy actions are likely to be required and in a number of cases (including the US after next month’s transition) appear to be forthcoming.
The US National Bureau of Economic Research has formally declared that a recession began in December 2007 ...

NBER's key recession gauges since Dec 2007 cf. previous recessions

Real personal income less transfers

Industrial production

Employment

Real business sales

Sources: US Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve Board; Commerce Department; ANZ Economics & Markets Research.
... even though the US has yet to experience consecutive quarters of negative real GDP growth

US real GDP growth

Note: 2001 recession did not feature successive contractions in real GDP

Note: Shaded area denotes recessions as designated by National Bureau of Economic Research. Source: US Bureau of Economic Analysis; ANZ.
The recession is being driven (in the first instance) by household responses to deteriorating net worth.

US household indicators

**Consumer confidence**

1985 = 100 (trend)

**Real personal consumption expenditure**

% change from year earlier (trend)

**Household net worth**

% of annual personal disposable income

**Real personal saving**

% of personal disposable income (trend)

*Note:* shaded periods denote recessions as designated by National Bureau of Economic Research.

*Sources:* The Conference Board; Bureau of Labor Statistics; Census Bureau.
The US housing market is in a dire state

**US housing market indicators**

**Housing starts**

**‘Seriously delinquent’ mortgages**

**Inventory of unsold homes**

**Rental vacancy rate**

*Sources: US Commerce Department; National Association of Realtors; National Association of Home Builders; Mortgage Bankers’ Association of America.*
Household spending will come under further pressure from a rapidly deteriorating labour market.

**US labour market indicators**

**Payroll employment**

**Hours worked**

**Unemployment**

**‘Help wanted’ advertising**

*Note:* shaded periods denote recessions as designated by National Bureau of Economic Research.

The US household sector will cut spending in order to return to its long-term position as a net lender.

**US private sector net lending and liabilities**

**Household net lending**
- % of GDP (trend)
- Linear time trend

**Non-financial corporate net lending**
- % of GDP (trend)
- Linear time trend

**Household liabilities**
- % of GDP
- Linear time trend

**Non-financial corporate liabilities**
- % of GDP
- Linear time trend

*Note:* ‘Net lending’ is gross saving minus gross investment.
*Sources:* Federal Reserve Flow of Funds (Z1) statements; Bureau of Economic Analysis; ANZ.
The US public sector should (and can) increase its net borrowing substantially to cushion the impact of household de-leveraging.

**US government and foreign net lending and liabilities**

### Government net lending

- **% of GDP**
  - 1950 to 2010

### Foreign net lending

- **% of GDP**
  - 1950 to 2010

### Government liabilities

- **% of GDP**
  - 1950 to 2010

*Note:* 'Net lending' is gross saving minus gross investment.

*Sources:* Federal Reserve Flow of Funds (Z1) statements; Bureau of Economic Analysis; ANZ.
The euro area has also entered recession, although it may not be as severe as in the UK.

**Euro area economic indicators**

**Real GDP**
- % change from previous quarter

**House prices**
- % change from year earlier

**Business & consumer confidence**
- Net balance (%)

**Unemployment**
- %

*Sources: European Commission; Eurostat; Datastream.*
With a relatively large financial sector and house prices falling almost as much as the US, the UK will have a sharp recession.

**UK economic indicators**

### Real GDP

- % change from previous quarter
- First decline in 17 years

### House prices

- % change from year earlier

### Business & consumer confidence

- Net balance (%)
- Lowest since July 1980

### Unemployment

- %

*Sources: UK Office of National Statistics; Confederation of British Industry; Eurostat; HBoS.*
Japan’s economy has entered recession even though its banks have very little exposure to the global credit crisis.

Sources: Japan Economic & Social Research Institute; Ministry of Economy, Trade and Industry; Japan Home Ministry.
Industrial production is declining in Western countries and also set to slow sharply in developing and emerging economies.

Manufacturing purchasing indices (PMIs) and industrial production

**Advanced economies**

**Developing economies**

Sources: IMF World Economic Outlook October 2008 database; updated by ANZ Economics & Markets Research.
China’s economy is slowing, reflecting slower export growth and an internal property slump.

**Chinese economic indicators**

**Real GDP growth**

- % change from year earlier
- Slowest growth rate since SARS (2003)

**Exports**

- % change from year earlier (6-mth moving avge)
- (deflated by change in export price index)

**Industrial production**

- % change from year earlier (6-mth moving avge)

**Real estate prices**

- % change from year earlier

Source: China National Statistics Bureau; ANZ.
Industry indicators provide a starker indication of the slowdown in China’s economy

**Chinese industry indicators**

**Crude steel production**

% change from year earlier

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<th>02</th>
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**Electricity generation**

% change from year earlier

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<tr>
<th>Year</th>
<th>01</th>
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**Steel product inventories**

Mn tonnes

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<th>Year</th>
<th>02</th>
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**Motor vehicle production**

% change from year earlier

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<th>01</th>
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*Sources:* China Steel Industry Association; China National Statistics Bureau; China Association of Automobile Manufacturers; CEIC. Seasonal adjustment and trend series by ANZ using DX.
India’s economy has also slowed, largely reflecting weaker household spending and a deteriorating trade performance.

**Indian economic indicators**

**Real GDP growth**
- % change from year earlier
- Slowest growth rate since 2003

**Merchandise trade**
- US$ bn (12-month moving total)
- Total
- Non-oil

**Industrial production**
- % change from year earlier
- (6-mth moving avge)

**Motor vehicle sales**
- % change from year earlier
- (6-mth moving avge)

*Source: Central Statistical Organization (CSO) of India; Society of Indian Automobile Manufacturers; RBI; CEIC; ANZ Economics & Markets Research.*
Commodity prices have fallen reflecting declining demand, the unwinding of speculative trades and a stronger US dollar.

Sources: Bloomberg; Datastream.
Spot prices for Australia’s two largest commodity exports have fallen sharply in recent weeks and are likely to decline further.

**Coal prices**

- Spot price (ex-Newcastle)
- Contract price

**Iron ore prices**

- Spot (Indian)
- Contract price

**Bulk commodity shipping costs**

- 'Baltic freight (cape size) futures index

**Sources:** Datastream; Bloomberg; ANZ Economics & Markets Research.
Commodity prices will fall further over the next 6-12 months though should remain strong by historical standards.

Resource commodity prices

Commodity prices:
- Coal: US$/tonne
  - Coking
  - Steaming
- Zinc: US$/pound
- Gold: US$/oz
- Iron ore: US$/tonne
- Aluminium: US$/pound
- Oil: US$/barrel

Sources: Thomson Financial; ANZ.
Headline inflation in the G7 economies has begun to come down rapidly, and ‘core’ inflation is also likely to fall significantly.

**Consumer prices**

**United States**

**Euro area**

**Japan**

**United Kingdom**

Sources: US Bureau of Labor Statistics; Eurostat; OECD.
Indeed, a period of deflation is not out of the question in the United States

Survey-based measures of ‘upstream’ US price pressures

**Purchasing managers’ survey**
- Prices paid

**Philadelphia Fed survey**
- Prices paid and received

*Note:* The ISM survey is calculated as 50 + half the net balance of respondents reporting ‘higher’ or ‘lower’ while the Philadelphia Fed is calculated as the difference between those reporting ‘higher’ or ‘lower’.

*Sources:* US Institute of Supply Management; Federal Reserve Bank of Philadelphia.
Inflation has also peaked in much of the developing world (with one or two exceptions such as India)

**Major developing economies – consumer prices**

**China**

![](chart_china.png)

**Other East Asia**

![](chart_other_east_asia.png)

**South Africa**

![](chart_south_africa.png)

**India**

![](chart_india.png)

**Latin America**

![](chart_latin_america.png)

**Russia**

![](chart_russia.png)

Sources: national statistical agencies; ANZ.
The US$ and ¥ have risen since July, reflecting the hoarding of US$ and unwinding of leveraged positions and ‘carry trades’.
Australia’s economy had slowed significantly before the global downturn began in earnest

- The most recently released national accounts show that Australia’s economy had already slowed significantly before the latest stage of the global financial crisis and ensuing economic downturn, reflecting the impact of the tightening of monetary policy up to March this year and rising fuel prices. Real GDP grew by just 0.1% in the September quarter (and non-farm GDP actually contracted by 0.3%) – although real gross domestic income (GDI, which captures the impact of changes in relative export and import prices) rose by 1.4% (for annual growth of 6.4%), supporting continued growth in domestic demand (4% from a year earlier).

- The sharp turnaround in commodity prices will detract significantly from Australian national income growth, especially once bulk commodity (iron ore and coal) export prices fall sharply in the June quarter of next year. Real GDI may fall by 2% in 2009, even though real GDP growth is expected to remain marginally positive (at ½% on average).

- Australian house prices have softened, but have not fallen (and are not expected to fall) at anything like the rates experienced in the US or UK. Nonetheless, Australian households appear to be seeking to lift their saving and consumer spending is therefore likely to remain weak well into next year. The most recent surveys of business investment intentions (taken in October and November) were surprisingly robust, although capital spending plans are likely to be scaled back during 2009.

- Australia may well avoid recession, if defined as consecutive quarters of negative real GDP growth, if only because of the timing and magnitude of fiscal policy measures. However Australia is likely to experience recession defined as a rise in the unemployment rate of at least 1½ pc pts in 12 months or less during 2009, even though the relatively strong position of the corporate sector suggests that there is less need for mass retrenchments than during previous downturns.

- Despite the sharp fall in the A$, inflation is likely to fall back into the RBA’s 2-3% target range more quickly than previously foreseen (note that the RBA has a contrary view).

- The RBA has responded decisively to the dramatic shifts in economic prospects, reversing in three months the tightening of monetary policy implemented over the preceding six years. The cash rate is likely to fall further, to 3½% or lower, over the first half of 2009.

- The A$ will likely depreciate further (to ~ US55¢) during 2009 as commodity prices fall further and the interest rate premium on A$ assets erodes.
The Australian economy had been slowing since late 2007, although income growth remained strong and unemployment low.

**Real GDP growth**

% change from year earlier

- Real GDP
- Non-farm GDP

**Employment**

% change from year earlier

- Seas. adj.
- Trend

**Real income and expenditure**

% change from year earlier

- Gross domestic income
- Domestic final demand

**Unemployment rate**

% of labour force

- Seas. adj.
- Trend

*Note: real gross domestic income (GDI) is real GDP adjusted for changes in the terms of trade; it measures the 'purchasing power' of the income associated with producing the GDP. Sources: ABS; ANZ.*
Consumer and business confidence have fallen sharply this year although both now seem to be stabilizing (for now, anyway)

**Consumer confidence**

Ratio of optimists to pessimists (%)

**Business confidence**

Net balance of optimists minus pessimists (%)

Sources: Roy Morgan Research; National Australia Bank; ANZ
Households are responding to declining wealth by lifting saving – to its highest level (as a proportion of income) in a decade.

Sources: Australian Bureau of Statistics; ANZ.
Household spending and borrowing, and housing activity, have both slowed sharply over the past six months.

Sources: ABS; ANZ Economics & Markets Research.
The sharp fall in commodity prices will detract substantially from Australian national income in 2009.

Note: real gross domestic income (GDI) is real GDP adjusted for changes in the terms of trade; it measures the 'purchasing power' of the income associated with producing the GDP. Sources: ABS; ANZ.
Australia is also exposed to the global credit crunch because of the large external deficit and the way it has been financed.

Sources: IMF World Economic Outlook (October 2008); ABS; ANZ. Note that apparently large movements in ‘other (incl. reserves) in 2007-08 largely reflect the withdrawal of cash deposits at the RBA by the Future Fund; the RBA had invested these largely in US Treasuries, and they were reported as part of the RBA’s official reserve assets.
Hence Australian banks and securities markets have come under similar pressure to banks and markets overseas.

**Banks’ short-term funding costs**

90-day Libor spread over OIS (bp)

**Corporate bond yield spreads**

AA spread over 5-7 yr govt bond yields (bp)

**Banks’ long-term funding costs**

5-year swap spread (bp)

**Bank share prices**

31 Dec 2006 = 100

*Note:* all data shown as 5-day moving averages. *Sources:* Bloomberg; Datastream.
Like other central banks, the Reserve Bank of Australia has been expanding its balance sheet to support liquidity.

The ‘credit crunch’ plus the effect of higher interest rates on credit demand has led to a sharp slowdown in credit growth.

---

**Credit provided to the Australian private sector**

**Total credit**

**Credit to households**

**Credit by source**

**Credit to business**

---

*Source: Reserve Bank of Australia.*
The corporate sector is (in general) in a strong financial position and doesn’t need to cut labour costs aggressively.

**Australian non-financial corporate sector finances**

**Interest cover ratio**
- Ratio of gross operating surplus of corporate trading enterprises to interest paid
- Still high by historical standards

**Debt-equity ratio**
- Low by historical standards

**‘Profit share’ of national income**
- Gross operating surplus of corporate trading enterprises (as a % of GDP)
- Record high (and still rising)

**Real unit labour costs**
- % change from year earlier (trend)
- Sharp decline (cf. lead-up to previous downturns)

*Note:* Shaded areas denoted recessions.
*Sources:* Australian Bureau of Statistics; Reserve Bank of Australia; ANZ.
Business capital expenditure expectations have remained remarkably strong, even into October-November.

### Business new fixed capital expenditure

**Real % change from year earlier**

- **Mining**
- **Other**

### Capital expenditure expectations

**Mining**

- % revision from previous estimate
  - **2008-09**
  - **Average for previous 20 years**

**Other**

- % revision from previous estimate
  - **2008-09**
  - **Average for previous 20 years**

**Note:** The ABS survey of business capital expenditure expectations taken after the end of each quarter produces six sets of expectations for each financial year. The charts on the right show the extent to which these estimates have been revised in successive surveys, in 2008-09 and on average over the past 20 years.

**Sources:** ABS; ANZ.
Australia’s housing market has clearly softened but it won’t become as dire as America’s unless unemployment rises sharply.

**Population growth**

- **Australia**
- **US**

<table>
<thead>
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<th>Year</th>
<th>Australia</th>
<th>US</th>
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<tr>
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<tr>
<td>08</td>
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</tbody>
</table>

**Mortgage delinquency rates***

- **Australia**
- **US**

<table>
<thead>
<tr>
<th>% of total loans outstanding</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
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<td>0.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Housing commencements**

- **Australia**
- **US**

<table>
<thead>
<tr>
<th>Year</th>
<th>Australia</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>100</td>
<td>150</td>
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<tr>
<td>08</td>
<td>100</td>
<td>150</td>
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</tbody>
</table>

**House prices**

- **Australia**
- **US**

<table>
<thead>
<tr>
<th>% change from year earlier</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
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<td>10</td>
<td>5</td>
<td>0</td>
<td>-5</td>
<td>-10</td>
<td>-15</td>
</tr>
</tbody>
</table>

* 90 days or more past due. For Australia, securitized mortgages only (including on-balance sheet mortgages would result in a lower figure). Sources: ABS; US Commerce Department; S&P; Mortgage Bankers’ Association of America.
Australia’s household sector (like the US’s) will probably revert to its traditional position as a net lender.

**Australian household net lending and liabilities**

**Household net lending**

-5 -4 -3 -2 -1 0 1 2 3 4 5

% of GDP (trend)

60 65 70 75 80 85 90 95 00 05 10

**Household liabilities**

110 100 90 80 70 60 50 40 30

% of GDP

85 90 95 00 05 10

Linear time trend

4% of GDP

**Note:** ‘Net lending’ is gross saving minus gross investment. **Sources:** ABS; ANZ Economics & Markets Research.
There is considerable scope for government borrowing to moderate the impact of household sector de-leveraging.

- Australia’s general government sector has been running surpluses, on average, since 1998 (apart from a brief interlude in 2001-02), allowing the elimination of its net debt and the accumulation of net financial assets equivalent to ~7% of GDP at the end of the 2007-08 fiscal year.

- The recent mid-year review of the Commonwealth Budget lowered the projected surplus for 2008-09 from 1.8% of GDP to 0.4%, and for subsequent years from 1.3-1.5% of GDP to 0.2-0.5%, reflecting the A$10.4bn ‘Economic Security Strategy’ announced in October and downward revisions to revenues.

- State & Territory Governments are revising up estimates of their deficits for 2008-09 and beyond.

- Further fiscal measures are both likely and warranted, notwithstanding that the result is likely to be budget deficits of the order of 1-2% of GDP; Australia has more scope than most Western countries for expansionary fiscal policy.
Inflation will likely fall more quickly than the RBA expects, despite the fall in the A$.

**Consumer prices**

% change from year earlier

"Headline"

"Underlying"

RBA target range

Note: excludes impact of introduction of GST and major health policy changes and proposed commencement of emissions trading scheme in mid-2010. Sources: ABS; RBA Statement on Monetary Policy (November 2008); ANZ Economics & Markets Research.
Inflation expectations peaked during the September quarter and are now falling (sharply in the case of consumers).

Sources: Westpac-Melbourne Institute; National Australia Bank; ANZ.
Other monthly data also points to inflation having peaked and now declining.

**Monthly inflation gauge**

- % change from year earlier

**Purchasing managers’ survey selling prices**

- Net balance reporting higher selling prices

*Sources: TD Securities Australia; Australian Industry Group*
The RBA’s cash rate is likely to be lowered further, to 3½% (or even less) during the first half of 2009 ...

- The RBA has cut its cash rate by 3 pc points over the past three months – entirely reversing the increase¼s over the previous 6¼ years
- Over the past two decades, the RBA has come to regard a cash rate in the range 5-6% as consistent with ‘neutral’ policy settings, ie neither stimulating or restraining economic activity
- This view has been premised on a stable margin between the cash rate and the rate which borrowers actually pay
- However with the spread between the cash rate and the standard variable mortgage rate having widened by ~80bp this year (and that between the cash rate and business lending rates by even more), the range consistent with ‘neutral’ must have moved down to somewhere around 4¼-5¼%
- Moreover, the economic outlook surely warrants monetary policy settings significantly on the ‘easy’ side of ‘neutral’
... implying that official interest rates will be at their lowest since the late 1950s, and mortgage rates since the early 1970s.

Note: ‘neutral’ range for monetary policy defined as a cash rate of between 5 and 6%, adjusted since January 2008 for the widening in the spread between the cash rate and the standard variable mortgage rate. Sources: RBA; ANZ.
The economy will slow sharply (although it may not contract outright) and unemployment will rise by around 2½ pc points.

**Spending and output**

- Real % change from year earlier
- Domestic final demand (spending)
- GDP (output)

**Employment and unemployment**

- % change from year earlier
- Unemployment (right scale)
- Employment (left scale)

*Sources: Australian Bureau of Statistics; ANZ.*
The recent sharp drop in the A$ is partly a reflection of the rebound in the US$ ...
The A$’s decline also reflects plummeting commodity prices and the narrowing Australian-US interest rate spread.

**A$ vs US$ and commodity prices**

The decline in the A$ is partly due to the fall in commodity prices and the narrowing interest rate spread between Australia and the US.

**A$ vs US$ and Australia-US interest rate spreads**

The graph shows the exchange rate of the A$ against the US$ along with the CRB index of industrial commodity prices and the spread between Australian and US 2-yr swap rates.
The Australian dollar is likely to remain weak against the US$ and yen over the next two years.

Sources: ABS; ANZ Economics & Markets Research.
Credit growth is expected to slow over the next two years reflecting both demand and supply influences.

**Credit growth**

**Housing**

% change from year earlier

**Business**

% change from year earlier

**Other personal**

% change from year earlier

**Total**

% change from year earlier

*Sources: RBA; ANZ.*
Outlook for the New Zealand economy

- The New Zealand economy is in recession, having contracted by 0.3% in the March quarter and 0.2% in the June quarter, and in all likelihood by ½% in the September quarter. Our own business conditions survey and anecdotal evidence point to ongoing and significant weakness in economic activity. Further declines in real GDP are expected in the first half of 2009. The unemployment rate has risen from 3.4% to 4.2% so far this year, and is likely to reach 6% by the end of 2009. New Zealand’s trade account remains in deficit (unlike Australia’s), so the current account adjustment process is likely to be more severe.

- NZ house prices have fallen by 6% so far this year (cf. an average of about 2% in Australia) while the volume of transactions is down almost 60% from its early 2007 peak. Residential construction activity is also declining sharply, with building consents (approvals) falling to a record low in October. Underlying demand for housing (derived largely from population growth) is weaker in NZ than in Australia, while the predominance of fixed-rate mortgages means that whatever benefit might be provided by reductions in official interest rates takes longer to be felt.

- Despite the sharply lower NZ$ and lingering pressures in ‘non-contestable’ sectors, consumer prices are likely to fall in the current and following quarters, pulling the annual ‘headline’ inflation rate down from 5.7% to 3.1% by the March quarter of 2009, with a further decline to 1.5% (and possibly to the bottom of the 1-3% target band) by the September quarter of next year.

- The RBNZ has cut its official cash rate by 325 basis points (to 5%) since July, including an unprecedented reduction of 150 basis points earlier this month. A further 50 bp cut is likely in January, with the cash ultimately falling to 4% and perhaps even lower.

- The newly-elected government of Prime Minister John Key is likely to deliver a significant fiscal stimulus package before Christmas.

- Given the poor NZ economic outlook and the likelihood of further declines in NZ commodity prices and interest rates, the NZ$ is likely to remain on a generally downward trajectory against both the US$ (dropping below US50¢ during the first half of 2009 with a trough of ~US44¢) and, to a rather lesser extent, against the A$ (with the cross-rate reaching NZ$1.23 during the first half of 2009).
The New Zealand economy is in recession, and continues to weaken.

Business confidence down again

Construction sector leading the charge

Broadening beyond housing-centric sectors

The labour market is turning

Sources: Statistics NZ, Business NZ, NZIER, ANZ National
NZ business confidence is deteriorating

ANZ National Bank Business Outlook survey

Headline confidence

Own activity

Employment

Investment

Sources: ANZ National Bank
NZ households have begun a period of balance sheet consolidation

House prices retreating

Debt servicing burden is high

Discretionary spending being pared back

Household credit growth subdued

Sources: RBNZ, REINZ, Statistics NZ, ANZ National
As in other countries, monetary and fiscal policy are responding to the deteriorating economic outlook.

**Interest rates are falling**

Current market pricing

**The currency is adjusting, with more to come**

NZD/USD

**Fiscal policy to support**

Fiscal impulse

**Government should use its balance sheet to do more**

% of GDP

% of GDP

Sources: NZ Treasury, Bloomberg, ANZ National
New Zealand dollar to remain under pressure

NZ dollar vs US dollar

Australian dollar vs NZ dollar

Sources: Bloomberg, ANZ National
Credit growth is weak and looks likely to remain so

Sources: ANZ National; RBNZ
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