

Open partnerships  
Open possibilities

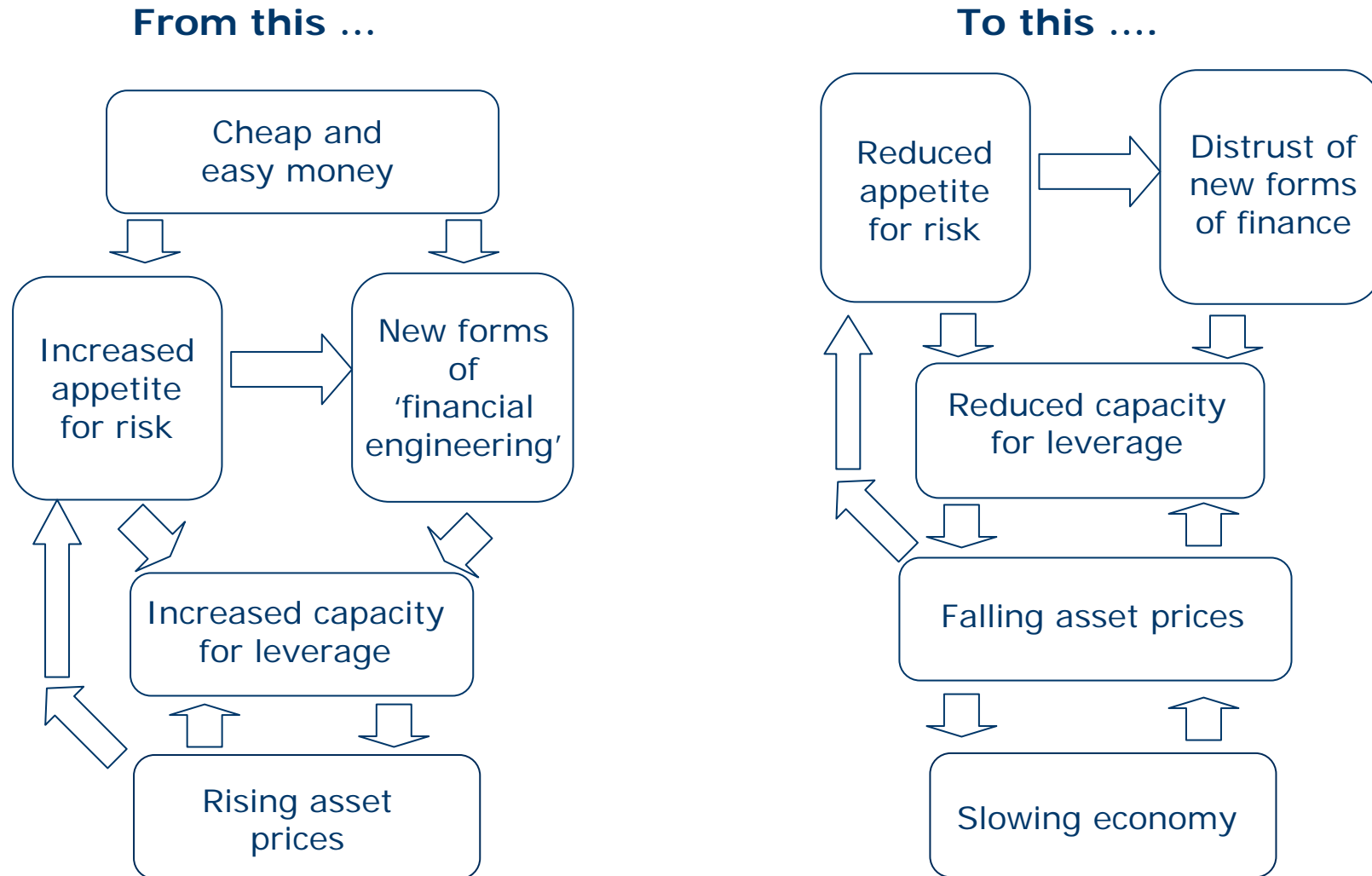
# Commodities boom and credit crunch: the global and Australian economies

Presentation to the  
Australasian Mutuals Institute

National Convention Centre, Canberra  
17<sup>th</sup> March 2008

Saul Eslake  
Chief Economist, ANZ

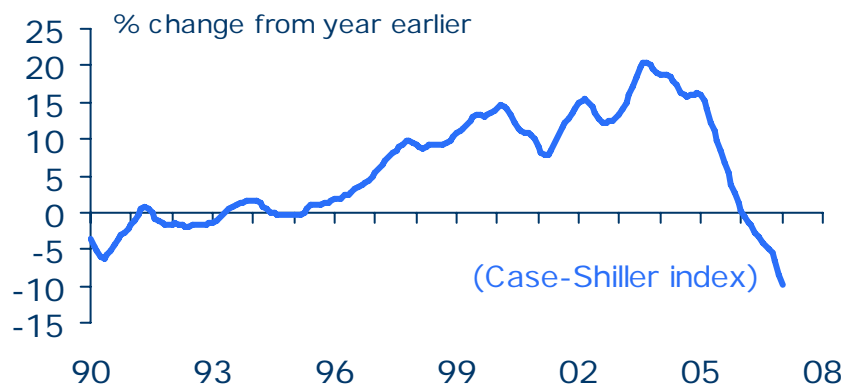
# The current global financial crisis stems from the bursting of a 'credit market bubble'



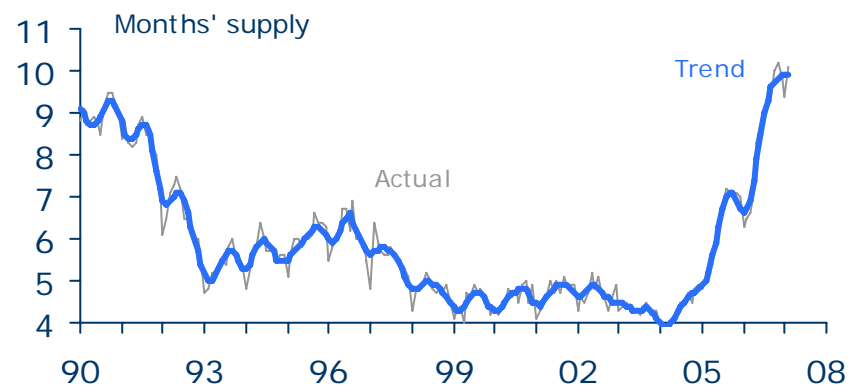
The credit market crisis was triggered by the bursting of the US housing 'bubble' beginning in mid-2006

### US housing market

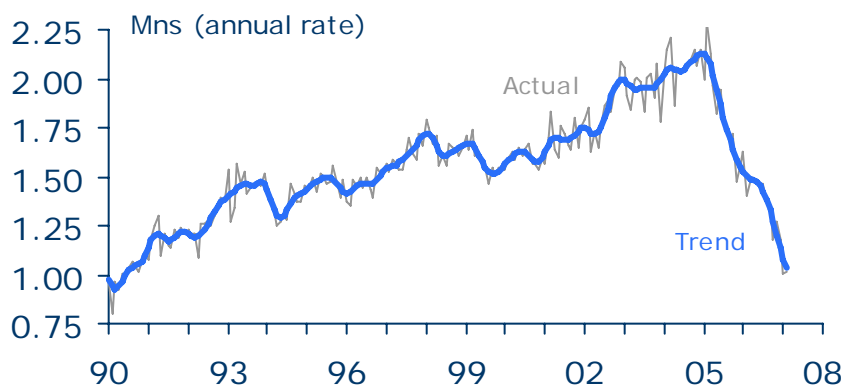
#### US house prices



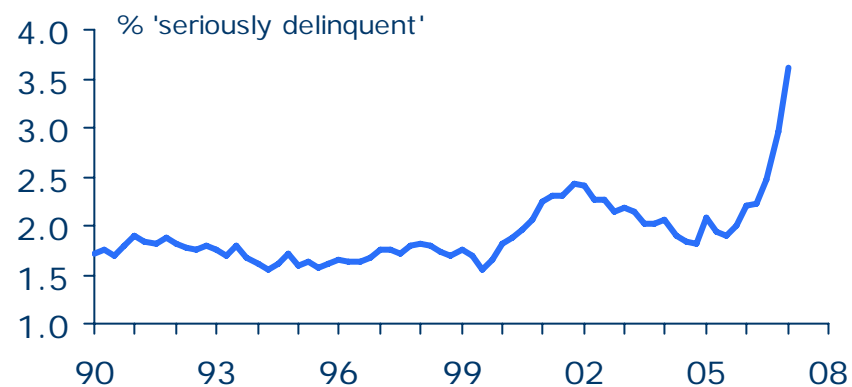
#### US unsold homes



#### US housing starts



#### US mortgage delinquencies

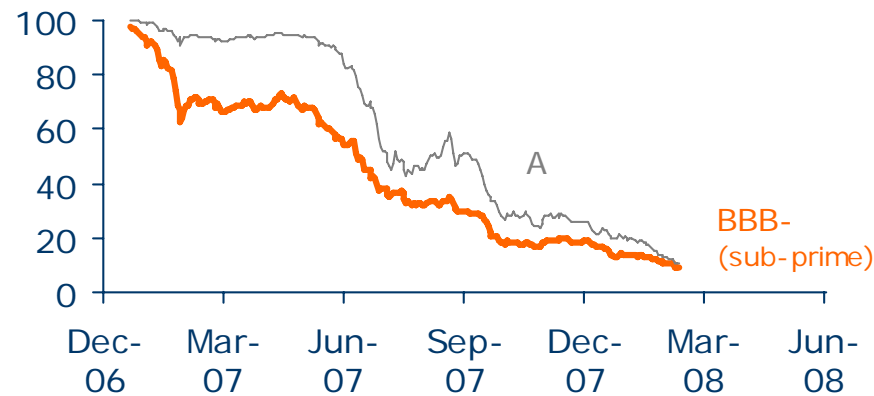


Sources: S&P; US Commerce Department; US National Association of Realtors; US Mortgage Bankers' Association.



## Dramatic declines in the value of mortgage-backed securities have led to substantial losses incurred by big global banks

### ABX index of prices of US mortgage-backed securities



Source: Bloomberg.

### Losses announced by major banks since mid-2007

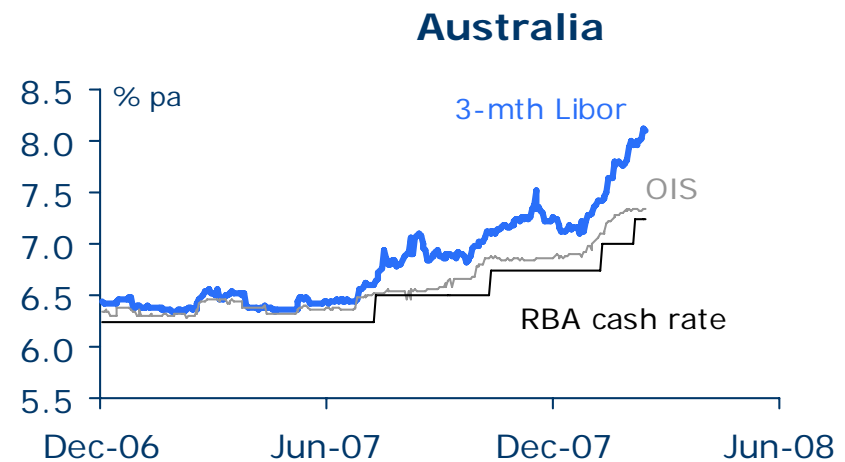
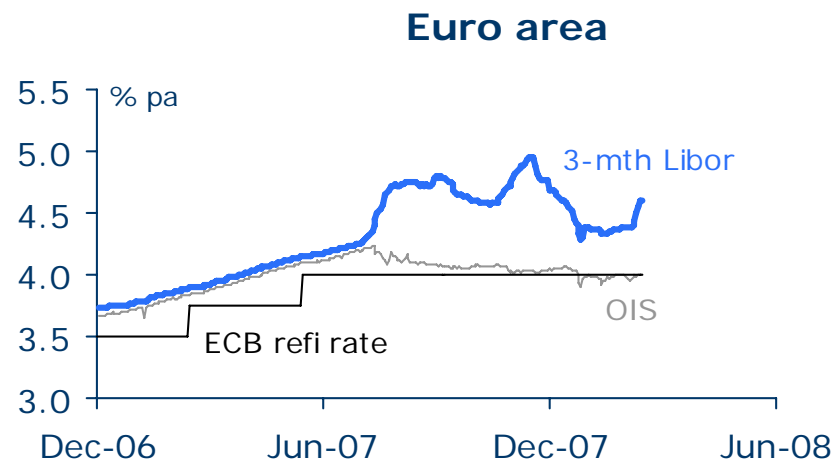
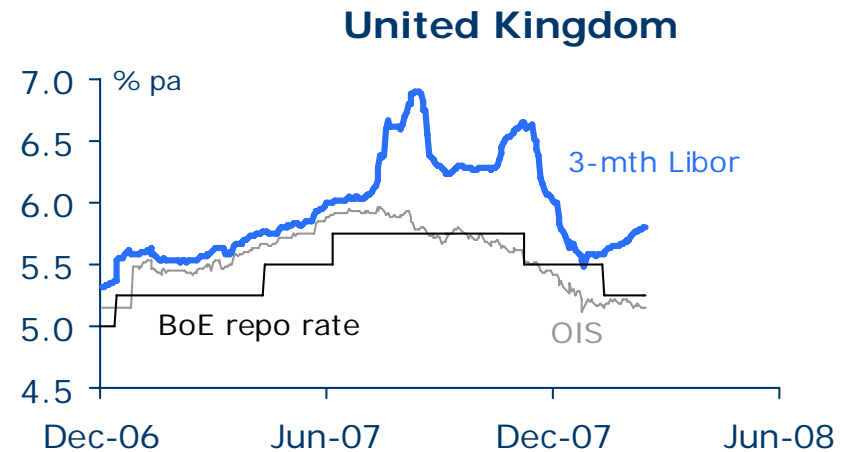
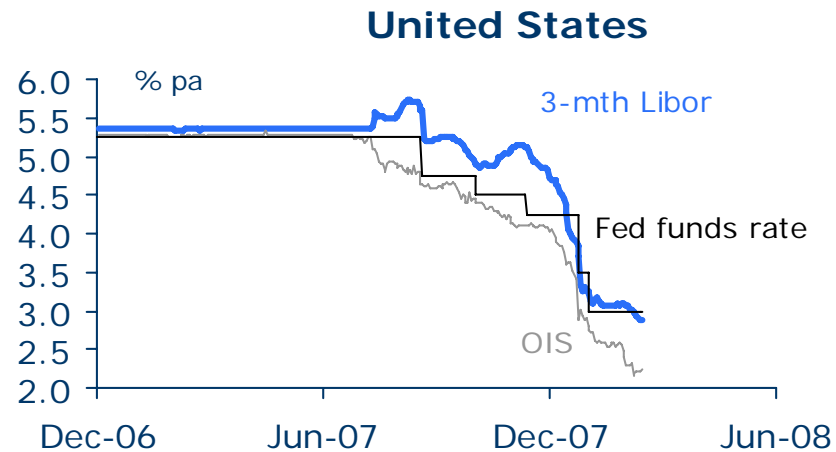
Bank	Total (US\$ bn)
Merrill Lynch	24.5
Citigroup	22.1
UBS	18.3
HSBC	10.7
Morgan Stanley	9.4
Bank of America	7.9
Washington Mutual	6.5
Credit Agricole	4.9
Wachovia	4.7
JPMorgan Chase	3.2
Canadian Imperial (CIBC)	3.2
Barclays	2.7
Bear Sterns	2.6
Royal Bank of Scotland	2.5
Deutsche Bank	2.3
Wells Fargo	1.7
<b>TOTAL *</b>	<b>141.0</b>

\* incl. smaller banks not shown separately.



These losses (and fears of more to come) have made banks reluctant to lend to one another

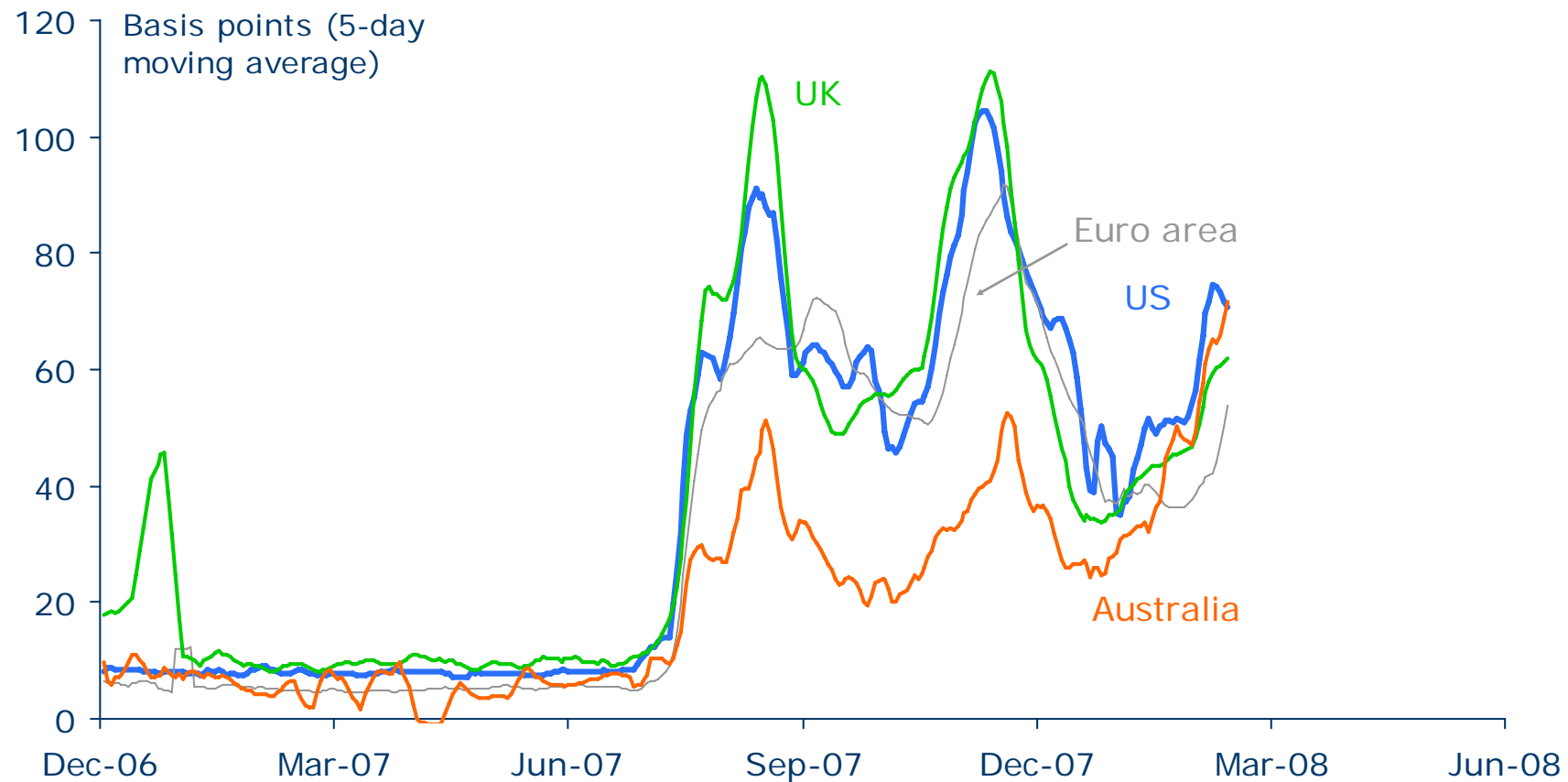
## Inter-bank borrowing rates and overnight index swap (OIS) rates



\* The OIS is an indicator of market expectations of future movements in cash rates.  
Sources: Thomson Financial; Bloomberg.

Banks short-term funding spreads are widening again (for the third time since mid-2007)

### Spreads between short-term (90-day) inter-bank borrowing rates and expected official cash rates



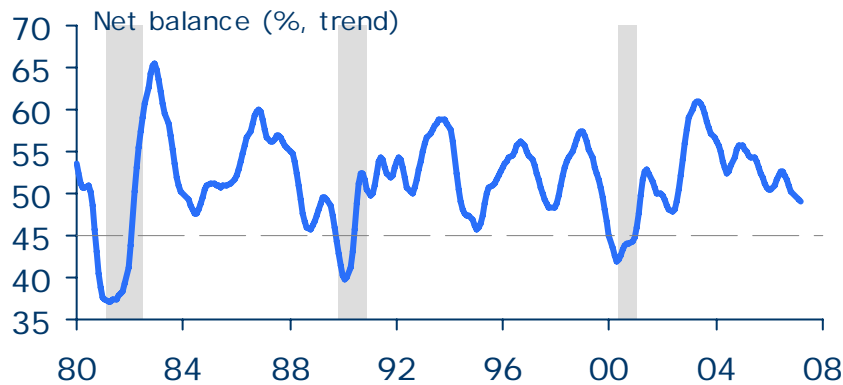
Note: 'expected official cash rates' proxied by overnight index swaps (OIS).  
Sources: Thomson Financial; Bloomberg.



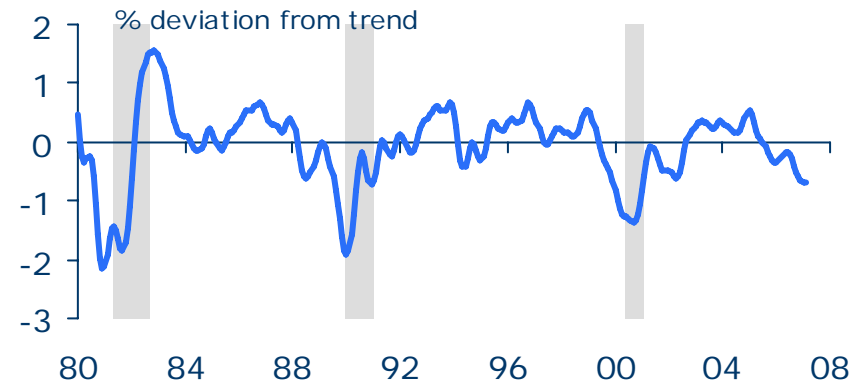
# A number of high-profile composite indicators suggest the US economy may be in, or heading for, a recession

## Composite indicators of US economic activity

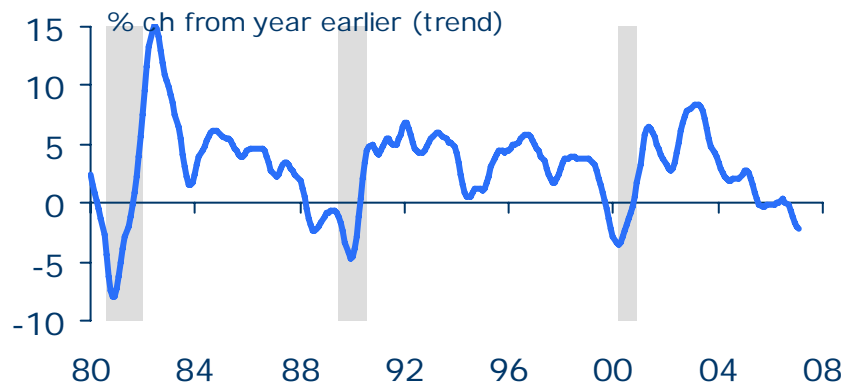
### Purchasing managers' indices



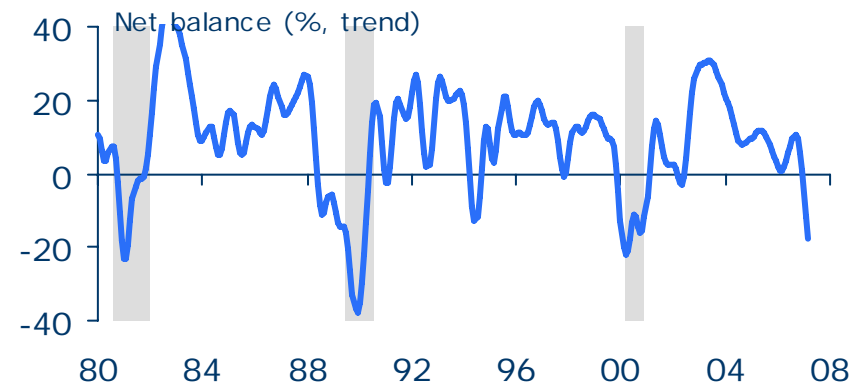
### Chicago Fed activity index



### Conference Board leading indicators



### Philadelphia Fed activity index



*Note:* Shaded areas denote recessions as defined by the National Bureau of Economic Research.

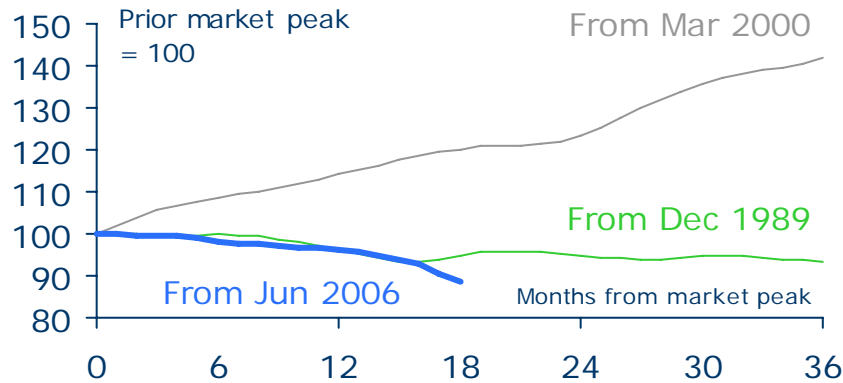
*Sources:* Institute of Supply Management (ISM); The Conference Board; Federal Reserve Banks of Chicago and Philadelphia.



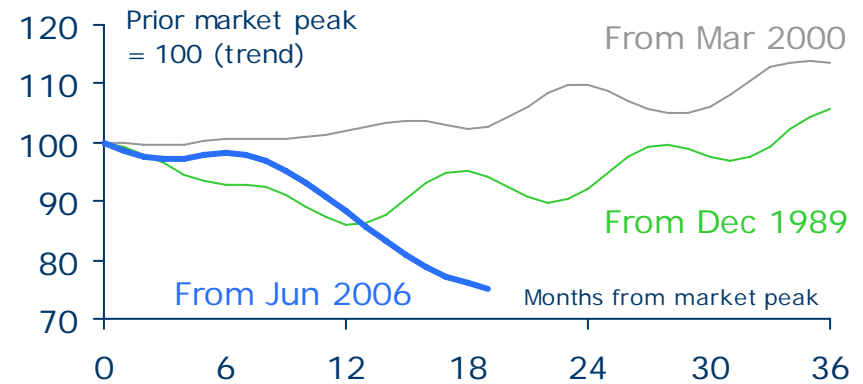
The US housing market looks worse, on most indicators, than it did prior to the last two recessions

### US housing market indicators in three cycles

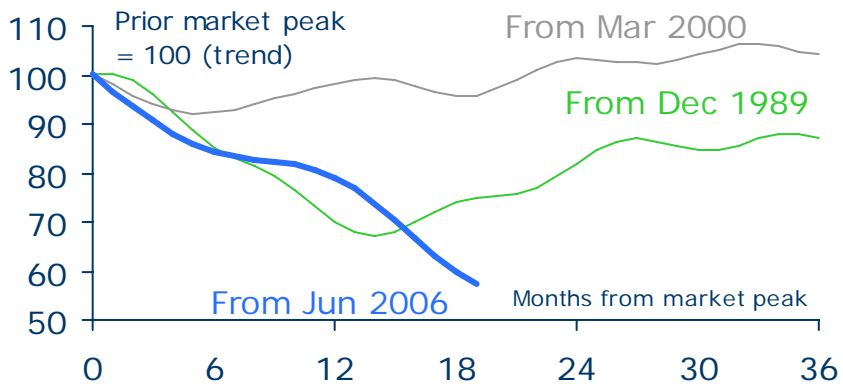
**Housing prices**



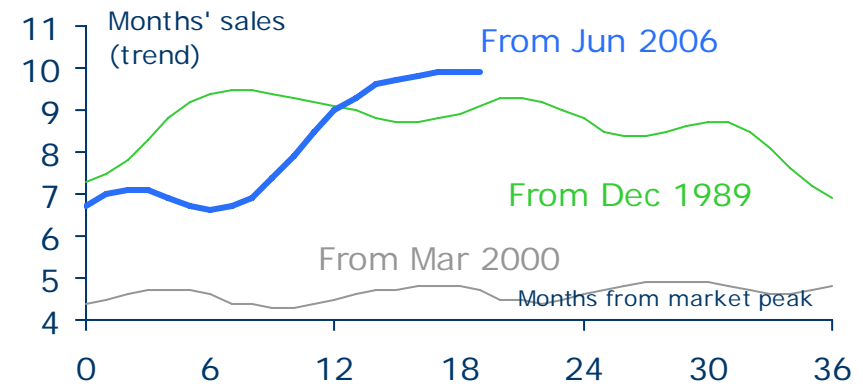
**Established home sales**



**Housing starts**



**Unsold homes**



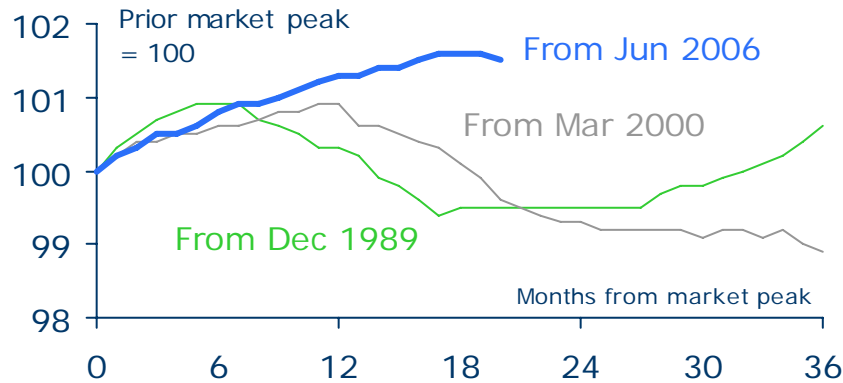
Sources: S&P; US Commerce Department; US National Association of Realtors; ANZ.



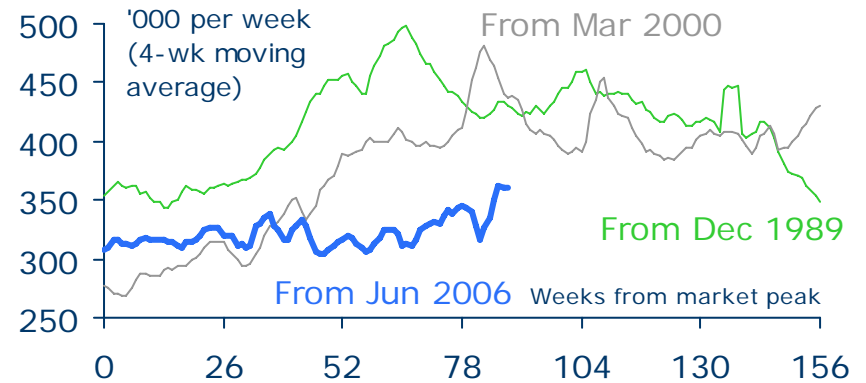
So far, however, the US labour market is not deteriorating as quickly as it did prior to the last two recessions

### US labour market indicators in three cycles

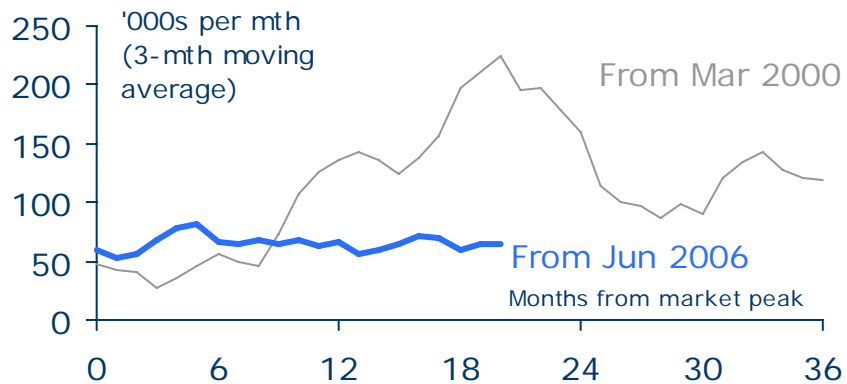
**Non-farm payroll employment**



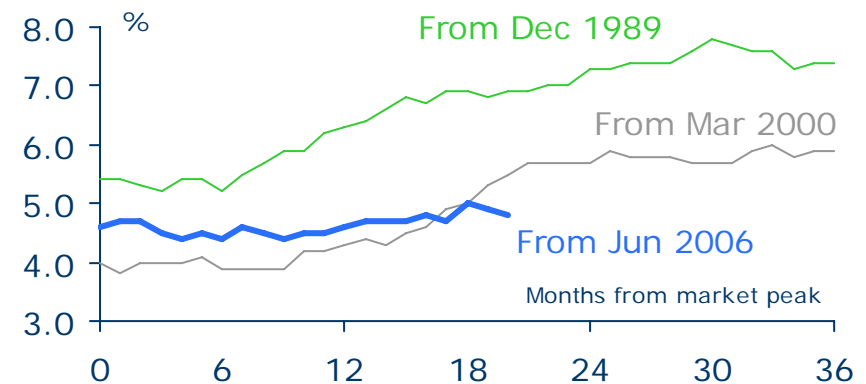
**Initial claims for unemployment benefits**



**Layoff announcements**



**Unemployment rate**



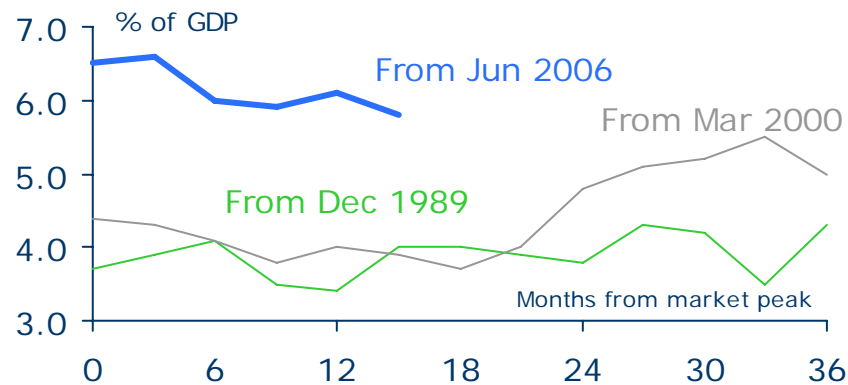
Sources: US Bureau of Labor Statistics; Challenger; ANZ.



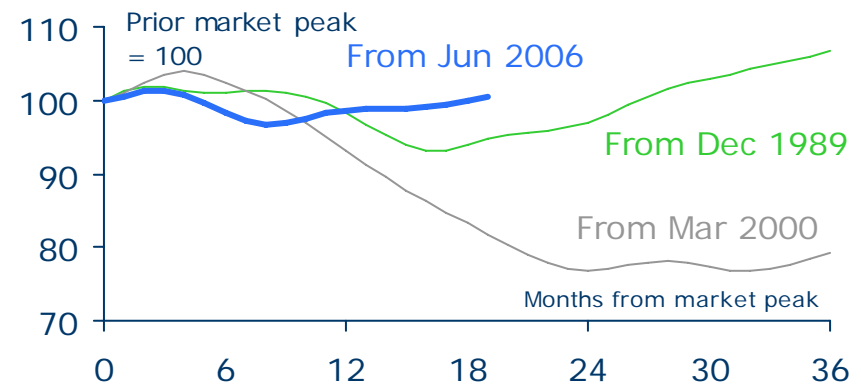
The US non-financial sector is in a strong financial position, and isn't retrenching in the way it has done in past recessions <sup>10</sup>

## US business finances and activity in three cycles

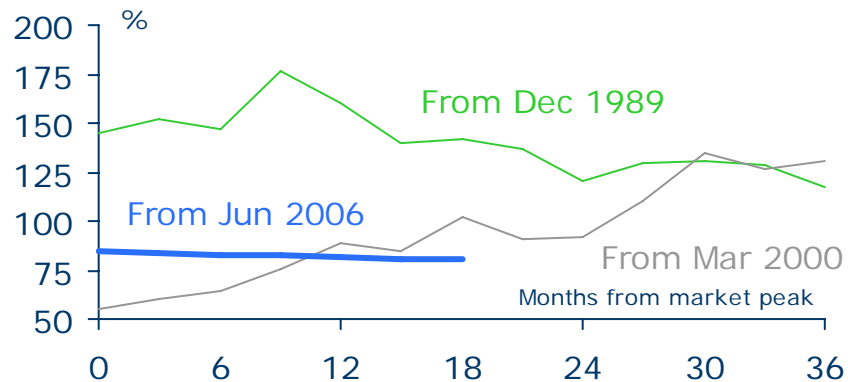
### After-tax corporate profits<sup>†</sup>



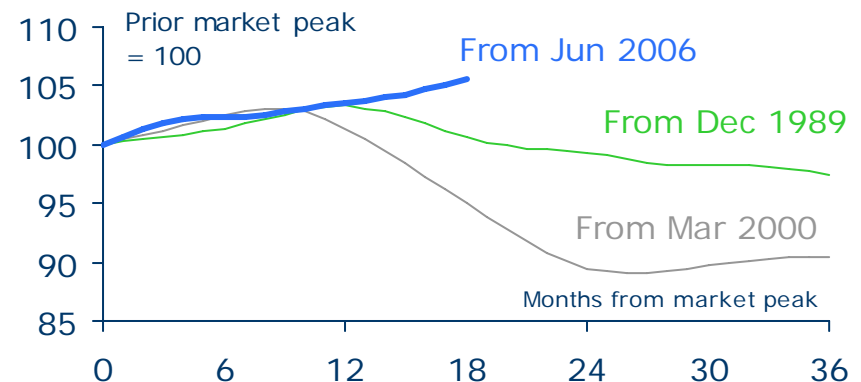
### Non-defence capital goods orders\*



### Debt-equity ratio<sup>†</sup>



### Manufacturing inventories



<sup>†</sup> Non-financial corporations \* Excluding aircraft.

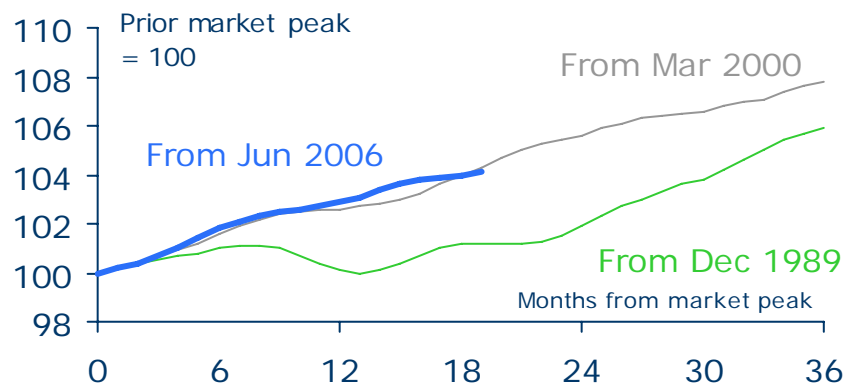
Sources: US Bureau of Economic Analysis; Federal Reserve; Commerce Department; ANZ.



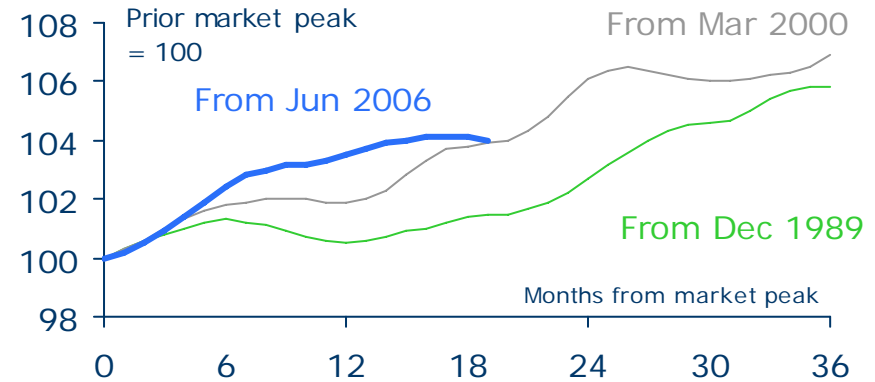
Household finances are likely to play a larger role in shaping the current cycle than in previous recessions <sup>11</sup>

## US household finances and spending in three cycles

### Real personal disposable income



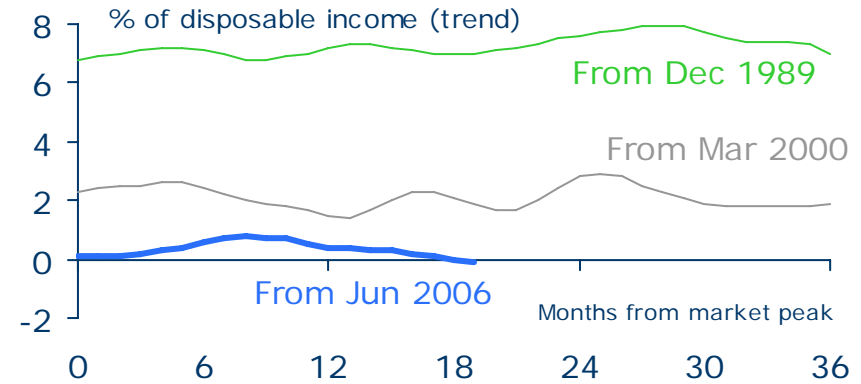
### Real consumer spending



### Personal net worth



### Personal saving ratio



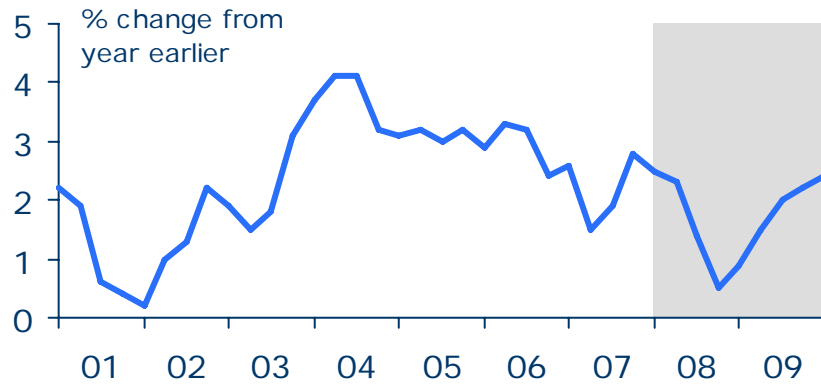
Sources: US Bureau of Economic Analysis; Federal Reserve; ANZ.



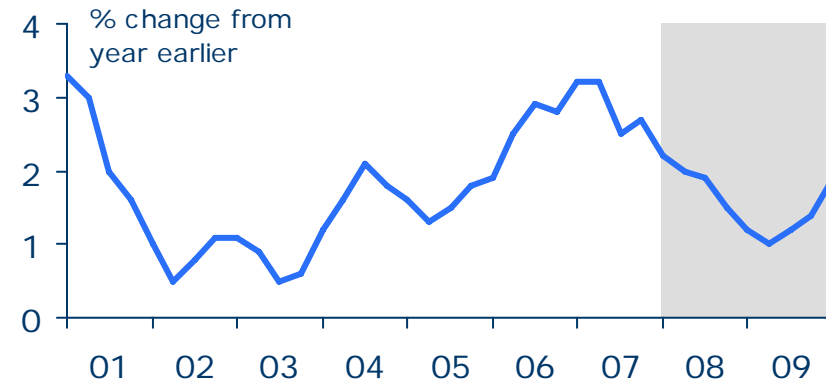
# All of the world's major advanced economies will experience slower growth in 2008

## Major advanced economies – real GDP growth

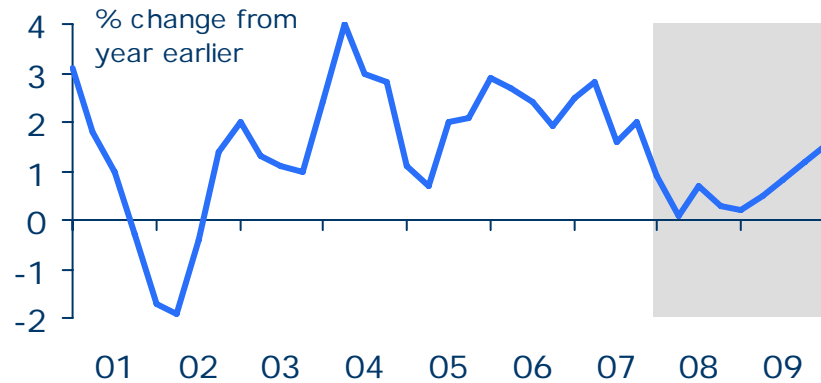
### United States



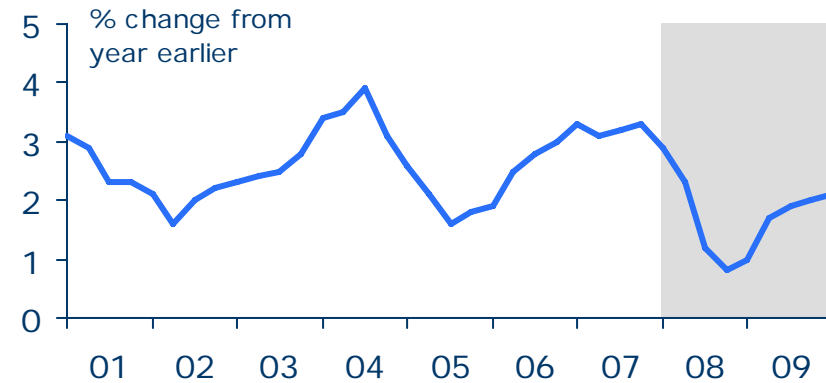
### Euro zone



### Japan



### United Kingdom

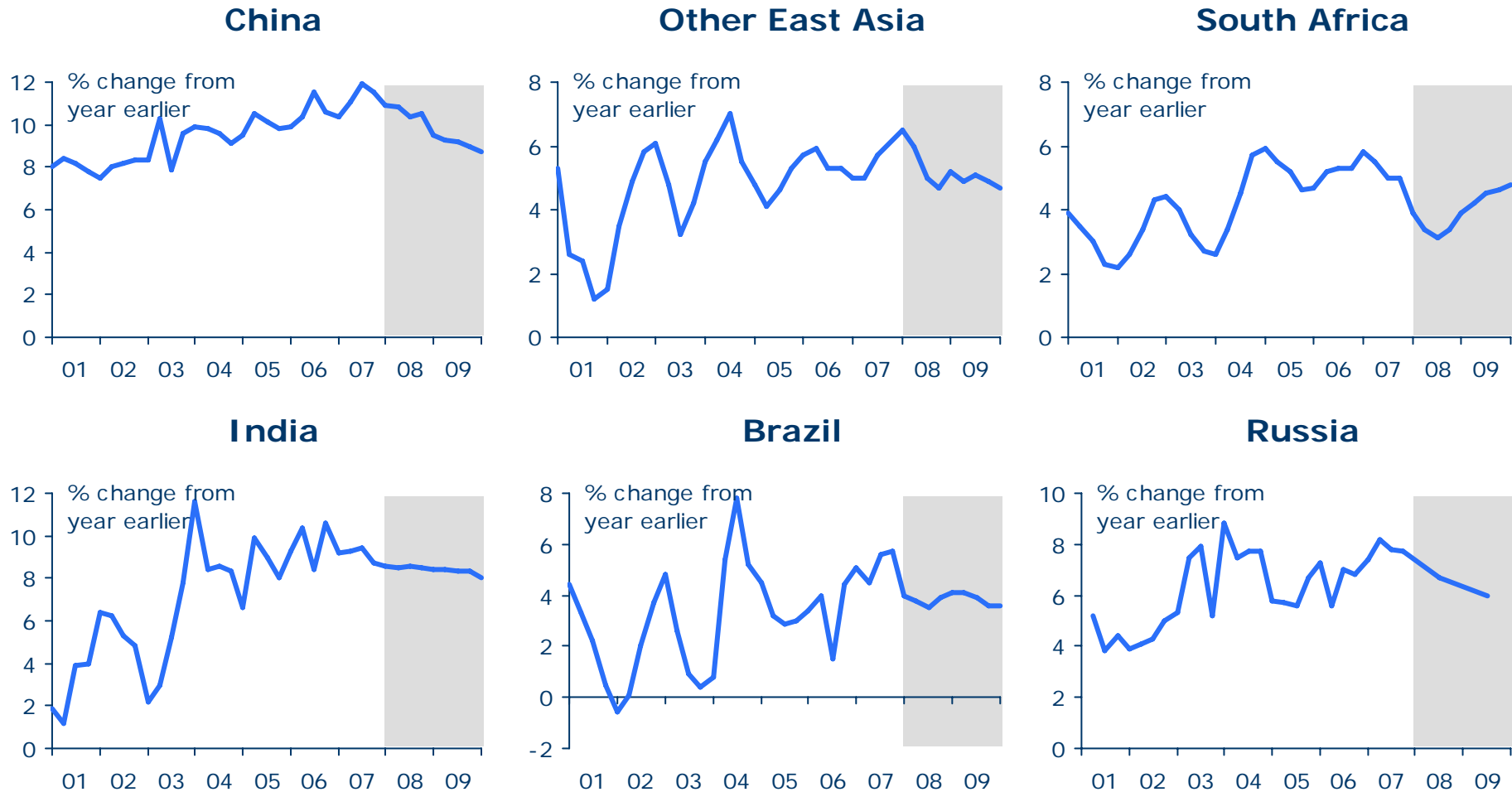


Sources: national statistical agencies; ANZ.



Major developing countries should continue to experience relatively strong growth, albeit a little slower than in 2006-07

### Major developing economies – real GDP growth

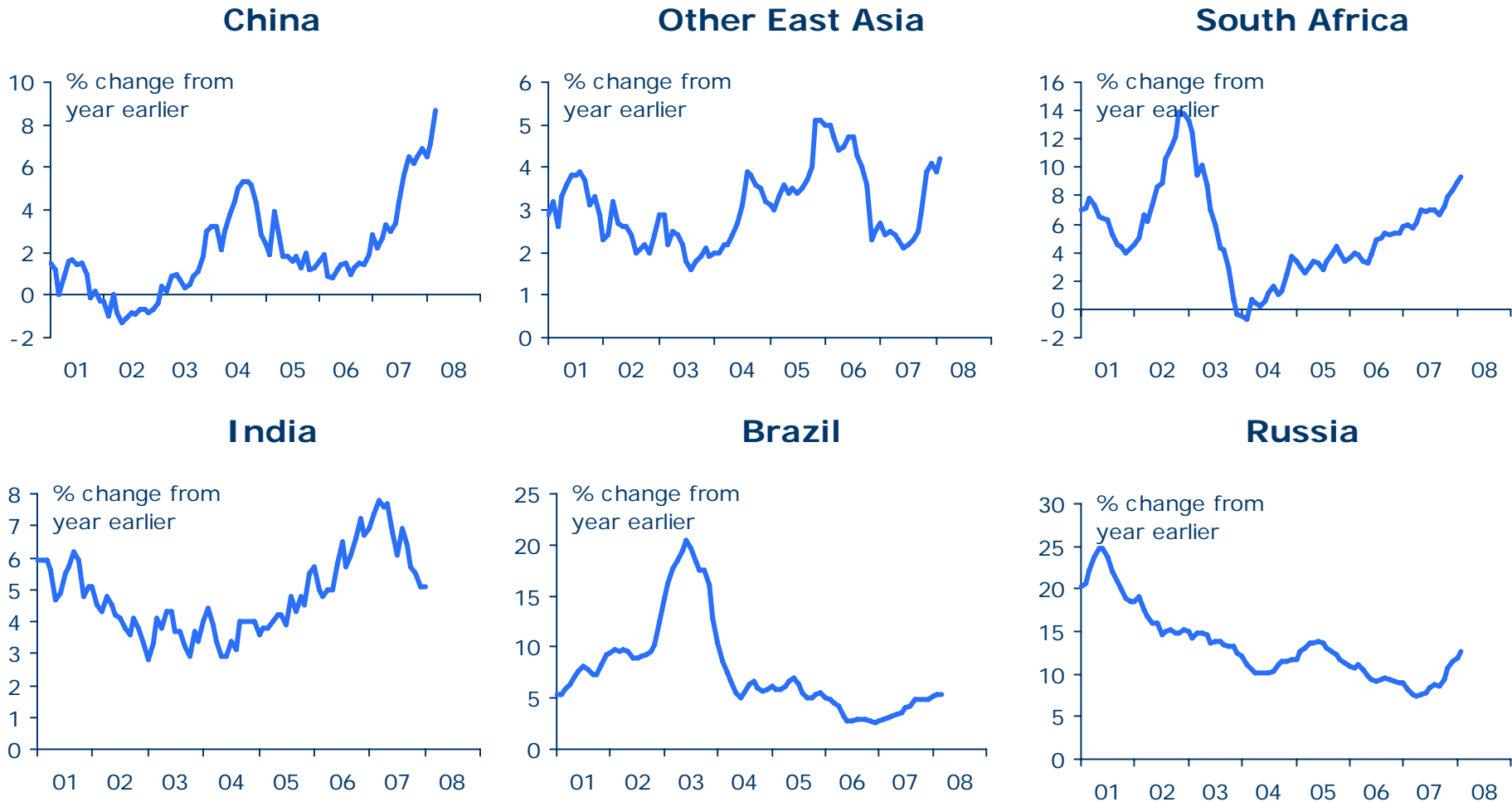


Sources: national statistical agencies; ANZ.



# Most developing countries are more worried about rising inflation than slowing growth

## Major developing economies – consumer prices

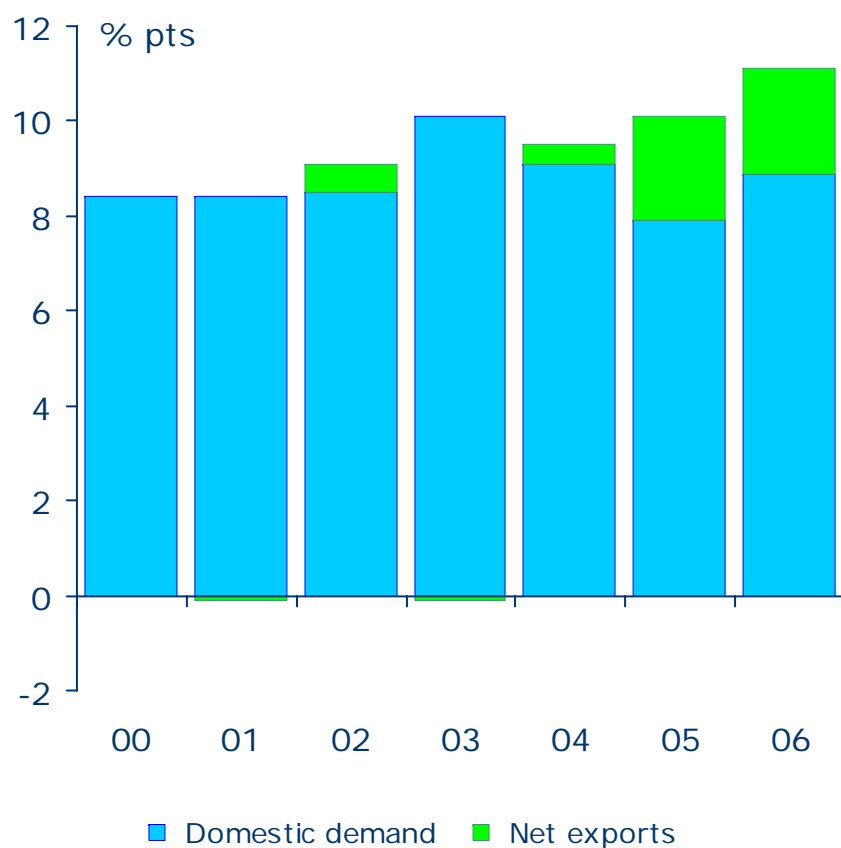


Sources: national statistical agencies; ANZ.

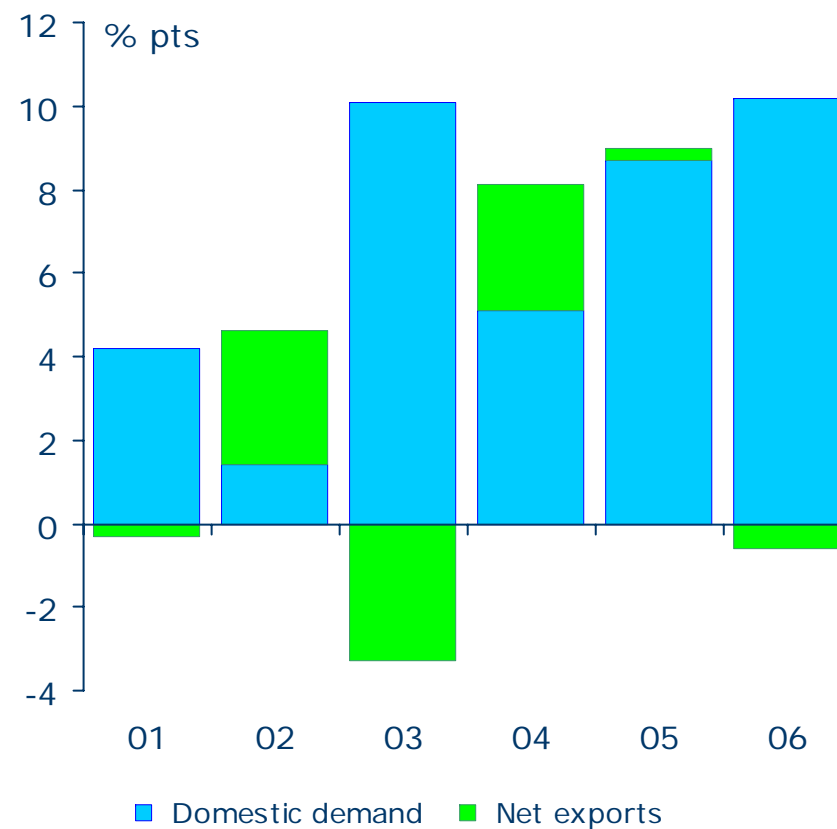


China's and India's growth has been predominantly driven by domestic demand, not by net exports

**Contributions to  
China's real GDP growth**



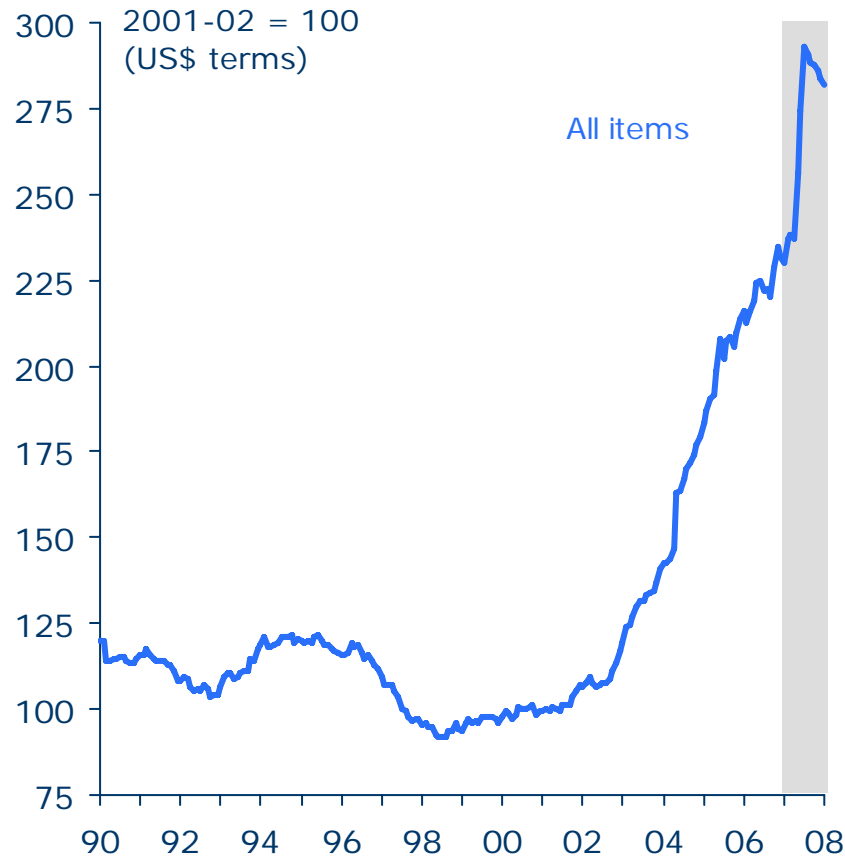
**Contributions to  
India's real GDP growth**



Source: China National Bureau of Statistics, CEIC.

Expected rises in coal and iron ore export prices will deliver a further leg upwards in the commodity price cycle in 2008-09

### Australian export commodity prices



### Australia's "terms of trade"

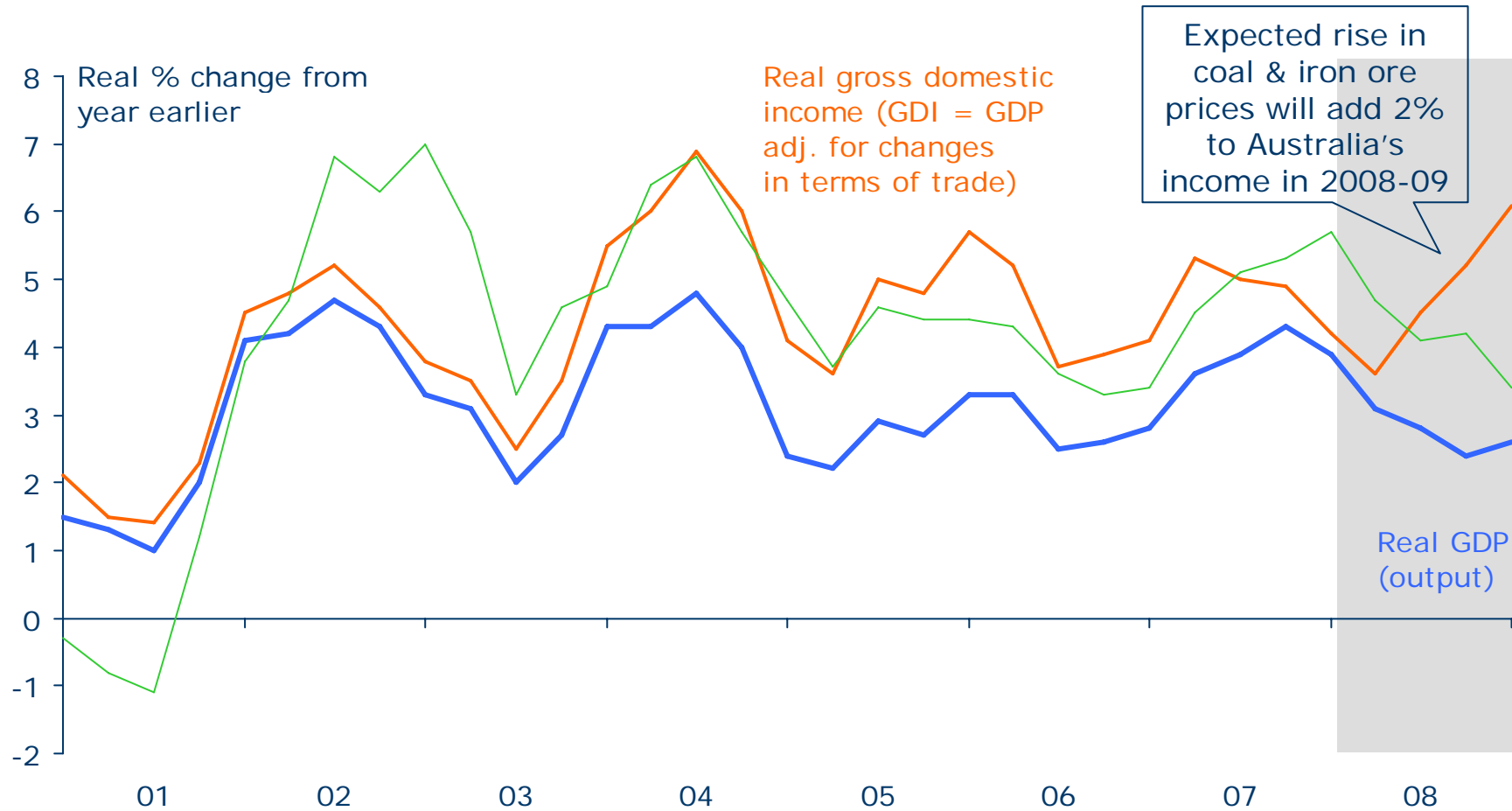


Note: "terms of trade" is the ratio of average export to average import prices.  
Sources: Reserve Bank of Australia; ABS; ANZ.



This will boost Australia's income by another 2% in 2008-09, on top of 11% from terms of trade gains already so far this decade <sup>17</sup>

### Australia's real gross domestic income and output

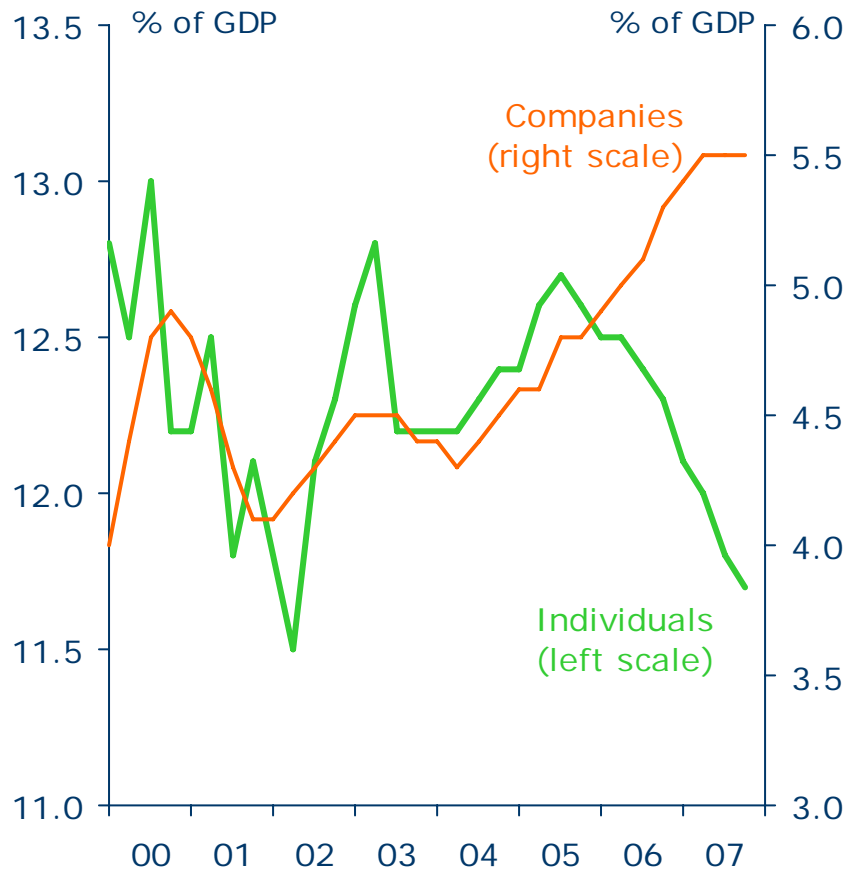


Sources: Australian Bureau of Statistics; ANZ.

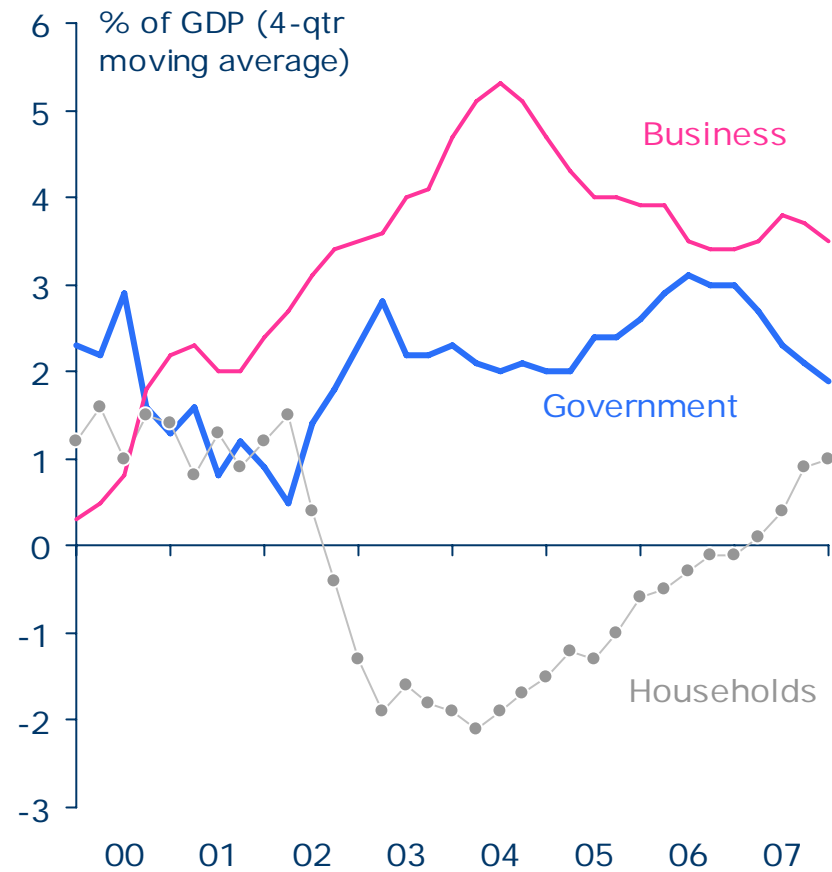


Income will continue to be re-cycled from the business sector to households through the Budget, boosting total spending <sup>18</sup>

**Australian income tax collections**



**Net saving by sectors of the Australian economy**



Sources: Australian Bureau of Statistics; ANZ.



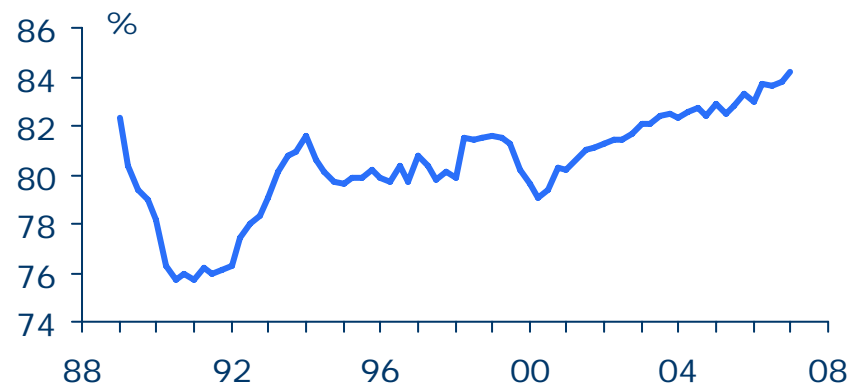
After more than 16 years of continuous economic growth, Australia's economy has run into serious capacity constraints

### Indicators of 'spare capacity' in the Australian economy

**Unemployed persons per job vacancy**



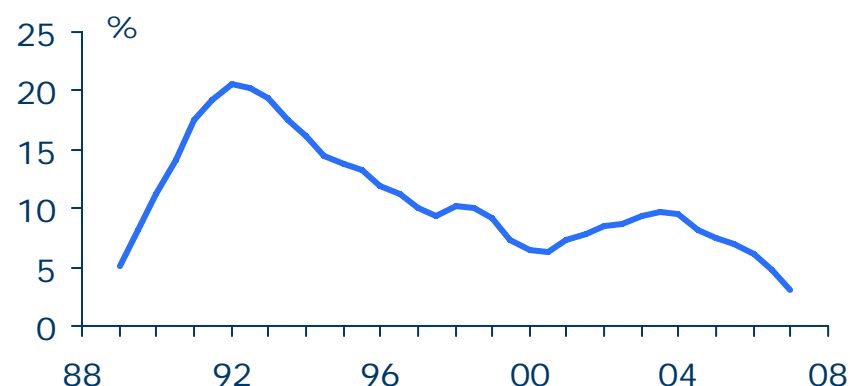
**Capacity utilization rate**



**Businesses reporting labour shortages**



**Office vacancy rates**

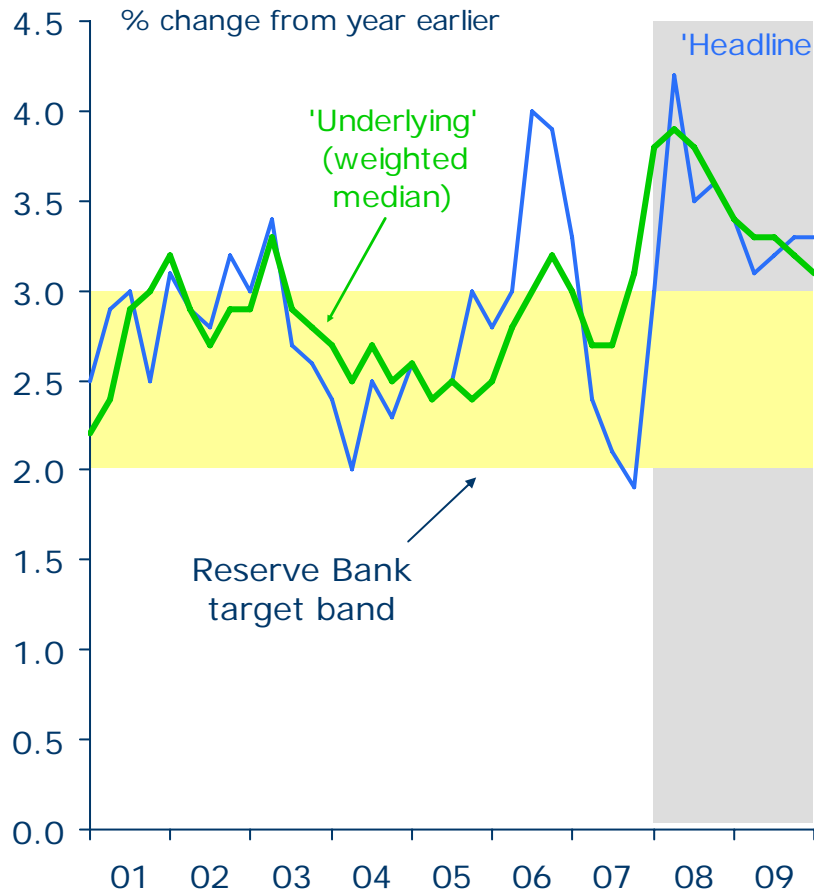


Sources: Australian Bureau of Statistics; nabCapital; Property Council of Australia.

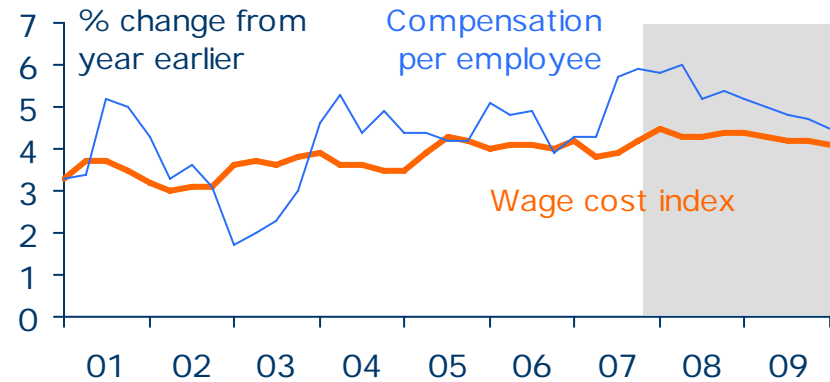


Underlying inflation is at its highest level since 1991 – and the RBA is particularly concerned at rising inflation expectations

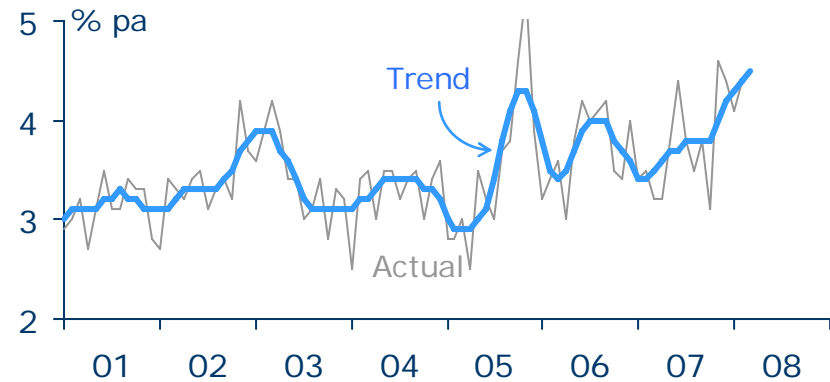
### Consumer prices



### Measures of labour costs



### Household inflation expectations



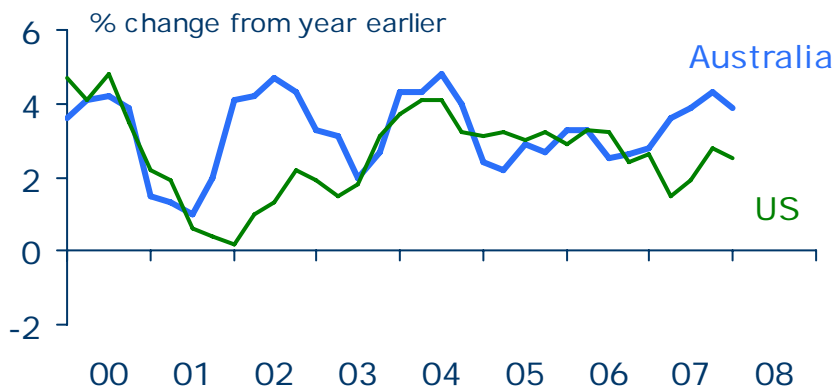
Sources: Australian Bureau of Statistics; Reserve Bank of Australia; Westpac-Melbourne Institute; ANZ.



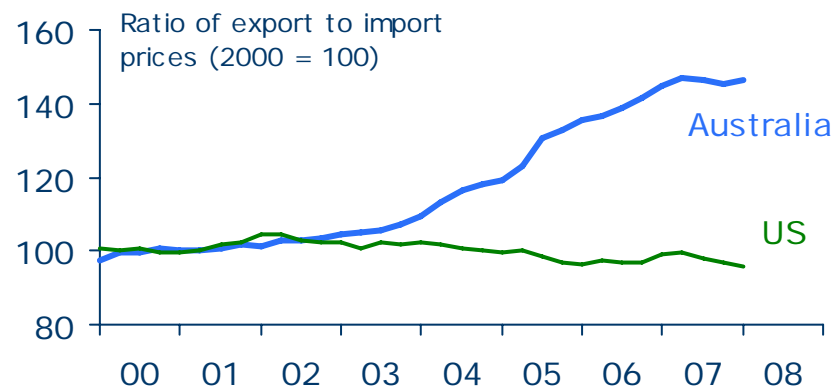
Australian and US economic cycles have not been closely correlated this decade, and are diverging further now

### Australian and US economic indicators

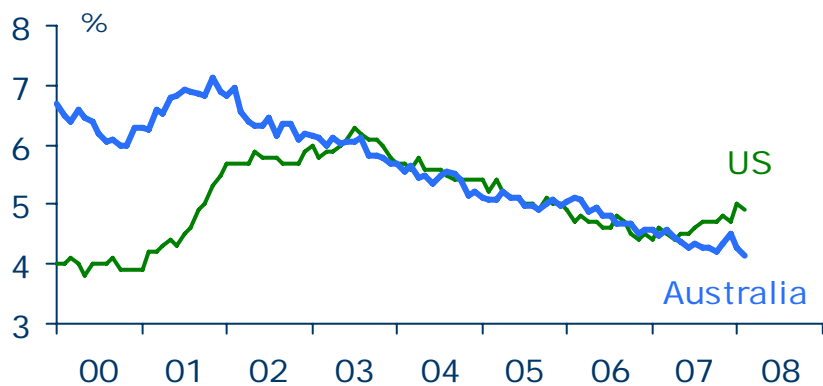
**Real GDP growth**



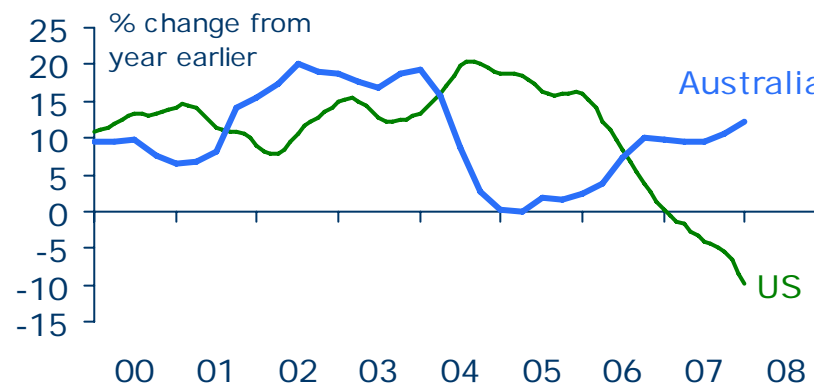
**Terms of trade**



**Unemployment**



**House prices**



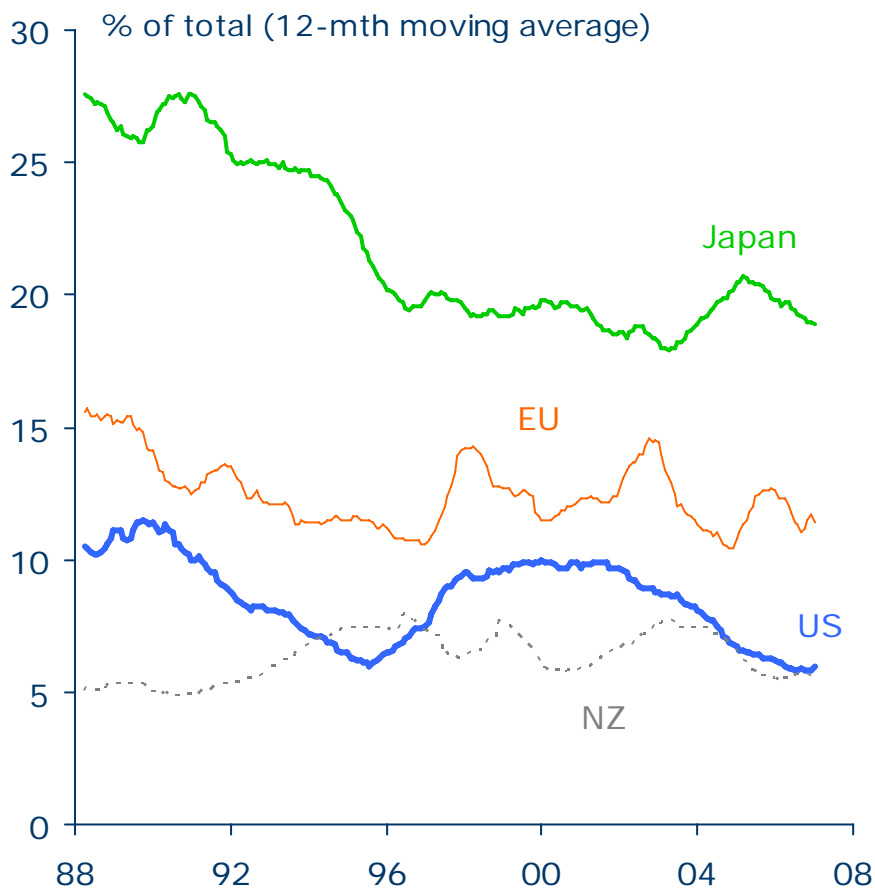
Sources: Australian Bureau of Statistics; US Bureau of Economic Analysis; US Bureau of Labor Statistics; S&P.



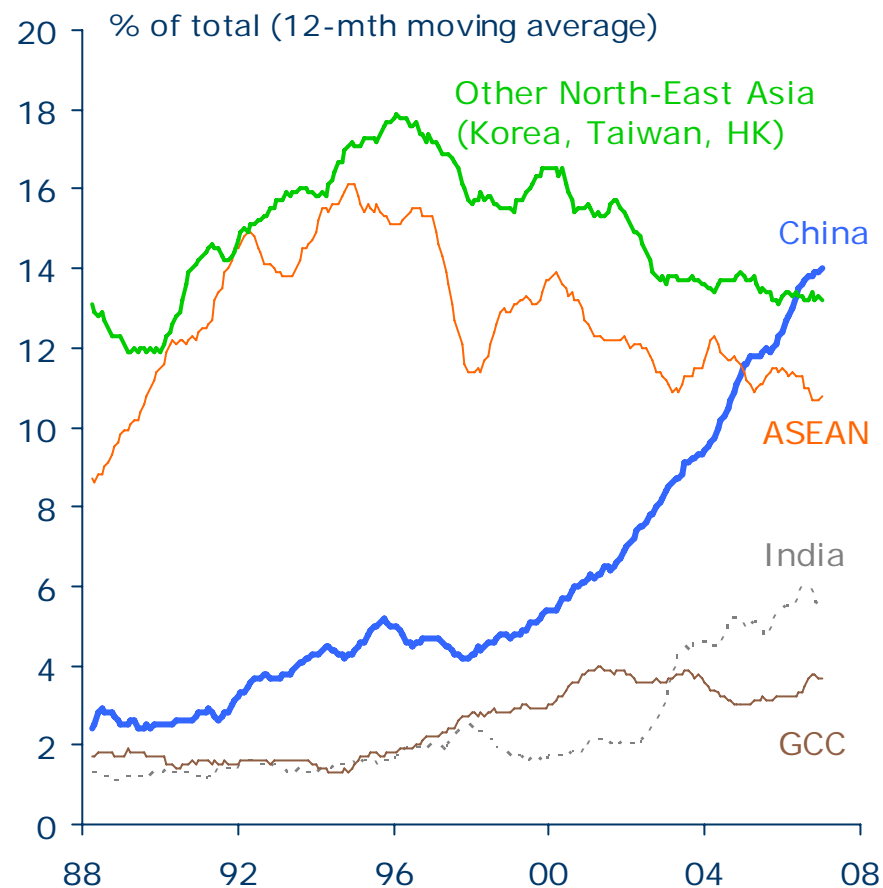
Australia is much less directly dependent on the US and other OECD export markets than it used to be

### Australia's major export markets

Advanced economies



Developing economies

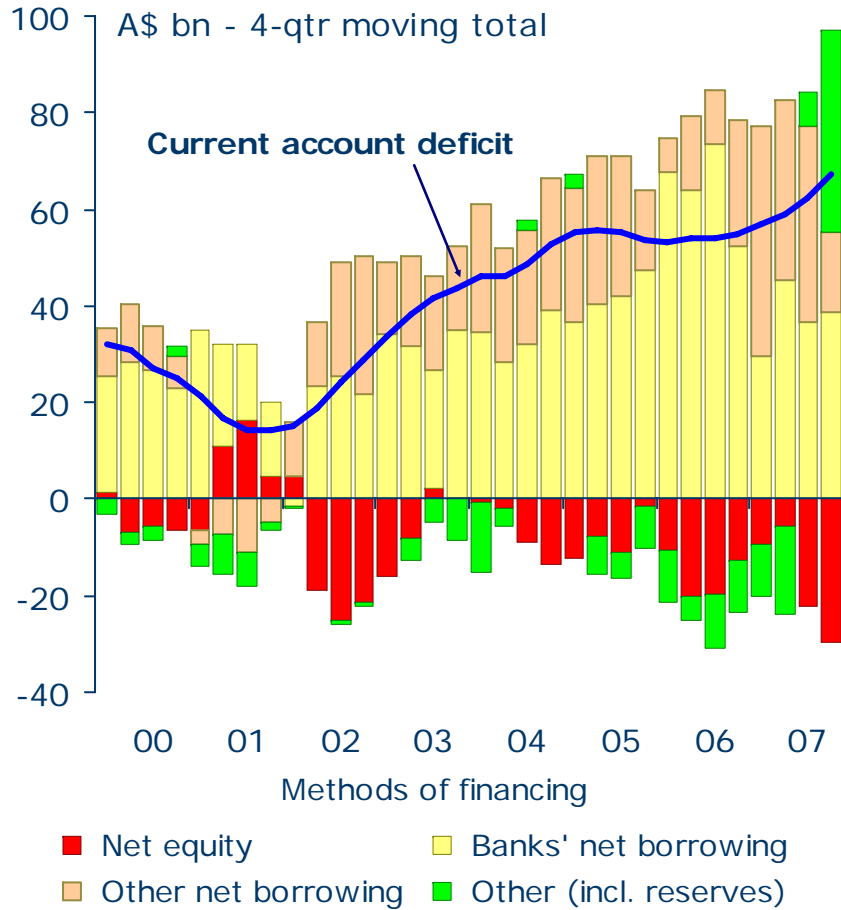


Sources: Australian Bureau of Statistics.

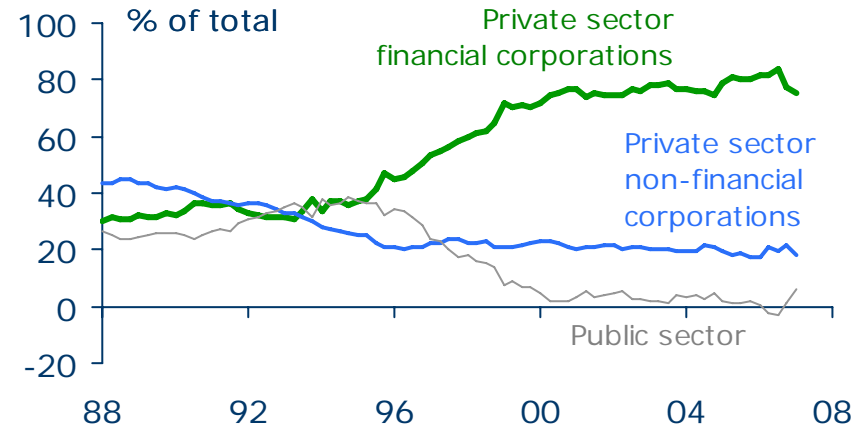


# The downside risk to Australia stems from our large current account deficit and the way we've financed it

### Financing Australia's current account deficit



### Net foreign debt, by borrower



### Maturity structure of net foreign debt



Sources: Australian Bureau of Statistics; ANZ.



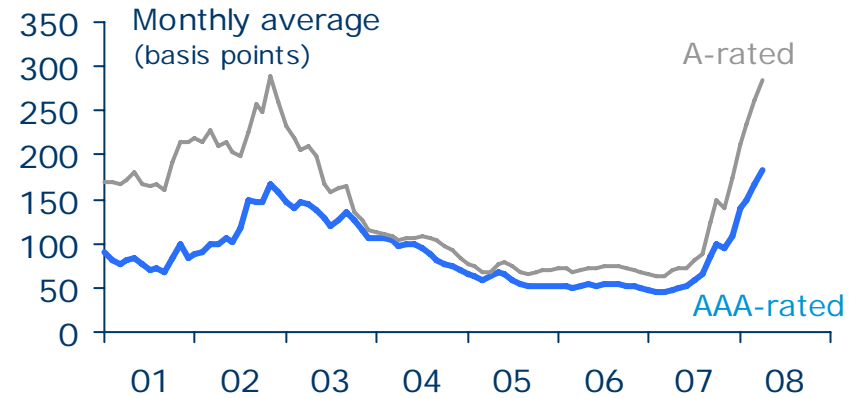
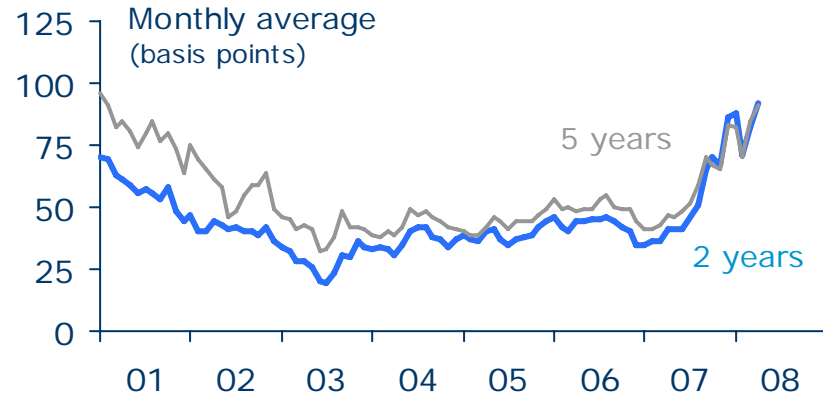
# Australian longer-term debt markets have likewise seen similar increases in spreads as US debt markets

## Swap spreads

## Corporate bond yield spreads

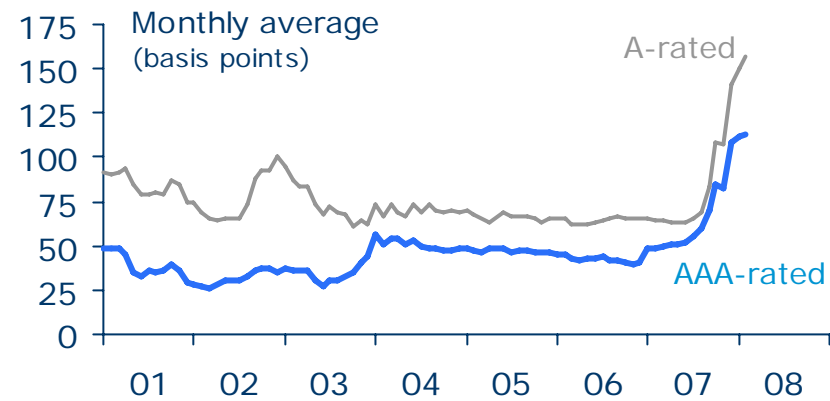
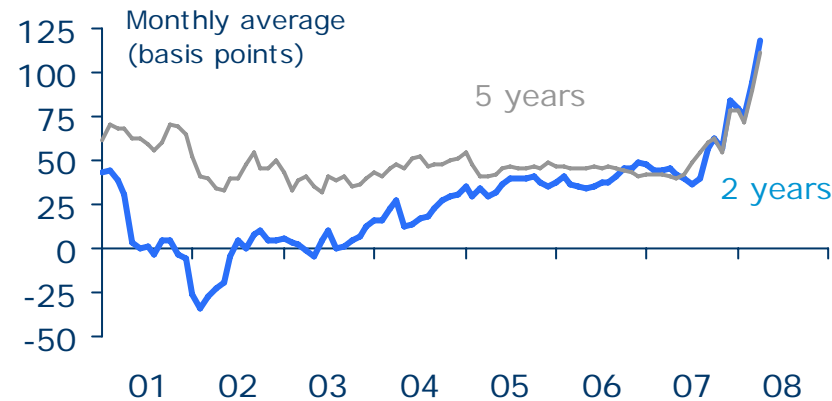
### United States

### United States



### Australia

### Australia

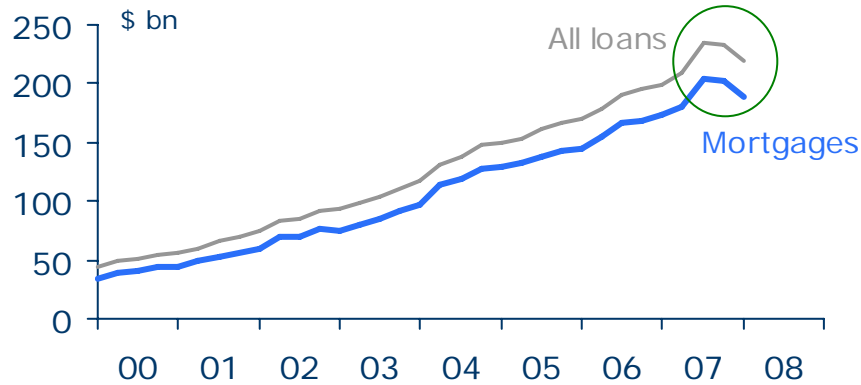


Note: spreads are to government bond yields of comparable maturities.  
 Sources: Thomson Financial; Bloomberg; Reserve Bank of Australia.

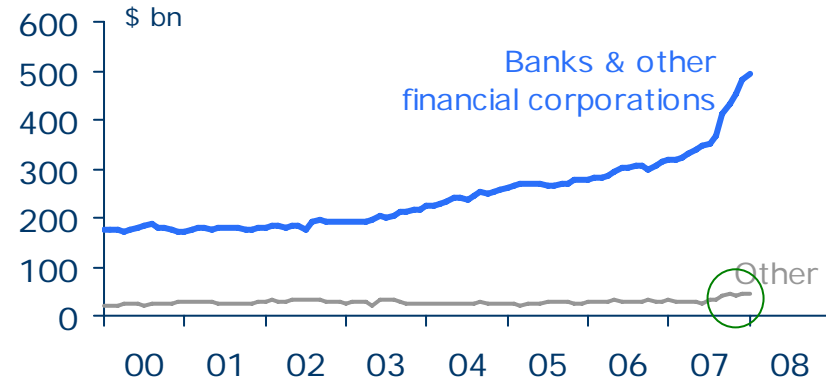


In Australia, as in the US, the debt securities markets have almost completely closed to non-bank borrowers

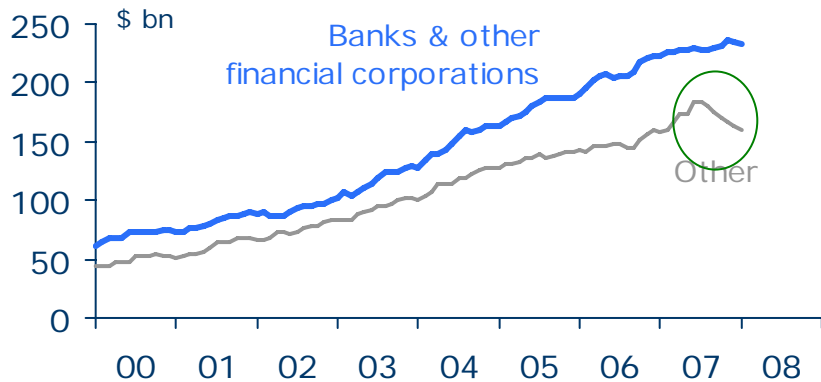
**Securitizers' loan assets**



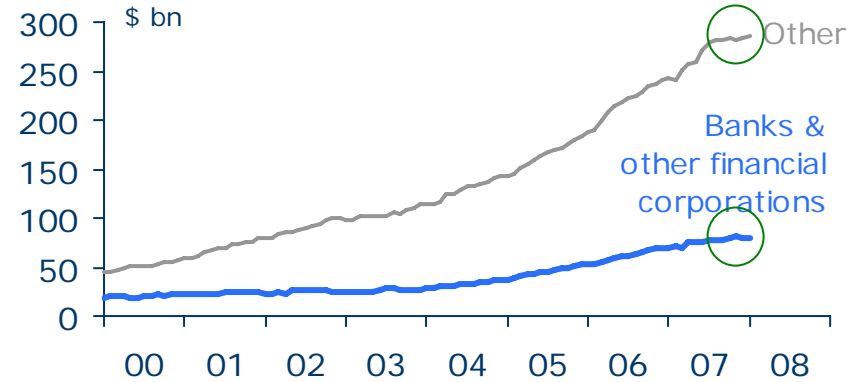
**Short-term debt securities issued in Australia**



**Australian non-government debt securities issued offshore**



**Long-term debt securities issued in Australia**

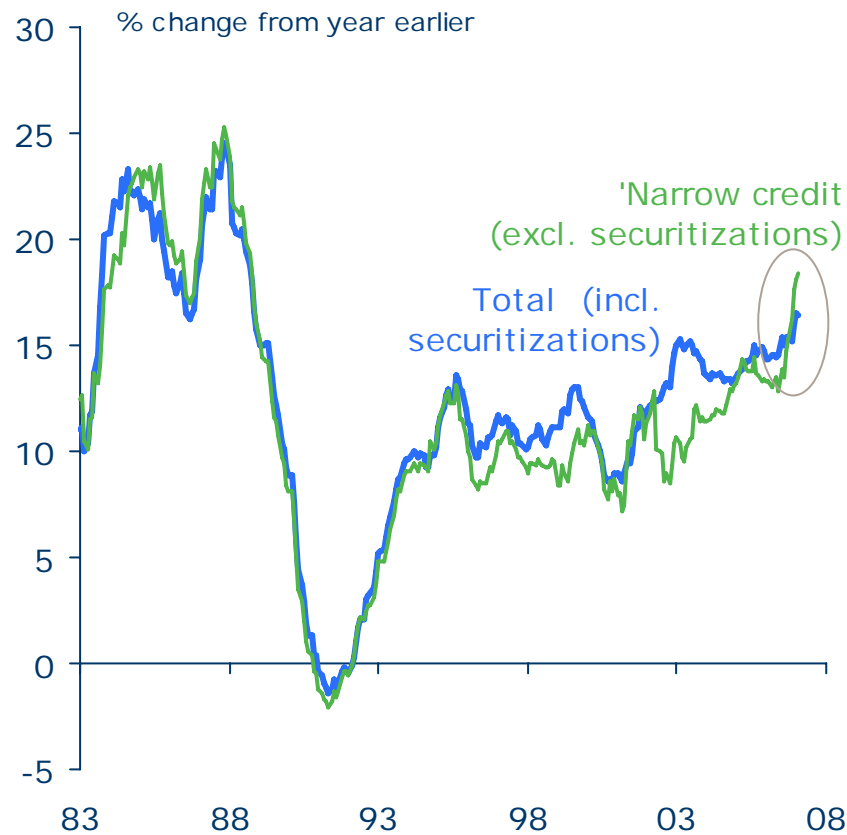


Note: excludes government debt securities. Source: Reserve Bank of Australia

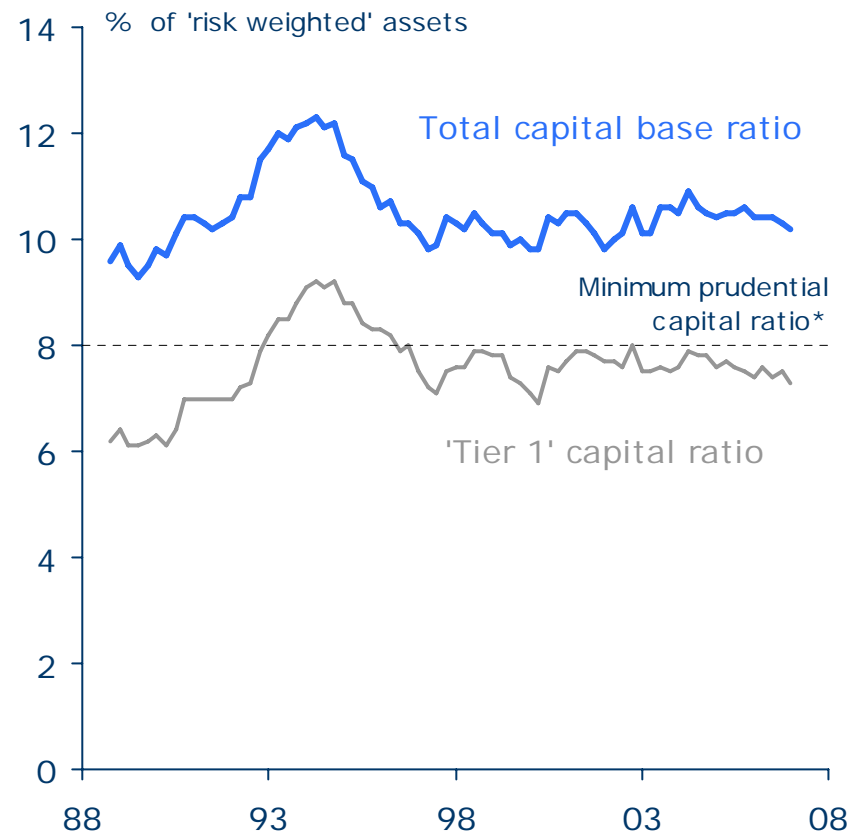


With debt securities markets largely closed, credit demand is returning to the banking system – straining banks' capital

**Australian financial intermediaries' business lending**



**Australian banks' capital adequacy ratios**

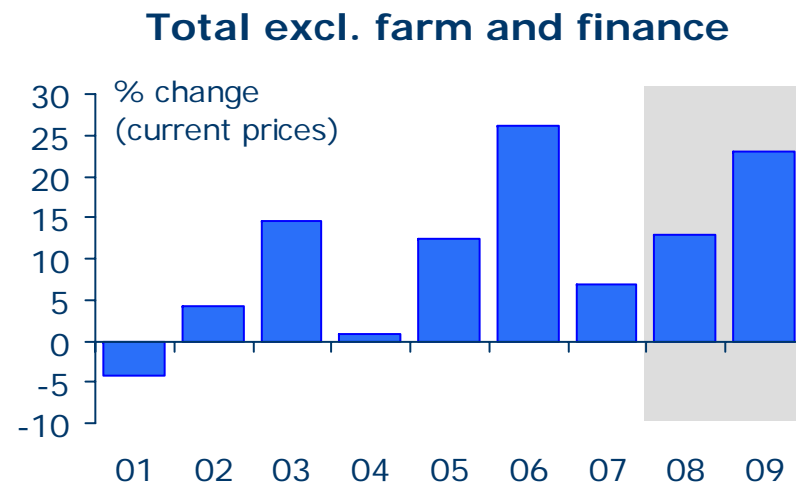
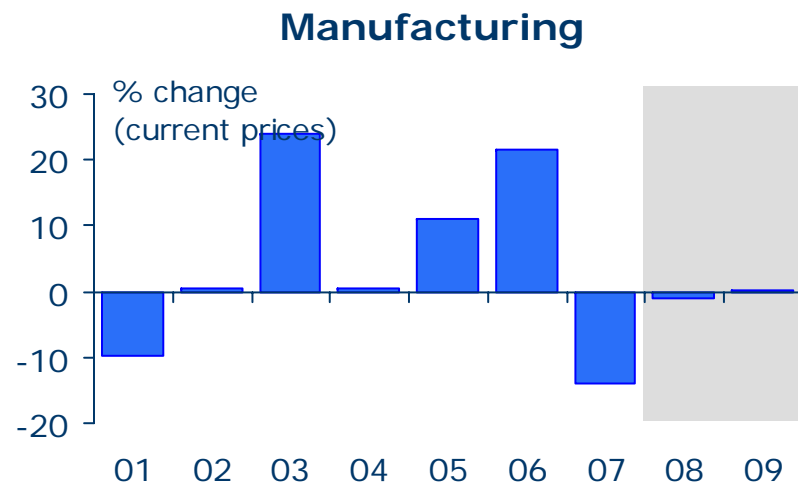
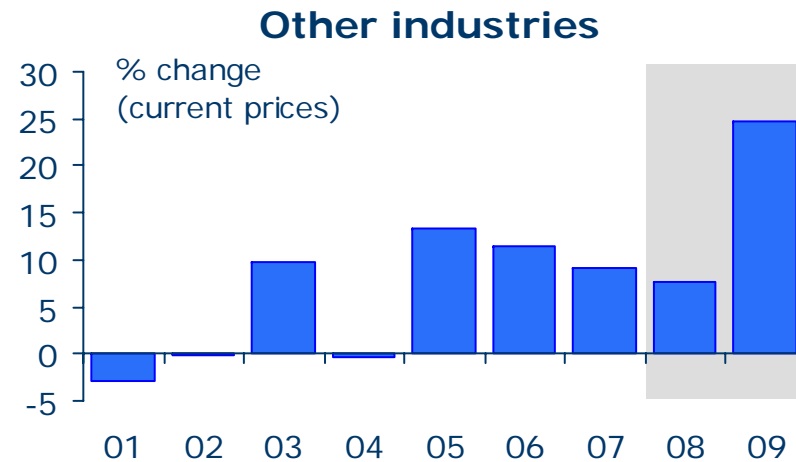
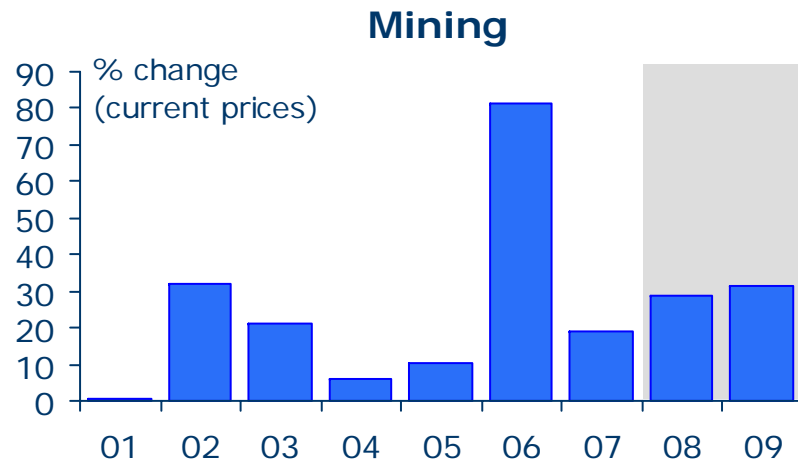


\* Under APRA regulations, banks must maintain total base capital in excess of 8% of their risk-weighted assets, half of which must be in the form of 'Tier 1' capital (paid-up capital, disclosed reserves and retained earnings).  
Sources: Reserve Bank of Australia; Australian Prudential Regulation Authority.



# Business investment is expected to keep rising strongly, despite <sup>27</sup> global uncertainties and deteriorating financial conditions

## Actual and projected capital expenditure



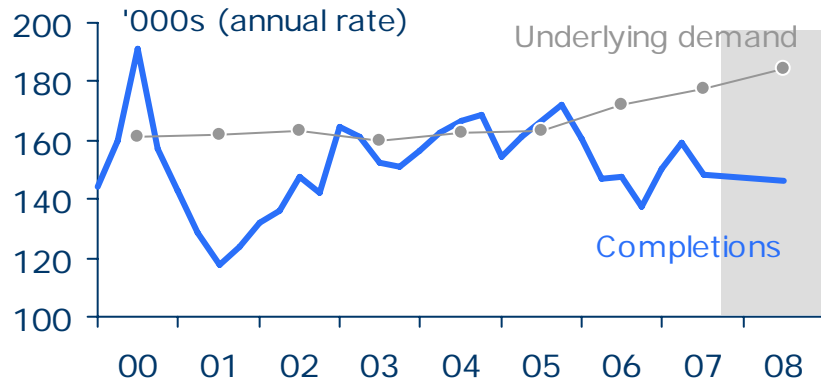
*Note:* Data are for financial years ended 30 June. Projections for 2007-08 and 2008-09 are based on expected levels of capital expenditure reported to the ABS in its January-February 2008 survey, adjusted for the extent to which expectations in this survey have been realized over the five years to 2006-07. *Sources:* ABS; ANZ.



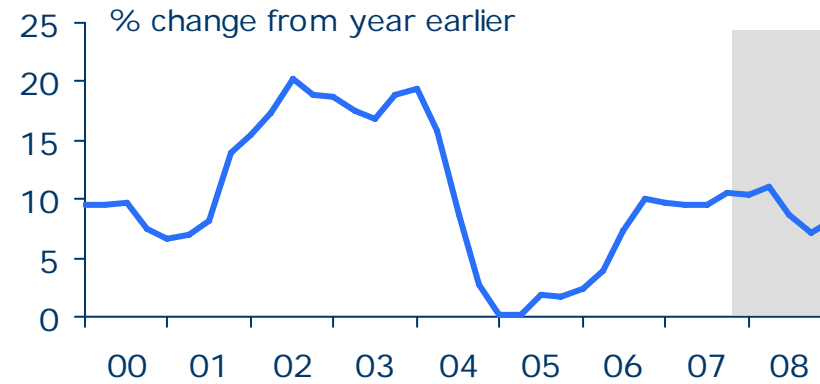
Housing is also in short supply, putting upward pressure on prices and rents

### Australian housing market fundamentals

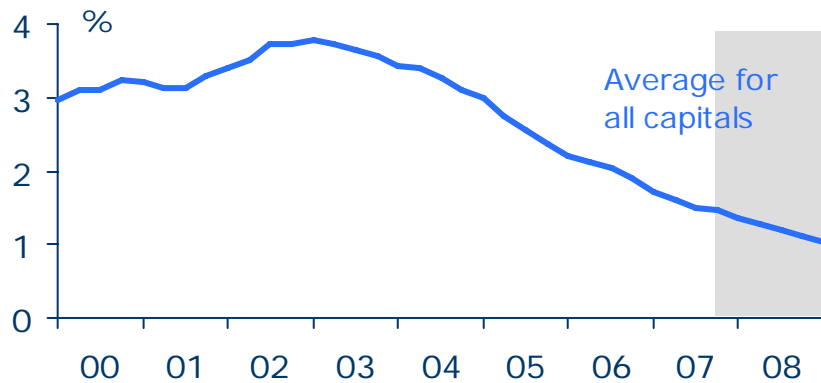
**Housing supply and demand**



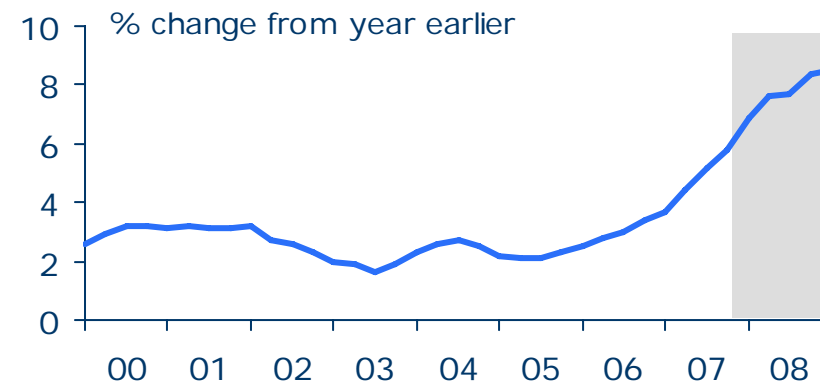
**Capital city house prices**



**Rental vacancy rates**



**Capital city dwelling rents**



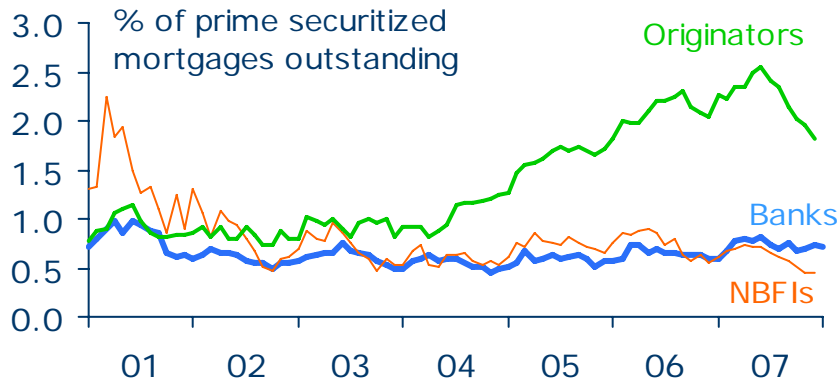
Sources: Australian Bureau of Statistics; Real Estate Institute of Australia; ANZ.



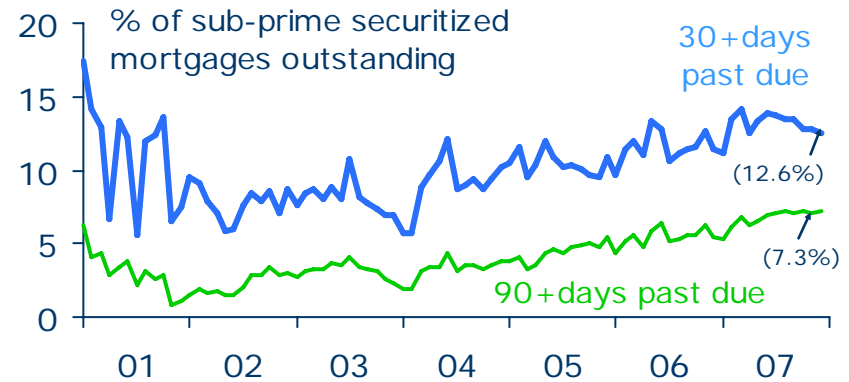
# Mortgage delinquencies actually declined last year, despite rising interest rates

## Mortgage delinquency rates

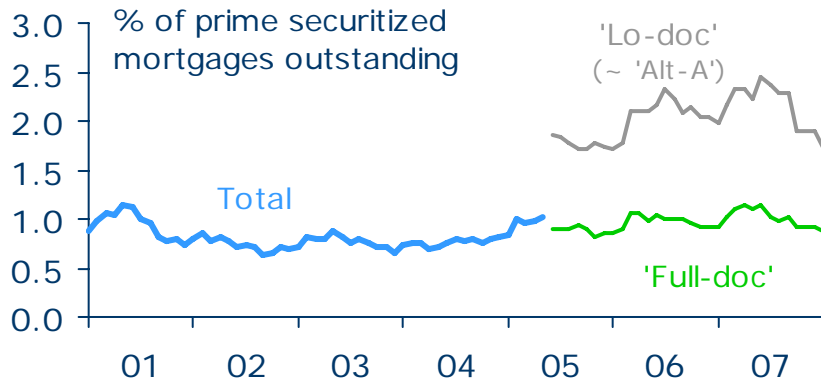
**Prime securitized mortgages  
30 days + past due, by lender**



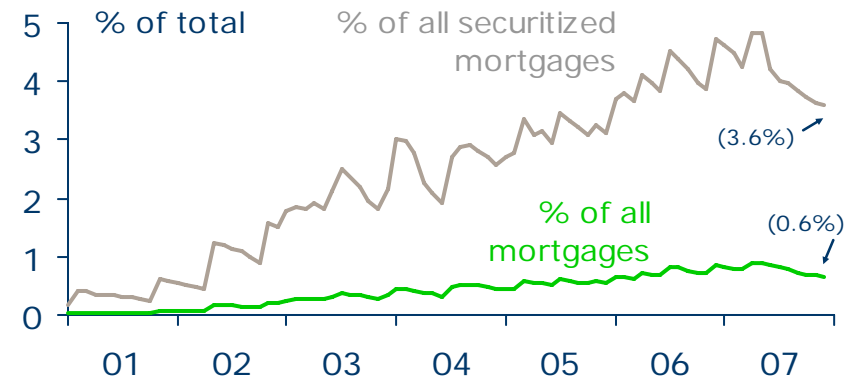
**Sub-prime securitized mortgages  
30 days + past due**



**Prime securitized mortgages  
30 days + past due, by type of loan**



**Sub-prime mortgages as a pc of  
total mortgages**

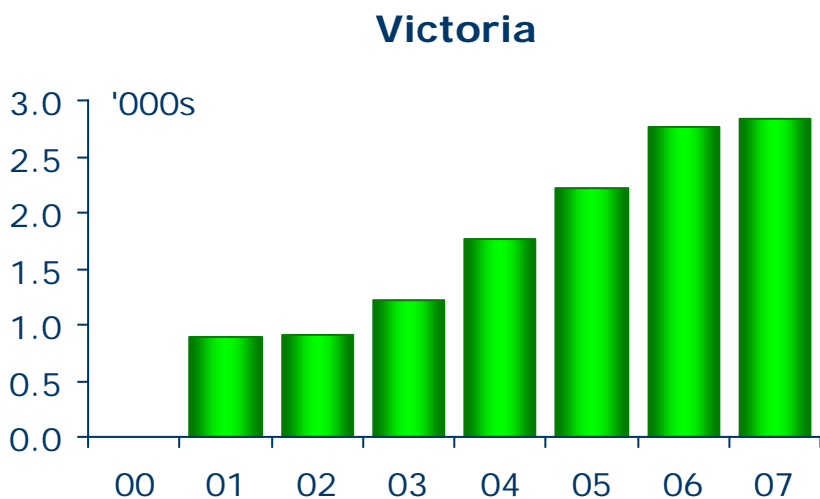
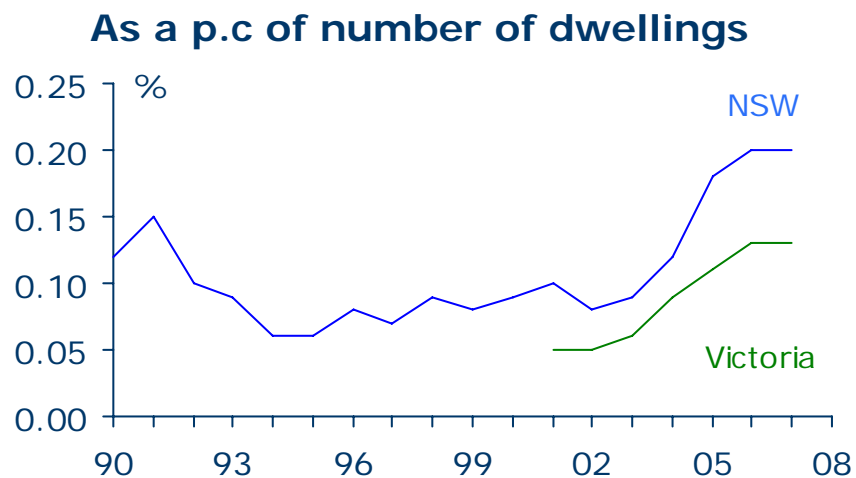


Sources: S&P.

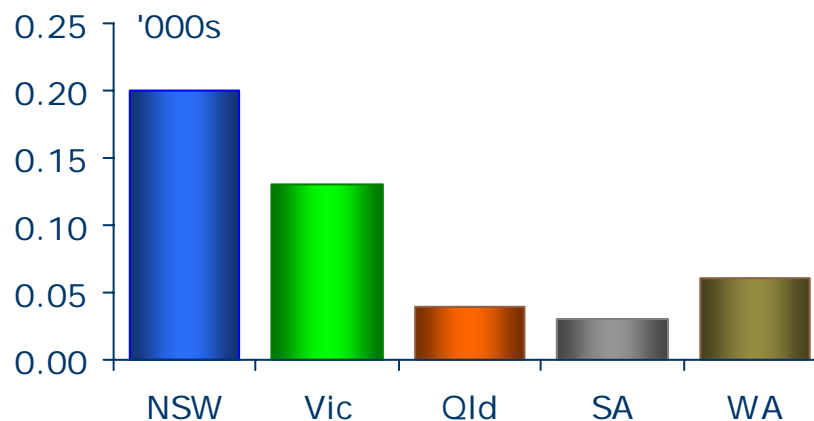


Repossessions are increasing, but are still very low as a percentage of the total stock of dwellings

### Repossession claims lodged with State Supreme Courts



**As a p.c. of number of dwellings, 2007**

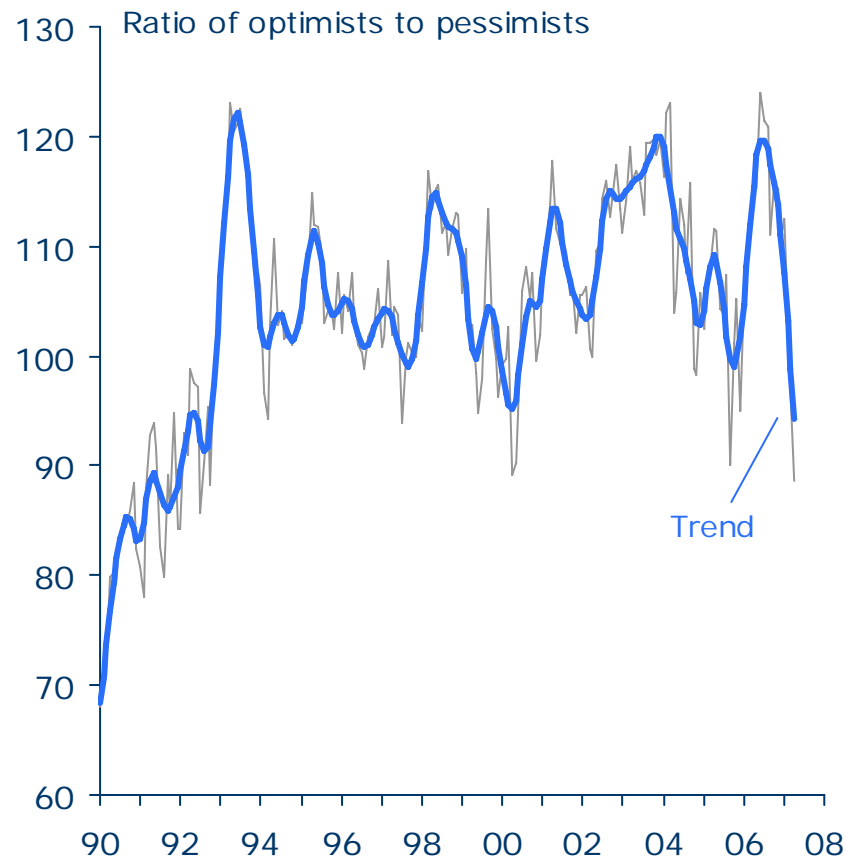


Sources: Financial Review; ANZ.

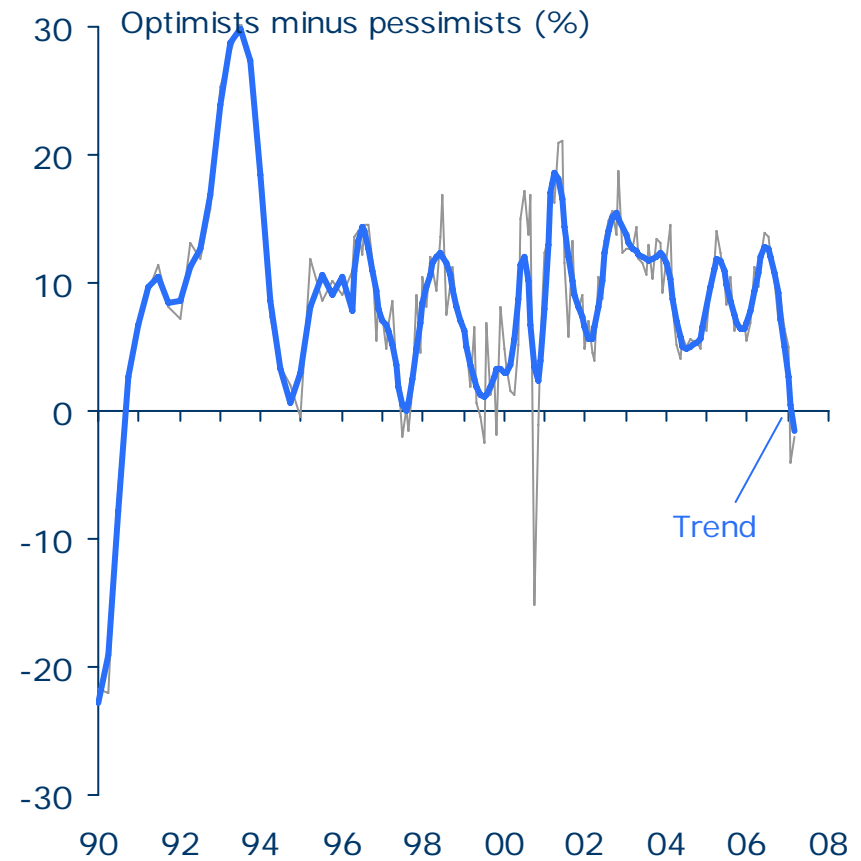


# Sharp falls in consumer and business confidence in early 2008 may indicate that the economy is at a turning point

### Consumer confidence



### Business confidence

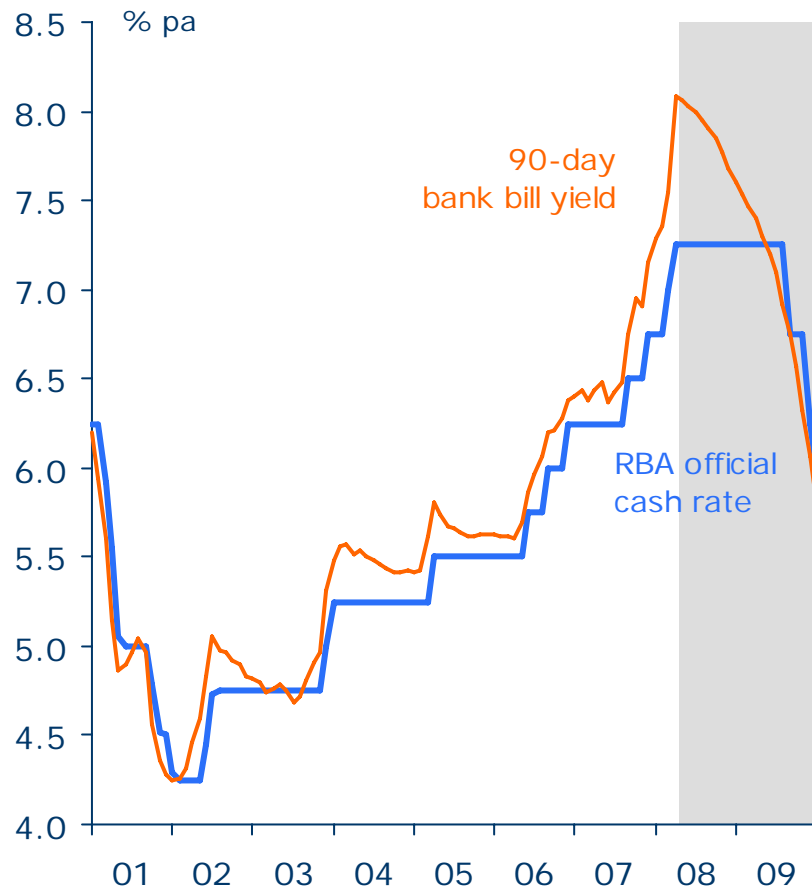


Sources: Westpac-Melbourne Institute; National Australia Bank; trend estimates derived by ANZ.



The 1% increase in official rates since August, combined with the effects of the credit crunch, should now be 'enough' for the RBA<sup>32</sup>

### Short-term interest rates



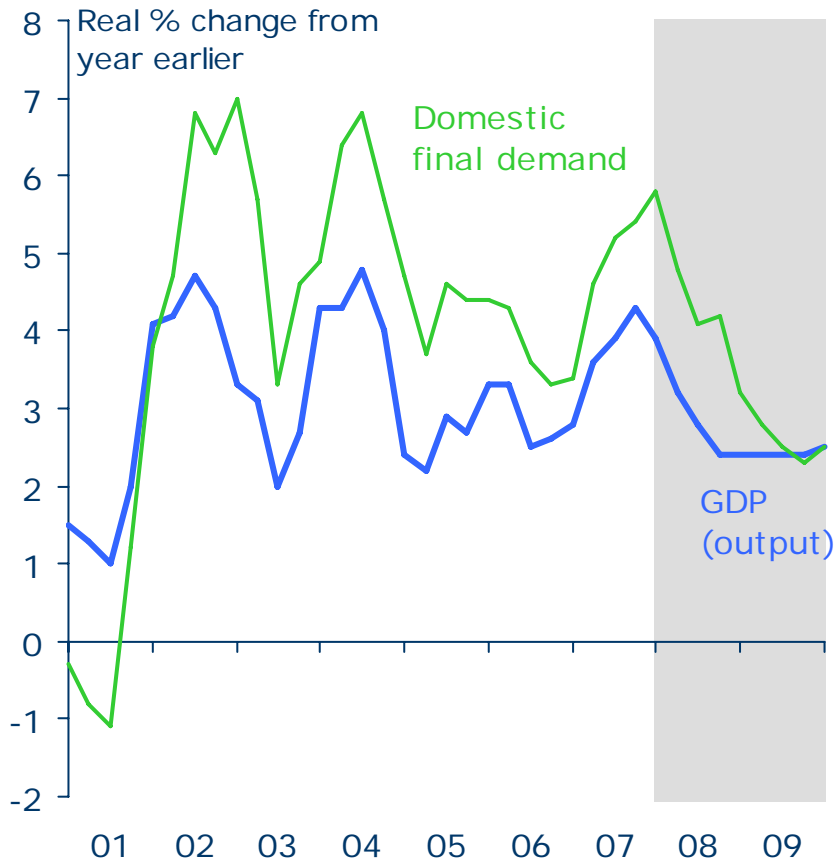
Sources: Thomson Financial; ANZ.

- The RBA says that 'a significant slowing in domestic demand ... is likely to be necessary to reduce inflation over time'
- ... and (in contrast to the relatively gradual approach for the period 2002-2006) has since August last year tightened monetary policy more aggressively, lifting the cash rate by 1 percentage point in seven months
- Mortgage rates have risen by an additional 0.2-0.4 pc points, and business rates by rather more, over and above this increase in official rates
- Combined with the other effects of the credit crunch, a stronger exchange rate and sharply lower share prices this amounts to a substantial tightening of financial conditions
- Moreover there is now some evidence that this tightening is starting to 'bite'
- Official rates have thus probably peaked, and will fall in 2009

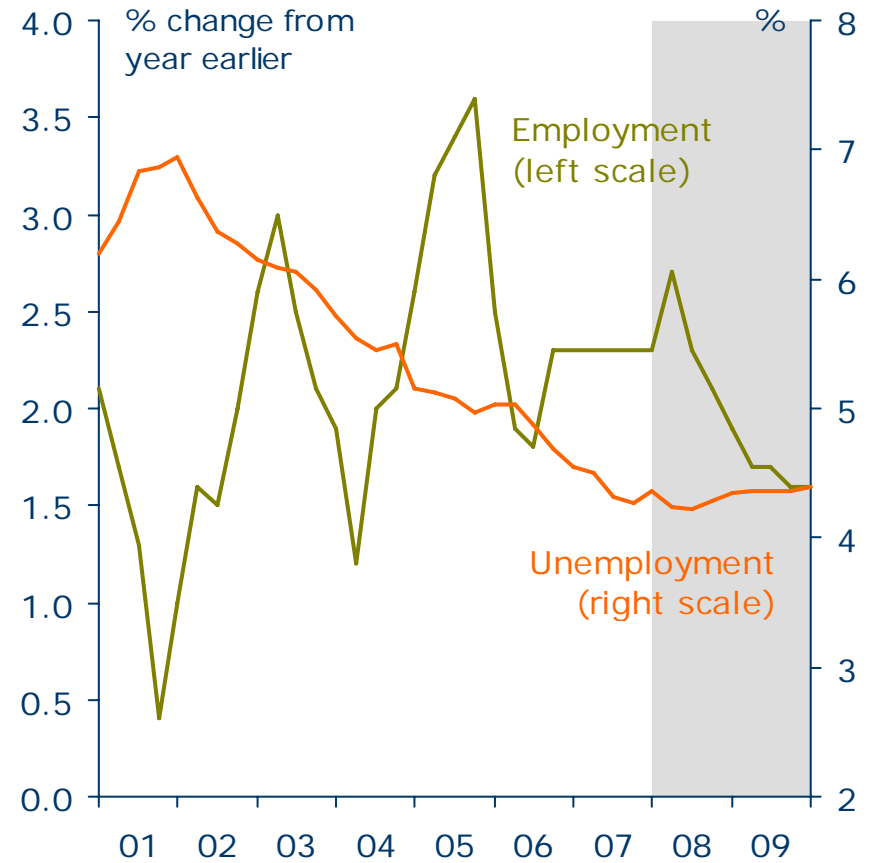


Tighter financial conditions will likely see a significant slowing in domestic demand over the next eighteen months 33

### Spending and output



### Employment and unemployment



Sources: Australian Bureau of Statistics; ANZ.



# Summary

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- The US sub-prime mortgage crisis has morphed into a fully-fledged global credit crunch
  - the US economy may fall into recession (though it probably isn't there yet)
  - although as a large creditor Japan isn't directly affected by the credit crunch, its economy is still fragile and vulnerable to external shocks
- Developing Asian and other emerging economies are much less reliant on foreign capital than previously and so won't be significantly affected by the credit crunch, although their exports to the US will slow
  - developing country demand will likely keep commodity prices high
- Although Australia will continue to benefit from rapid growth in China and other developing countries, its large current account deficit and reliance on banks' overseas borrowings makes it vulnerable to the credit crunch
  - the credit crunch is now adding to the thrust of the Reserve Bank's monetary policy, making it unlikely that there will be any further increase in official interest rates
- Domestic demand growth will slow sharply from its 2007 pace of nearly 6% to less than 3% by early next year
  - there is some risk of an earlier and sharper slowdown in domestic spending
- This sharp slowdown will allow Australian interest rates to fall from mid-2009 onwards, and the A\$ will also fall significantly as rates come down