

Economics, interest rates and currencies chart pack

Charts prepared for ANZ Senior Management

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www.anz.com/go/economics

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Summary of key economic forecasts

	2006	2007	2008
Oil prices (US\$ per barrel WTI)	66	61	63
World GDP growth (%)	5.2	4¾ ^r	4¾ ^r
Australian GDP growth (%)	2.7	3	3¾ ^r
Australian unemployment rate (%) ^a	4.6	4½	4½ ^r
Australian CPI inflation (%) ^a	3.3	2¼ ^r	3 ^r
Aust. current account deficit (% GDP)	5.4	5½	5½
Australian credit growth (%) ^a	14.4	13½	11
NZ GDP growth (%)	1.5	2¼ ^r	1½
NZ unemployment rate (%) ^a	3.7	4	4½
NZ CPI inflation (%) ^a	2.6	2½	3
NZ current account deficit (% GDP)	9	7¾	7¾
NZ private sector credit growth (%) ^a	13.2	11¼	9

^a Year to December quarter; all other forecasts are calendar year-average. ^r Revised since last quarter; see slide 4.

Summary of key market forecasts

	May 2007	Dec 2007	Jun 2008	Dec 2008	Dec 2009
US Fed funds rate (% pa)	5.25	4.75	4.75	5.25	5.25
US 10-year bond yield (% pa)	4.85	4.75	5.15	5.30	5.25
€ - US\$	1.36	1.37	1.31	1.27	1.20
US\$ - ¥	119	117	114	111	110
US\$ - Yuan	7.67	7.45	7.40	7.35	7.75
RBA cash rate (% pa)	6.25	6.50	6.50	6.50	6.75
Australian 10-year bond (% pa)	5.90	6.10	6.30	6.50	6.65
A\$ - US\$	0.83	0.81	0.79	0.75	0.69
RBNZ cash rate (% pa)	7.75	7.75	7.75 ^r	7.25 ^r	6.00 ^r
NZ 10-year bond yield (% pa)	6.20	6.30 ^r	6.10 ^r	6.00	6.20
NZ\$ - US\$	0.73	0.64	0.61	0.57	0.55
A\$ - NZ\$	1.11	1.26	1.30	1.31	1.25

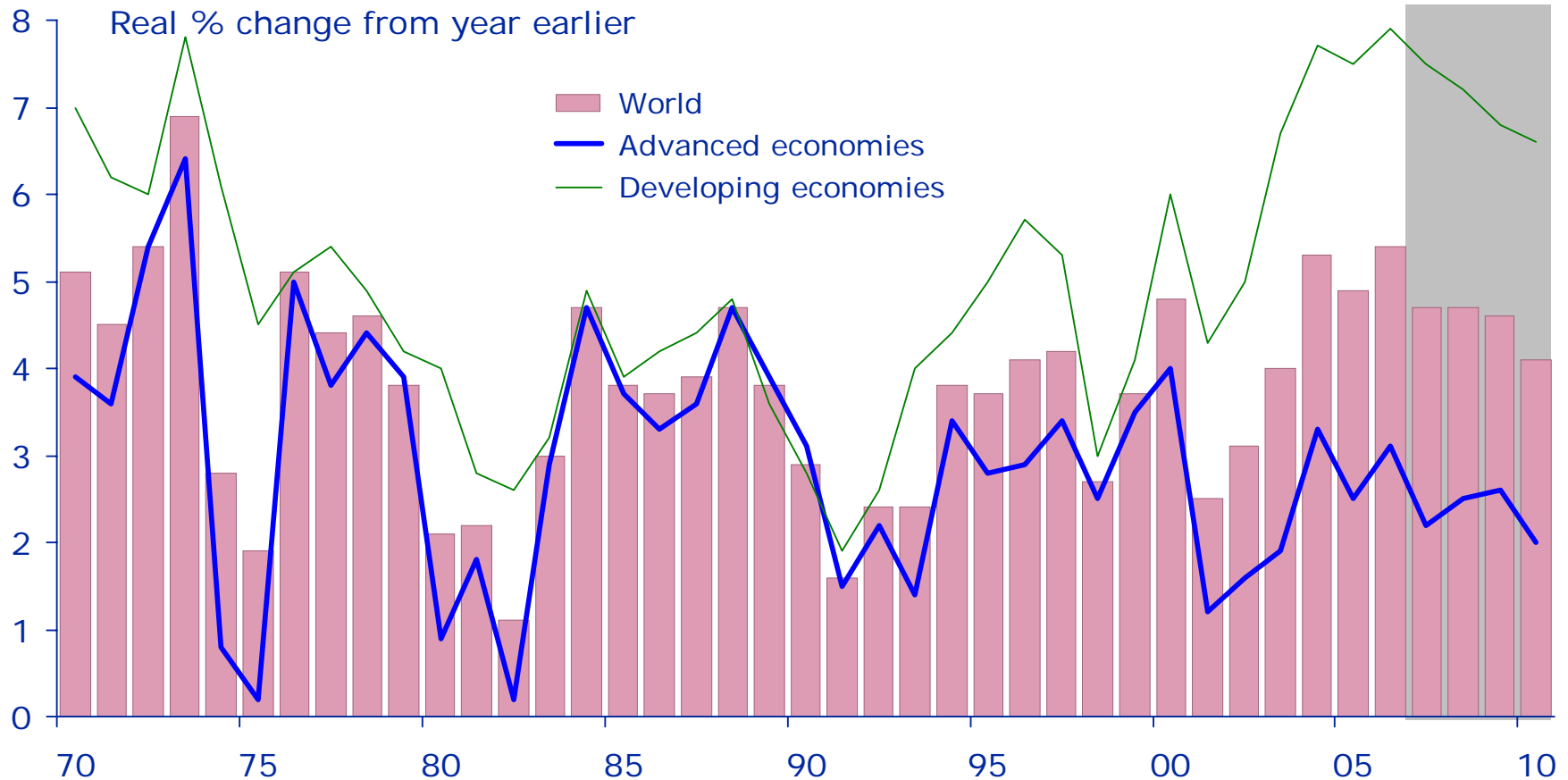
* actual ^r revised

Key forecast themes

- **World economy continues to grow at an above-trend pace**
 - US slowdown (largely driven by housing sector weakness) largely offset by faster growth elsewhere
- **Fed will cut US rates twice, late this year and early 2008, while ECB will raise rates twice more and BoJ will also resume raising rates later this year**
 - however market sentiment will swing towards expectations of rising US rates in 2008 as US economy picks up again
 - so US dollar will strengthen gradually during 2008
- **Australian economy will accelerate later this year and into 2008**
 - partly reflecting rebound in rural production (with assumed breaking of drought) and continuing pick-up in export volumes
 - but also driven by fiscal stimulus in Budget
- **RBA 'on hold' until after this year's election**
 - lower-than-expected inflation outcomes in past two quarters have lowered the risk of inflation exceeding the target in 2007
- **NZ economy will slow again in 2008**
 - as mortgages progressively reset at higher rates
- **No RBNZ easing before Dec 2008**
 - NZ\$ to fall during 2008 in anticipation of large rate cuts in 2009

World economy in what is likely to be its longest period of above-trend growth in over 30 years

Global economic growth



Note: GDP is measured in US\$ at purchasing power parities.

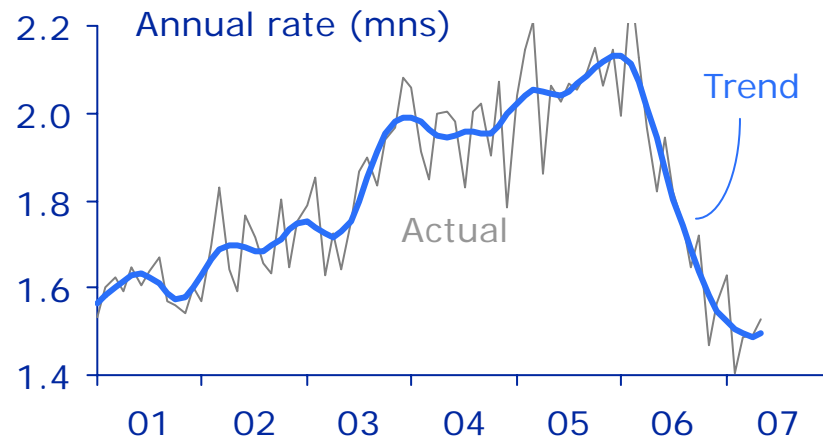
Source: IMF; Economics@ANZ.

US house prices are no longer rising, and housing activity has turned down sharply

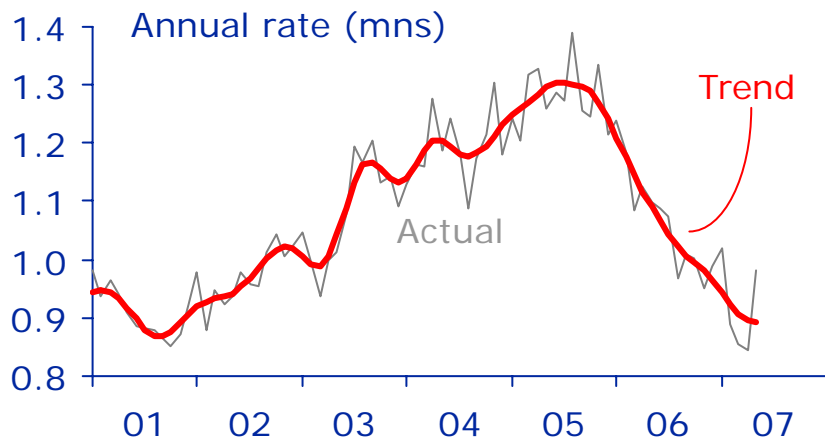
House prices



Housing starts



New home sales



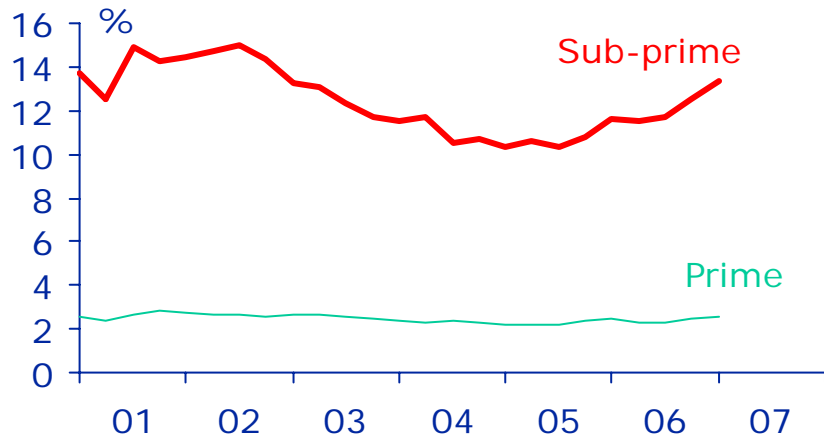
Unsold new housing stock



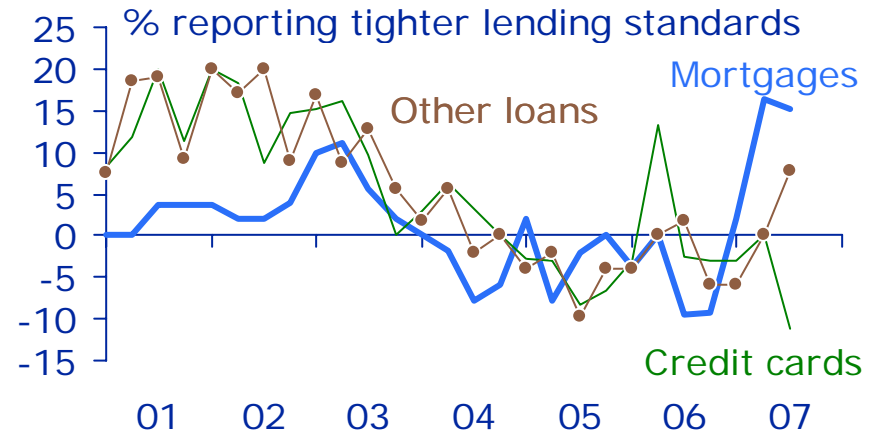
Sources: US Office of Federal Housing Enterprises Oversight; Bureau of Economic Analysis; National Realtors' Association.

Problems in the sub-prime mortgage market have not spilled over into other segments

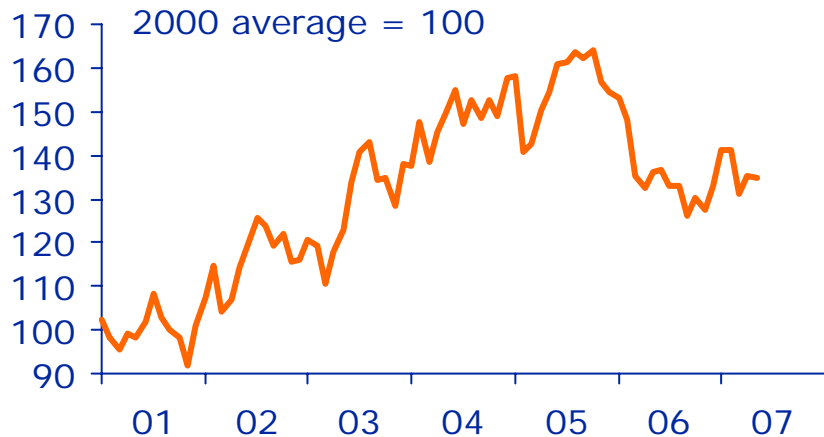
Mortgage delinquencies



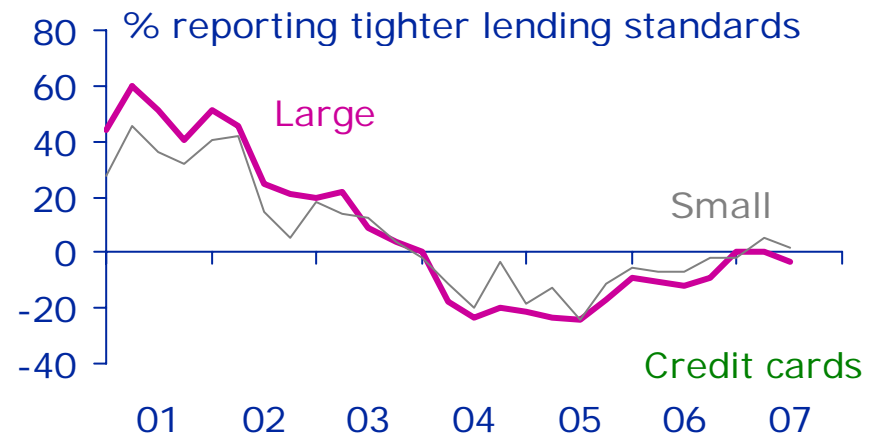
Consumer lending standards



Mortgage purchase applications



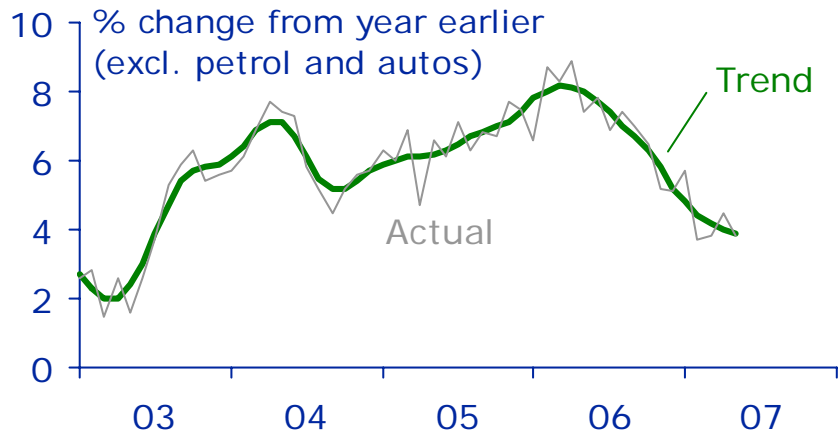
Business lending standards



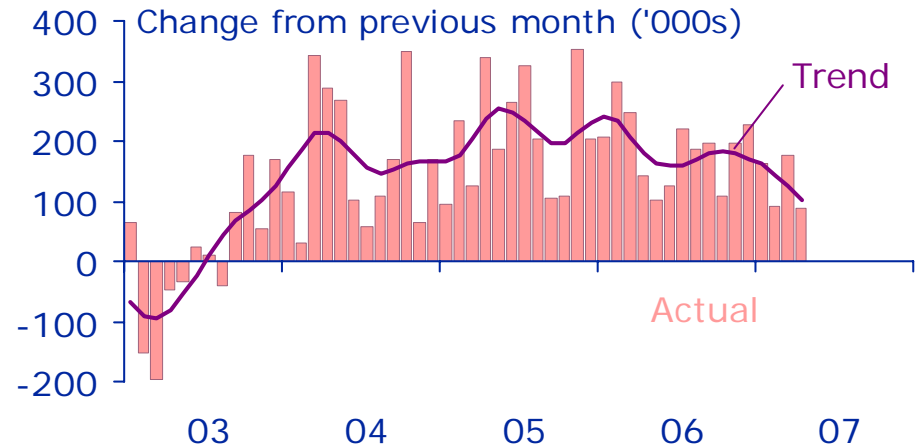
Sources: Mortgage Bankers' Association; Federal Reserve Senior Lending Officers Survey.

The housing downturn is leading to a slowdown in the broader US economy

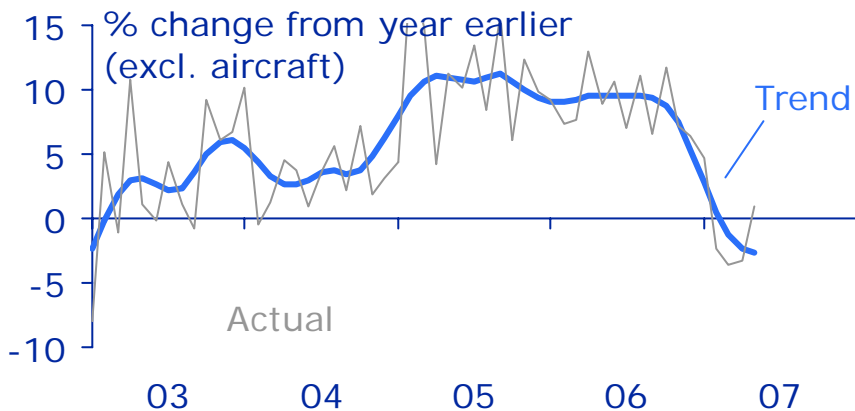
Retail sales



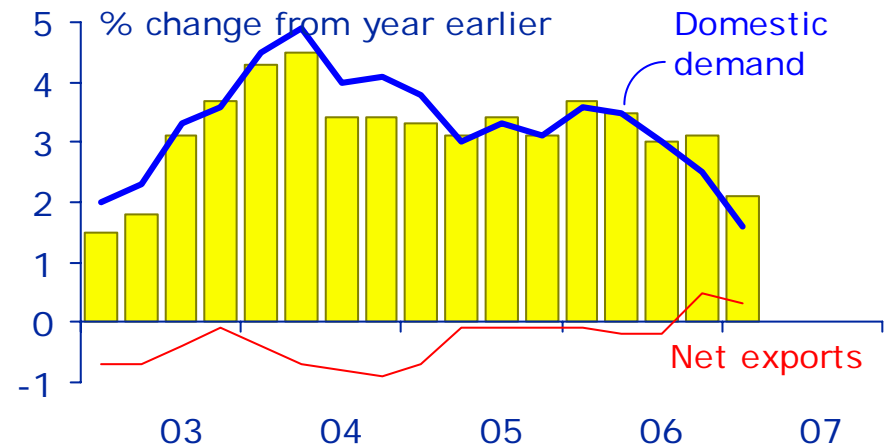
Non-farm employment



Non-defence capital goods orders



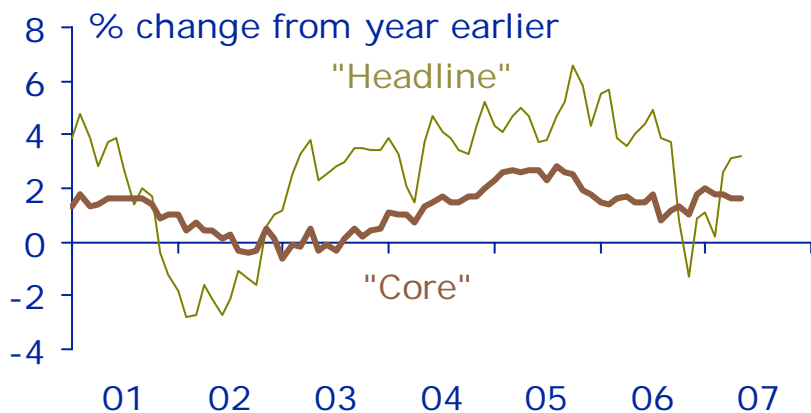
Real GDP



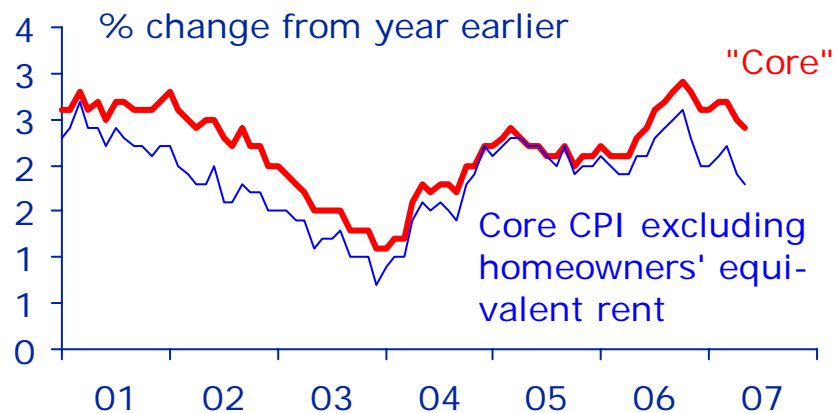
Sources: US Bureau of Economic Analysis and Labor Statistics;
US Commerce Department.

'Core' inflation is now beginning to come down although it's still above the Fed's 'comfort zone'

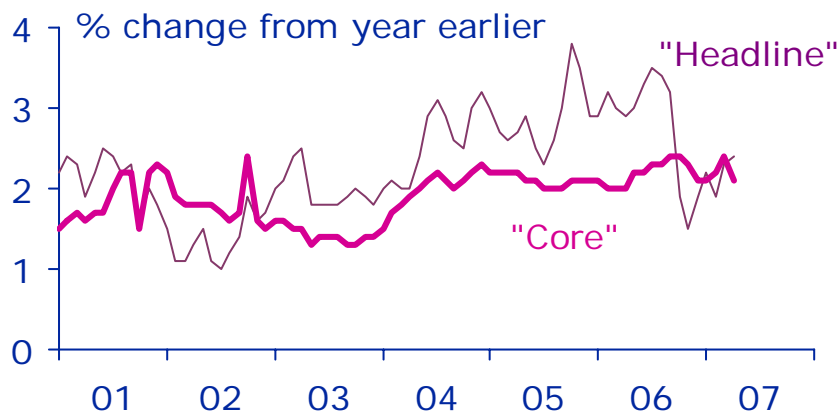
Producer prices – finished goods



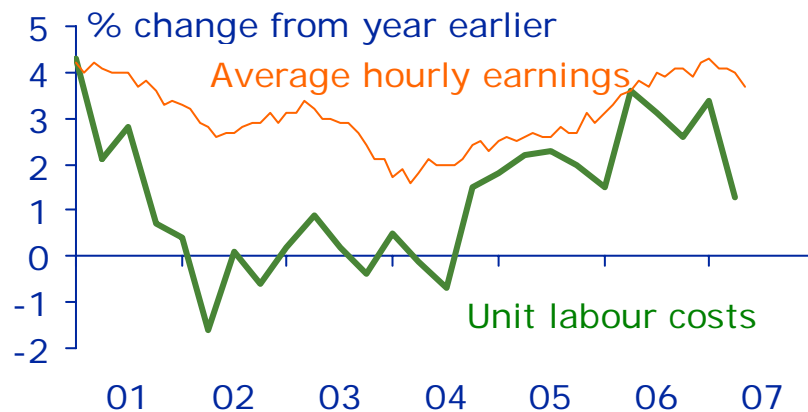
'Core' consumer prices



Consumption expenditure deflator



Labour costs

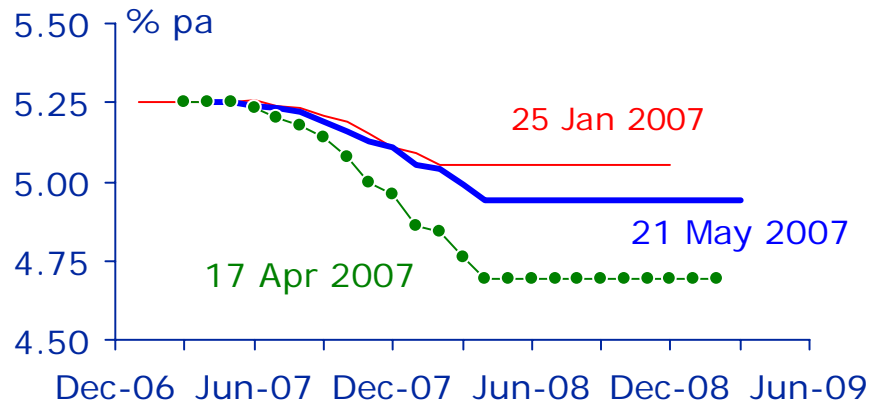


Note: 'core' means excluding food and energy. 'Homeowners' equivalent rent' is the rent notionally charged by owner-occupiers to themselves.

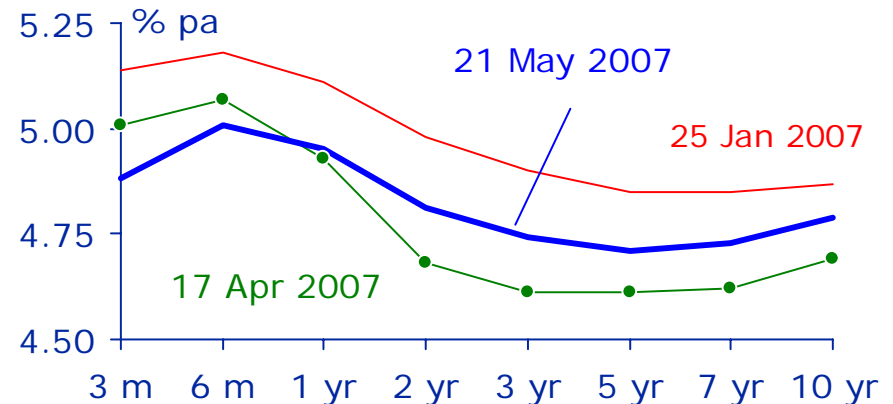
Sources: US Bureau of Labor Statistics and Economic Analysis.

US financial markets have become slightly less optimistic about Fed rate cuts in recent weeks

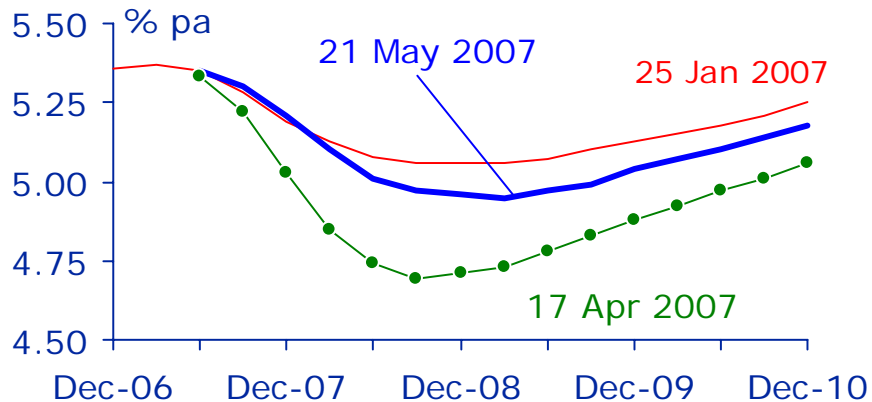
'Fed funds' futures*



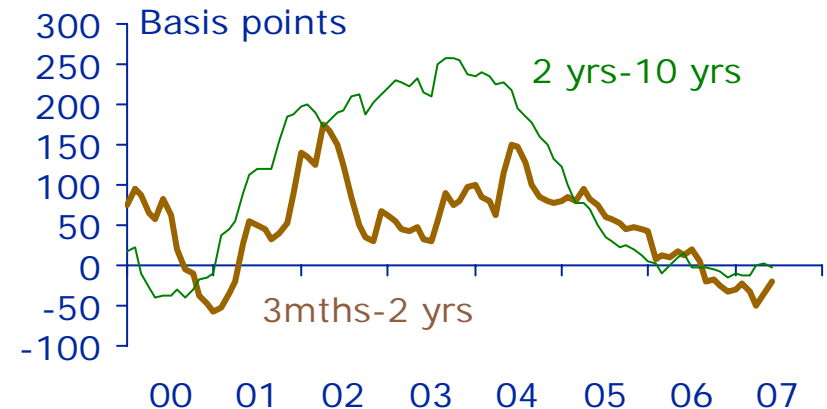
Treasury yield curve



3-mth Eurodollar futures



US fed funds rate

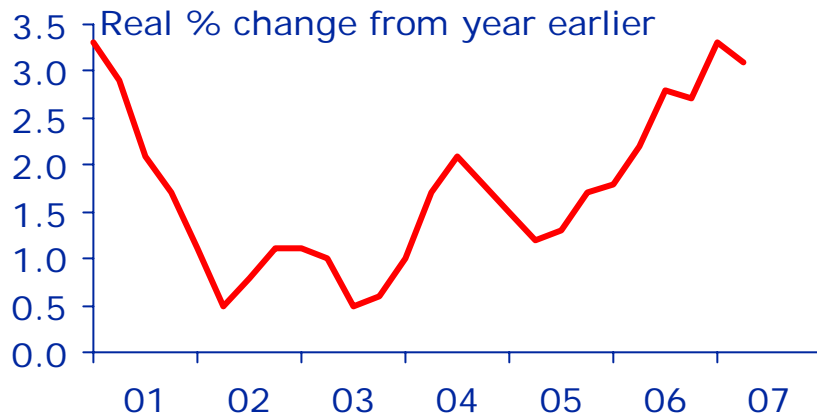


* Strictly, 30-day futures contracts.

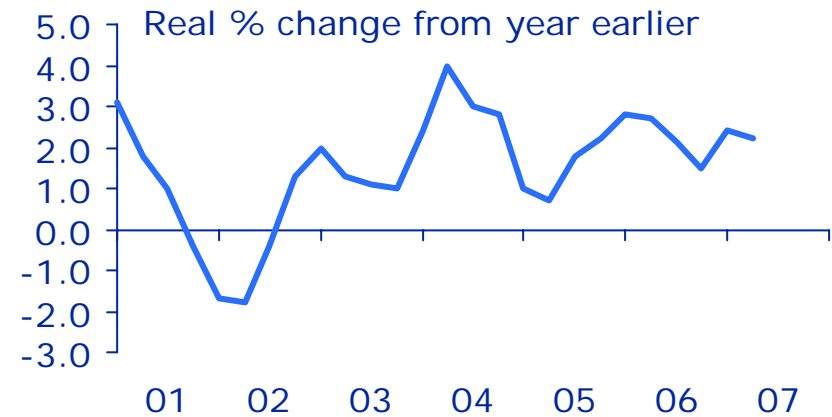
Sources: Bloomberg; Datastream; Economics@ANZ.

To some extent weaker US growth is being offset by stronger growth in Europe and Japan

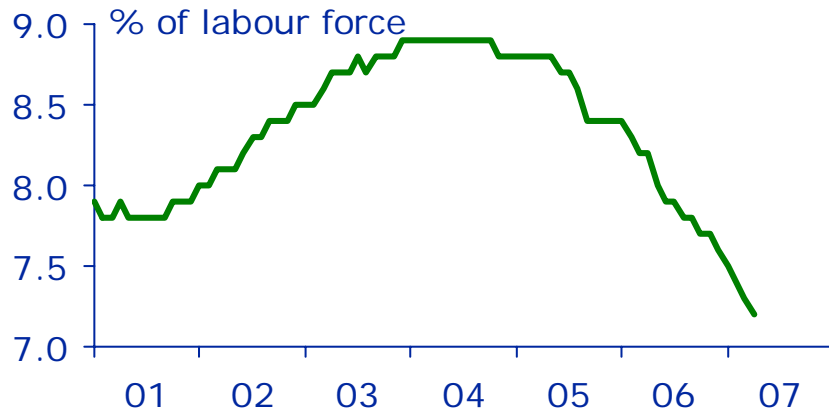
Euro area GDP growth



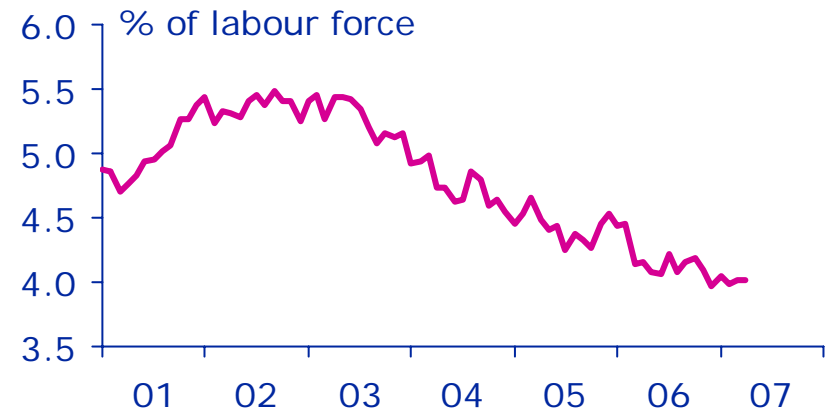
Japan GDP growth



Euro area unemployment



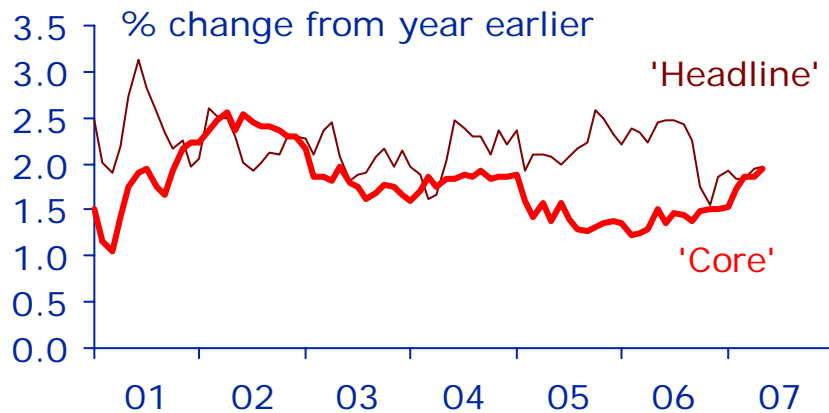
Japan unemployment



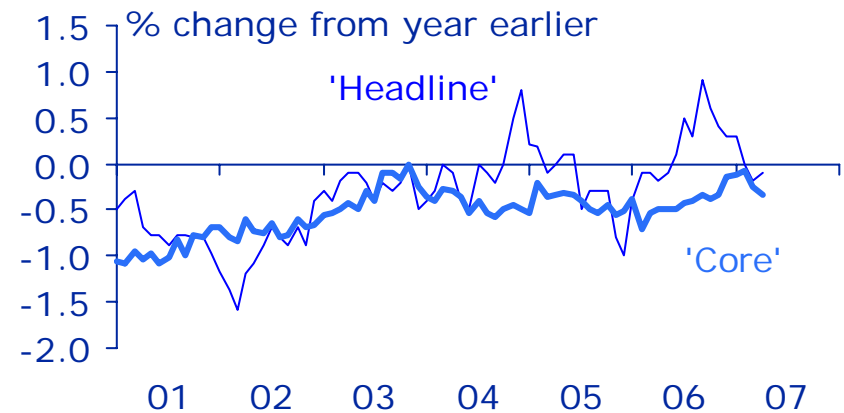
Sources: Eurostat; Japan Economic & Social Research Institute and Home Ministry.

Rising 'core' inflation prompting further ECB rate hikes while persistent deflation keeps BoJ on hold

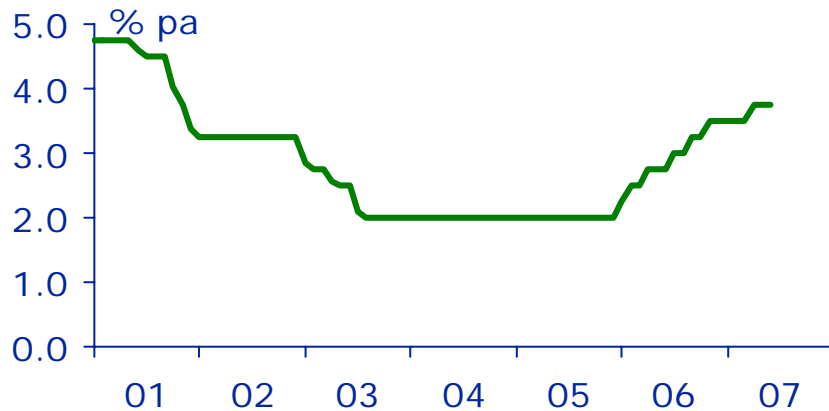
Euro area consumer prices



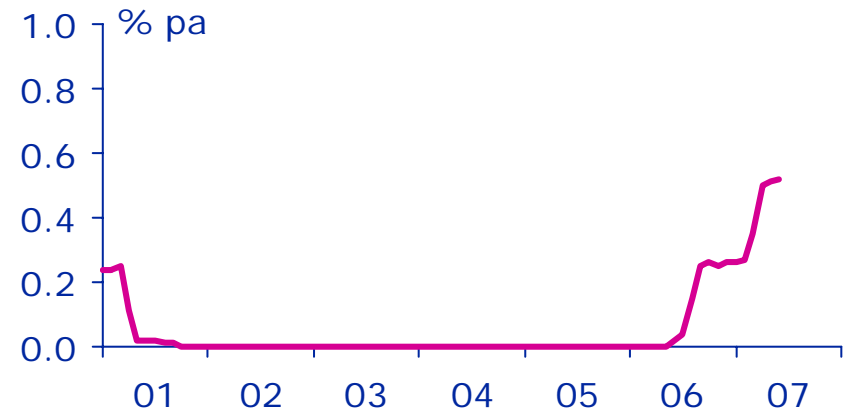
Japan consumer prices



ECB refi rate



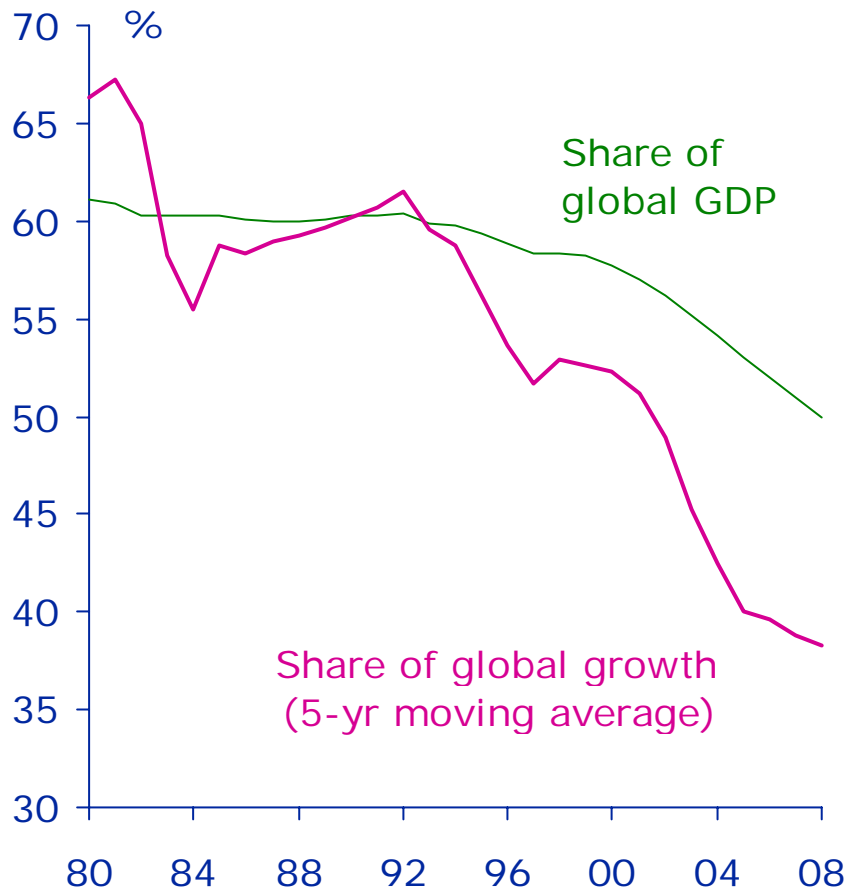
BoJ overnight call rate



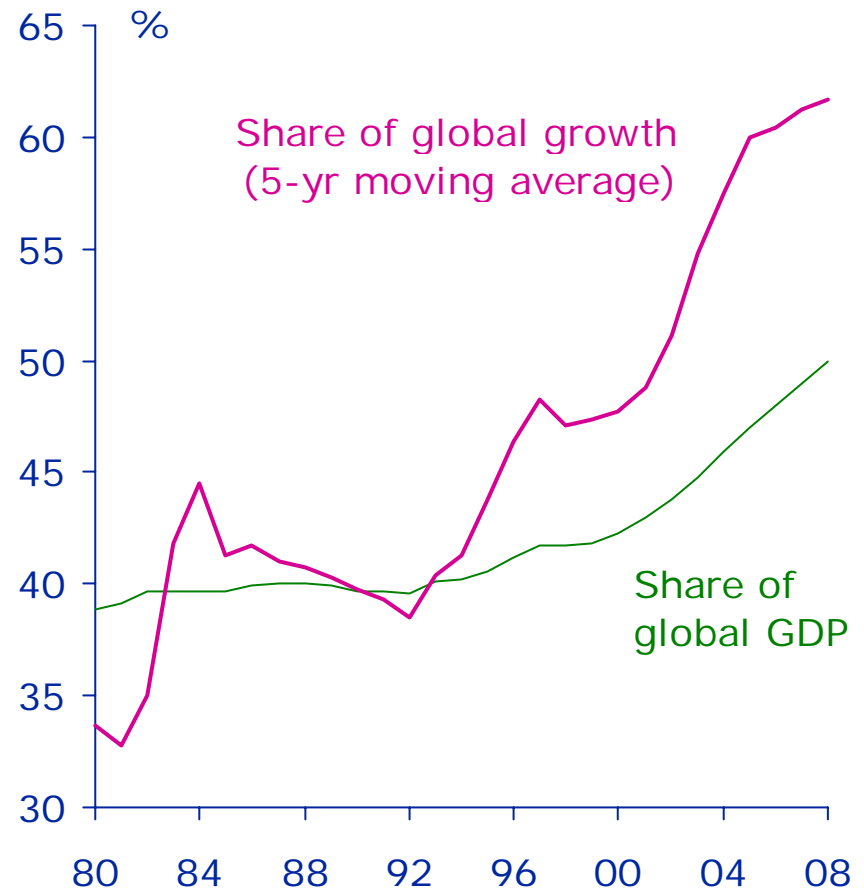
Note: 'core' inflation is excluding food and energy.
Sources: Eurostat; OECD; ECB; BoJ.

Above-trend global growth is largely being driven by developing countries

Advanced economies



Developing economies

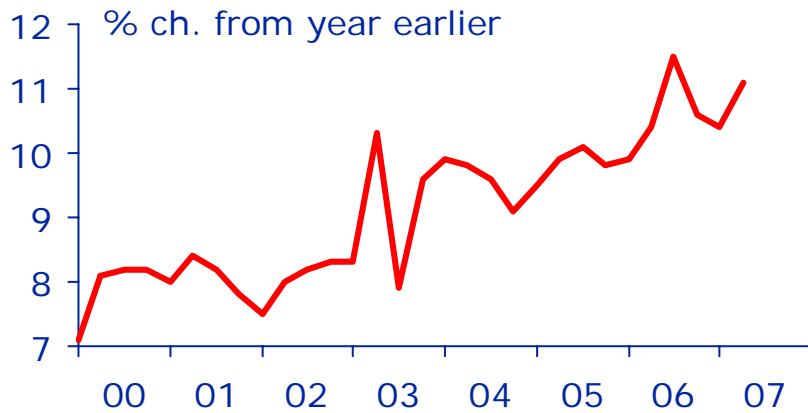


'Advanced' economies comprise the US, Western Europe, Japan, Canada, Australia, New Zealand, Korea, Taiwan, Hong Kong, Singapore and Israel.

Sources: IMF, *World Economic Outlook*; Economics@ANZ.

China's GDP growth accelerated in Q1 although rising inflation is largely due to higher food prices

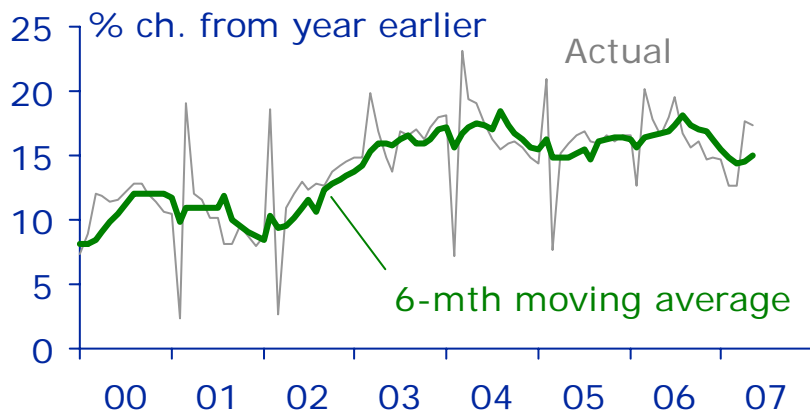
Real GDP



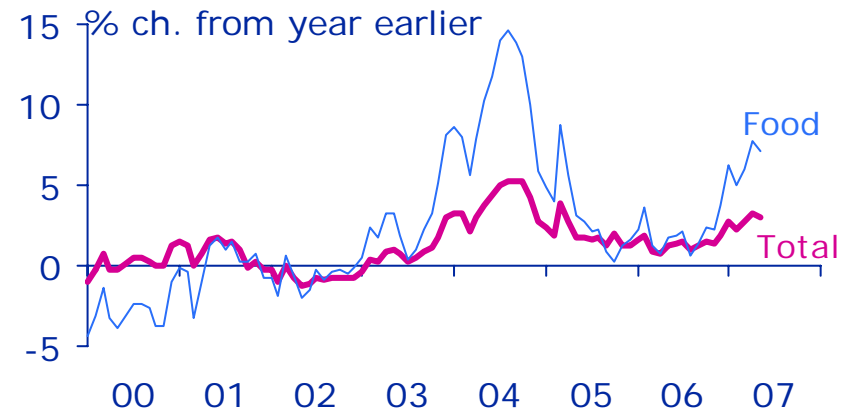
Producer prices



Industrial production



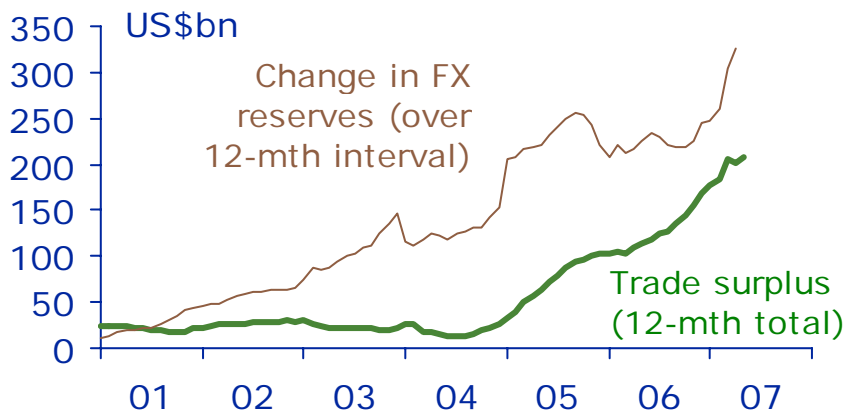
Consumer prices



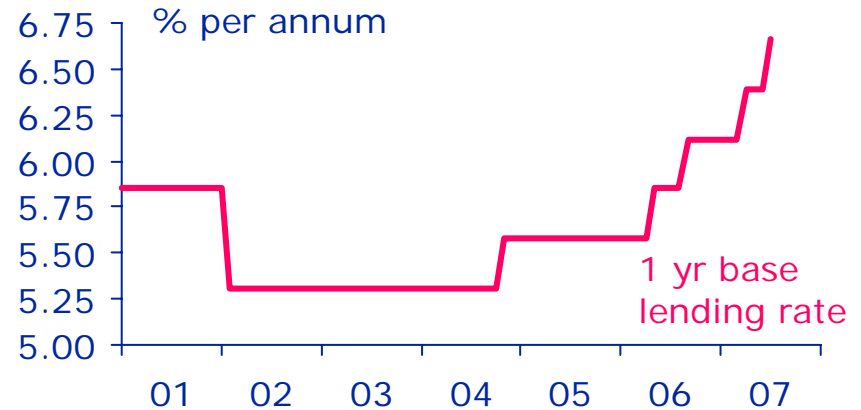
Source: China National Statistics Bureau

FX policy continues to fuel liquidity growth so that further PBoC tightening will be required

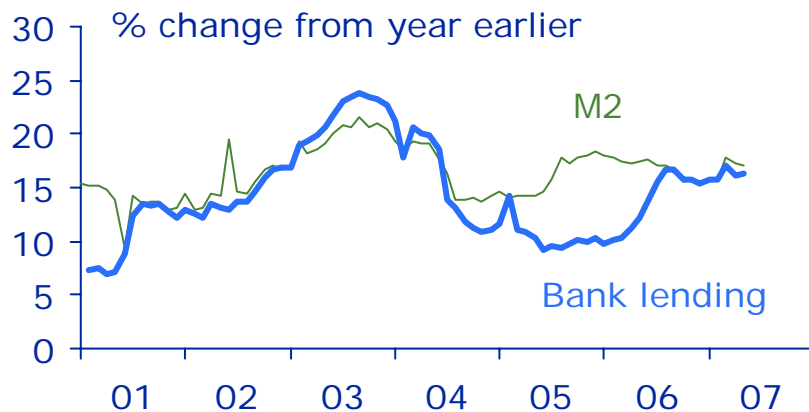
Increase in FX reserves



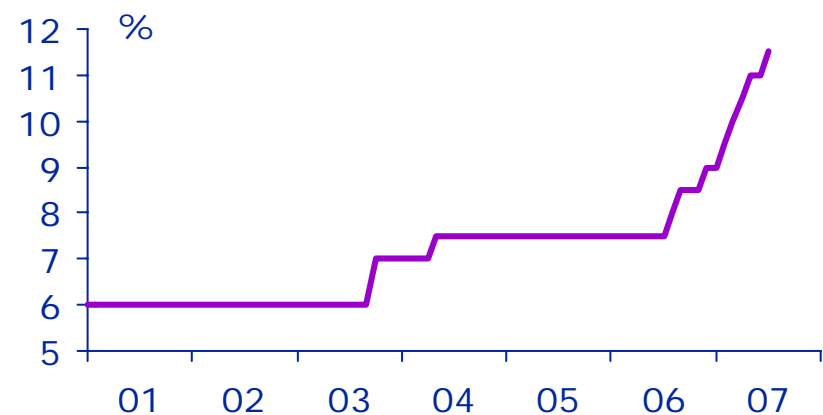
Interest rates



Money supply and bank lending



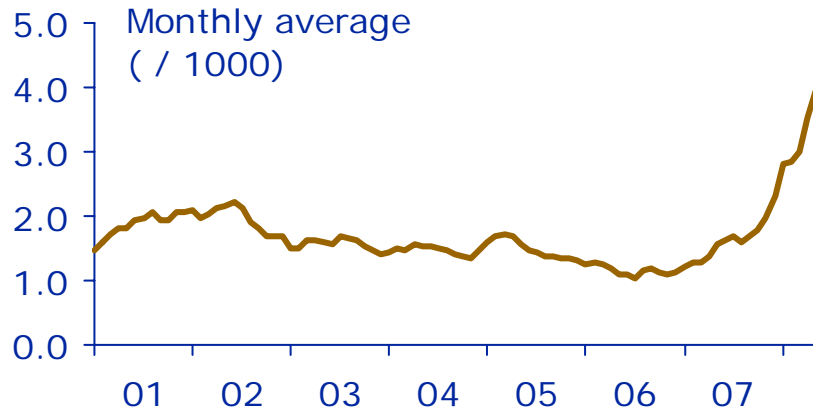
Banks required reserves ratio



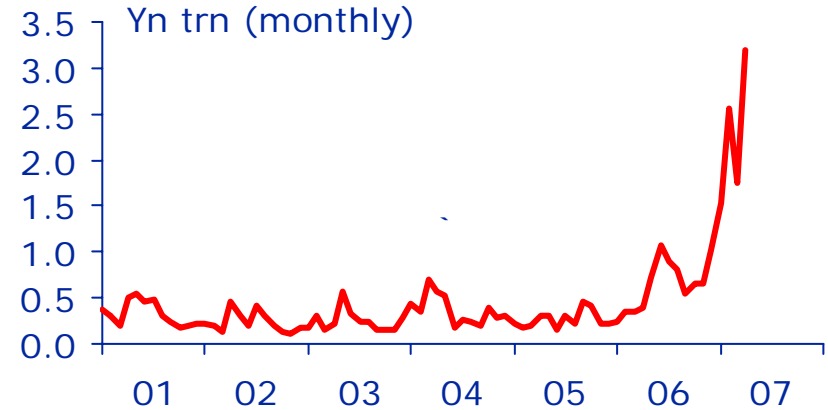
Source: China National Statistics Bureau; People's Bank of China; Thomson Financial Datastream.

Chinese authorities are also concerned about bubble-like developments in the equity market

Shanghai composite index



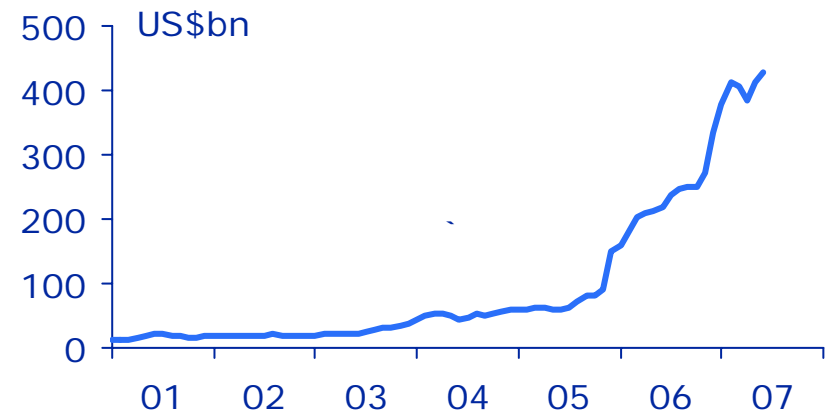
Shanghai turnover



Shanghai p/e ratio



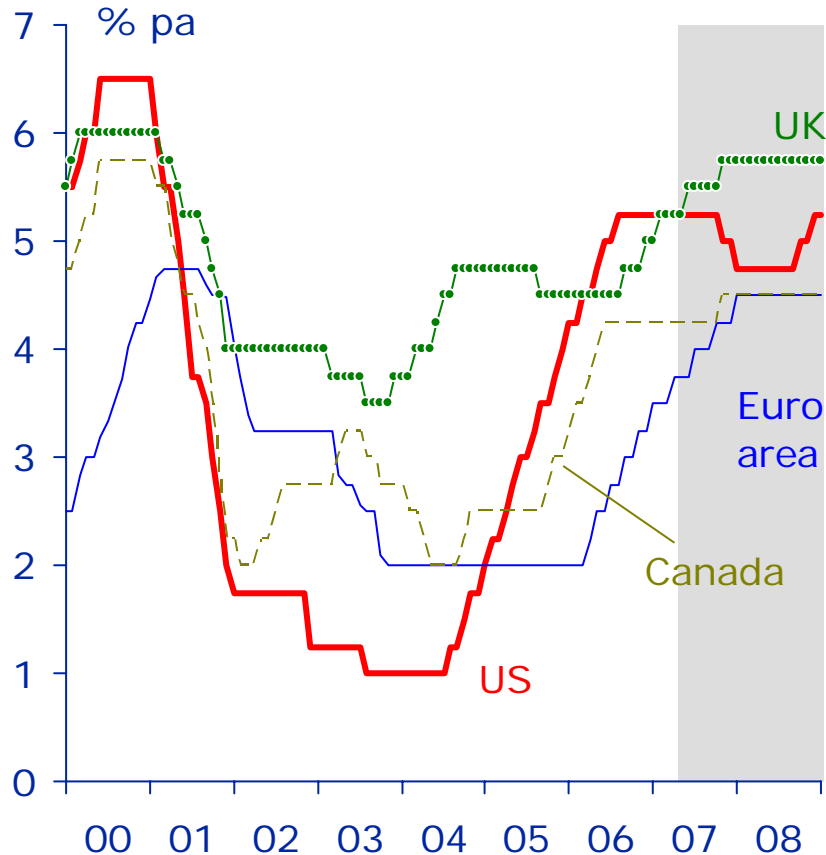
Shanghai market capitalization



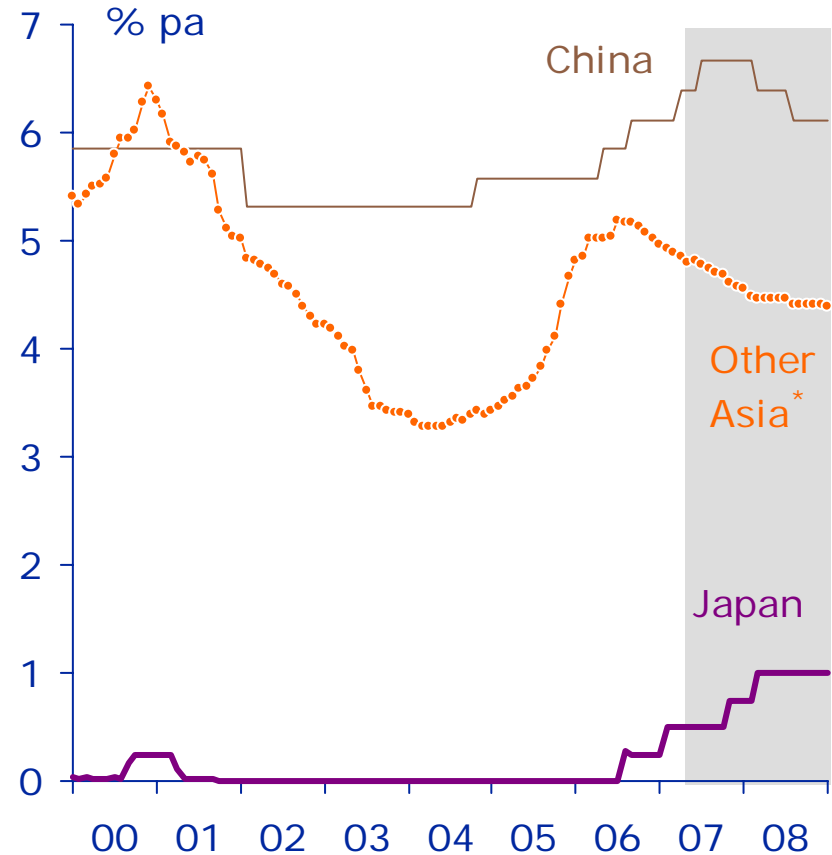
Source: Datastream.

Interest rates in major economies will move in divergent directions in 2007-08

North America and Europe



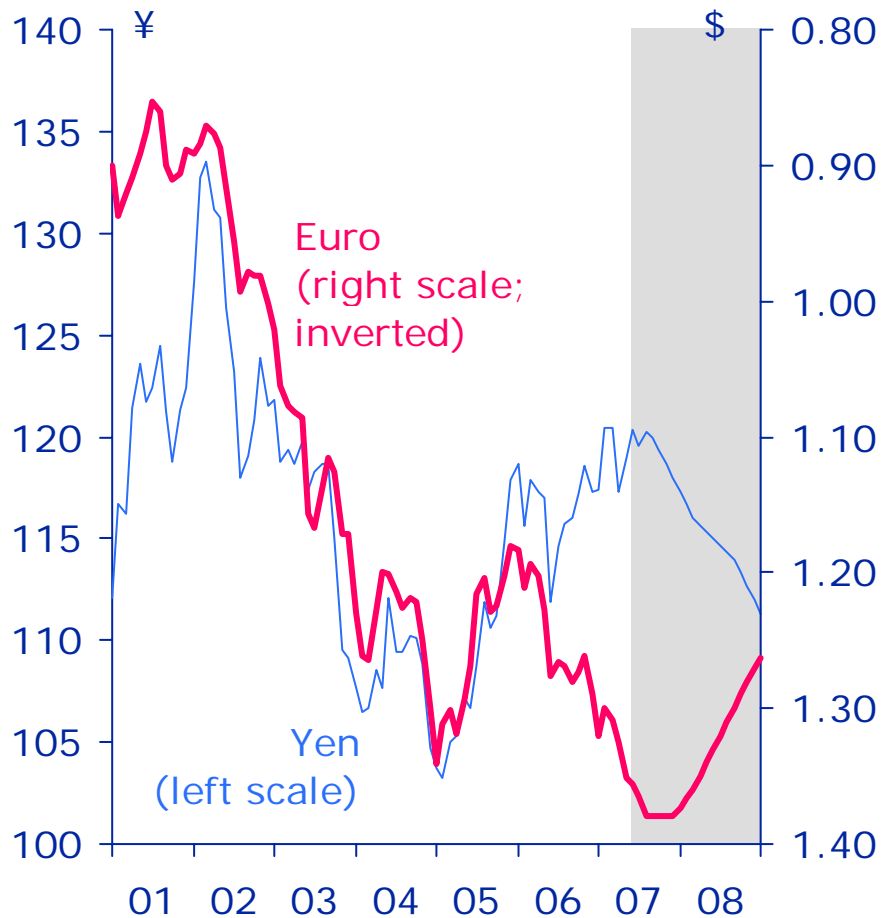
Asia



* Weighted average of Korea, Taiwan, Hong Kong, Indonesia, Thailand, Malaysia, Philippines and Singapore. *Source:* Thomson Financial Datastream.

Once the US economy and Fed expectations start to turn (in 2008) the US\$ will regain lost ground

US\$ exchange rates

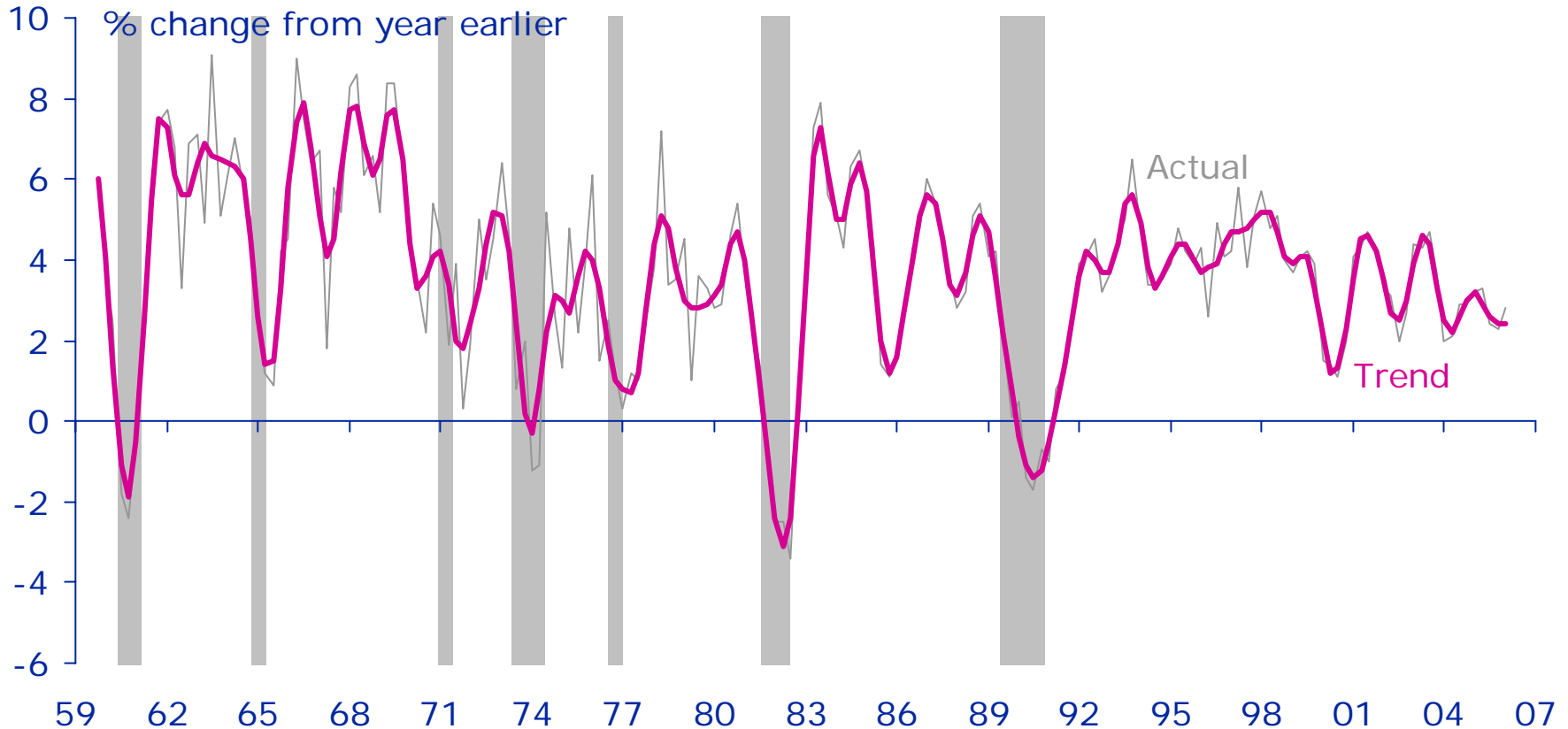


Sources: Thomson Financial Datastream;
Economics@ANZ

- We expect the Fed to cut US rates at most twice by late this year – after which, with the US economy bottoming, markets will likely turn to speculating on renewed rises in US rates
- The ECB is likely to have finished tightening by the end of this year
- Thus although the US\$ may fall a little further against the € near-term, it should regain ground during 2008
- Capital outflows from Japan will keep the ¥ relatively weak but the prospect of gradual BoJ tightening should diminish the volume of 'carry trades'

Australia has now gone nearly 16 years without recession, the longest in its history

Real GDP growth



Note: shaded intervals denote periods in which real GDP growth was negative for two or more quarters, or during which real GDP declined from the year-earlier quarter.

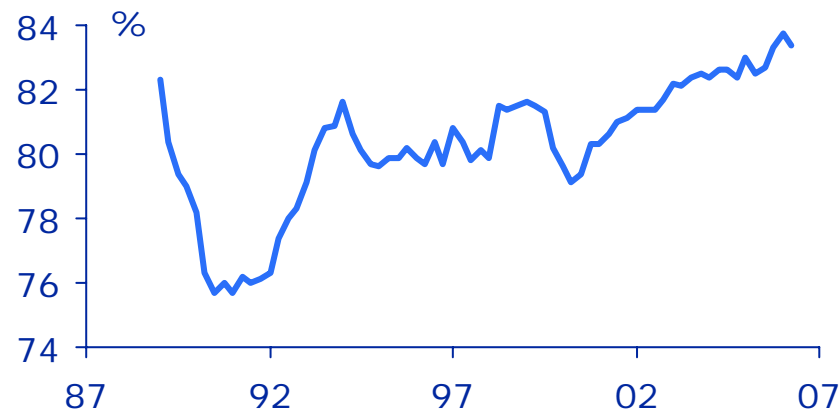
Sources: Australian Bureau of Statistics; Economics@ANZ.

The Australian economy is bumping up against 'capacity constraints'

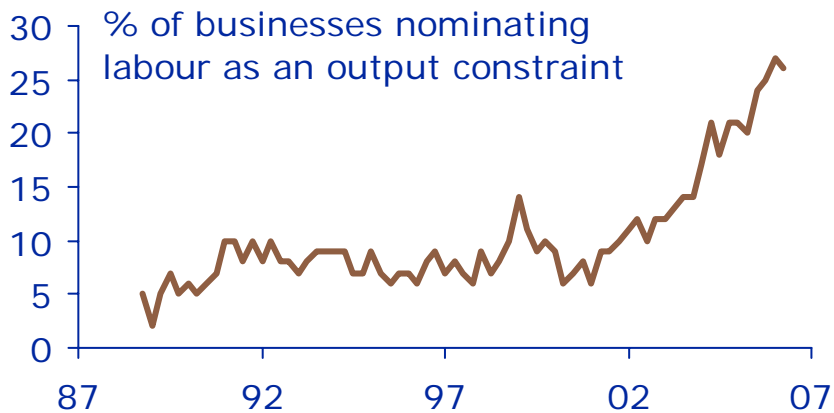
Unemployment rates



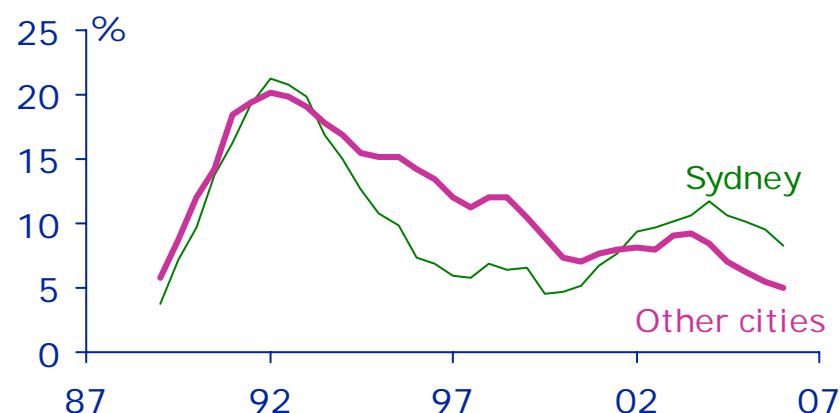
Capacity utilization



Labour shortages



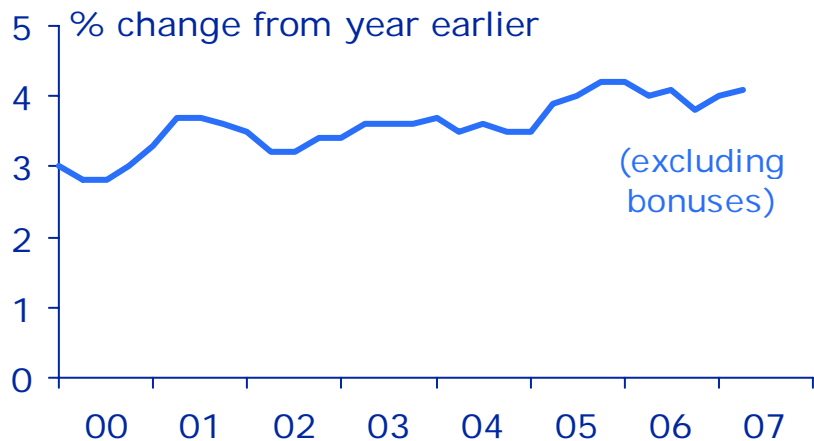
Office vacancy rates



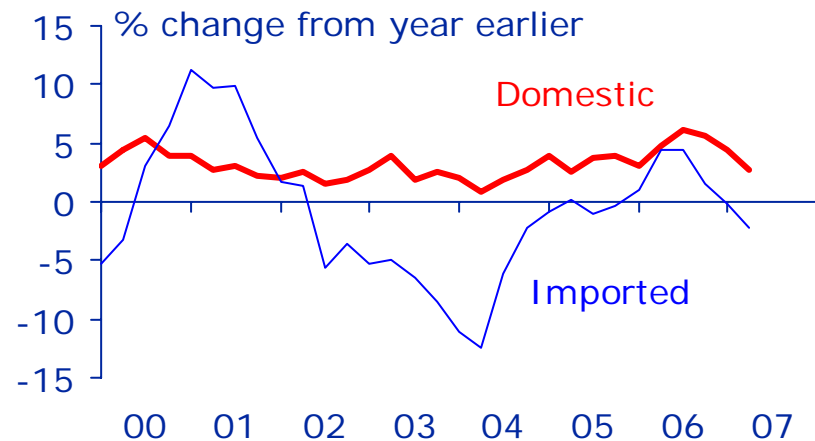
Sources: Australian Bureau of Statistics; National Australia Bank; Property Council of Australia.

Despite this there has been remarkably little acceleration in inflation so far

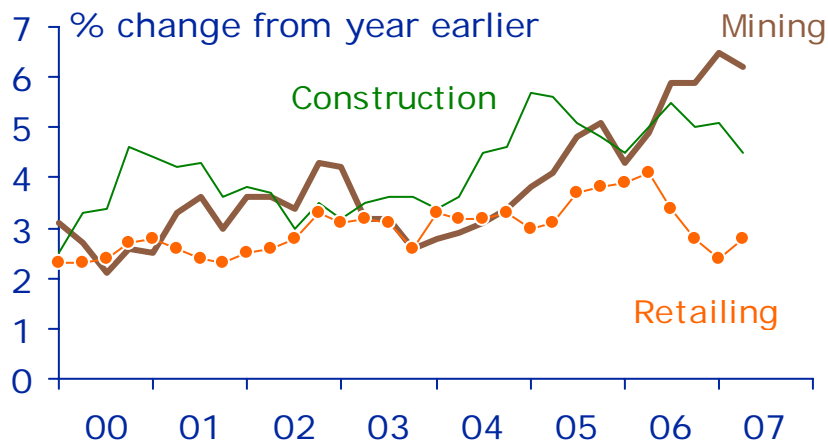
Wage cost index



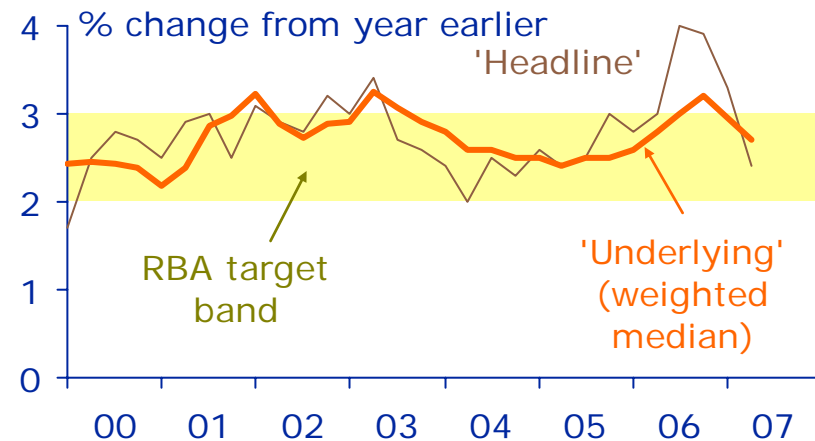
Producer prices*



Wage costs: selected sectors



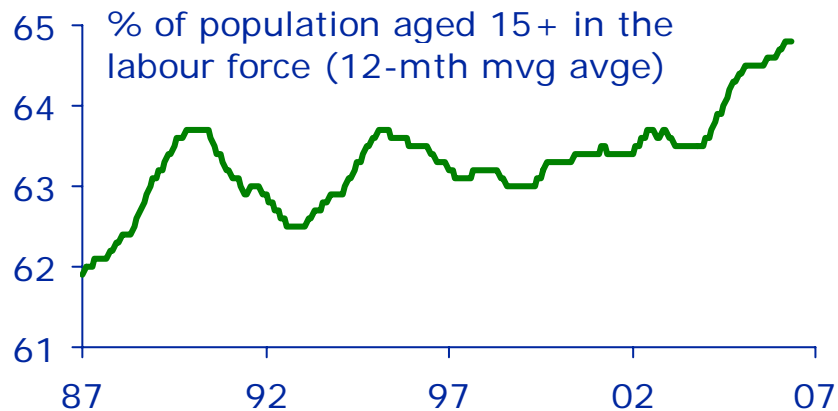
Consumer prices



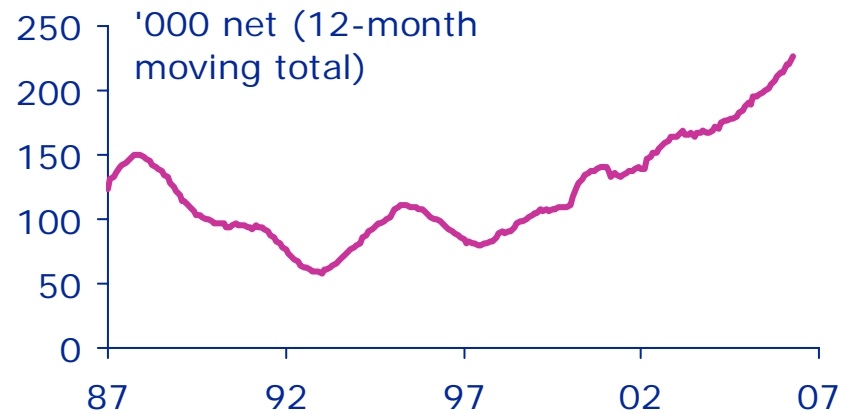
* of consumer goods. Sources: ABS; RBA.

A number of 'safety valves' have increased the elasticity of labour supply

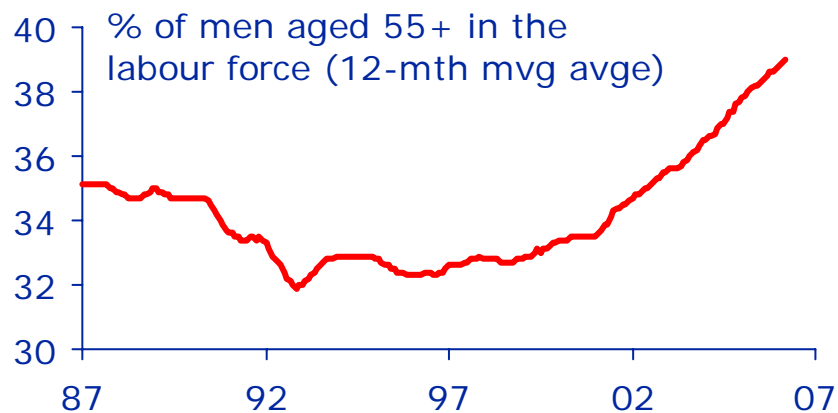
Labour force participation rate



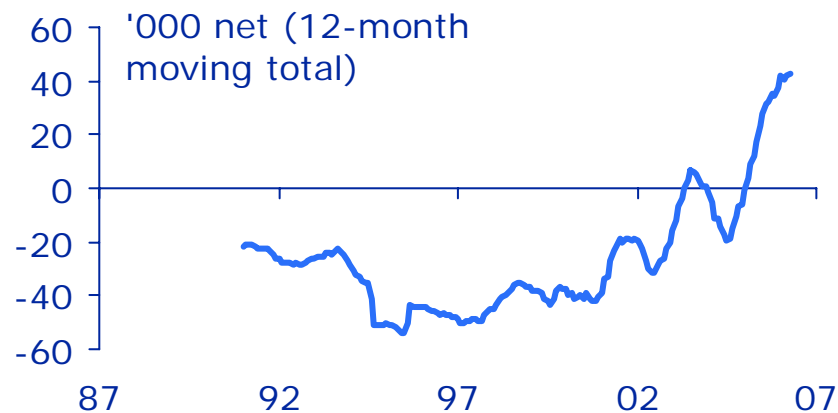
Permanent & long-term migration



Participation rate men over 55



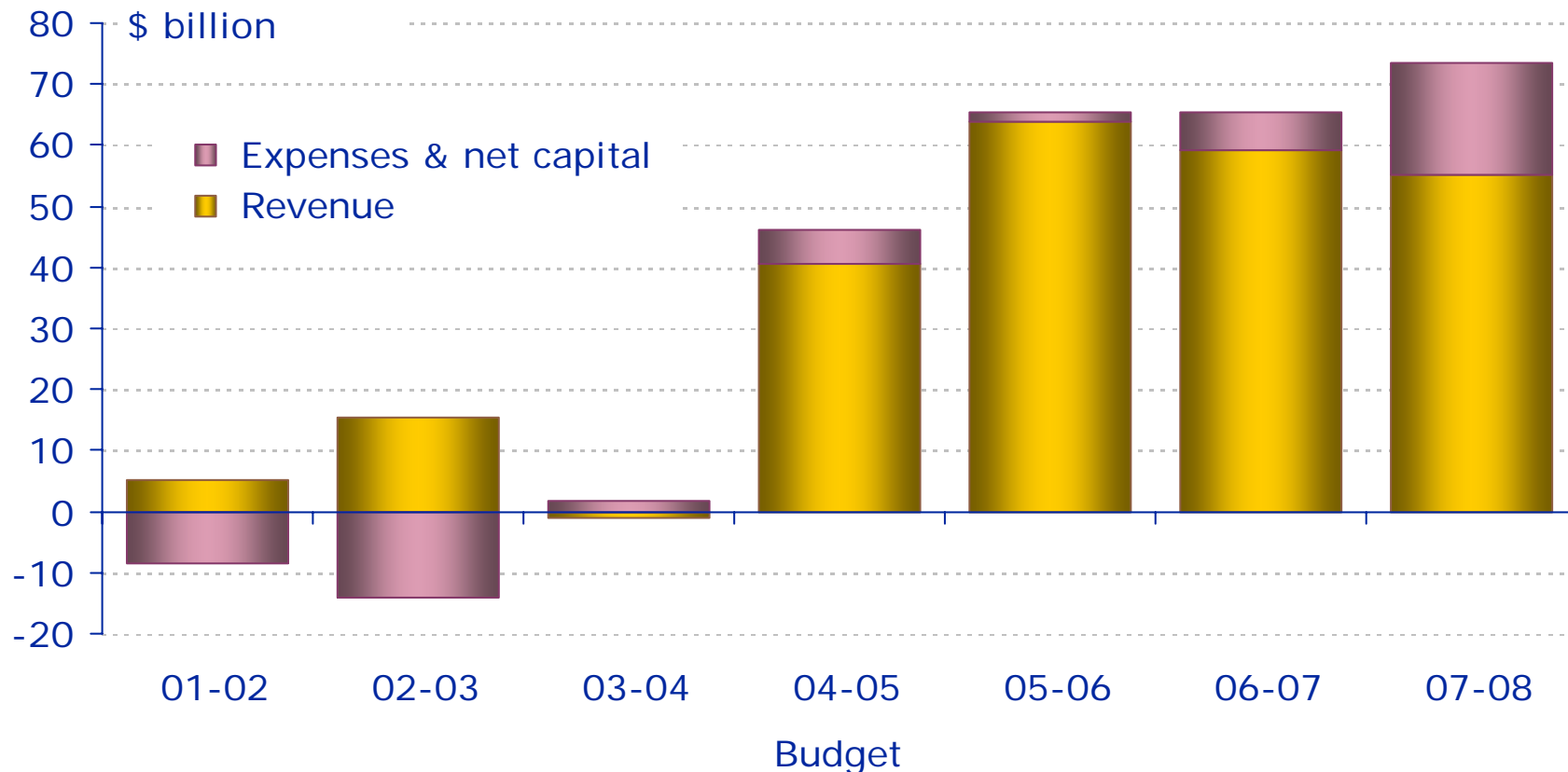
Temporary migration 'for employment'



Sources: Australian Bureau of Statistics; Economics@ANZ.

The 2007-08 Budget has again benefited from huge favourable 'parameter variations' ...

Total impact of 'parameter variations' on four-year accruals Forward Estimates from Budget to Budget

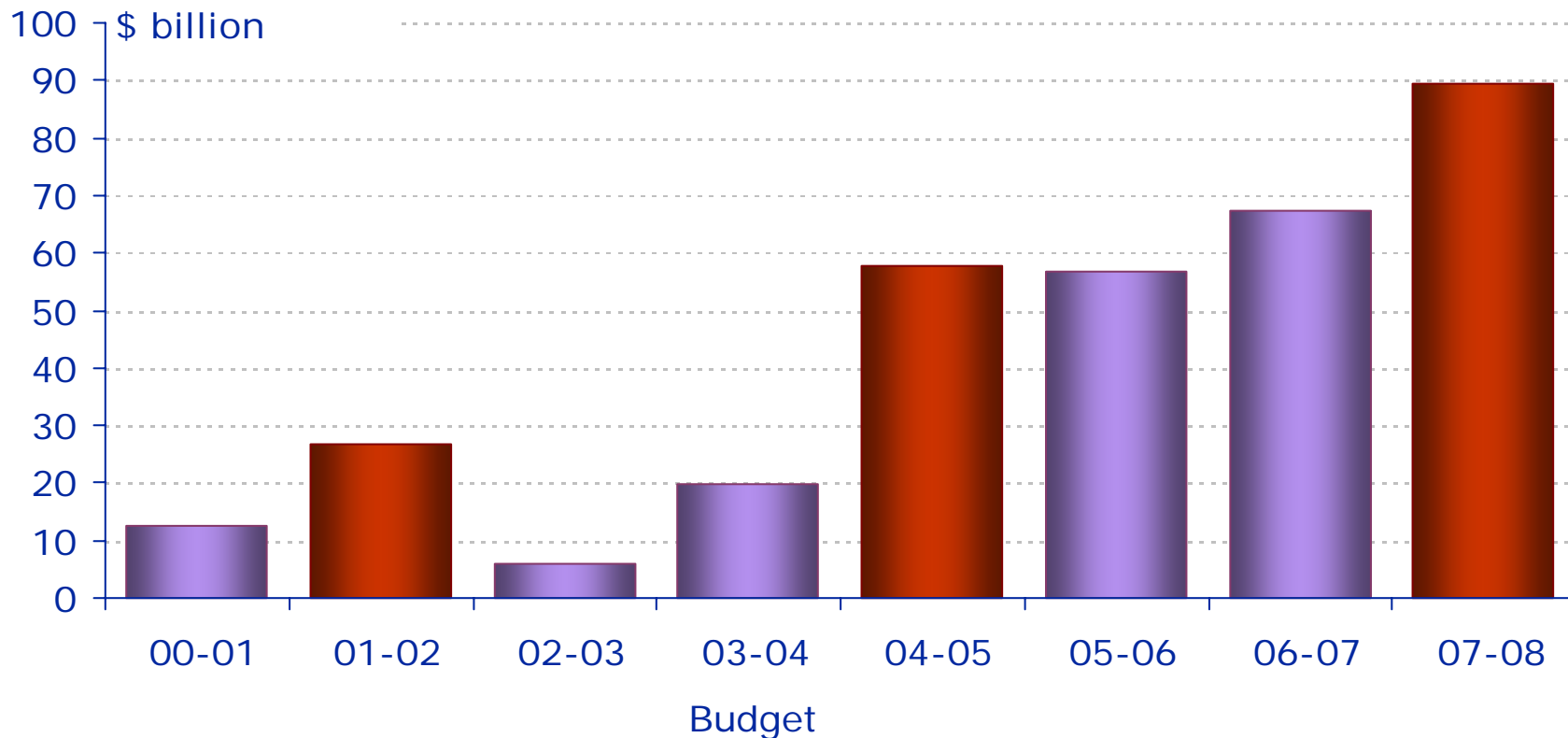


Note: Figures in this chart are based on accrual estimates, and show the impact of 'parameter variations' since the preceding Budget on the forward estimates of revenues and expenses & net capital investment for the four years shown in Table 2 of Statement No. 2 in Budget Paper No. 1 each year.

Sources: Budget Paper No. 1, various years; Economics@ANZ.

... which have in turn been used to fund the largest 'policy decisions' on record

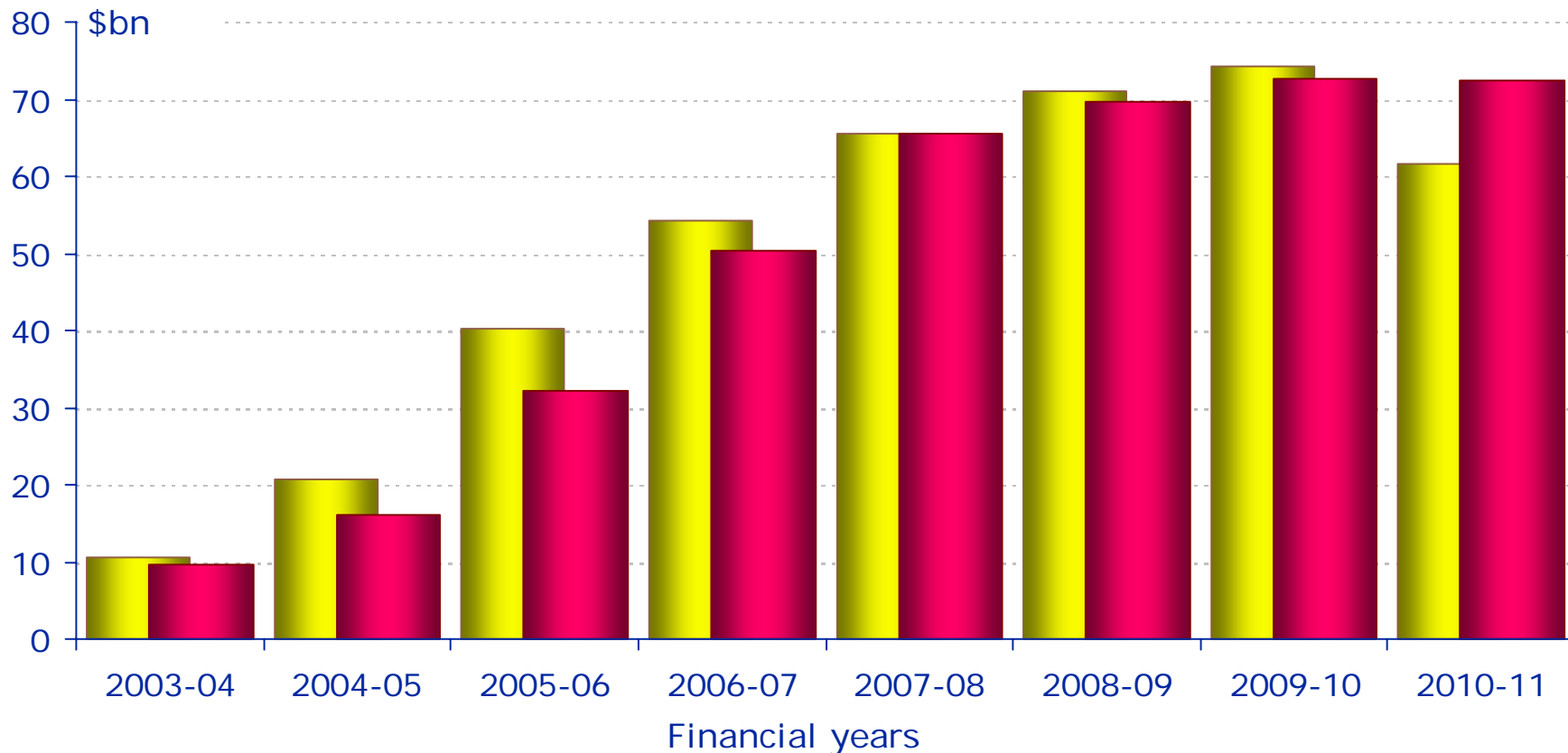
Impact of policy decisions over Forward Estimates periods of the last eight Budgets



Note: Figures in this chart based on accrual rather than cash estimates, and represent the total (over the remainder of the preceding year plus the 4 year Forward Estimates period) impact of decisions taken since the previous Budget, compiled from Table 2 in Statement No. 2 of Budget Paper No. 1 together with estimates for the final year of the Forward Estimates period taken from the Tables at the beginning of Parts 1 and 2 of Budget Paper No. 2.

Over the past 5 Budgets, 'parameter variations' have totalled \$398bn and policy decisions \$388bn

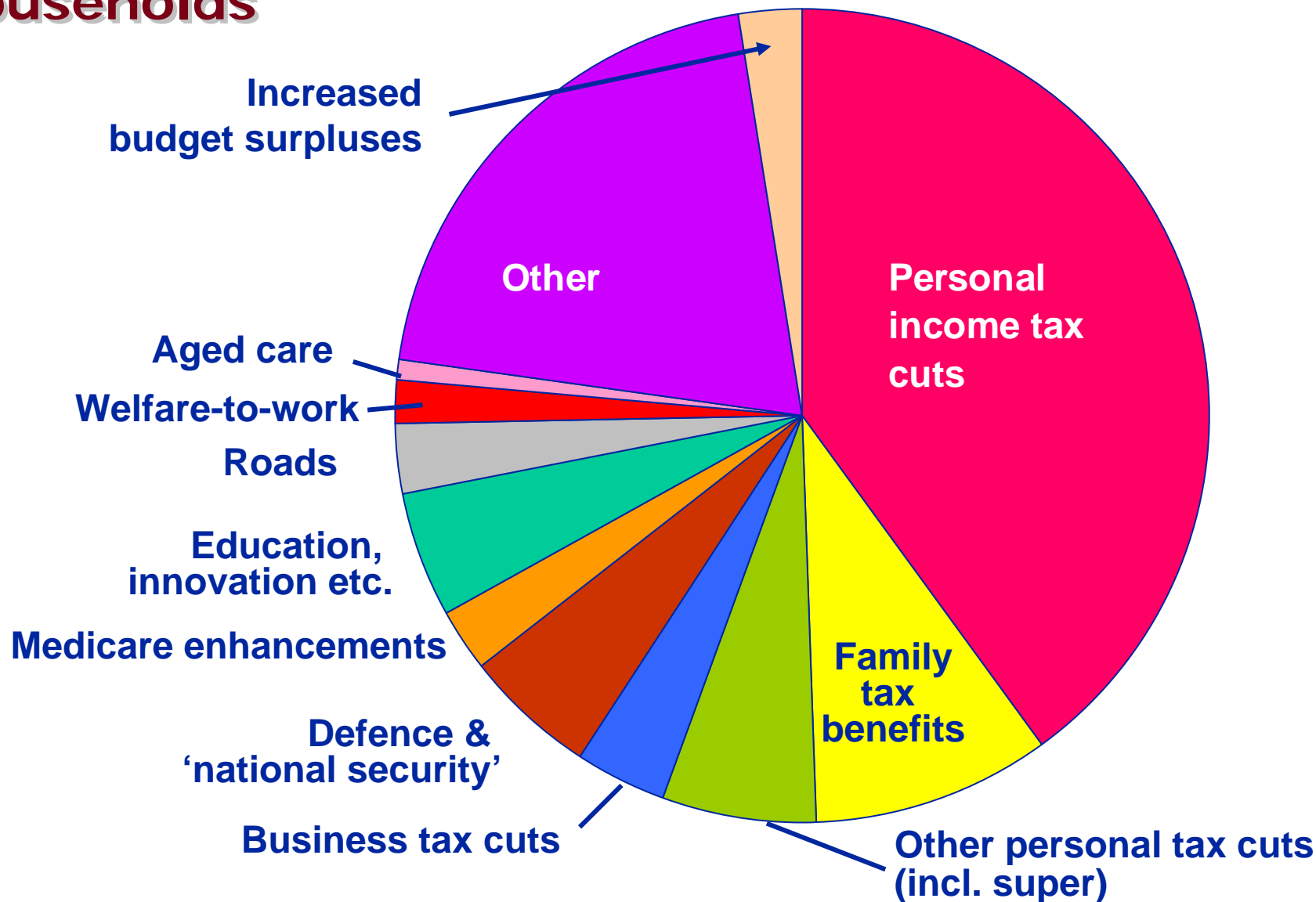
Cumulative net impact on the 'underlying' cash balance of 'parameter variations' and 'policy decisions' over past 5 Budgets



Cumulative impact of: ■ 'Parameter variations' ■ 'Policy decisions'

Source: Table 4, Statement No. 1 in *Budget Paper No. 1* (various years); Economics@ANZ.
See footnote on previous slide for explanation of assumptions used in compiling estimates.

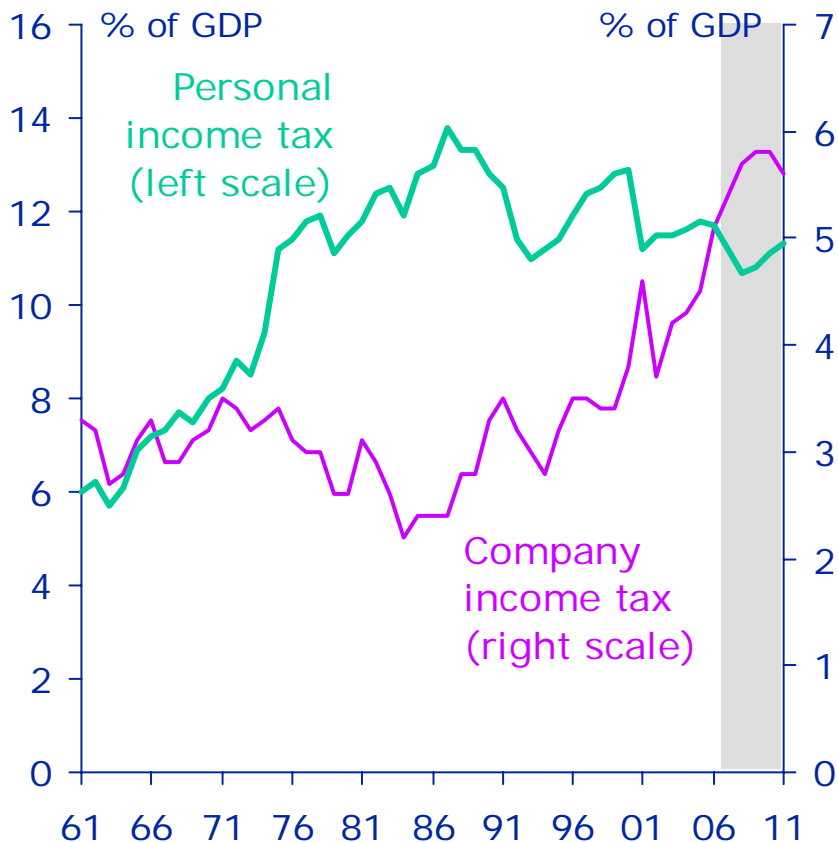
56% of this has been handed over in cash to households



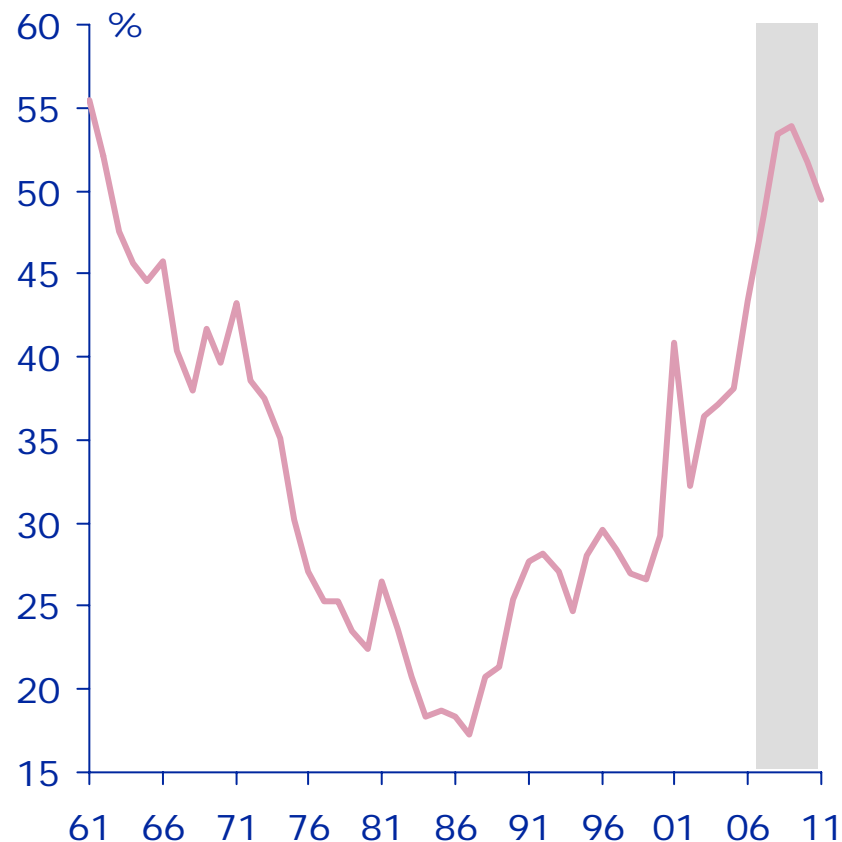
Sources: As for previous slide. Total is A\$398bn over nine years.

Successive Budgets have effectively redistributed income from companies to households

Personal and company income tax as a % of GDP



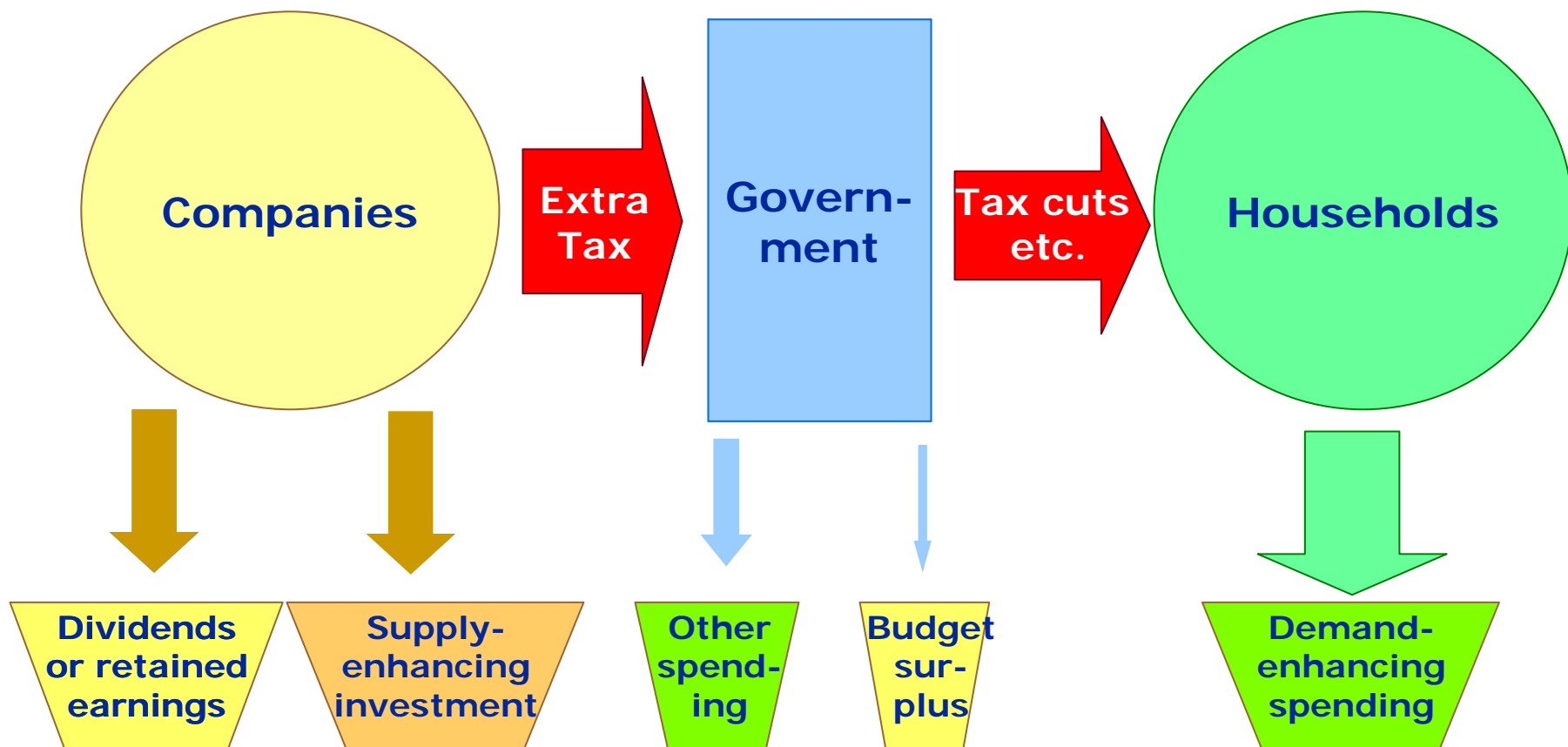
Company income tax as a % of personal income tax



Sources: RBA Occasional Paper No 8, *Australian Economic Statistics 1949-50 to 1994-95* Table 2.17 and Budget Paper No. 1, Statement 5, Tables C4 & C5 (various years).

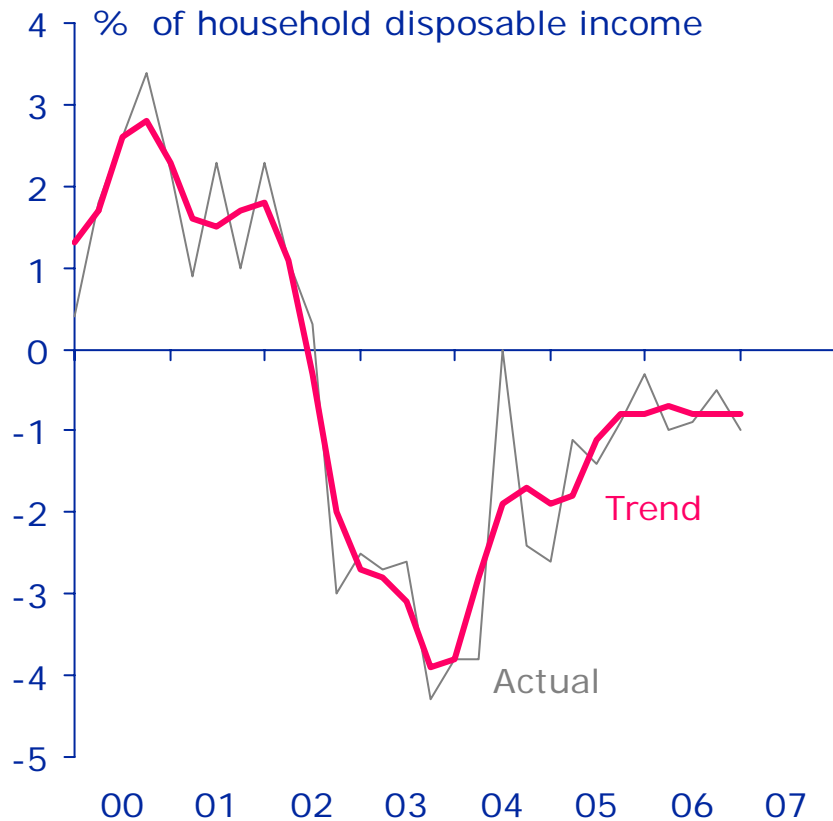
Just because the Budget is in surplus doesn't mean it's not boosting demand

A stylized representation of how recent Budgets have boosted demand even with an unchanged surplus



There's no hard evidence that households saved any significant proportion of last year's tax cuts

Household saving ratio



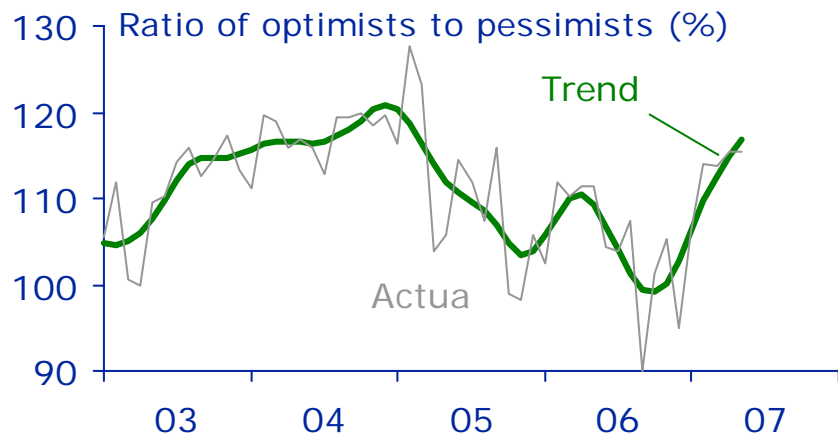
Household credit outstanding



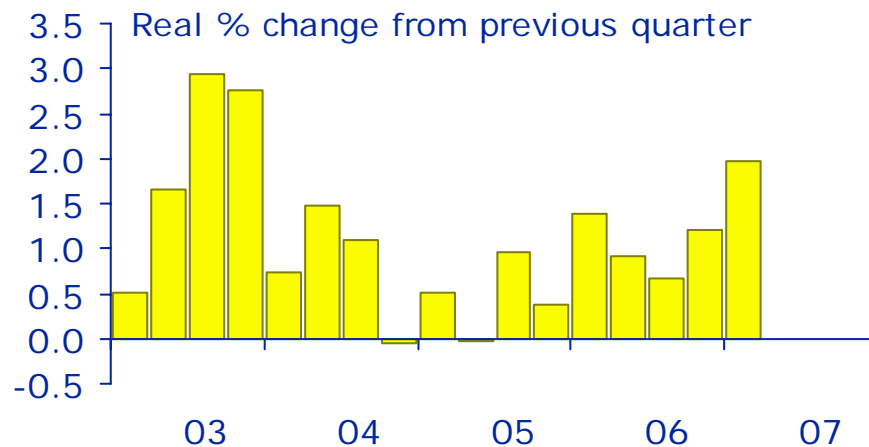
Sources: ABS; RBA.

Australian economy has picked up again this year despite last year's three interest rate increases

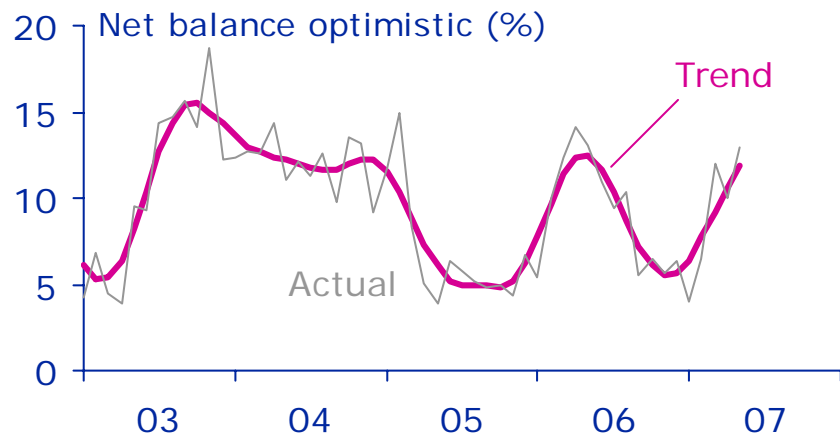
Consumer confidence



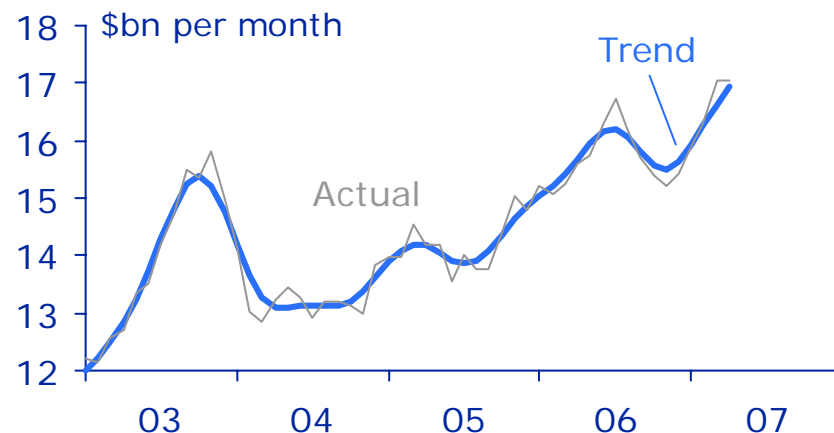
Retail sales volume



Business confidence



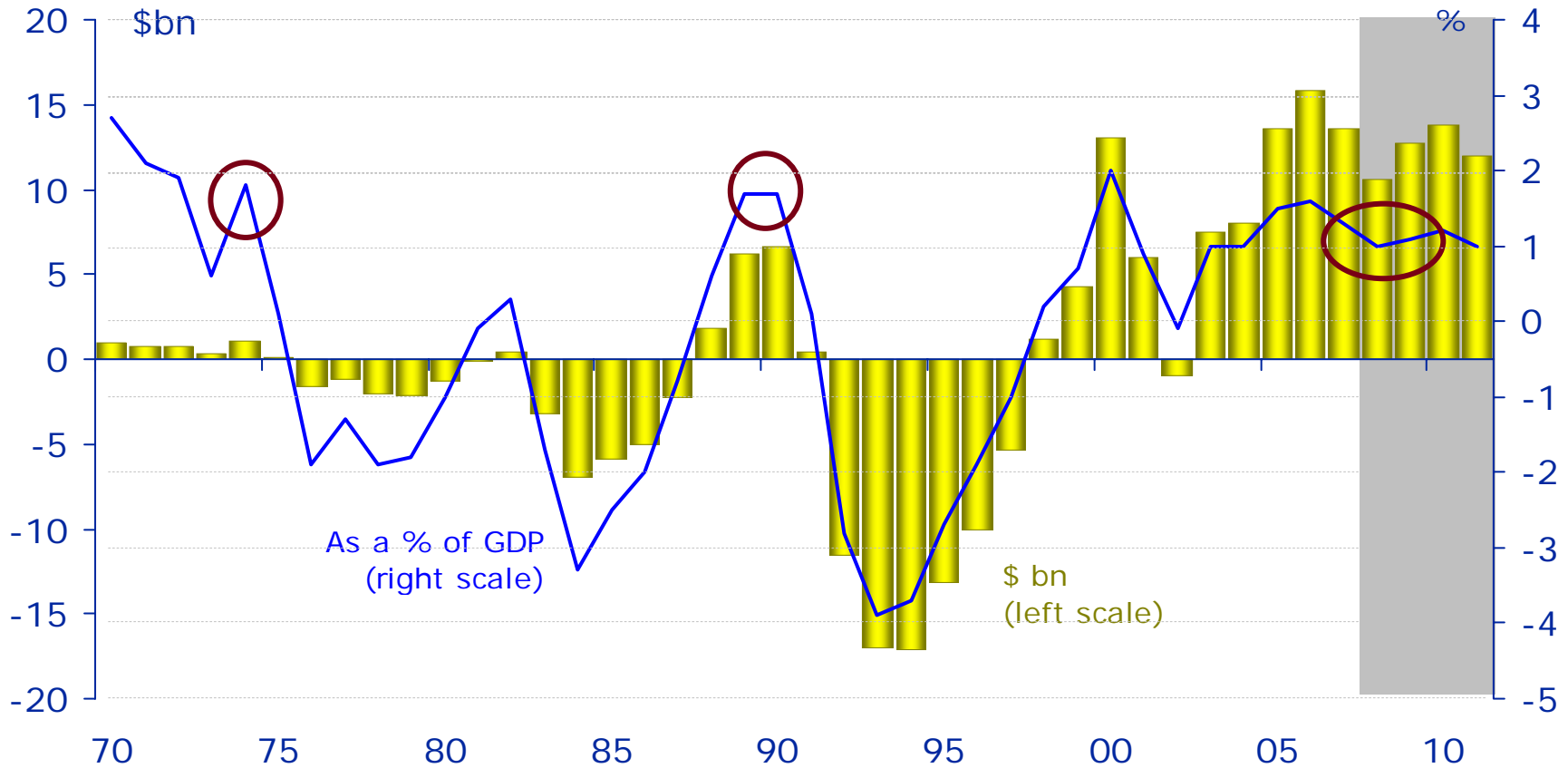
Housing finance commitments



Sources: Westpac-Melbourne Institute; National Australia Bank; ABS.

The projected Budget surpluses are smaller than at the same stage of previous business cycles

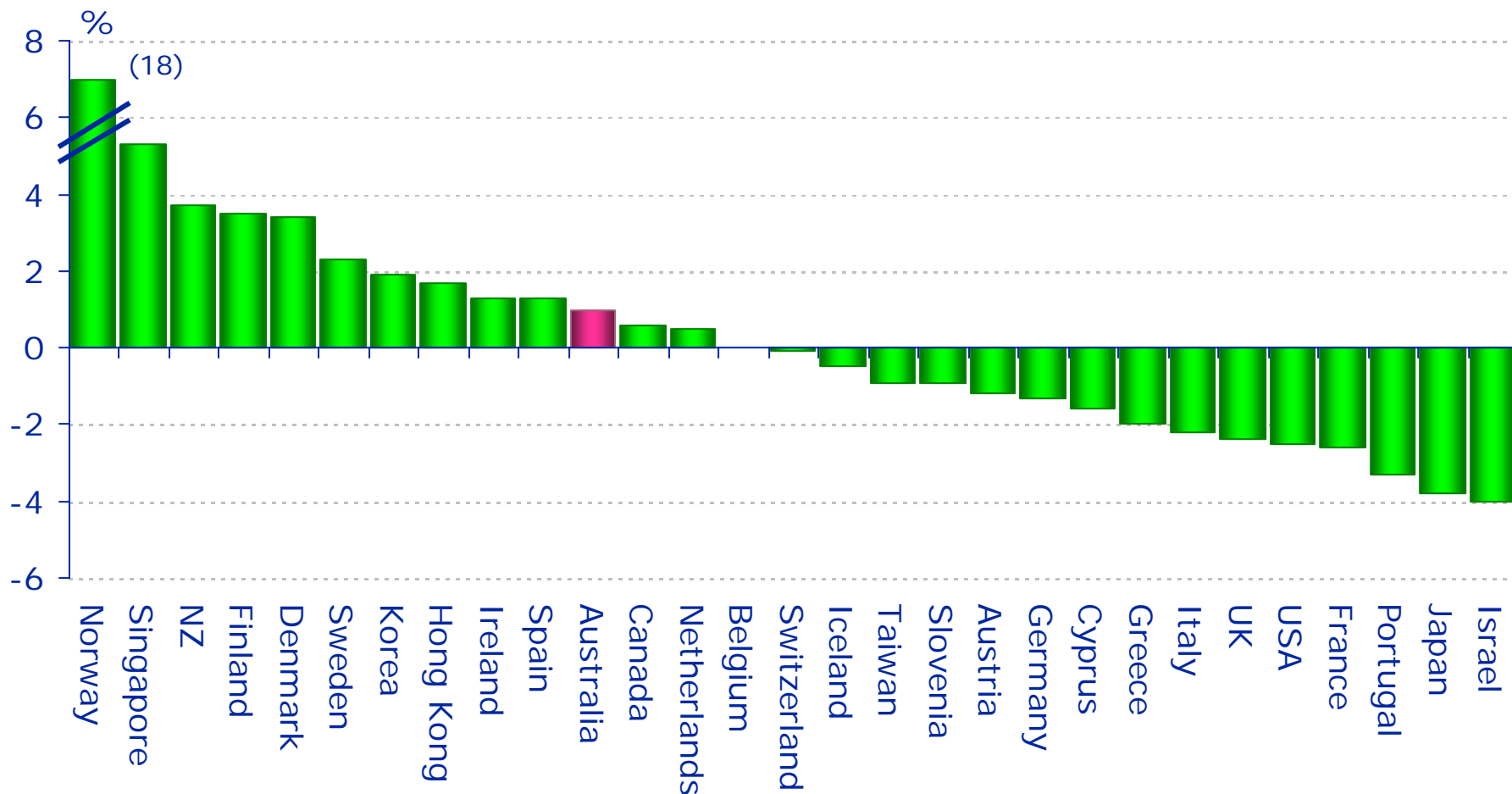
Commonwealth 'underlying' cash balance



Sources: 2007-08 Budget Paper No. 1, Statement 13, Table 1 (and previous issues).

Australia's budget surplus ranks only 11th among advanced economies in 2007

'General government' financial balance
as % of GDP, 2007

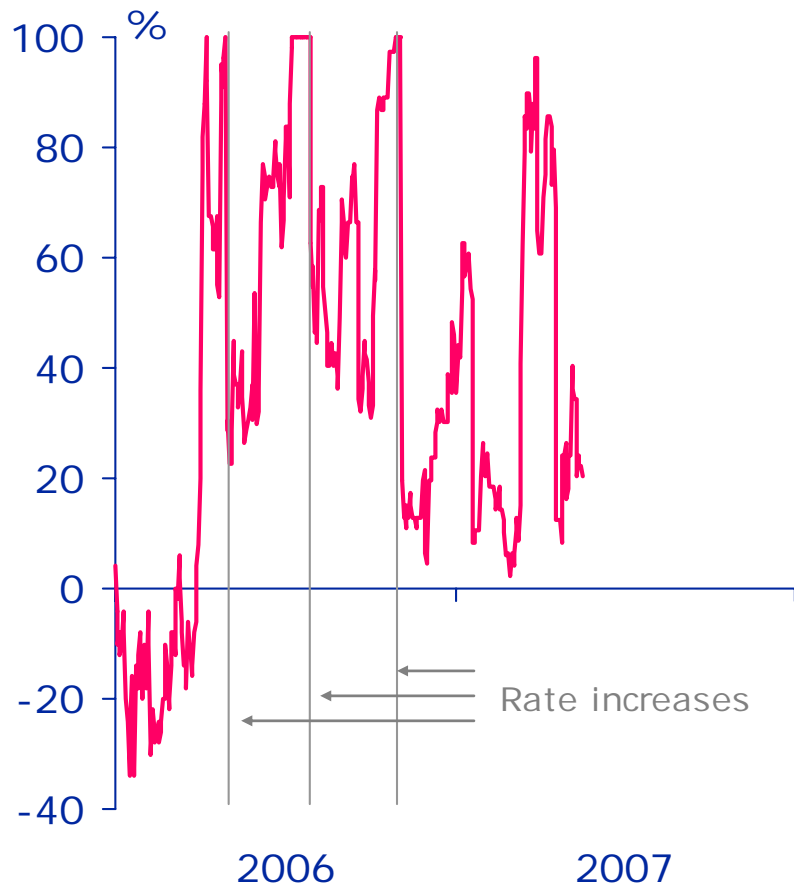


Sources: IMF, *World Economic Outlook* database (April 2007)
and *Budget Paper No. 1*.

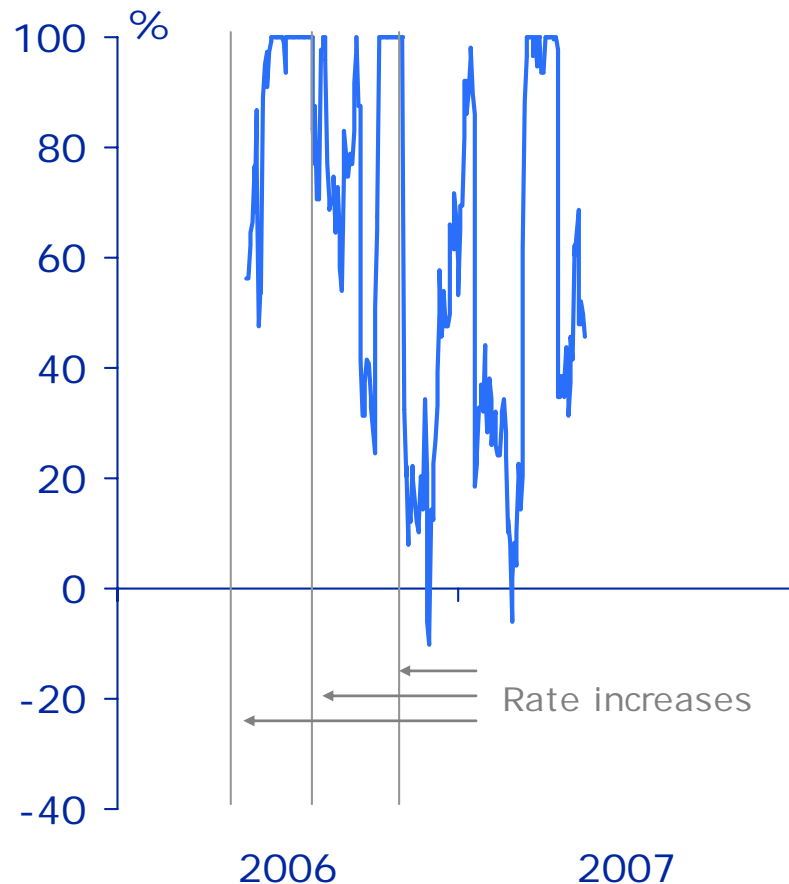
Markets have backed off expectations for a near-term rate rise but still expect higher rates in 2008

Market implied probability of a 25 bp rate increase

within 3 months



within 6 months

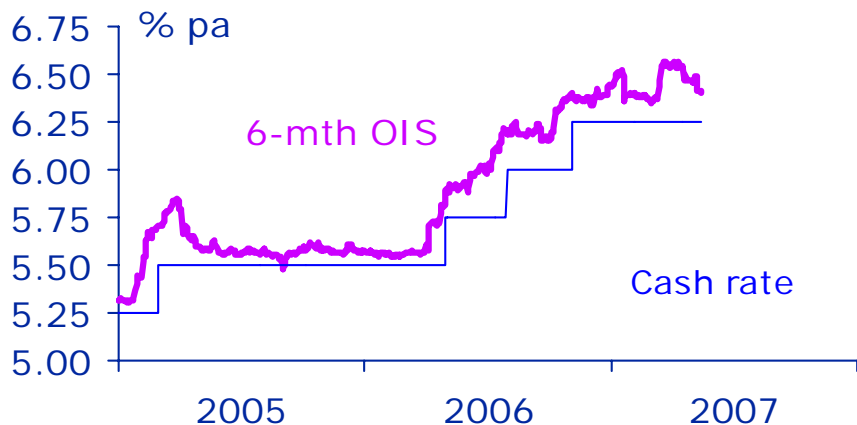


Note: vertical lines indicate date of increases in the cash rate.

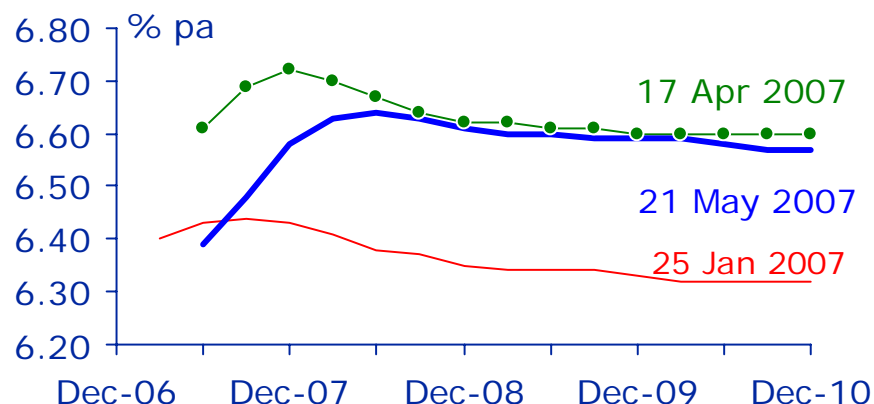
Sources: Bloomberg; Economics@ANZ (based on 30-day futures contracts)

Markets have backed off expectations for a near-term rate rise but still expect higher rates in 2008

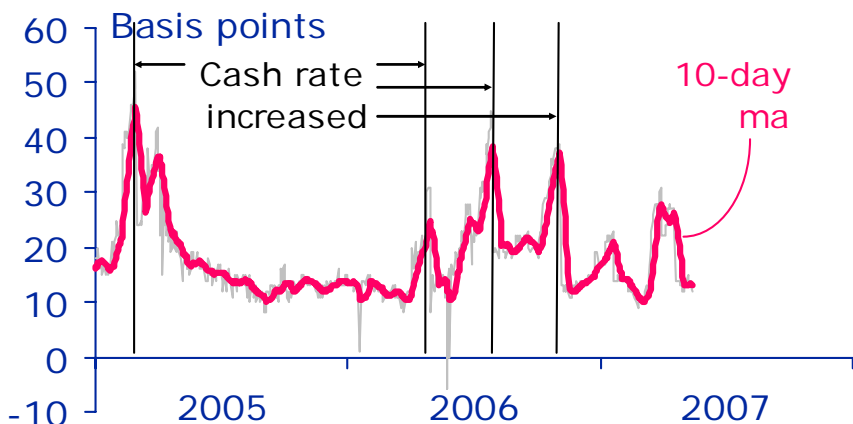
Overnight index swaps



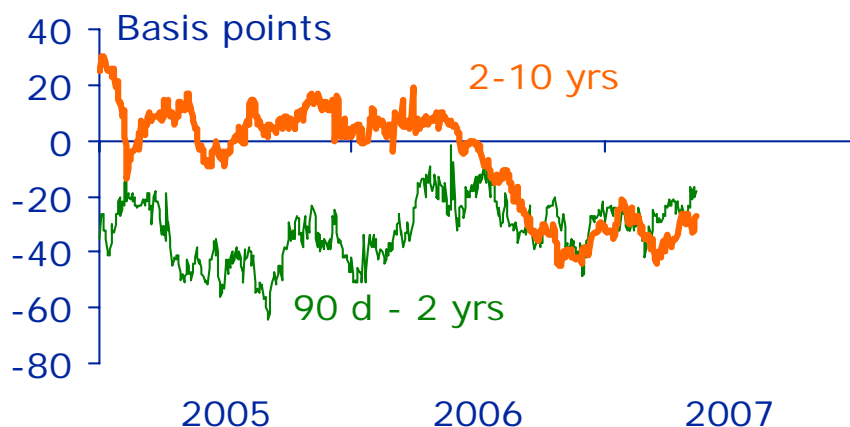
90-day bank bill futures



90-day bill funding spread



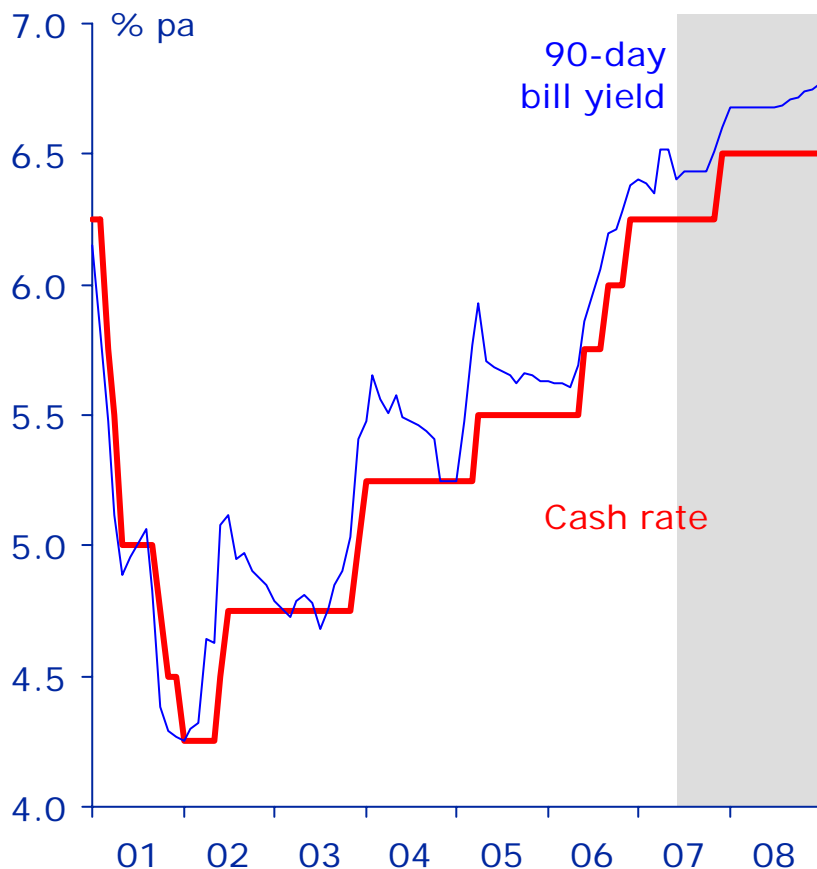
Yield curves



Sources: Bloomberg; Economics@ANZ.

Interest rates probably won't rise before the election but will go up again afterwards

Australian interest rates



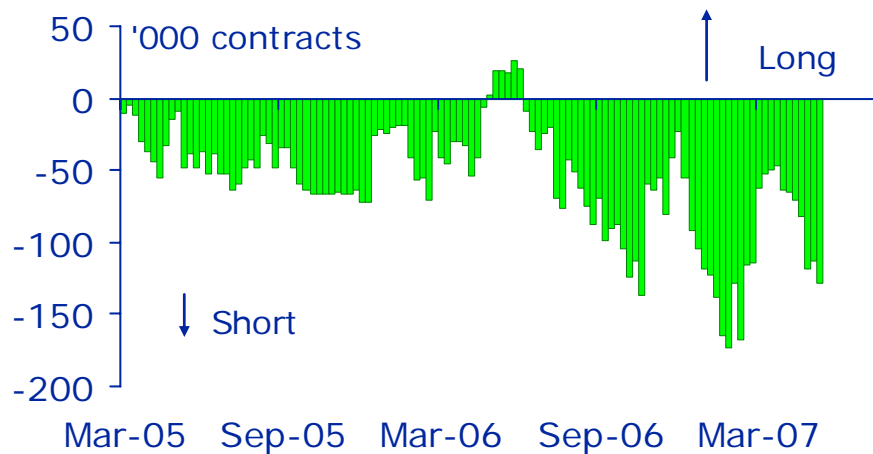
Shaded areas denote forecasts.

Sources: RBA; Datastream; Economics@ANZ.

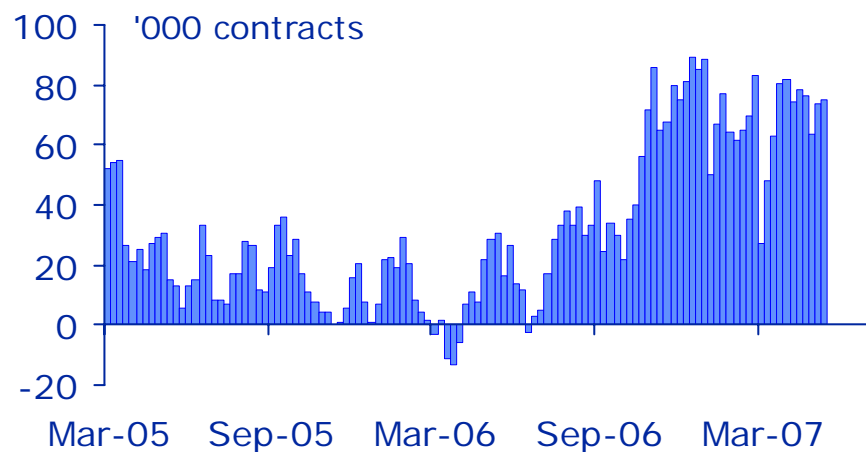
- The RBA gave strong hints that it was contemplating a rate increase in April but chose to wait for the March quarter inflation data – which vindicated the decision to remain on hold
- Having lowered its forecast for 'underlying inflation' for 2007 to 2½% the RBA is quite unlikely to raise the cash rate in the next six months (ie before the election)
- But its forecasts for 2008 and beyond signal an on-going concern that 'underlying' inflation could exceed the top of the target band – and with demand set to remain strong a post-election rate rise is likely

Speculative positioning indicates that the A\$ and NZ\$ still benefiting from the 'carry trade'

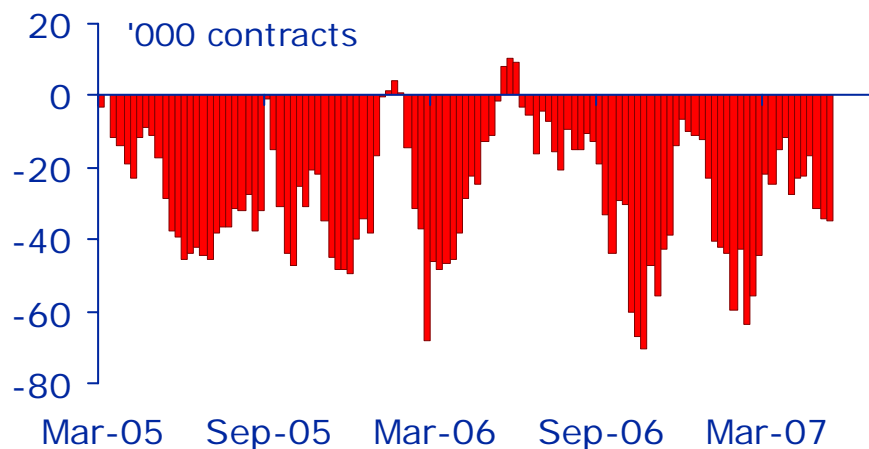
Japanese yen



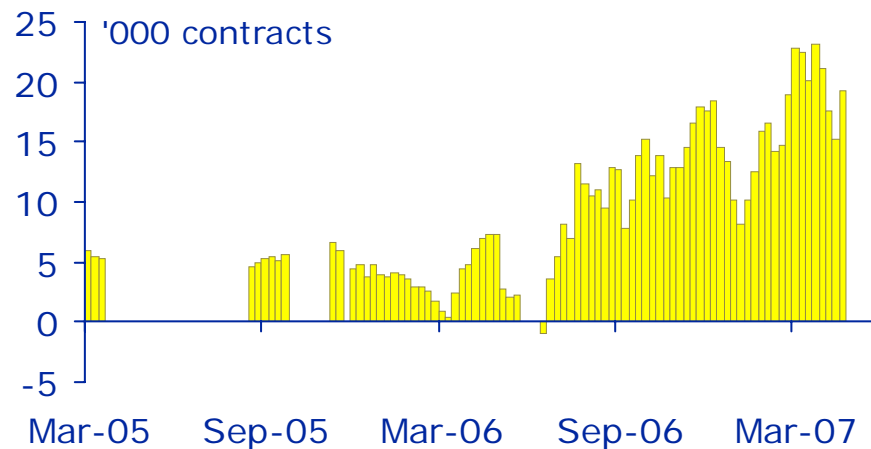
Australian dollar



Swiss franc

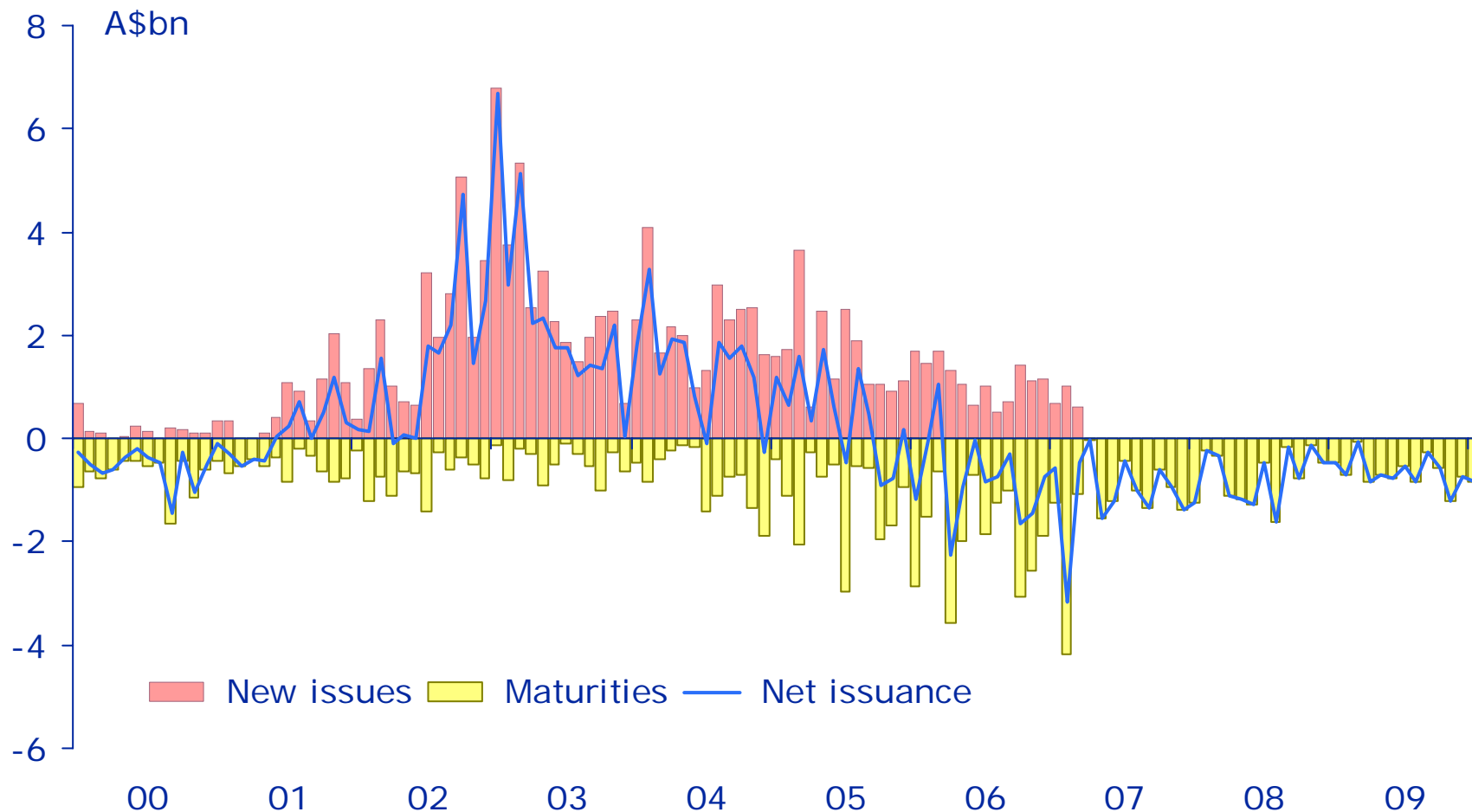


New Zealand dollar



A\$ off-shore bond maturity profile is relatively light (especially compared to NZ\$)

A\$ Euro-bond issuance

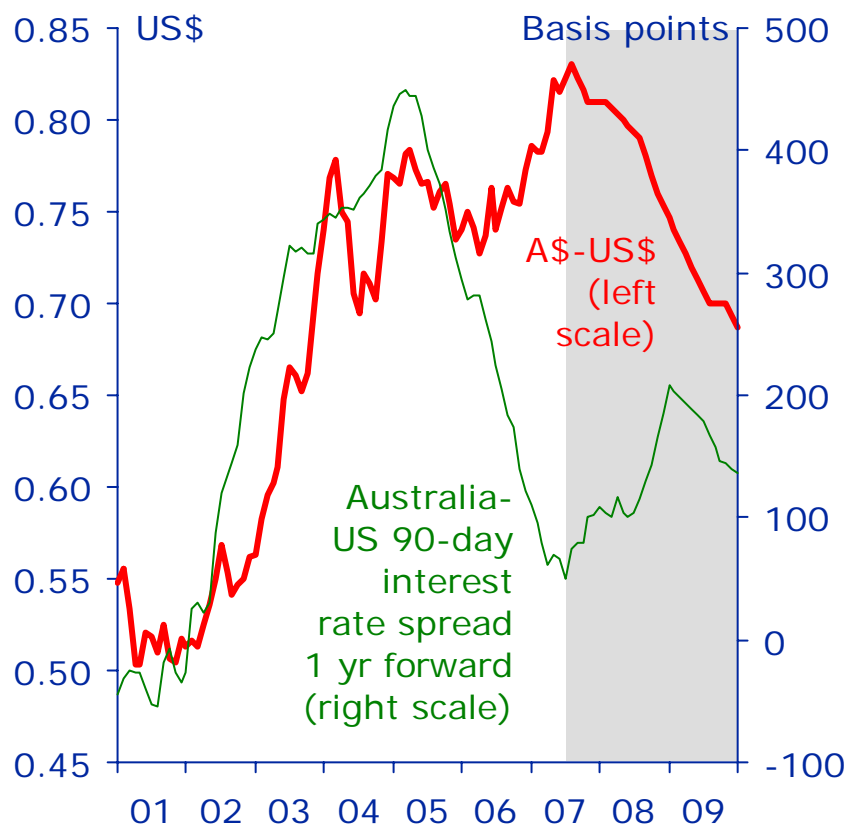


Note: Includes Uridashis. Profile of new issuance from May 2007 is unknown. *Sources:* RBA; Bloomberg; ANZ Markets Research.

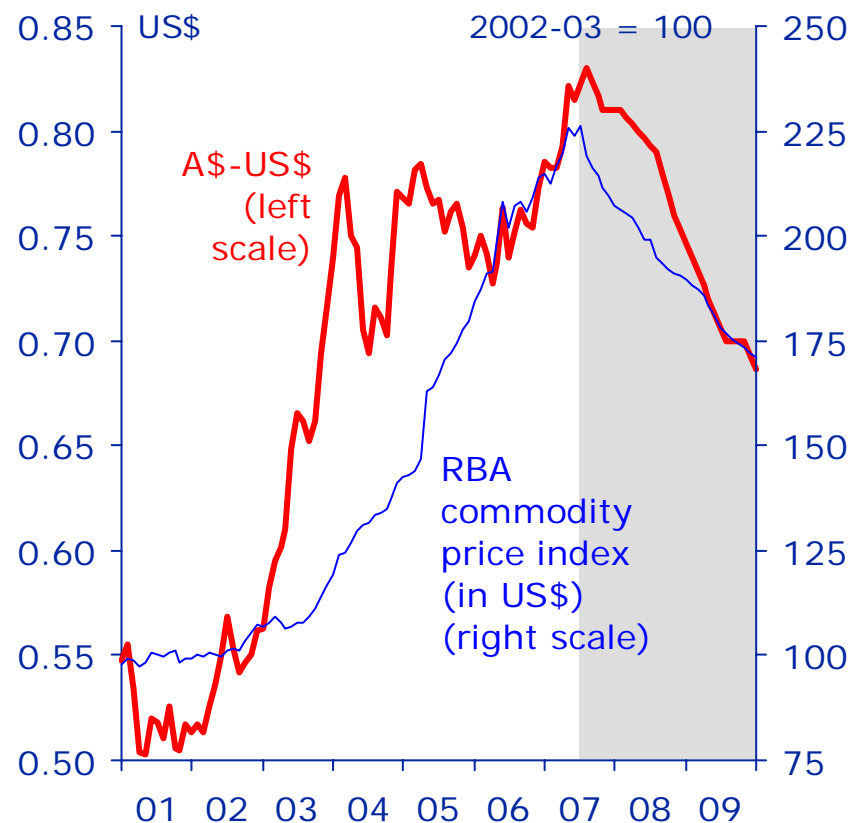
A\$ will ease in line with commodity prices though attracting some support from interest rate spreads

Economic influences on the value of the A\$

Interest rate spreads



Commodity prices

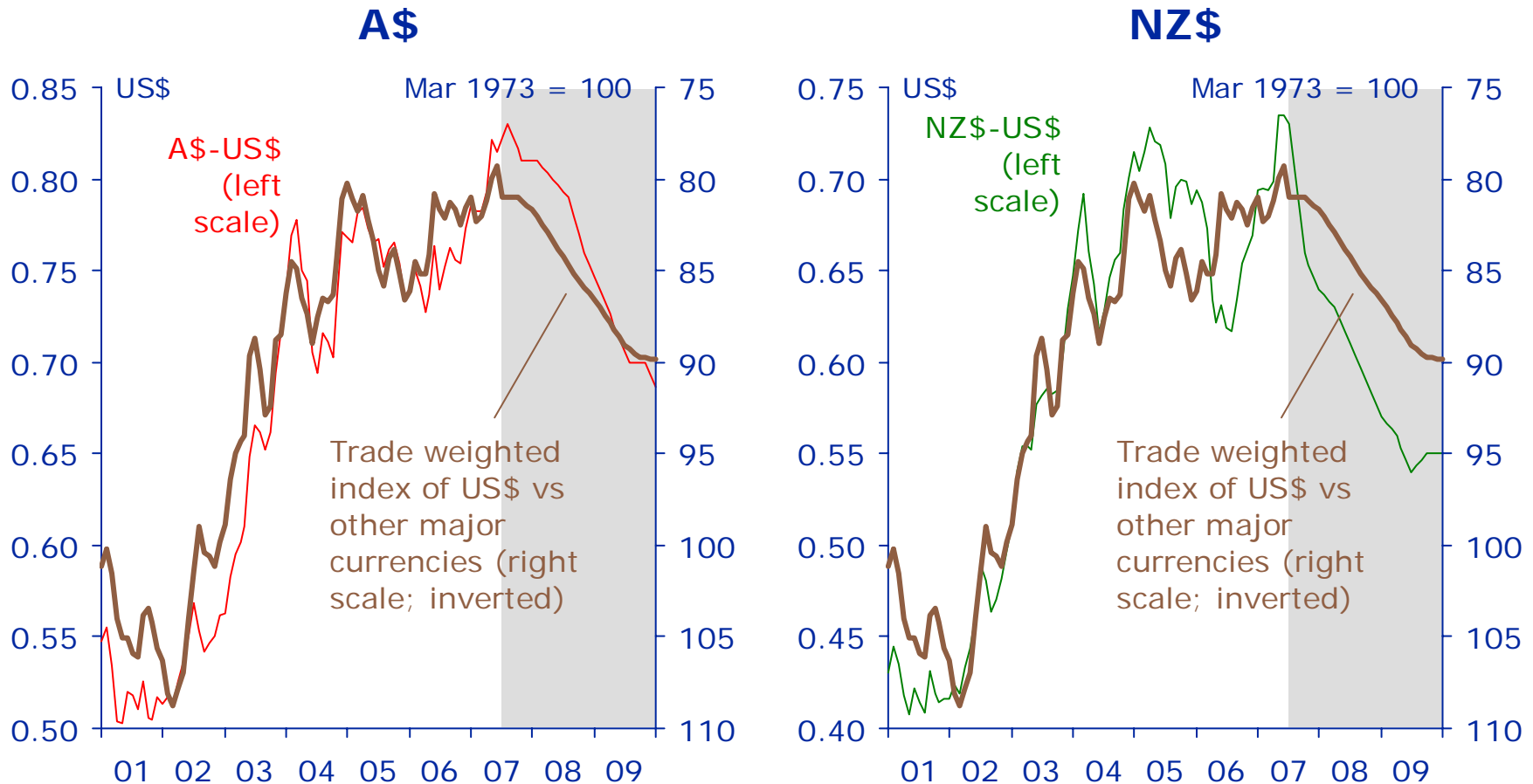


Shaded areas denote forecasts.

Sources: Datastream; RBA; Economics@ANZ.

The expected rebound in the US dollar in 2008 will also be reflected in weaker A\$ and NZ\$

A\$ and NZ\$ vs trade-weighted value of US\$

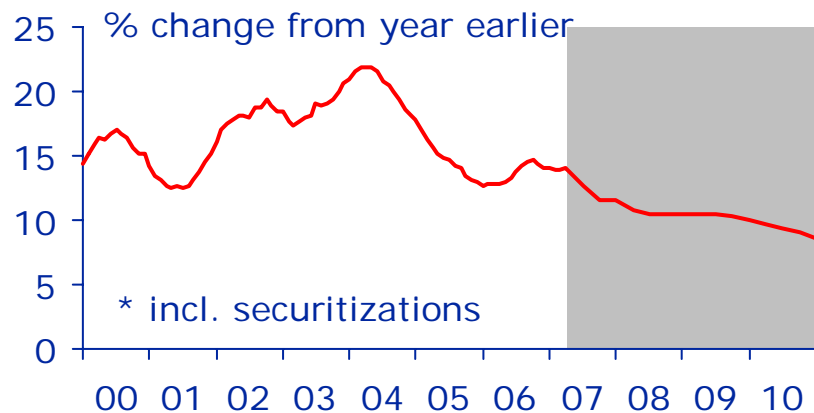


Shaded areas denote forecasts.

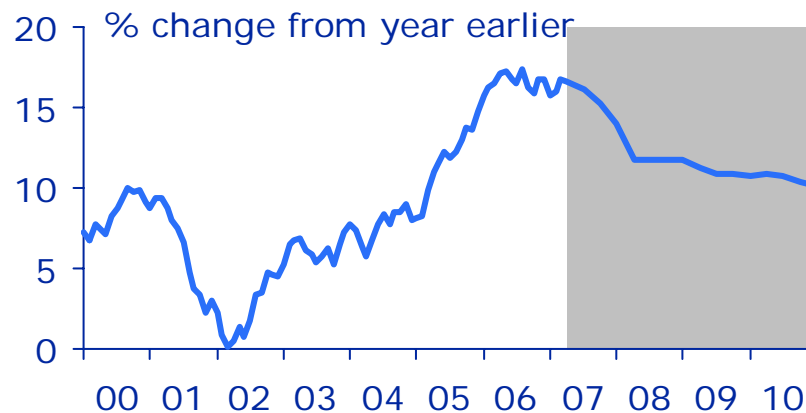
Sources: Datastream; US Federal Reserve; Economics@ANZ.

Declining housing affordability and the peak in the investment boom suggest slowing credit growth

Housing credit*



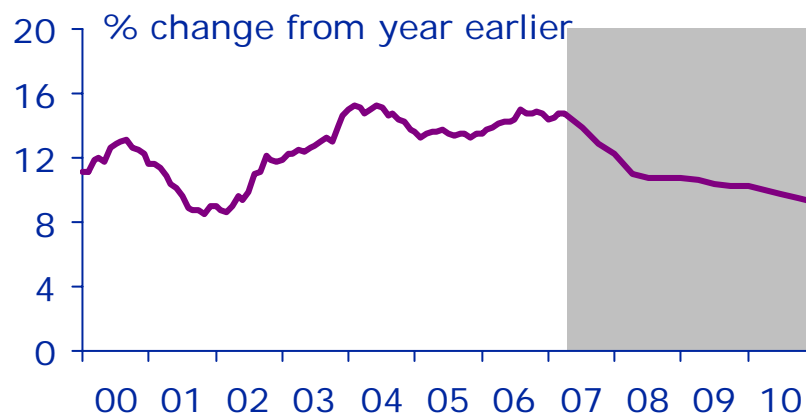
Business credit



Other personal credit



Total credit



Source: Reserve Bank of Australia;
Economics@ANZ forecasts.

NZ economy has slowed but earlier fears of a 'hard landing' haven't been realized

Real GDP growth



Unemployment



Current account balance



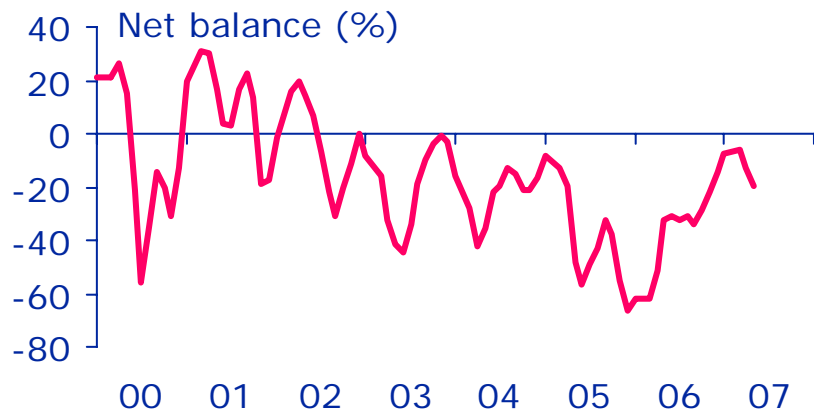
Capacity utilization



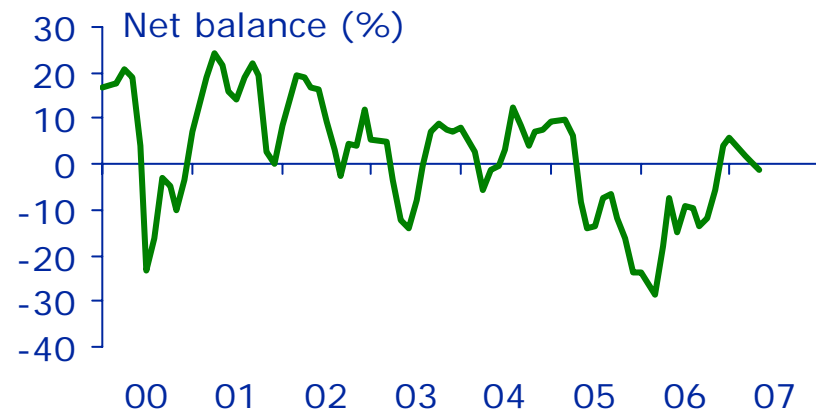
Sources: Statistics NZ; NZ Institute of Economic Research.

Survey evidence suggests that NZ business conditions have softened a little in recent months

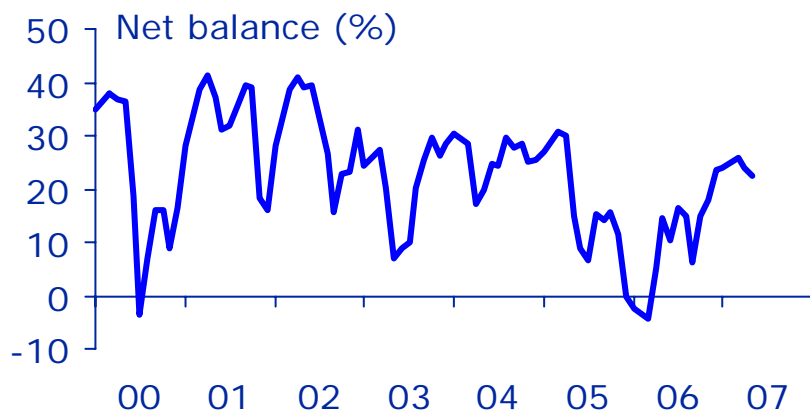
Business confidence



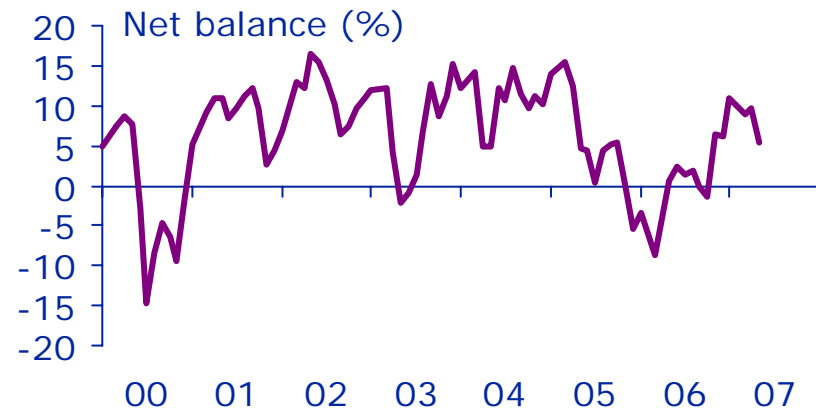
Profit expectations



Firms' own activity outlook



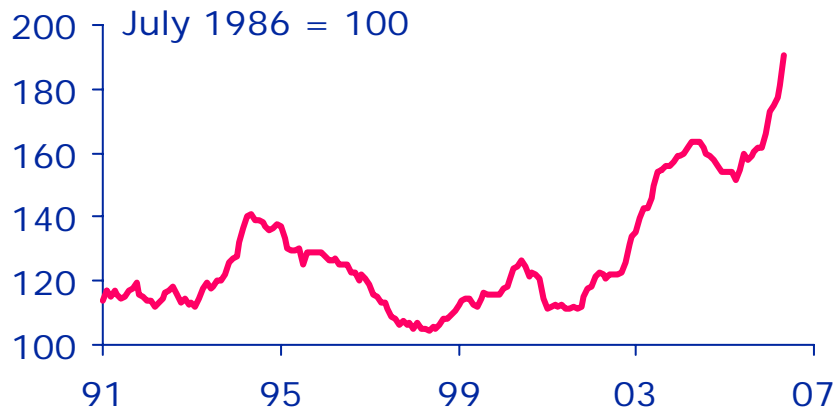
Employment expectations



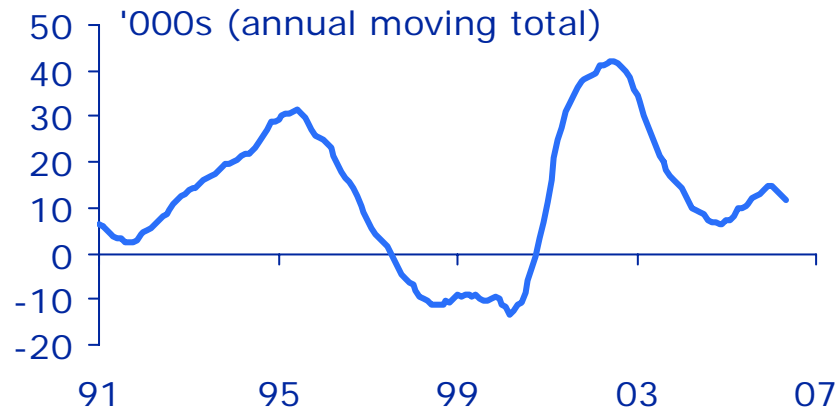
Source: ANZ National Bank.

NZ benefiting from terms of trade and population gains and a still-buoyant housing market

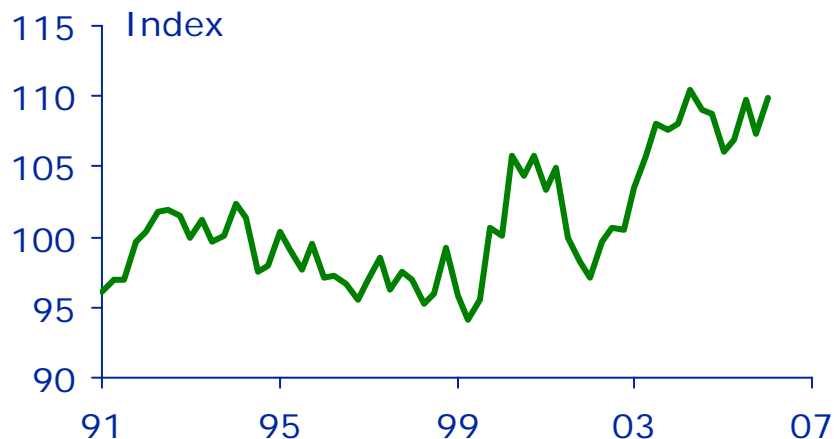
Export commodity prices



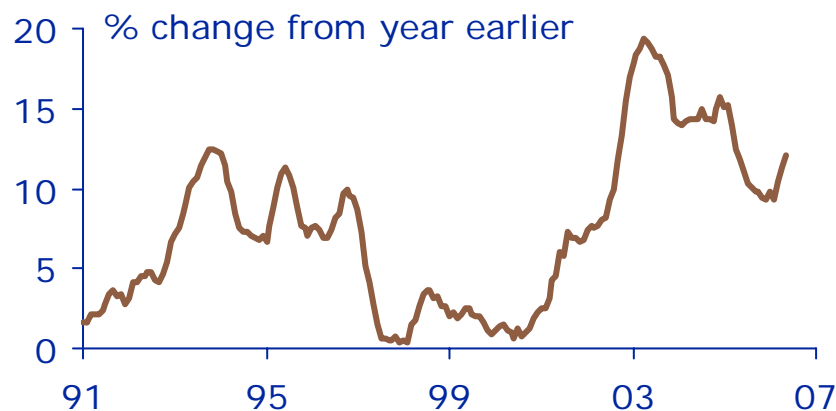
Net immigration



Terms of trade



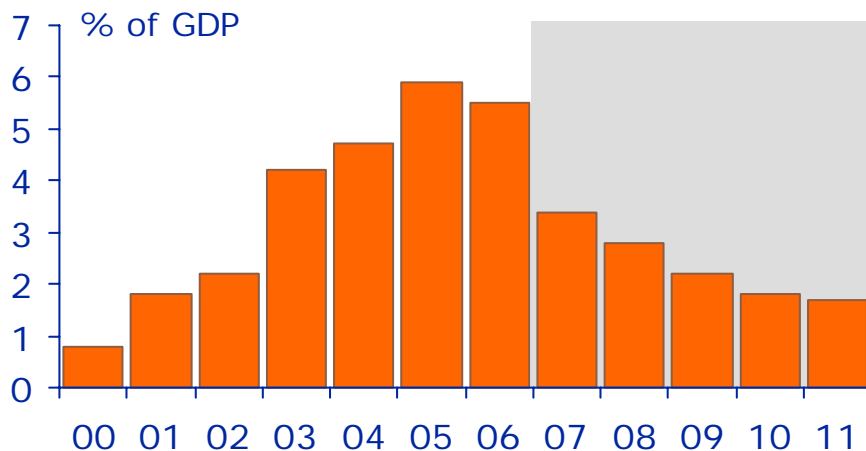
House prices



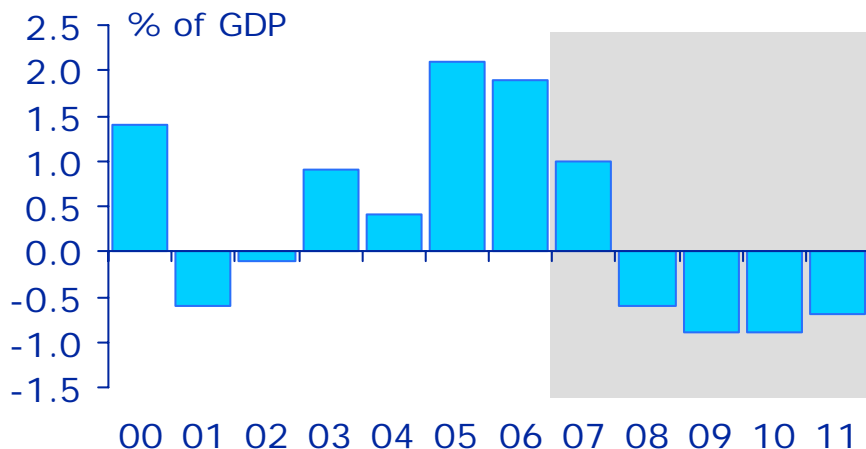
Sources: ANZ National Bank; Statistics NZ; REINZ.

New Zealand's budget will be mildly expansionary

OBERAC/OBEGAL*



Cash balance

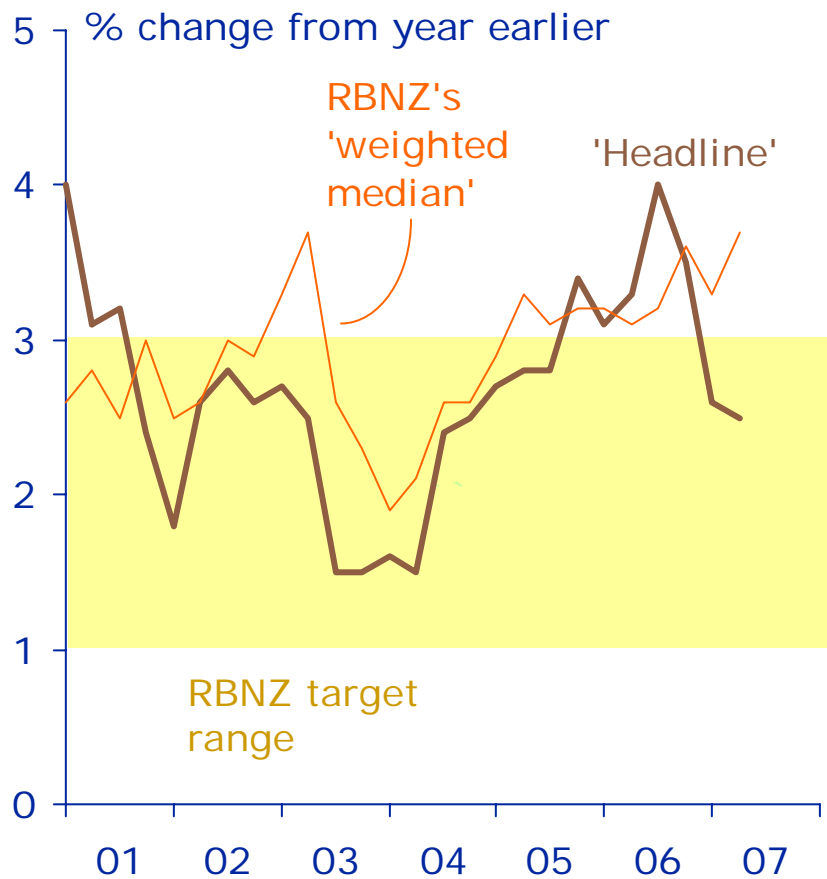


* Operating balance excl. revaluations and accounting changes (pre-2007); op balance before gains & losses and excl. NZ Super Fund revenue (2007 and after)

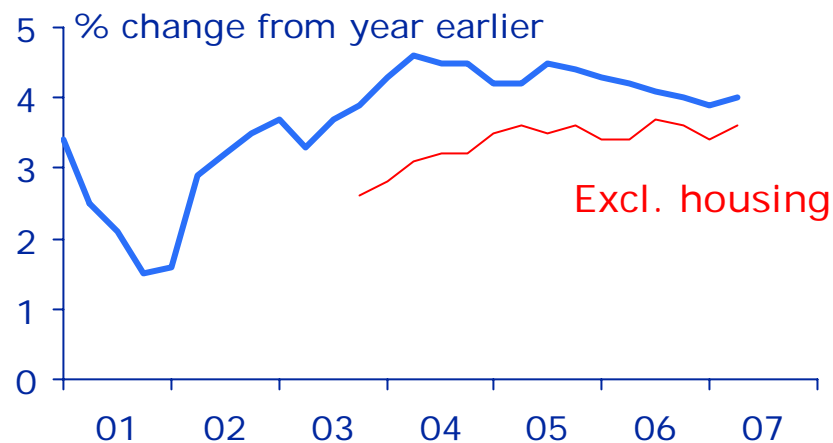
- **Key features of the 2007 Budget:**
 - company tax rate cut from 33% to 30%
 - \$500mn additional capital spending over four years (mainly for urban rail networks)
 - compulsory super ('KiwiSaver') commencing with employer contributions of 1% from April 2008 rising to 4% by 2011, matched by tax credits up to \$40 per week
- In addition regions have been given scope to impose fuel taxes to fund transport projects
- The Budget will add to demand, even allowing for the fact that some of the measures will be directed to private saving
 - in particular note that the budget balance (expressed in the same terms as Australian budgets) swings into deficit in 2007-08

The RBNZ has become increasingly frustrated at the persistence of above-target inflation

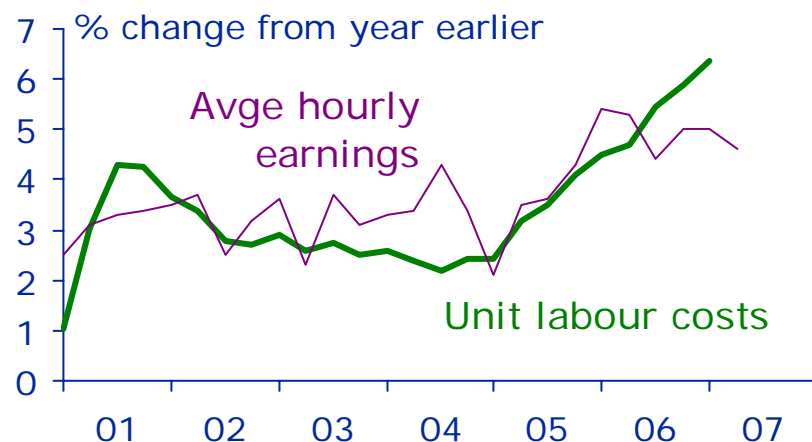
Consumer price inflation



'Non-tradeable' prices



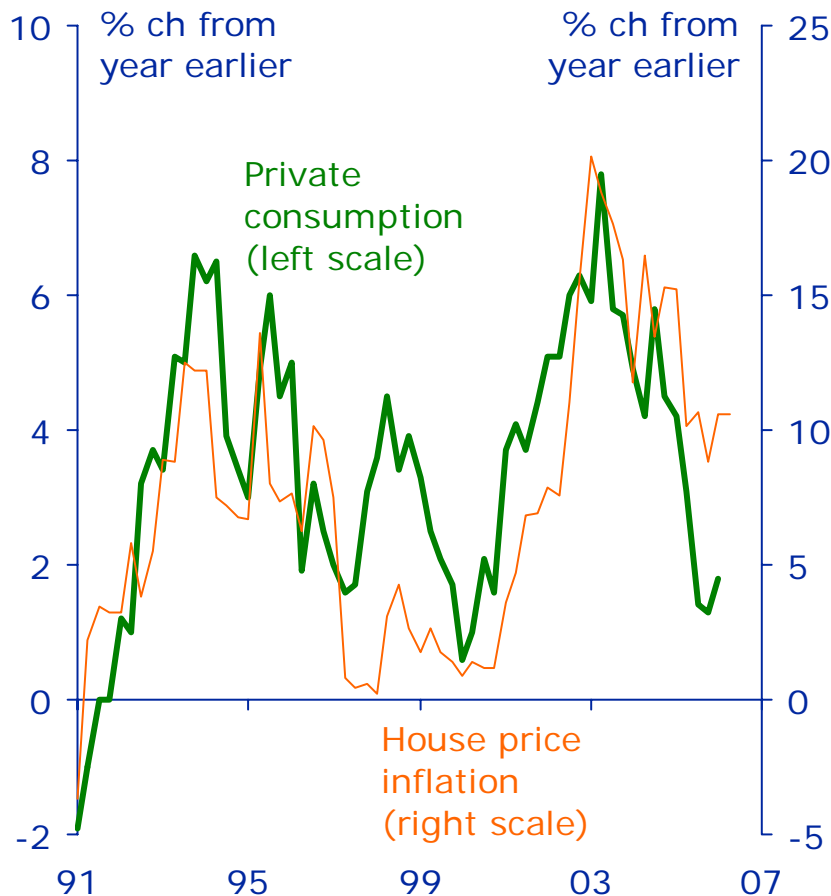
Labour costs



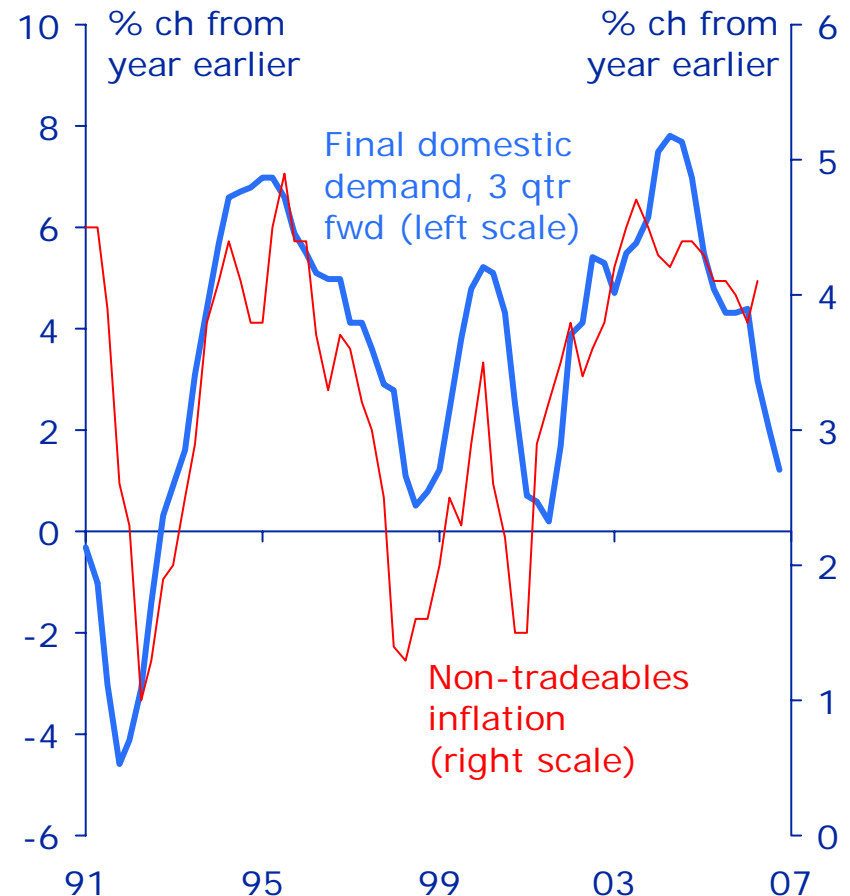
Sources: Statistics NZ; Reserve Bank of New Zealand.

House price inflation and domestic demand need to slow to bring inflation down

House price inflation and private consumption



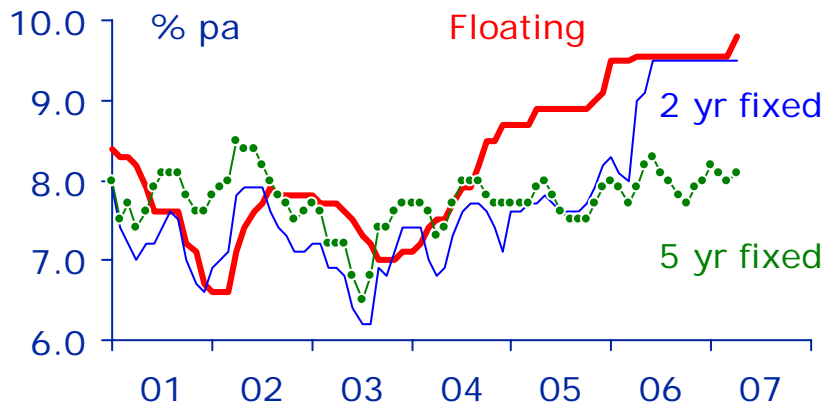
Domestic demand growth and inflation



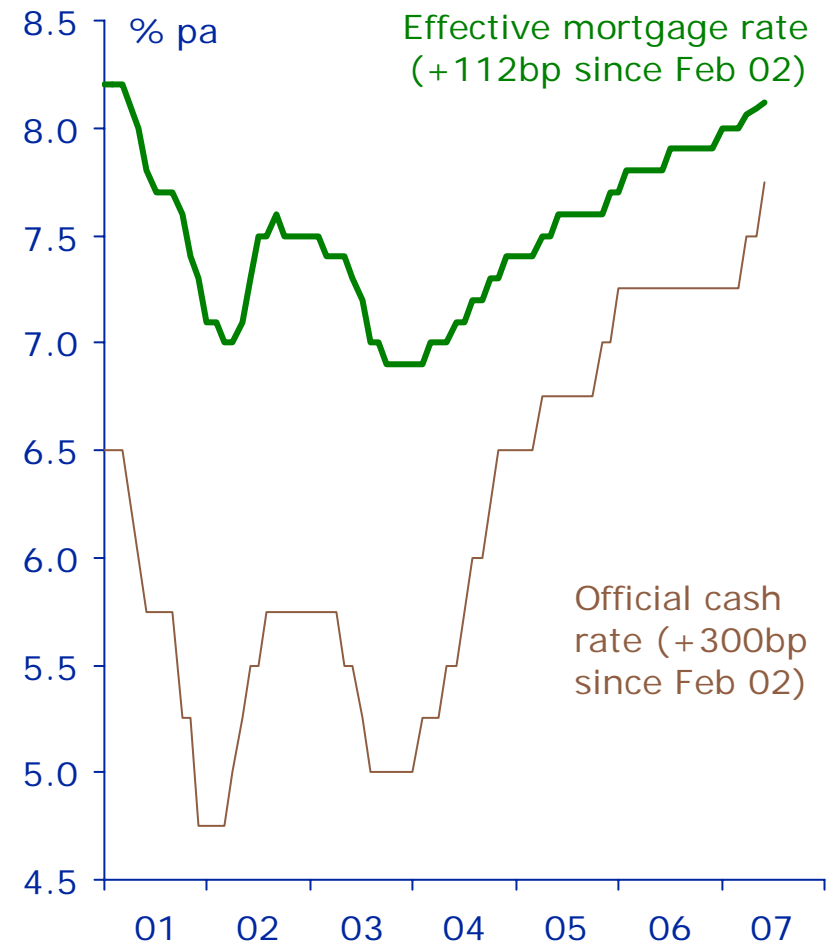
Sources: REINZ; Statistics NZ; ANZ National Bank.

The RBNZ's efforts to tighten monetary policy have been muted by shift to fixed rate mortgages

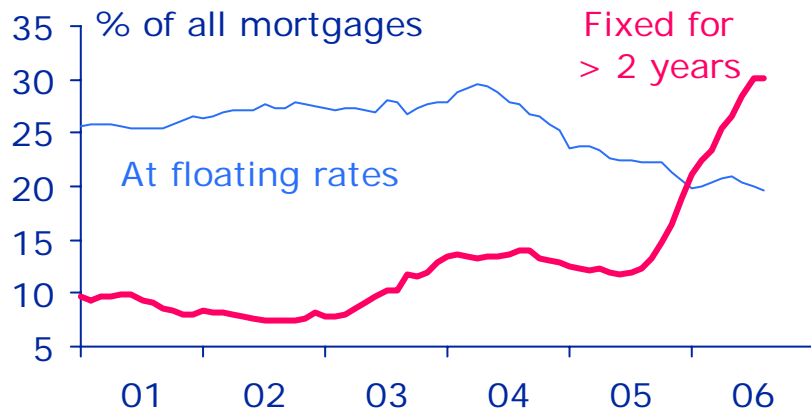
Mortgage rates



Cash vs mortgage rate



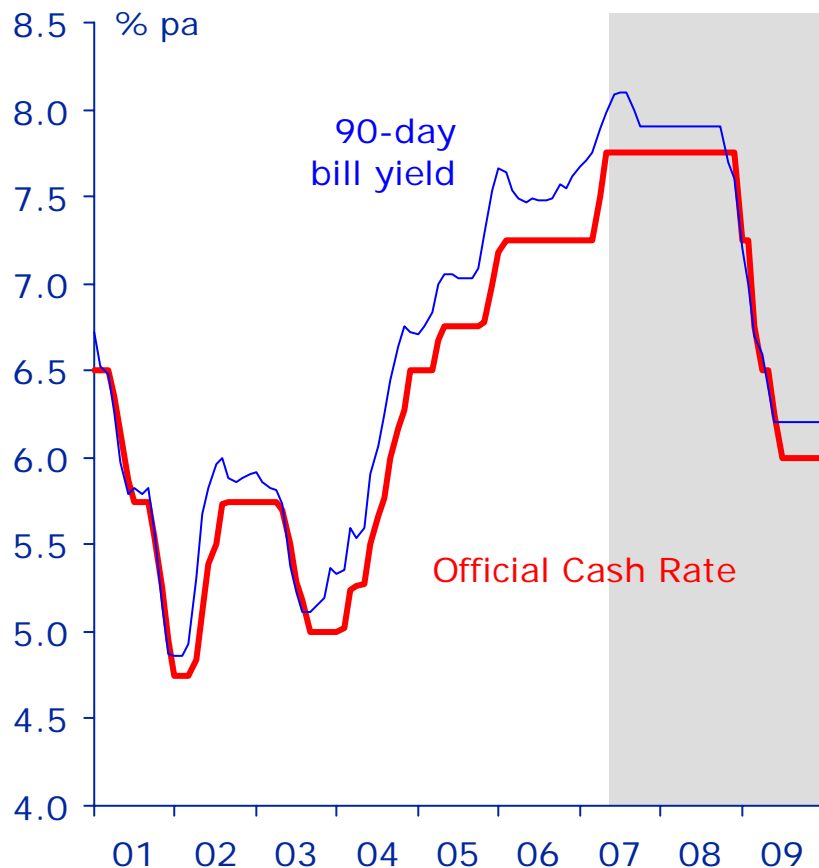
Floating vs fixed rate mortgages



Source: Reserve Bank of New Zealand

RBNZ likely to keep rates on hold until late 2008 before cutting aggressively in 2009

NZ interest rates

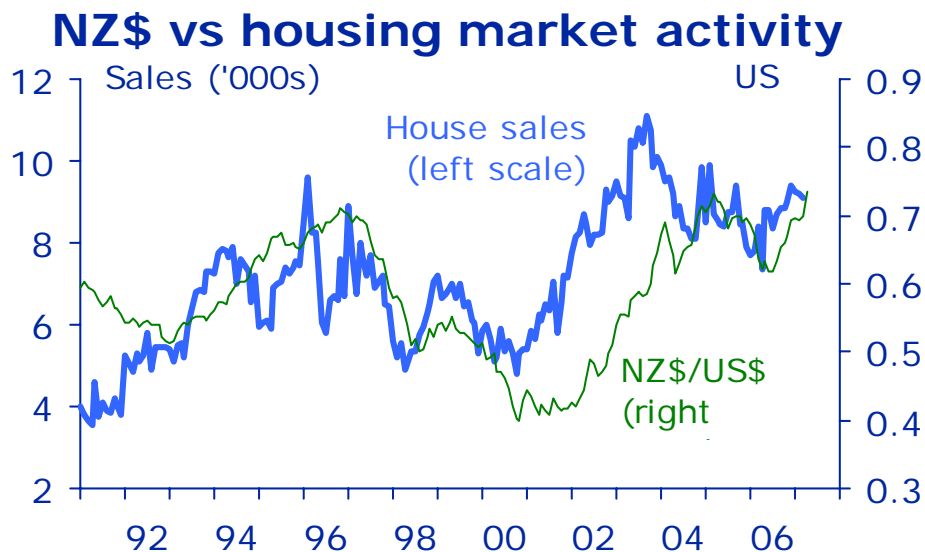
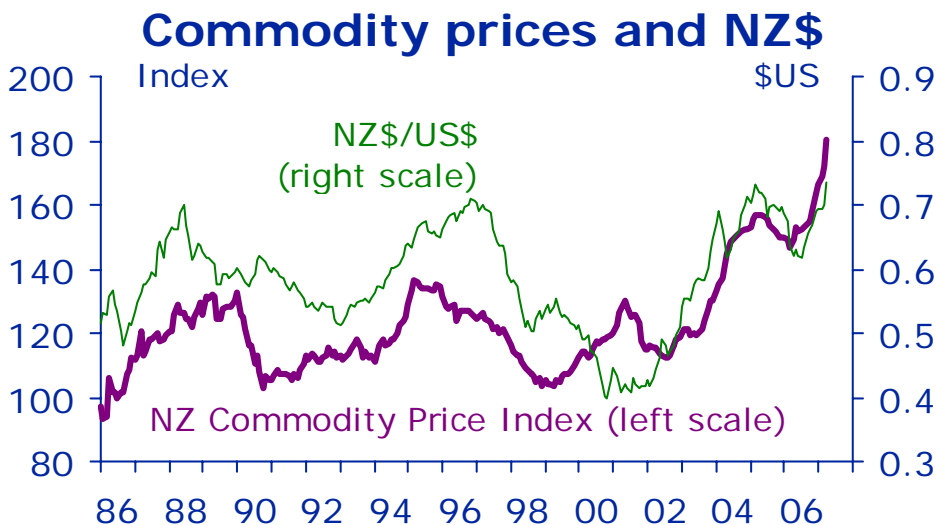


Shaded areas denote forecasts.

Sources: Reuters; ANZ National Bank.

- Non-tradable inflation has risen back above 4 percent and core inflation measures remain well above the RBNZ's target range
- The Reserve Bank has already raised the OCR twice in 2007 - but given the current inflation backdrop, the bias to interest rates is still to the upside
- Borrowers are facing a material jump in fixed lending rates.
- While we retain our 'base case' view that 7¾% will be the peak of the OCR cycle, there is perhaps a 40% chance that rates move up again in June

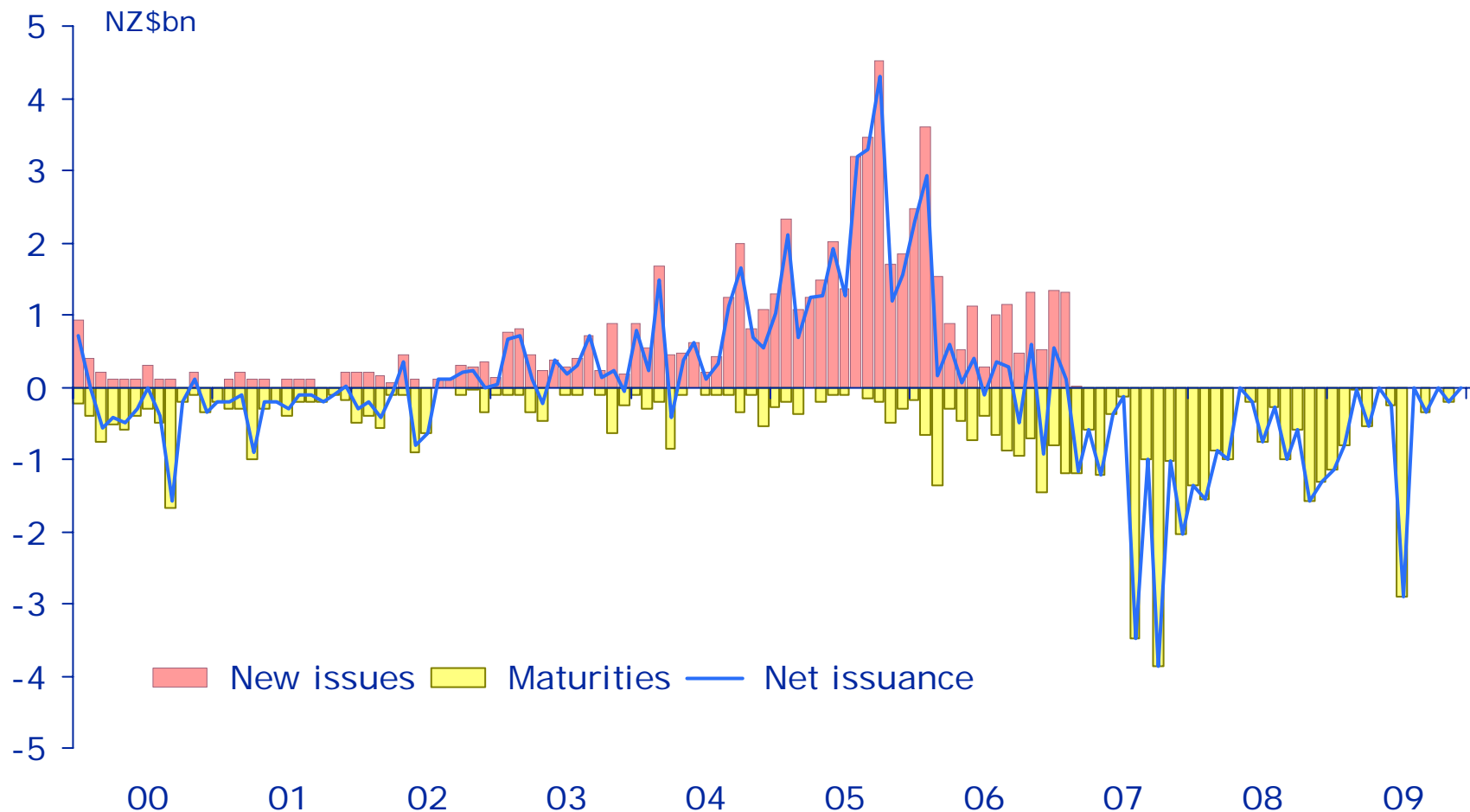
NZ\$ remains supported over the near-term, but the medium term outlook remains bearish



- The NZ\$ has performed strongly, recording a post-float high close to US75¢ in April, with interest rates and commodity (especially dairy) prices providing substantial support
- While the NZ\$ is close to record highs against the US\$ and ¥, it has been flat against most other currencies
- Interest rates, economic activity, and commodity prices are likely to provide ongoing support to the NZ\$ over the near-term, weaker economic data beyond that horizon are likely to lead to sharp falls in the currency

Heavy schedule of offshore NZ\$ bond maturities may prompt NZ\$ weakness later this year

NZ\$ Euro-bond issuance

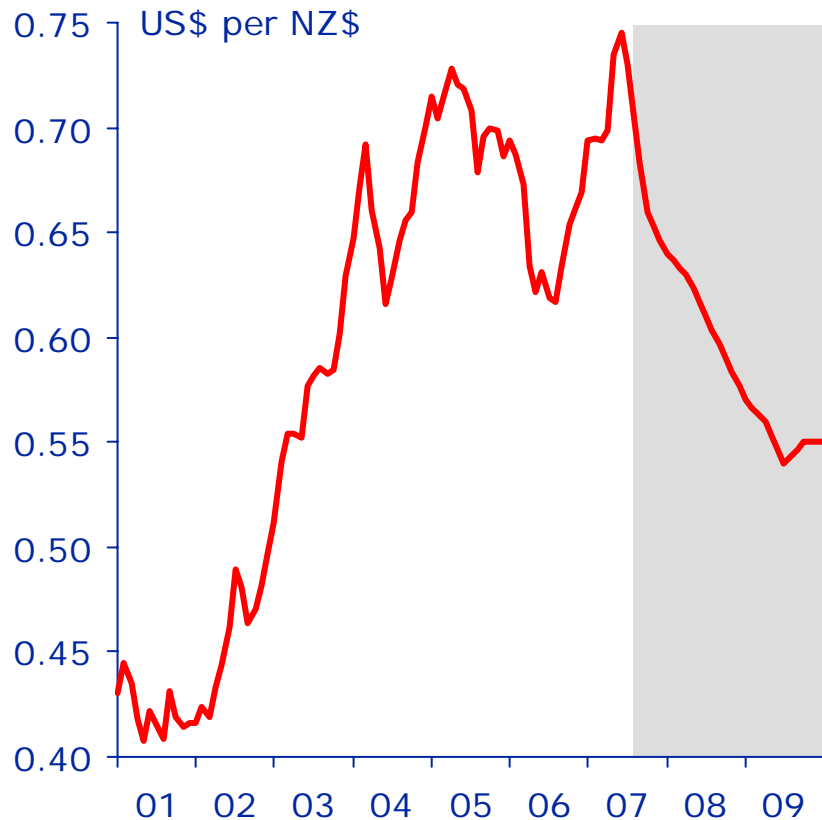


Note: Includes Uridashis. The profile of new issues from May 2007 onwards is of course unknown.

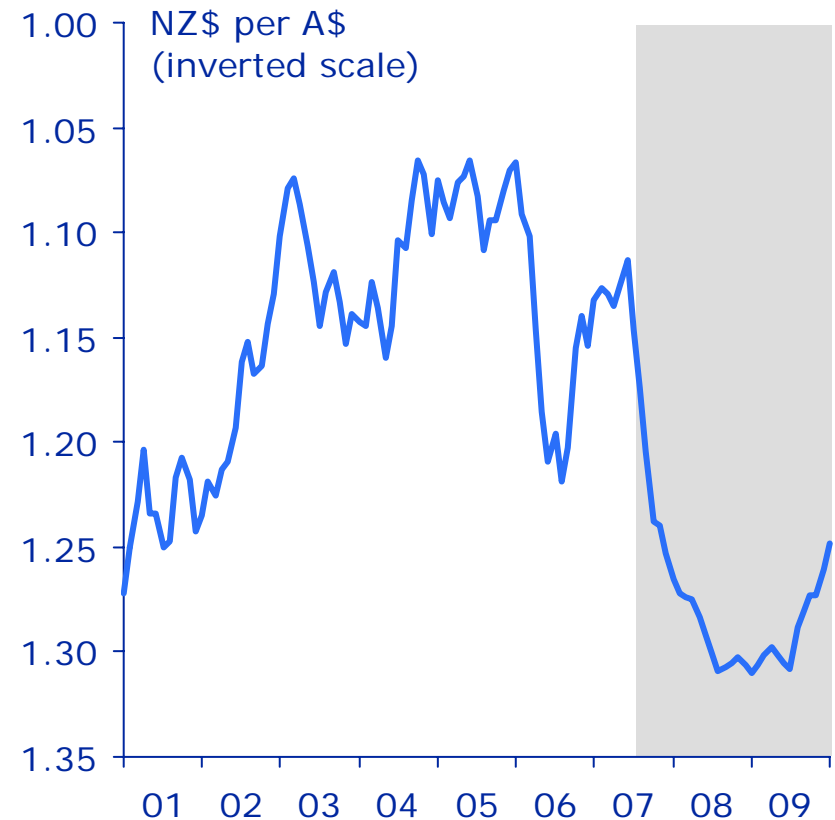
Sources: Bloomberg; RBNZ; ANZ Markets Research.

New Zealand dollar will weaken ahead of aggressive easing by RBNZ

NZ\$ vs US\$



NZ\$ vs A\$



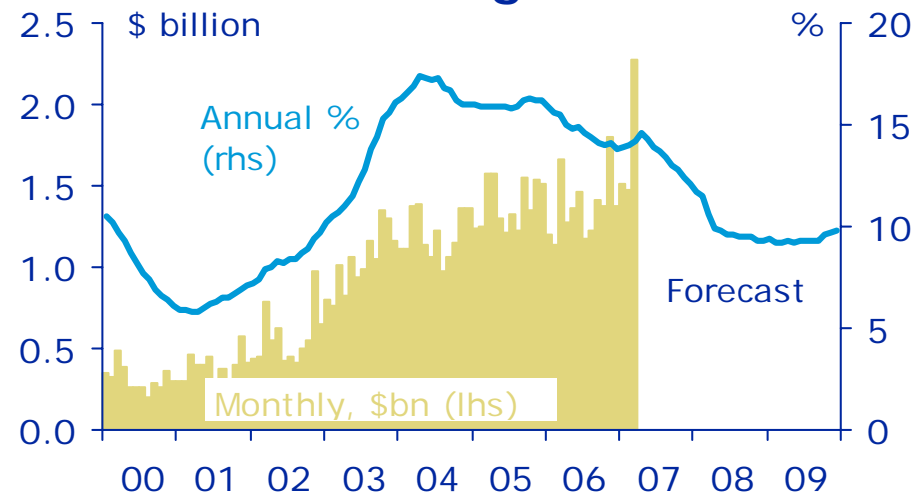
Shaded areas denote forecasts.

Sources: Datastream; NZ Economics

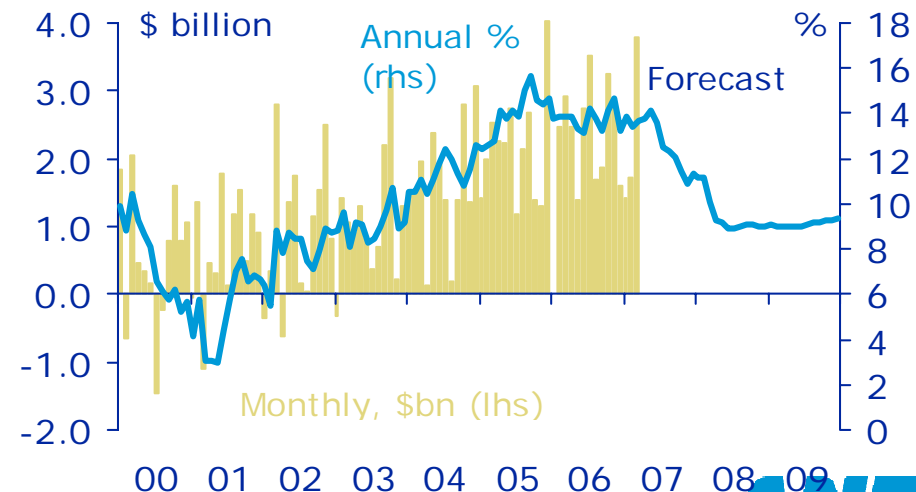
Credit growth in New Zealand is expected to slow over the next 18 months

- Lending growth remains robust: the solid trend in lending is not showing any material sign of easing, although the large increase in mortgage loans written in March may reflect early refinancing ahead of Reserve Bank interest rate increases
- We expect continued moderation in credit growth given prospects for softening growth in the domestic economy
- System wide growth for the banking sector of around 8-10 % pa is expected over the coming three years

Housing credit



PSC (resident, ex repos)



Sources: RBNZ; ANZ National Bank.