
The Australian Economy and Financial Markets

Chart Pack September 2015

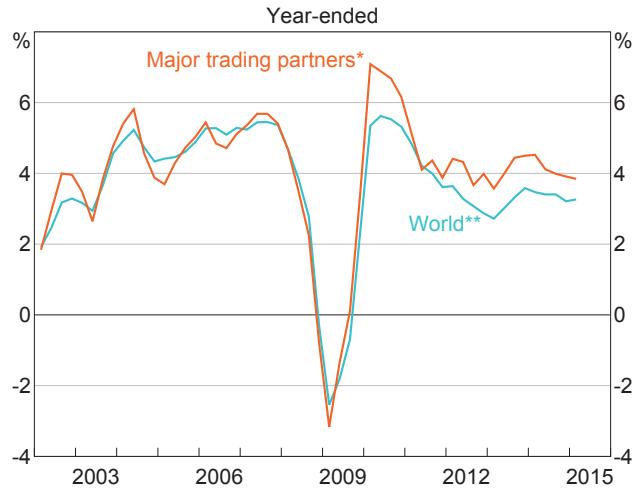
The Australian Economy and Financial Markets

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GDP Growth – World

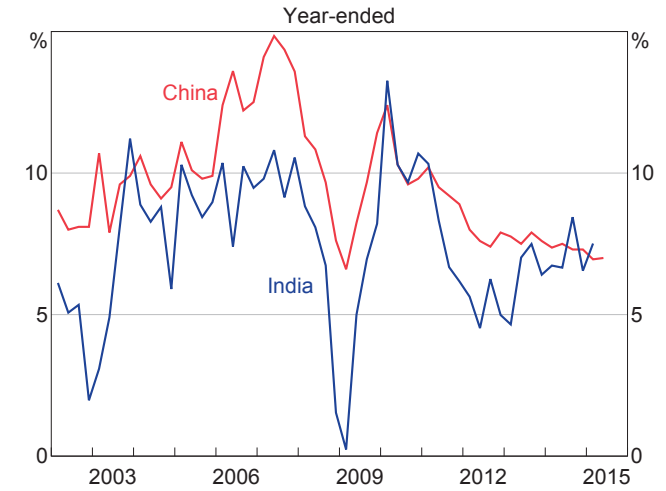


* Weighted using Australian export shares

** PPP-weighted; accounts for 85 per cent of world GDP

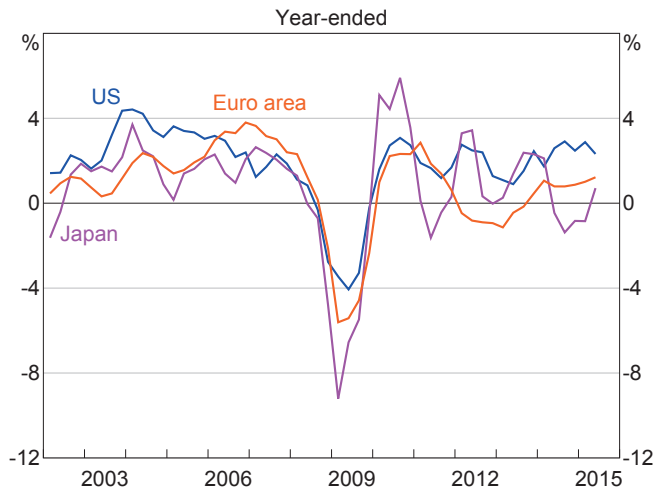
Sources: ABS; CEIC Data; IMF; RBA; Thomson Reuters

GDP Growth – China and India



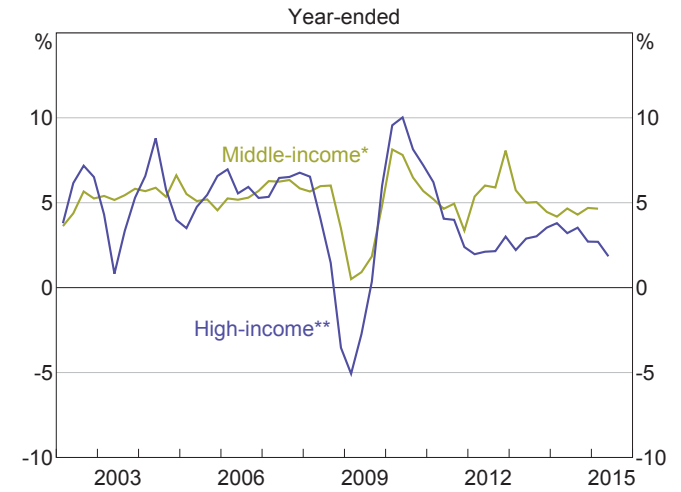
Sources: CEIC Data; RBA

GDP Growth – Advanced Economies



Source: Thomson Reuters

GDP Growth – East Asia

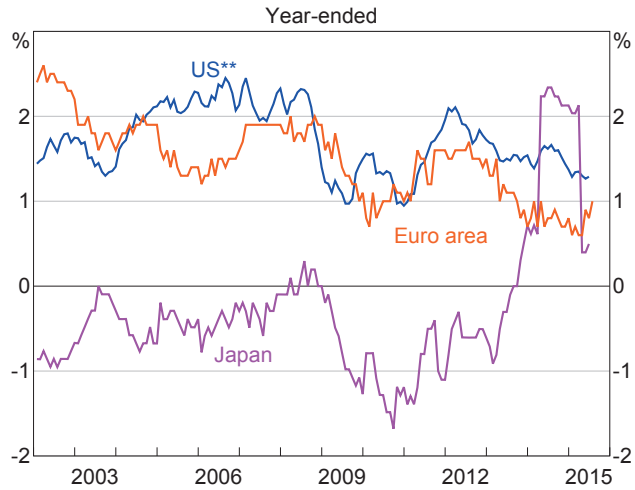


* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted

** Hong Kong, Singapore, South Korea and Taiwan; PPP-weighted

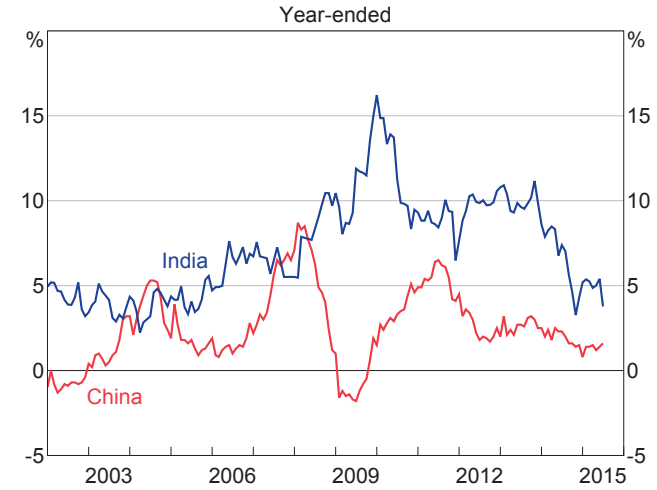
Sources: CEIC Data; IMF; RBA

Core Inflation* – Advanced Economies



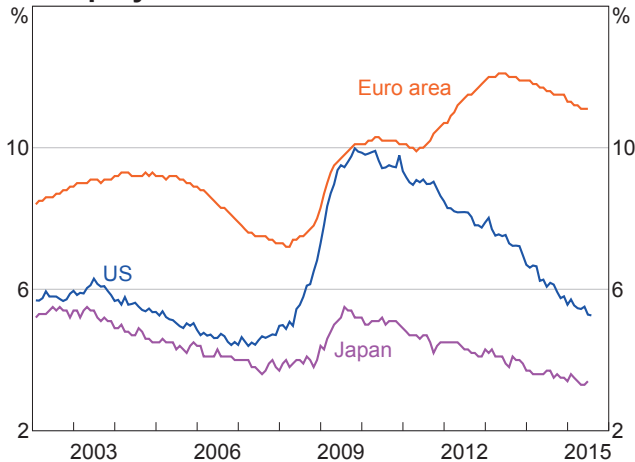
* Excluding food and energy, and for the euro area also excluding alcohol and tobacco
 ** Core price index for personal consumption expenditures
 Source: Thomson Reuters

Inflation – China and India



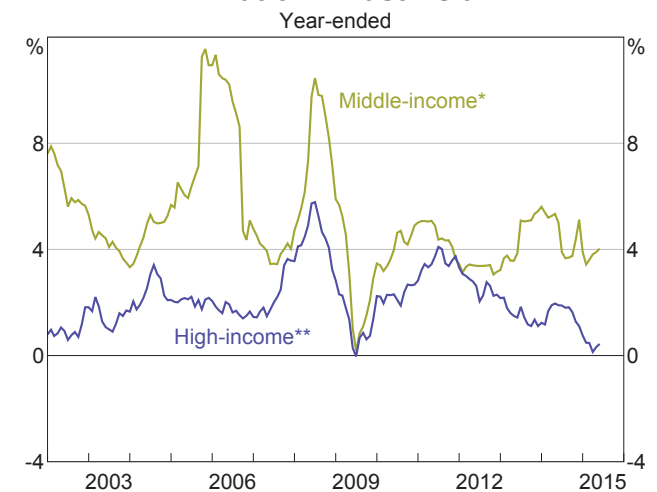
Source: CEIC Data

Unemployment Rate – Advanced Economies



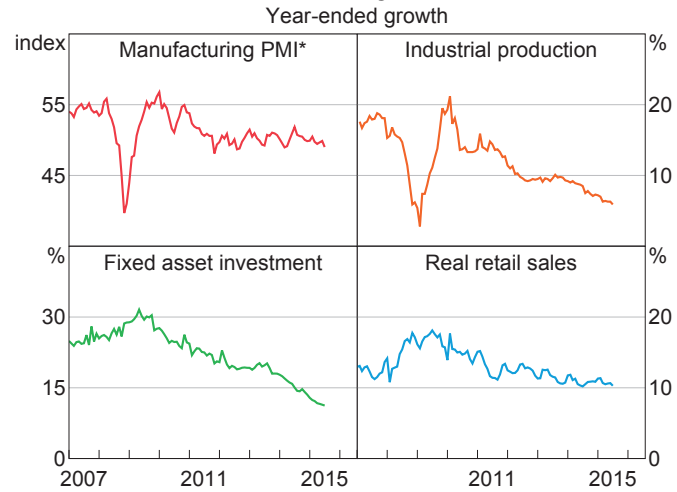
Source: Thomson Reuters

Inflation – East Asia



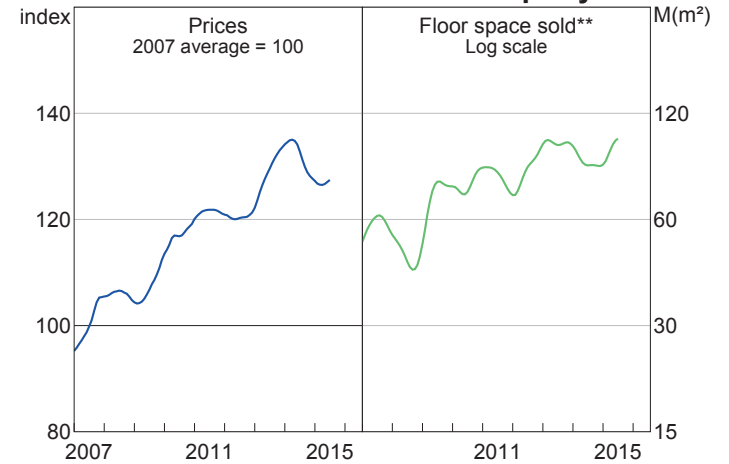
* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted
 ** Hong Kong, Singapore, South Korea and Taiwan; PPP-weighted
 Sources: CEIC Data; IMF; RBA; Thomson Reuters

China – Activity Indicators



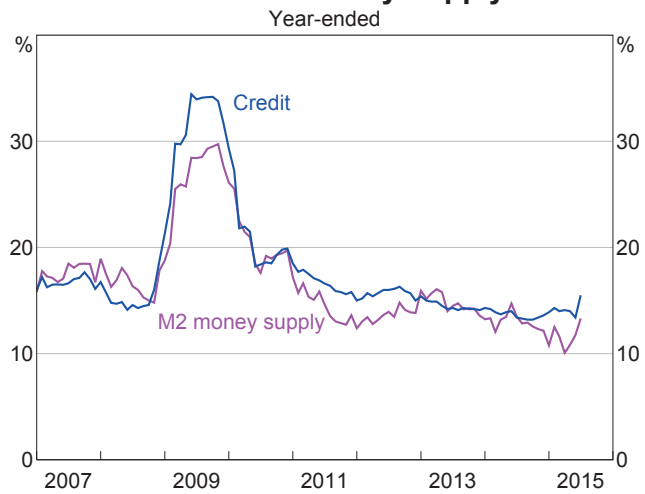
* Diffusion index; average of the official and Caixin
Sources: CEIC Data; RBA

China – New Residential Property*



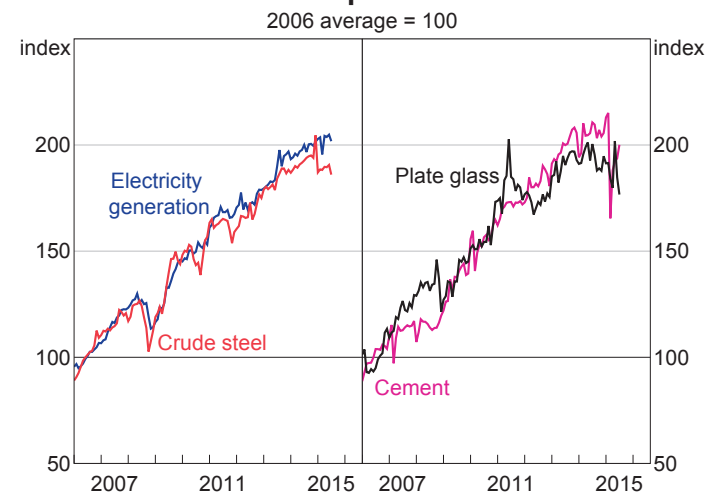
* RBA estimates
** Trend
Sources: CEIC Data; RBA

China – Credit and Money Supply Growth



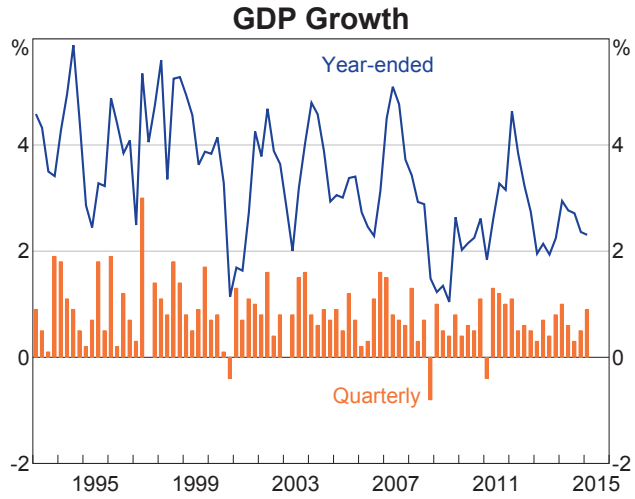
Source: CEIC Data

China – Output Indicators

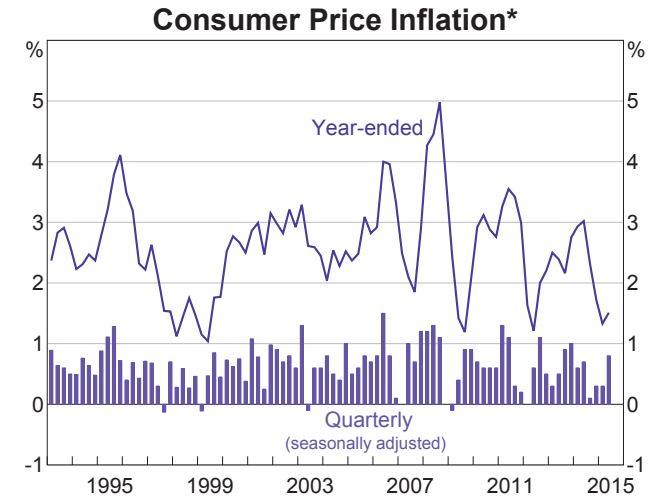


Sources: CEIC Data; RBA

Australian GDP Growth and Inflation

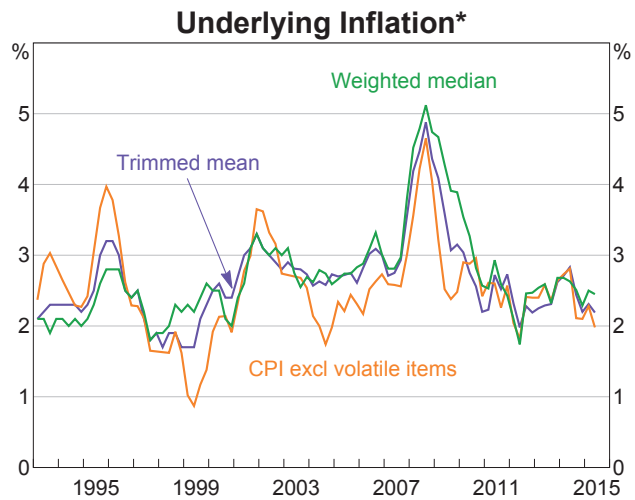


Source: ABS



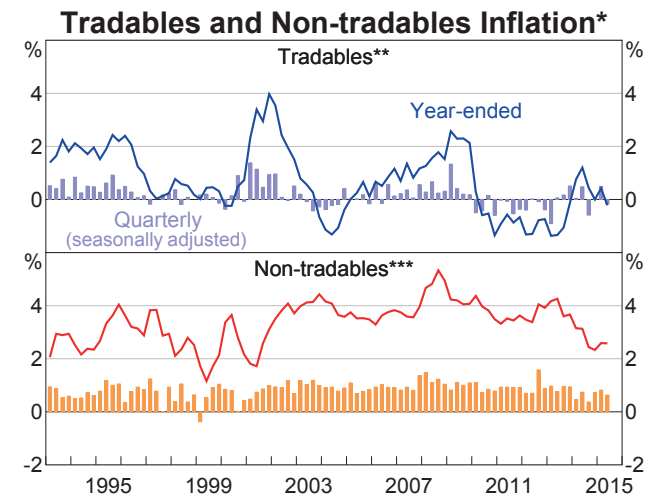
* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000

Sources: ABS; RBA



* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000

Sources: ABS; RBA



* Adjusted for the tax changes of 1999–2000

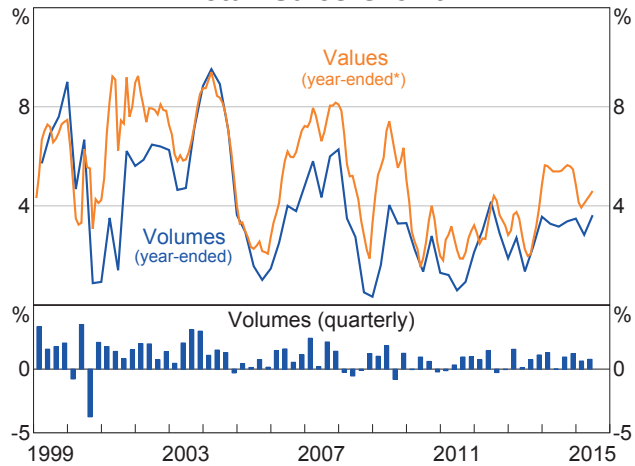
** Excluding volatile items (fruit, vegetables & automotive fuel) and tobacco

*** Excluding interest charges prior to the September quarter 1998 and deposit & loan facilities prior to the September quarter 2011

Sources: ABS; RBA

Household Sector

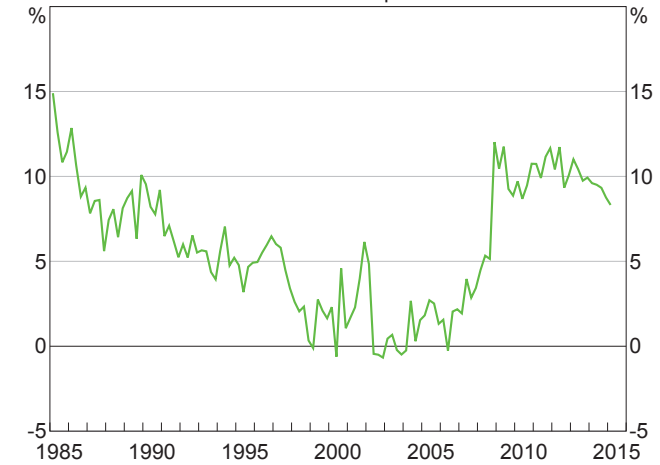
Retail Sales Growth



* Percentage change over year to latest three months
Source: ABS

Household Saving Ratio*

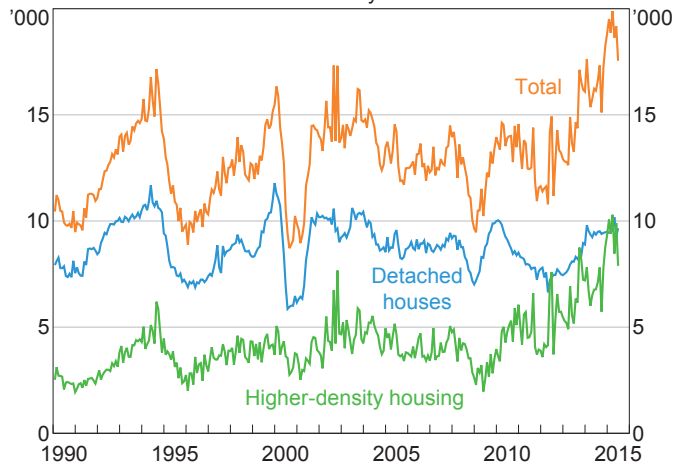
Per cent of household disposable income



* Net of depreciation
Source: ABS

Private Residential Building Approvals

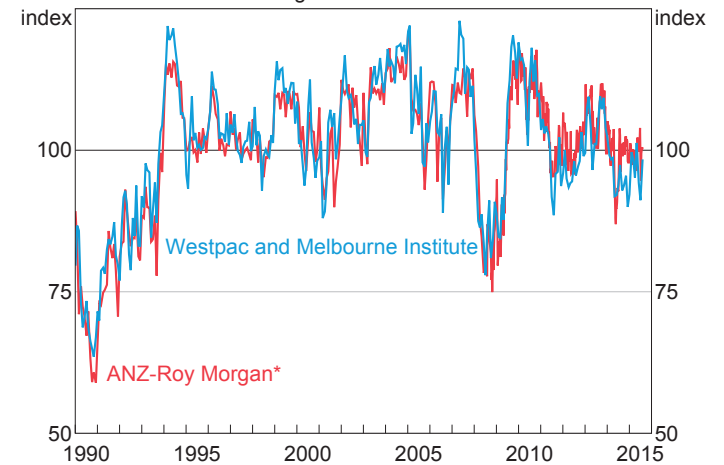
Monthly



Source: ABS

Consumer Sentiment

Average since 1980 = 100

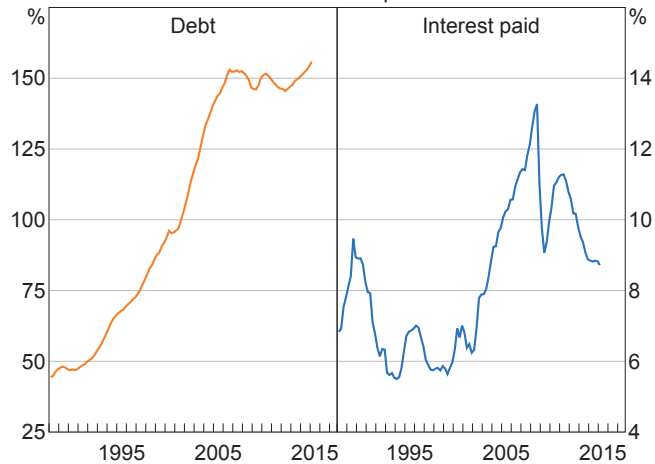


* Rescaled to have the same average as the Westpac and Melbourne Institute index since 1996

Sources: ANZ-Roy Morgan; RBA; Westpac and Melbourne Institute

Household Finances*

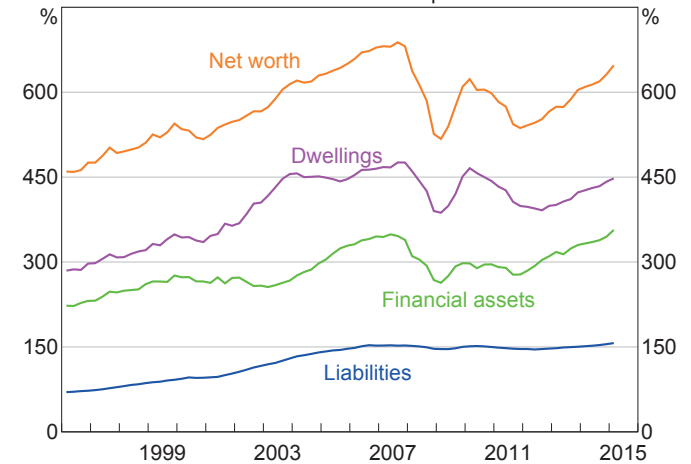
Per cent of household disposable income



* Household sector excludes unincorporated enterprises; disposable income is after tax and before the deduction of interest payments
Sources: ABS; RBA

Household Wealth and Liabilities*

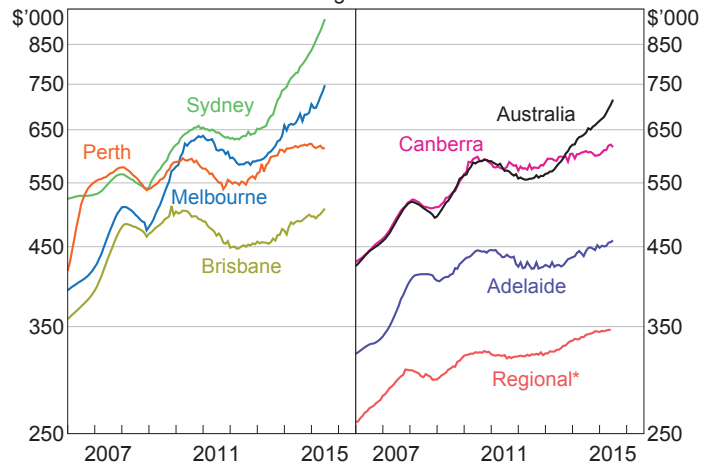
Per cent of annual household disposable income



* Household liabilities exclude the liabilities of unincorporated enterprises; disposable income is after tax and before the deduction of interest payments
Sources: ABS; RBA

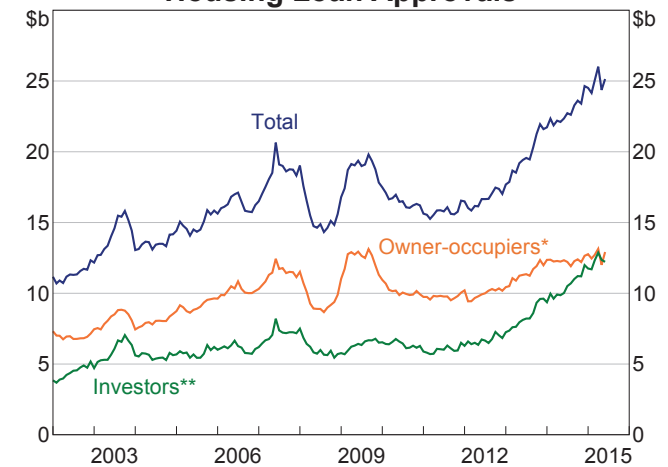
Housing Prices

Log scale



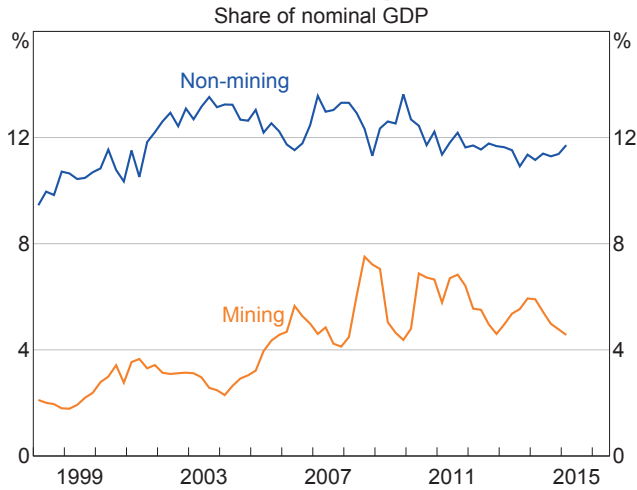
* Excludes apartments; measured as areas outside of capital cities in mainland states
Sources: CoreLogic RP Data; RBA

Housing Loan Approvals



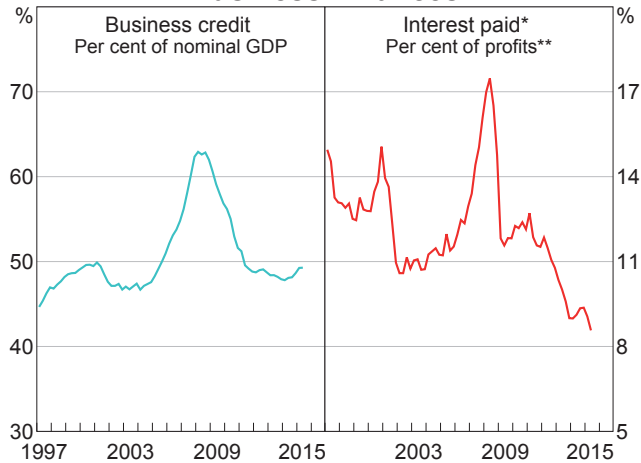
* Excludes refinancing
** Includes refinancing
Sources: ABS; RBA

Private Non-financial Corporation Profits*



* Gross operating profits; inventory valuation adjusted
Sources: ABS; RBA

Business Finances

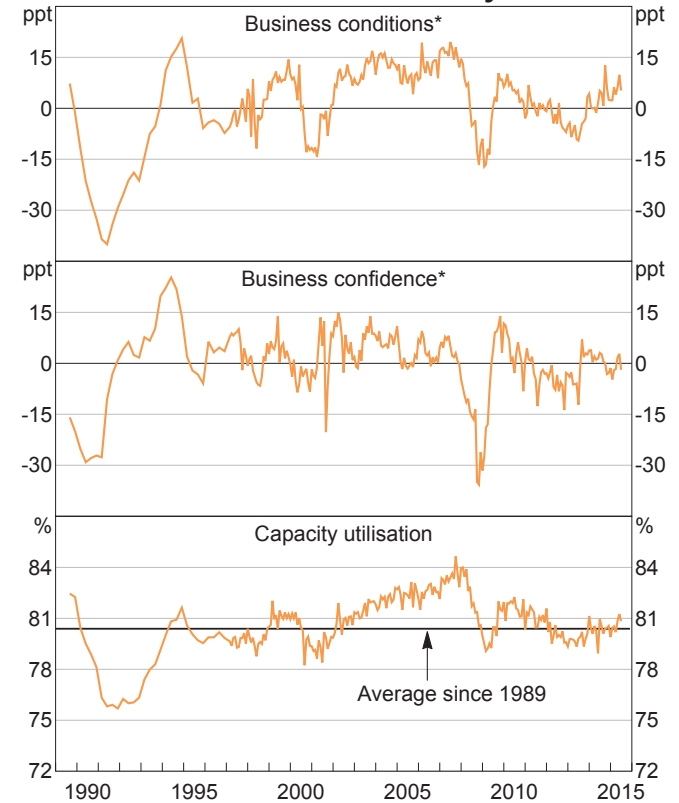


* Interest on intermediated debt from Australian-domiciled financial institutions

** Profits are private non-financial gross operating surplus (adjusted for privatisations) and gross mixed income

Sources: ABS; APRA; RBA

NAB Business Survey

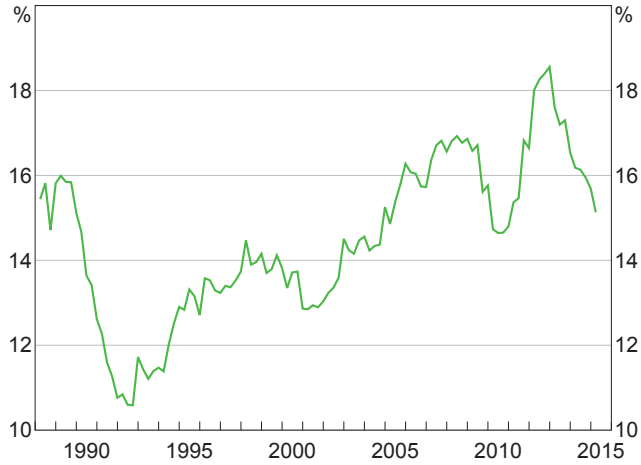


* Net balance; deviation from average since 1989

Sources: NAB; RBA

Business Investment*

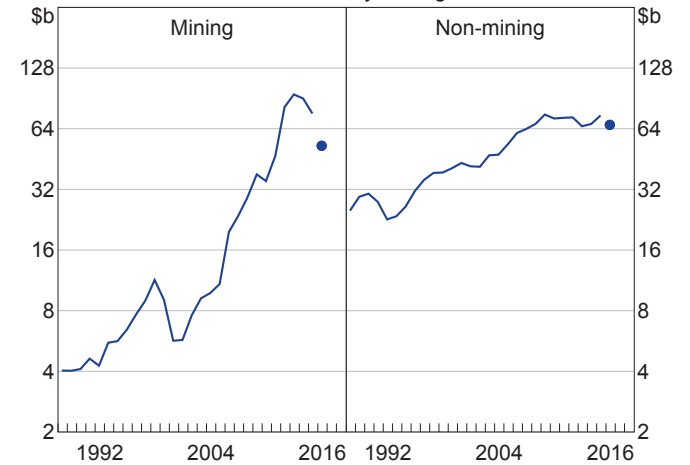
Share of nominal GDP



* Adjusted for second-hand asset transfers between the private and other sectors
Source: ABS

Capital Expenditure – Mining and Non-mining*

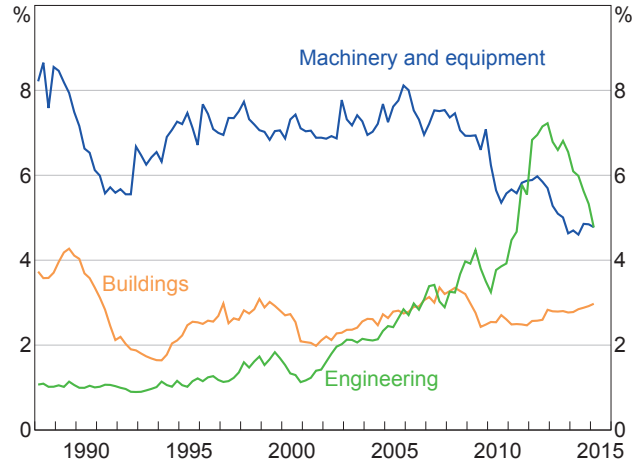
Nominal, financial year, log scale



* Sample of firms' spending plans; dots represent the survey's most recent estimates for 2015/16 adjusted for historical realised spending
Sources: ABS; RBA

Business Investment Components*

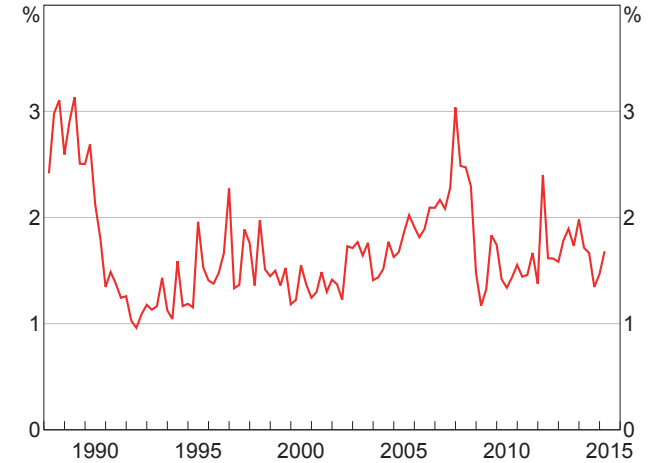
Share of nominal GDP



* Adjusted for second-hand asset transfers between the private and other sectors
Source: ABS

Private Non-residential Building Approvals

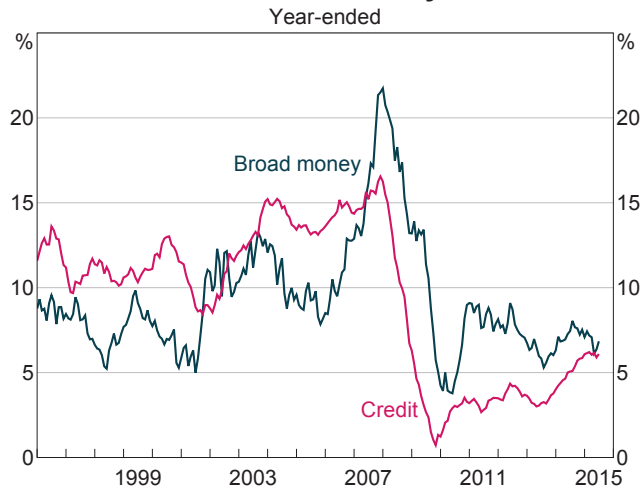
Per cent of nominal GDP



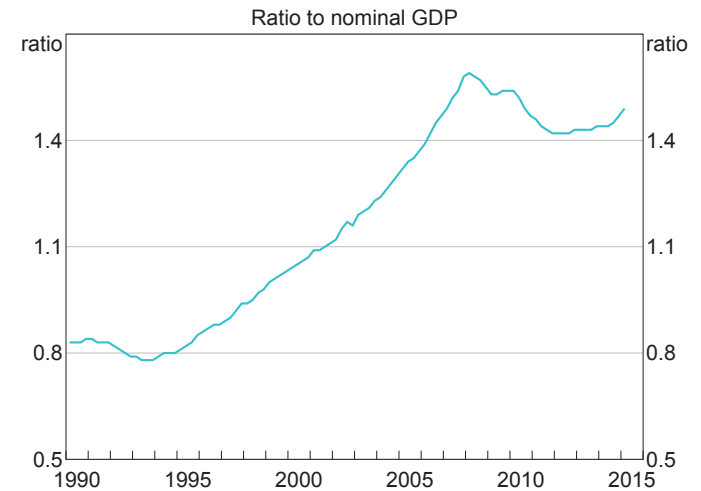
Source: ABS

Credit and Money

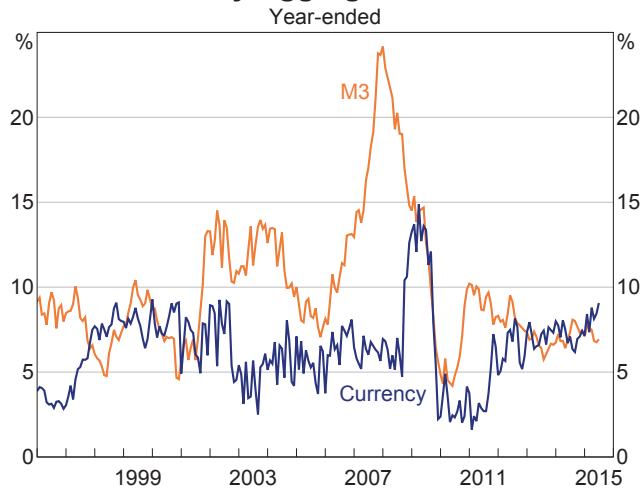
Credit and Broad Money Growth



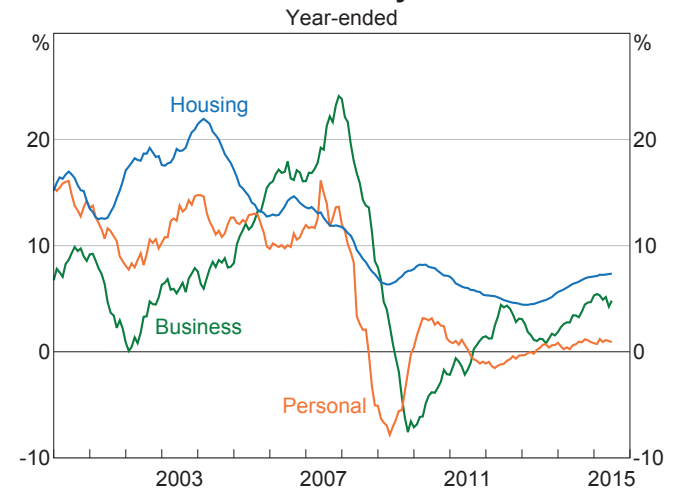
Credit*



Monetary Aggregates Growth

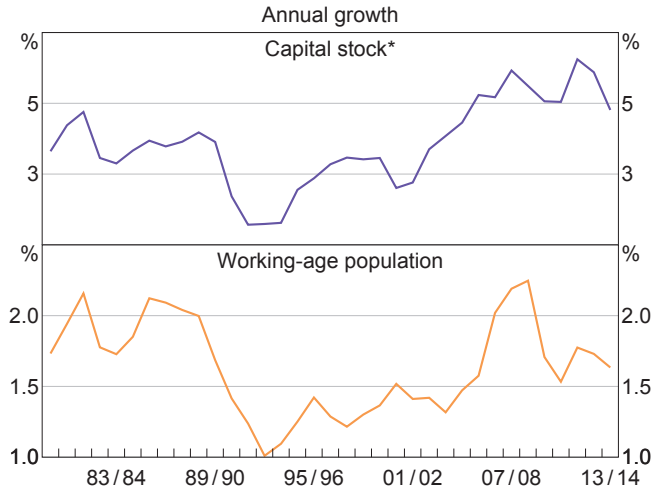


Credit Growth by Sector



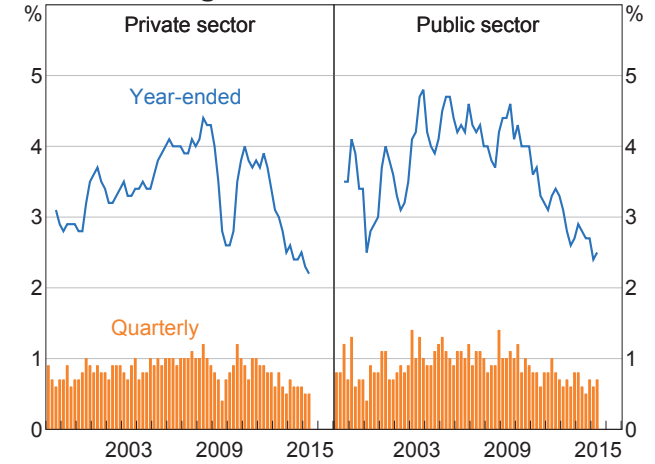
Factors of Production and Labour Market

Factors of Production



* Excluding livestock & orchards, dwellings and ownership transfer costs
Sources: ABS; RBA

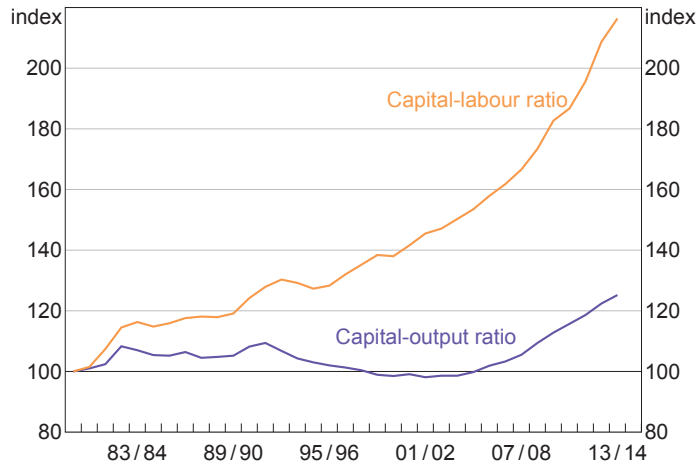
Wage Price Index Growth



Source: ABS

Capital Ratios*

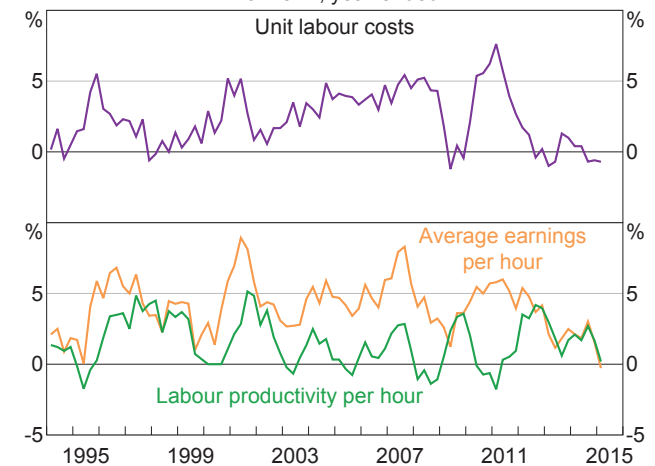
1979/80 = 100



* Capital stock excludes livestock & orchards, dwellings and ownership transfer costs
Sources: ABS; RBA

Unit Labour Costs Growth

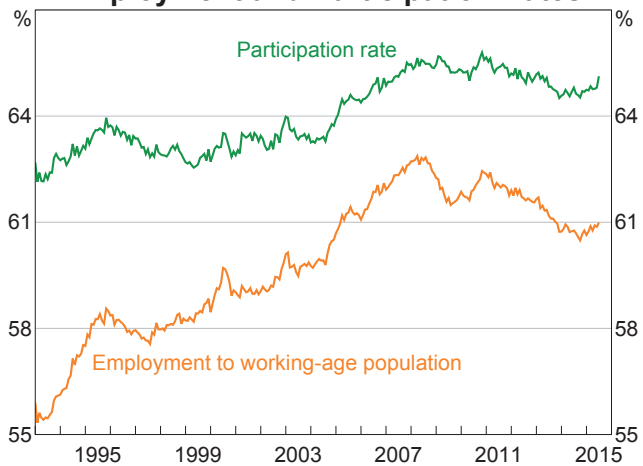
Non-farm, year-ended



Sources: ABS; RBA

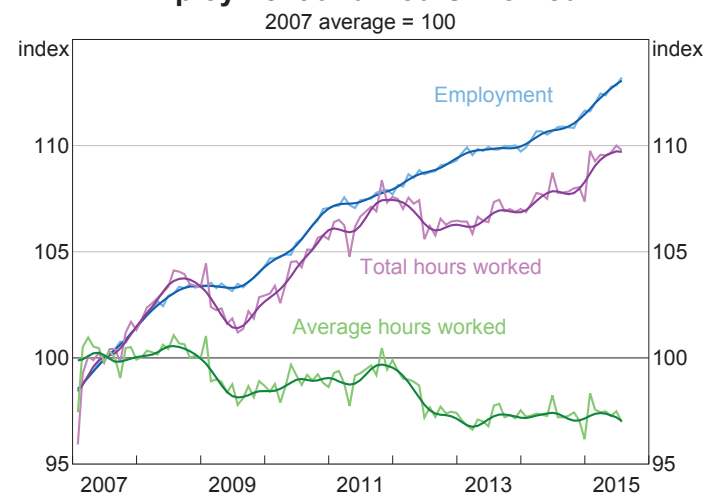
Factors of Production and Labour Market

Employment and Participation Rates



Source: ABS

Employment and Hours Worked*



* Smoothed lines are 13-period Henderson trends

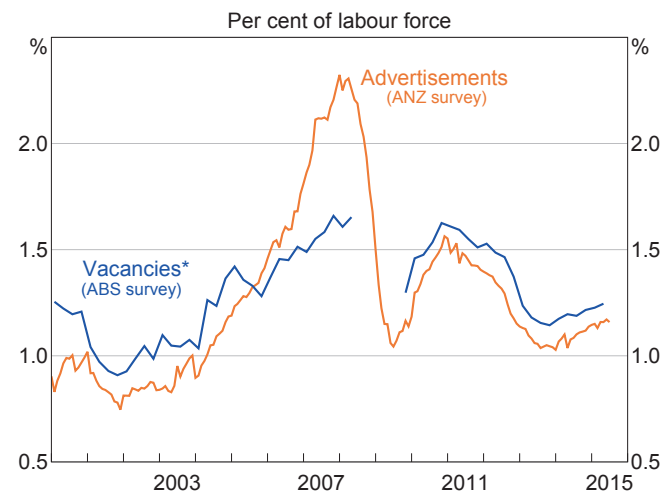
Sources: ABS; RBA

Unemployment Rate



Source: ABS

Job Vacancies and Advertisements

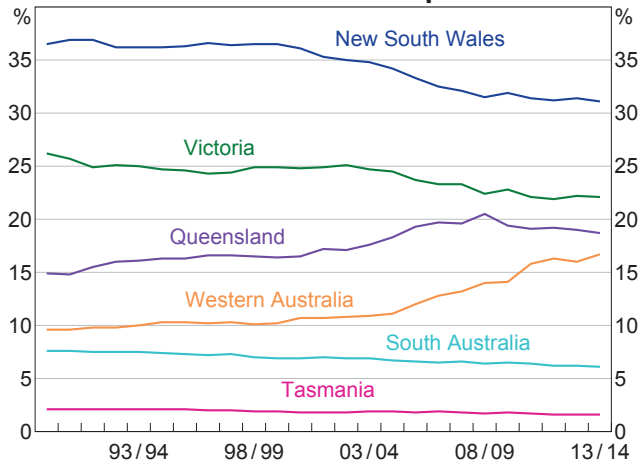


* This survey was suspended between May 2008 and November 2009

Sources: ABS; ANZ

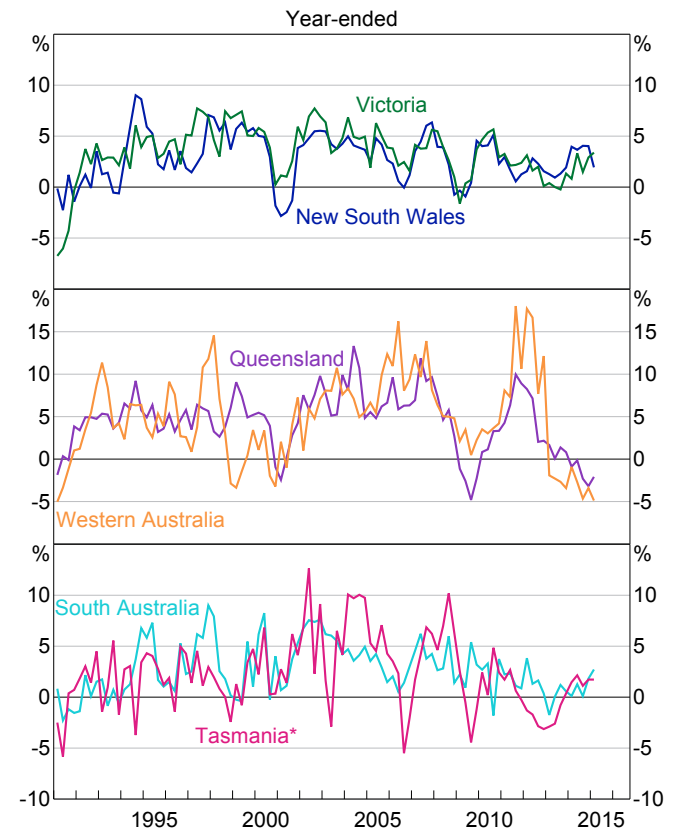
Regions and Industry

State Share of Output*



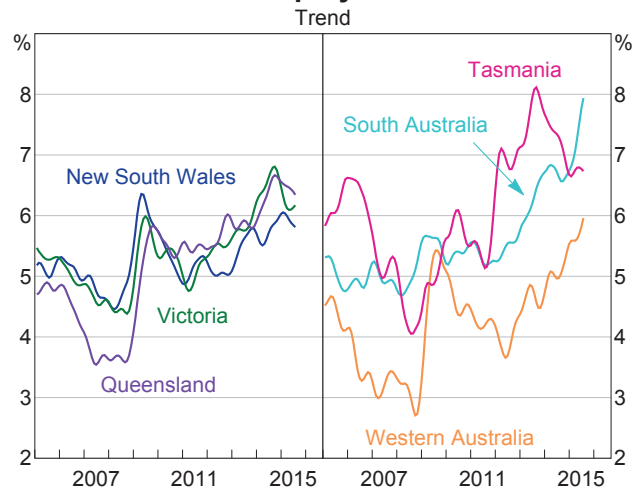
* Nominal
Source: ABS

State Final Demand Growth



* Adjusted for the purchase and sale of ferries in 2002
Sources: ABS; RBA

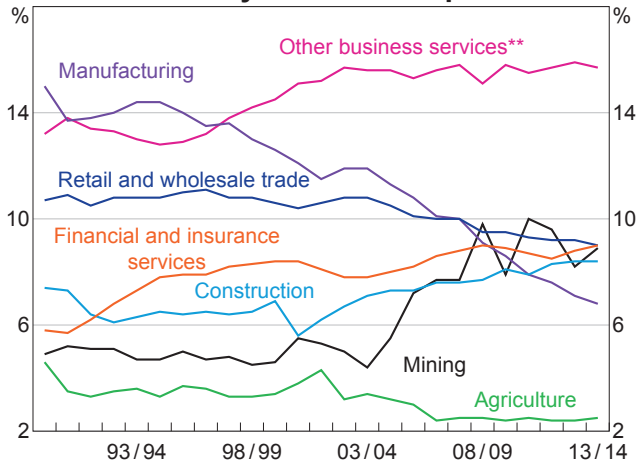
State Unemployment Rates



Source: ABS

Regions and Industry

Industry Share of Output*

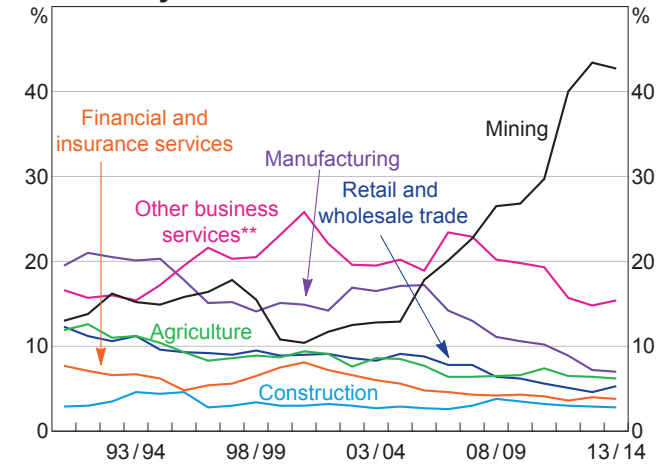


* Nominal gross value added

** Includes: information media and telecommunications; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services

Source: ABS

Industry Share of Business Investment**



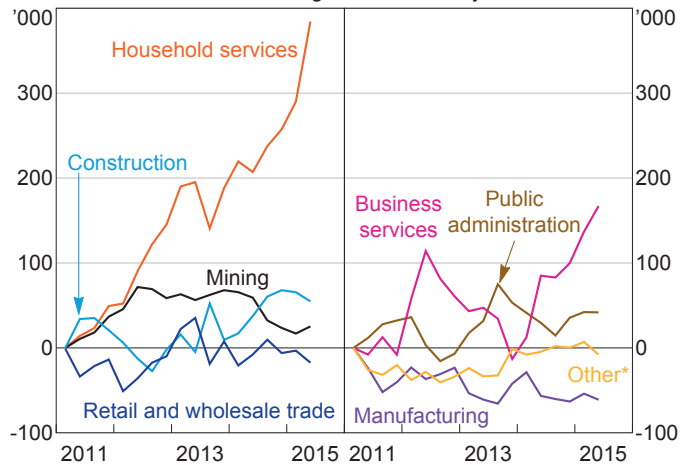
* Nominal

** Includes: information media and telecommunications; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services

Source: ABS

Employment Growth by Industry

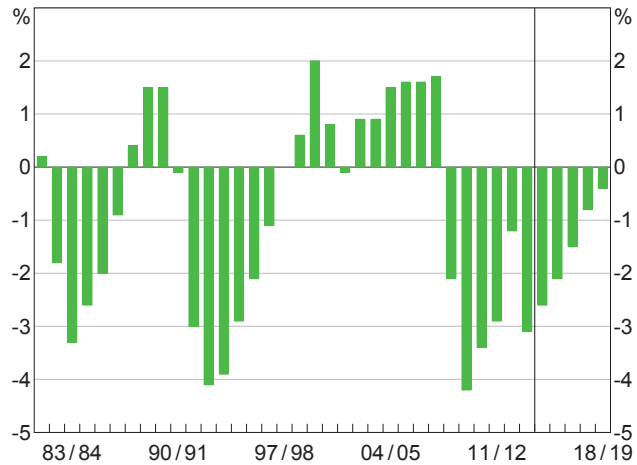
Cumulative change since February 2011



* Includes agriculture, forestry & fishing; transport, postal & warehousing; and electricity, gas, water & waste services

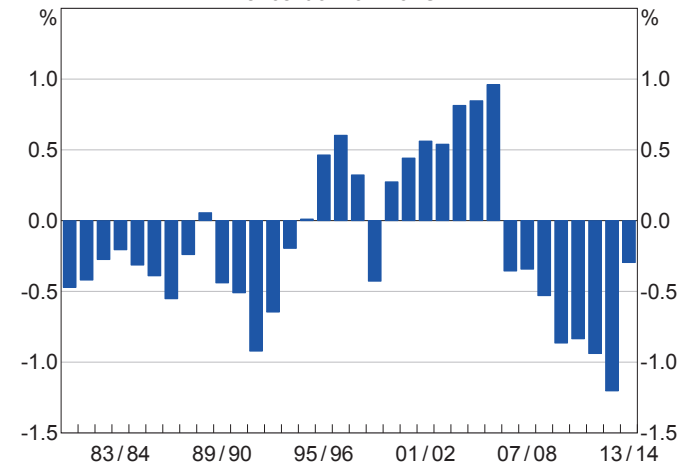
Source: ABS

Australian Government Budget Balance*
Per cent of nominal GDP



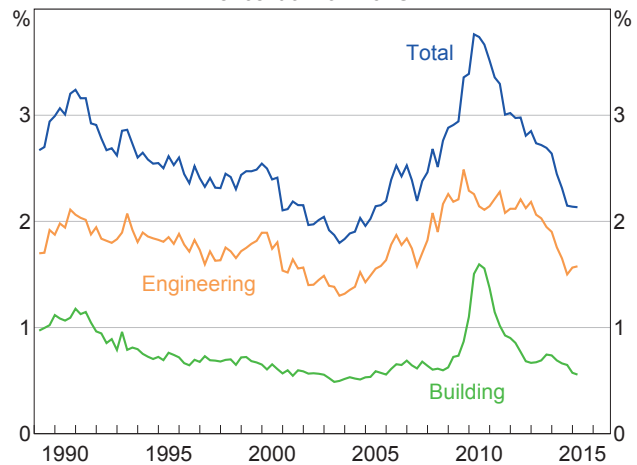
* Underlying cash balance; 2015/16 Budget
Source: Australian Treasury

State Budget Balances*
Per cent of nominal GDP



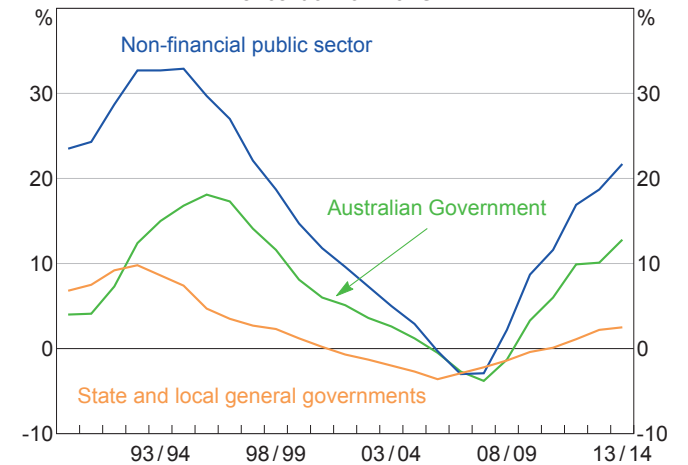
* Underlying cash balance
Source: ABS

Public Construction Work Done
Per cent of nominal GDP



Source: ABS

Non-financial Public Sector Net Debt
Per cent of nominal GDP

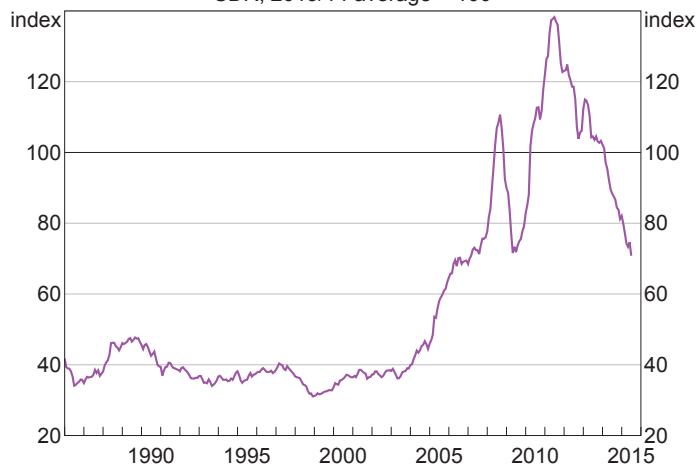


Source: Australian Treasury

Commodity Prices

RBA Index of Commodity Prices

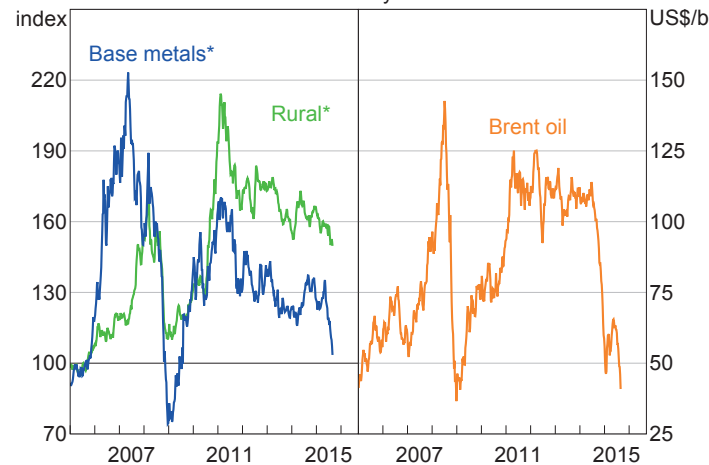
SDR, 2013/14 average = 100



Source: RBA

Base Metals, Rural and Oil Prices

Weekly

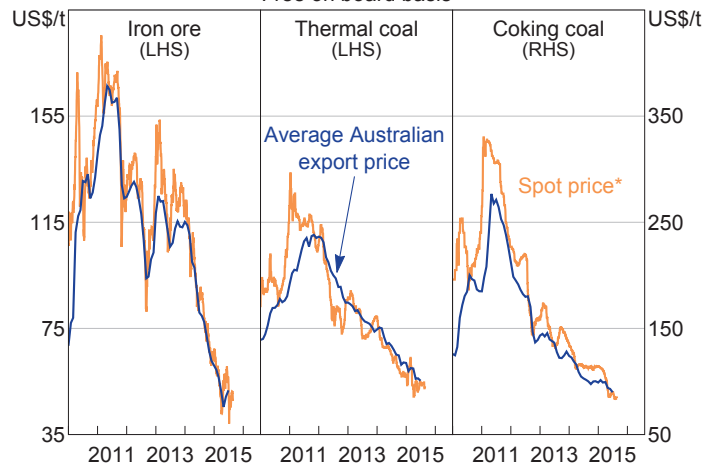


* RBA Index of Commodity Prices sub-indices; SDR terms; 2005 average = 100

Sources: Bloomberg; RBA

Bulk Commodity Prices

Free on board basis

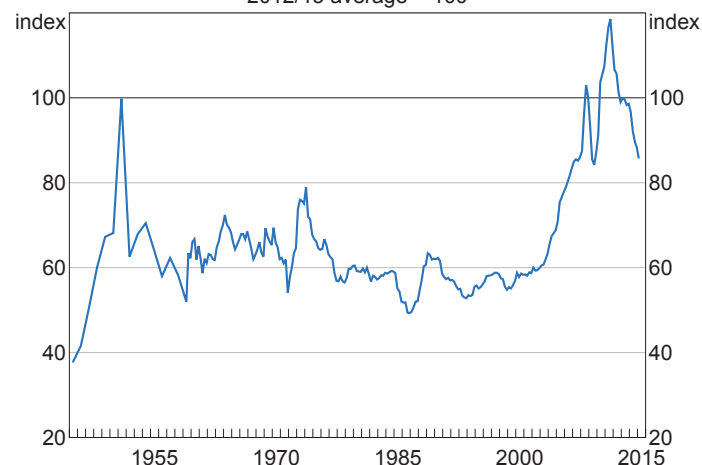


* Iron ore fines, Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS; RBA

Terms of Trade*

2012/13 average = 100



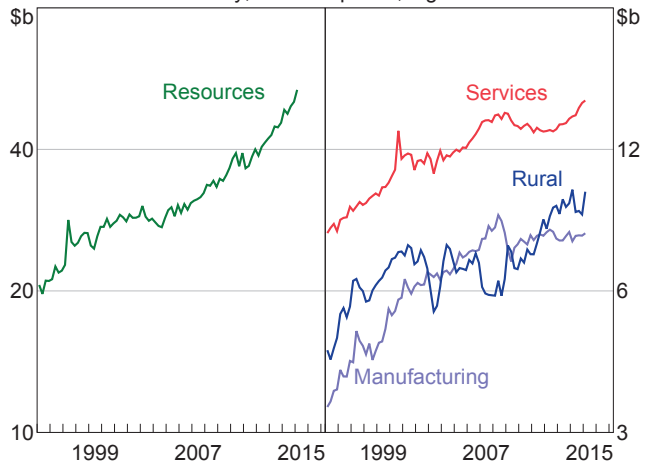
* Annual data are used prior to 1960

Sources: ABS; RBA

Balance of Payments and External Position

Export Volumes

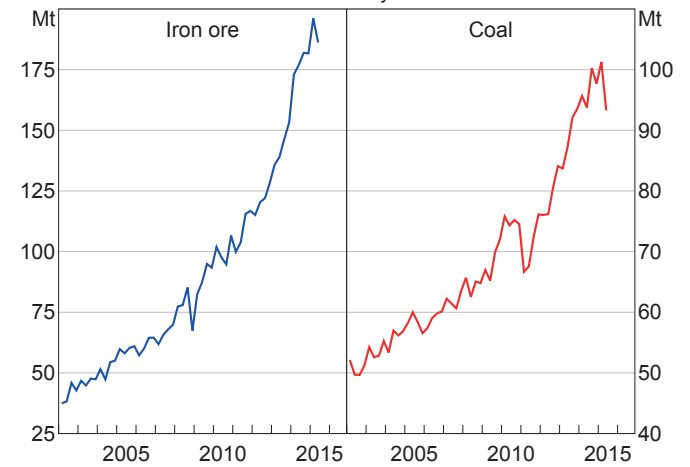
Quarterly, 2012/13 prices, log scale



Sources: ABS; RBA

Bulk Commodity Exports

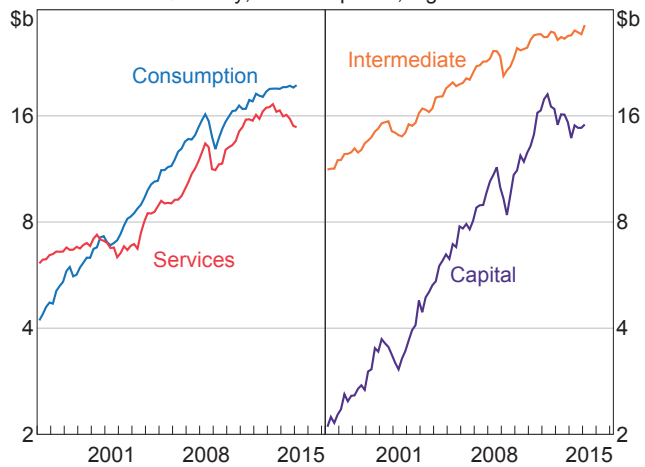
Quarterly



Sources: ABS; RBA

Import Volumes

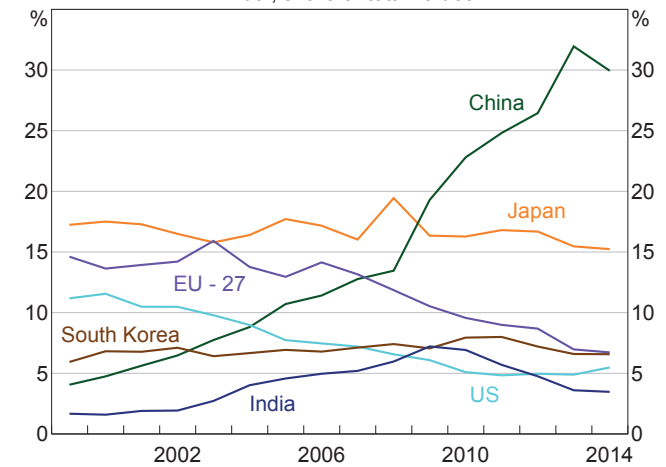
Quarterly, 2012/13 prices, log scale



Source: ABS

Exports by Destination

Annual, share of total values

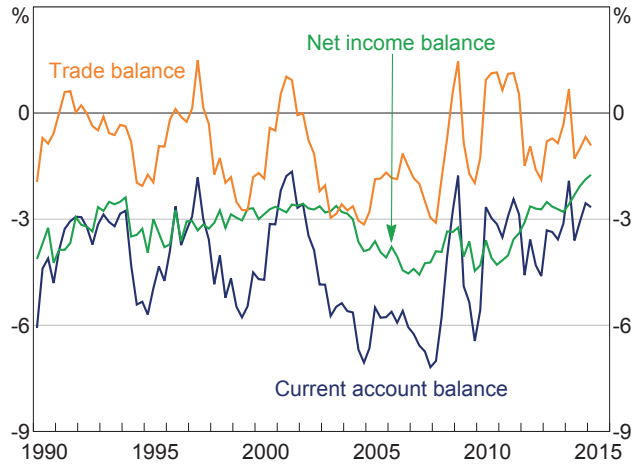


Source: ABS

Balance of Payments and External Position

Current Account Balance

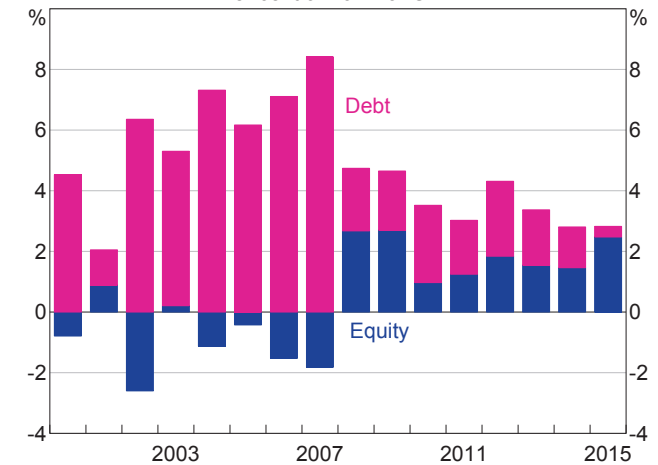
Per cent of nominal GDP



Source: ABS

Net Capital Inflow*

Per cent of nominal GDP

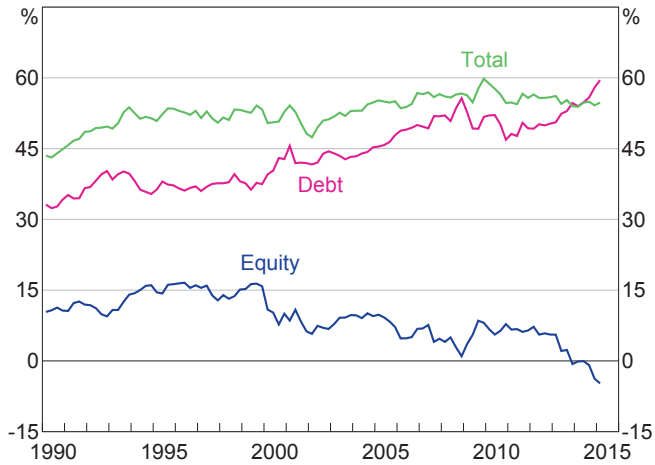


* 2015 values are year to March quarter

Source: ABS

Net Foreign Liabilities

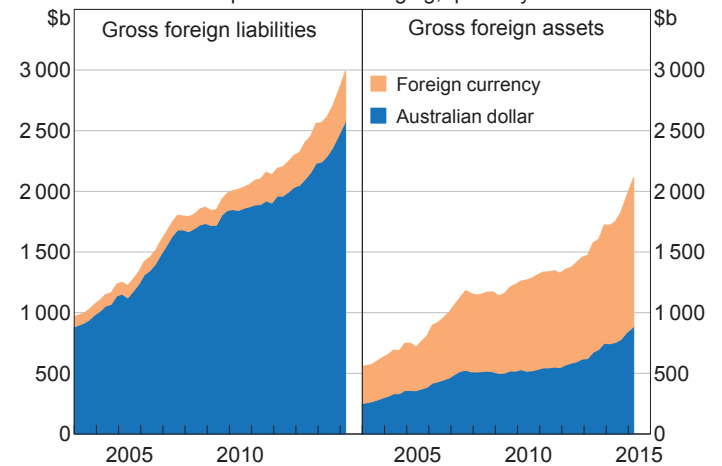
Per cent of nominal GDP



Source: ABS

External Position

Composition after hedging, quarterly*

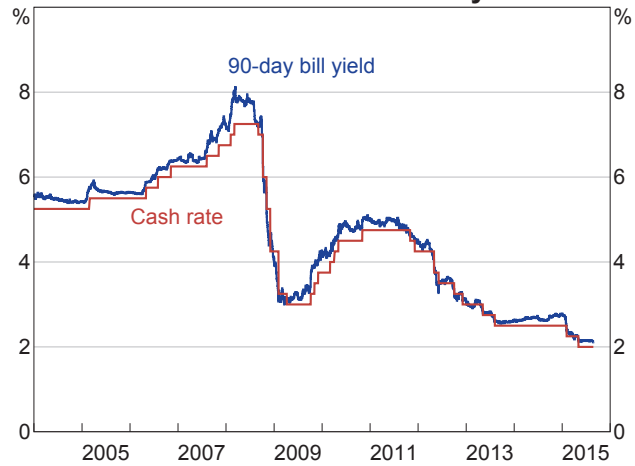


* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

Sources: ABS; RBA

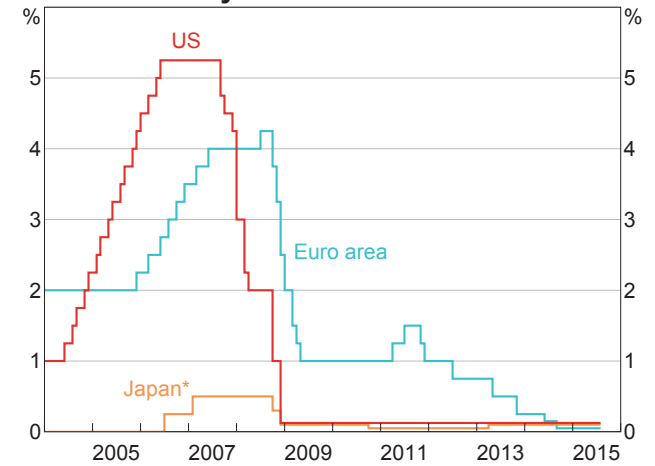
Interest Rates

Australian Cash Rate and 90-day Bill Yield



Sources: AFMADData; RBA

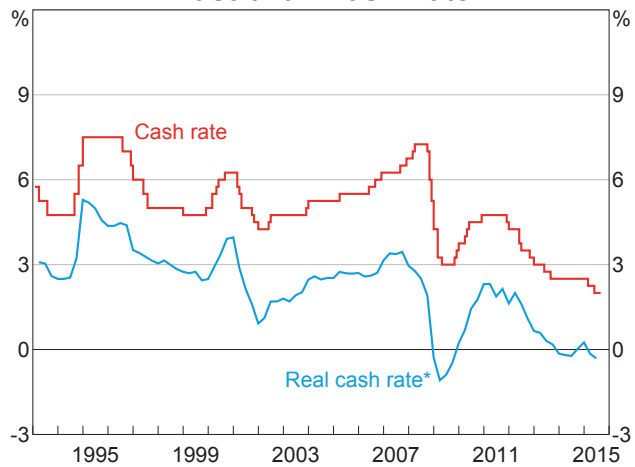
Policy Interest Rates – G3



* Since April 2013, the Bank of Japan's main operating target has been the money base

Source: central banks

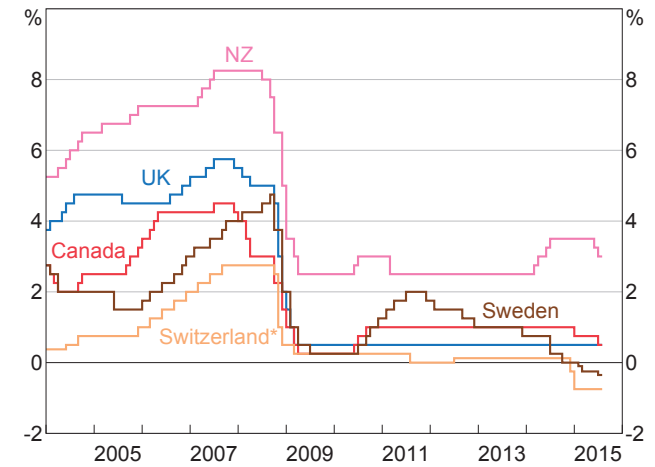
Australian Cash Rate



* Calculated using average of weighted median and trimmed mean inflation

Sources: ABS; RBA

Policy Interest Rates – Selected Advanced Economies

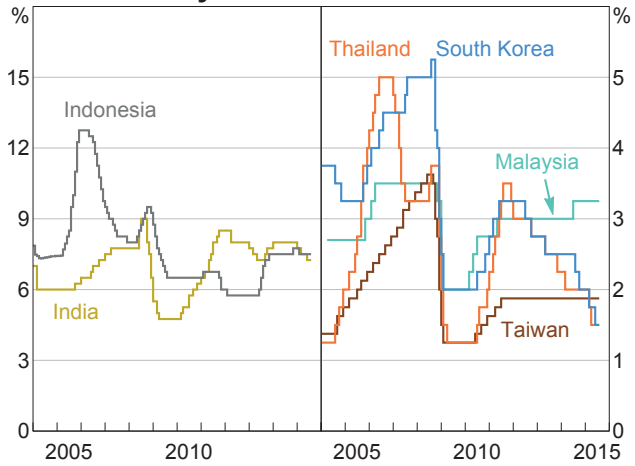


* Policy rate is the midpoint of the 3-month LIBOR target band

Source: central banks

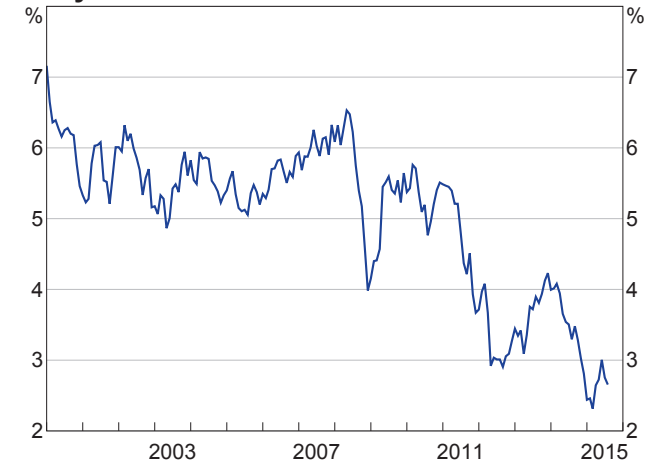
Interest Rates

Policy Interest Rates – Asia



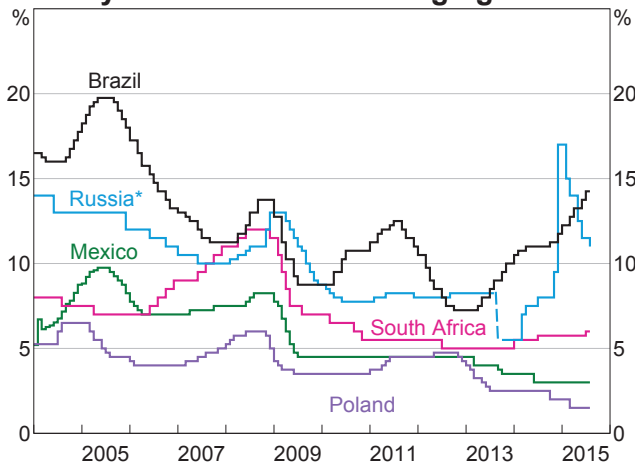
Source: central banks

10-year Australian Government Bond Yield



Source: RBA

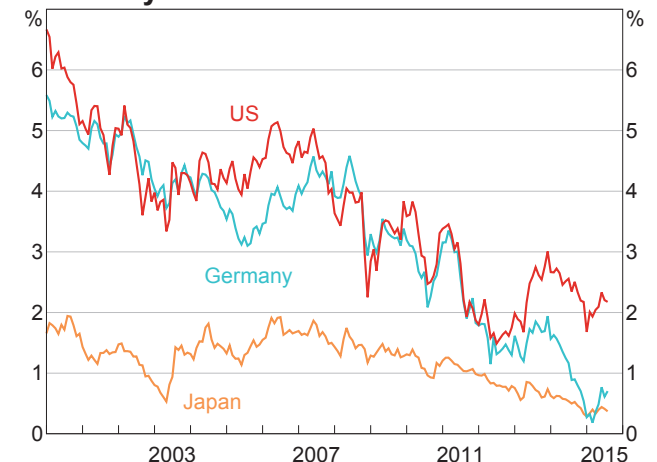
Policy Interest Rates – Emerging Markets



* On 13 September 2013, the Central Bank of the Russian Federation changed its official policy rate to the rate on its one-week open market operations, which was left unchanged at the September 2013 meeting

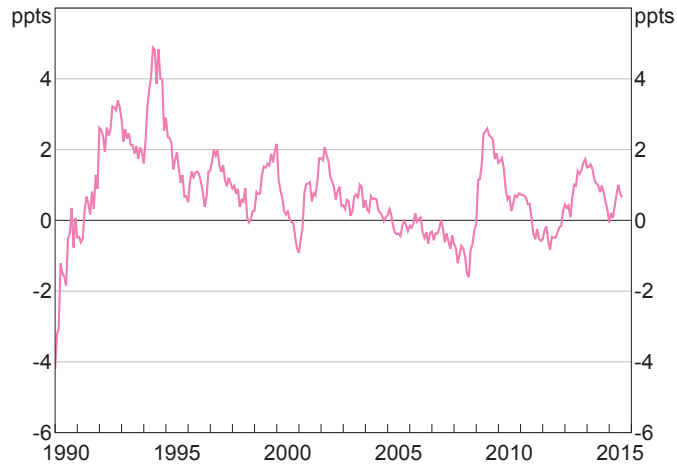
Source: central banks

10-year Government Bond Yields



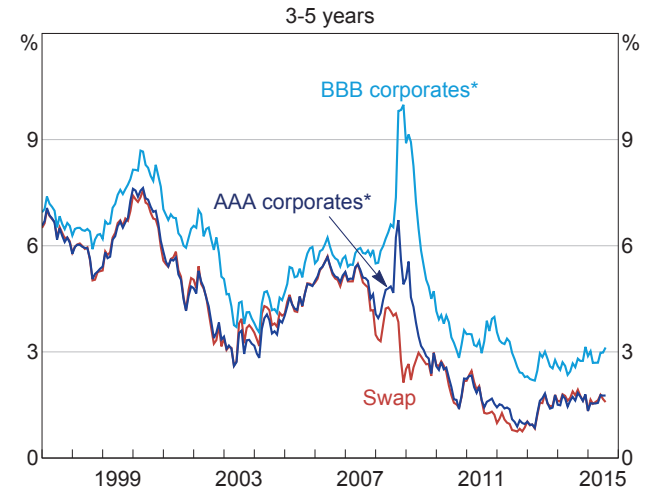
Source: Thomson Reuters

Spread between Australian 10-year Bond Yield and the Cash Rate



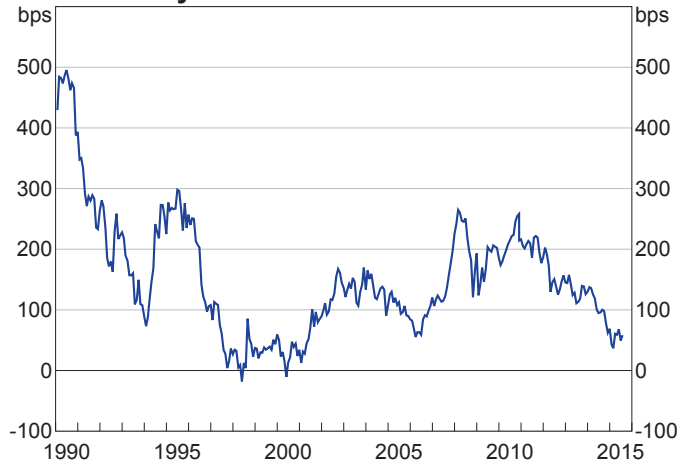
Source: RBA

US Bond Yields



* Includes financials and non-financials
Sources: Bank of America Merrill Lynch; Bloomberg; Thomson Reuters

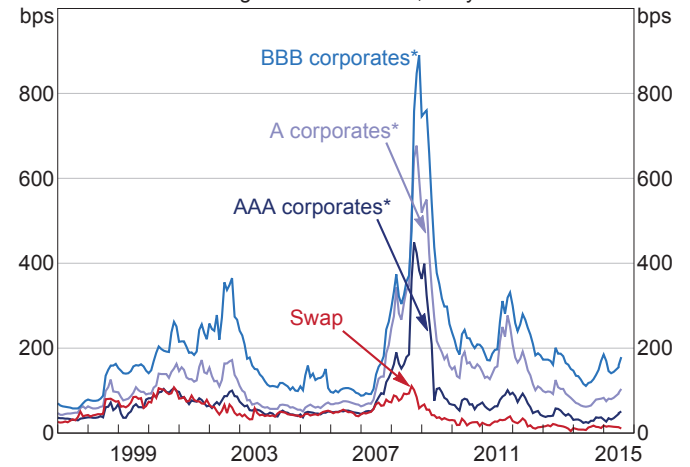
Differential between Australian and US 10-year Government Bond Yields



Sources: Bloomberg; RBA

US Bond Spreads

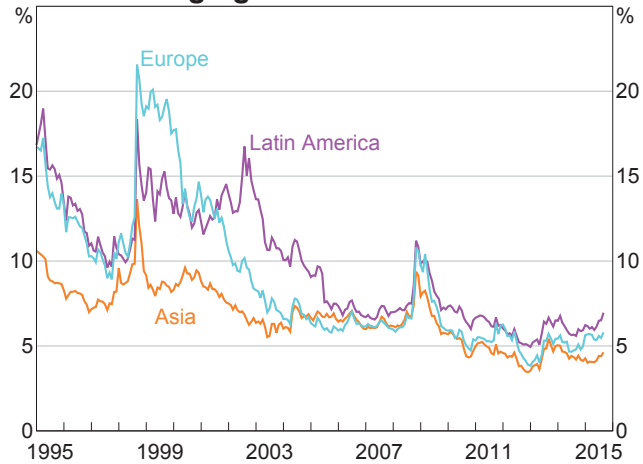
To US government bonds, 3-5 years



* Includes financials and non-financials
Sources: Bank of America Merrill Lynch; Bloomberg

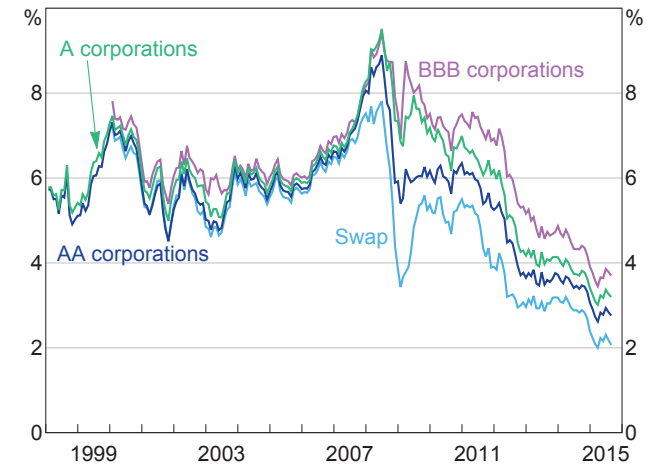
Interest Rates

Emerging Market Bond Yields



Sources: Bloomberg; RBA; Thomson Reuters

Australian Bond Yields*

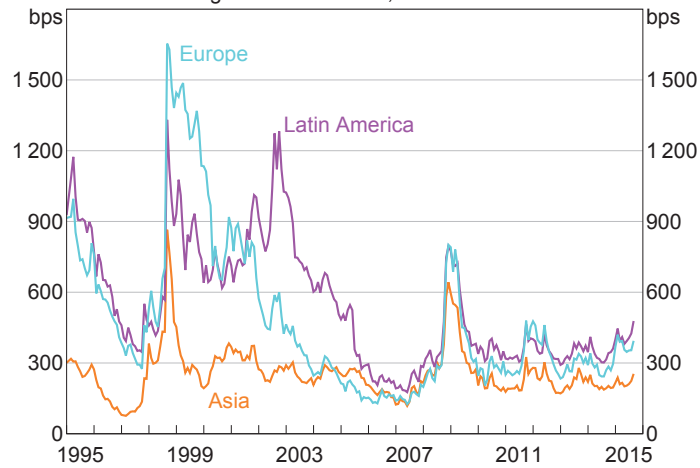


* Swap rates are for 3-year maturity; corporate bond yields are a weighted average of senior bonds with remaining maturities of 1 to 5 years, including financial and non-financial corporations

Sources: Bloomberg; RBA; UBS AG, Australia Branch

Emerging Market Bond Spreads

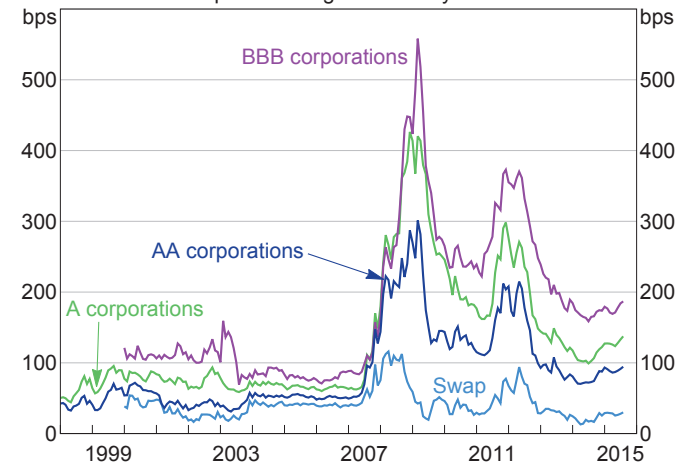
To US government bonds, duration-matched



Sources: Bloomberg; RBA; Thomson Reuters

Australian Bond Spreads*

Spread over government yields

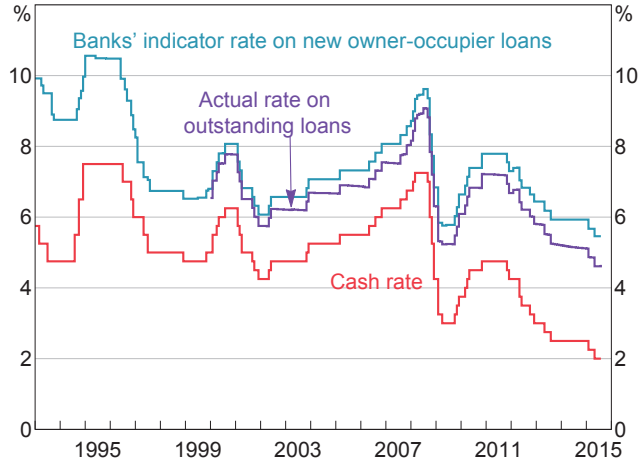


* Swap spreads are for 3-year maturity; corporate bond spreads are a weighted average of senior bonds with remaining maturities of 1 to 5 years, including financial and non-financial corporations

Sources: Bloomberg; RBA; UBS AG, Australia Branch

Australian Housing Lending Rates

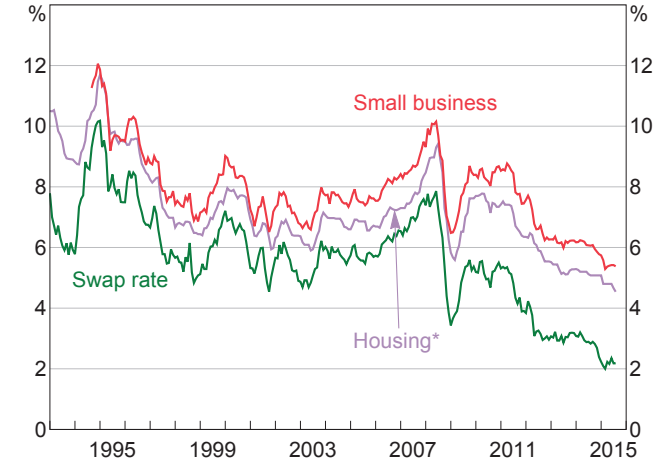
Average interest rate on variable-rate loans



Sources: ABS; APRA; Perpetual; RBA

Australian Fixed Interest Rates

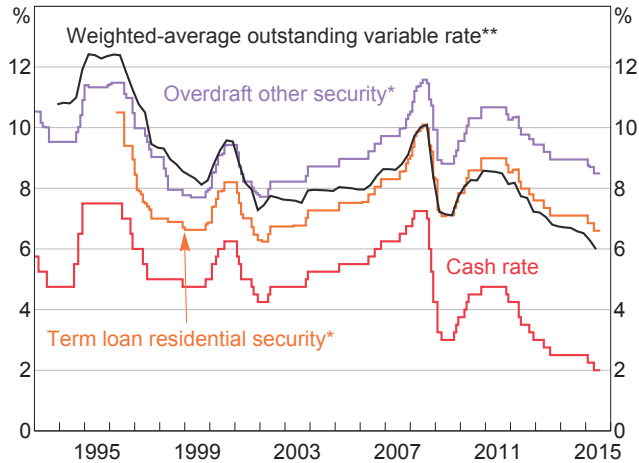
3-year maturity



* Available to owner-occupiers

Sources: Banks' websites; Bloomberg; CANSTAR; RBA

Australian Small Business Interest Rates



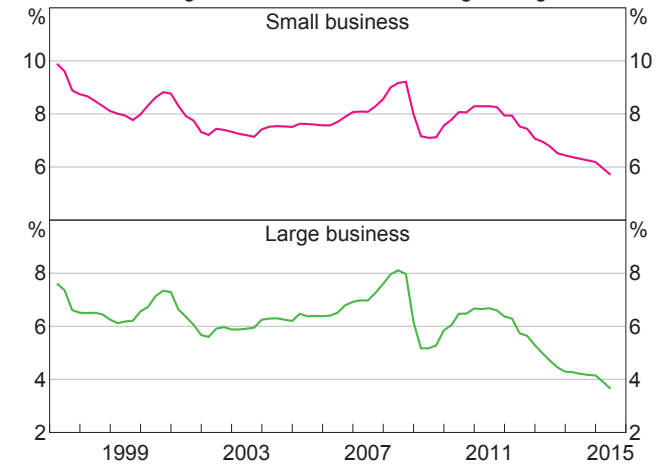
* Indicator rates

** RBA estimate; including risk margins

Sources: APRA; CANSTAR; RBA

Australian Business Lending Rates*

Average interest rate on outstanding lending

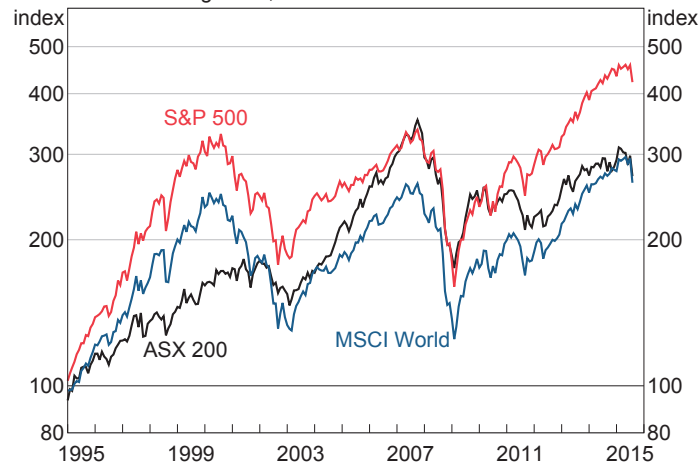


* RBA estimates

Sources: APRA; RBA

Australian and World Share Price Indices

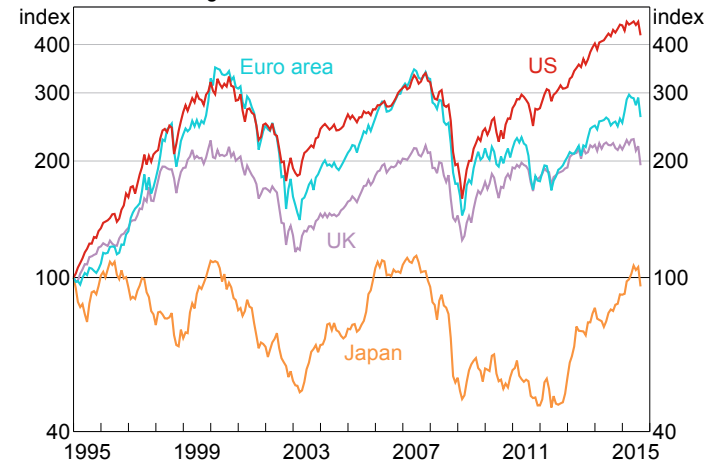
Log scale, end December 1994 = 100



Sources: Bloomberg; MSCI; RBA

Major Economies' Share Price Indices

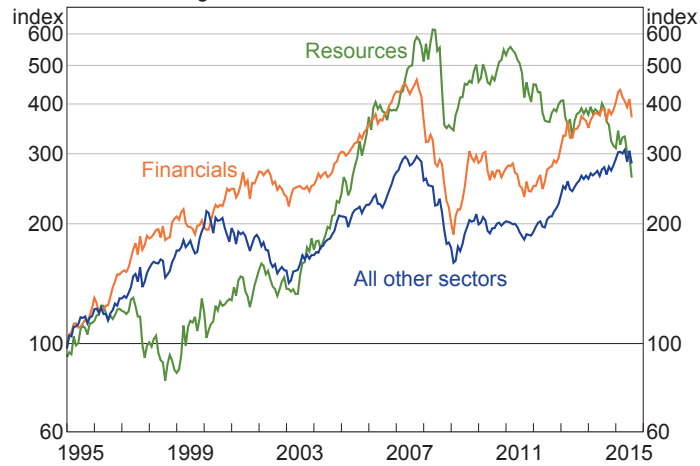
Log scale, end December 1994 = 100



Sources: Bloomberg; RBA

Australian Share Price Indices*

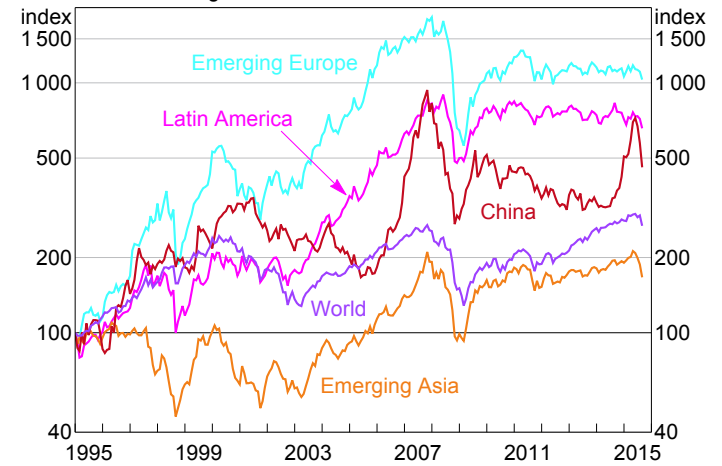
Log scale, end December 1994 = 100



* ASX 200 companies
Sources: Bloomberg; RBA

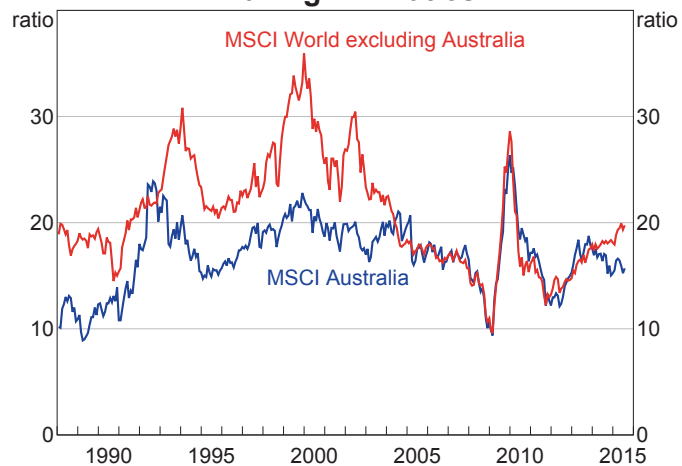
Share Price Indices

Log scale, end December 1994 = 100



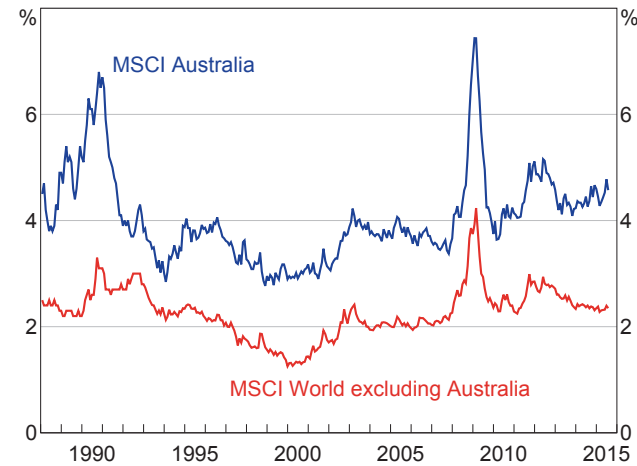
Sources: Bloomberg; MSCI; RBA

Trailing P/E Ratios



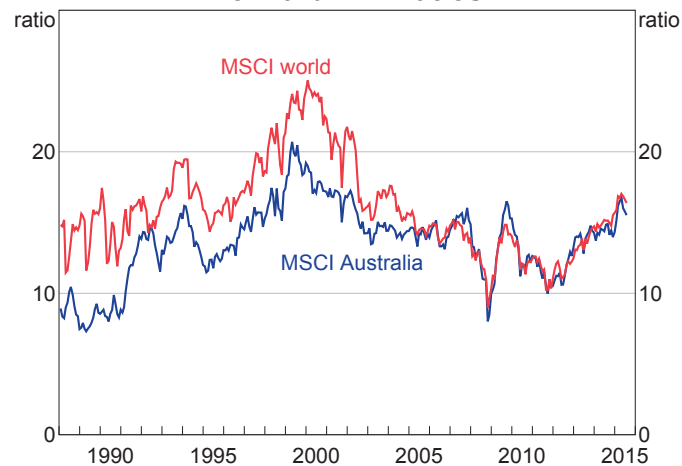
Sources: MSCI; Thomson Reuters

Dividend Yields



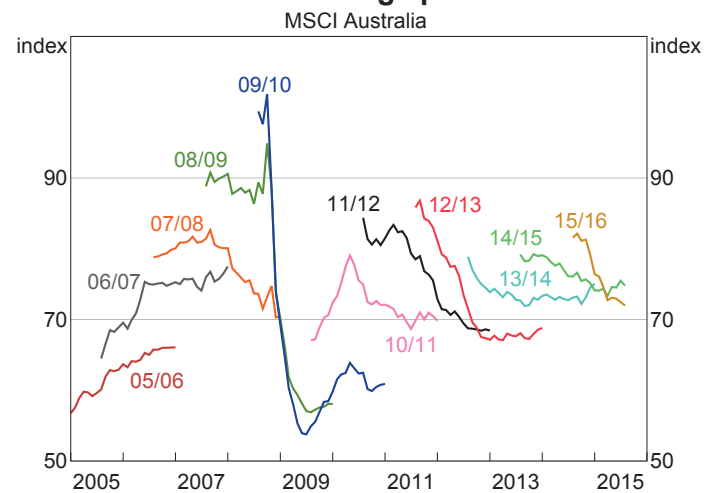
Sources: MSCI; Thomson Reuters

Forward P/E Ratios



Sources: MSCI; Thomson Reuters

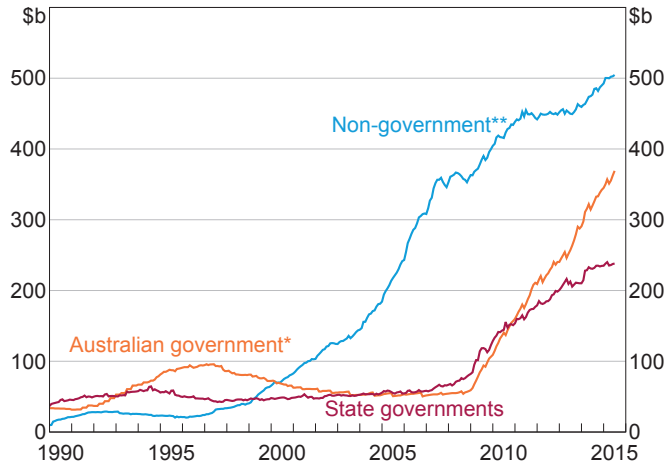
Forecast Earnings per Share



Sources: MSCI; Thomson Reuters

Bond Issuance

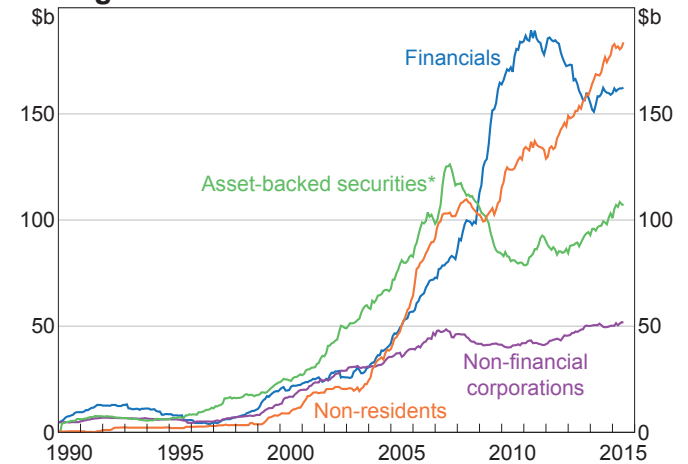
Bonds on Issue in Australia



* Excludes bonds purchased by the Australian Government
 ** Excludes ADIs' self-securitisations, includes government-guaranteed bonds

Sources: ABS; AOFM; RBA; State Treasury Corporations

Non-government Bonds on Issue in Australia

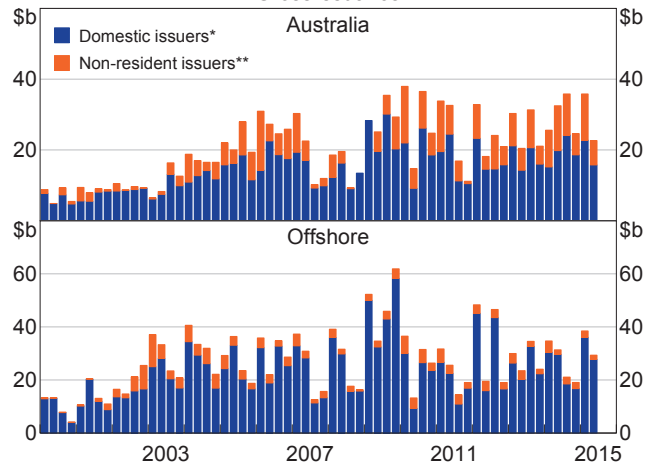


* Excludes ADIs' self-securitisations

Sources: ABS; RBA

Non-government Bond Issuance

Gross issuance



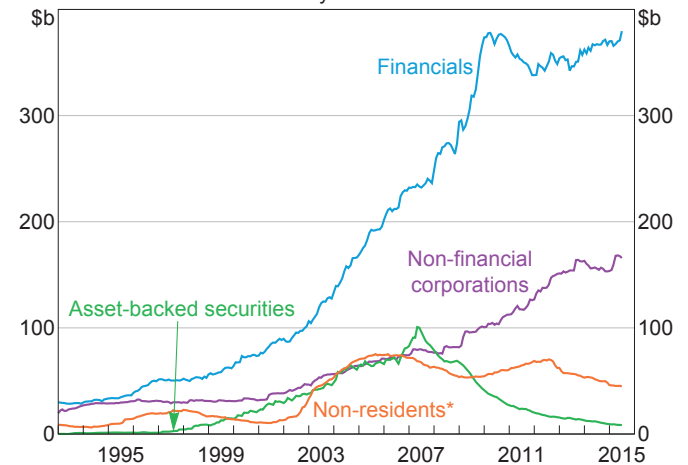
* Excludes ADIs' self-securitisations

** Offshore non-resident issuance includes Australian dollar-denominated bonds only

Source: RBA

Non-government Bonds on Issue Offshore

All currency denominations

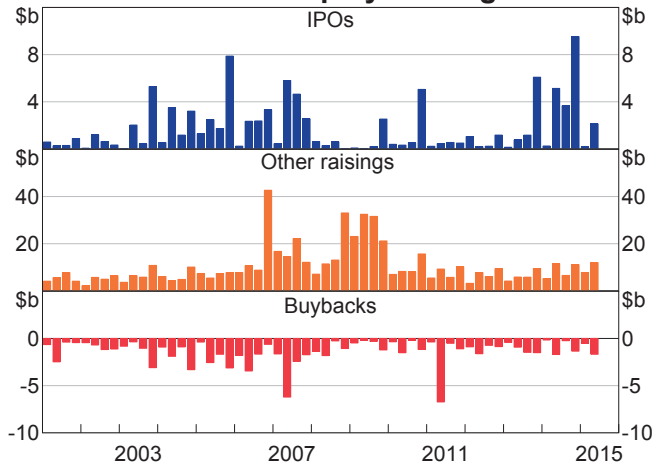


* Australian dollar-denominated bonds only

Sources: ABS; RBA

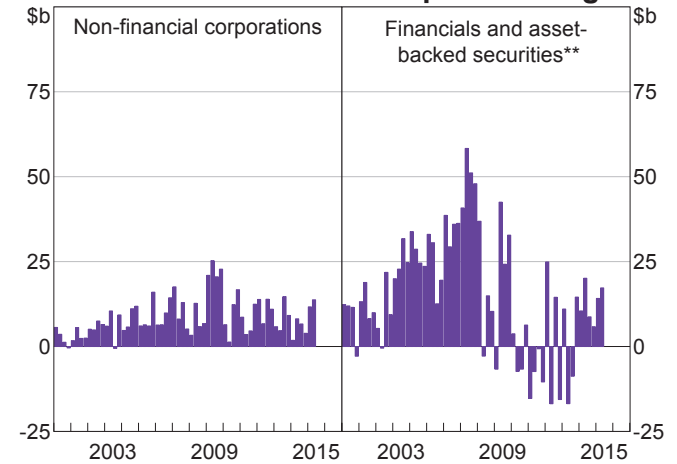
Equity Raisings and Business Financing

Australian Equity Raisings*



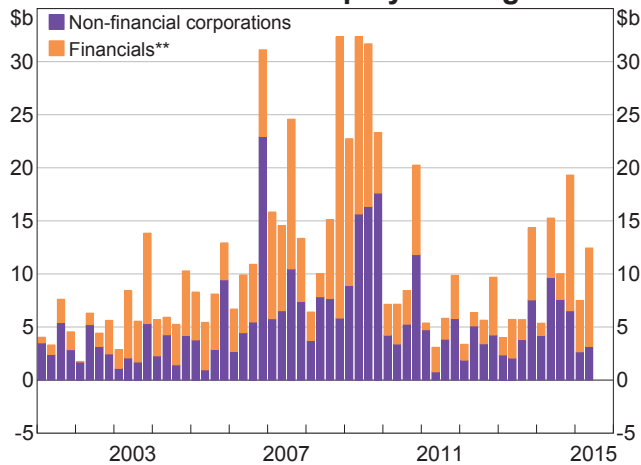
* All listed companies
Sources: ASX; RBA

Net Non-intermediated Capital Raisings*



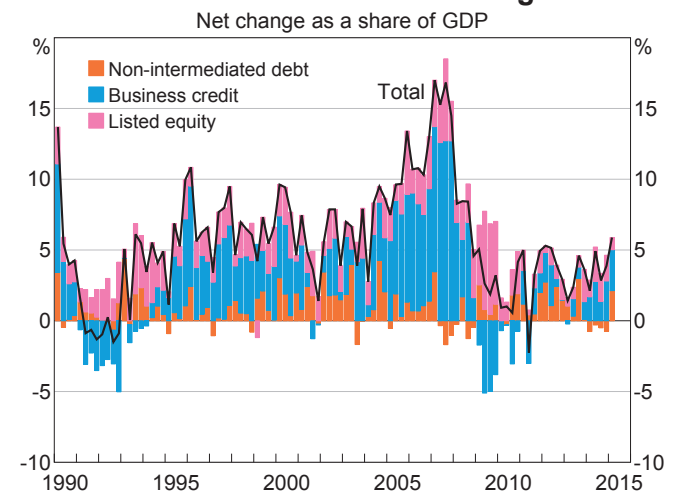
* Includes equity, hybrids, bonds, and short-term debt
** Excludes ADIs' self-securitisations; financials include banks and non-bank financials
Sources: APRA; ASX; Austraclear; RBA

Australian Net Equity Raisings*



* All listed companies
** Includes banks and non-bank financials
Sources: ASX; RBA

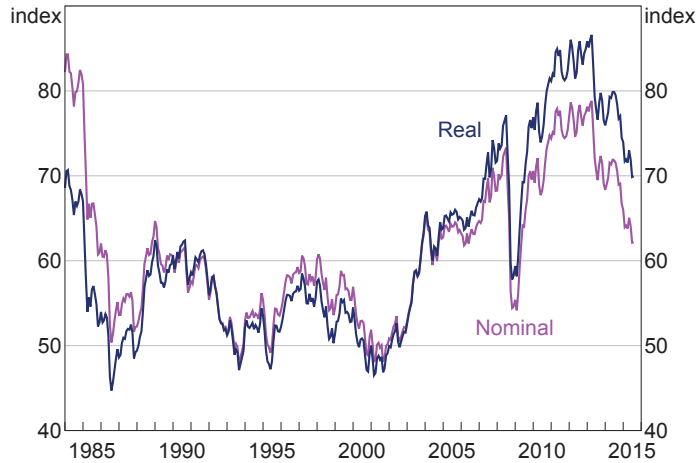
Business External Funding



Sources: ABS; APRA; ASX; RBA

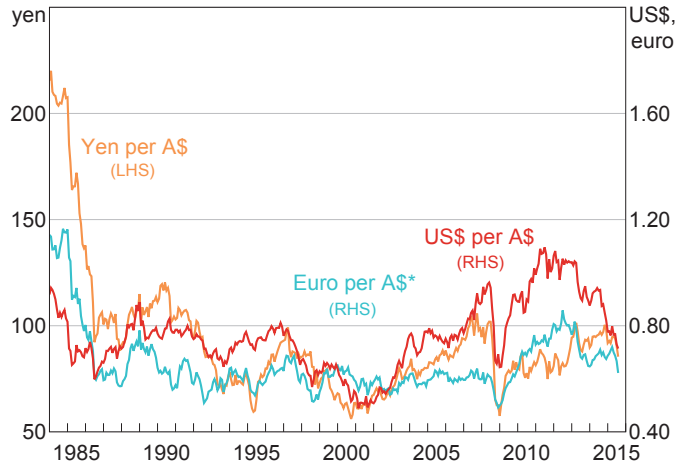
Exchange Rates

Australian Dollar TWI*



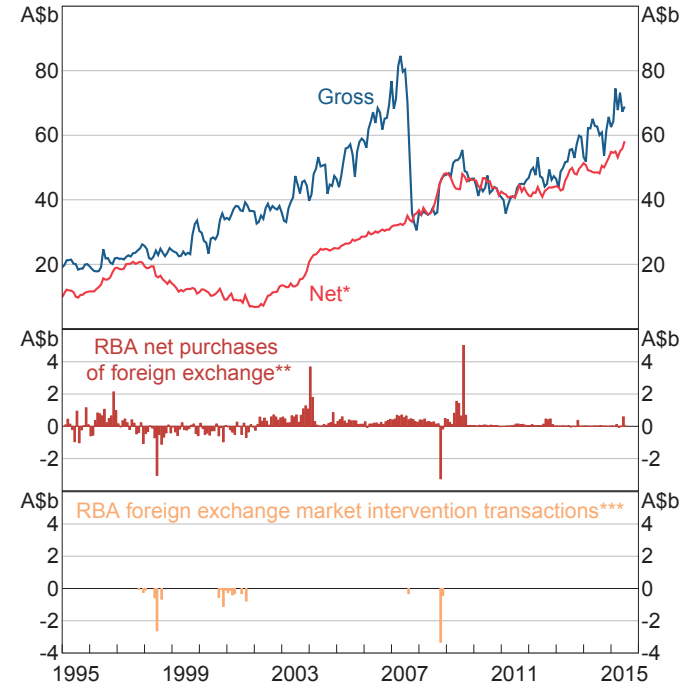
* May 1970 = 100 for nominal; real indexed to equate post-float averages
Sources: ABS; RBA; Thomson Reuters; WM/Reuters

Australian Dollar against US Dollar, Euro and Yen



* ECU per A\$ until 31 December 1998
Sources: Thomson Reuters; WM/Reuters

Official Reserve Assets

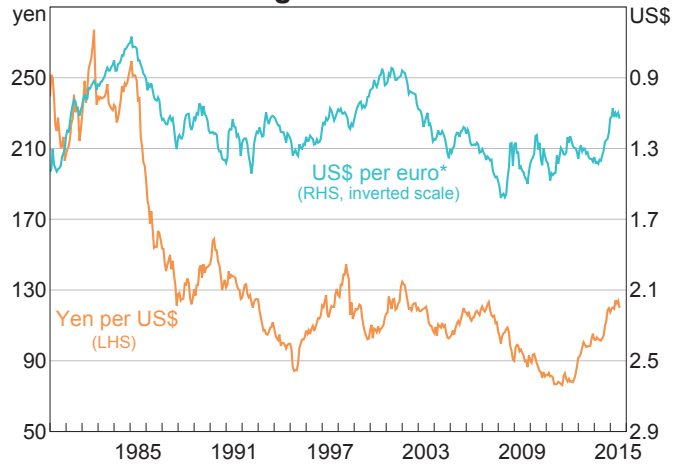


* Excludes foreign exchange swaps
** Includes market, government and other outright transactions, excludes swap deliveries
*** Data up to 30 June 2014; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

Source: RBA

Exchange Rates

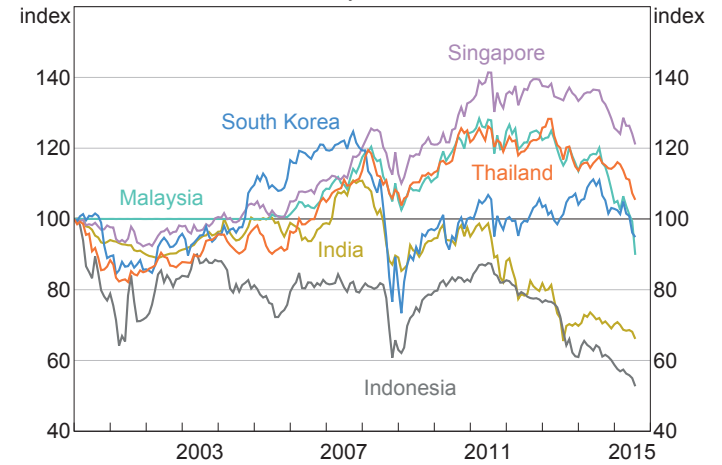
US Dollar against Euro and Yen



* US\$ per ECU until 31 December 1998
Sources: Bloomberg; Eurostat

Selected Asian Currencies against the US Dollar

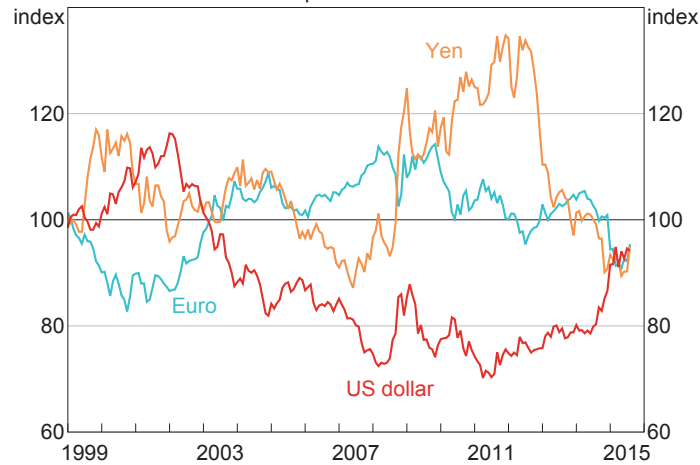
31 January 2000 = 100



Source: Bloomberg

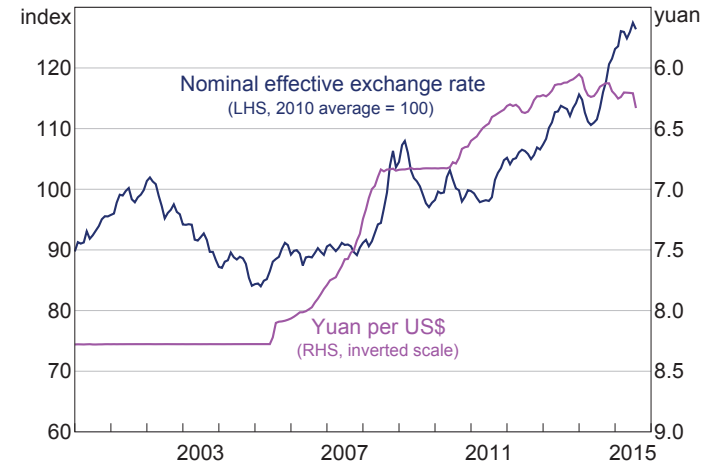
Nominal TWI

March quarter 1999 = 100

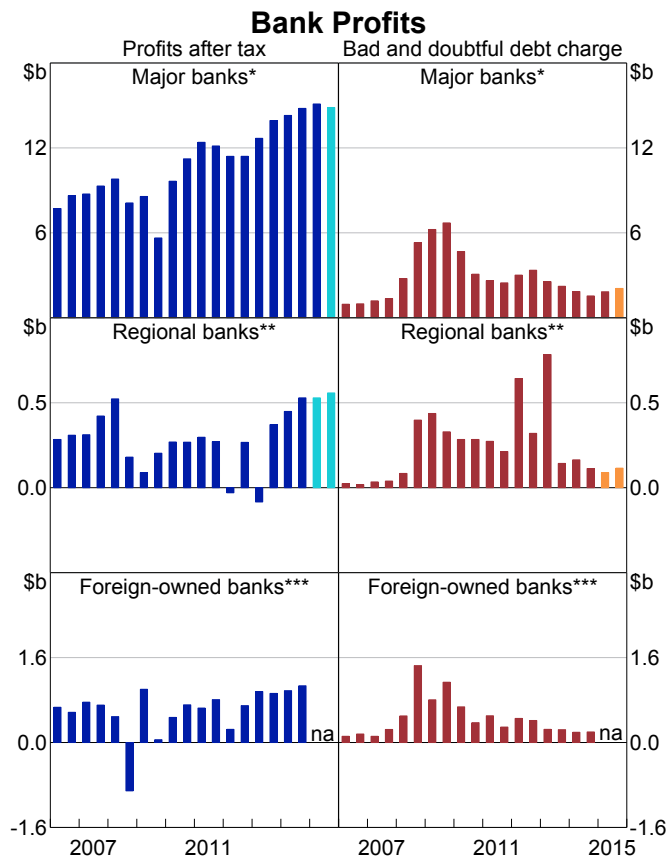


Sources: BIS; Bloomberg; Board of Governors of the Federal Reserve System; RBA

Chinese Renminbi



Sources: BIS; Bloomberg; RBA



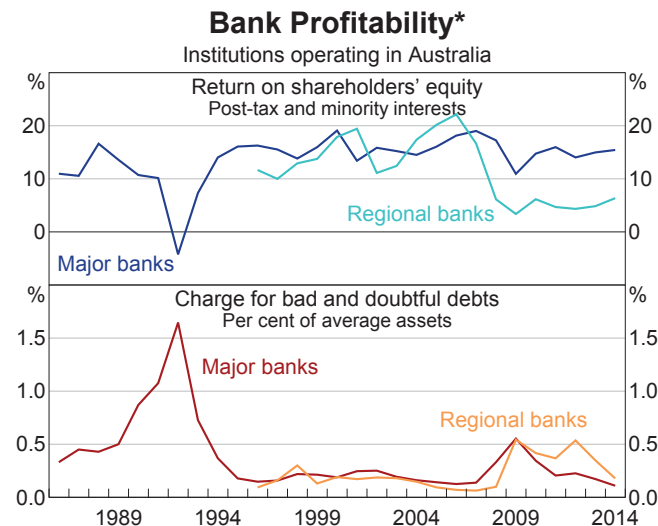
■ Actual ■ Actual
■ Analysts' forecasts ■ Analysts' forecasts

* ANZ, NAB and Westpac report half yearly to March and September, while CBA reports to June and December

** Suncorp Bank and Bendigo and Adelaide Bank report half yearly to June and December, while Bank of Queensland reports to February and August

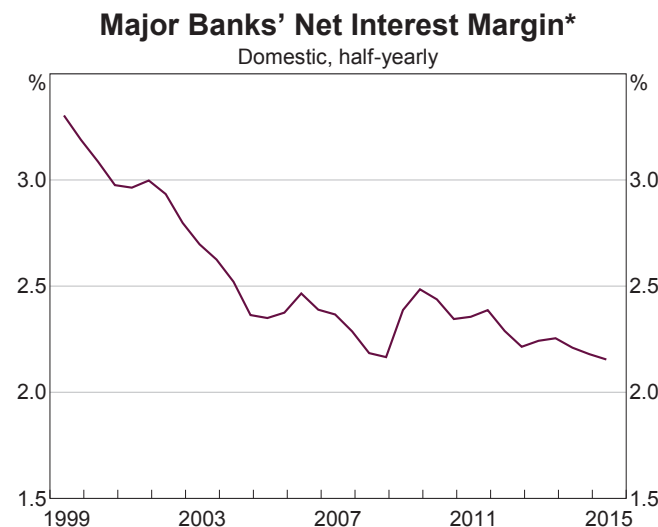
*** All results are half year to June and December

Sources: APRA; Banks' Annual and Interim Reports; Credit Suisse; Deutsche Bank; Nomura Equity Research; RBA; UBS Securities Australia



* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis; includes St. George and, from 2009, Bankwest

Sources: Banks' Annual and Interim Reports; RBA

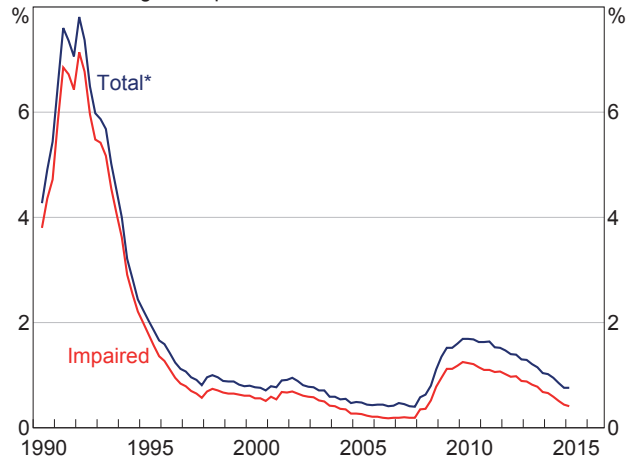


* From 2006 data are on an IFRS basis; prior years are on AGAAP basis; excludes St George Bank and Bankwest prior to the first half of 2009

Sources: Banks' Financial Reports; RBA

Banks' Non-performing Assets

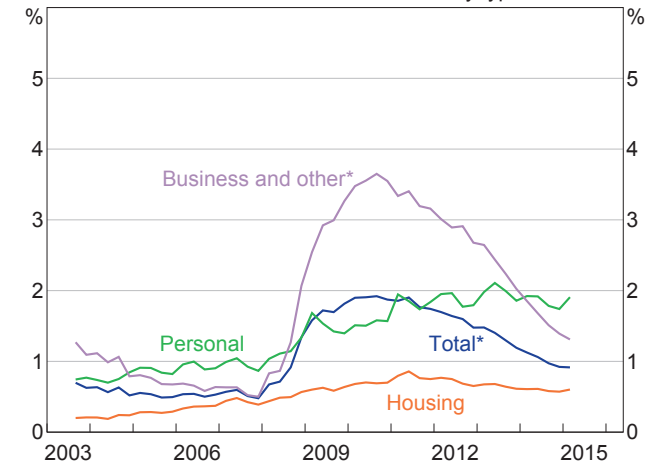
Consolidated global operations, share of on-balance sheet assets



* Includes assets 90+ days past due that are well secured
Source: APRA

Banks' Non-performing Assets

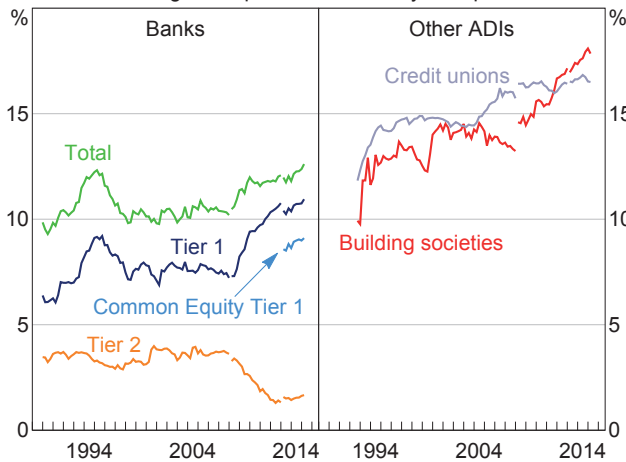
Domestic books, share of loans by type



* Includes lending to financial businesses, bills and debt securities
Source: APRA

Capital Ratios*

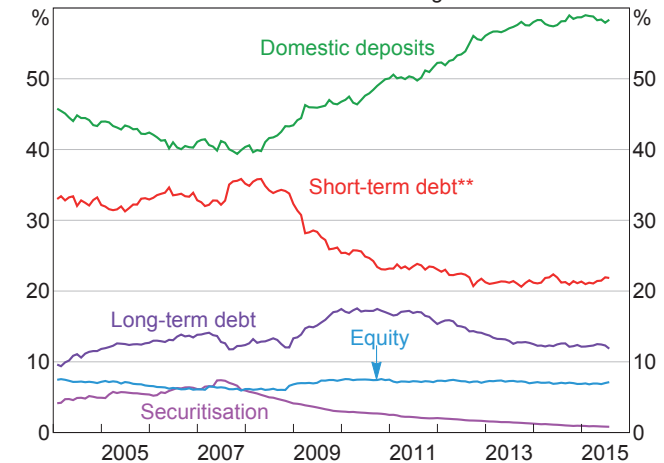
Consolidated global operations of locally incorporated ADIs



* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most ADIs; break in March 2013 due to the introduction of Basel III for all ADIs
Source: APRA

Funding Composition of Banks in Australia*

Share of total funding



* Adjusted for movements in foreign exchange rates; tenor of debt is estimated on a residual maturity basis

** Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA; Standard & Poor's