
The Australian Economy and Financial Markets

Chart Pack February 2017

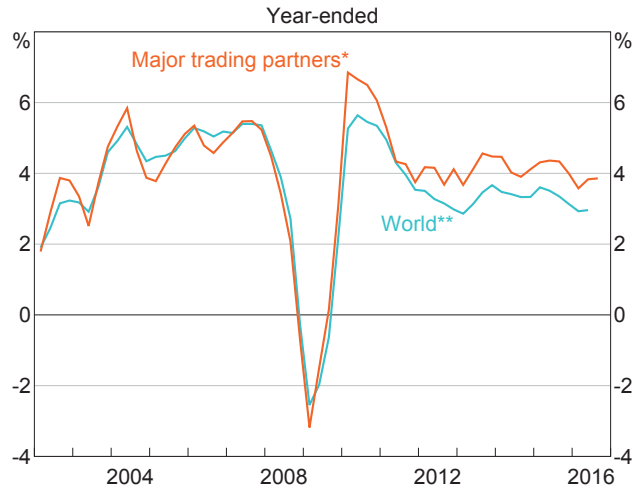
The Australian Economy and Financial Markets

Contents

Graphs

World Economy	1–3
Australian GDP Growth and Inflation	4
Household Sector	5–6
Business Sector	7–8
Credit and Money	9
Factors of Production and Labour Market	10–11
Regions and Industry	12–13
Government	14
Commodity Prices	15
Balance of Payments and External Position	16–17
Interest Rates	18–22
Share Markets	23–24
Bond Issuance	25–26
Exchange Rates	27–28
Banking Indicators	29–30

GDP Growth – World

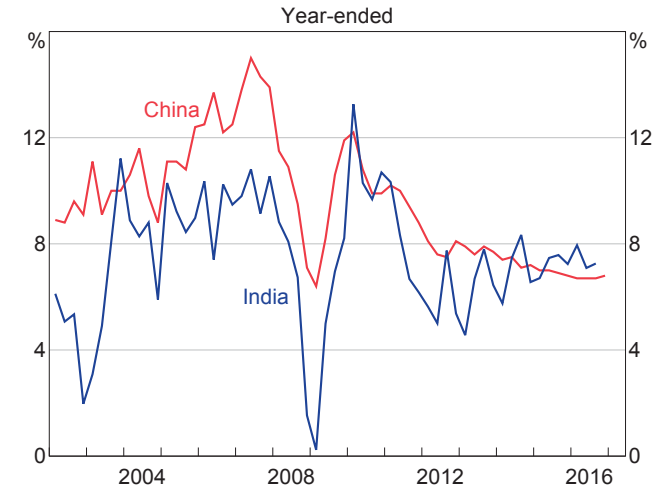


* Weighted using Australian export shares

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

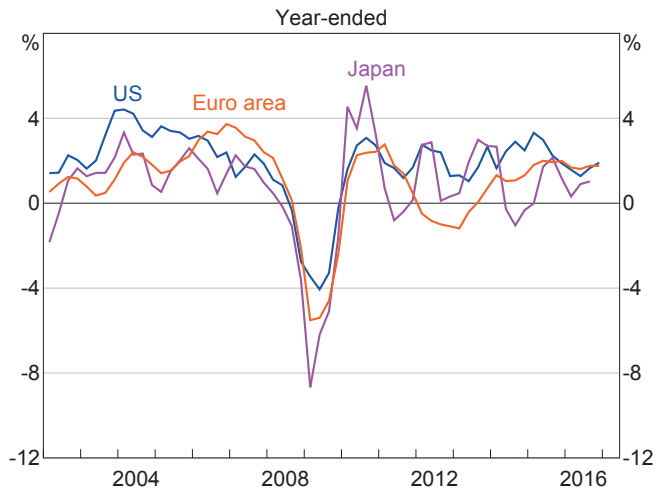
Sources: ABS; CEIC Data; IMF; RBA; Thomson Reuters

GDP Growth – China and India



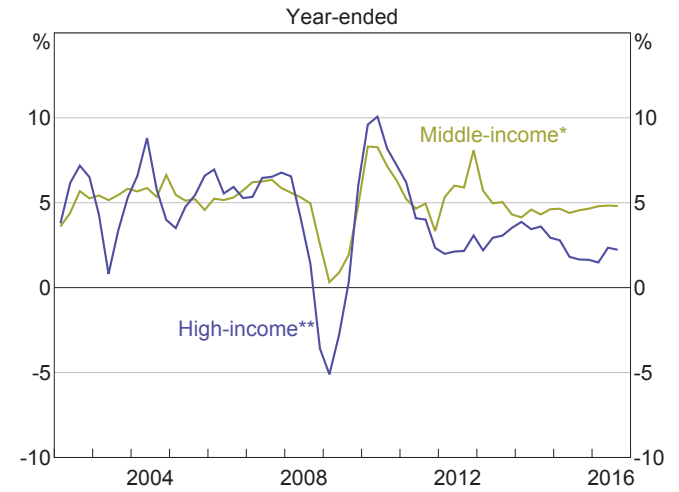
Sources: CEIC Data; RBA

GDP Growth – Advanced Economies



Source: Thomson Reuters

GDP Growth – East Asia

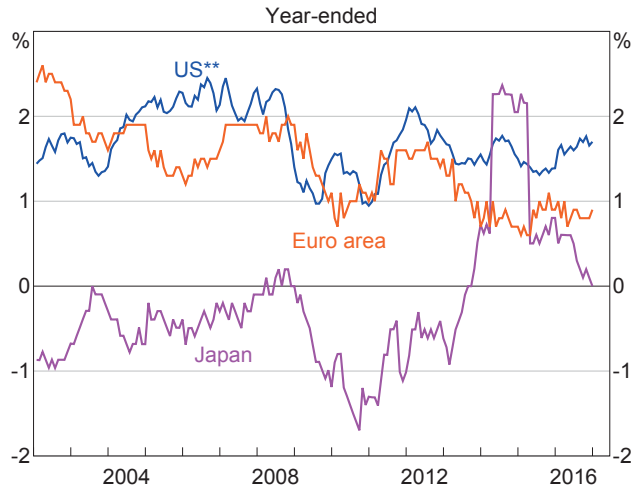


* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted

** 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

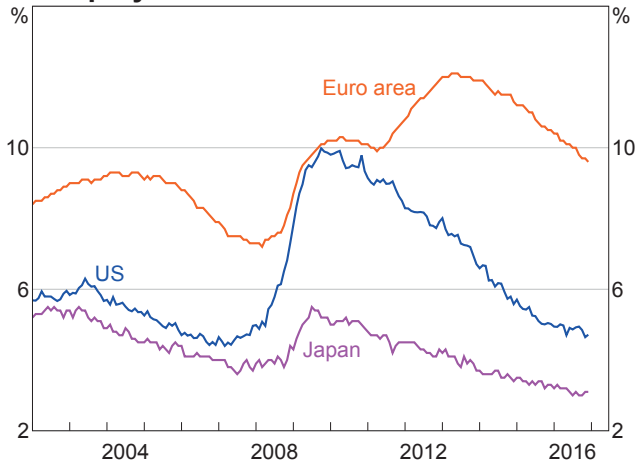
Source: Thomson Reuters

Inflation – China and India



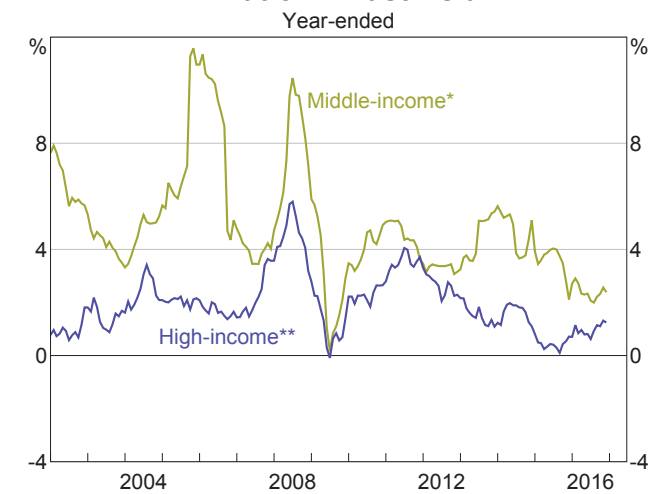
Source: CEIC Data

Unemployment Rate – Advanced Economies



Source: Thomson Reuters

Inflation – East Asia

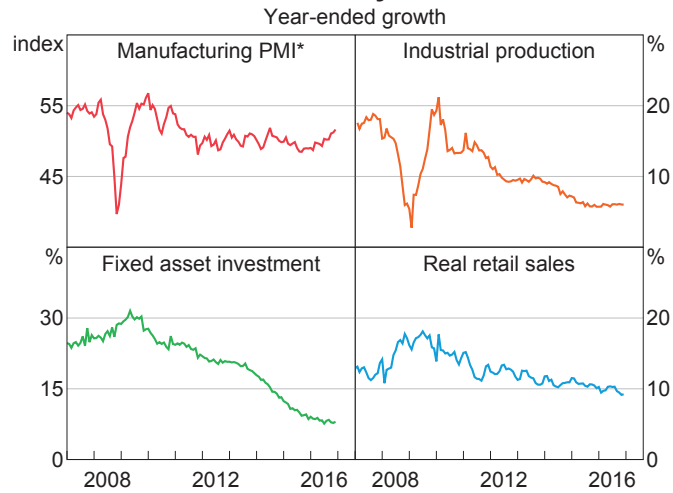


* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted

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

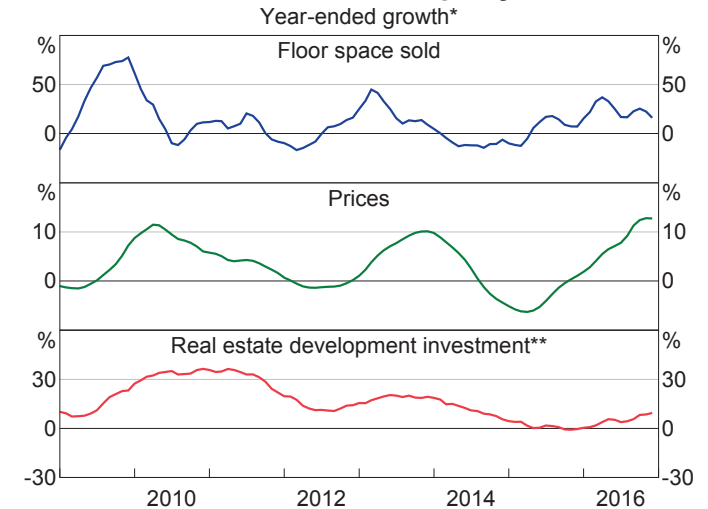
Sources: CEIC Data; IMF; RBA; Thomson Reuters

China – Activity Indicators



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

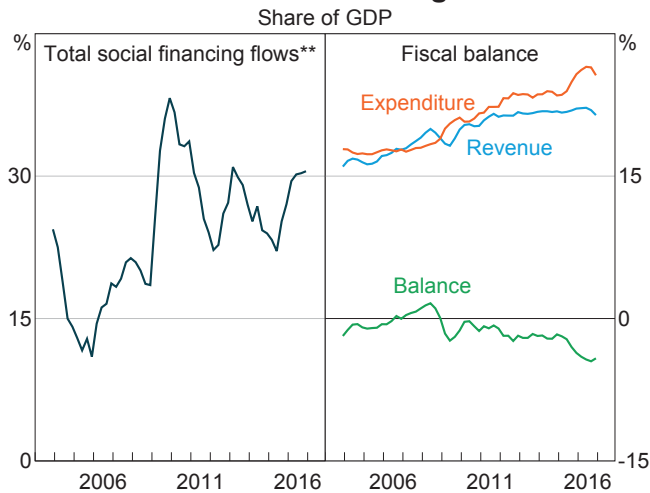
China – Residential Property Market



* For sales and investment, a three-month moving average of the seasonally adjusted series is used to calculate growth
** Investment by developers and other construction companies in the development of residential property, includes land purchases

Sources: CEIC Data; RBA

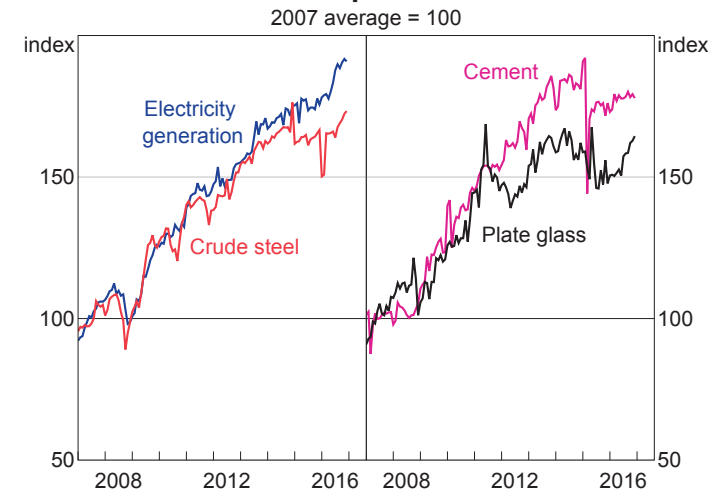
China – Financing*



* Seasonally adjusted by RBA
** Upper bound estimate adjusting for impact of local government bond issuance to pay off debt previously included in TSF

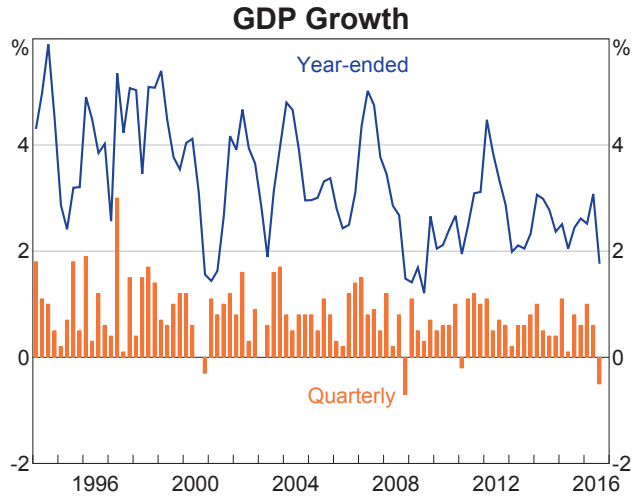
Sources: CEIC Data; RBA

China – Output Indicators

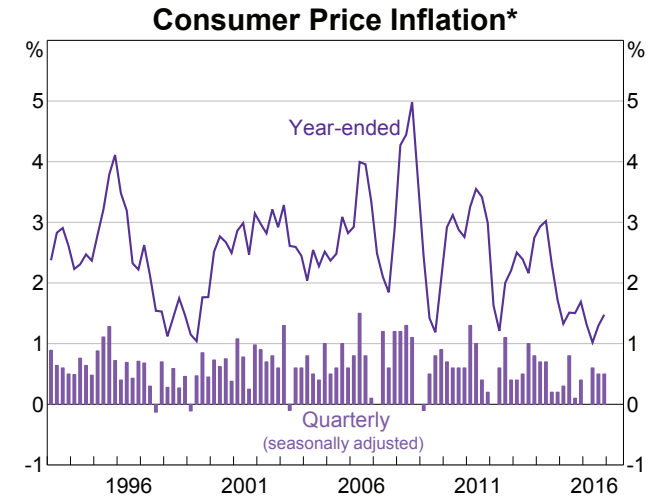


Sources: CEIC Data; RBA

Australian GDP Growth and Inflation

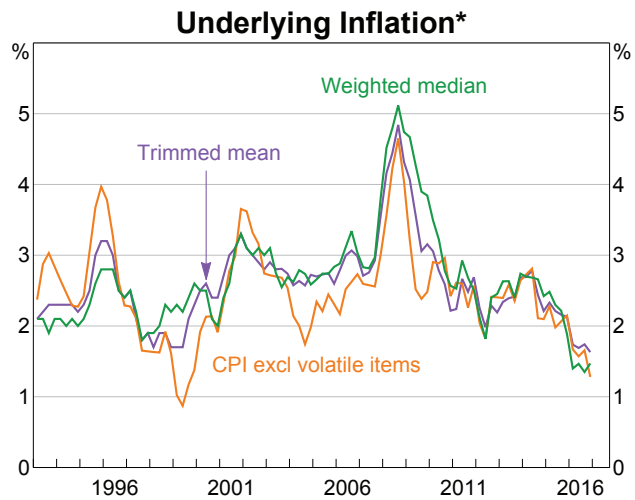


Source: ABS



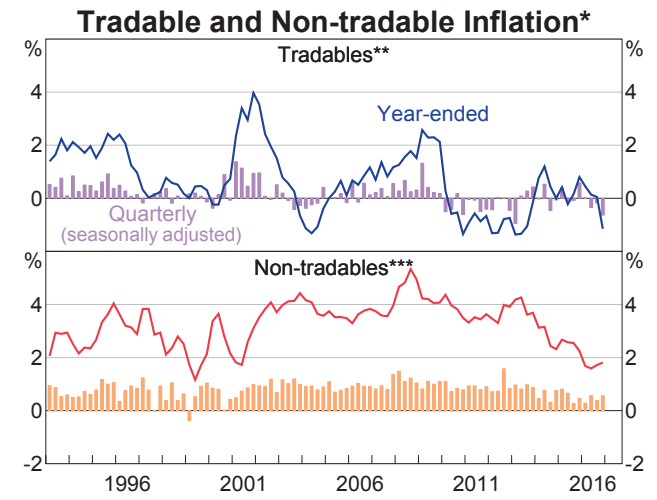
* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000

Sources: ABS; RBA



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

Sources: ABS; RBA



* Excludes tobacco; adjusted for the tax changes of 1999–2000

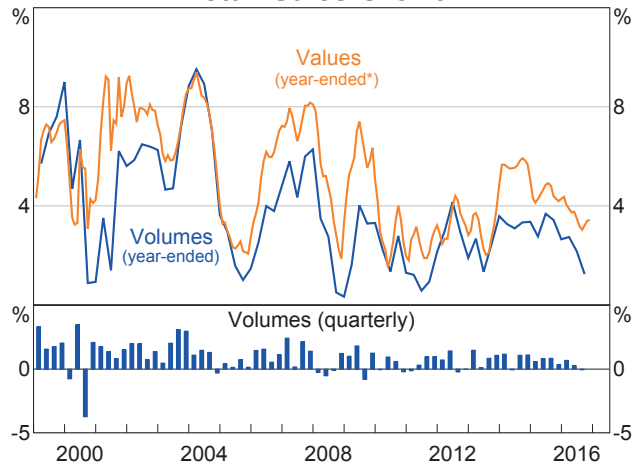
** Excludes volatile items (fruit, vegetables & automotive fuel)

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

Sources: ABS; RBA

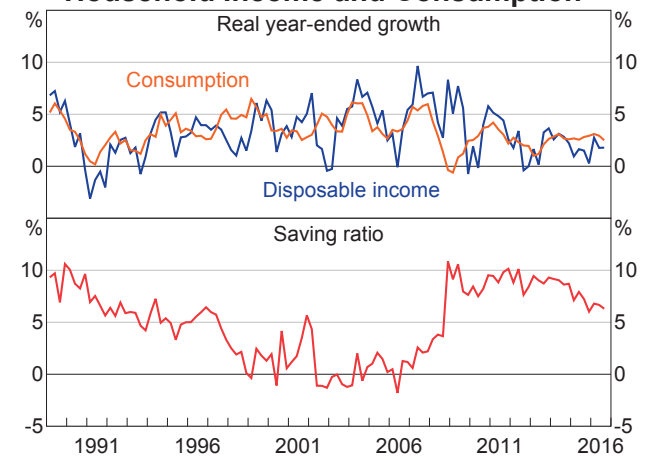
Household Sector

Retail Sales Growth



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

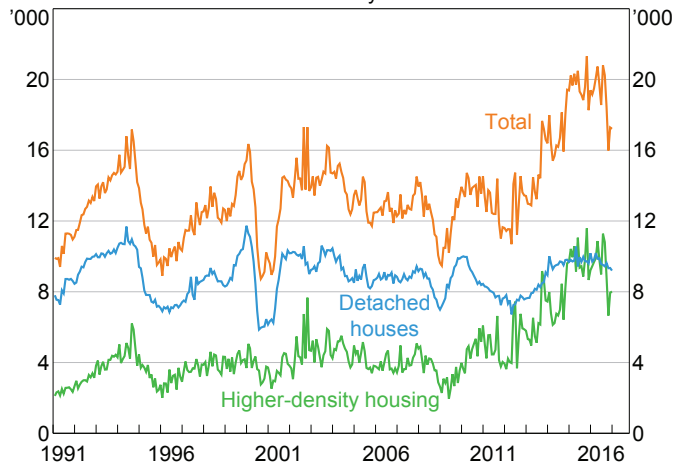
Household Income and Consumption*



* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; income level smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002; saving ratio is net of depreciation
Sources: ABS; RBA

Private Residential Building Approvals

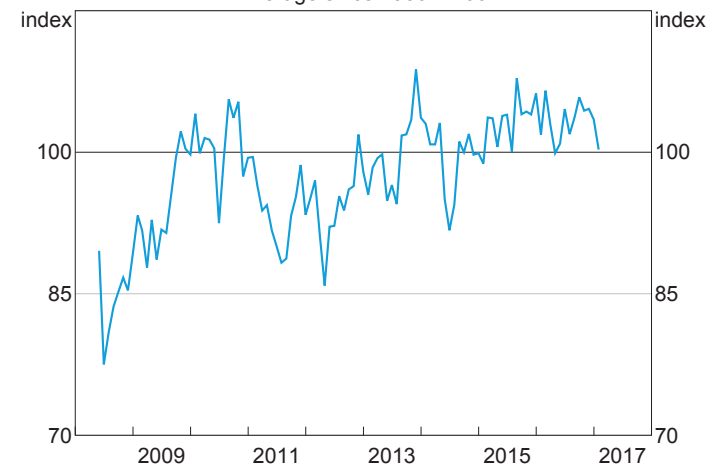
Monthly



Source: ABS

Consumer Sentiment*

Average since 1980 = 100

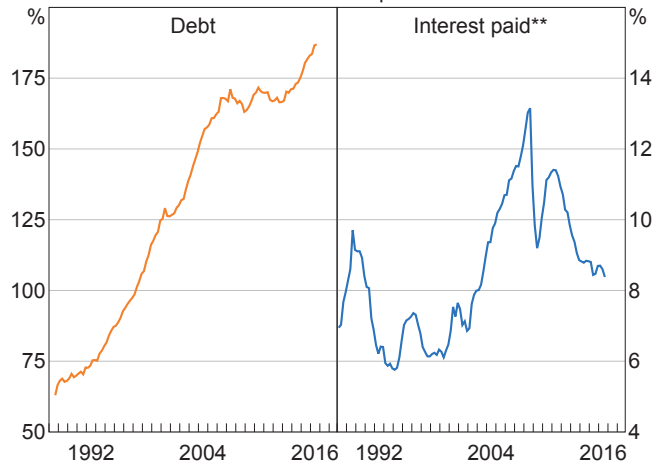


* Average of the ANZ-Roy Morgan and Westpac-Melbourne Institute consumer sentiment measure of respondents' perceptions of their personal finances relative to the previous year; ANZ-Roy Morgan index rescaled to have the same average as the Westpac-Melbourne Institute index since 1996

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

Household Finances

Per cent of household disposable income*



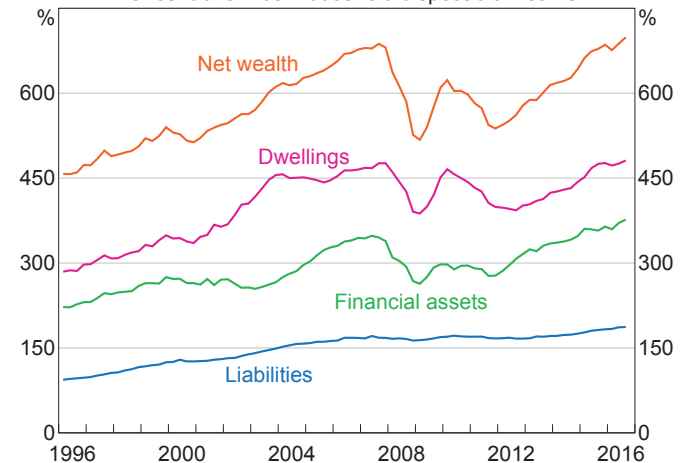
* Disposable income is after tax and before the deduction of interest payments

** Excludes unincorporated enterprises

Sources: ABS; RBA

Household Wealth and Liabilities*

Per cent of annual household disposable income

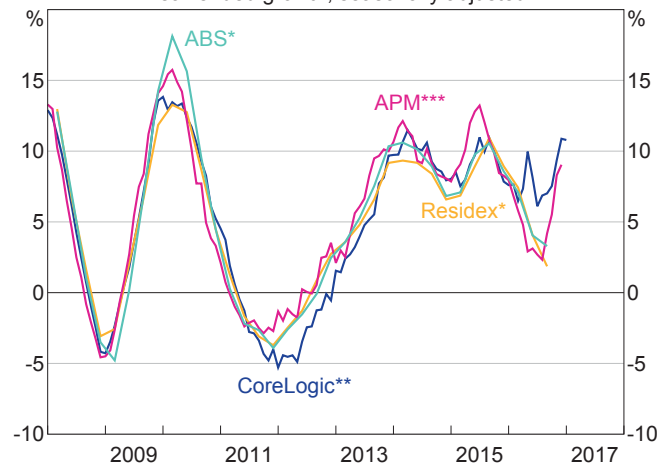


* Disposable income is after tax and before the deduction of interest payments

Sources: ABS; RBA

Housing Prices

Year-ended growth, seasonally adjusted



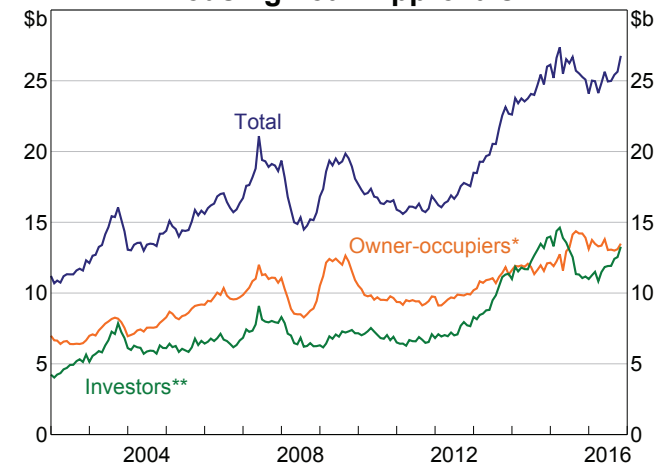
* ABS is a quarterly stratified median price index; Residex is a quarterly repeat sales price index

** Monthly hedonic price index; series breaks occurred in April 2016 and May 2016 due to changes in methods used to calculate the index

*** Monthly stratified median price index

Sources: ABS; APM; CoreLogic; RBA; Residex

Housing Loan Approvals

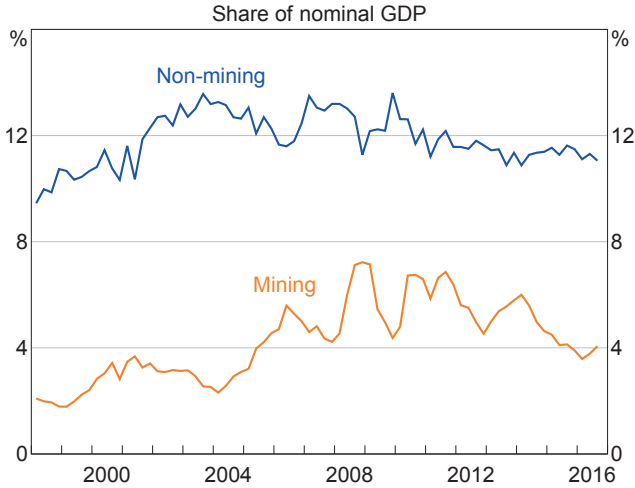


* Excludes refinancing

** Includes refinancing

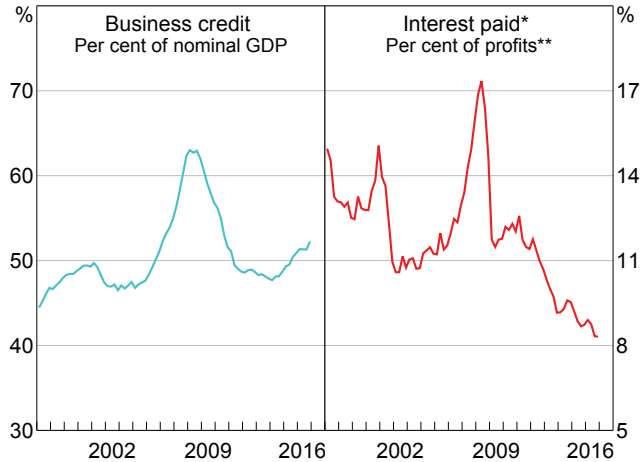
Sources: ABS; RBA

Private Non-financial Corporation Profits*



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

Business Finances

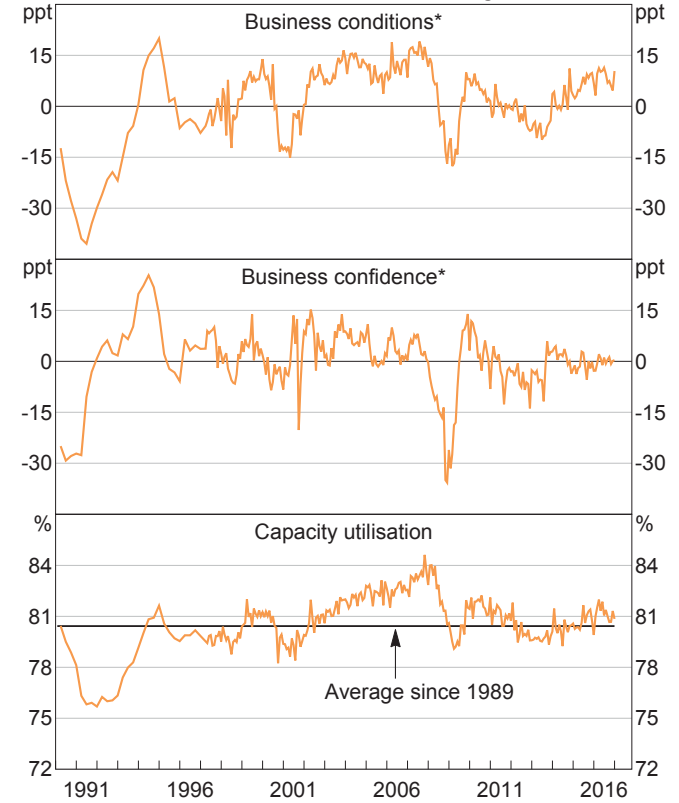


* Interest on intermediated debt from Australian-domiciled financial institutions

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

Sources: ABS; APRA; RBA

NAB Business Survey

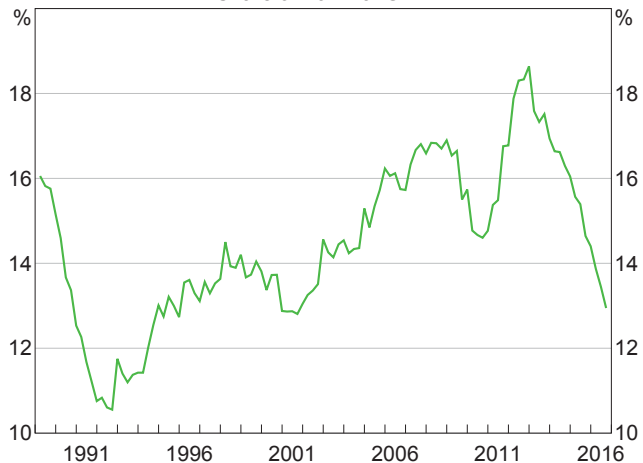


* Net balance; deviation from average since 1989

Sources: NAB; RBA

Business Investment*

Share of nominal GDP

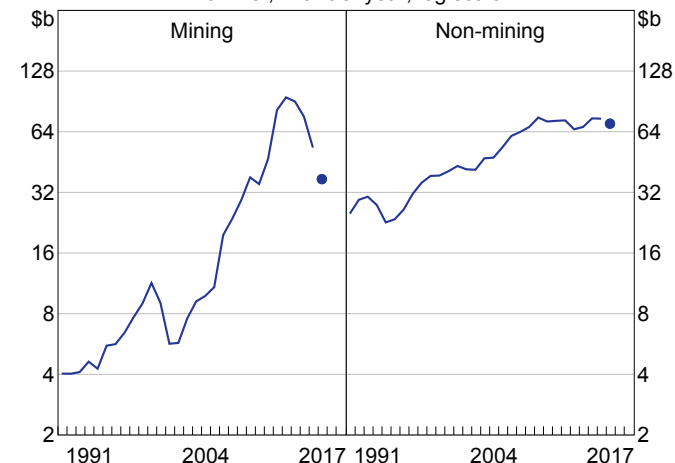


* Adjusted for second-hand asset transfers between the private and other sectors

Source: ABS

Capital Expenditure – Mining and Non-mining*

Nominal, financial year, log scale

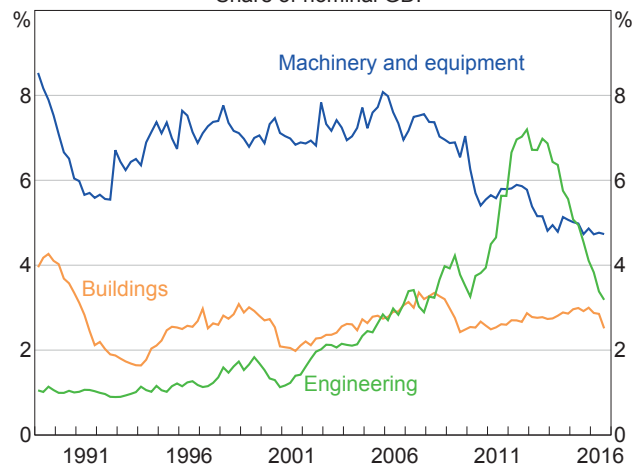


* Sample of firms' spending plans; dots represent the survey's most recent estimates for 2016/17 adjusted for historical realised spending

Sources: ABS; RBA

Business Investment Components*

Share of nominal GDP

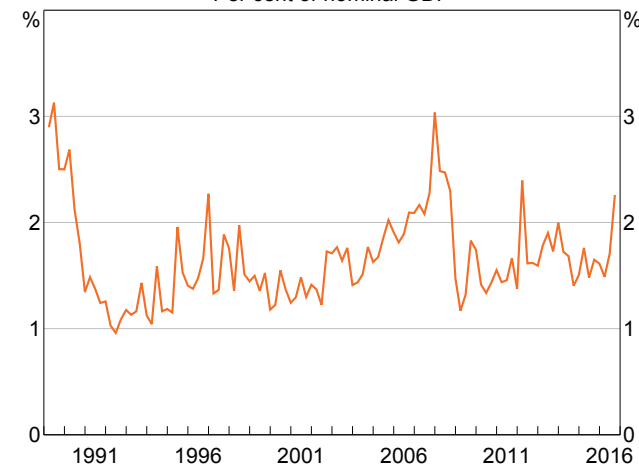


* Adjusted for second-hand asset transfers between the private and other sectors

Source: ABS

Private Non-residential Building Approvals

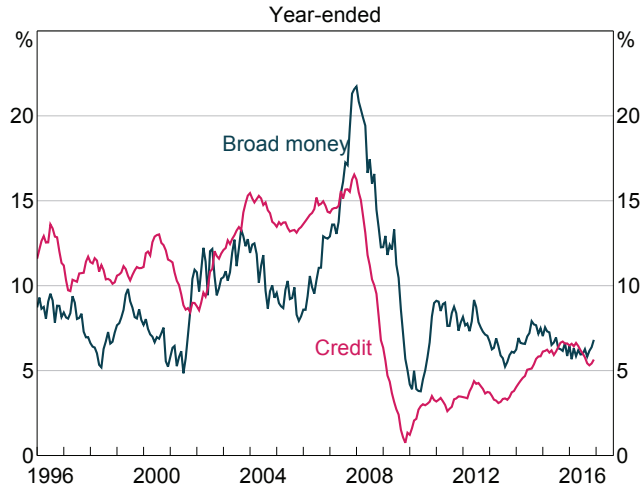
Per cent of nominal GDP



Source: ABS

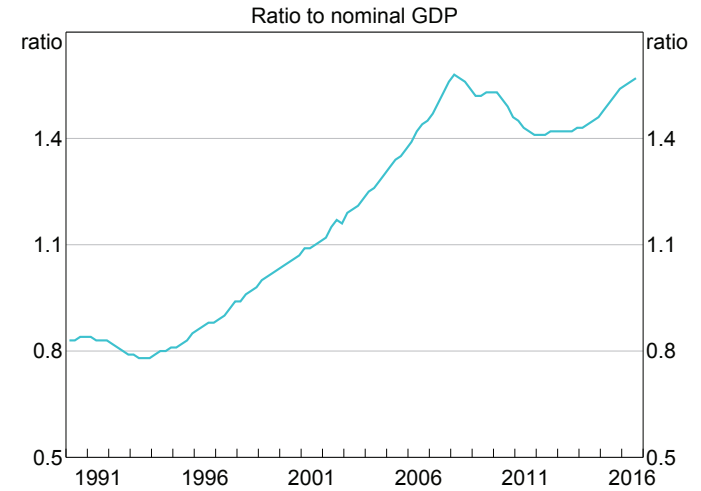
Credit and Money

Credit and Broad Money Growth



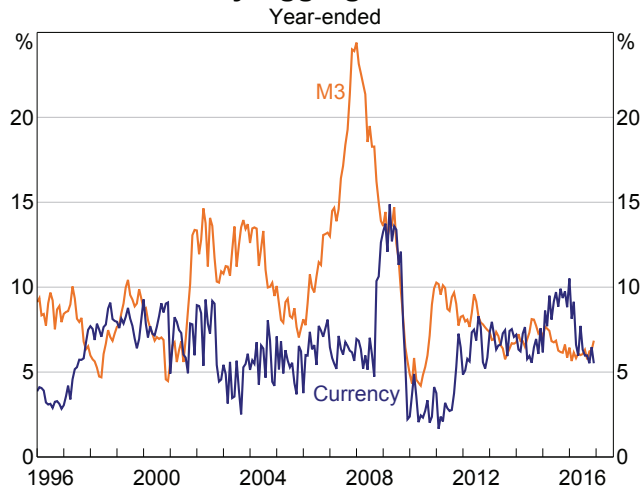
Sources: ABS; APRA; RBA

Credit*



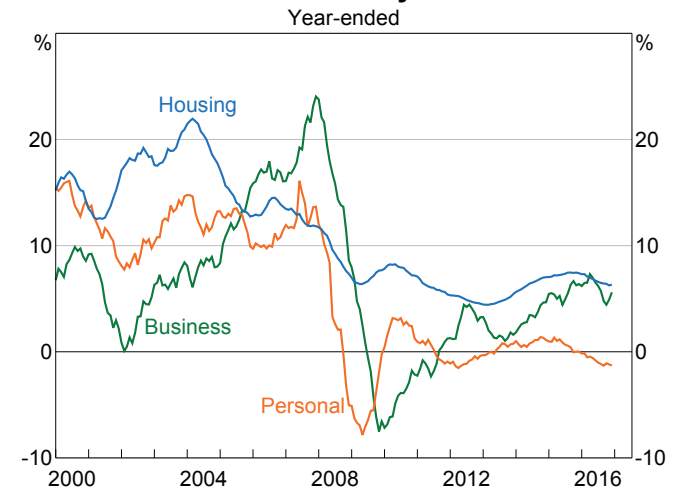
* Not adjusted for breaks
Sources: ABS; APRA; RBA

Monetary Aggregates Growth



Sources: APRA; RBA

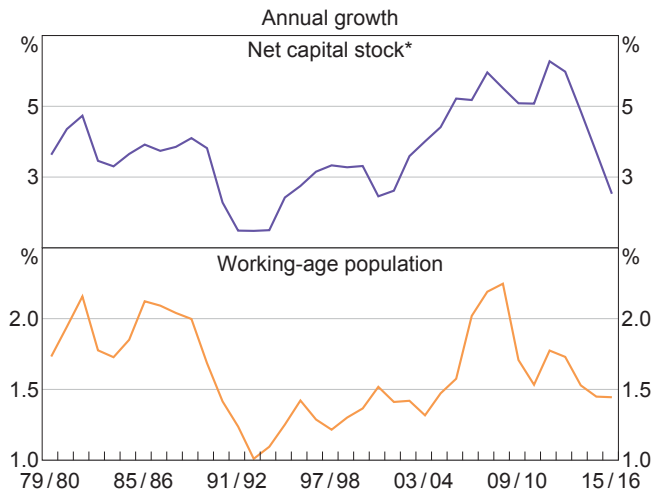
Credit Growth by Sector



Sources: ABS; APRA; RBA

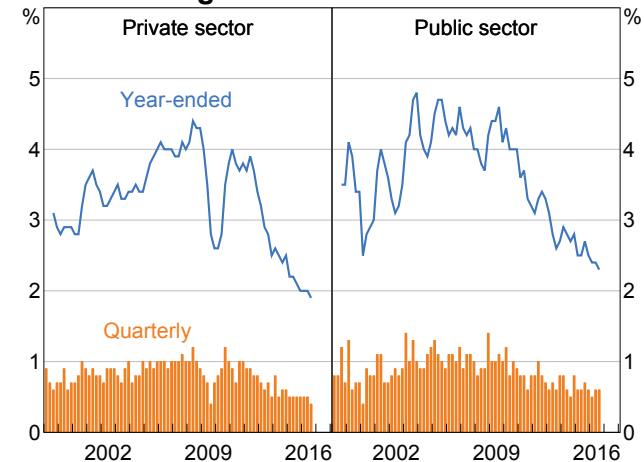
Factors of Production and Labour Market

Factors of Production



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

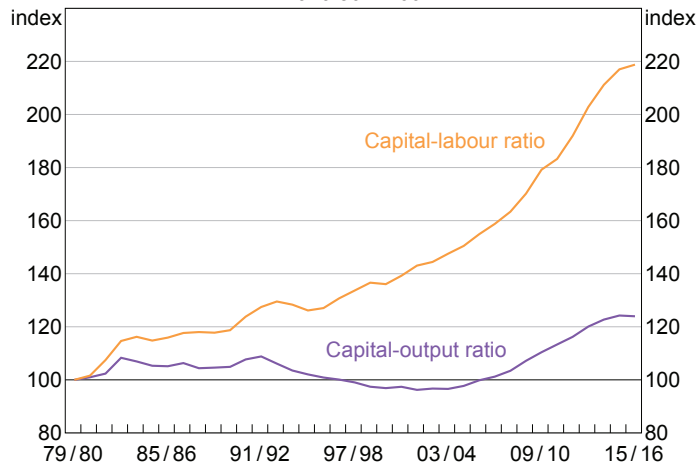
Wage Price Index Growth



Source: ABS

Capital Ratios*

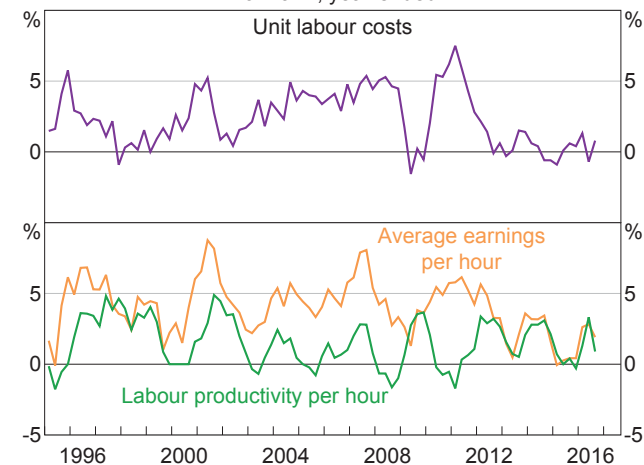
1979/80 = 100



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

Unit Labour Costs Growth

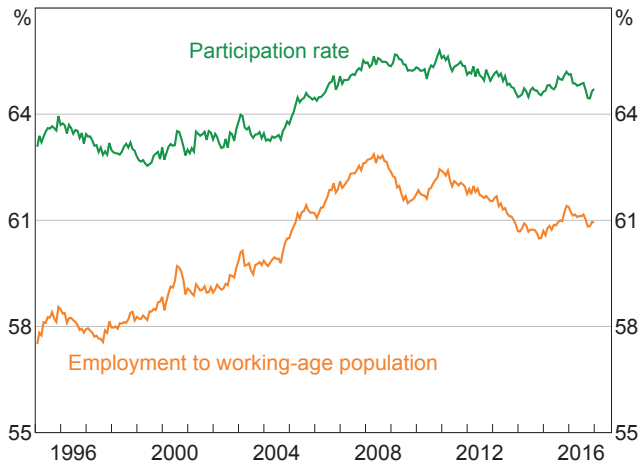
Non-farm, year-ended



Sources: ABS; RBA

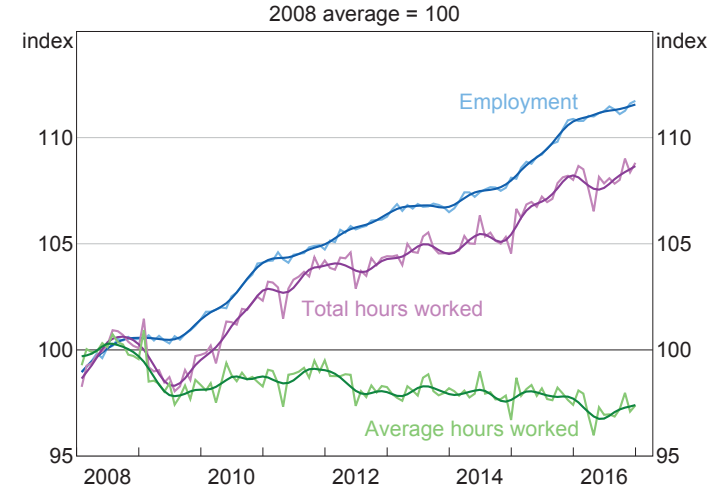
Factors of Production and Labour Market

Employment and Participation Rates



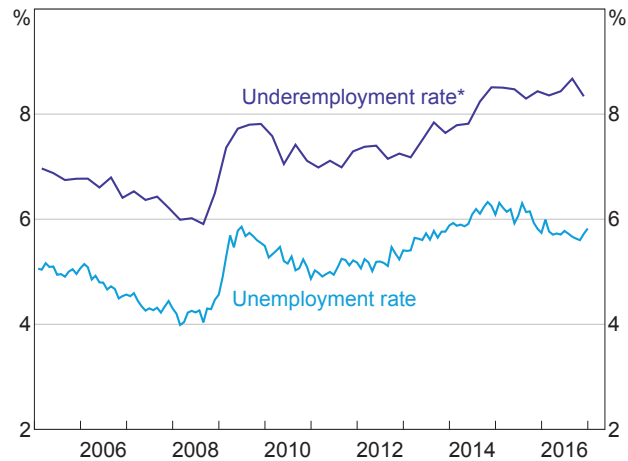
Source: ABS

Employment and Hours Worked*



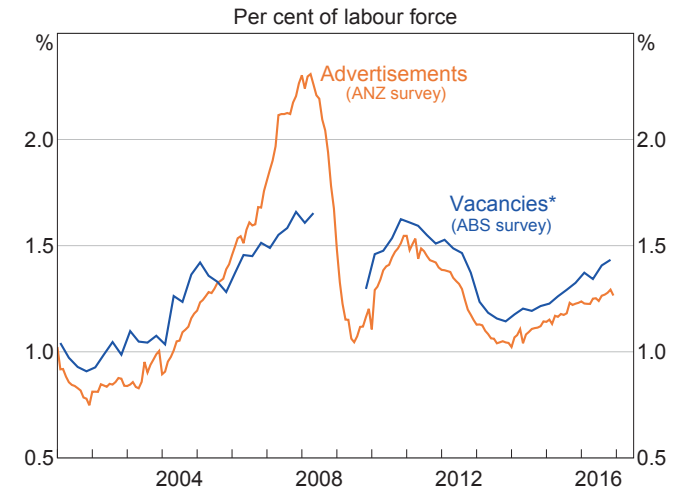
* Smoothed lines are 13-period Henderson trends
Sources: ABS; RBA

Labour Market



* Full-time workers on reduced hours for economic reasons and part-time workers who would like, and are available, to work more hours
Source: ABS

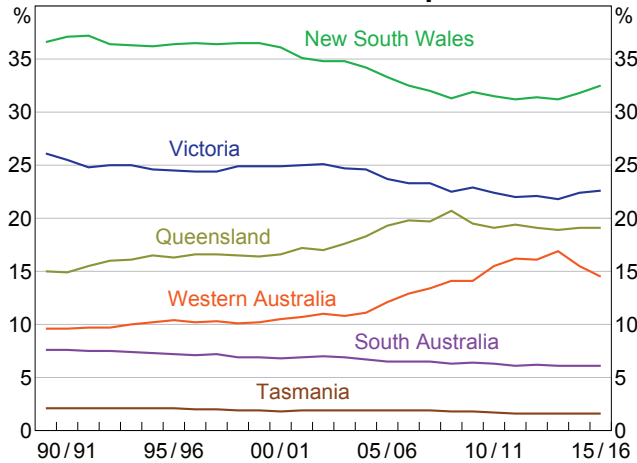
Job Vacancies and Advertisements



* This survey was suspended between May 2008 and November 2009
Sources: ABS; ANZ

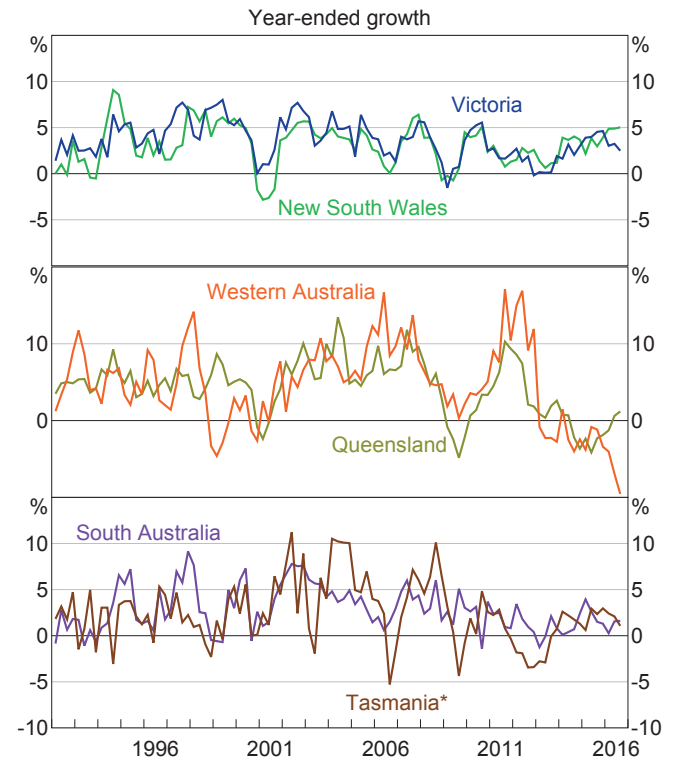
Regions and Industry

State Share of Output*



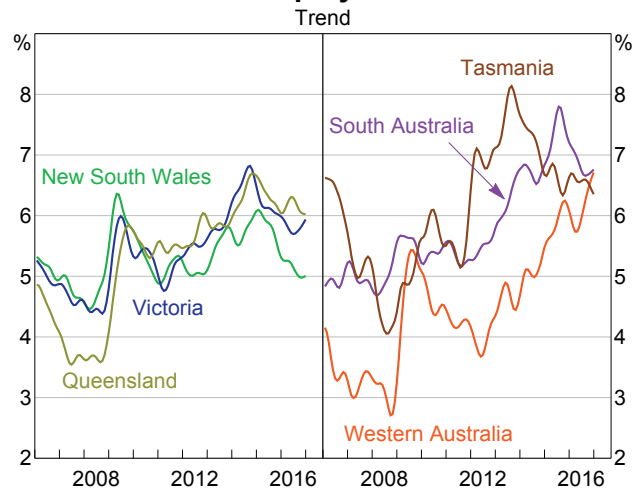
* Nominal
Source: ABS

State Final Demand



* Adjusted for the purchase and sale of ferries in 2002
Source: ABS

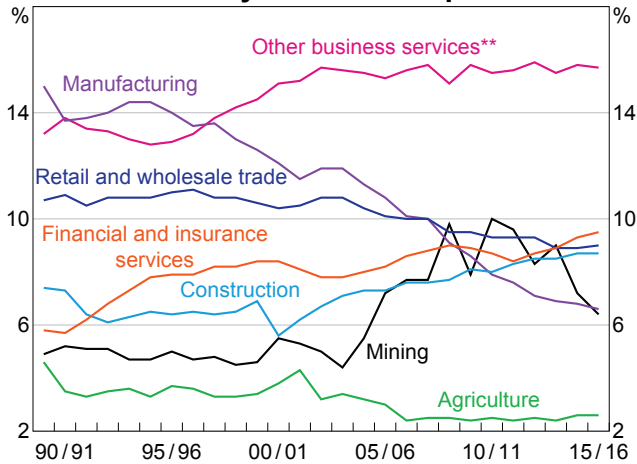
State Unemployment Rates



Source: ABS

Regions and Industry

Industry Share of Output*

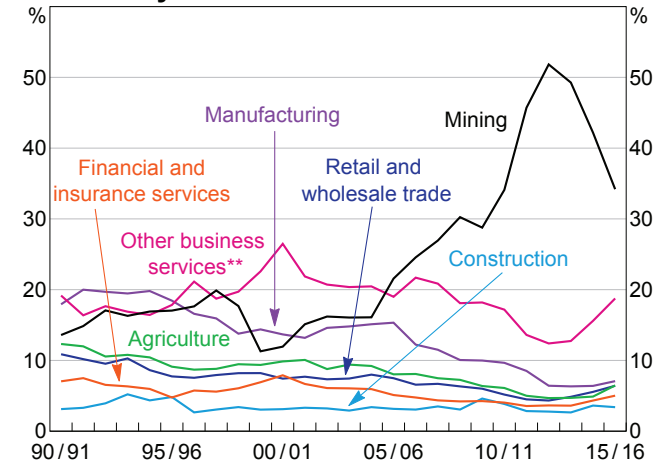


* Nominal gross value added

** 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**



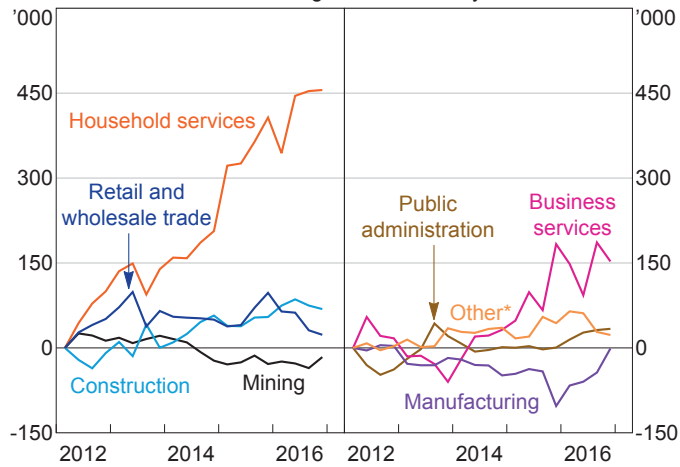
* Nominal

** 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

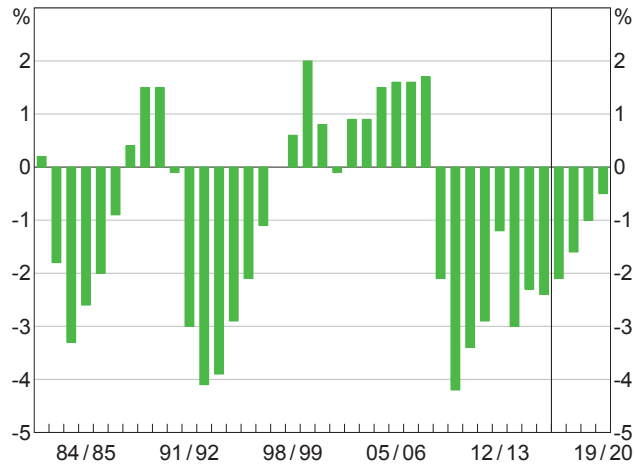
Cumulative change since February 2012



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

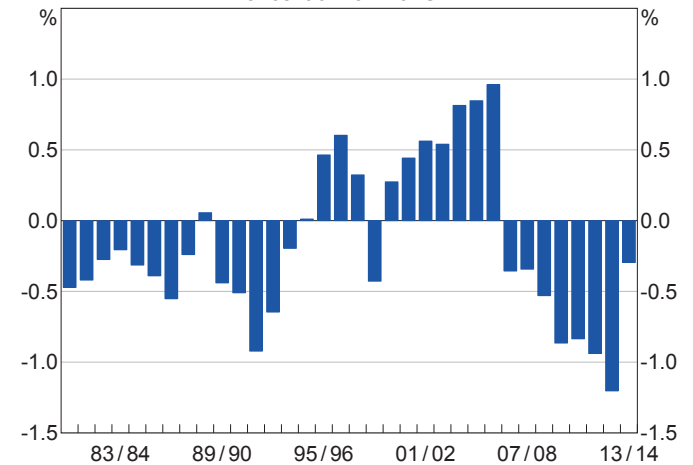
Source: ABS

Australian Government Budget Balance*
Per cent of nominal GDP



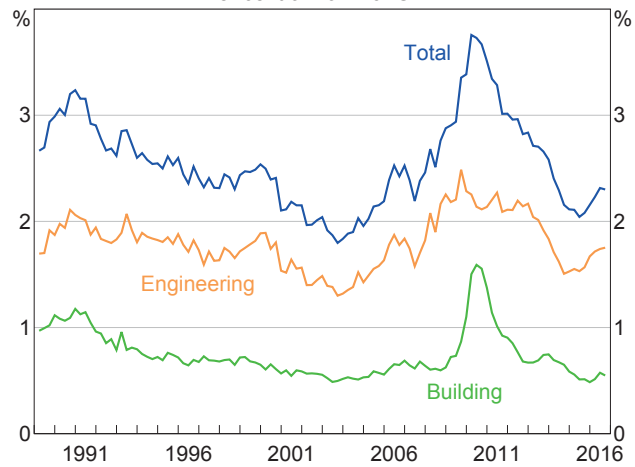
* Underlying cash balance; 2016/17 MYEFO
Source: Australian Treasury

State Budget Balances*
Per cent of nominal GDP



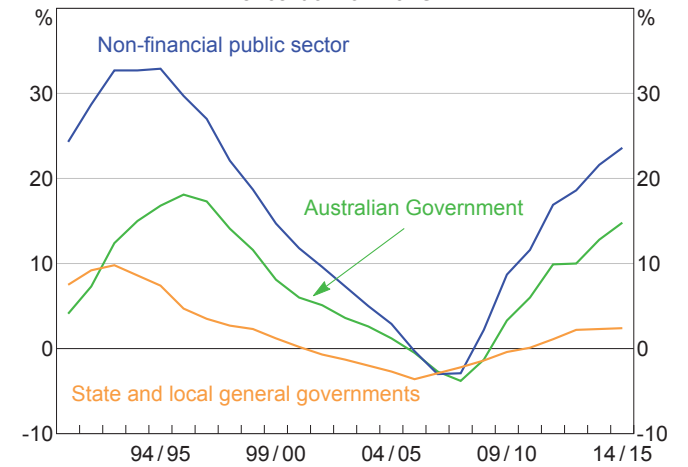
* Underlying cash balance
Source: ABS

Public Construction Work Done
Per cent of nominal GDP



Source: ABS

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

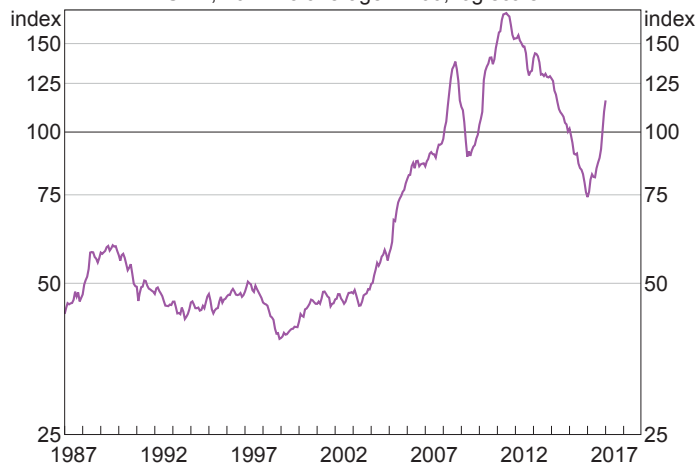


Source: Australian Treasury

Commodity Prices

RBA Index of Commodity Prices

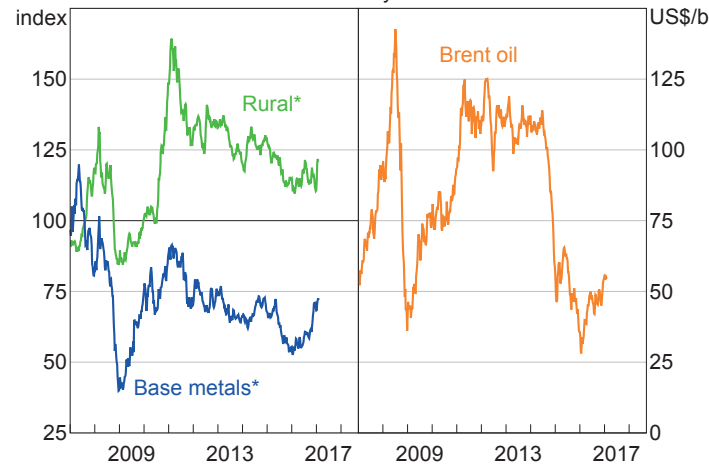
SDR, 2014/15 average = 100, log scale



Source: RBA

Base Metals, Rural and Oil Prices

Weekly

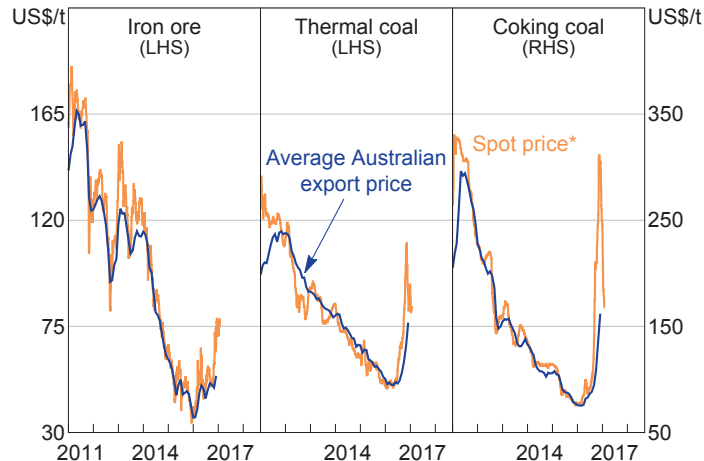


* RBA Index of Commodity Prices sub-indices; SDR terms; 2007 average = 100

Sources: Bloomberg; RBA

Bulk Commodity Prices

Free on board basis

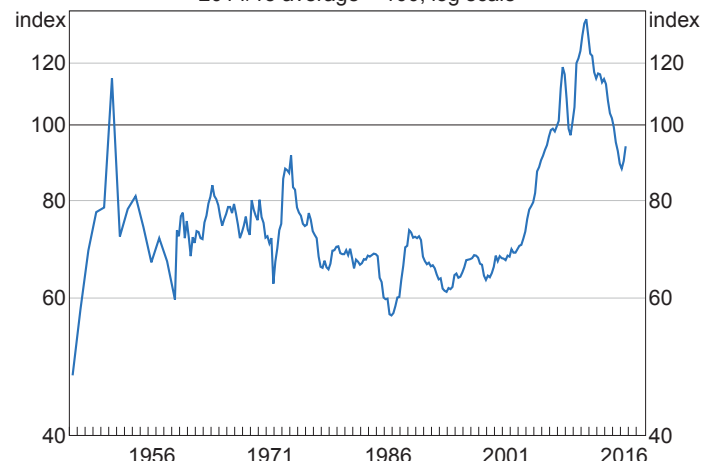


* Iron ore fines, Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS; RBA

Terms of Trade*

2014/15 average = 100, log scale



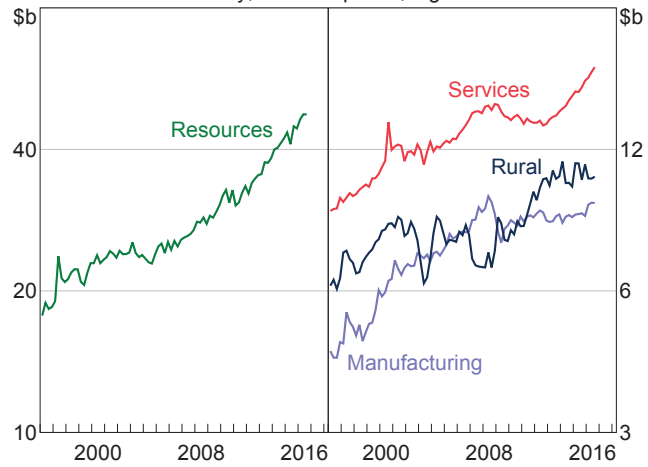
* Annual data are used prior to 1960

Sources: ABS; RBA

Balance of Payments and External Position

Export Volumes

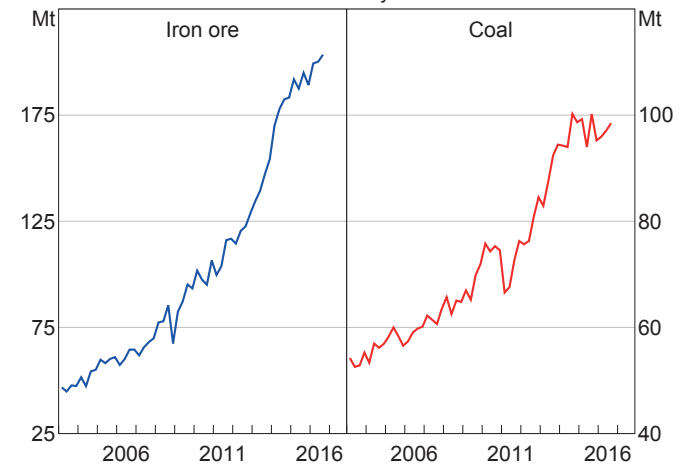
Quarterly, 2014/15 prices, log scale



Sources: ABS; RBA

Bulk Commodity Exports

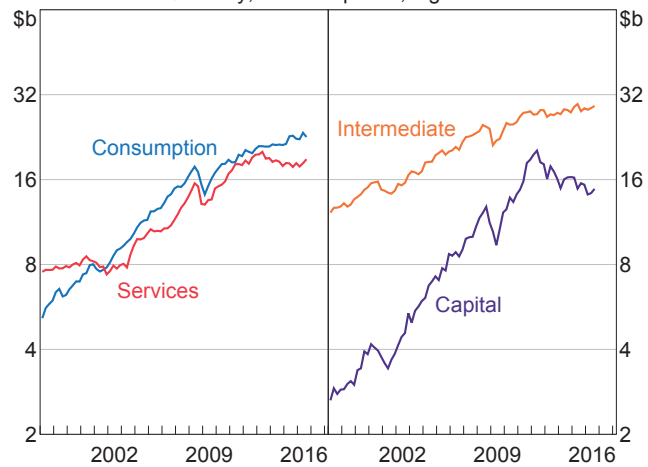
Quarterly



Sources: ABS; RBA

Import Volumes

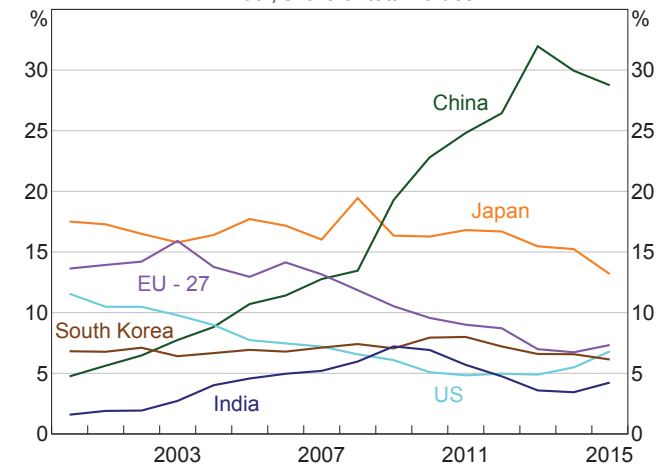
Quarterly, 2014/15 prices, log scale



Source: ABS

Exports by Destination

Annual, share of total values

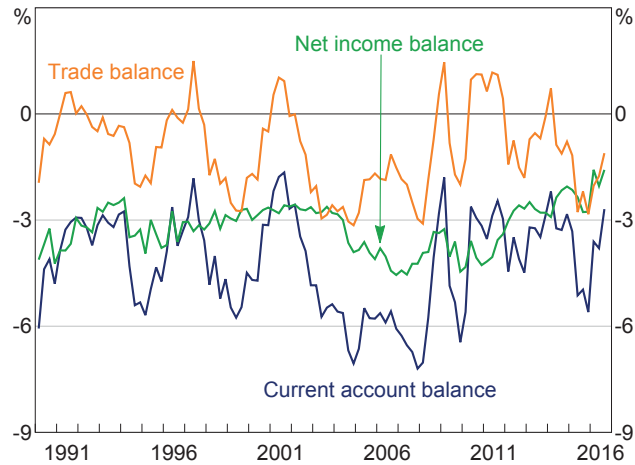


Source: ABS

Balance of Payments and External Position

Current Account Balance

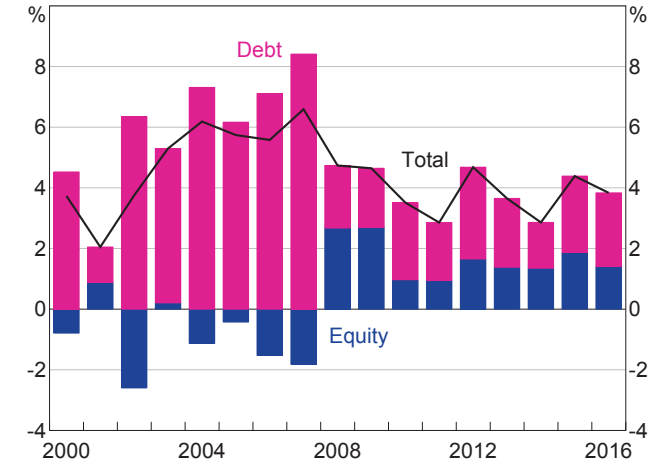
Per cent of nominal GDP



Source: ABS

Net Capital Inflow*

Per cent of nominal GDP

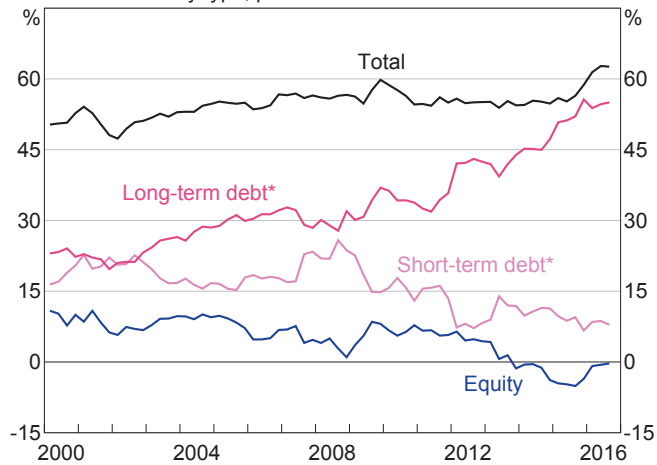


* 2016 values exclude the December quarter

Source: ABS

Net Foreign Liabilities

By type, per cent of nominal GDP

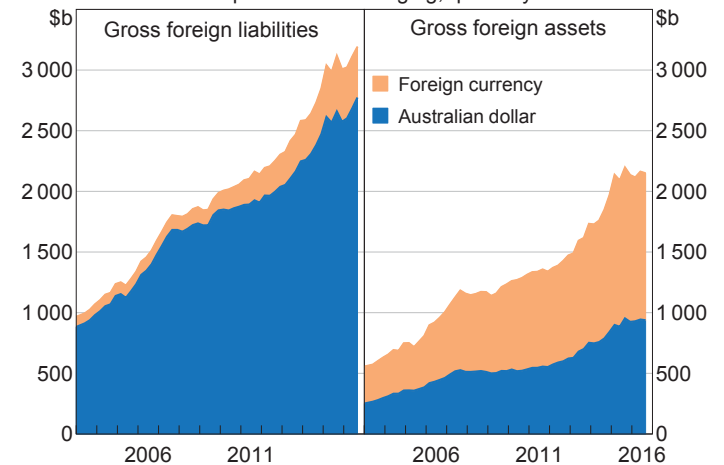


* Short-term includes debt with residual maturity of one year or less; long-term includes all other debt

Source: ABS

External Position

Composition after hedging, quarterly*

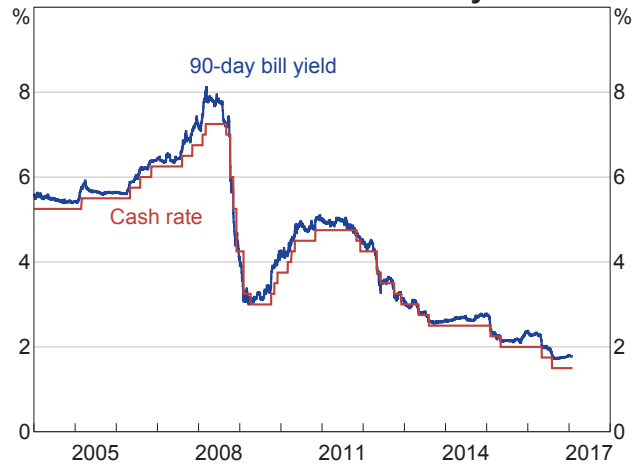


* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

Sources: ABS; RBA

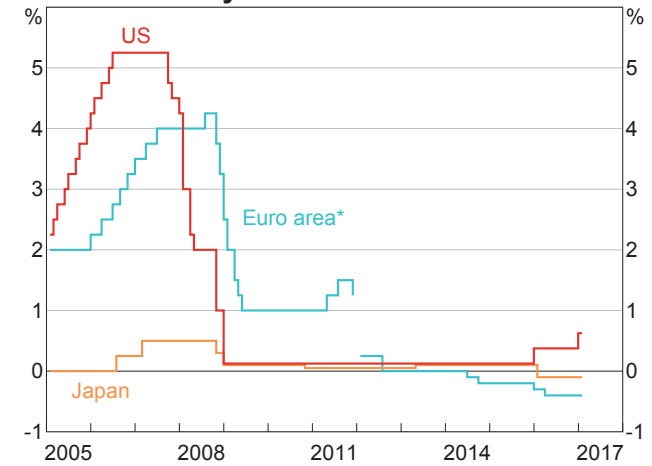
Interest Rates

Australian Cash Rate and 90-day Bill Yield



Sources: AFMADData; RBA

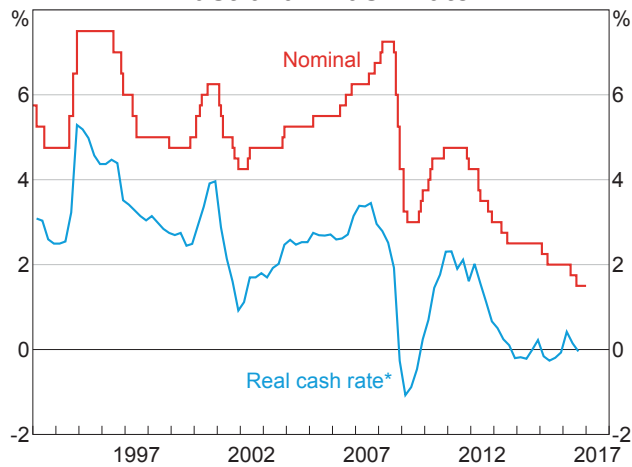
Policy Interest Rates – G3



* Main refinancing rate until the introduction of 3-year LTROs in December 2011; deposit facility rate thereafter

Source: Central banks

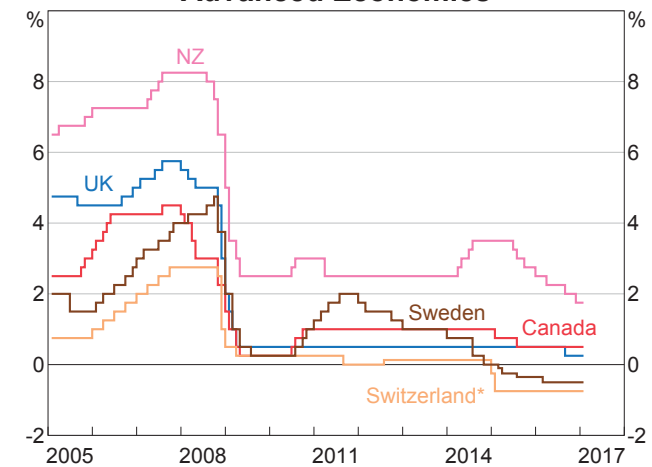
Australian Cash Rate



* Calculated using average of year-ended weighted median inflation and year-ended trimmed mean inflation

Sources: ABS; RBA

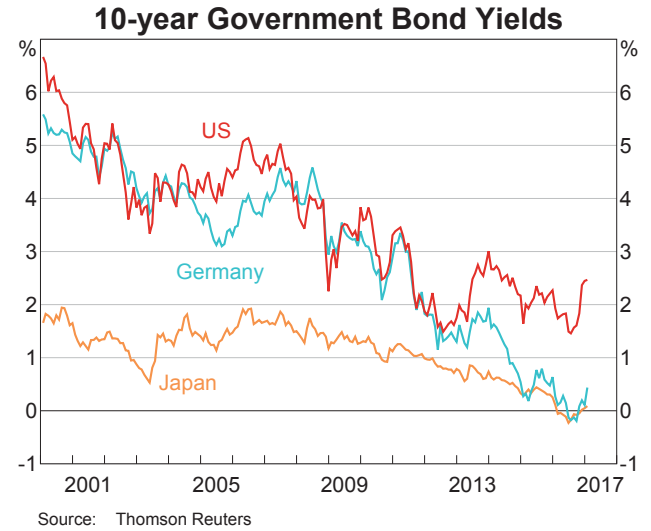
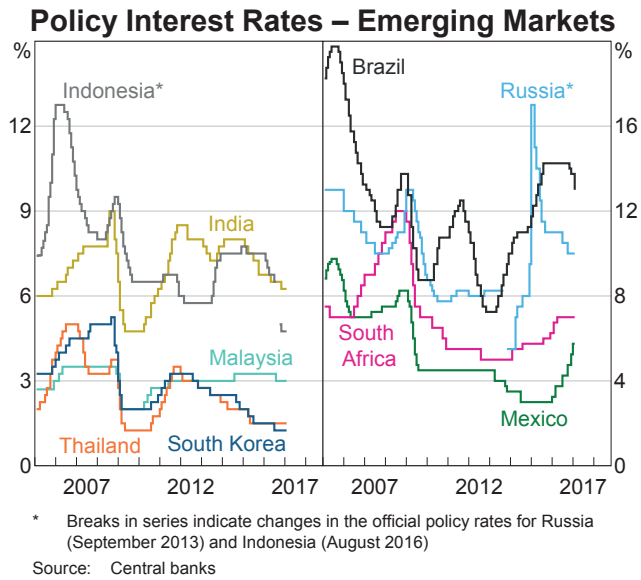
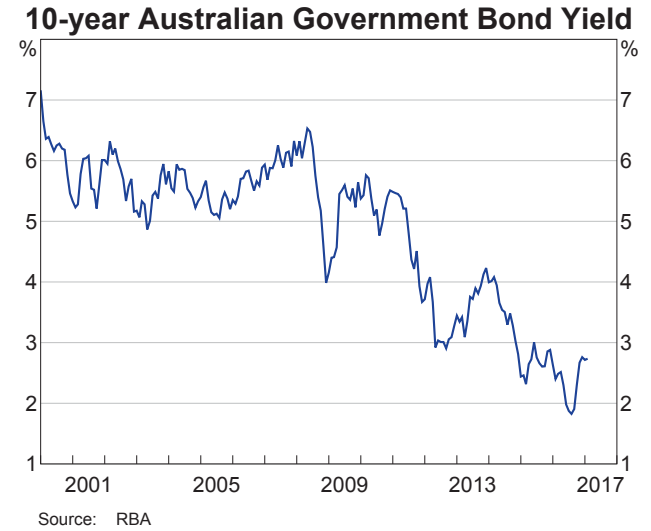
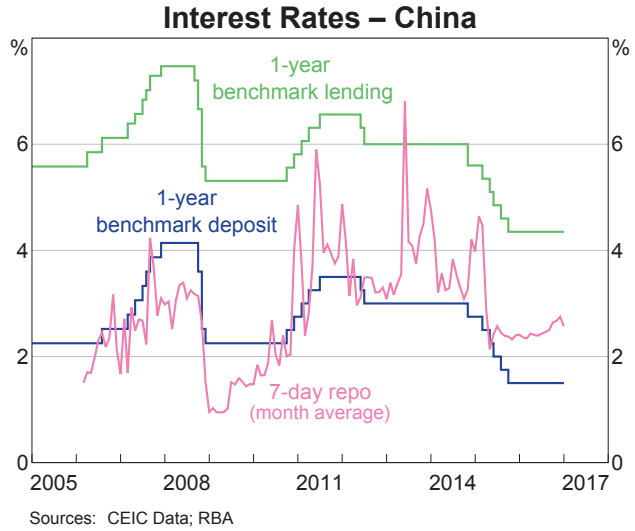
Policy Interest Rates – Selected Advanced Economies



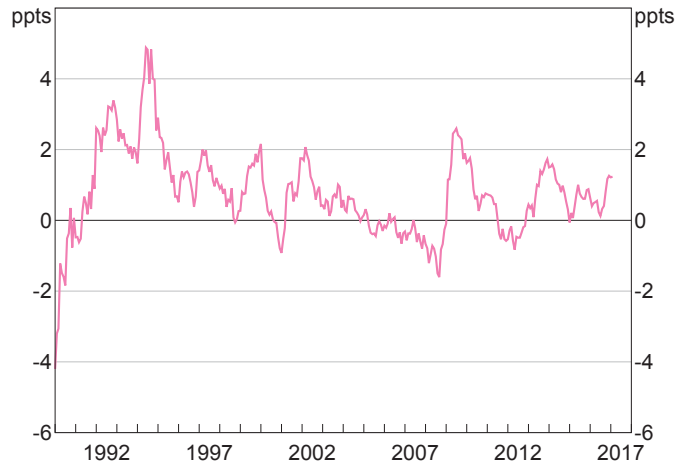
* Policy rate is the midpoint of the 3-month LIBOR target band

Source: Central banks

Interest Rates

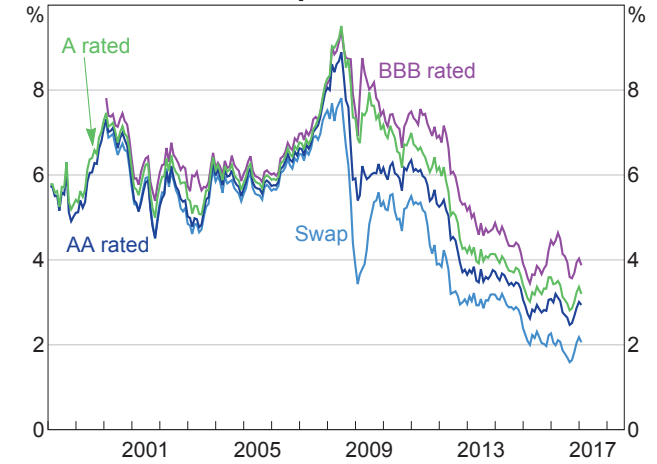


Spread between Australian 10-year Bond Yield and the Cash Rate



Source: RBA

Australian Corporate 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

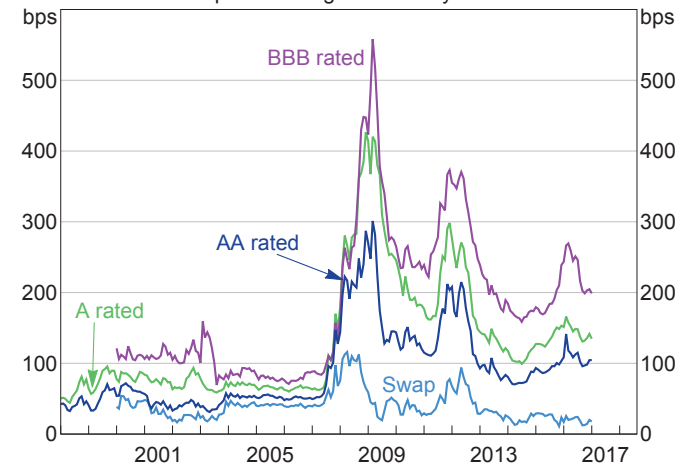
Differential between Australian and US 10-year Government Bond Yields



Sources: Bloomberg; RBA

Australian Corporate Bond Spreads*

Spread over government yields



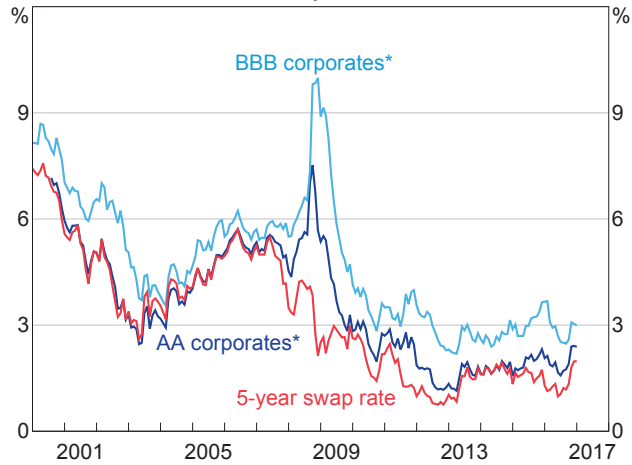
* Swap spreads are for 3-year maturity; corporate bond spreads are a weighted average of senior bonds with remaining maturities of 1 to 5 years, including financial and non-financial corporations

Sources: Bloomberg; RBA; UBS AG, Australia Branch

Interest Rates

US Corporate Bond Yields

3-5 years

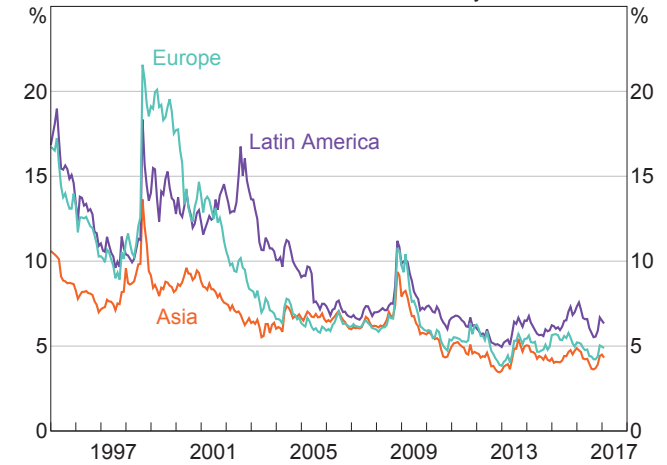


* Includes financials and non-financials

Sources: Bank of America Merrill Lynch; Bloomberg; Thomson Reuters

Emerging Market Bond Yields

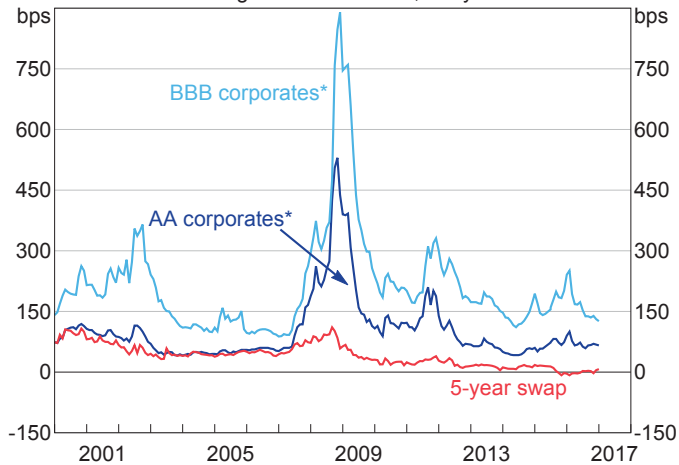
US dollar-denominated, blended yield



Sources: Bloomberg; RBA; Thomson Reuters

US Corporate Bond Spreads

To US government bonds, 3-5 years

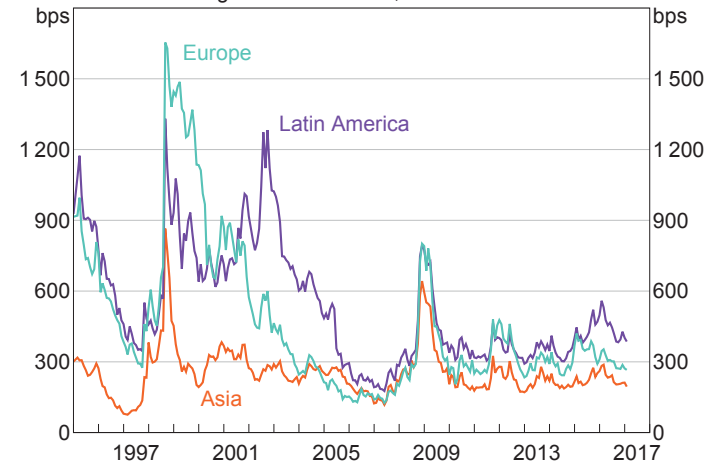


* Includes financials and non-financials

Sources: Bank of America Merrill Lynch; Bloomberg

Emerging Market Bond Spreads

To US government bonds, duration-matched

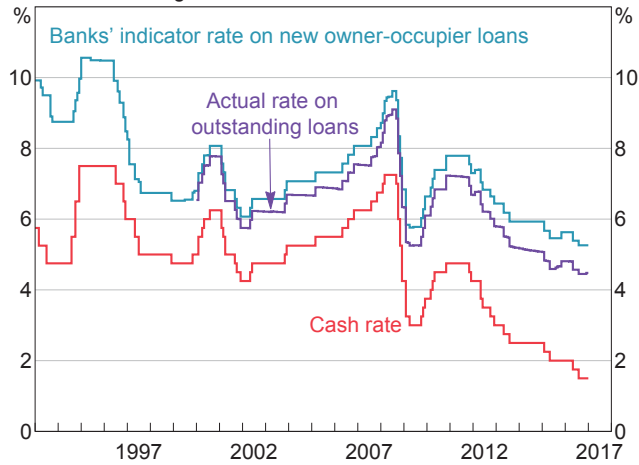


Sources: Bloomberg; RBA; Thomson Reuters

Interest Rates

Australian Housing Lending Rates

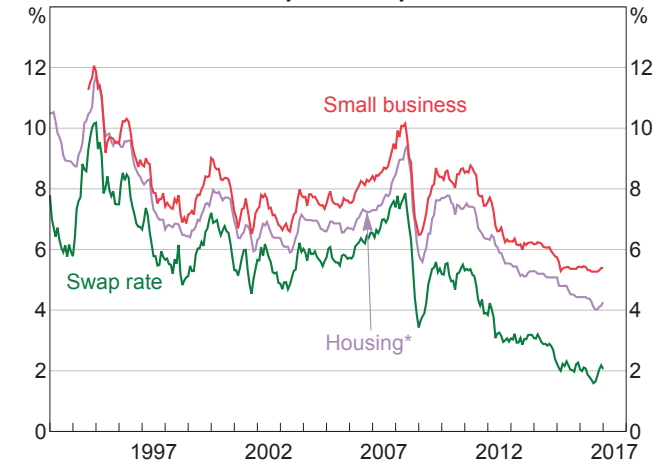
Average interest rate on variable-rate loans



Sources: ABS; APRA; Perpetual; RBA

Australian Fixed Interest Rates

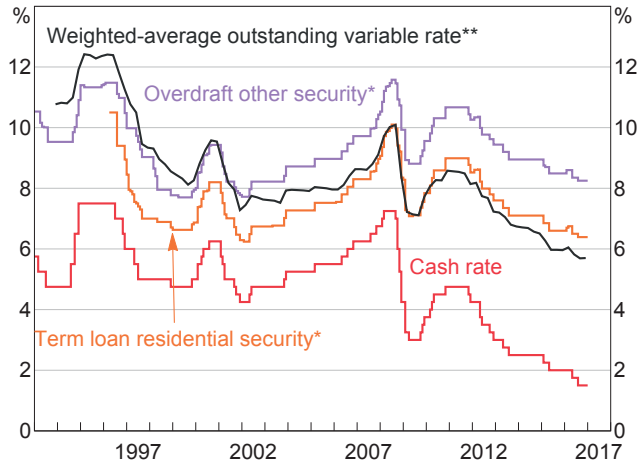
3-year maturity



* Available to owner-occupiers

Sources: Banks' websites; Bloomberg; Canstar Cannex; RBA

Australian Small Business Interest Rates



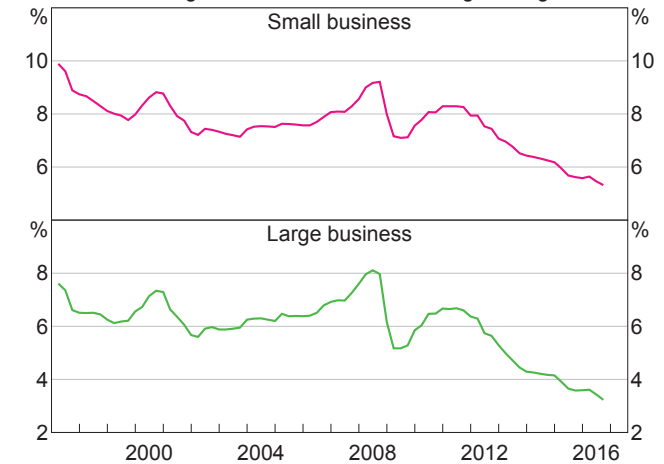
* Indicator rates

** RBA estimate; including risk margins

Sources: APRA; Canstar Cannex; RBA

Australian Business Lending Rates*

Average interest rate on outstanding lending

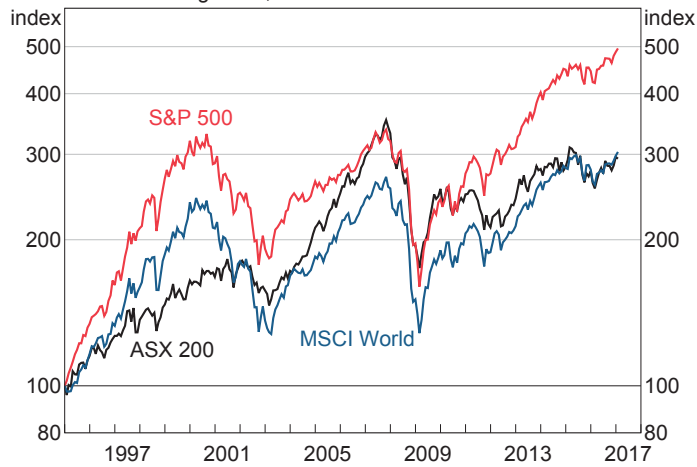


* RBA estimates

Sources: APRA; RBA

Australian and World Share Price Indices

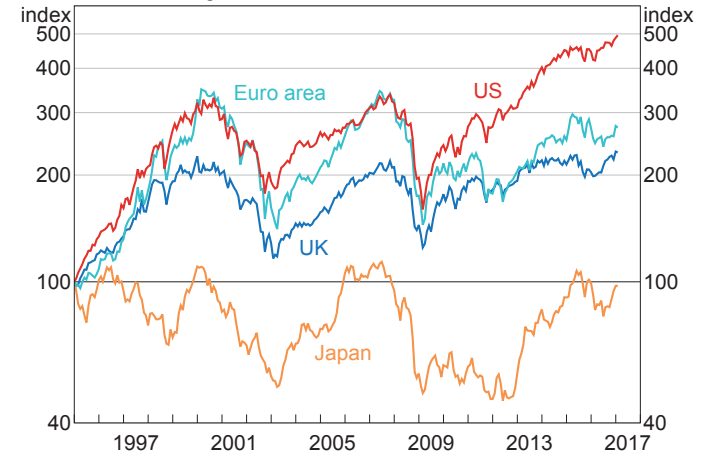
Log scale, end December 1994 = 100



Sources: Bloomberg; MSCI; RBA

Advanced Economies' Share Price Indices

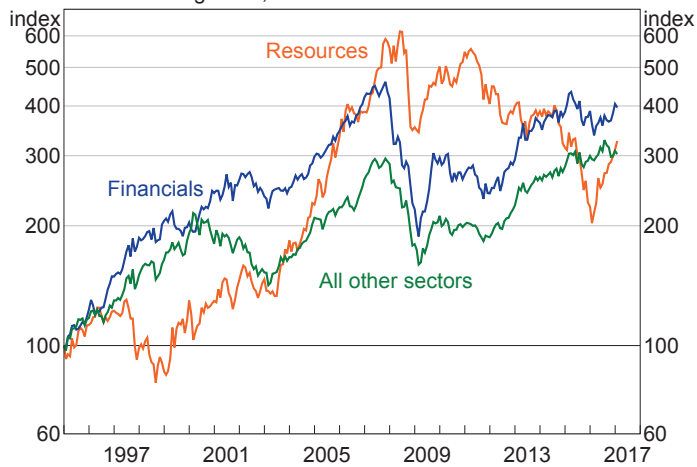
Log scale, end December 1994 = 100



Sources: Bloomberg; RBA

Australian Share Price Indices*

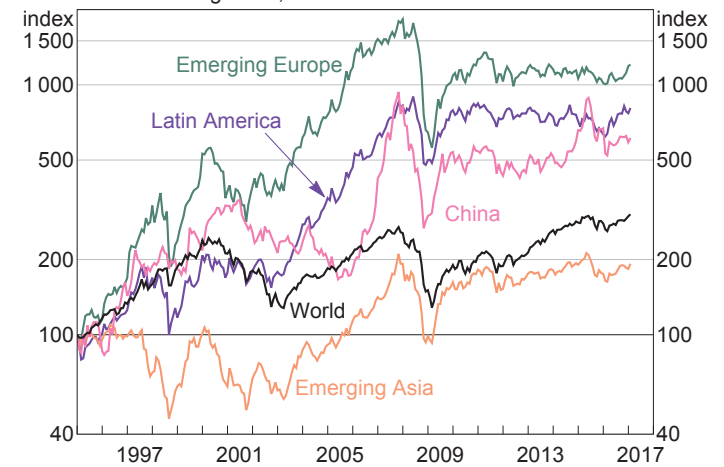
Log scale, end December 1994 = 100



* ASX 200 companies
Sources: Bloomberg; RBA

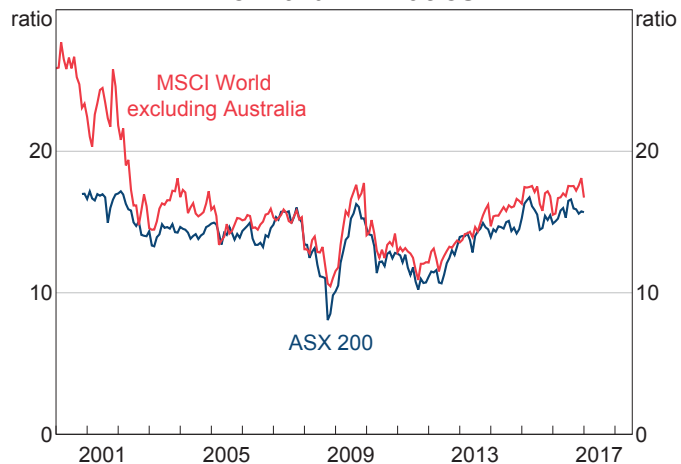
Emerging Markets' Share Price Indices

Log scale, end December 1994 = 100



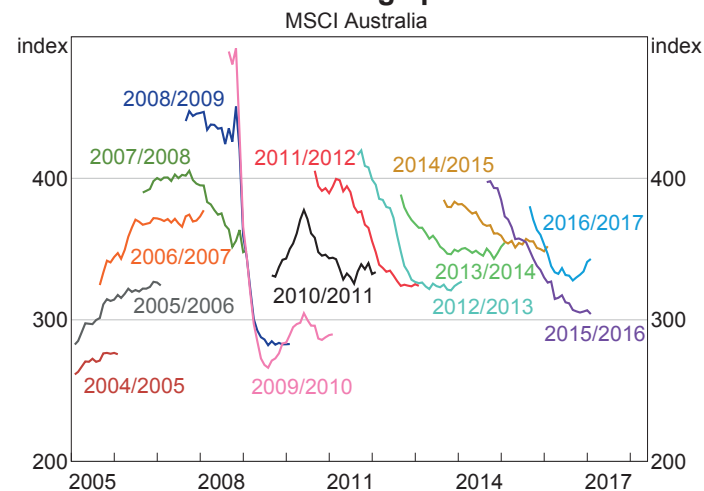
Sources: Bloomberg; MSCI; RBA

Forward PE Ratios



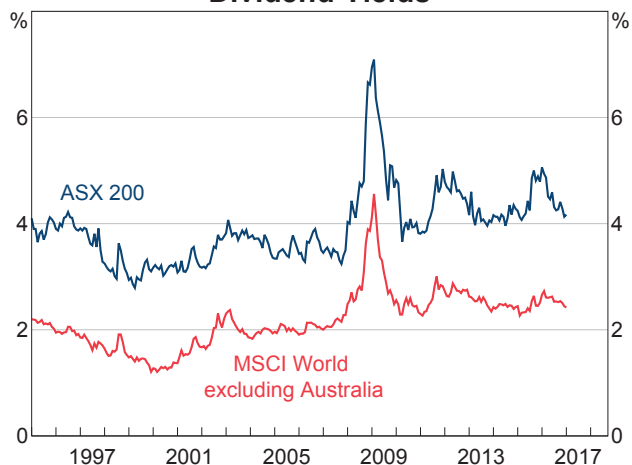
Sources: Bloomberg; MSCI; Thomson Reuters

Forecast Earnings per Share



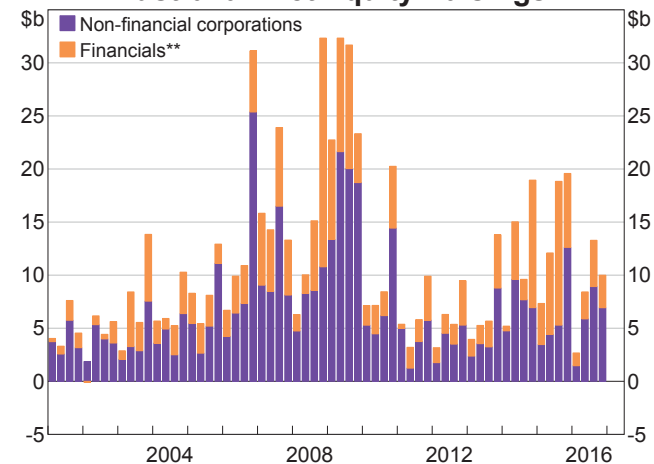
Source: Thomson Reuters

Dividend Yields



Sources: Bloomberg; MSCI; Thomson Reuters

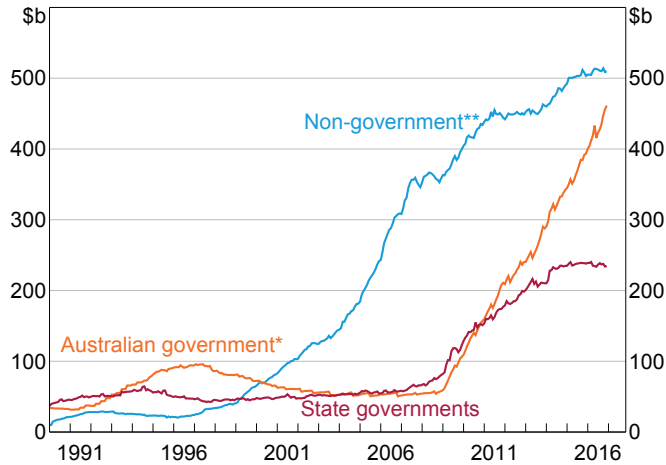
Australian Net Equity Raisings*



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

Bond Issuance

Bonds on Issue in Australia

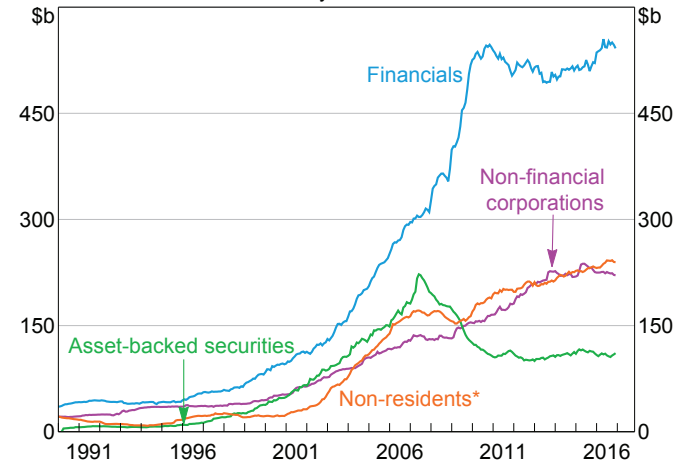


* Excludes bonds purchased by the Australian Government
 ** Excludes ADIs' self-securitisations, includes government-guaranteed bonds

Sources: ABS; AOFM; RBA; State Treasury Corporations

Total Non-government Bonds on Issue

All currency denominations

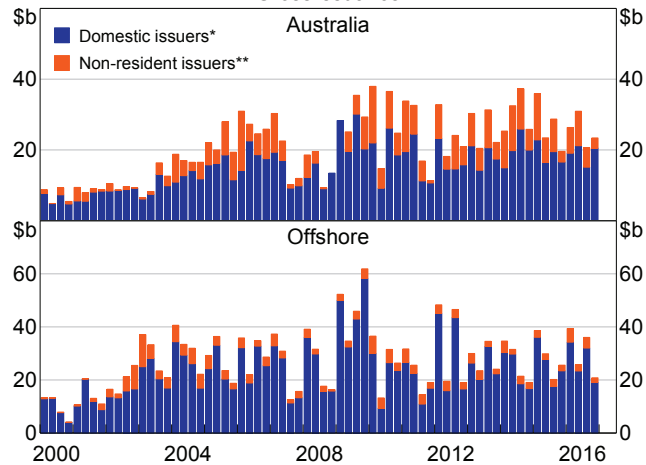


* Australian dollar-denominated bonds only

Sources: ABS; RBA

Non-government Bond Issuance

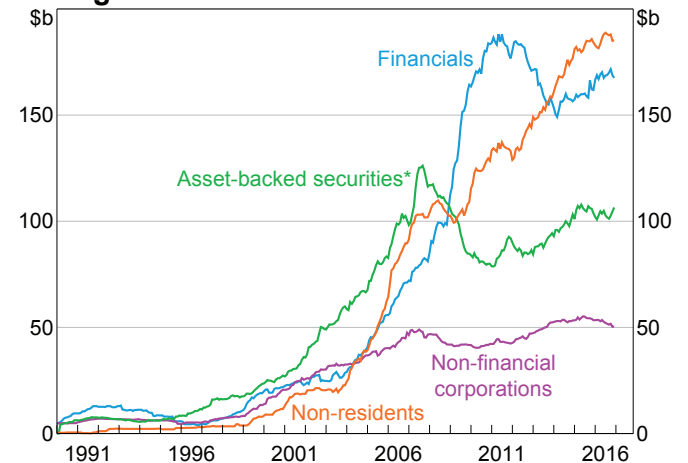
Gross issuance



* Excludes ADIs' self-securitisations
 ** Offshore non-resident issuance includes Australian dollar-denominated bonds only

Source: RBA

Non-government Bonds on Issue in Australia

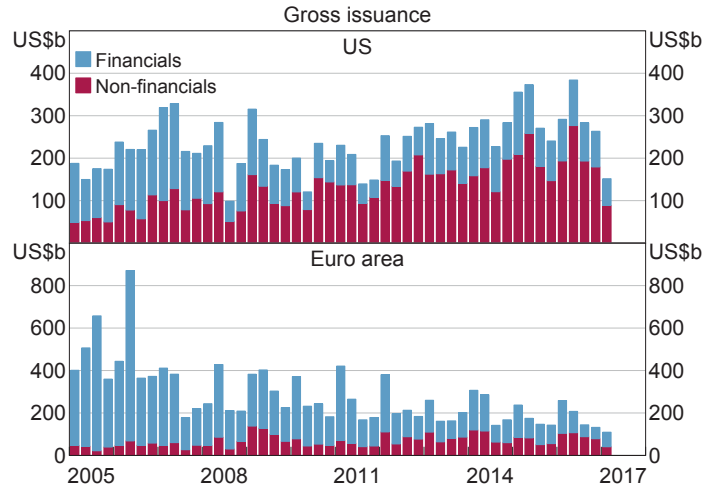


* Excludes ADIs' self-securitisations

Sources: ABS; RBA

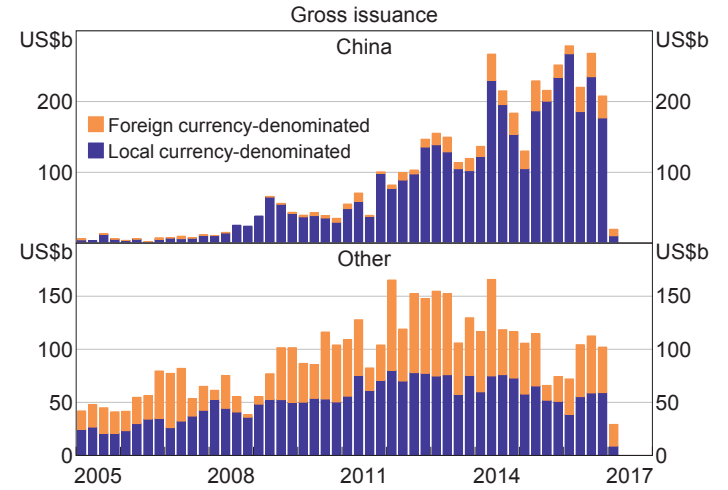
Bond Issuance

US and Euro Area Corporate Bond Issuance*



* March quarter-to-date
Sources: Dealogic; RBA

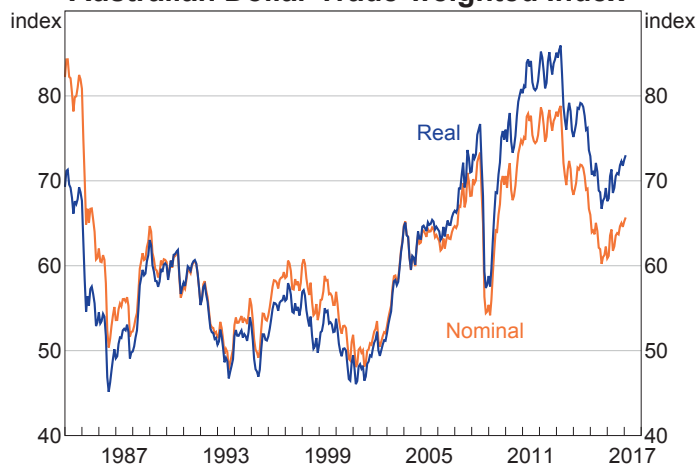
Emerging Market Corporate Bond Issuance*



* March quarter-to-date
Sources: Dealogic; RBA

Exchange Rates

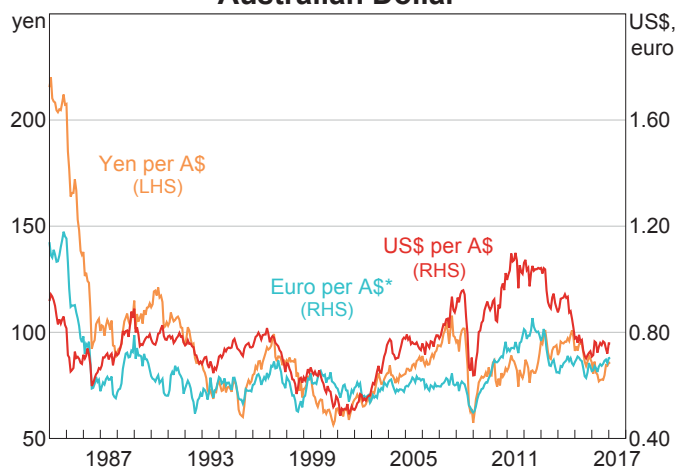
Australian Dollar Trade-weighted Index*



* May 1970 = 100 for nominal; real indexed to equate post-float averages; latest observations for real TWI are estimates

Sources: ABS; RBA; Thomson Reuters; WM/Reuters

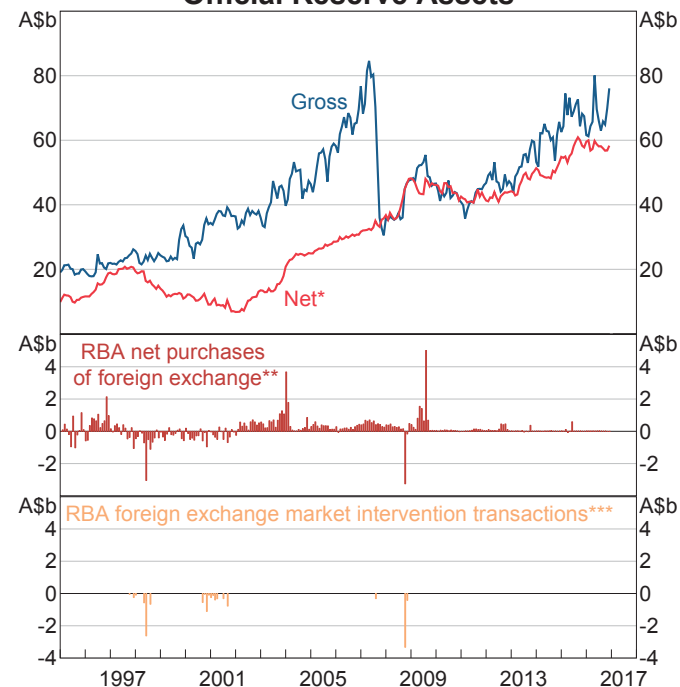
Australian Dollar



* ECU per A\$ until 31 December 1998

Sources: Thomson Reuters; WM/Reuters

Official Reserve Assets



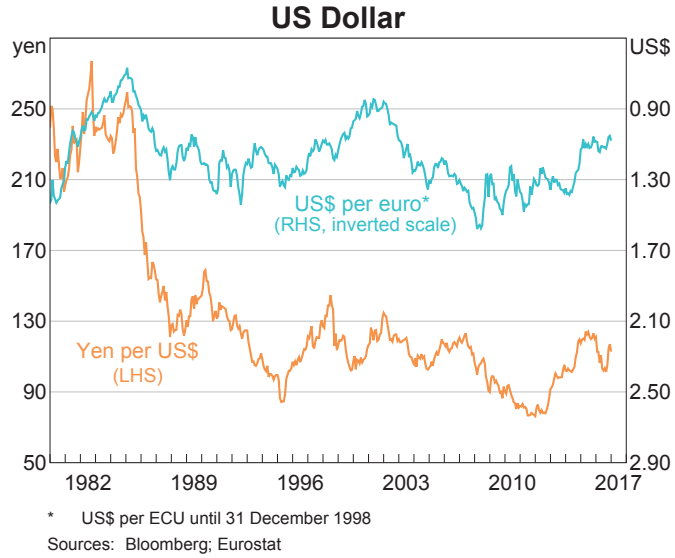
* Excludes foreign exchange swaps

** Includes market, government and other outright transactions, excludes swap deliveries

*** Data up to 30 June 2016; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

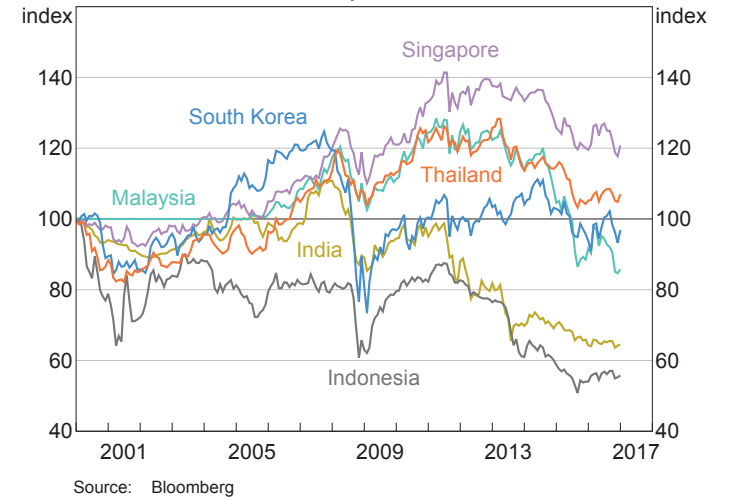
Source: RBA

Exchange Rates



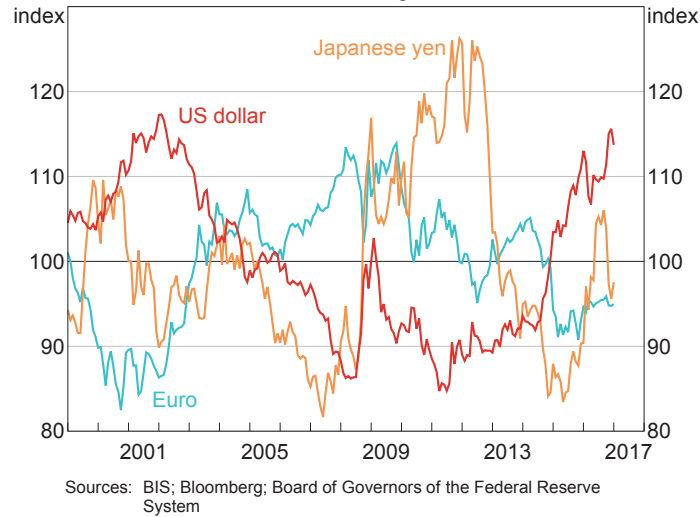
Selected Asian Currencies against the US Dollar

31 January 2000 = 100

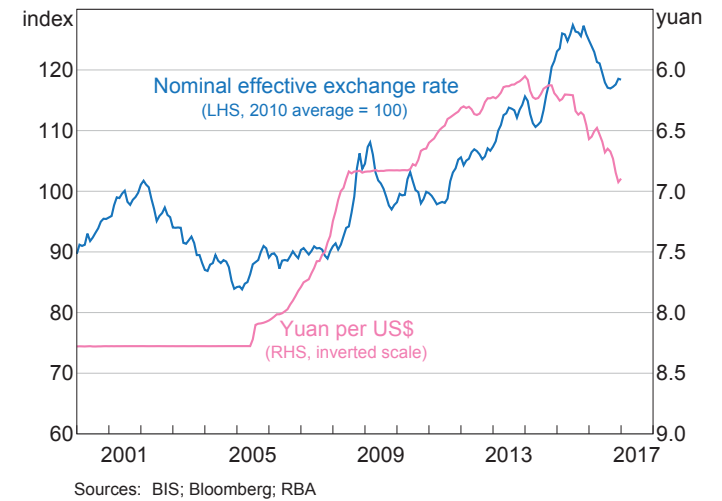


G3 Nominal Trade-weighted Indices

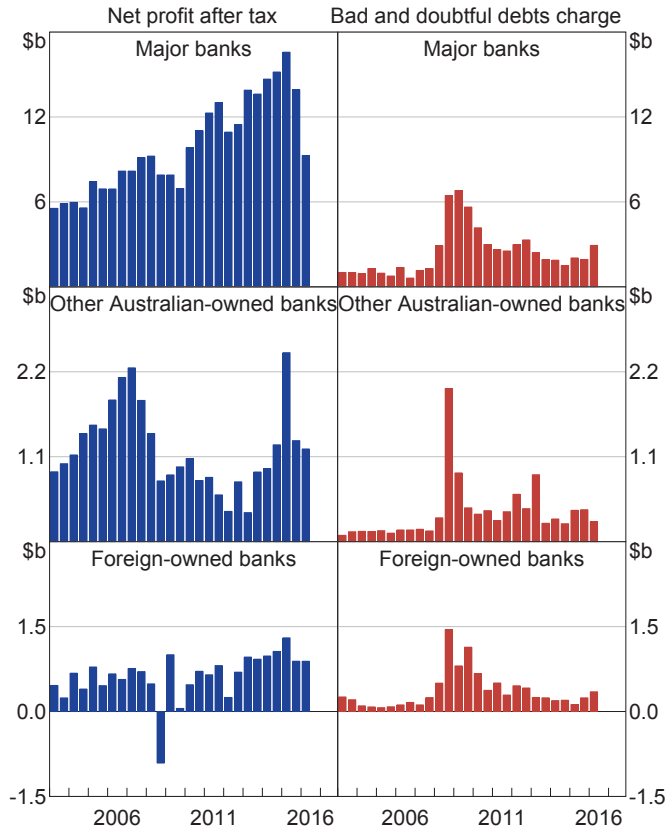
1999–2016 average = 100



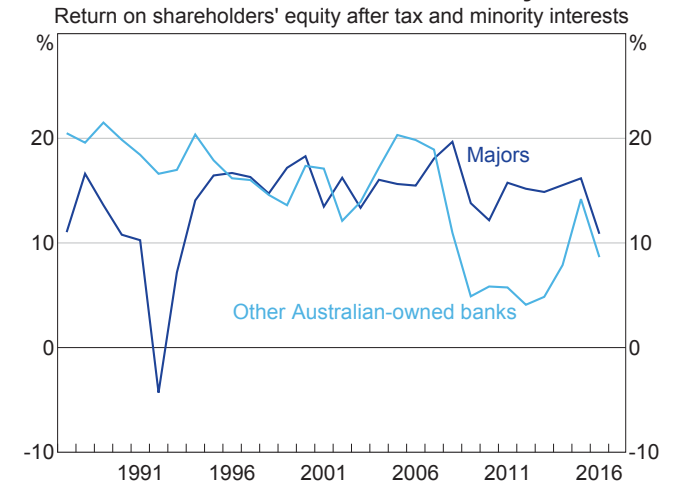
Chinese Renminbi



Australian Bank Profits



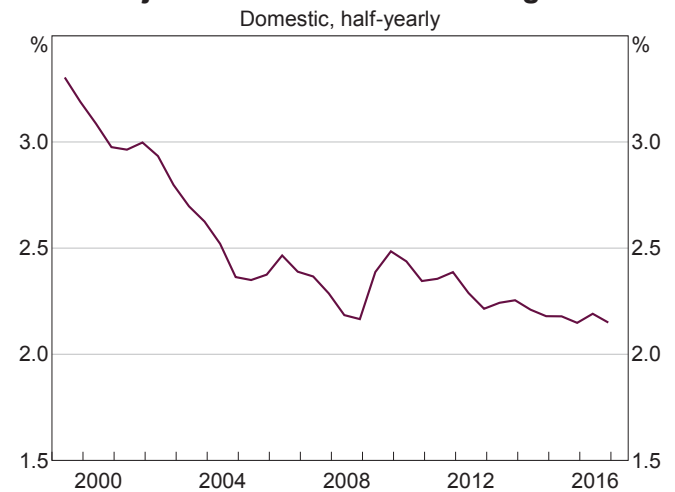
Australian Bank Profitability



* Fiscal years from 2003 onwards; prior data are as reported in banks financial statements.

Sources: APRA; Banks' annual reports; RBA

Major Banks' Net Interest Margin*

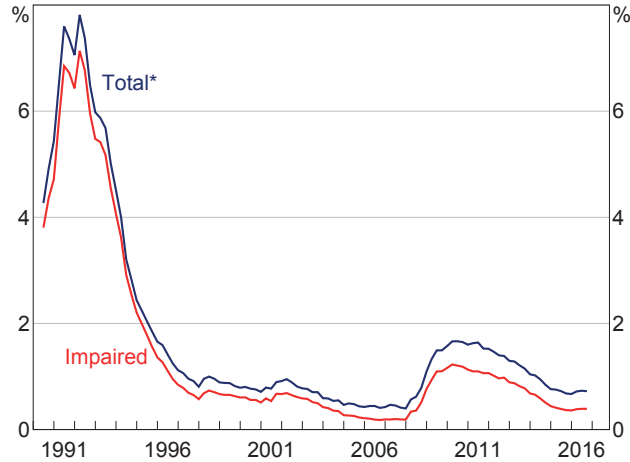


* From 2006 data are on an IFRS basis; prior years are on AGAAP basis; excludes St George Bank and Bankwest prior to the first half of 2009

Sources: Banks' Financial Reports; RBA

Banks' Non-performing Assets

Consolidated global operations, share of on-balance sheet assets

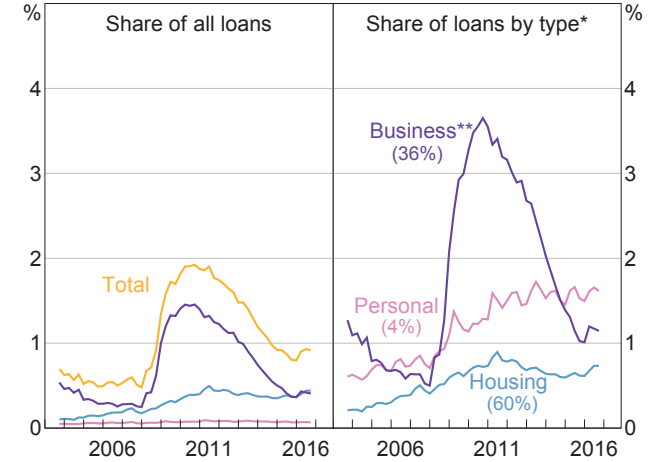


* Includes assets 90+ days past due that are well secured

Source: APRA

Banks' Non-performing Assets

Domestic books



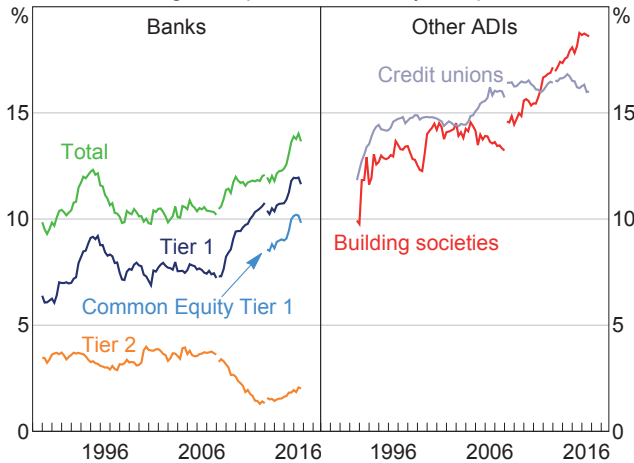
* Each category's share of total domestic lending at September 2016 is shown in parentheses

** Includes lending to financial businesses, bills, debt securities and other non-household loans

Sources: APRA; RBA

Capital Ratios*

Consolidated global operations of locally incorporated ADIs

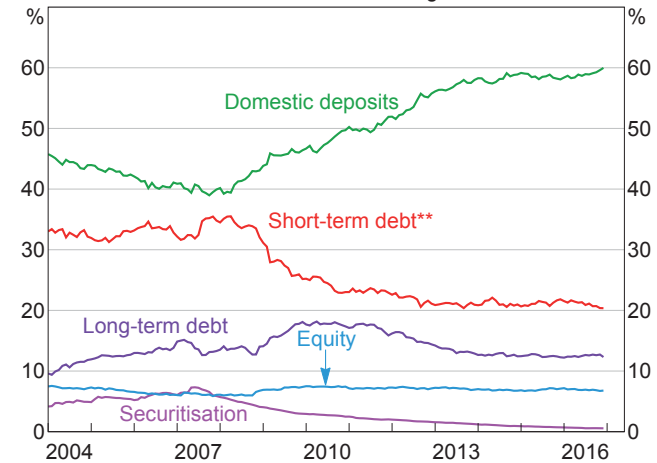


* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most ADIs; break in March 2013 due to the introduction of Basel III for all ADIs

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