
The Australian Economy and Financial Markets

Chart Pack January 2017

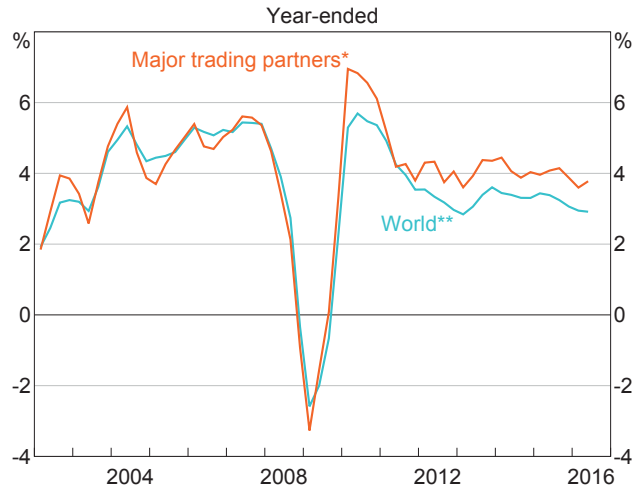
The Australian Economy and Financial Markets

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GDP Growth – World

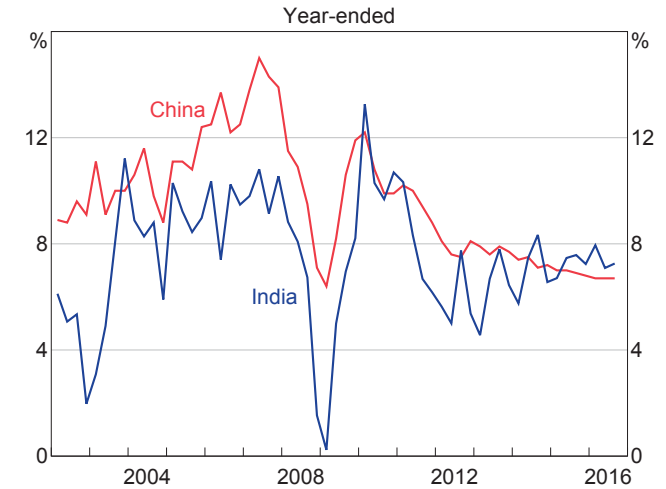


* Weighted using Australian export shares

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

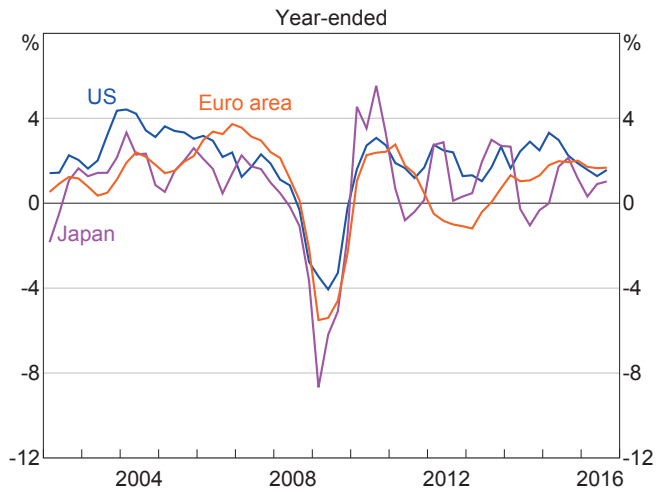
Sources: ABS; CEIC Data; IMF; RBA; Thomson Reuters

GDP Growth – China and India



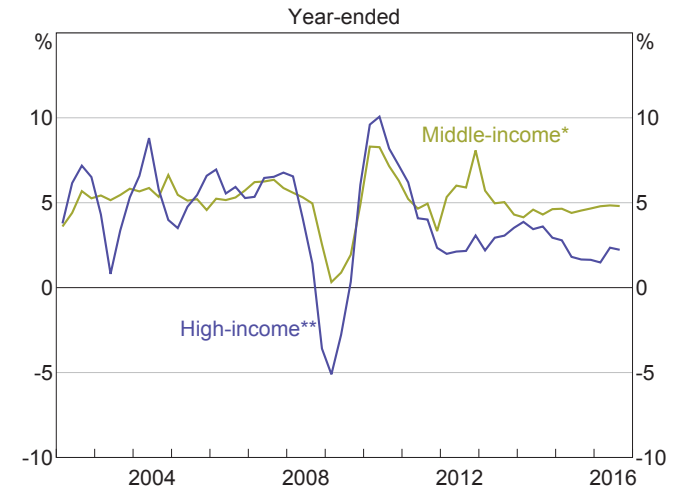
Sources: CEIC Data; RBA

GDP Growth – Advanced Economies



Source: Thomson Reuters

GDP Growth – East Asia

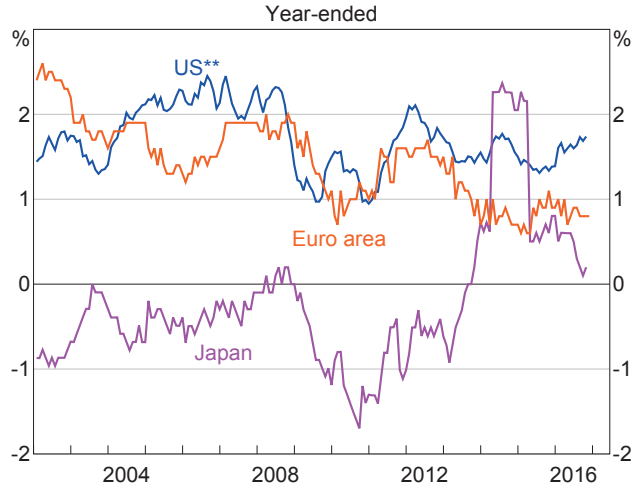


* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted

** 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

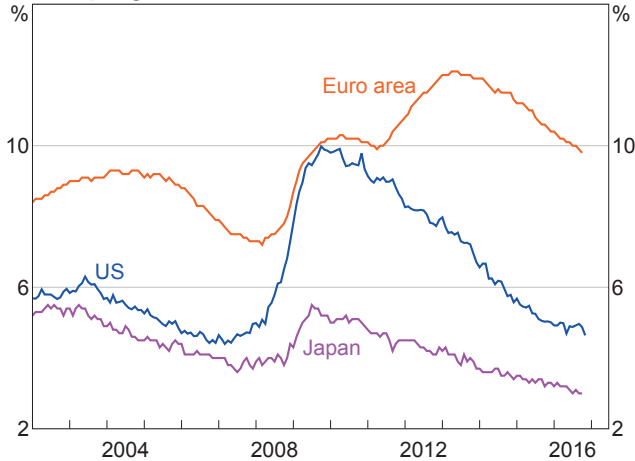
Source: Thomson Reuters

Inflation – China and India



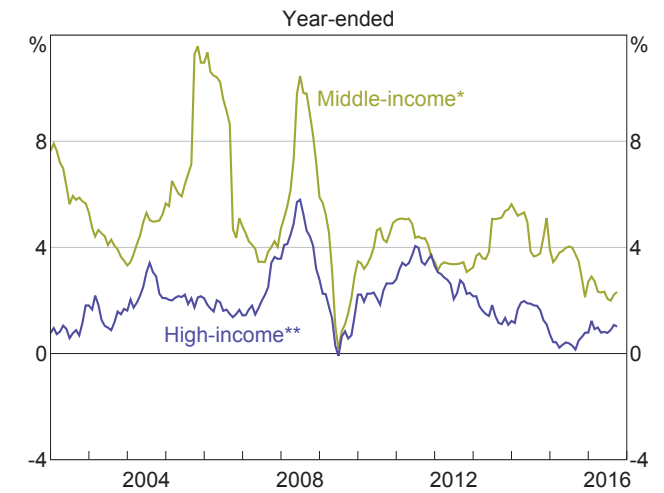
Source: CEIC Data

Unemployment Rate – Advanced Economies



Source: Thomson Reuters

Inflation – East Asia

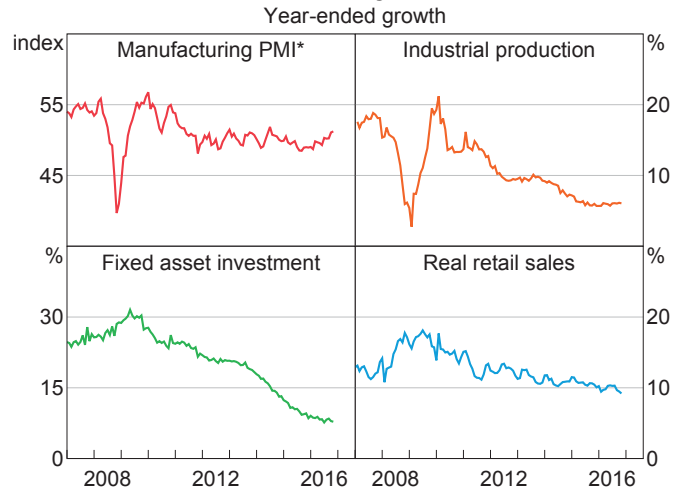


* Indonesia, Malaysia, Philippines and Thailand; PPP-weighted

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

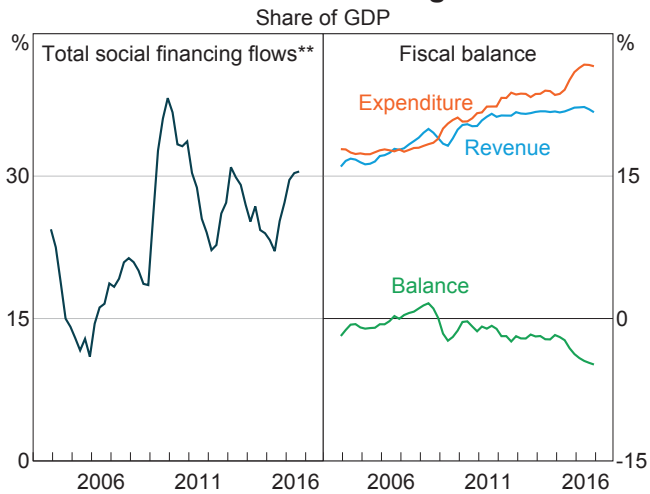
Sources: CEIC Data; IMF; RBA; Thomson Reuters

China – Activity Indicators



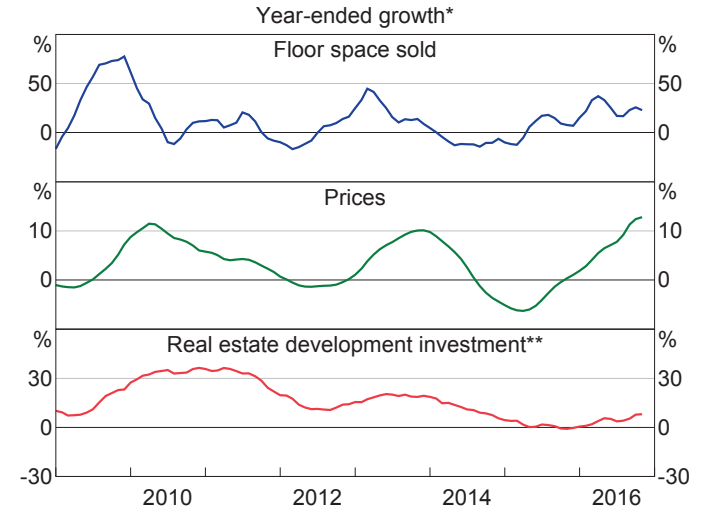
* Diffusion index; average of the official and Caixin
Sources: CEIC Data; Markit Economics; RBA

China – Financing*



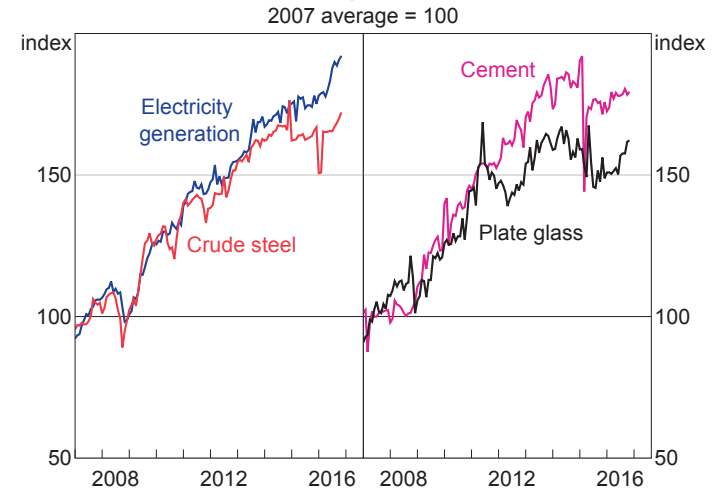
* Seasonally adjusted by RBA
** Upper bound estimate adjusting for impact of local government bond issuance to pay off debt previously included in TSF
Sources: CEIC Data; RBA

China – Residential Property Market



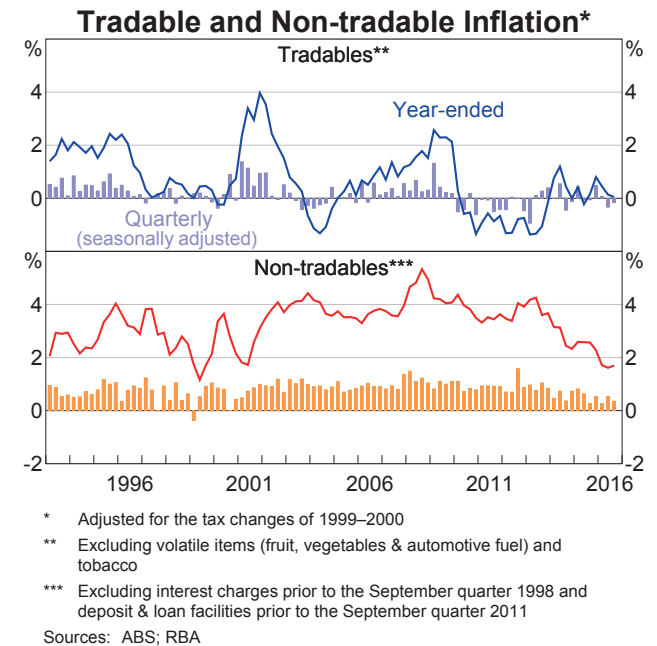
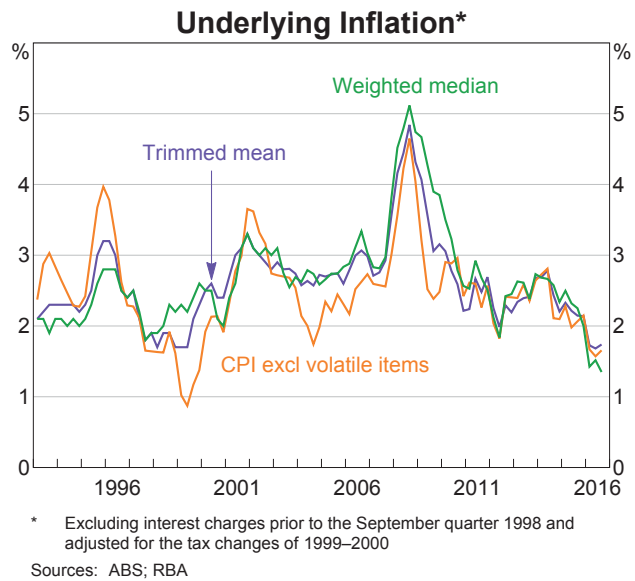
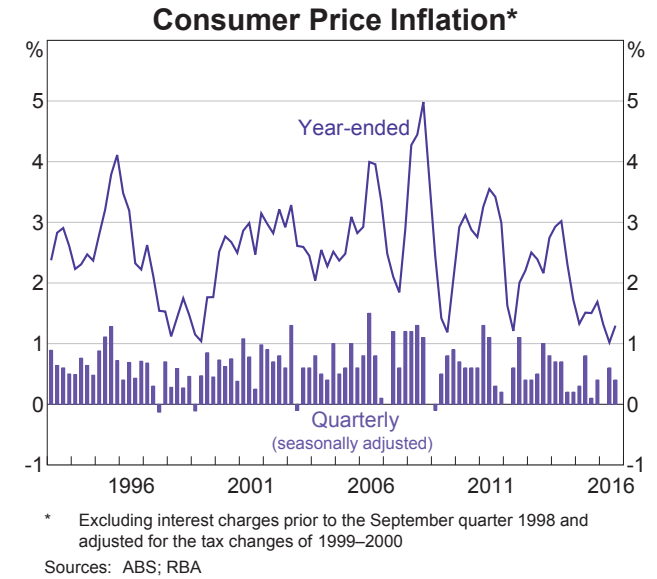
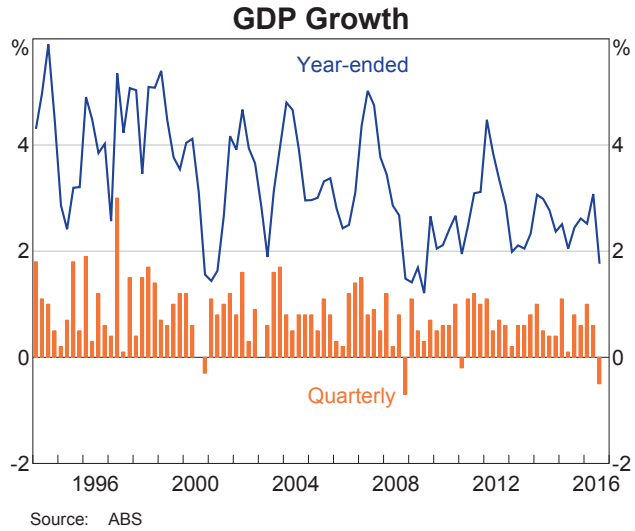
* For sales and investment, a three-month moving average of the seasonally adjusted series is used to calculate growth
** Investment by developers and other construction companies in the development of residential property, includes land purchases
Sources: CEIC Data; RBA

China – Output Indicators

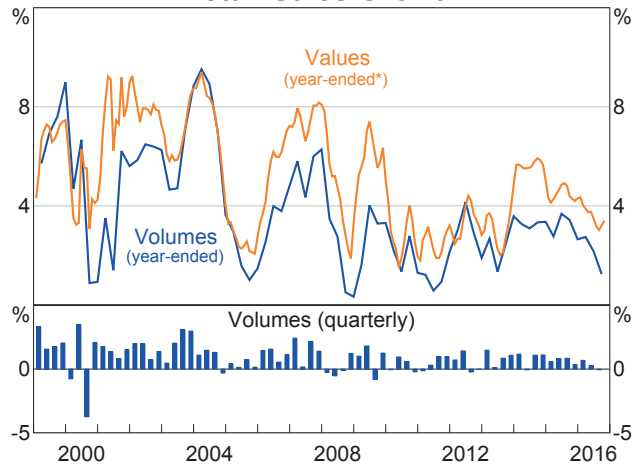


Sources: CEIC Data; RBA

Australian GDP Growth and Inflation

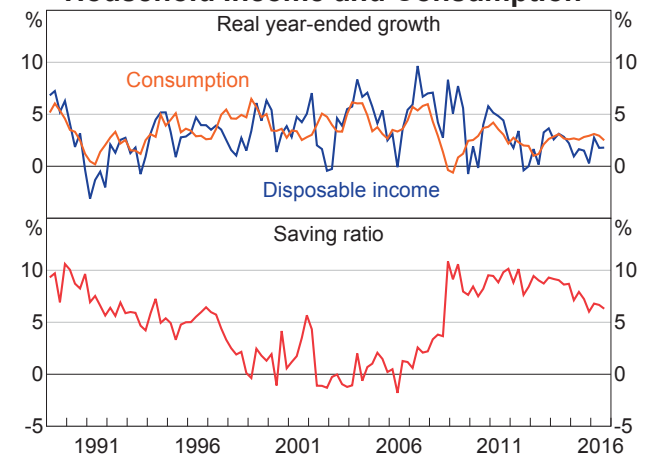


Retail Sales Growth



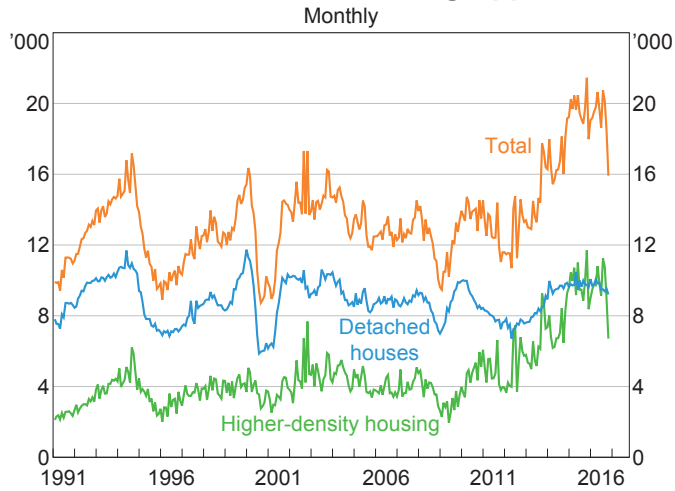
* Percentage change over year to latest three months
Source: ABS

Household Income and Consumption*



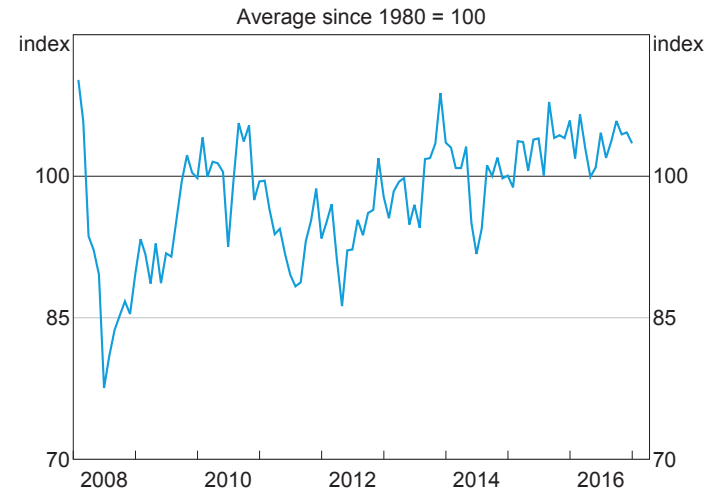
* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; income level smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002; saving ratio is net of depreciation
Sources: ABS; RBA

Private Residential Building Approvals



Source: ABS

Consumer Sentiment*

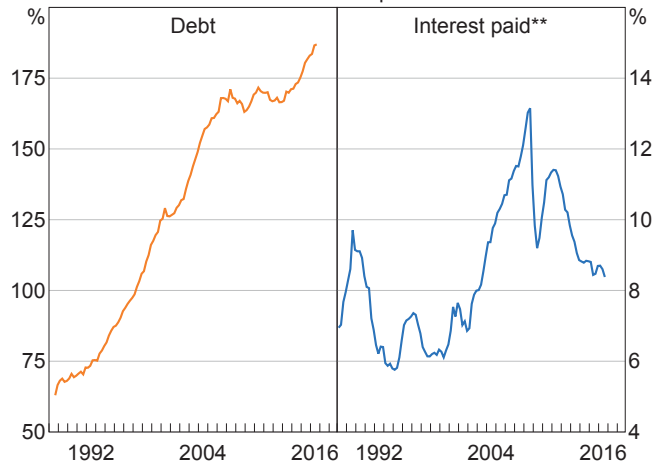


* Average of the ANZ-Roy Morgan and Westpac-Melbourne Institute consumer sentiment measure of respondents' perceptions of their personal finances relative to the previous year; ANZ-Roy Morgan index rescaled to have the same average as the Westpac-Melbourne Institute index since 1996

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

Household Finances

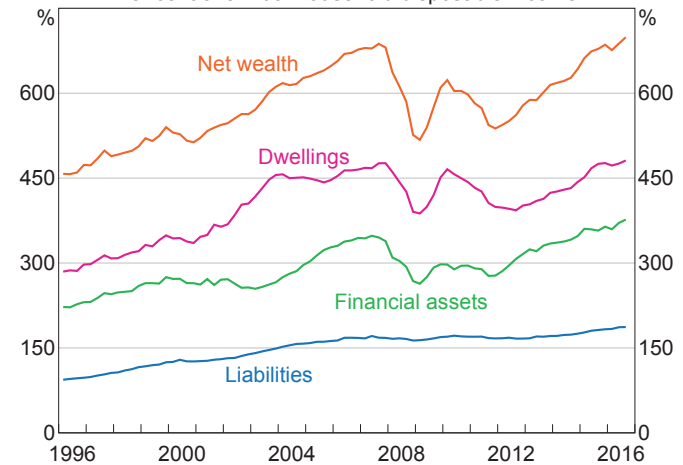
Per cent of household disposable income*



* Disposable income is after tax and before the deduction of interest payments
 ** Excludes unincorporated enterprises
 Sources: ABS; RBA

Household Wealth and Liabilities*

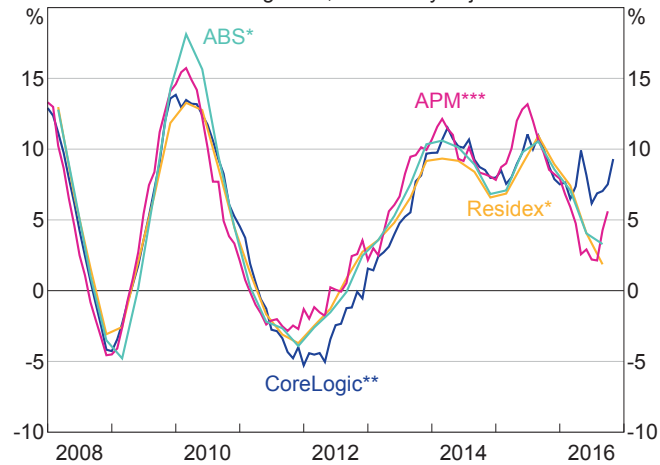
Per cent of annual household disposable income



* Disposable income is after tax and before the deduction of interest payments
 Sources: ABS; RBA

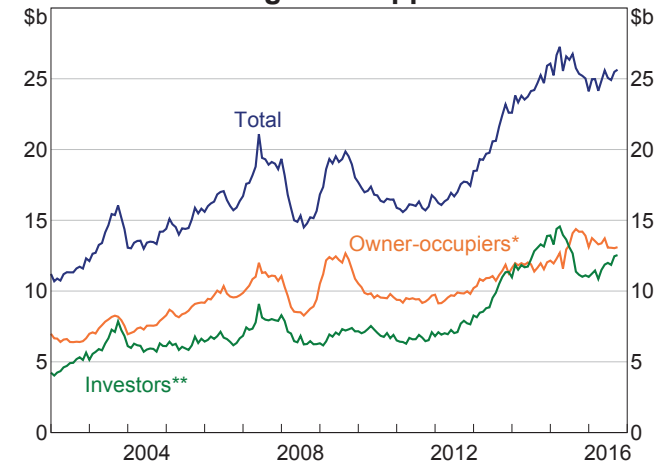
Housing Prices

Year-ended growth, seasonally adjusted



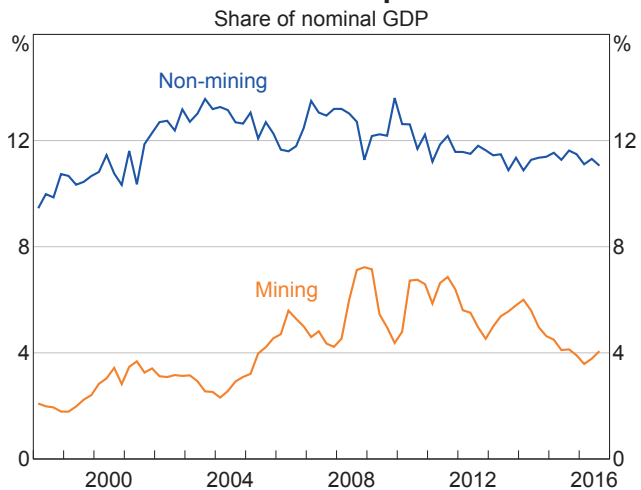
* ABS is a quarterly stratified median price index; Residex is a quarterly repeat sales price index
 ** Monthly hedonic price index; series breaks occurred in April 2016 and May 2016 due to changes in methods used to calculate the index
 *** Monthly stratified median price index
 Sources: ABS; APM; CoreLogic; RBA; Residex

Housing Loan Approvals



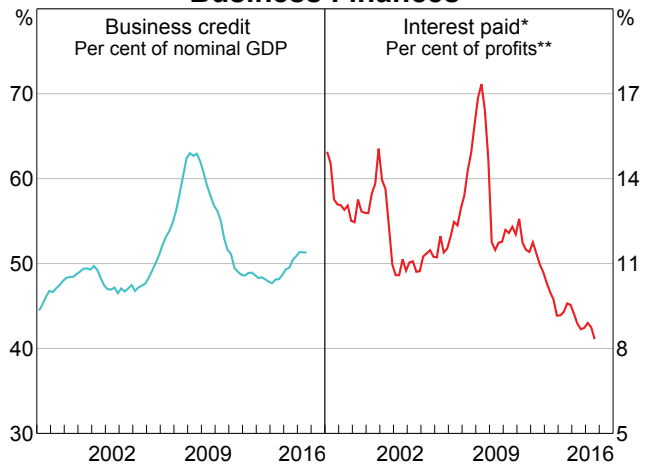
* Excludes refinancing
 ** Includes refinancing
 Sources: ABS; RBA

Private Non-financial Corporation Profits*



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

Business Finances

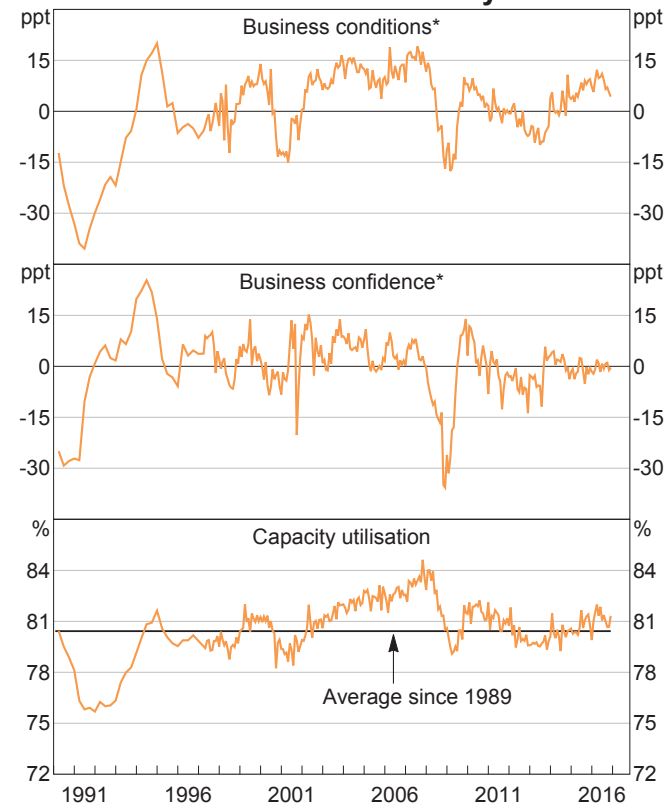


* Interest on intermediated debt from Australian-domiciled financial institutions

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

Sources: ABS; APRA; RBA

NAB Business Survey

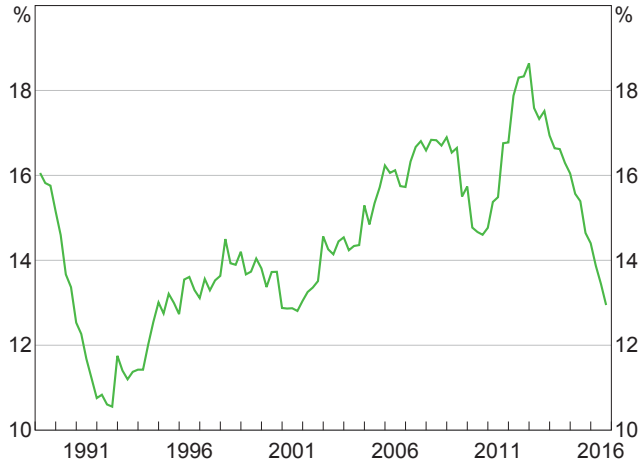


* Net balance; deviation from average since 1989

Sources: NAB; RBA

Business Investment*

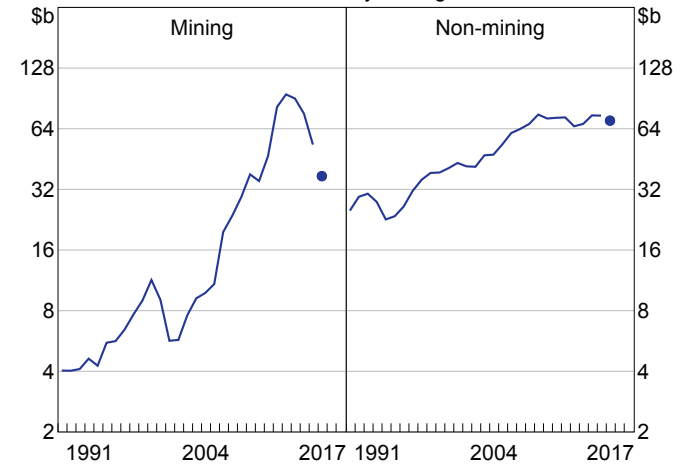
Share of nominal GDP



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

Capital Expenditure – Mining and Non-mining*

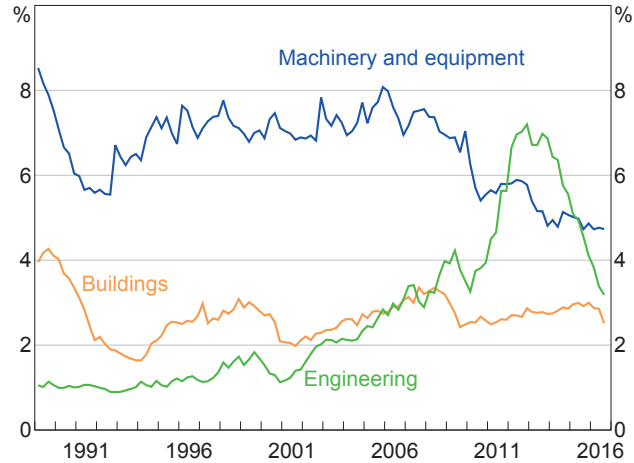
Nominal, financial year, log scale



* 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*

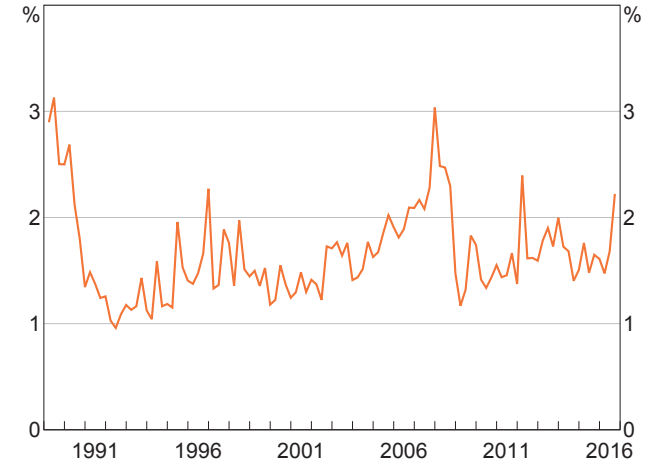
Share of nominal GDP



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

Private Non-residential Building Approvals

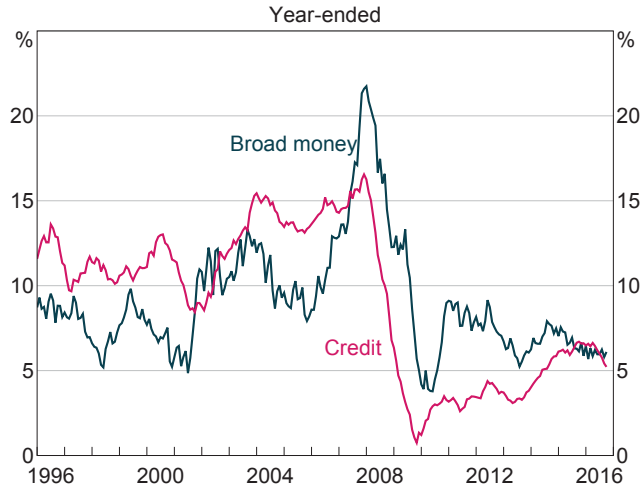
Per cent of nominal GDP



Source: ABS

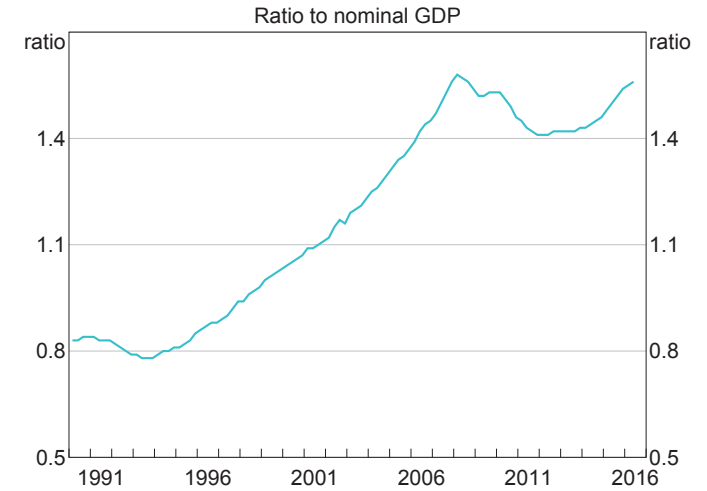
Credit and Money

Credit and Broad Money Growth



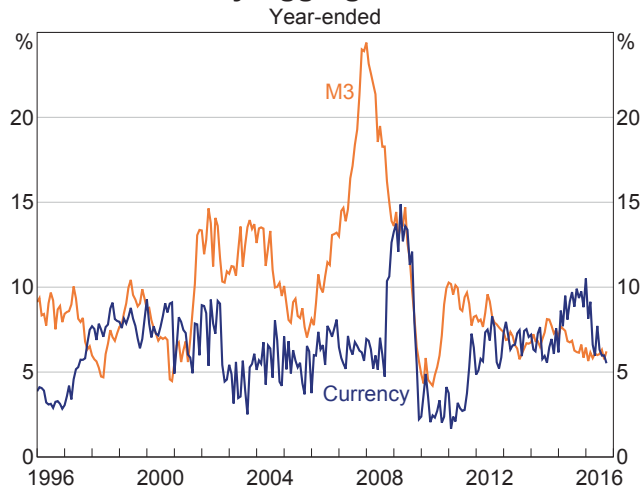
Sources: ABS; APRA; RBA

Credit*



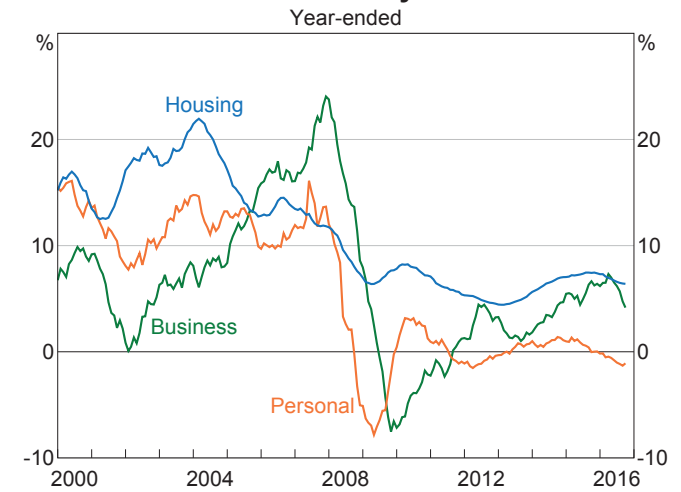
* Not adjusted for breaks
Sources: ABS; APRA; RBA

Monetary Aggregates Growth



Sources: APRA; RBA

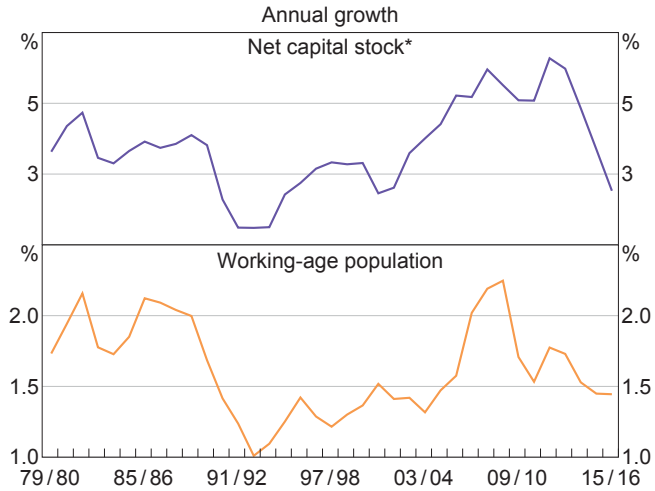
Credit Growth by Sector



Sources: ABS; APRA; RBA

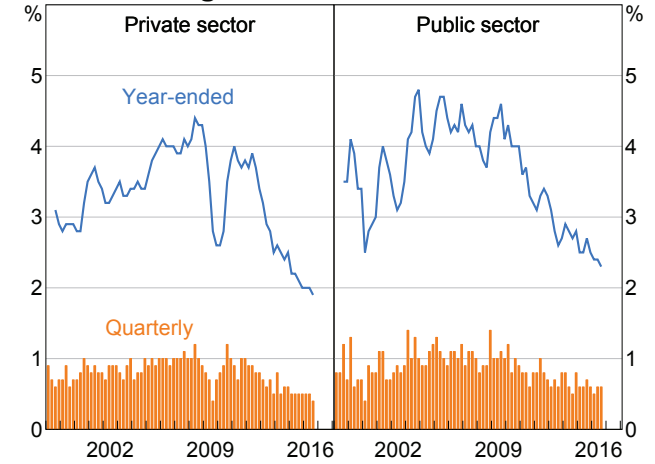
Factors of Production and Labour Market

Factors of Production



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

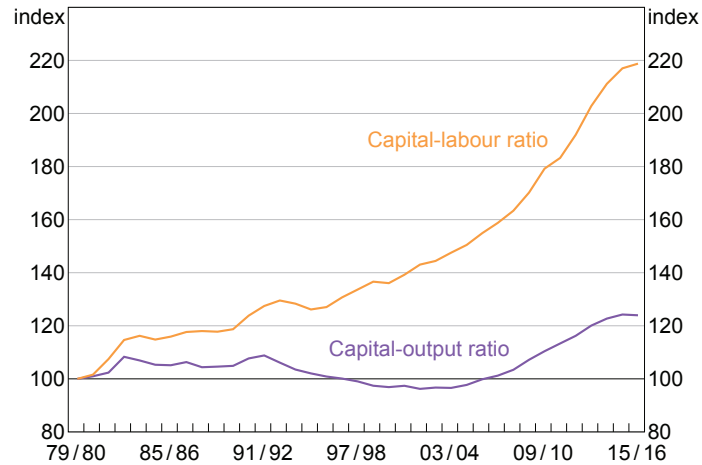
Wage Price Index Growth



Source: ABS

Capital Ratios*

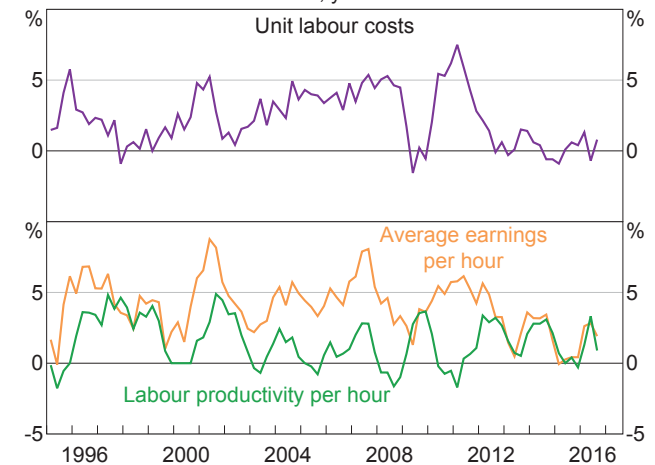
1979/80 = 100



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

Unit Labour Costs Growth

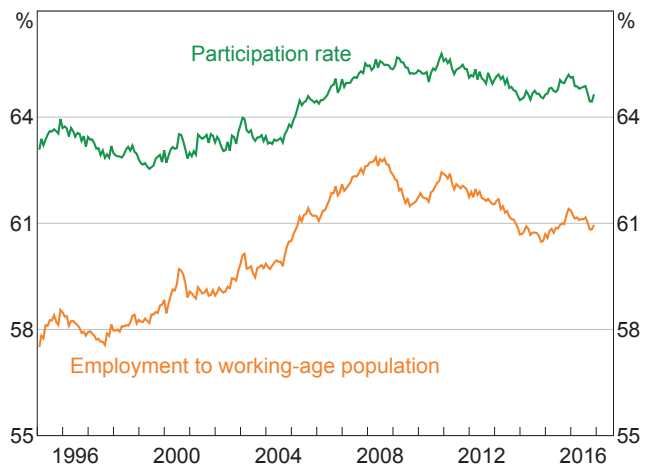
Non-farm, year-ended



Sources: ABS; RBA

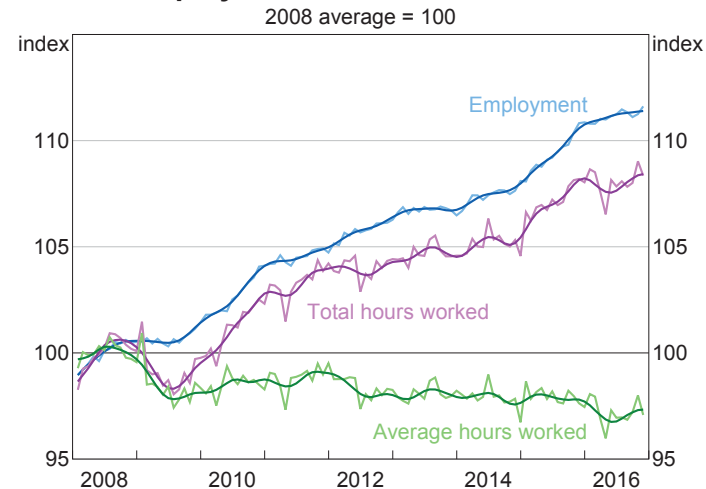
Factors of Production and Labour Market

Employment and Participation Rates



Source: ABS

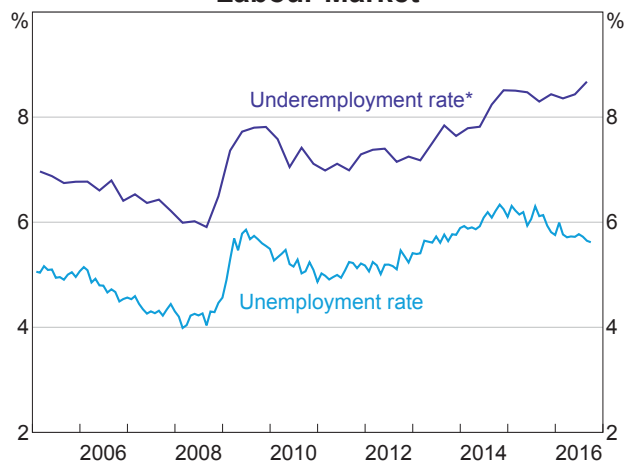
Employment and Hours Worked*



* Smoothed lines are 13-period Henderson trends

Sources: ABS; RBA

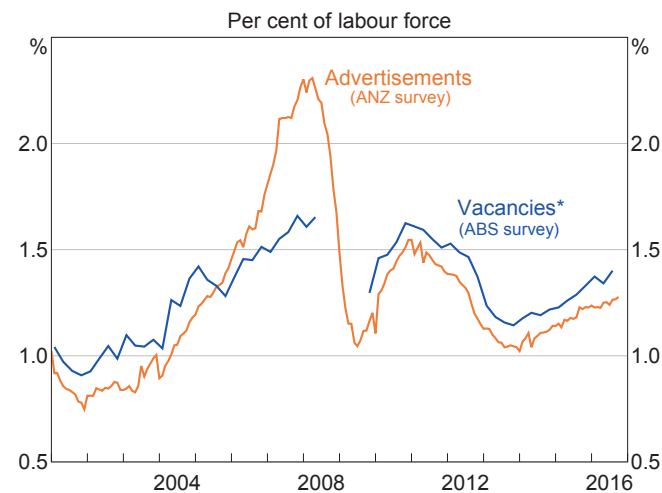
Labour Market



* 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

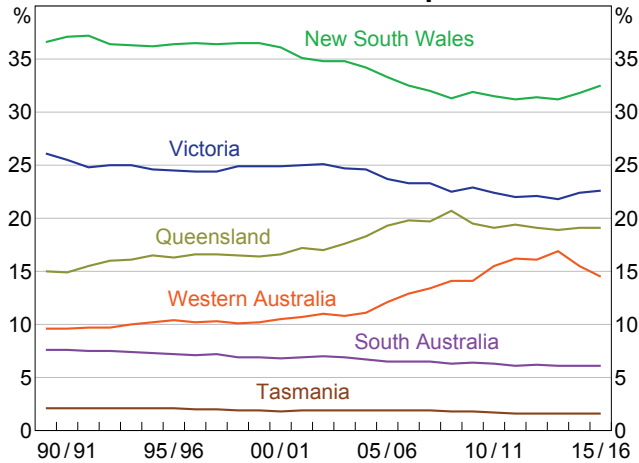


* This survey was suspended between May 2008 and November 2009

Sources: ABS; ANZ

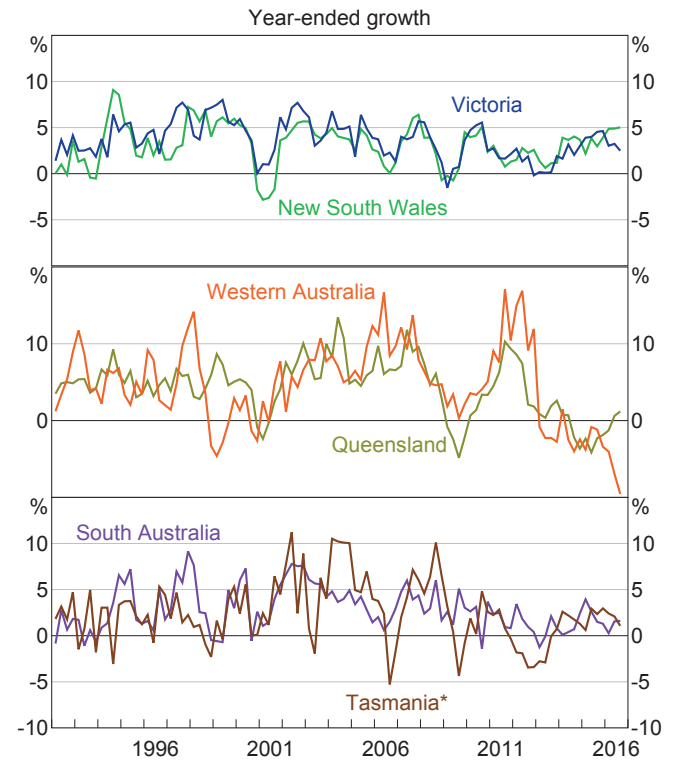
Regions and Industry

State Share of Output*



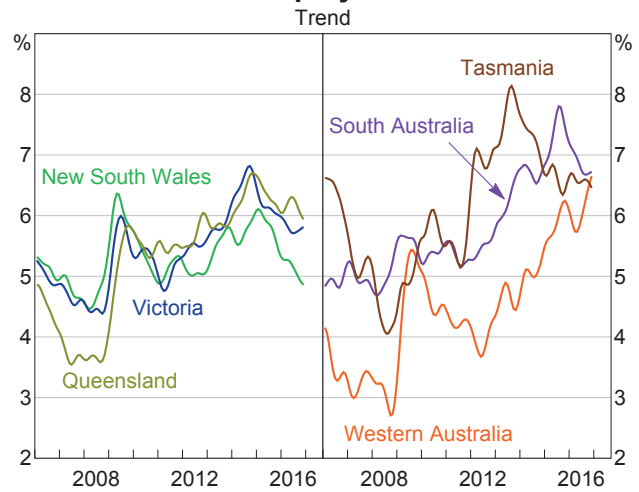
* Nominal
Source: ABS

State Final Demand



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

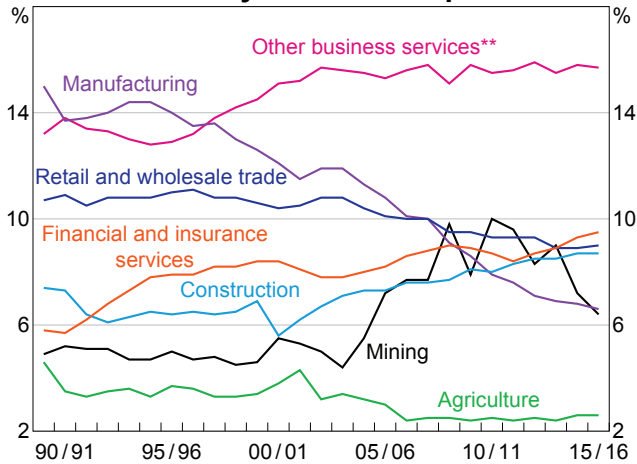
State Unemployment Rates



Source: ABS

Regions and Industry

Industry Share of Output*

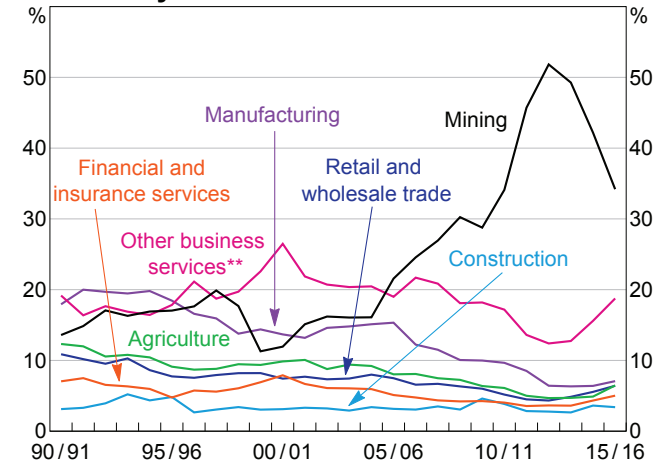


* Nominal gross value added

** 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**



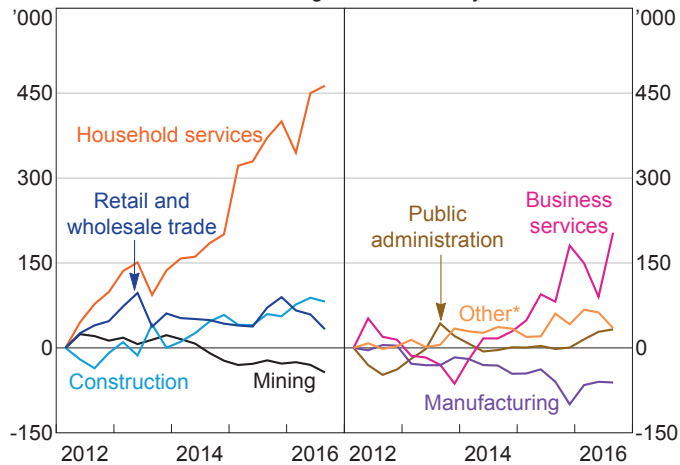
* Nominal

** 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

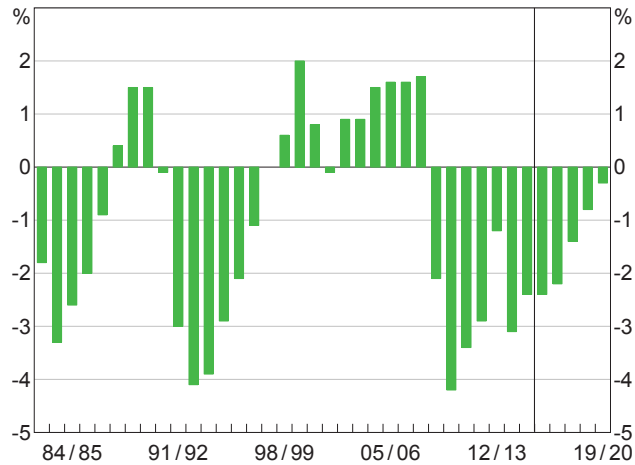
Cumulative change since February 2012



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

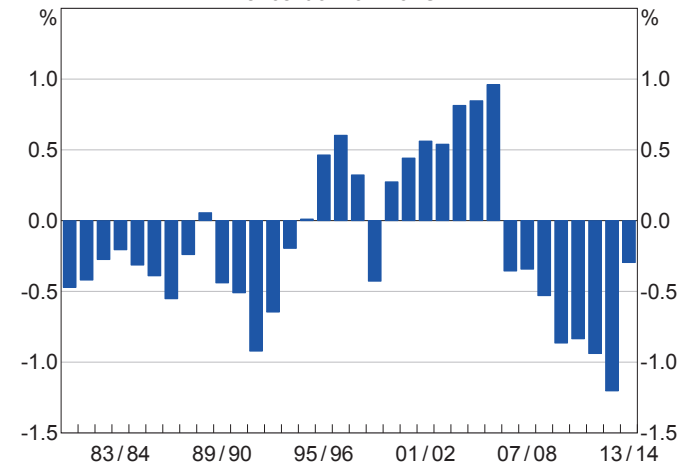
Source: ABS

Australian Government Budget Balance*
Per cent of nominal GDP



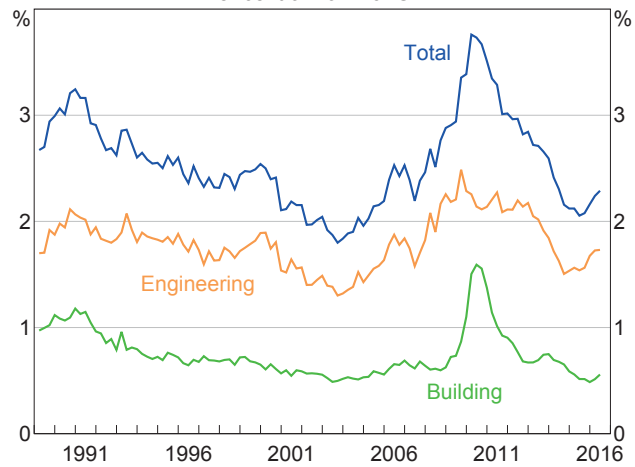
* Underlying cash balance; 2016/17 Budget
Source: Australian Treasury

State Budget Balances*
Per cent of nominal GDP



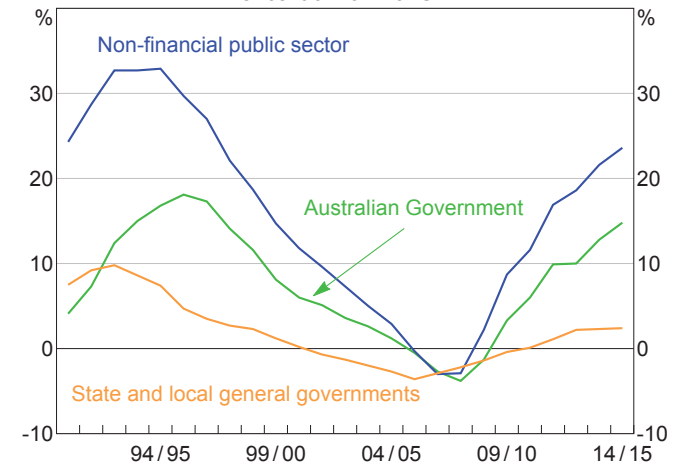
* Underlying cash balance
Source: ABS

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

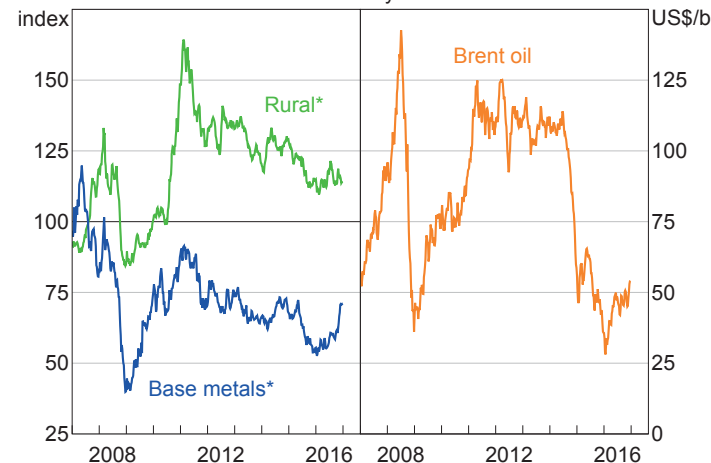
SDR, 2014/15 average = 100, log scale



Source: RBA

Base Metals, Rural and Oil Prices

Weekly

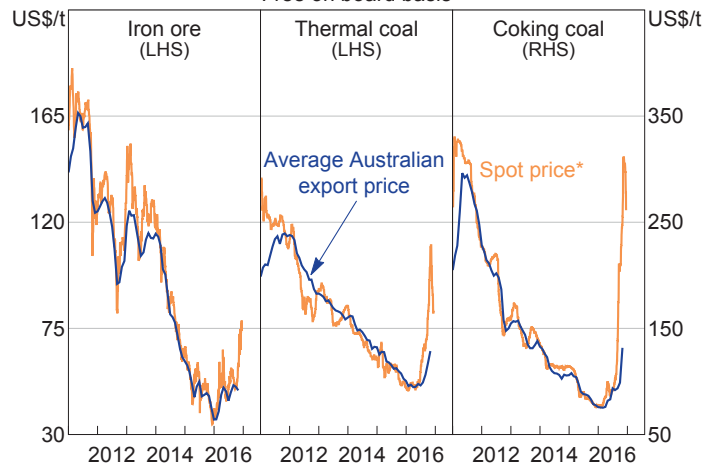


* RBA Index of Commodity Prices sub-indices; SDR terms; 2007 average = 100

Sources: Bloomberg; RBA

Bulk Commodity Prices

Free on board basis

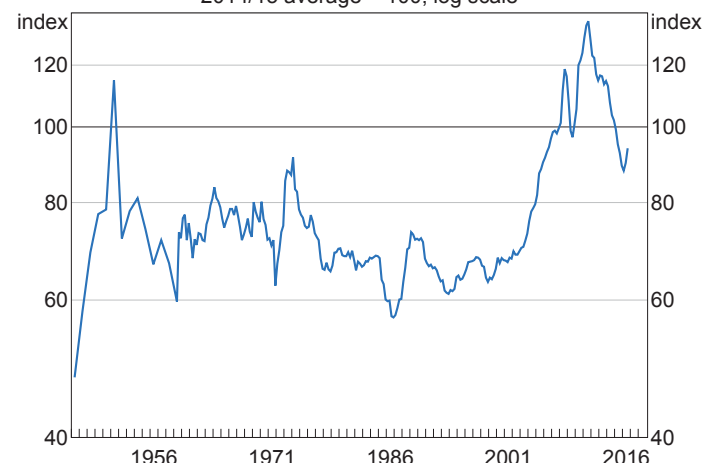


* Iron ore fines, Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS; RBA

Terms of Trade*

2014/15 average = 100, log scale



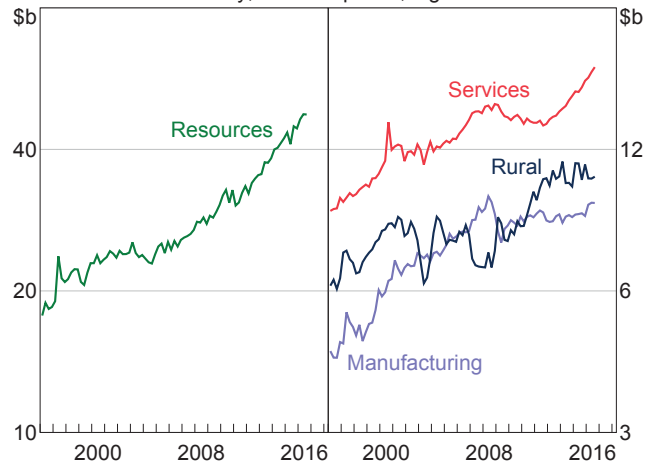
* Annual data are used prior to 1960

Sources: ABS; RBA

Balance of Payments and External Position

Export Volumes

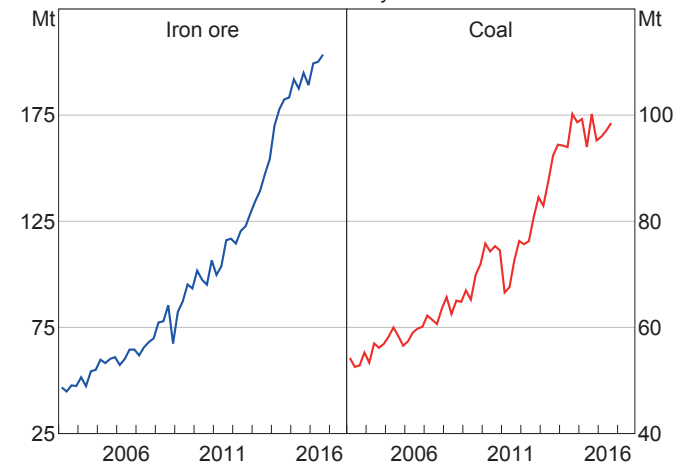
Quarterly, 2014/15 prices, log scale



Sources: ABS; RBA

Bulk Commodity Exports

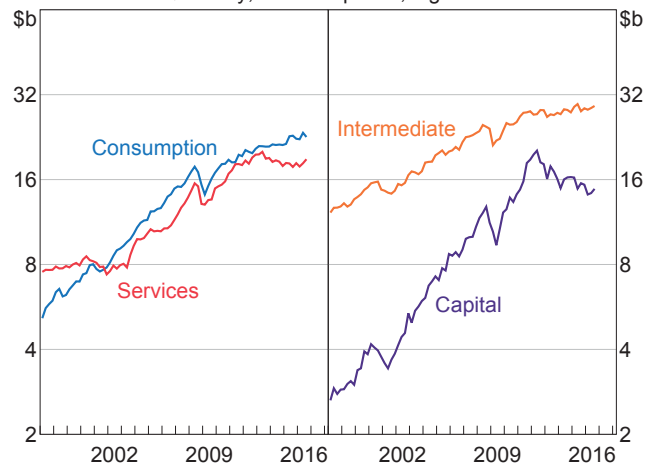
Quarterly



Sources: ABS; RBA

Import Volumes

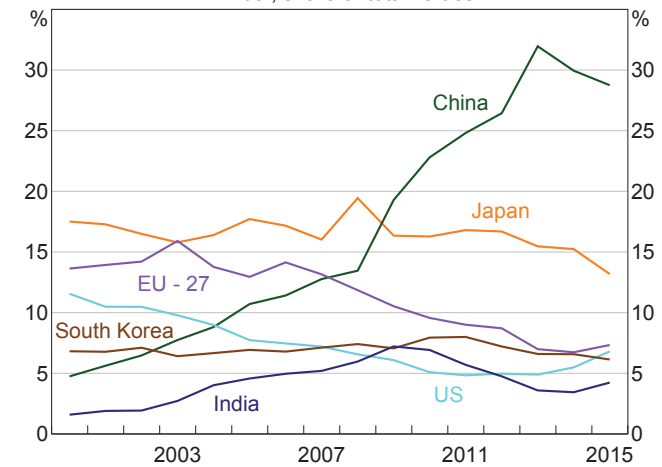
Quarterly, 2014/15 prices, log scale



Source: ABS

Exports by Destination

Annual, share of total values

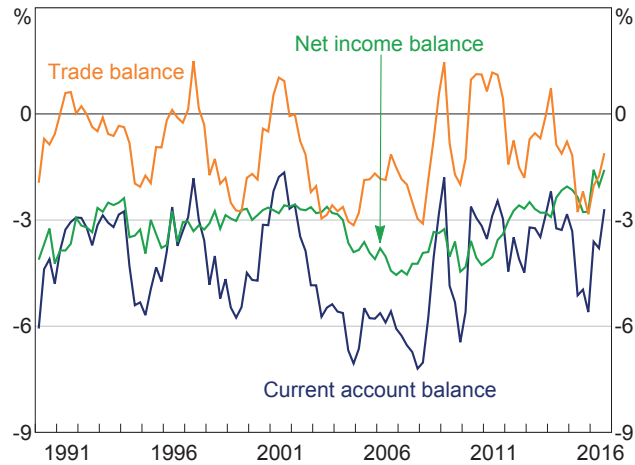


Source: ABS

Balance of Payments and External Position

Current Account Balance

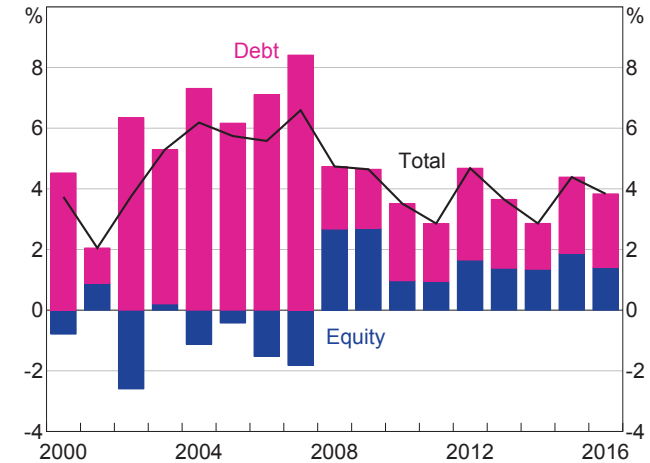
Per cent of nominal GDP



Source: ABS

Net Capital Inflow*

Per cent of nominal GDP

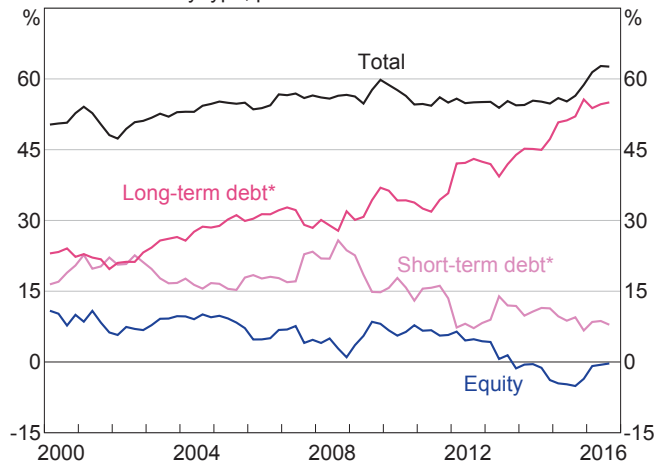


* 2016 values exclude the December quarter

Source: ABS

Net Foreign Liabilities

By type, per cent of nominal GDP

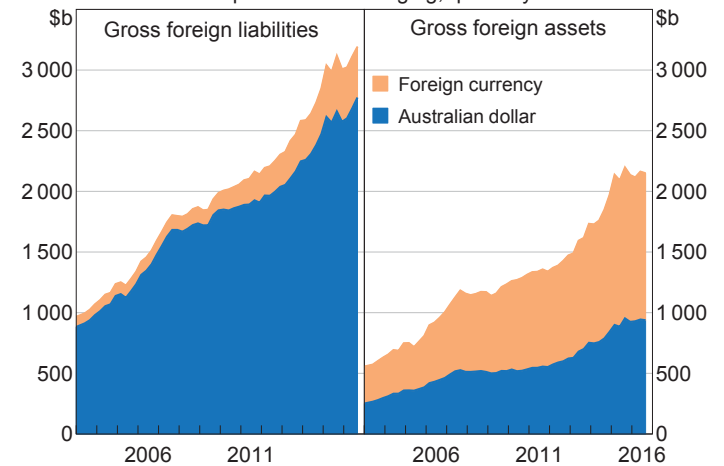


* Short-term includes debt with residual maturity of one year or less; long-term includes all other debt

Source: ABS

External Position

Composition after hedging, quarterly*

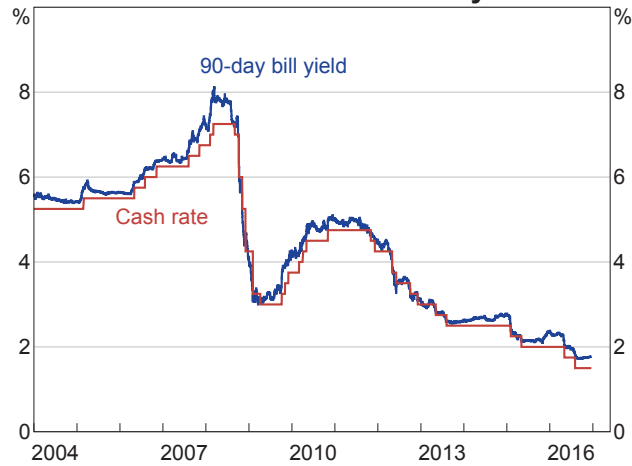


* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

Sources: ABS; RBA

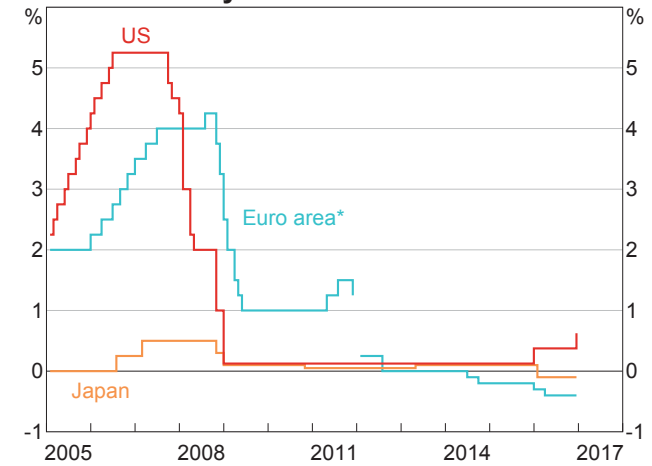
Interest Rates

Australian Cash Rate and 90-day Bill Yield



Sources: AFMADData; RBA

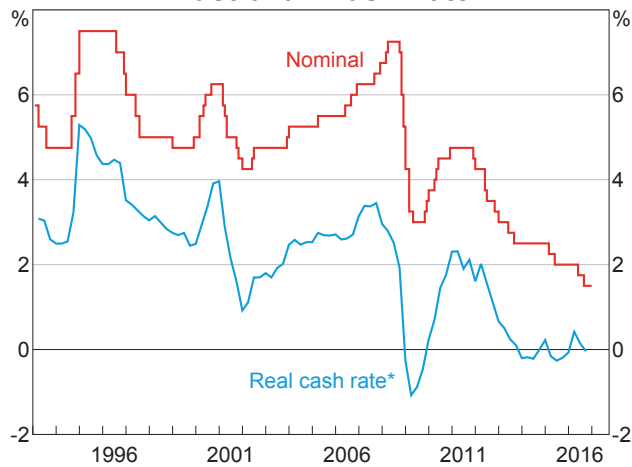
Policy Interest Rates – G3



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

Source: Central banks

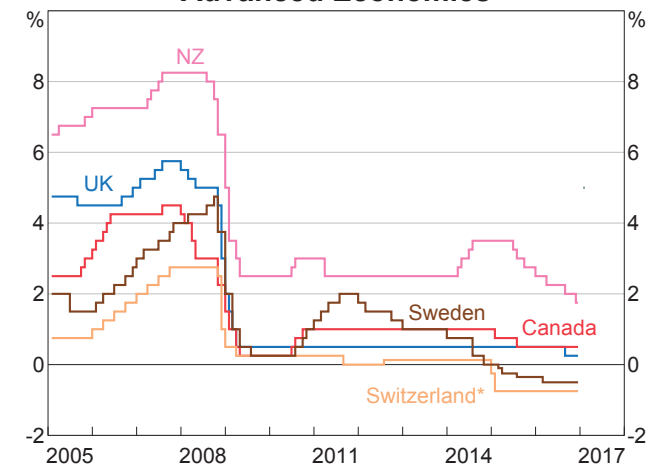
Australian Cash Rate



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

Sources: ABS; RBA

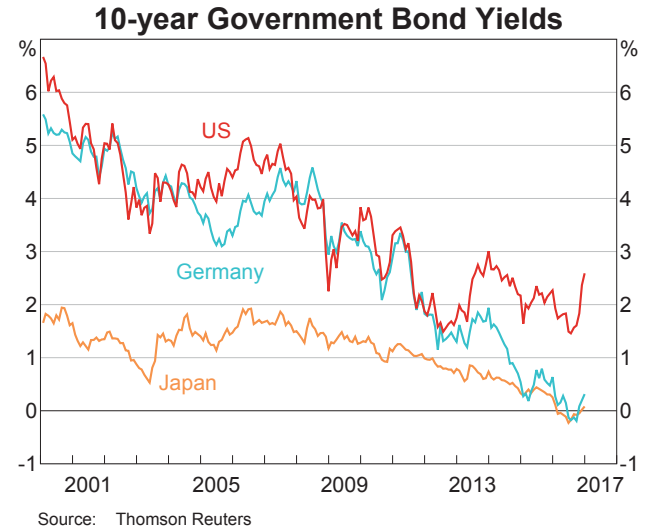
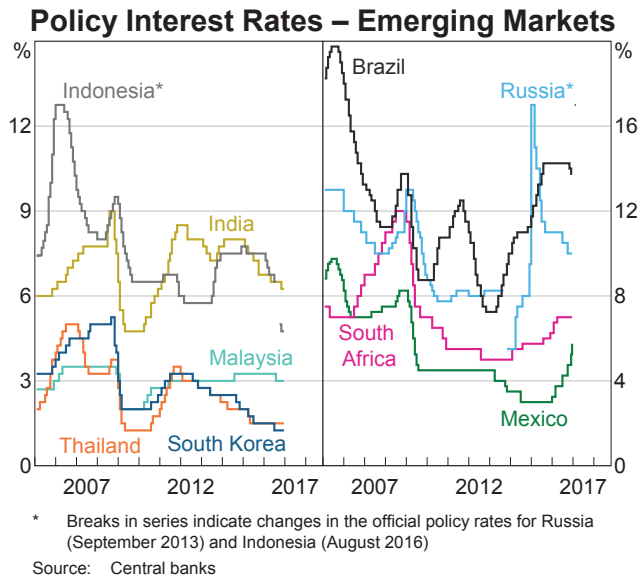
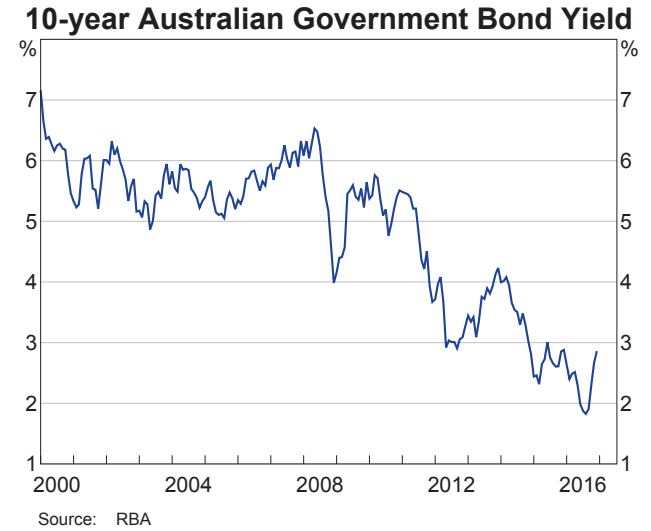
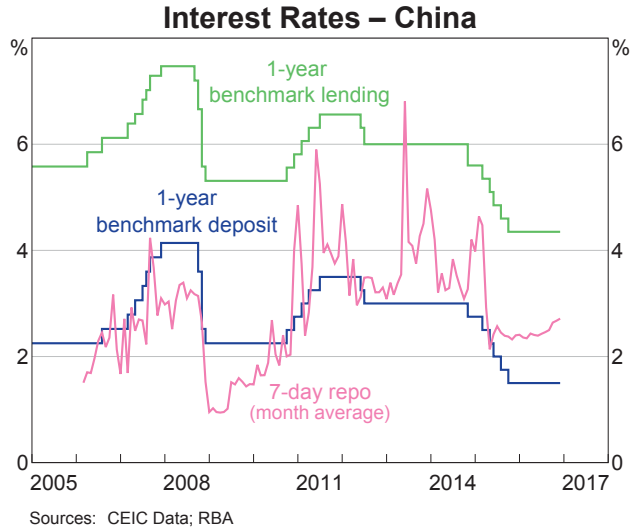
Policy Interest Rates – Selected Advanced Economies



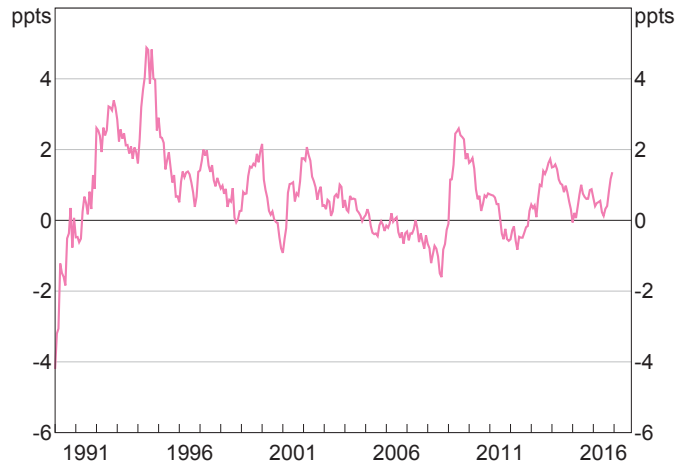
* Policy rate is the midpoint of the 3-month LIBOR target band

Source: Central banks

Interest Rates

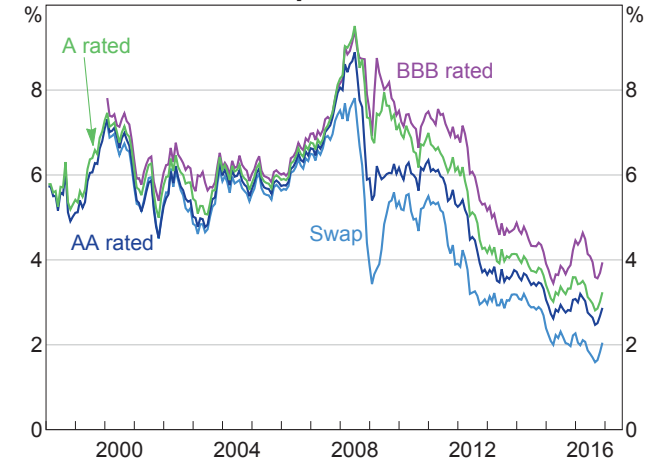


Spread between Australian 10-year Bond Yield and the Cash Rate



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

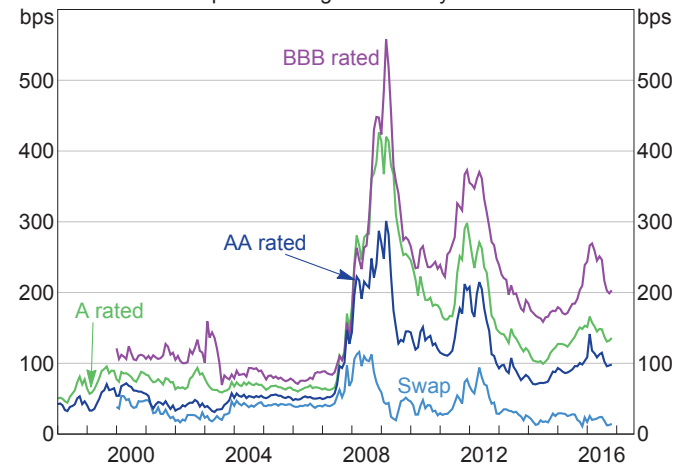
Differential between Australian and US 10-year Government Bond Yields



Sources: Bloomberg; RBA

Australian Corporate Bond Spreads*

Spread over government yields



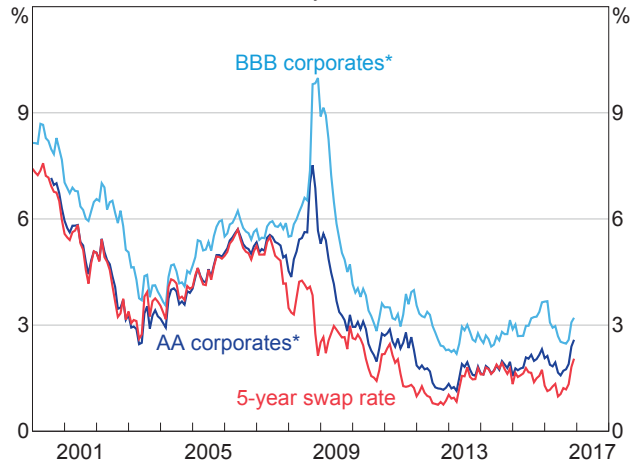
* Swap spreads are for 3-year maturity; corporate bond spreads are a weighted average of senior bonds with remaining maturities of 1 to 5 years, including financial and non-financial corporations

Sources: Bloomberg; RBA; UBS AG, Australia Branch

Interest Rates

US Corporate Bond Yields

3-5 years

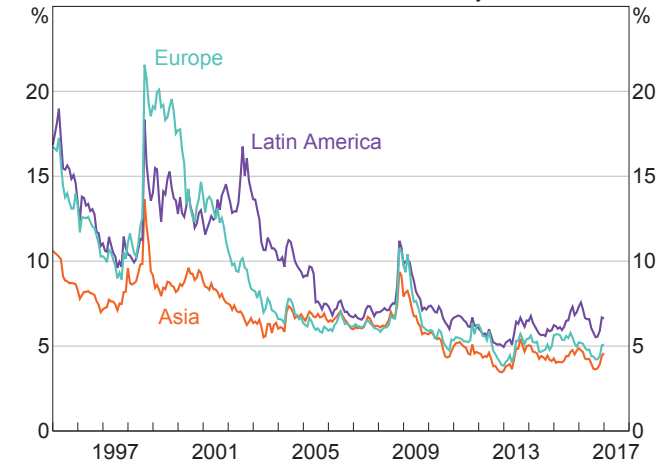


* Includes financials and non-financials

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

Emerging Market Bond Yields

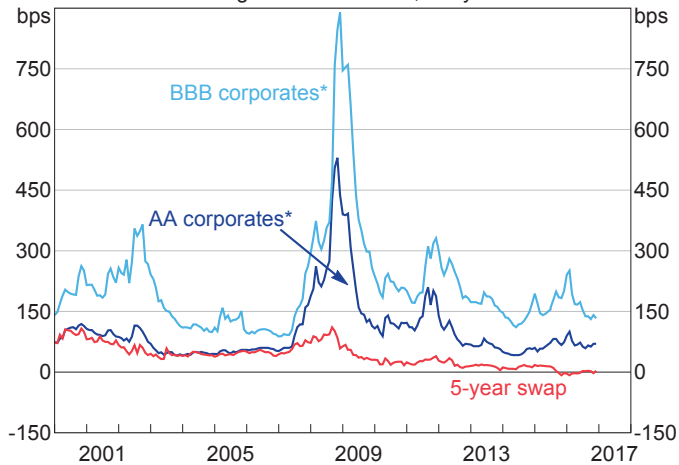
US dollar-denominated, blended yield



Sources: Bloomberg; RBA; Thomson Reuters

US Corporate Bond Spreads

To US government bonds, 3-5 years

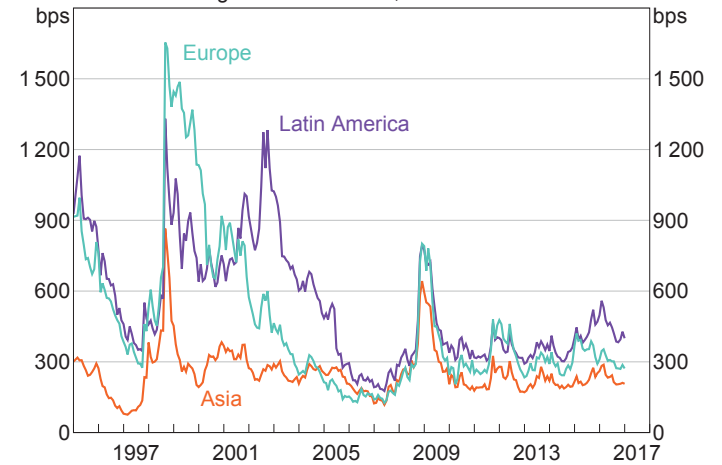


* Includes financials and non-financials

Sources: Bank of America Merrill Lynch; Bloomberg

Emerging Market Bond Spreads

To US government bonds, duration-matched

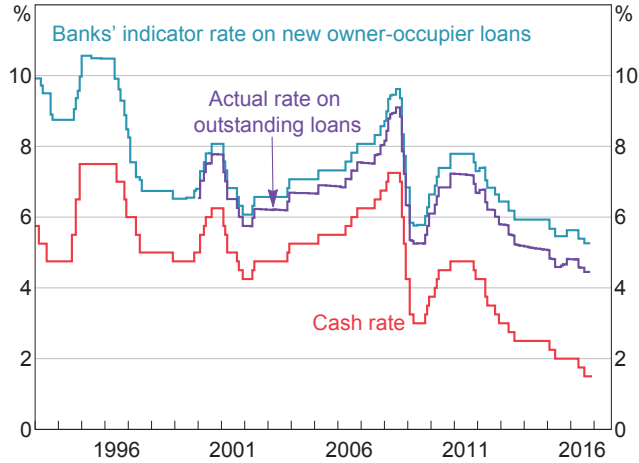


Sources: Bloomberg; RBA; Thomson Reuters

Interest Rates

Australian Housing Lending Rates

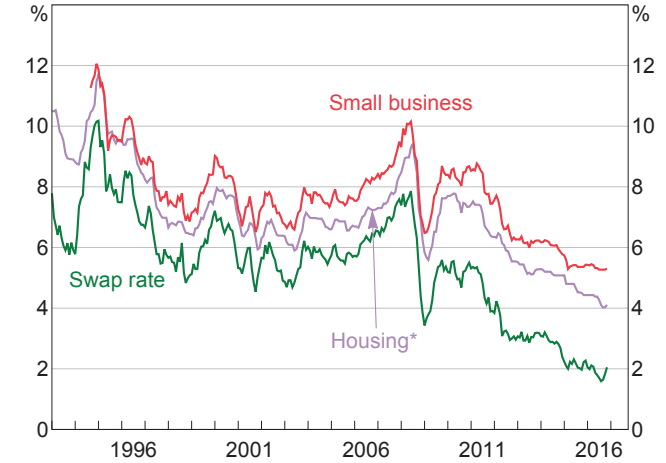
Average interest rate on variable-rate loans



Sources: ABS; APRA; Perpetual; RBA

Australian Fixed Interest Rates

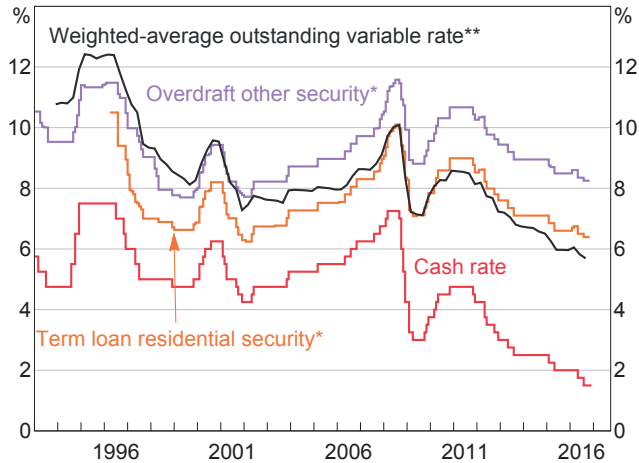
3-year maturity



* Available to owner-occupiers

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

Australian Small Business Interest Rates



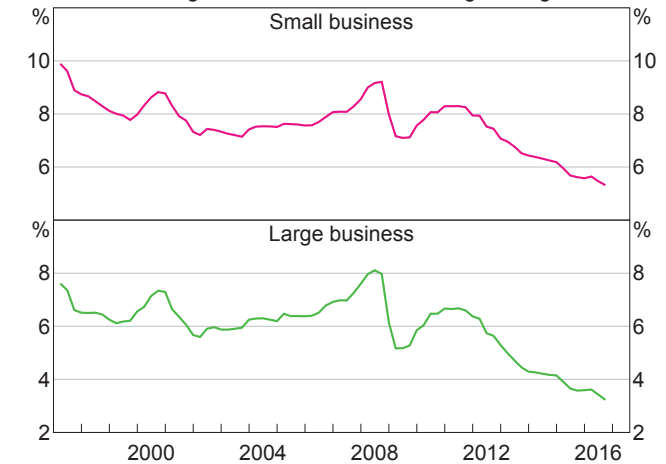
* Indicator rates

** RBA estimate; including risk margins

Sources: APRA; Canstar Cannex; RBA

Australian Business Lending Rates*

Average interest rate on outstanding lending

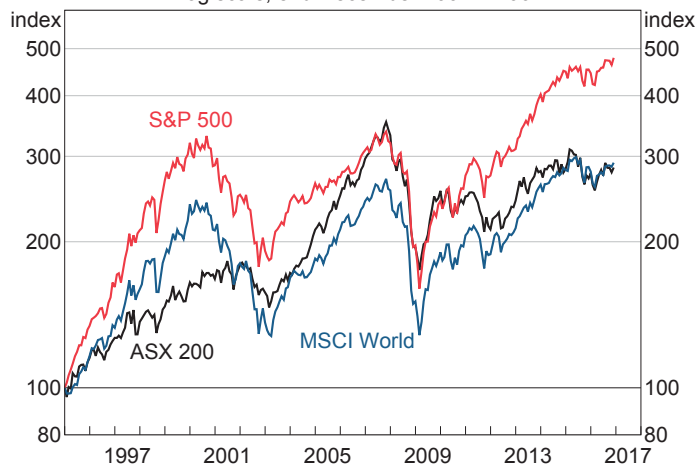


* RBA estimates

Sources: APRA; RBA

Australian and World Share Price Indices

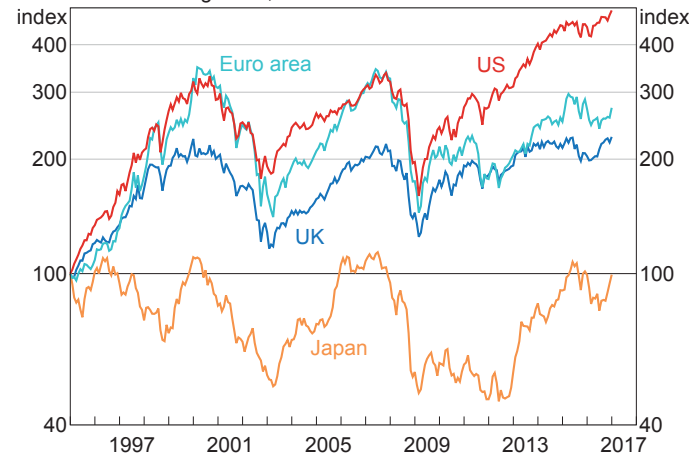
Log scale, end December 1994 = 100



Sources: Bloomberg; MSCI; RBA

Advanced Economies' Share Price Indices

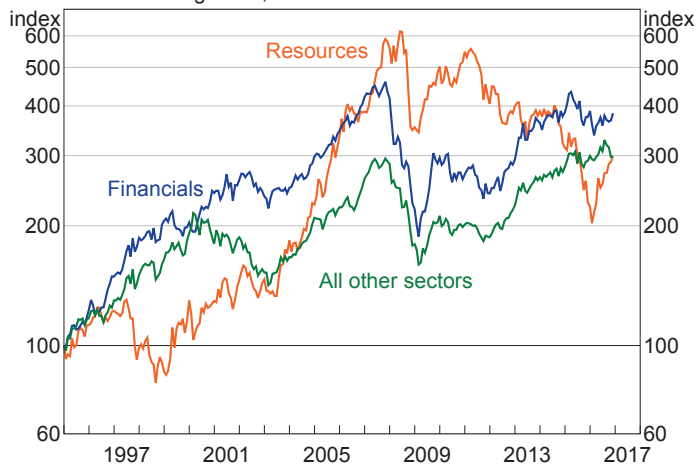
Log scale, end December 1994 = 100



Sources: Bloomberg; RBA

Australian Share Price Indices*

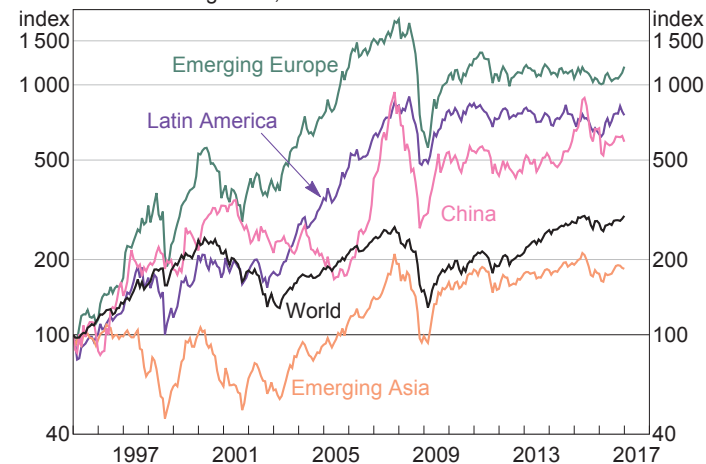
Log scale, end December 1994 = 100



* ASX 200 companies
Sources: Bloomberg; RBA

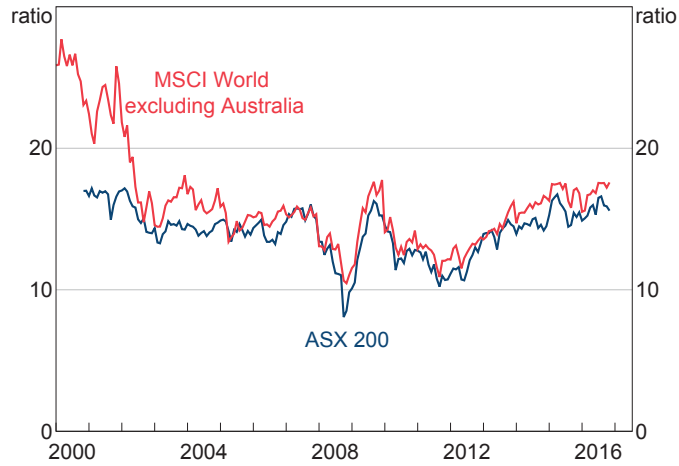
Emerging Markets' Share Price Indices

Log scale, end December 1994 = 100



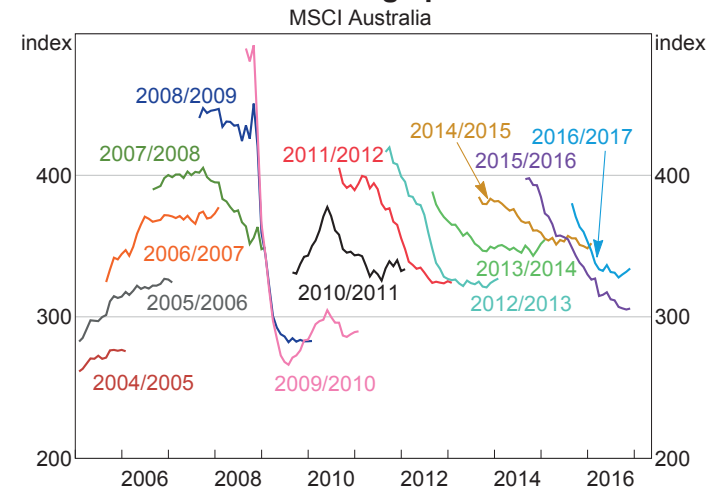
Sources: Bloomberg; MSCI; RBA

Forward PE Ratios



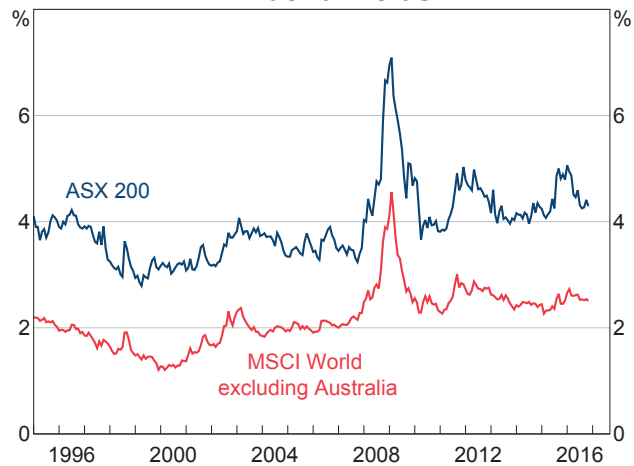
Sources: Bloomberg; MSCI; Thomson Reuters

Forecast Earnings per Share



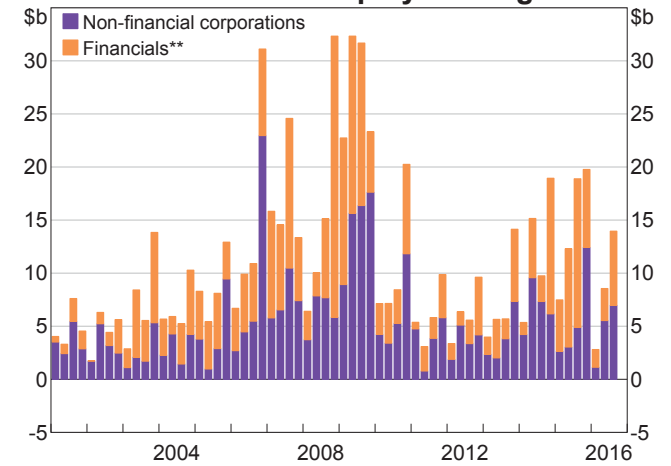
Source: Thomson Reuters

Dividend Yields



Sources: Bloomberg; MSCI; Thomson Reuters

Australian Net Equity Raisings*



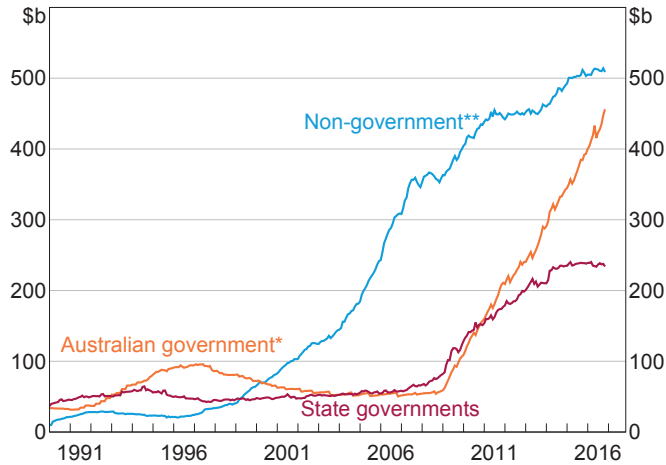
* All listed companies

** Includes banks and non-bank financials

Sources: ASX; RBA

Bond Issuance

Bonds on Issue in Australia

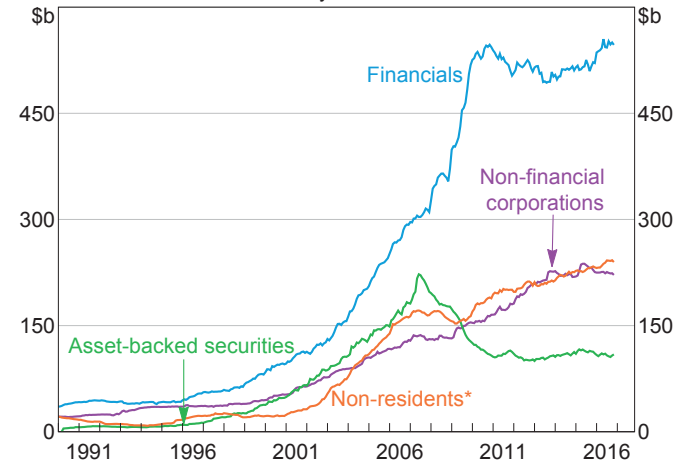


* Excludes bonds purchased by the Australian Government
 ** Excludes ADIs' self-securitisations, includes government-guaranteed bonds

Sources: ABS; AOFM; RBA; State Treasury Corporations

Total Non-government Bonds on Issue

All currency denominations

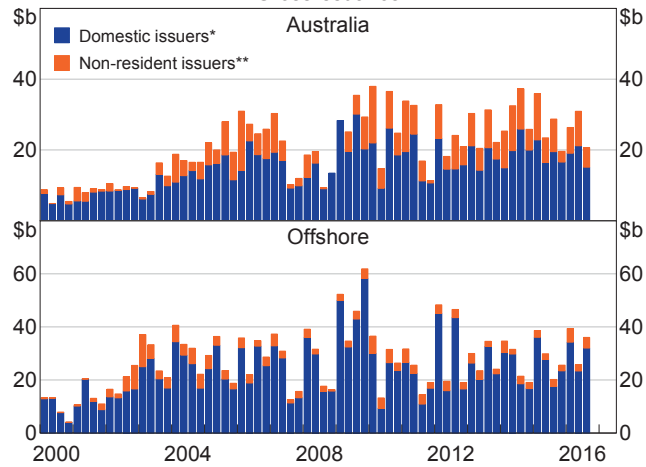


* Australian dollar-denominated bonds only

Sources: ABS; RBA

Non-government Bond Issuance

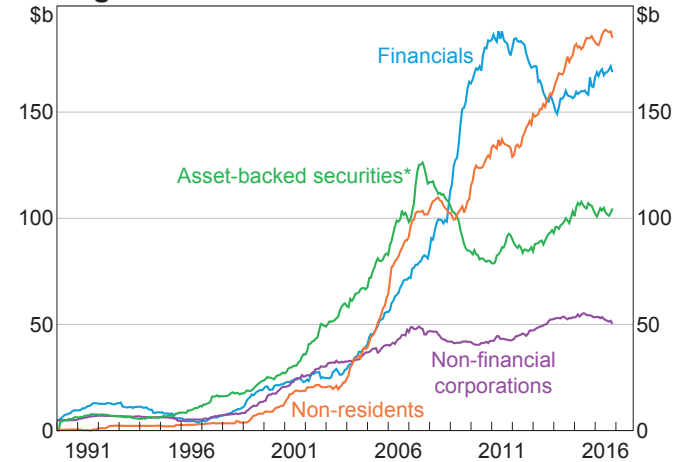
Gross issuance



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

Source: RBA

Non-government Bonds on Issue in Australia

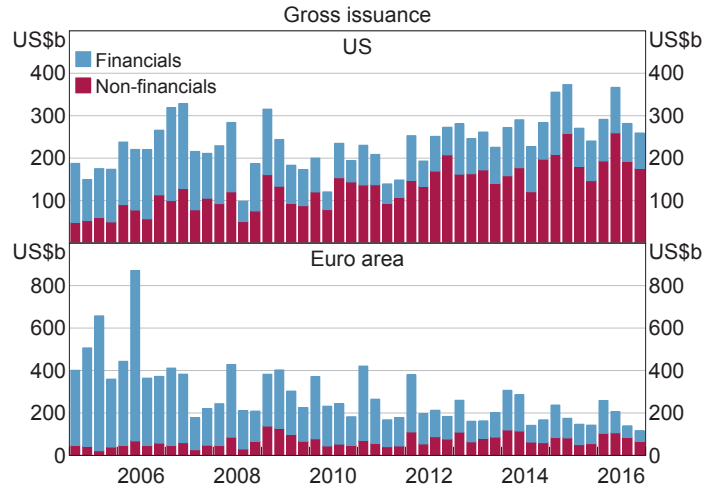


* Excludes ADIs' self-securitisations

Sources: ABS; RBA

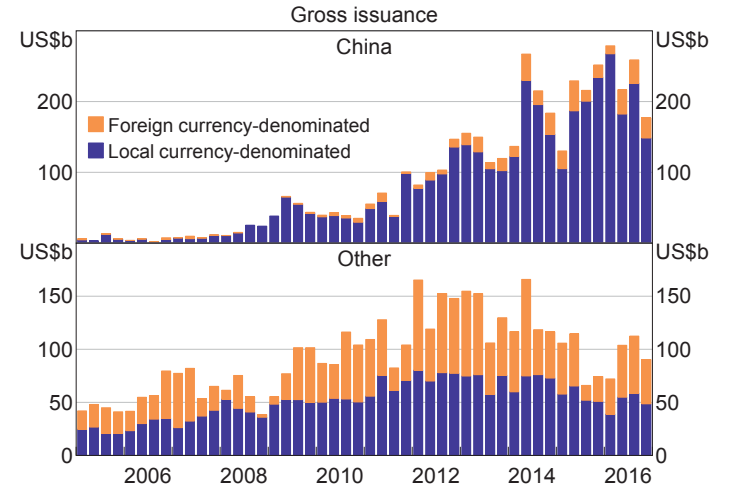
Bond Issuance

US and Euro Area Corporate Bond Issuance*



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

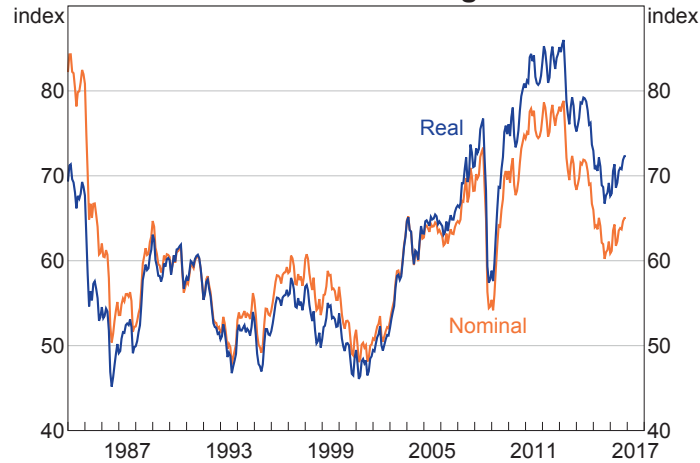
Emerging Market Corporate Bond Issuance*



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

Exchange Rates

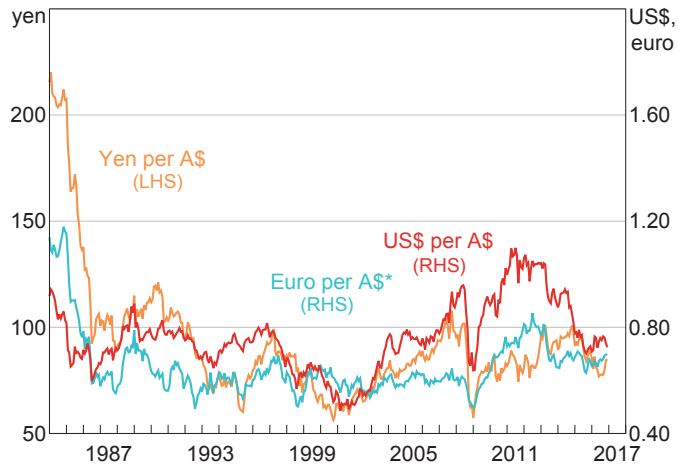
Australian Dollar Trade-weighted Index*



* 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

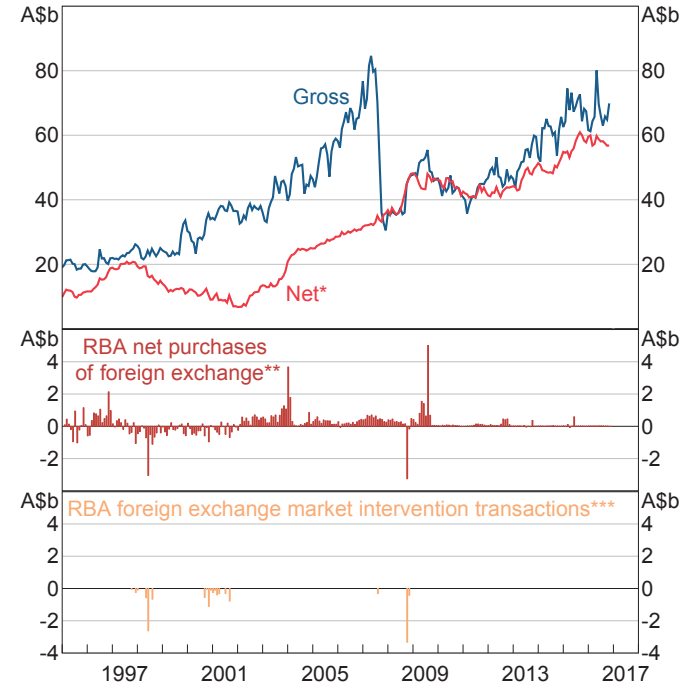
Australian Dollar



* ECU per A\$ until 31 December 1998

Sources: Thomson Reuters; WM/Reuters

Official Reserve Assets



* Excludes foreign exchange swaps

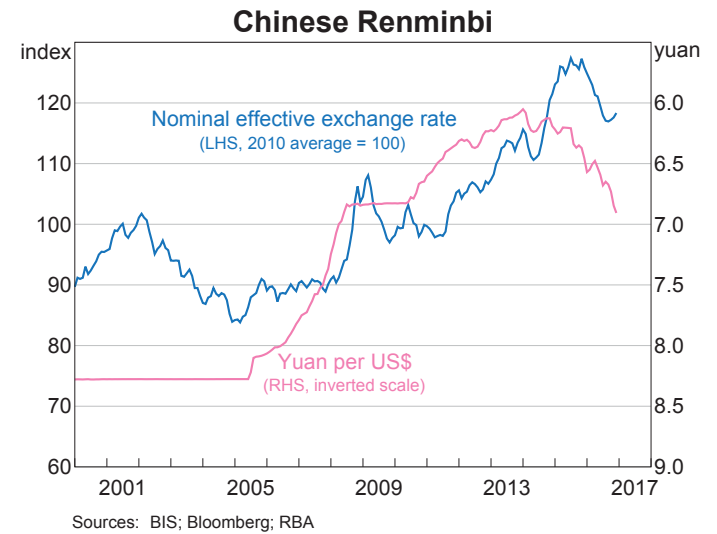
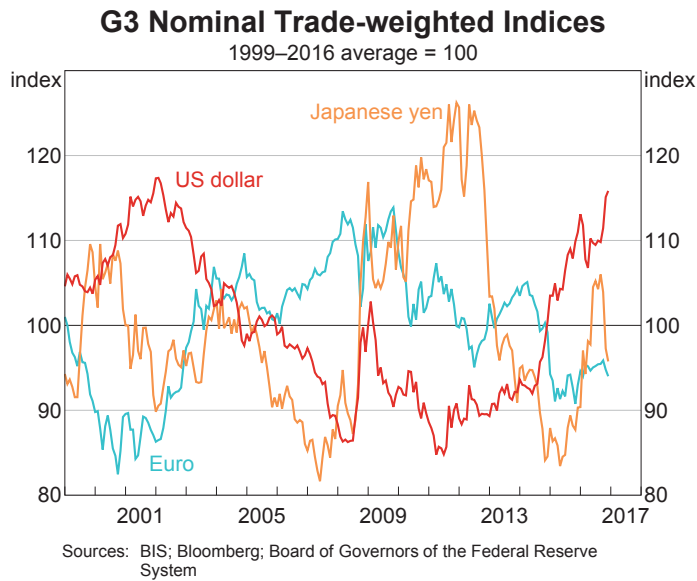
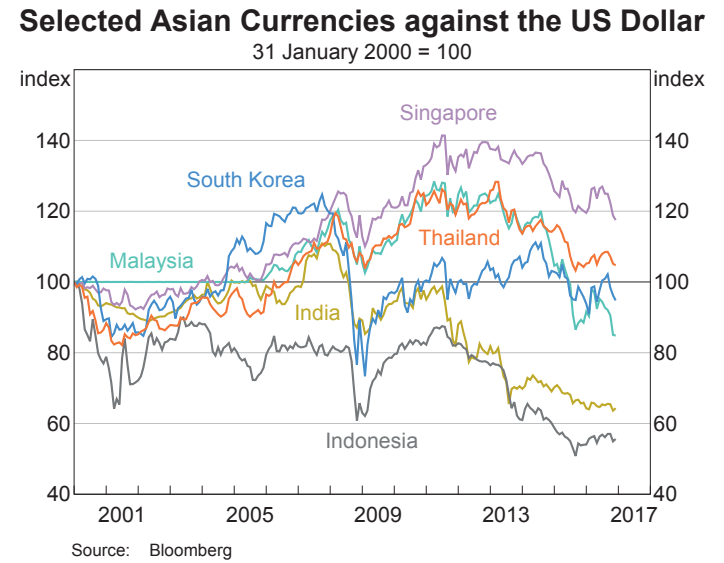
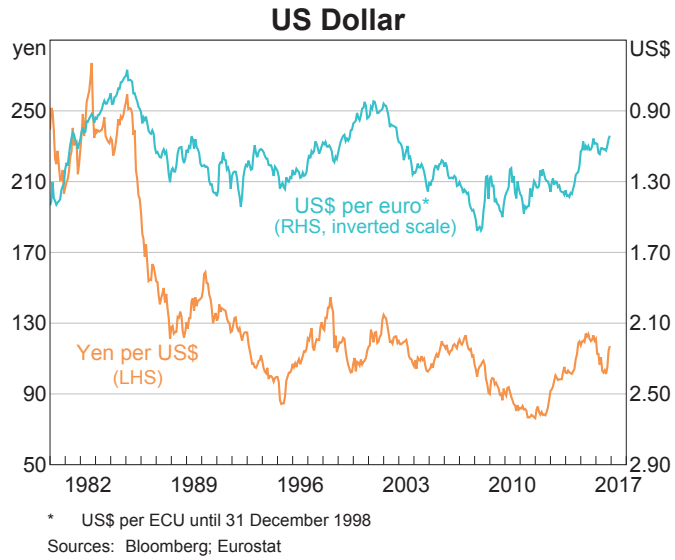
** Includes market, government and other outright transactions, excludes swap deliveries

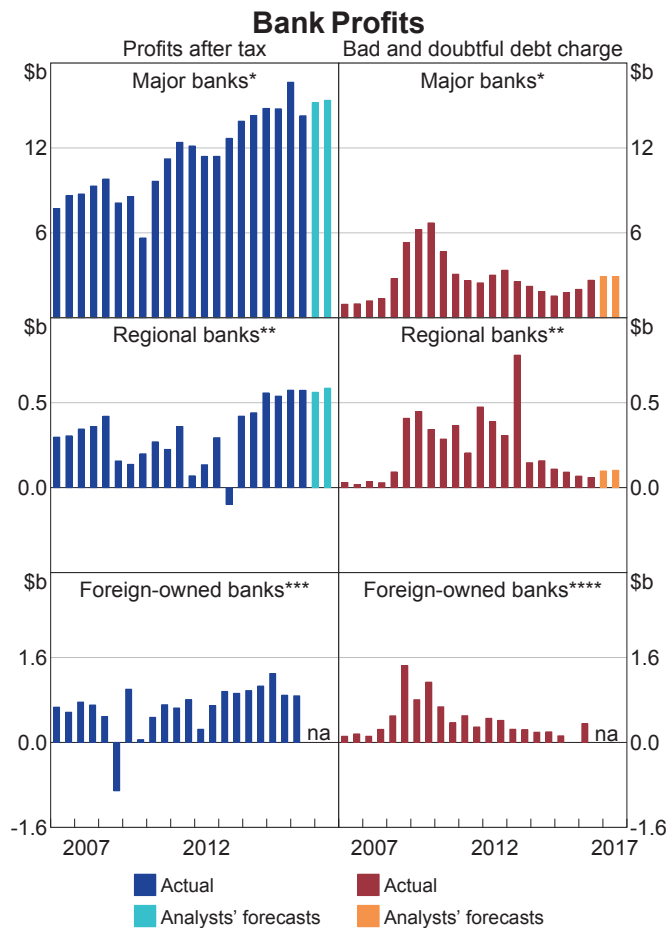
*** Data up to 30 June 2016; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

Source: RBA



Exchange Rates





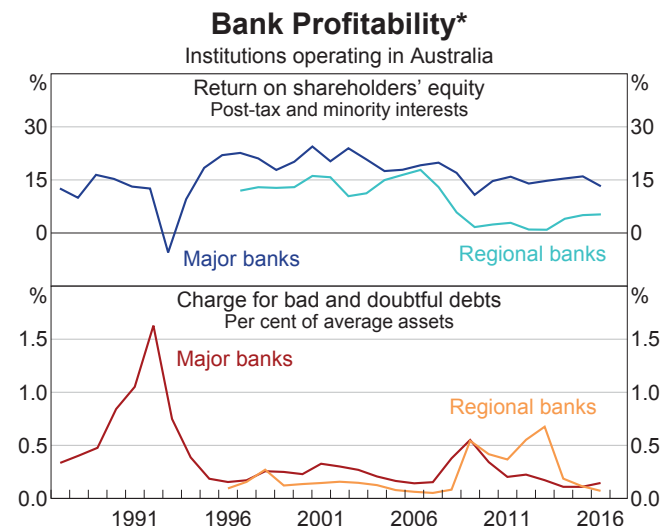
* ANZ, NAB and Westpac report half yearly to March and September, while CBA reports to June and December

** 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

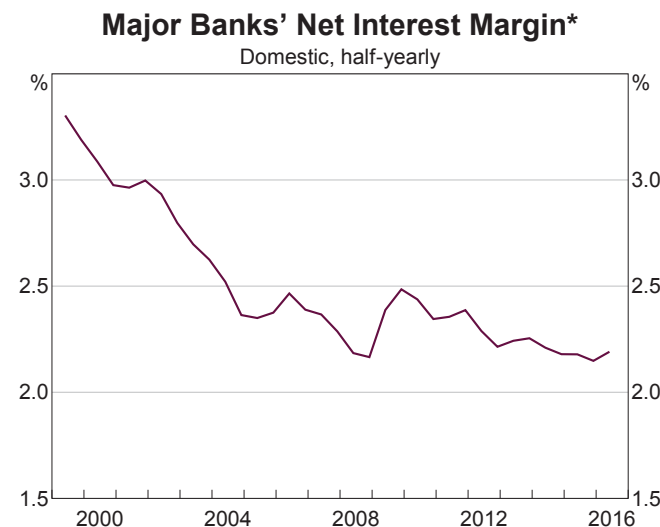
**** All results are half-year to June and December, September quarter 2015 data not reported

Sources: APRA; Banks' annual and interim reports; Credit Suisse; Deutsche Bank; Morgan Stanley; 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

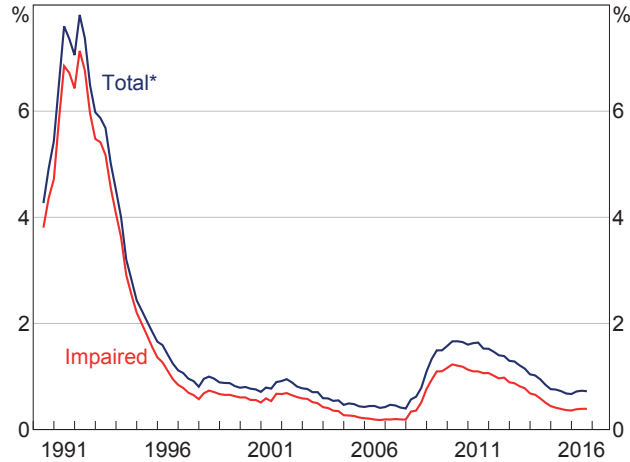


* From 2006 data are on an IFRS basis; prior years are on AGAAP basis; excludes St George Bank and Bankwest prior to the first half of 2009

Sources: Banks' Financial Reports; RBA

Banks' Non-performing Assets

Consolidated global operations, share of on-balance sheet assets

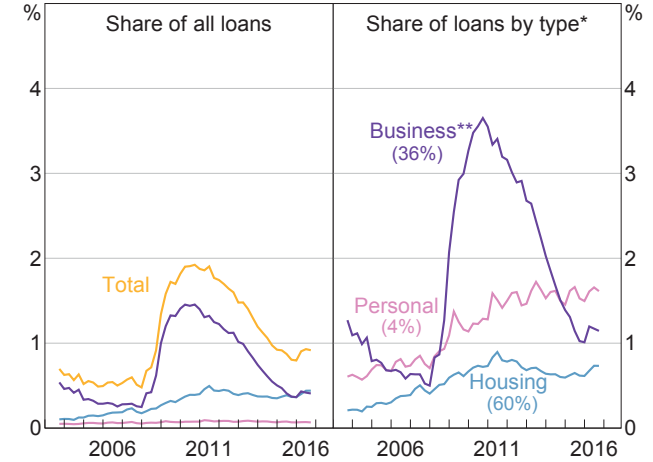


* Includes assets 90+ days past due that are well secured

Source: APRA

Banks' Non-performing Assets

Domestic books



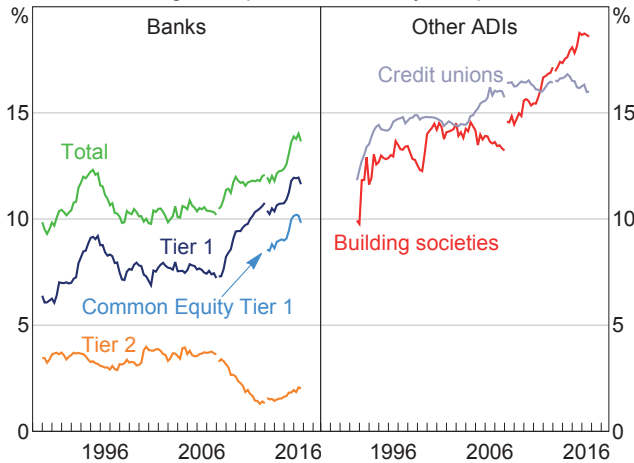
* Each category's share of total domestic lending at September 2016 is shown in parentheses

** 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

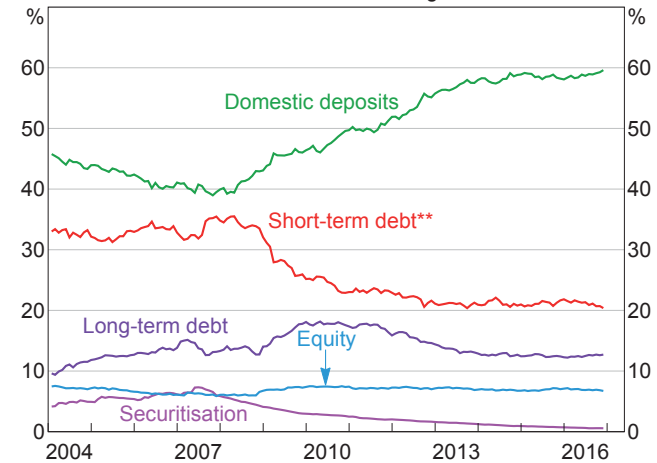


* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most ADIs; break in March 2013 due to the introduction of Basel III for all ADIs

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