



# The Australian Economy and Financial Markets

Chart Pack | October 2020



RESERVE BANK OF AUSTRALIA



# The Australian Economy and Financial Markets

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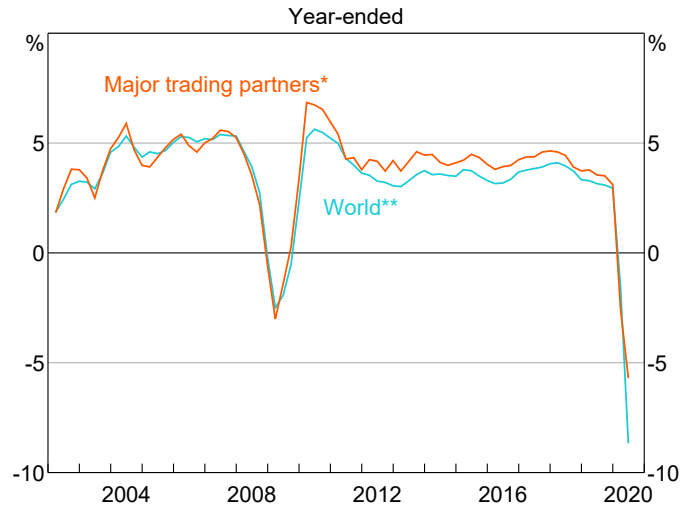
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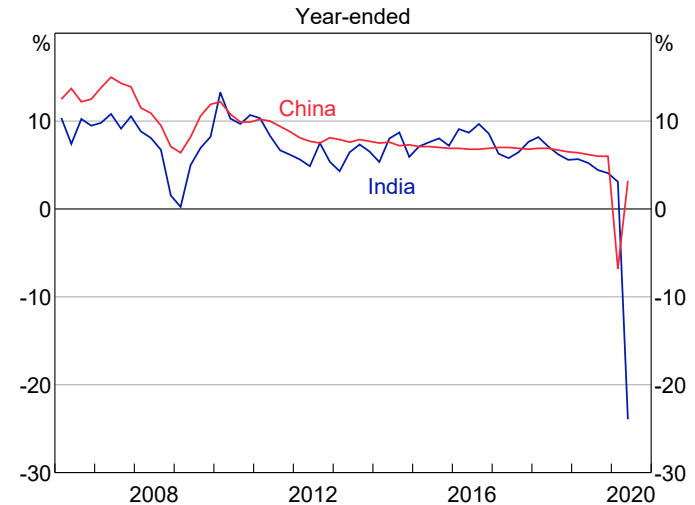
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### GDP Growth – World



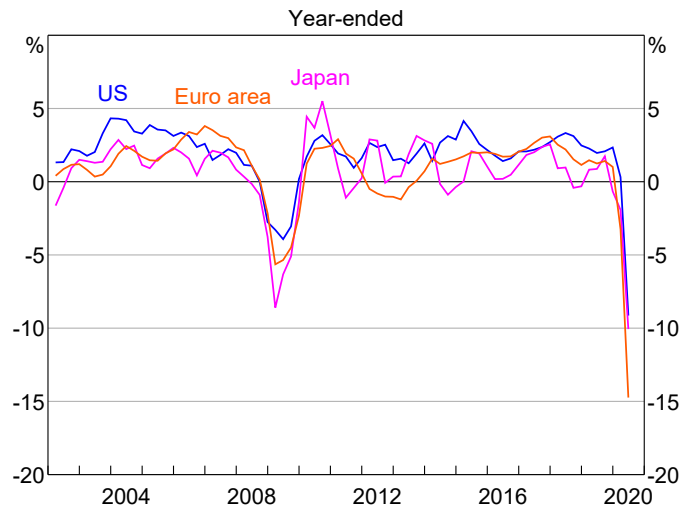
\* Weighted using Australian export shares  
 \*\* PPP-weighted; accounts for 85 per cent of world GDP  
 Sources: ABS; CEIC Data; IMF; RBA; Refinitiv

### GDP Growth – China and India



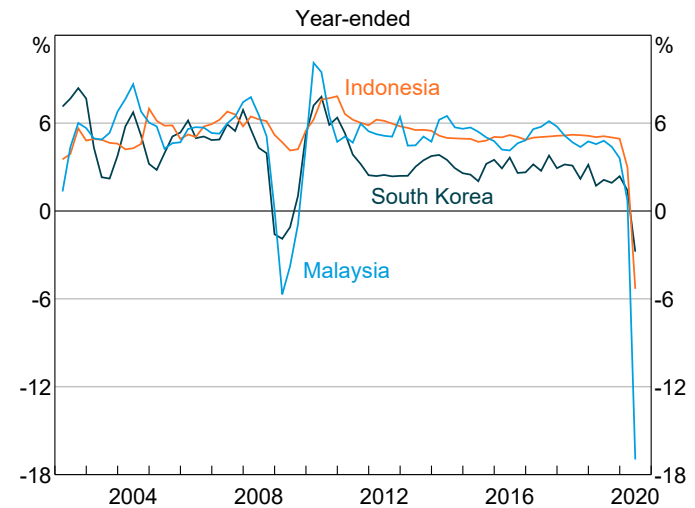
Sources: CEIC Data; RBA

### GDP Growth – Advanced Economies



Source: Refinitiv

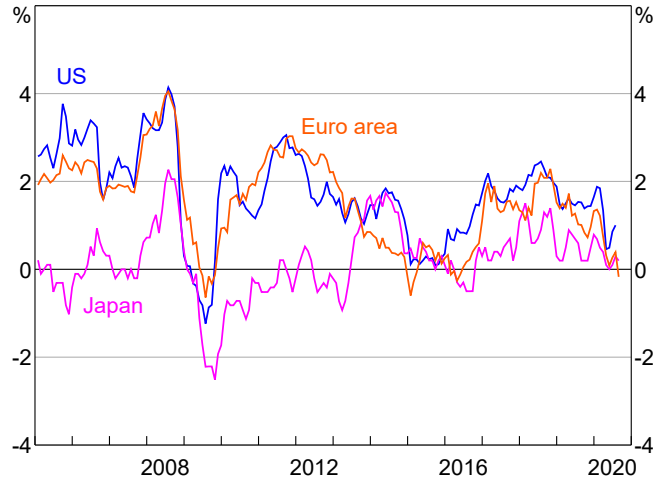
### GDP Growth – East Asia



Sources: CEIC Data; RBA

**Inflation – Advanced Economies\***

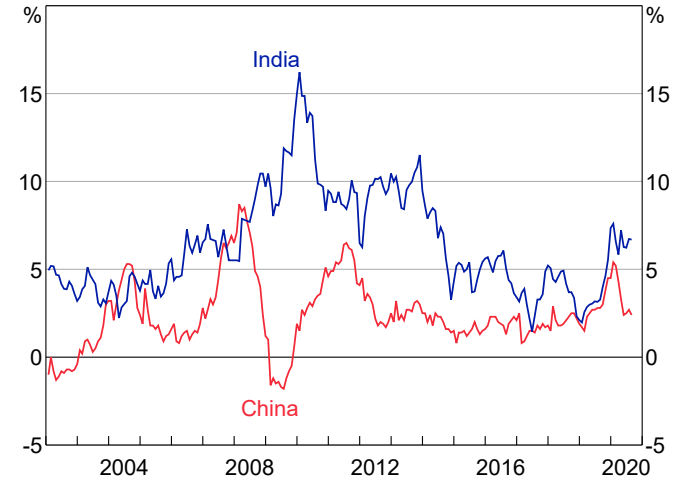
Year-ended



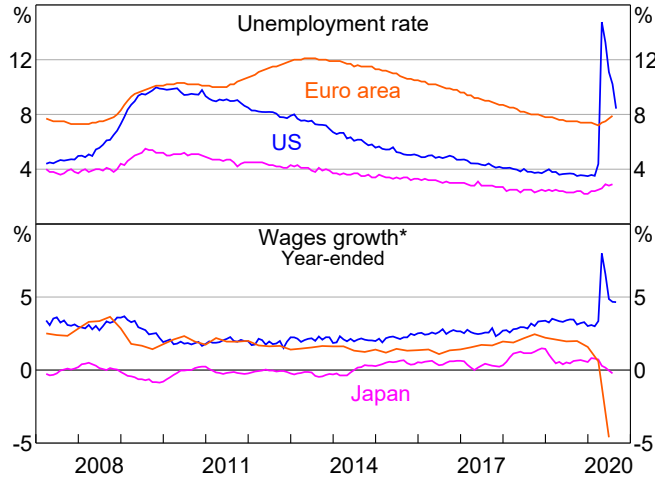
\* Personal consumption expenditure (PCE) inflation for the US; Japan data excludes the effects of the consumption tax increase in April 2014  
Sources: RBA; Refinitiv

**Inflation – China and India**

Year-ended



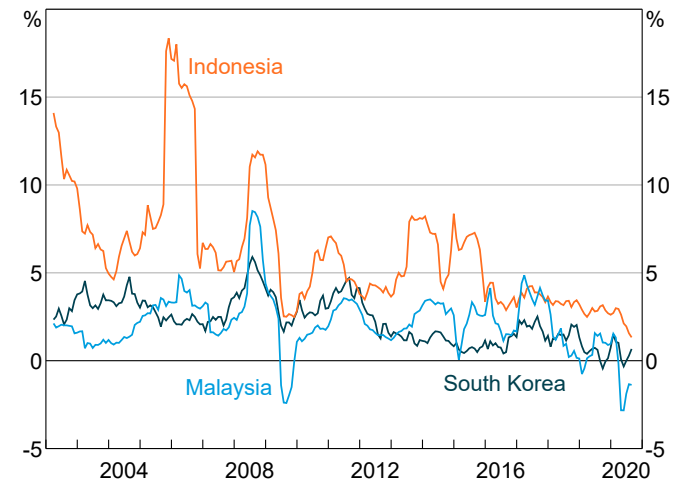
Source: CEIC Data

**Labour Markets – Advanced Economies**

\* Average hourly earnings for the US; compensation per employee for the euro area; smoothed full-time base wages for Japan  
Sources: ECB; Eurostat; RBA; Refinitiv

**Inflation – East Asia**

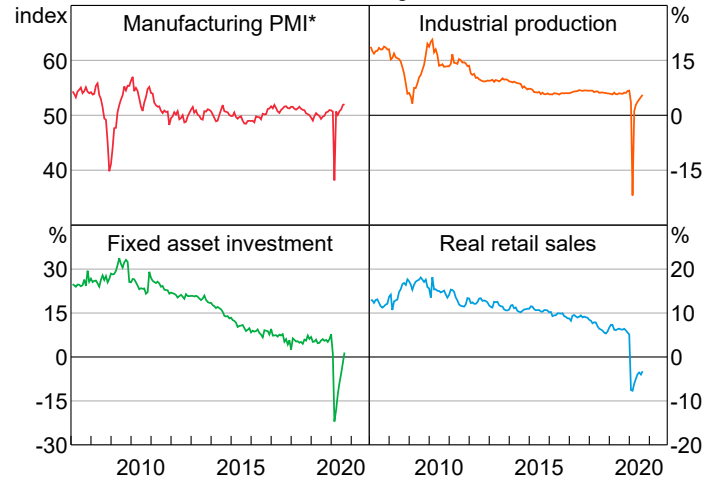
Year-ended



Sources: CEIC Data; RBA

## China – Activity Indicators

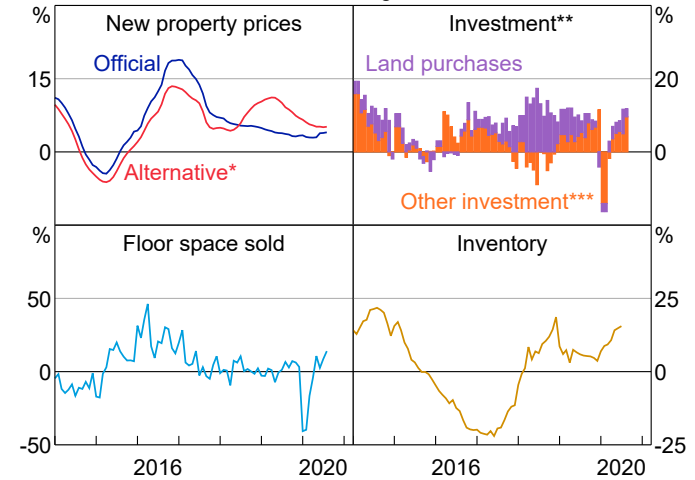
Year-ended growth



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

## China – Residential Property Indicators

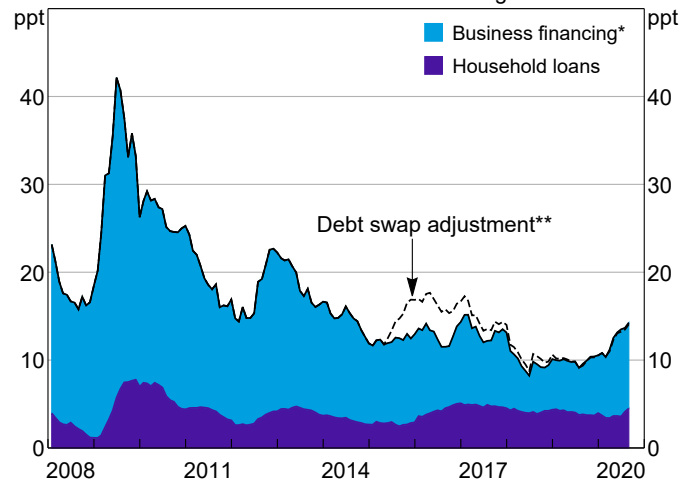
Year-ended growth



\* China Index Academy  
\*\* Contributions of residential and non-residential investment  
\*\*\* Construction, installation, equipment purchases and other  
Sources: CEIC Data; CIA; CRIC; RBA

## China – Total Social Financing

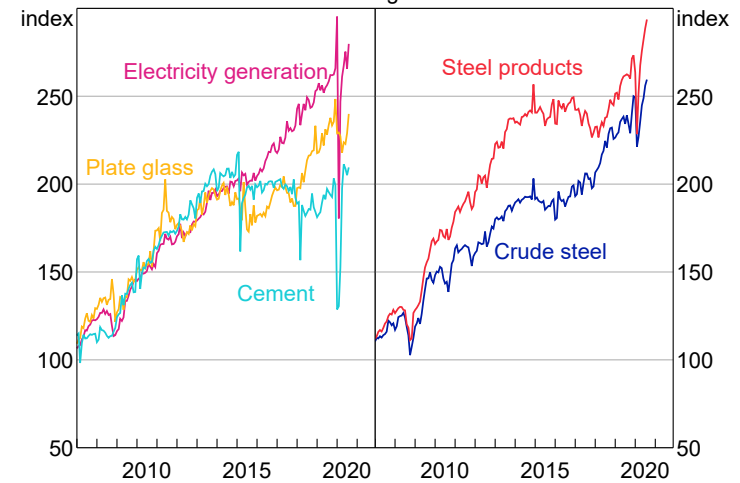
Contribution to six-month annualised growth



\* Sum of business loans, securities financing and off-balance sheet financing  
\*\* Upper bound estimate after including local government bond issuance to pay off debt previously included in TSF  
Sources: CEIC Data; RBA

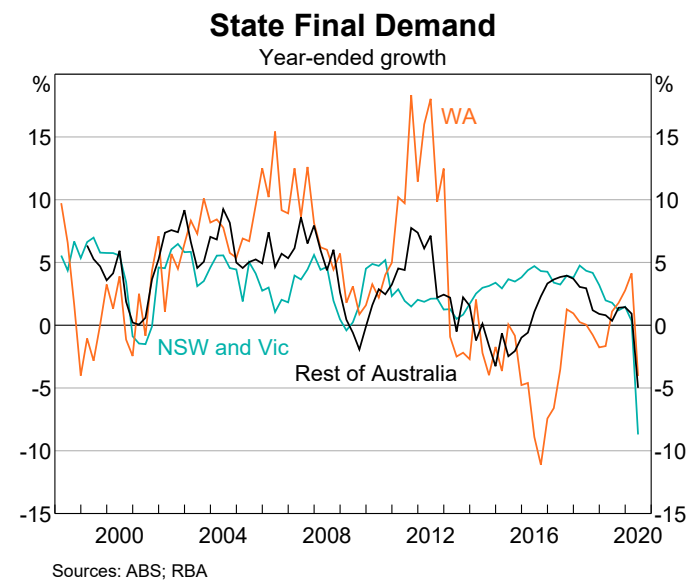
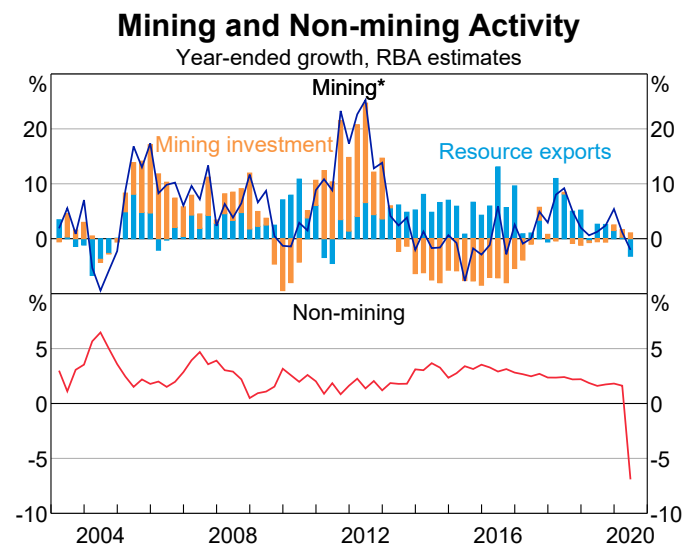
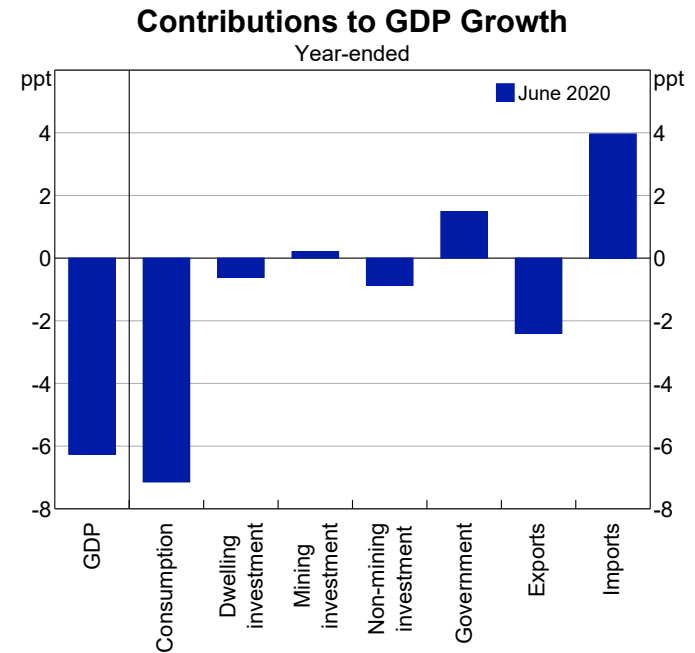
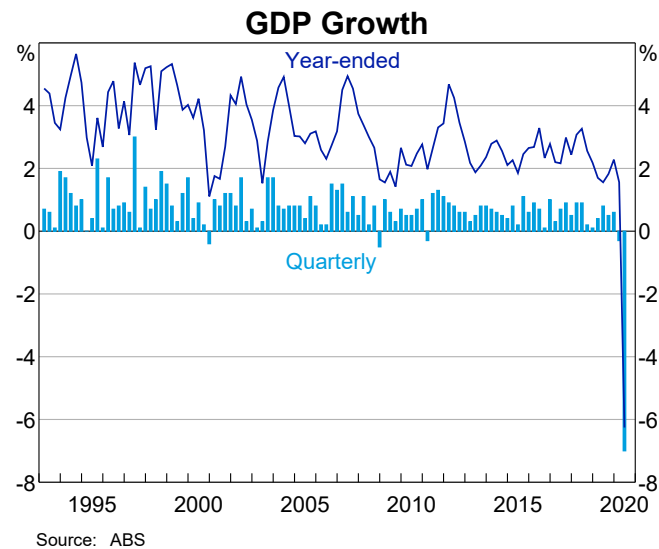
## China – Gross Output of Selected Products\*

2006 average = 100

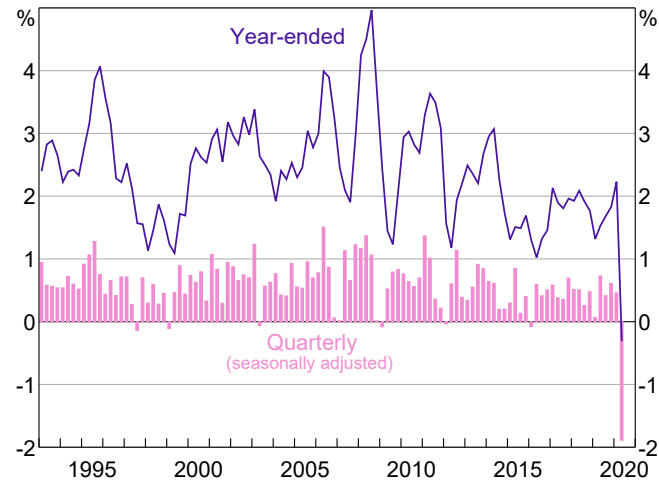


\* Seasonally adjusted by RBA  
Sources: CEIC Data; RBA

# Australian Growth



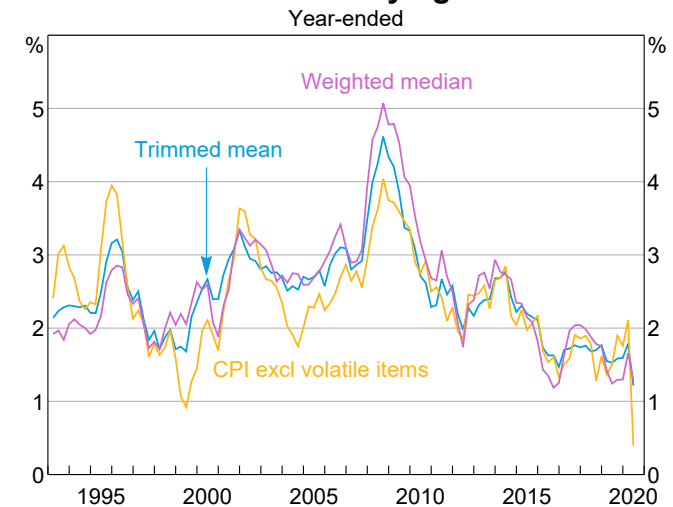
## Consumer Price Inflation\*



\* Excludes interest charges prior to the September quarter 1998; adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

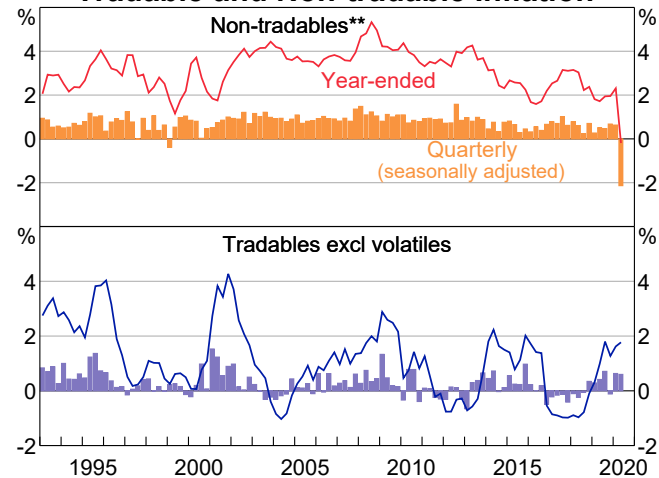
## Measures of Underlying Inflation\*



\* Excludes interest charges prior to September 1998 and deposit & loan facilities prior to September 2011; adjusted for 1999–2000 tax changes

Sources: ABS; RBA

## Tradable and Non-tradable Inflation\*

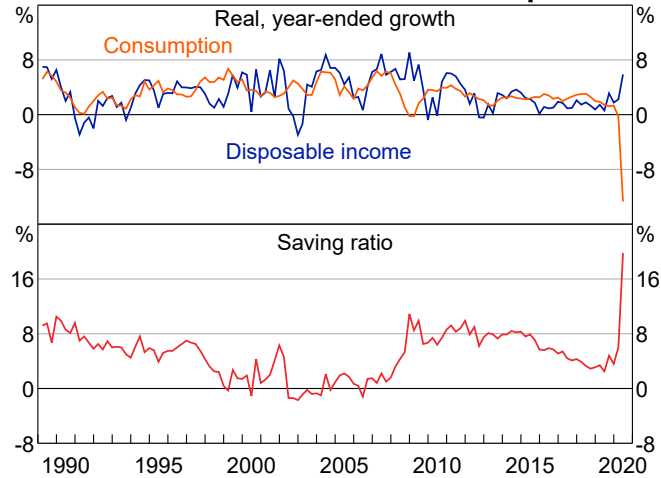


\* Adjusted for the tax changes of 1999–2000

\*\* Excludes interest charges and indirect deposit & loan facilities

Sources: ABS; RBA

## Household Income and Consumption\*

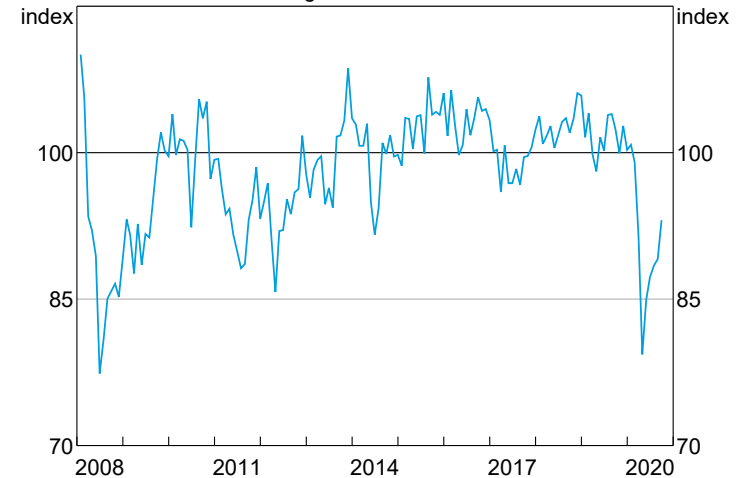


\* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; saving ratio is net of depreciation

Sources: ABS; RBA

## Consumer Sentiment\*

Average since 1980 = 100

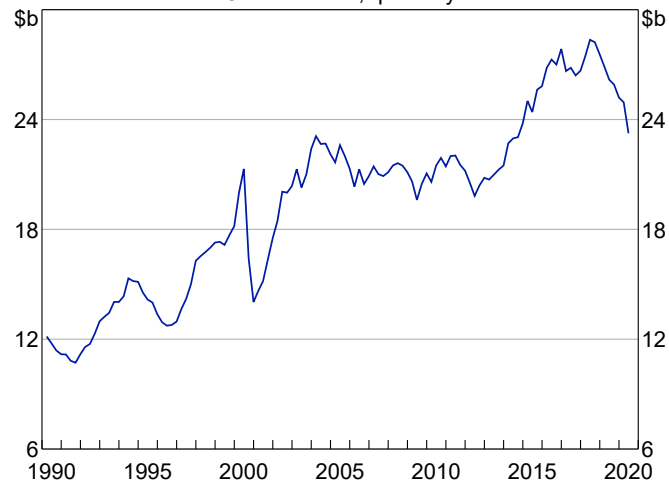


\* Average of the ANZ-Roy Morgan and Westpac-Melbourne Institute consumer sentiment measure of respondents' perceptions of their personal finances relative to the previous year; ANZ-Roy Morgan index rescaled to have the same average as the Westpac-Melbourne Institute index since 1996

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

## Private Dwelling Investment\*

Chain volume, quarterly

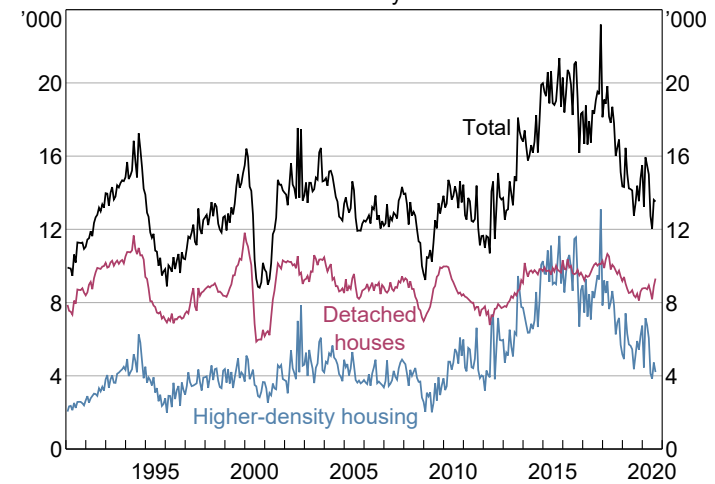


\* Reference year is 2017/18

Source: ABS

## Private Residential Building Approvals

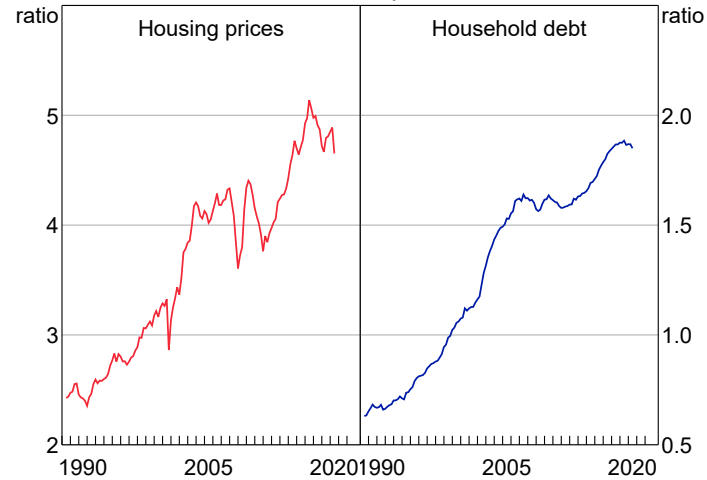
Monthly



Source: ABS

## Housing Prices and Household Debt\*

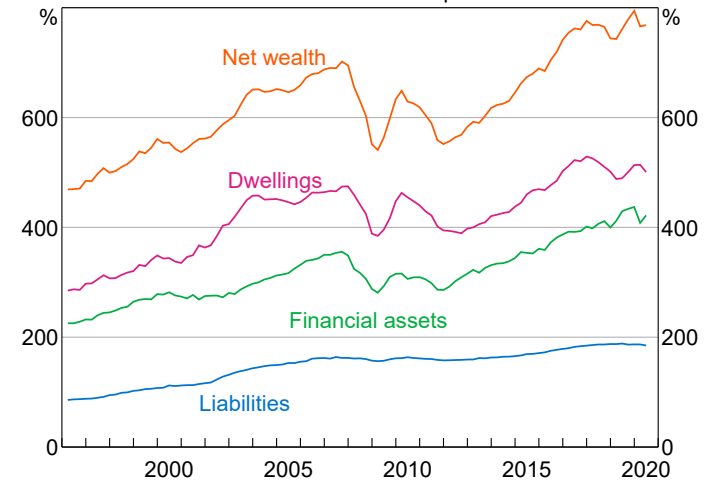
Ratio to household disposable income



\* Household disposable income is after tax, before the deduction of interest payments, and includes income of unincorporated enterprises  
Sources: ABS; CoreLogic; RBA

## Household Wealth and Liabilities\*

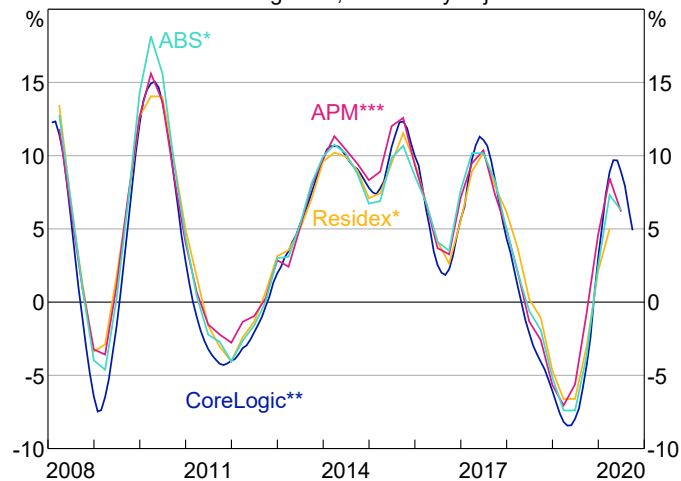
Per cent of annual household disposable income



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

## Housing Prices

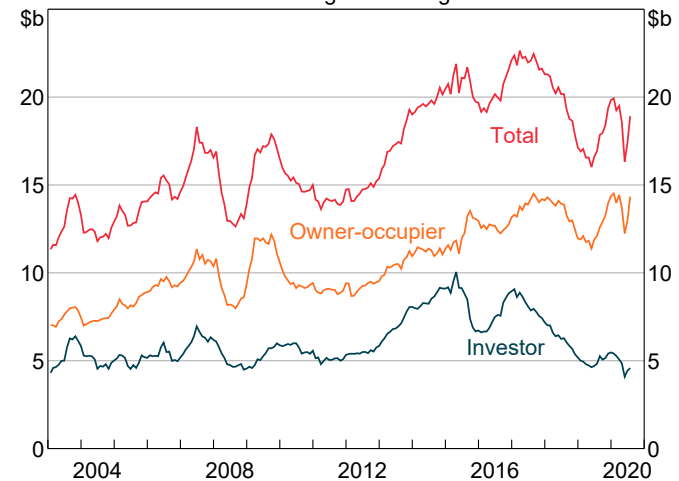
Year-ended growth, seasonally adjusted



\* ABS is a quarterly stratified median price index; Residex is a quarterly repeat sales price index  
\*\* Monthly hedonic price index; non-seasonally adjusted  
\*\*\* Quarterly stratified median price index  
Sources: ABS; APM; CoreLogic; RBA; Residex

## Housing Loan Commitments\*

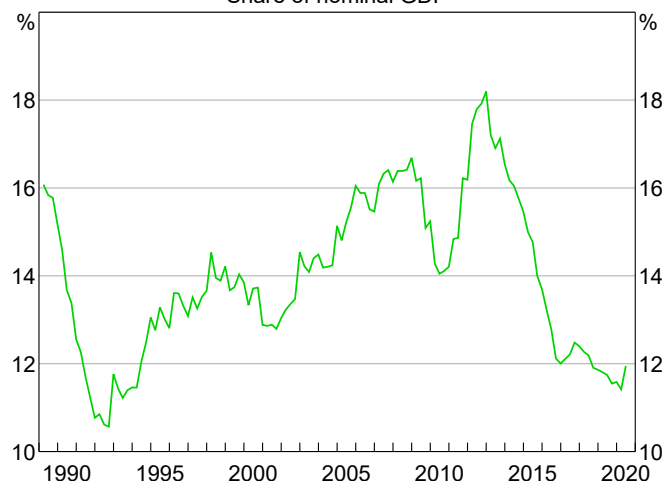
Excluding refinancing



\* Seasonally adjusted  
Sources: ABS; RBA

## Business Investment\*

Share of nominal GDP

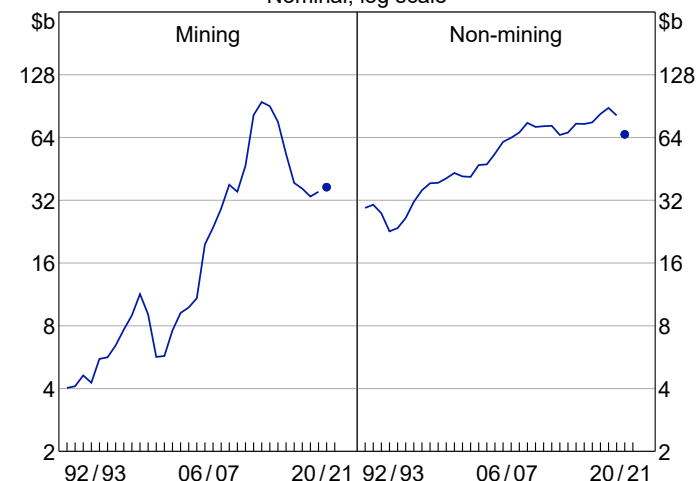


\* Adjusted for second-hand asset transfers between the private and other sectors

Source: ABS

## Capital Expenditure – Mining and Non-mining\*

Nominal, log scale

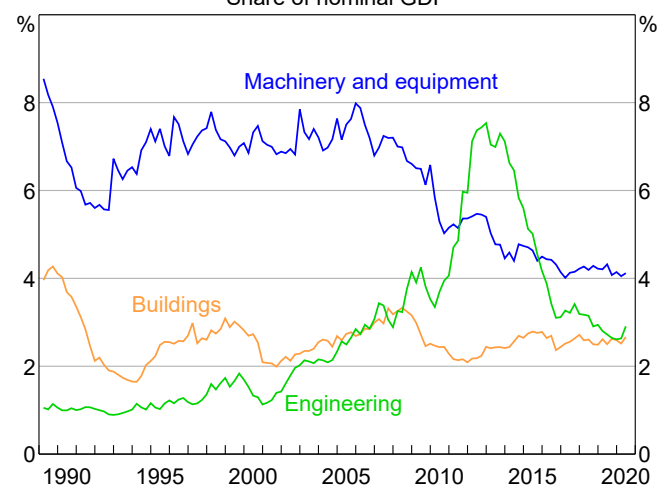


\* Dots are firms' expectations for 2020/21; adjusted for historical differences between expected and realised spending

Sources: ABS; RBA

## Business Investment Components\*

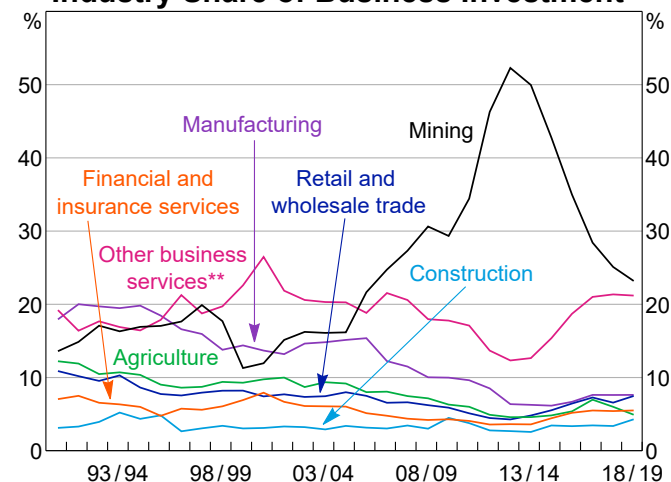
Share of nominal GDP



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

Source: ABS

## Industry Share of Business Investment\*



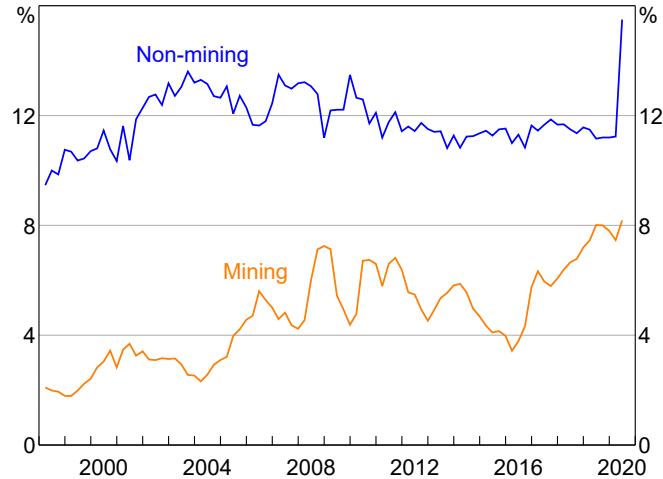
\* Nominal; includes second hand asset transfers

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

Source: ABS

## Private Non-financial Corporation Profits\*

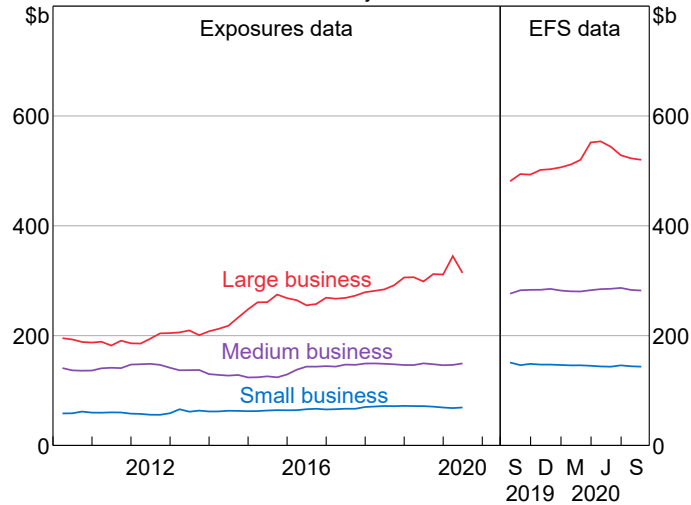
Share of nominal GDP



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

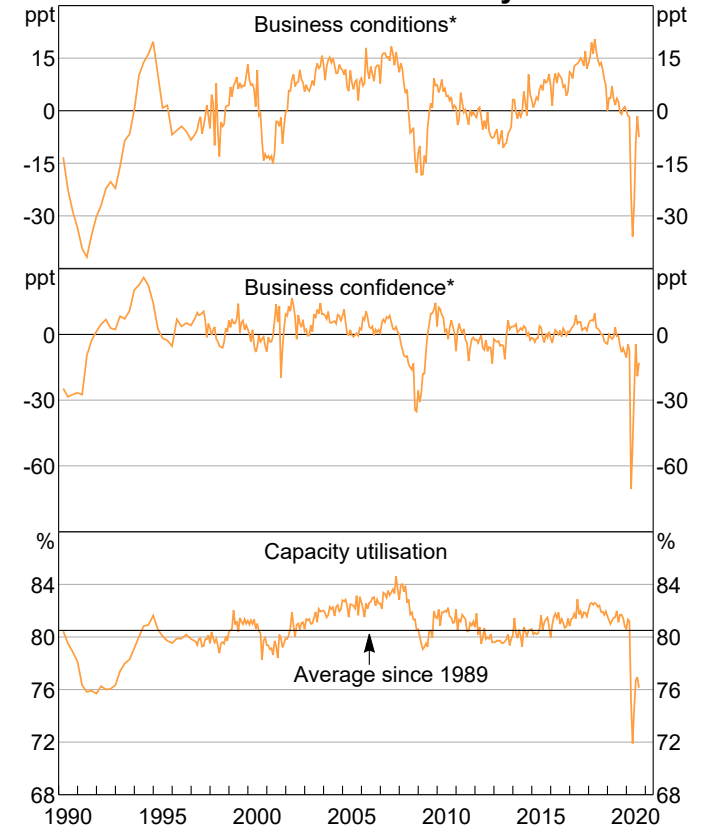
## Lending to Business\*

Break-adjusted



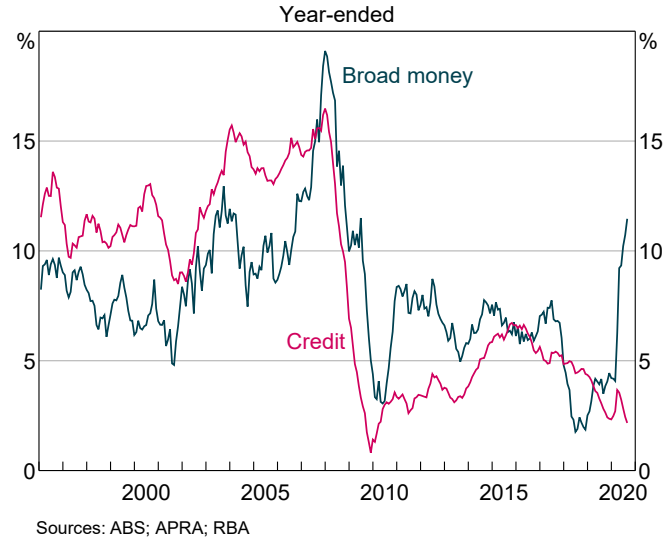
\* Exposures data capture credit exposures on the balance sheets of banks allowed by APRA to use an internal ratings-based approach for credit risk management; EFS data are based on reporting of banks and finance companies that have \$2 billion or more of business credit  
Sources: APRA; RBA

## NAB Business Survey

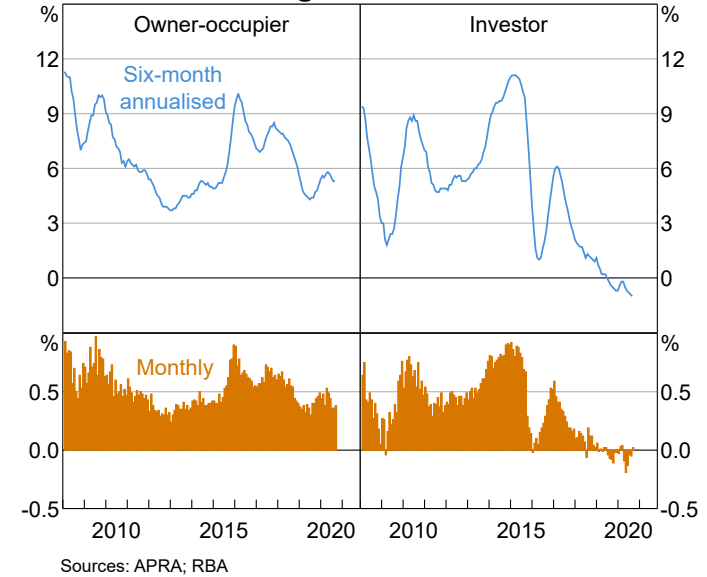


\* Net balance; deviation from average since 1989  
Sources: NAB; RBA

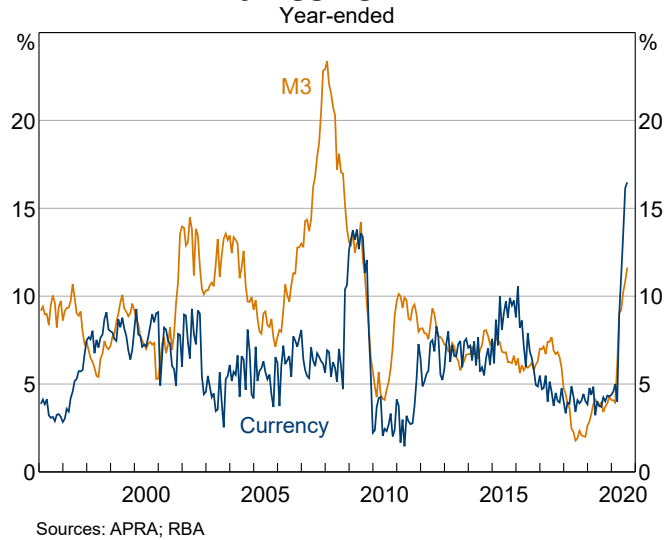
## Credit and Broad Money Growth



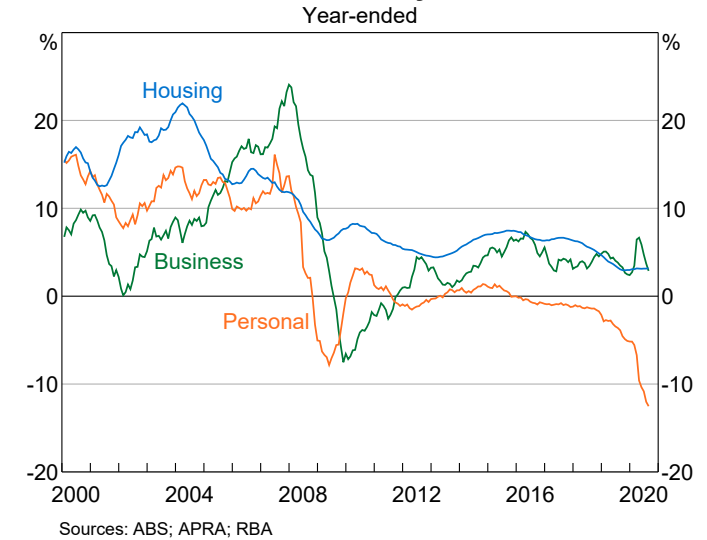
## Housing Credit Growth



## Monetary Aggregates Growth

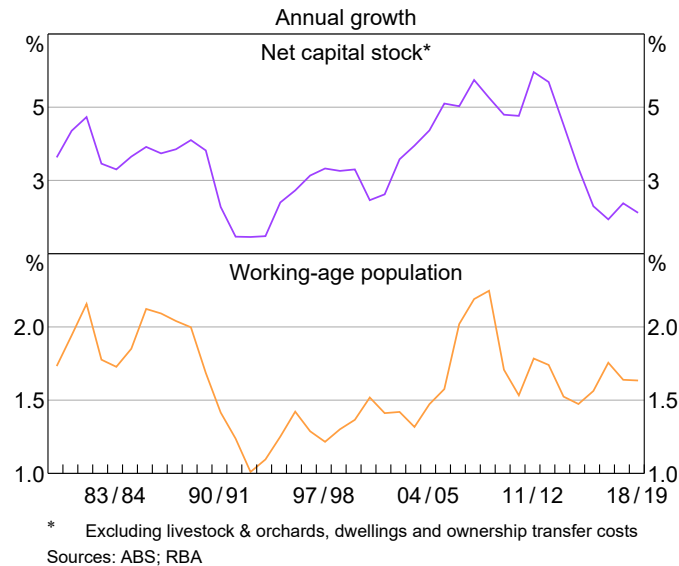


## Credit Growth by Sector

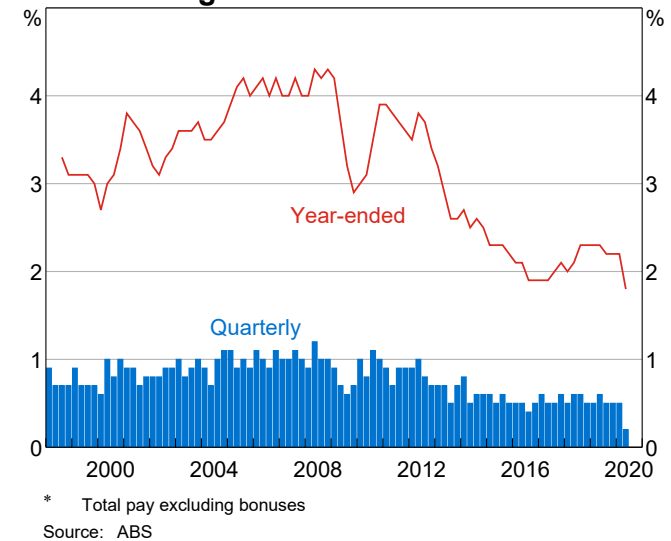


# Factors of Production and Labour Market

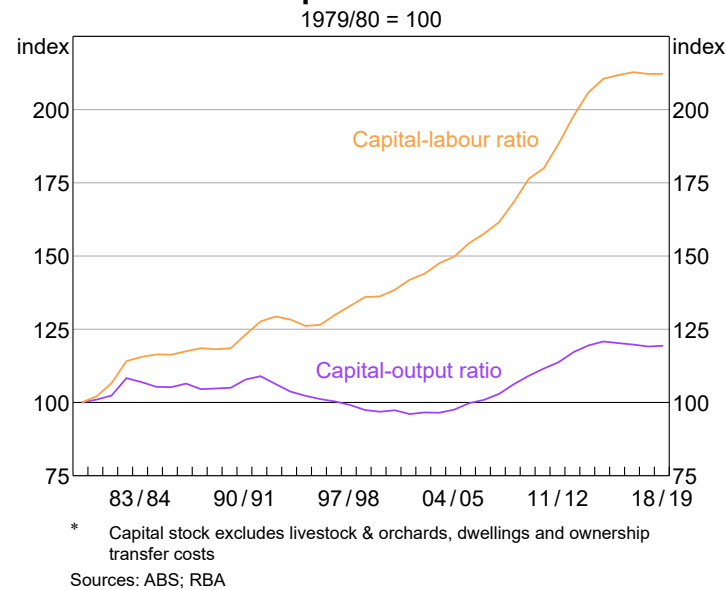
## Factors of Production



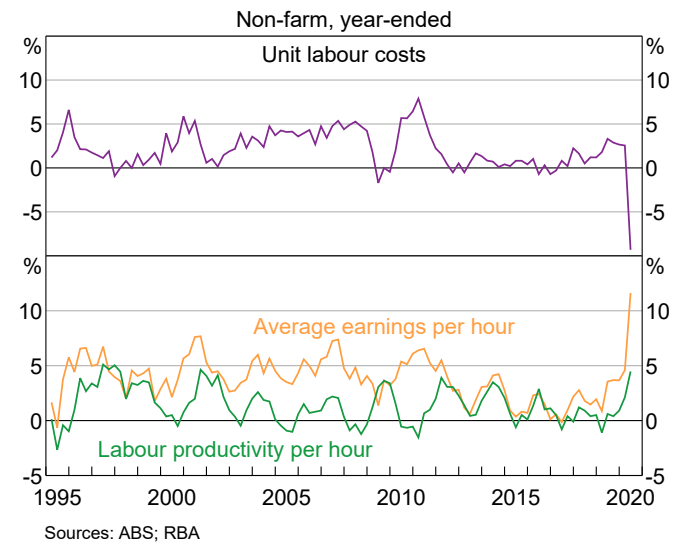
## Wage Price Index Growth\*



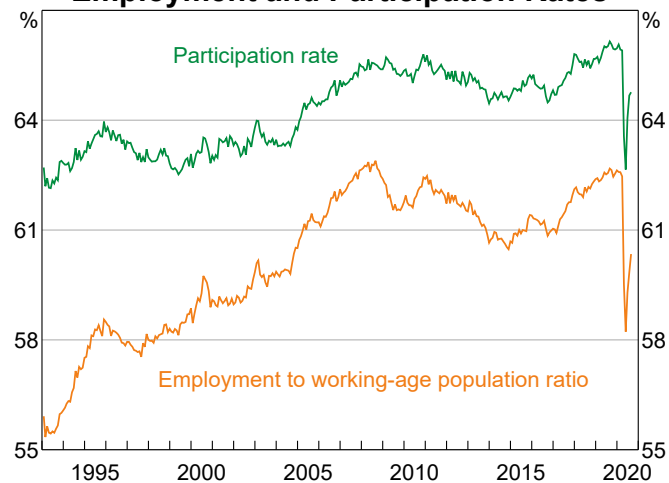
## Capital Ratios\*



## Unit Labour Costs Growth

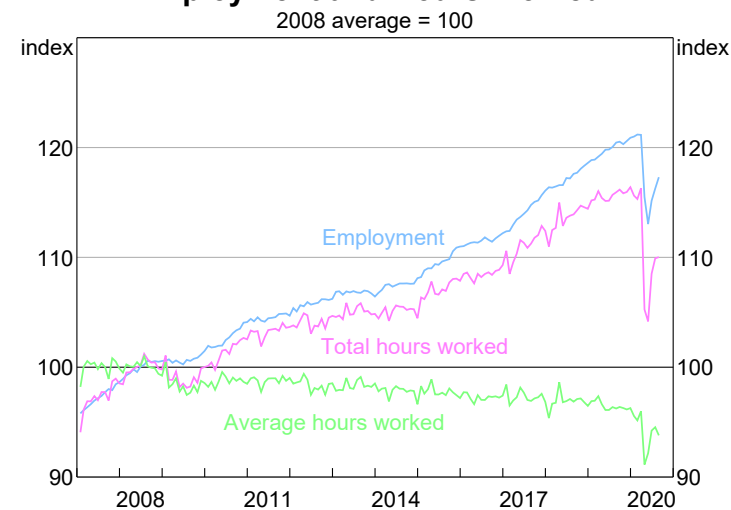


### Employment and Participation Rates



Source: ABS

### Employment and Hours Worked\*

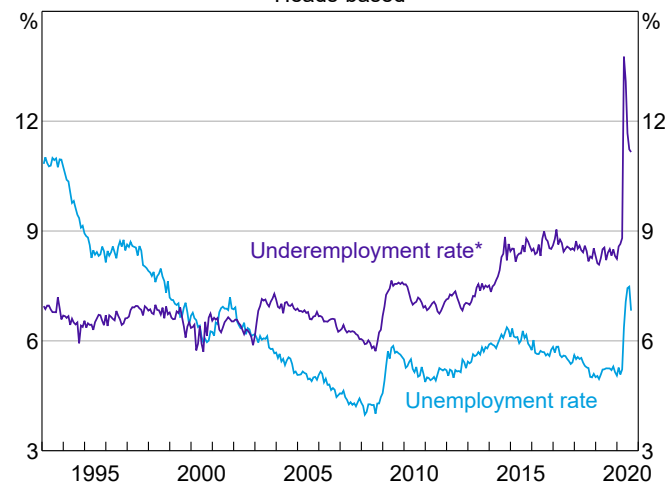


\* Seasonally adjusted

Sources: ABS; RBA

### Labour Underutilisation Rates

Heads-based

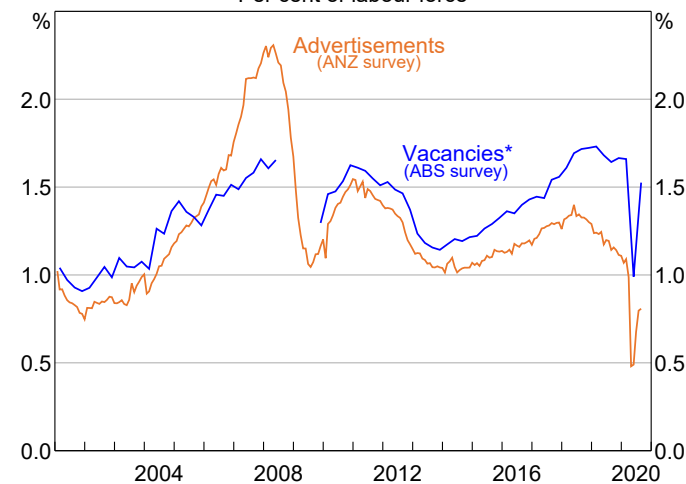


\* Full-time workers on reduced hours for economic reasons and part-time workers who would like, and are available, to work more hours

Source: ABS

### Job Vacancies and Advertisements

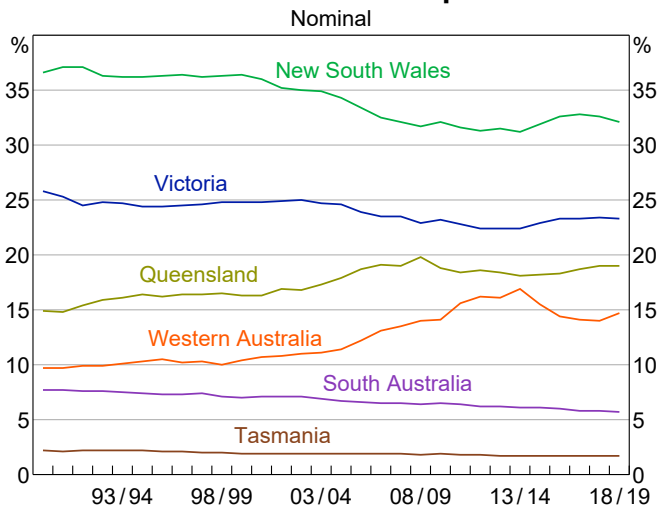
Per cent of labour force



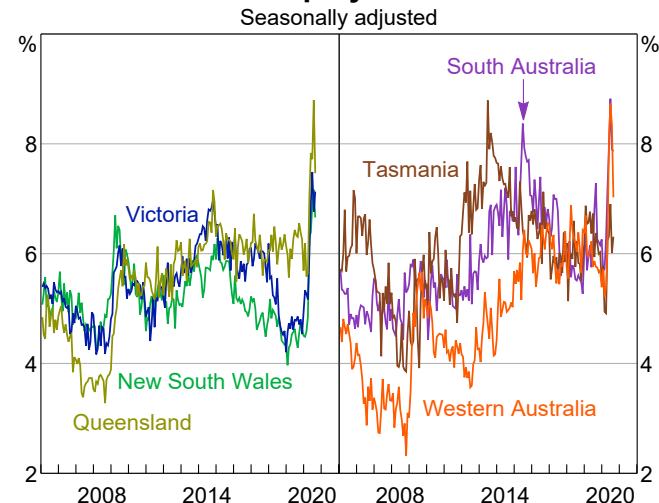
\* This survey was suspended between May 2008 and November 2009

Sources: ABS; ANZ

## State Share of Output



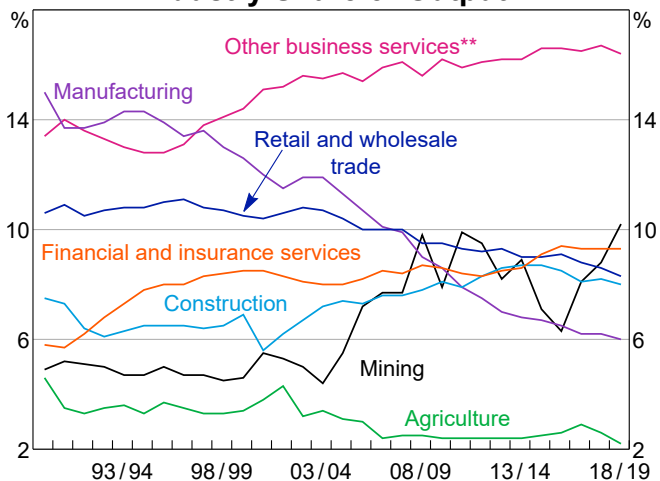
## State Unemployment Rates\*



\* The trend series have been suspended from April 2020, until more certainty emerges in the underlying trend in labour market activity over the COVID-19 period

Source: ABS

## Industry Share of Output\*

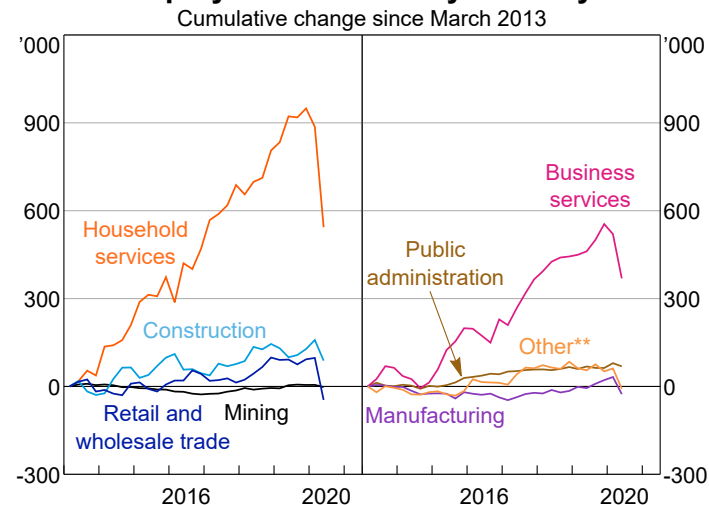


\* Nominal gross value added

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

Source: ABS

## Employment Growth by Industry\*



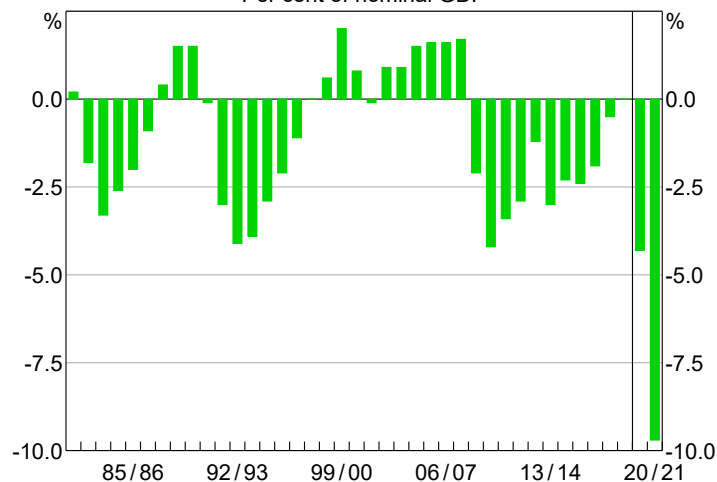
\* The trend series have been suspended from June 2020, until more certainty emerges in the underlying trend in labour market activity over the COVID-19 period

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

Source: ABS

### Australian Government Budget Balance\*

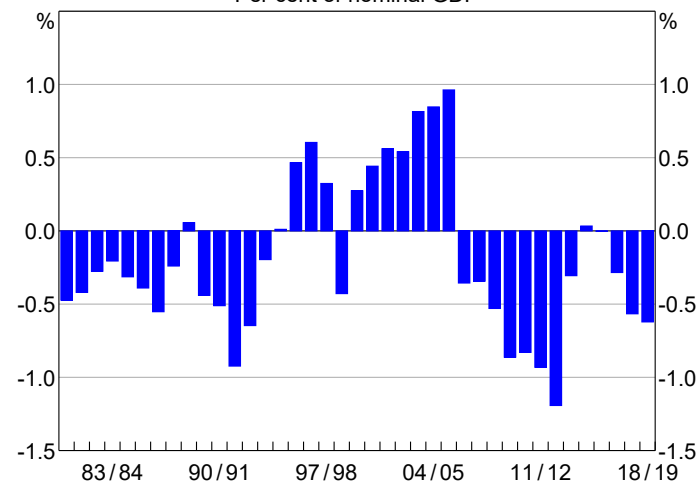
Per cent of nominal GDP



\* Underlying cash balance; 2020 July economic and fiscal update  
Source: Australian Treasury

### State Budget Balances\*

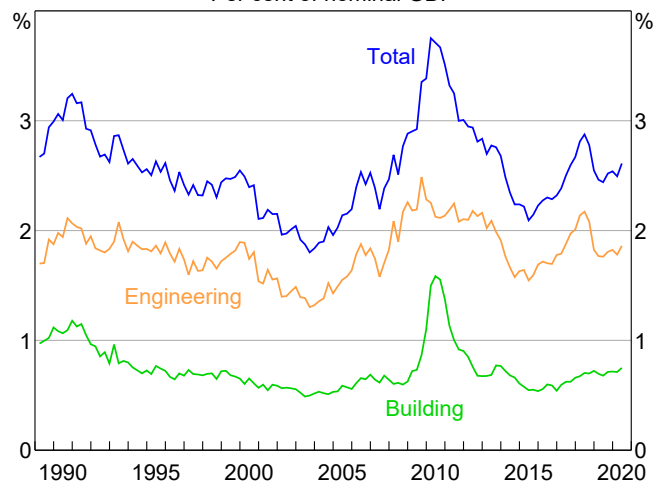
Per cent of nominal GDP



\* Underlying cash balance  
Source: ABS

### Public Construction Work Done

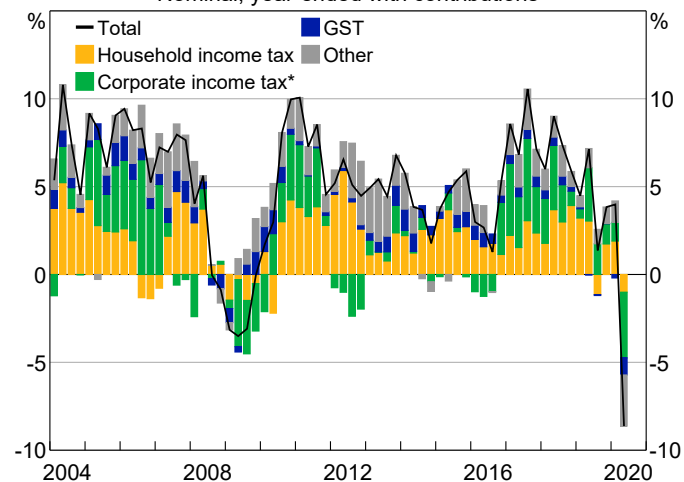
Per cent of nominal GDP



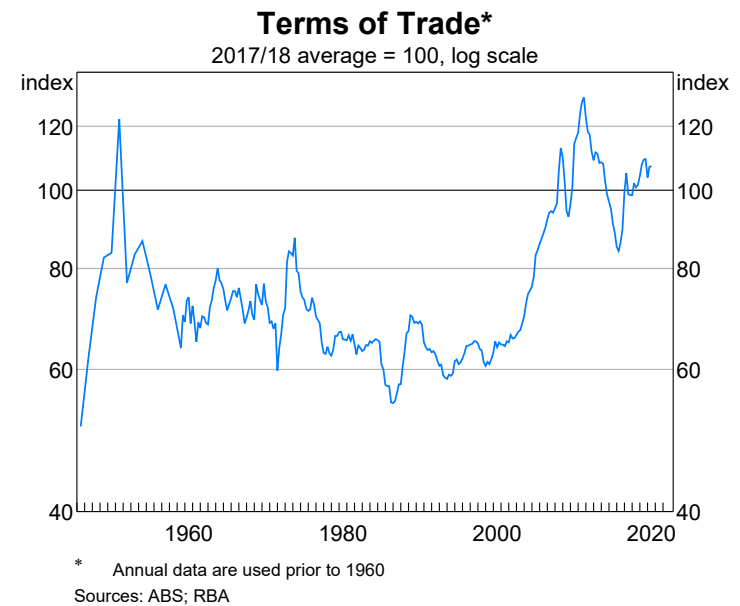
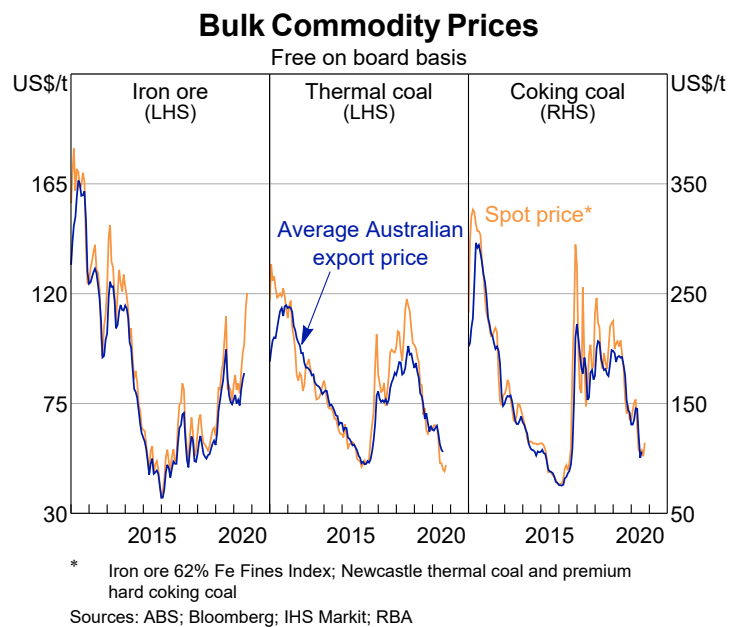
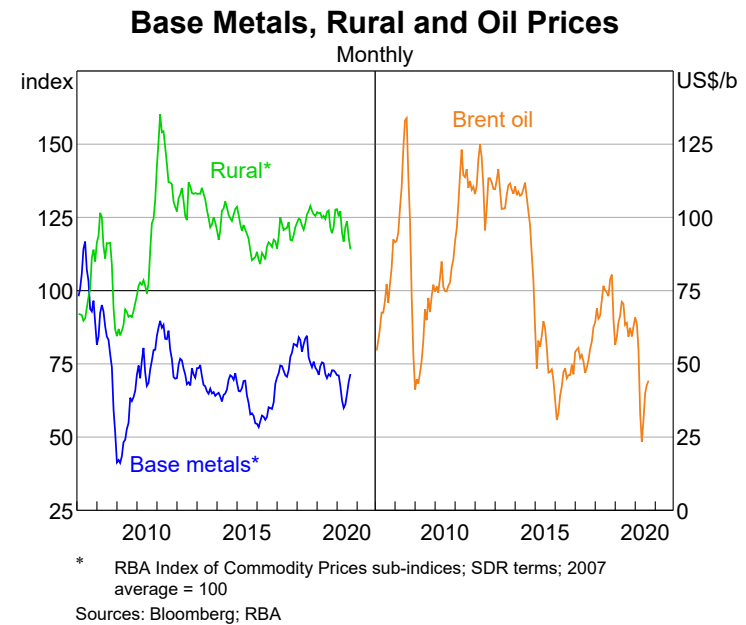
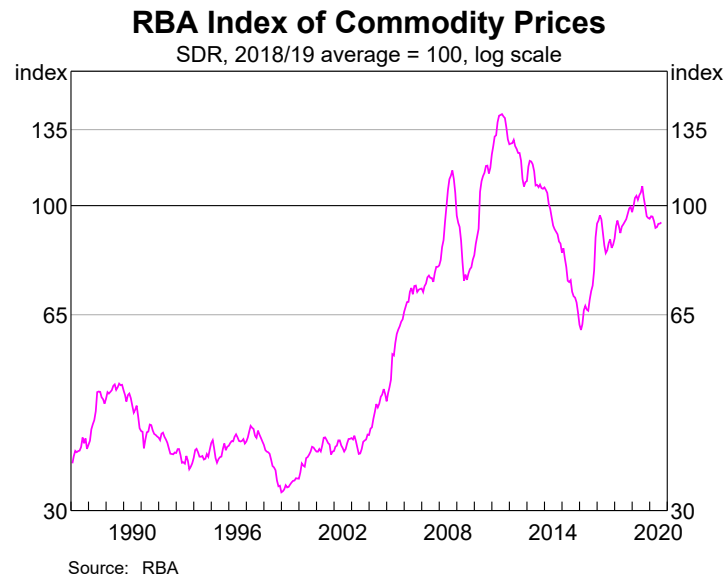
Source: ABS

### Taxation Revenue Growth

Nominal, year-ended with contributions



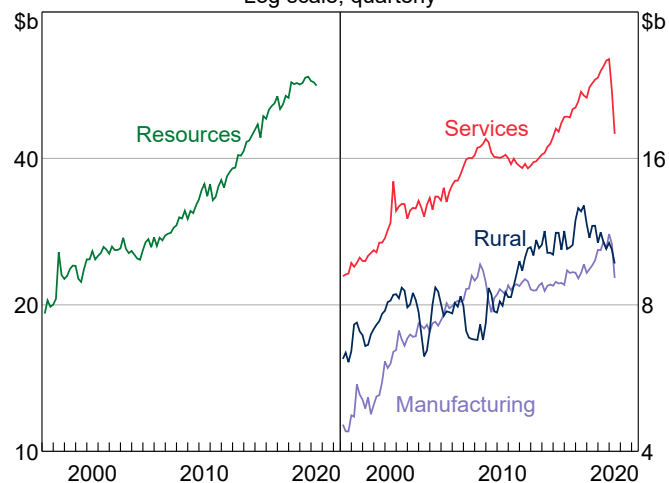
\* Only includes taxation of resident corporations  
Source: ABS



# Balance of Payments and External Position

## Export Volumes

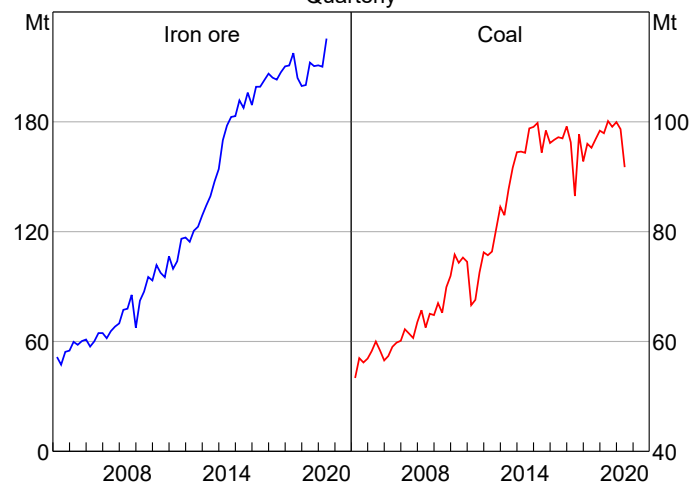
Log scale, quarterly



Sources: ABS; RBA

## Bulk Commodity Exports

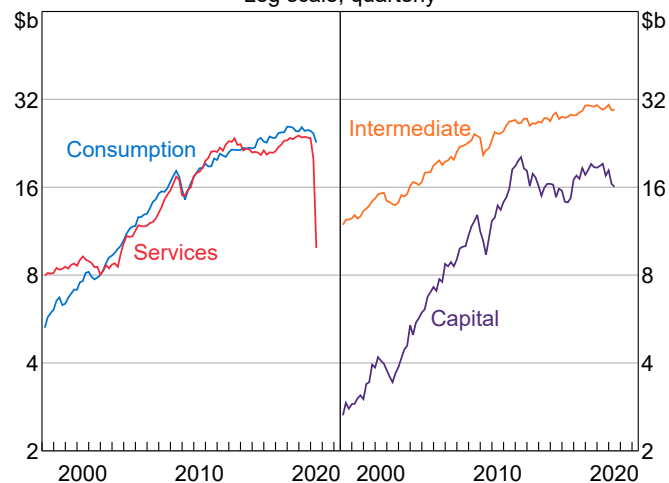
Quarterly



Sources: ABS; RBA

## Import Volumes

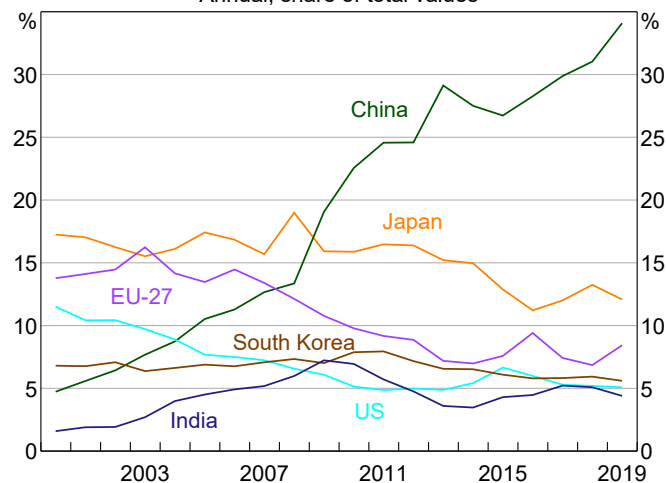
Log scale, quarterly



Source: ABS

## Exports by Destination

Annual, share of total values

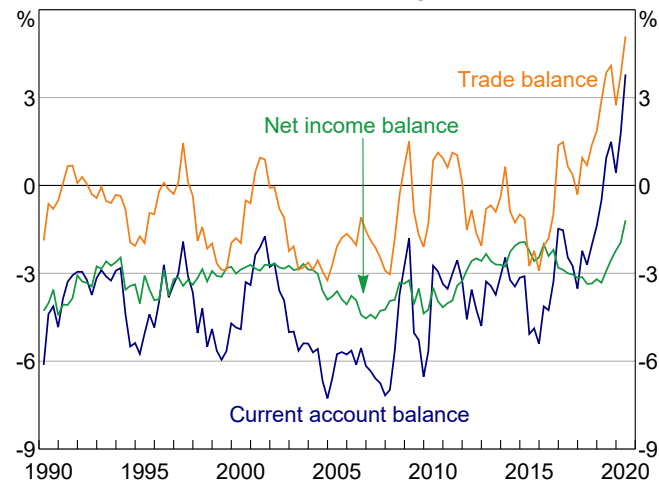


Source: ABS



**Current Account Balance**

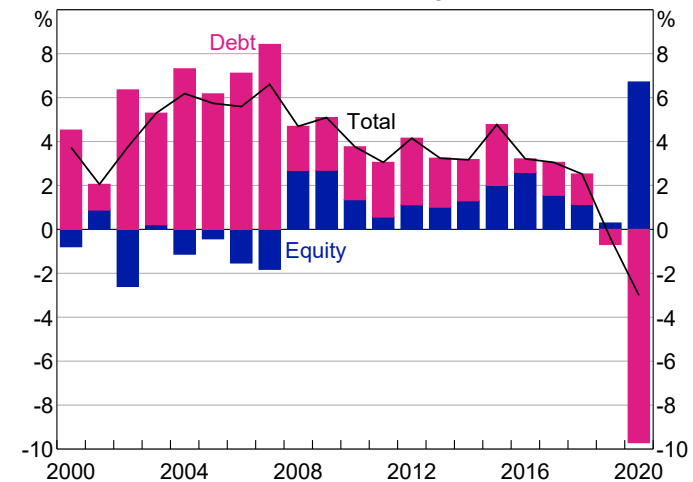
Per cent of nominal GDP



Source: ABS

**Net Capital Inflow\***

Per cent of nominal GDP

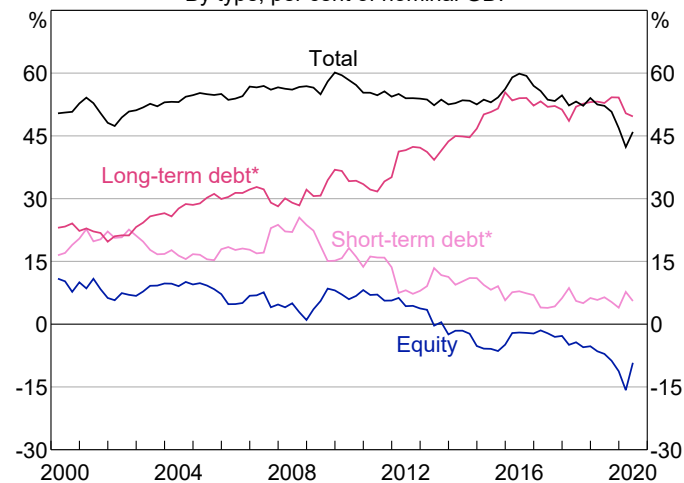


\* 2020 values include the March and June quarters

Source: ABS

**Net Foreign Liabilities**

By type, per cent of nominal GDP

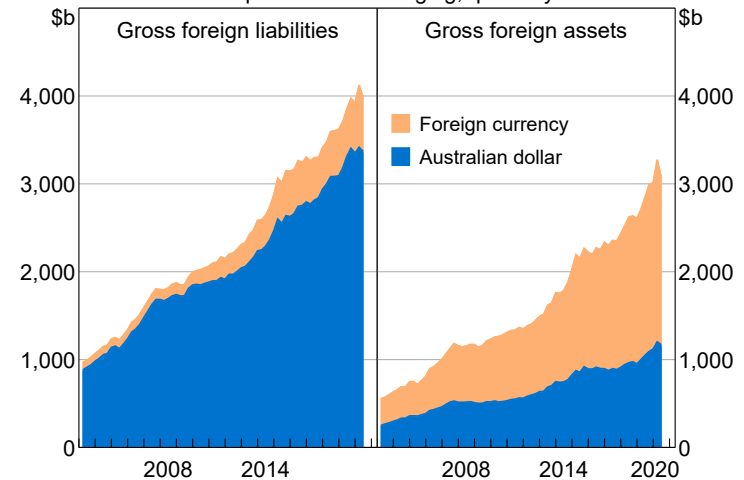


\* Short-term includes debt with residual maturity of one year or less;  
long-term includes all other debt

Source: ABS

**External Position\***

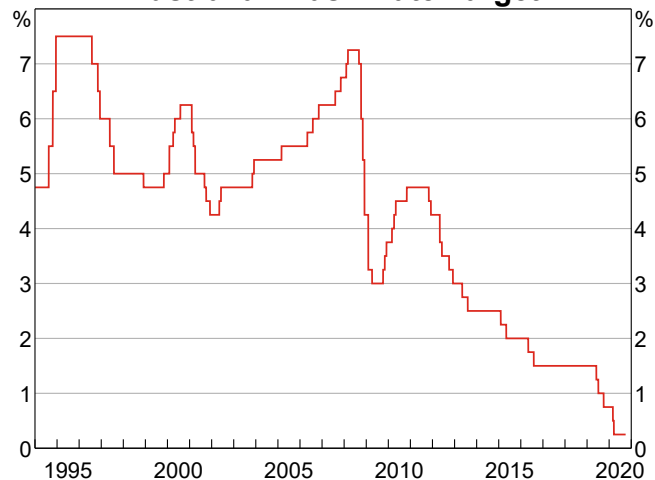
Composition after hedging, quarterly



\* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

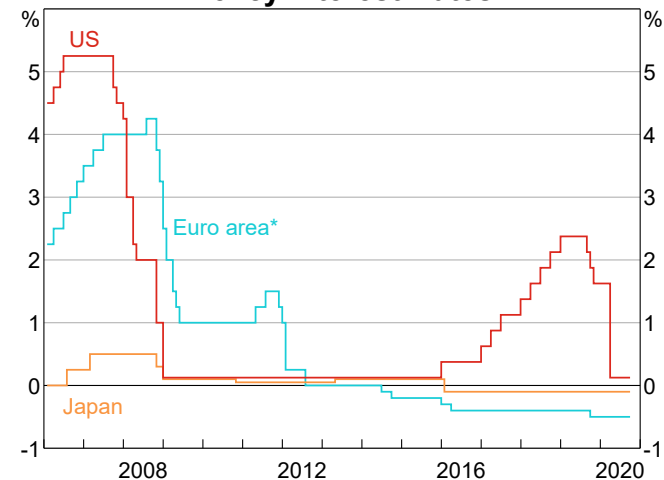
Sources: ABS; RBA

## Australian Cash Rate Target



Source: RBA

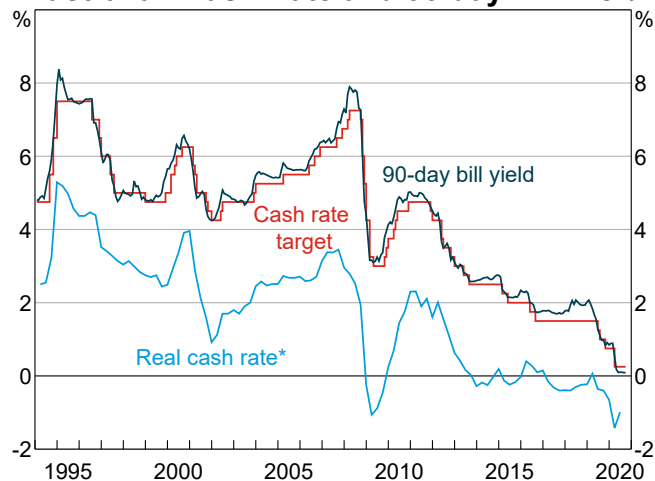
## Policy Interest Rates



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

Source: Central banks

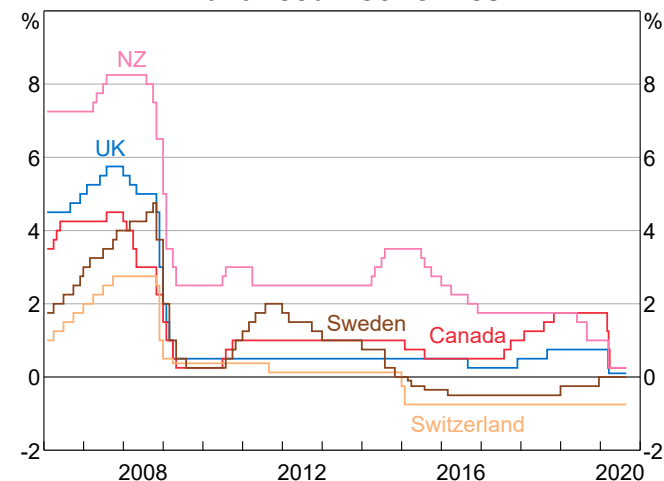
## Australian Cash Rate and 90-day Bill Yield



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

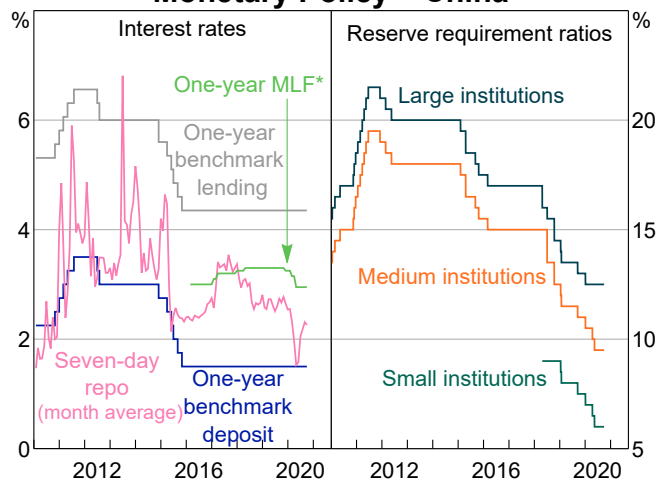
Sources: ABS; AFMA; ASX; RBA

## Policy Interest Rates – Selected Advanced Economies



Source: Central banks

## Monetary Policy – China



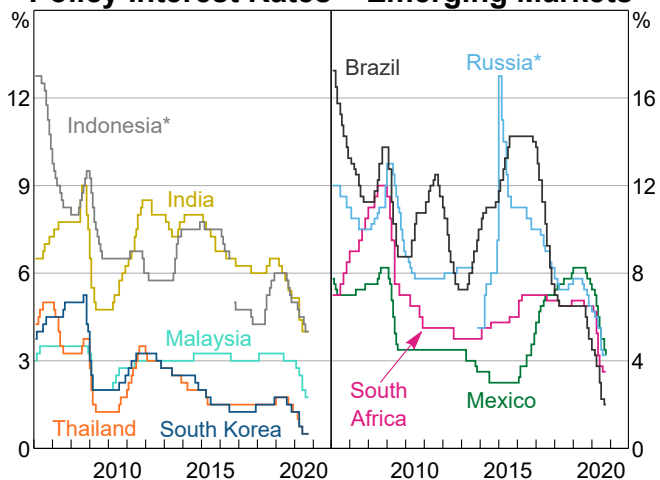
\* Medium term lending facility  
Sources: CEIC Data; RBA

## 10-year Australian Government Bond Yield



Sources: RBA; Yieldbroker

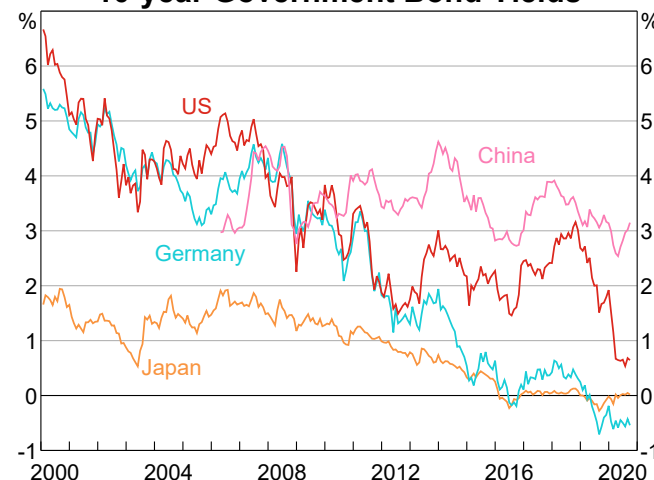
## Policy Interest Rates – Emerging Markets



\* Breaks in series indicate changes in the official policy rates for Russia (September 2013) and Indonesia (August 2016)

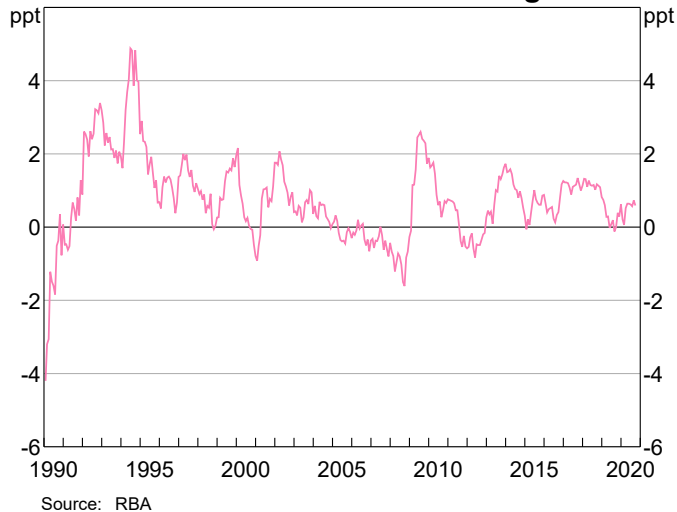
Source: Central banks

## 10-year Government Bond Yields

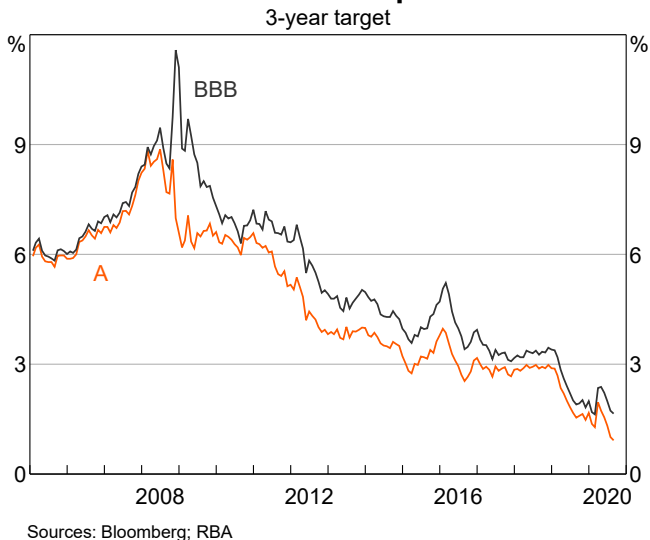


Sources: CEIC Data; Refinitiv

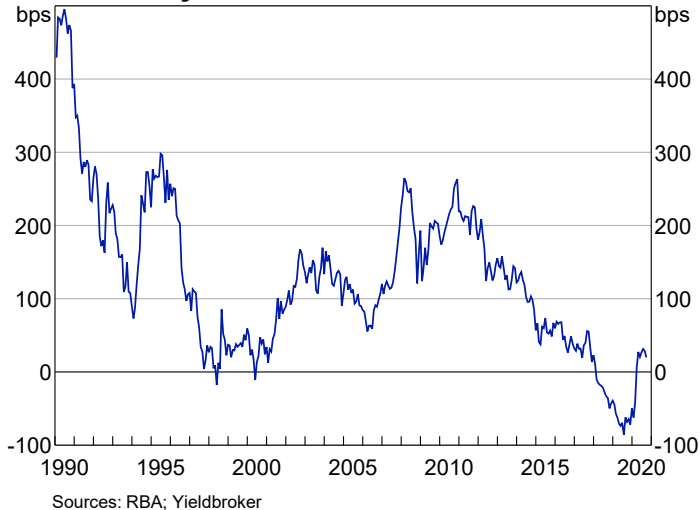
**Spread between Australian 10-year Bond Yield and the Cash Rate Target**



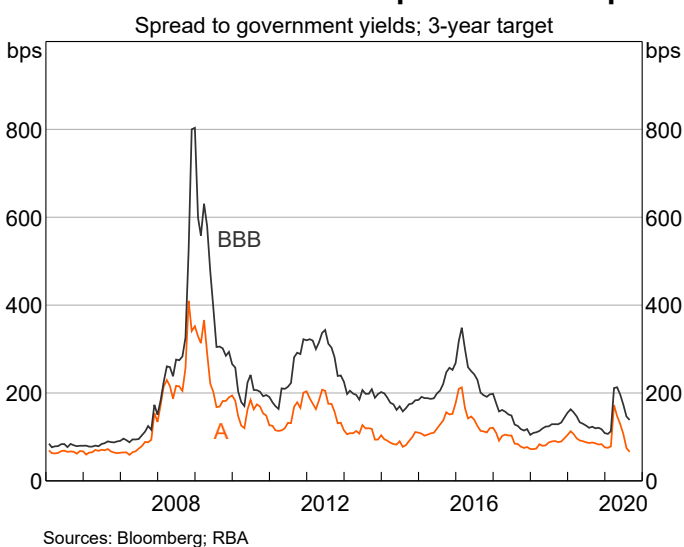
**Australian Non-financial Corporate Bond Yields**

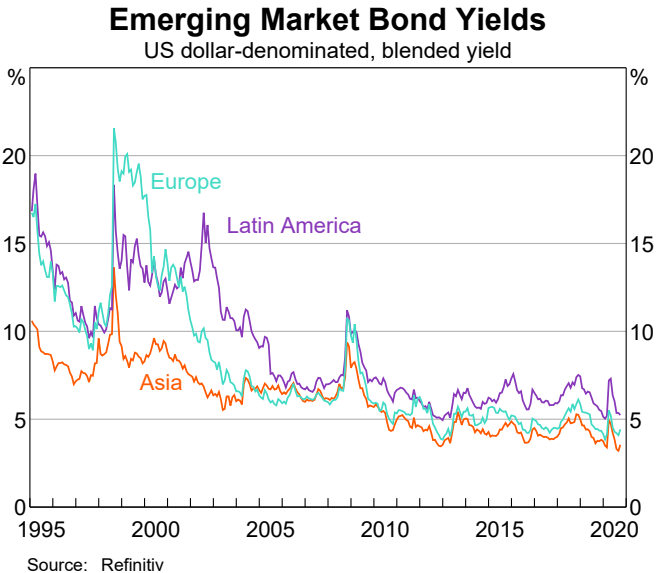
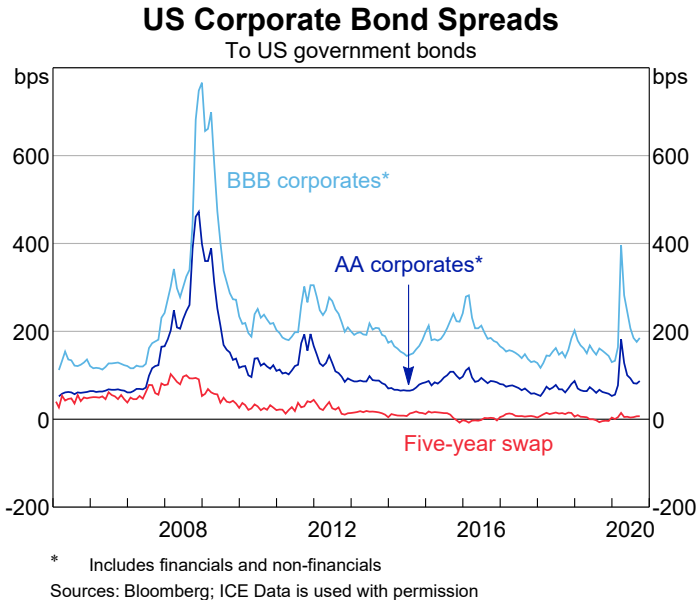
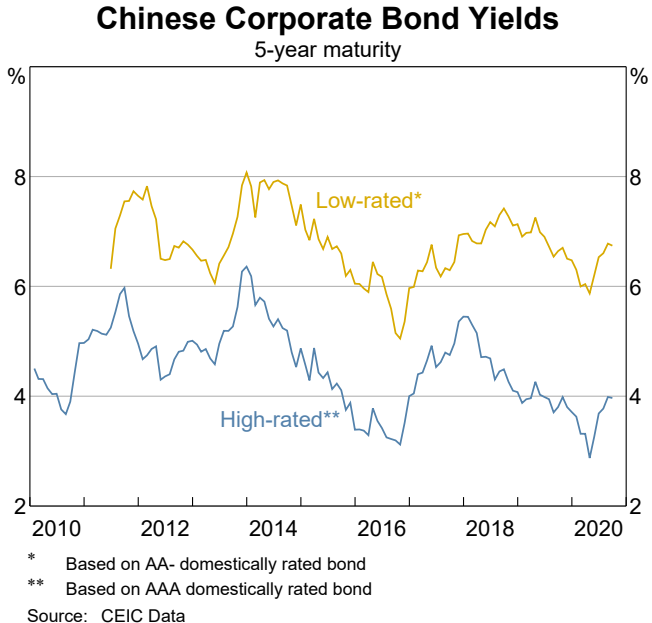
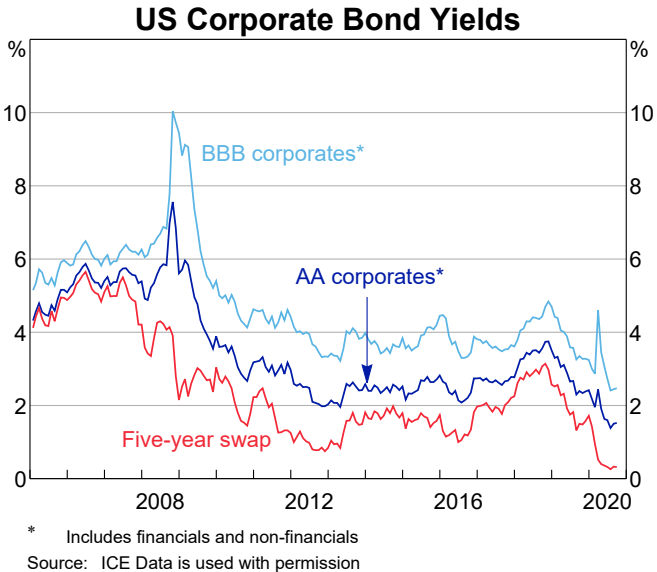


**Differential between Australian and US 10-year Government Bond Yields**

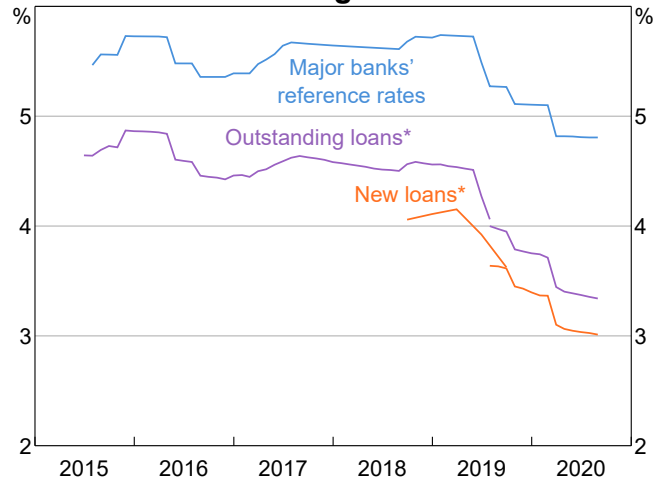


**Australian Non-financial Corporate Bond Spreads**





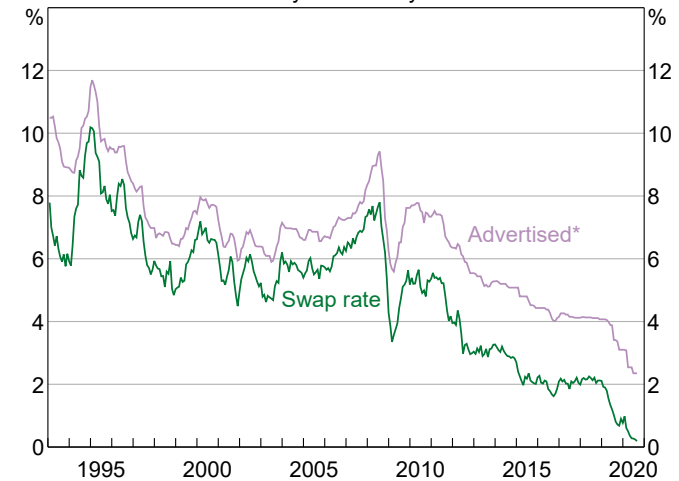
## Variable Housing Interest Rates



\* Series break in July 2019; thereafter, data based on EFS collection  
Sources: APRA; banks' websites; CANSTAR; RBA; Securitisation System

## Fixed Housing Interest Rates

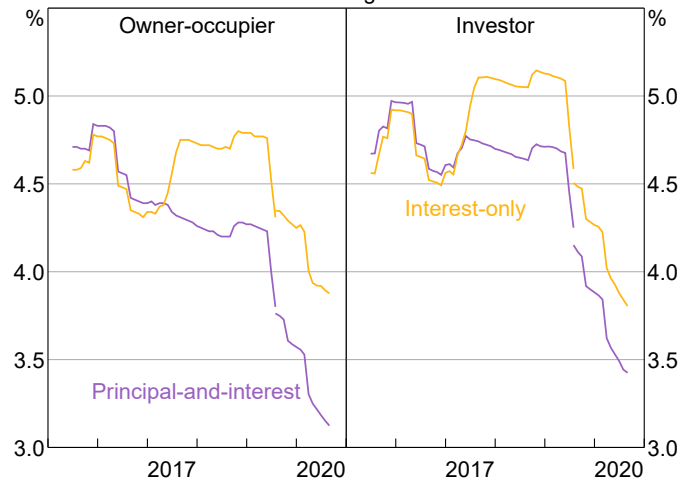
3-year maturity



\* Available to owner-occupiers  
Sources: Banks' websites; CANSTAR; RBA; Refinitiv

## Housing Interest Rates\*

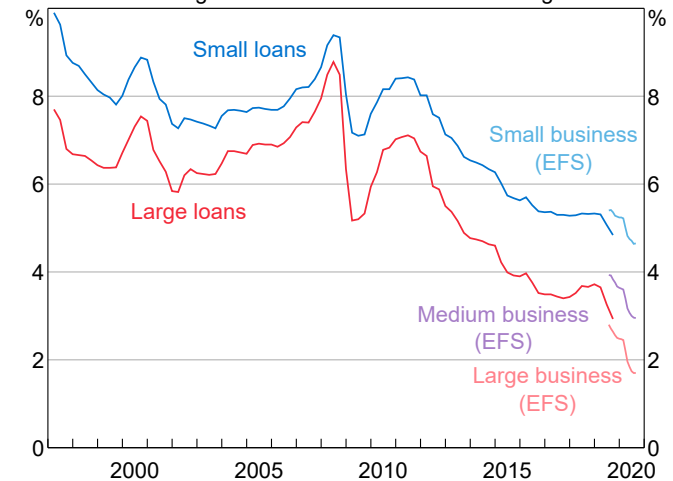
Outstanding loans



\* Average of variable-rate securitised loans to 2019; thereafter, average of fixed and variable-rate loans, based on EFS data  
Sources: APRA; RBA; Securitisation System

## Australian Business Lending Rates\*

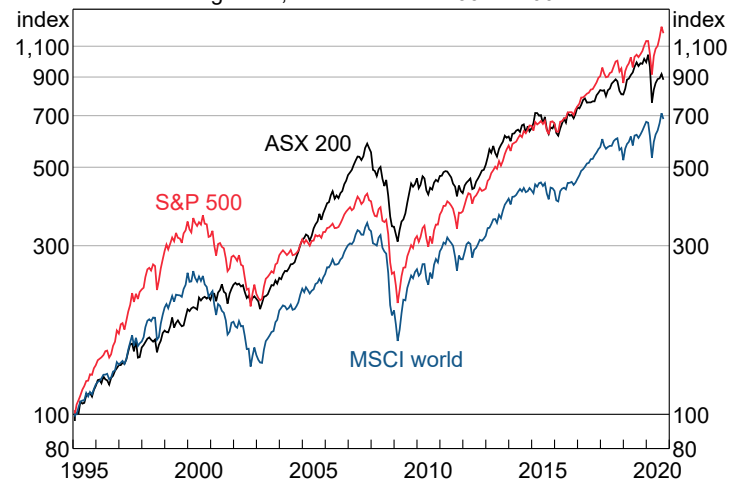
Average interest rate on credit outstanding



\* Small loans are loans less than \$2 million; large loans are loans \$2 million or more; new series from July 2019 are from the Economic and Financial Statistics (EFS) collection (see Statistical Table F7)  
Sources: APRA; RBA

## Share Price Accumulation Indices

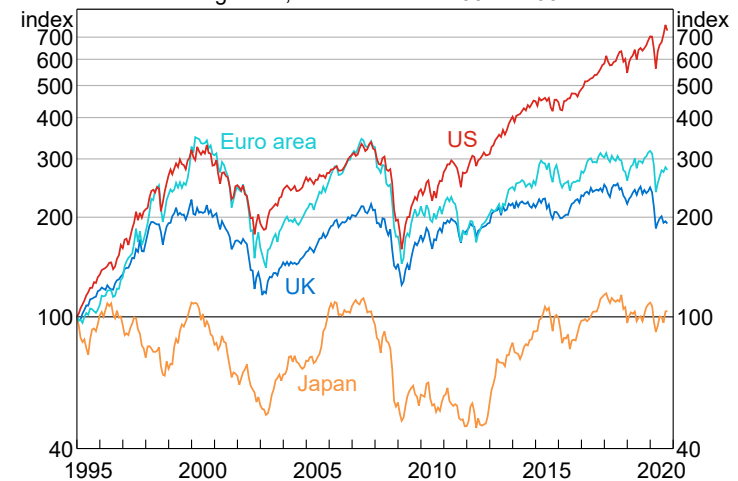
Log scale, end December 1994 = 100



Sources: RBA; Refinitiv

## Advanced Economies' Share Price Indices

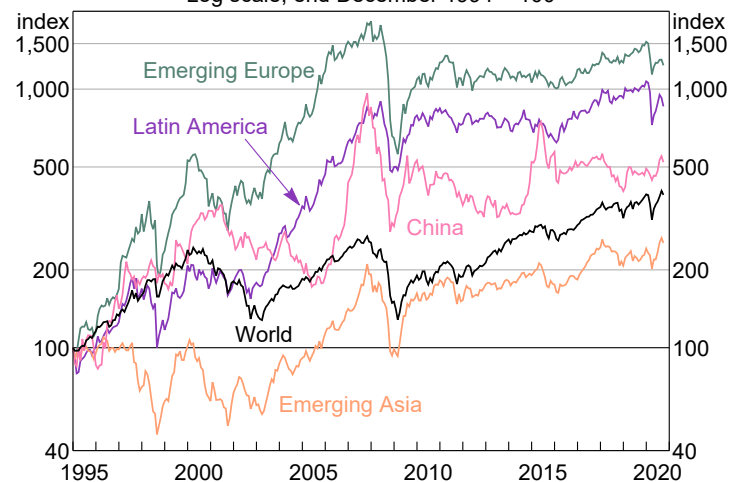
Log scale, end December 1994 = 100



Sources: Bloomberg; RBA

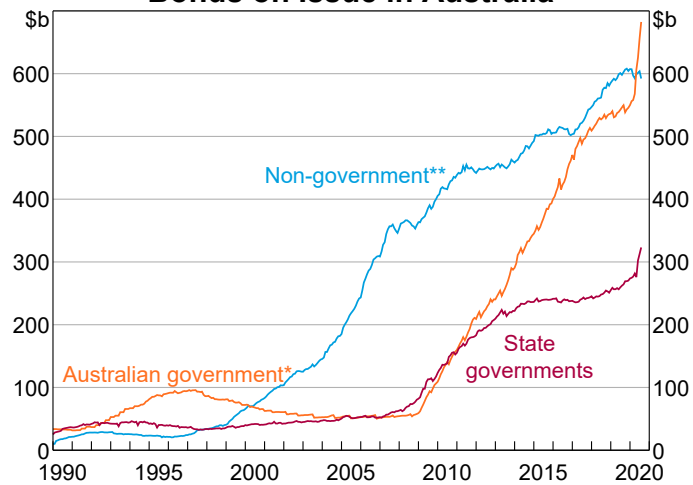
## Emerging Markets' Share Price Indices\*

Log scale, end December 1994 = 100



\* MSCI indices; Shanghai Composite Index for China  
Sources: Bloomberg; MSCI; RBA

## Bonds on Issue in Australia

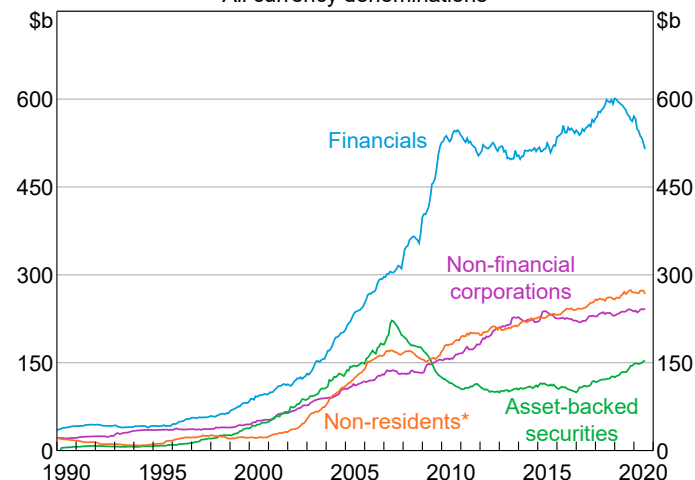


\* Excludes bonds purchased by the Australian Government  
 \*\* Excludes ADIs' self-securitisations, includes government-guaranteed bonds

Sources: ABS; AOFM; Bloomberg; KangaNews; Private Placement Monitor; RBA; State Treasury Corporations

## Total Non-government Bonds on Issue

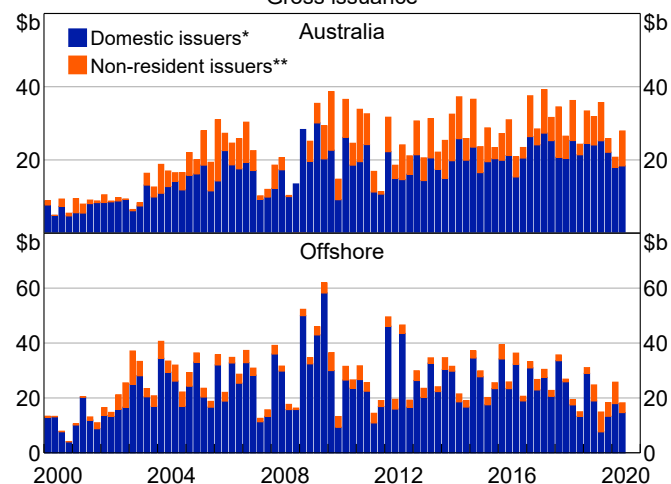
All currency denominations



\* Australian dollar-denominated bonds only  
 Sources: ABS; Bloomberg; KangaNews; Private Placement Monitor; RBA

## Non-government Bond Issuance

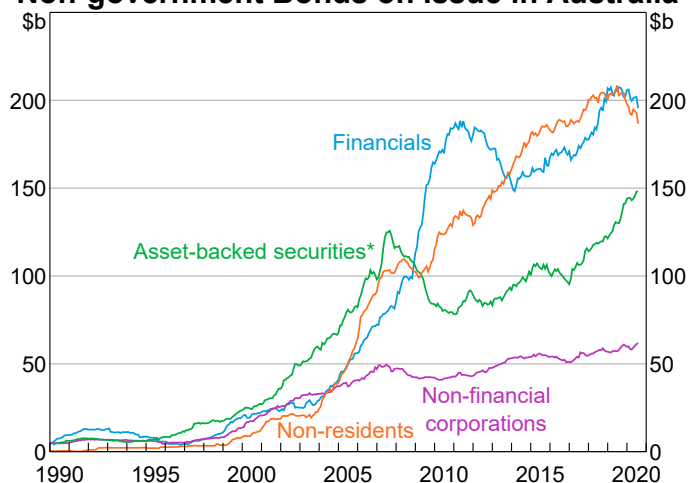
Gross issuance



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

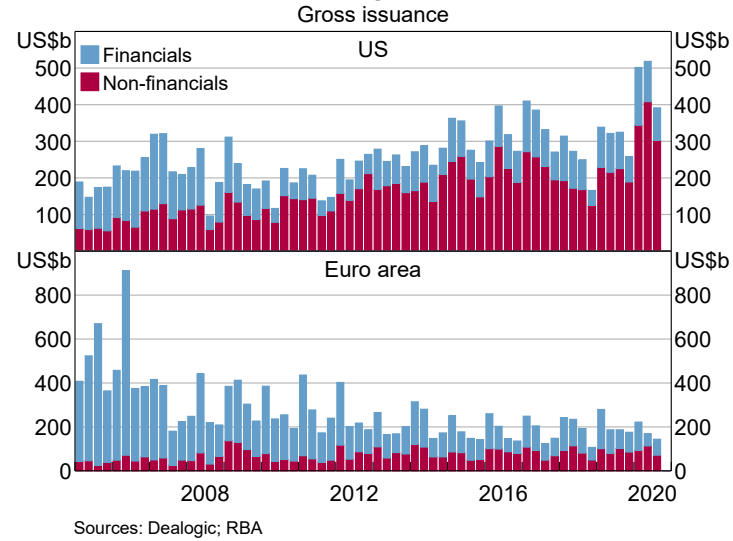
Sources: Bloomberg; KangaNews; Private Placement Monitor; RBA

## Non-government Bonds on Issue in Australia

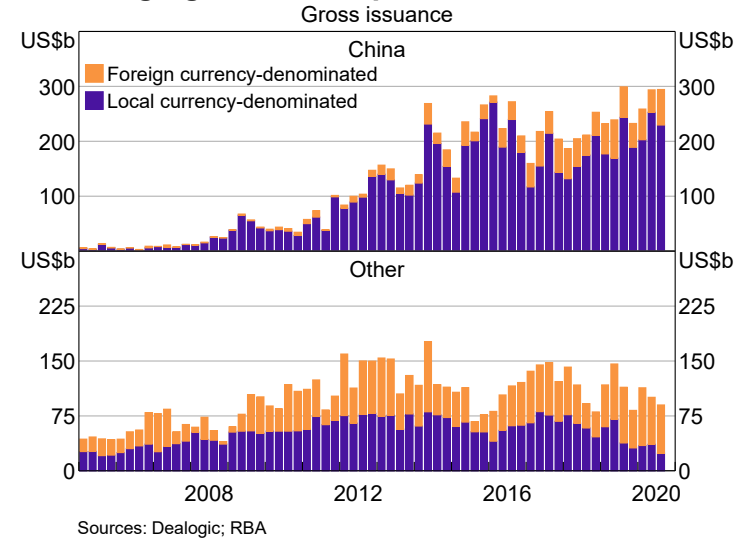


\* Excludes ADIs' self-securitisations  
 Sources: ABS; Bloomberg; KangaNews; Private Placement Monitor; RBA

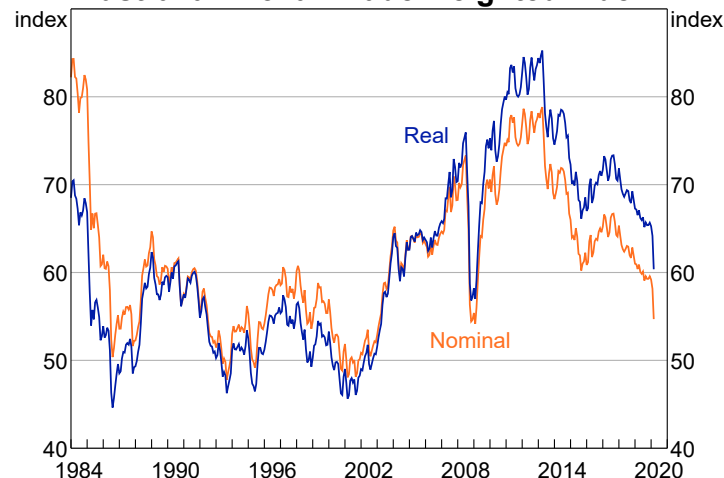
## US and Euro Area Corporate Bond Issuance



## Emerging Market Corporate Bond Issuance



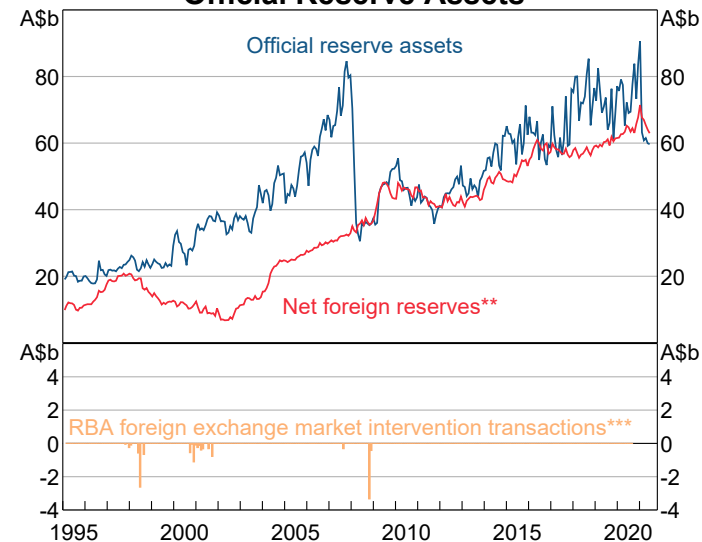
## Australian Dollar Trade-weighted Index\*



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

Sources: ABS; RBA; Refinitiv; WM/Reuters

## Official Reserve Assets\*



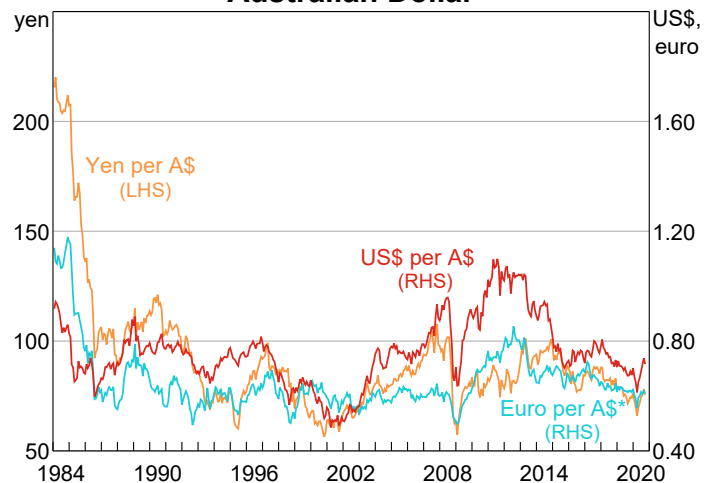
\* The reporting methodology for official reserve asset data changes in 2015

\*\* Excludes net forward foreign currency commitments

\*\*\* Data up to 30 June 2019; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

Source: RBA

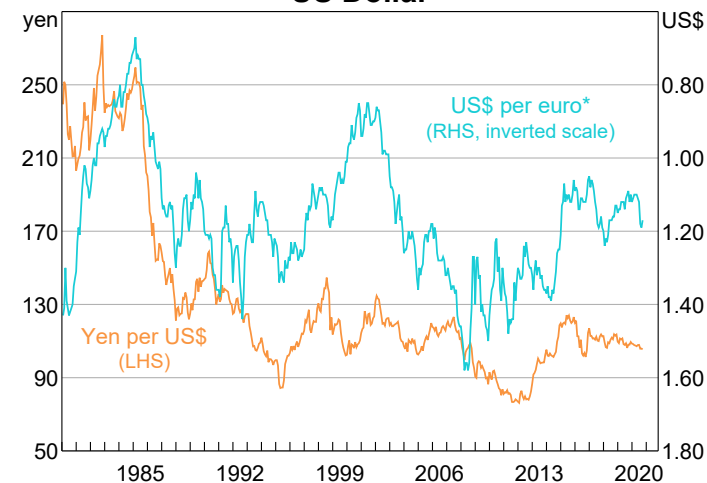
## Australian Dollar



\* ECU per A\$ until 31 December 1998

Source: Bloomberg

## US Dollar

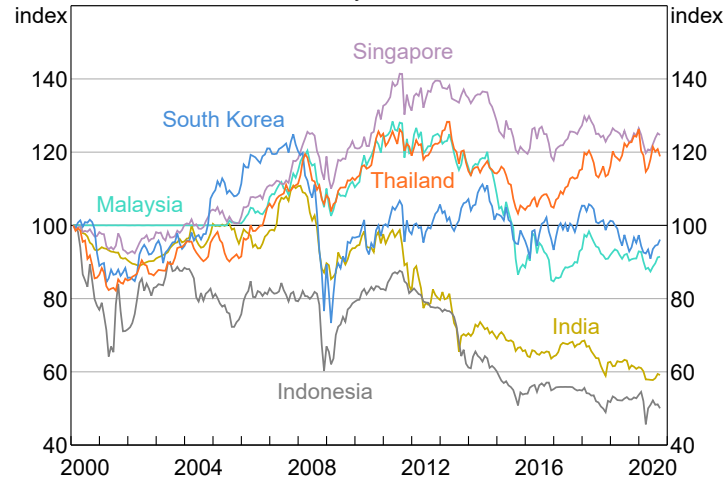


\* US\$ per ECU until 31 December 1998

Sources: Bloomberg; Eurostat

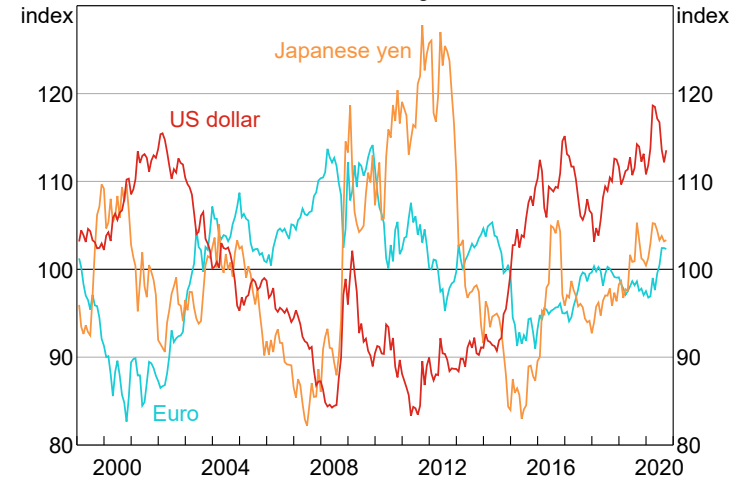
## Selected Asian Currencies against the US Dollar

31 January 2000 = 100

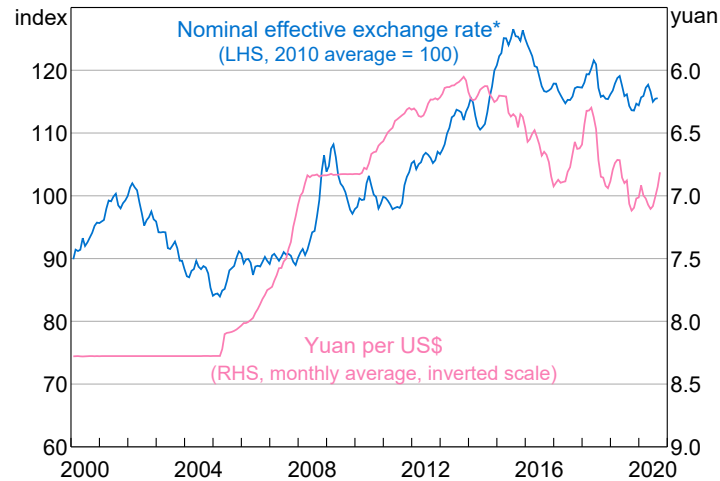


## G3 Nominal Trade-weighted Indices

1999–2020 average = 100



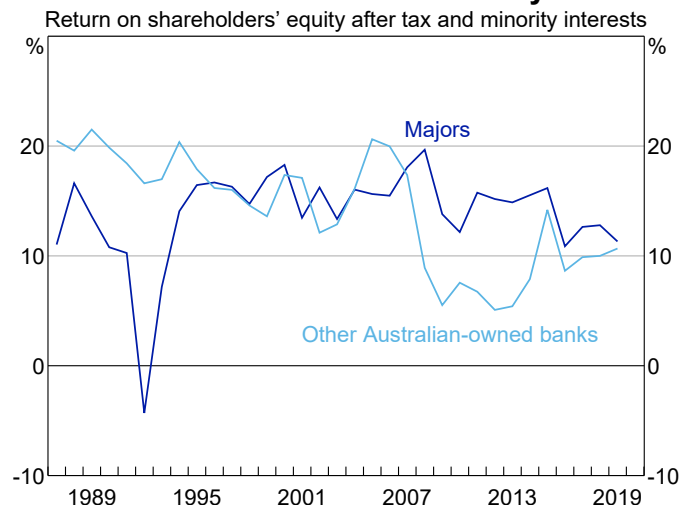
## Chinese Renminbi



\* Monthly average nominal rate calculated using BIS EER weights

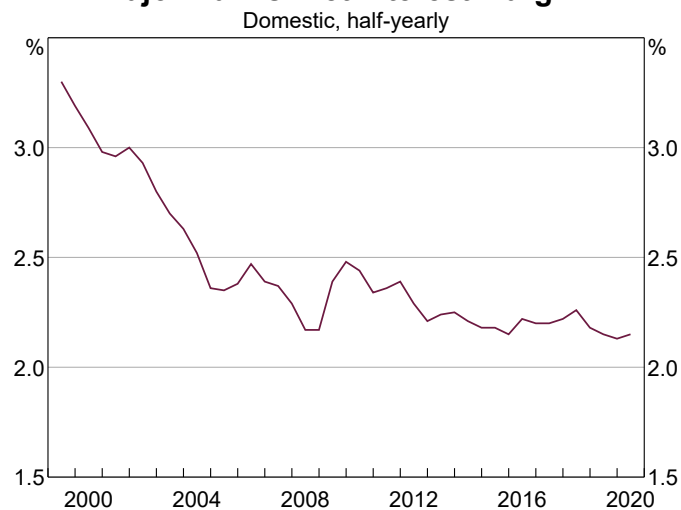
Sources: BIS; Bloomberg; RBA

## Australian Bank Profitability\*



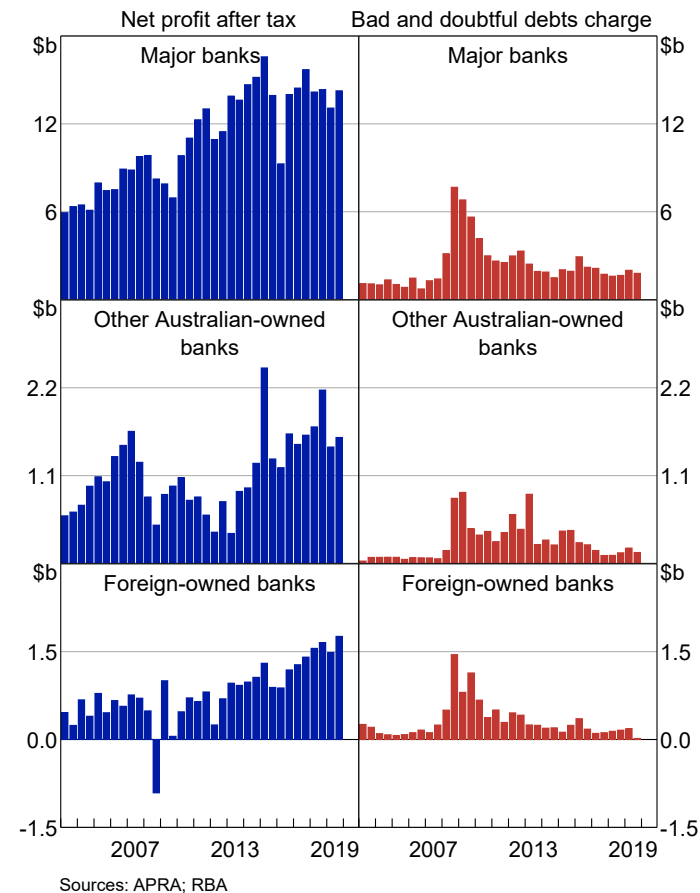
\* Fiscal years from 2003 onwards; prior data are as reported in banks' financial statements  
Sources: APRA; Banks' annual reports; RBA

## Major Banks' Net Interest Margin\*



\* Data for a given period relate to banks' public profit reports released in that half; IFRS basis from 2006, AGAAP prior; excludes St George Bank and Bankwest prior to the first half of 2009  
Sources: Banks' financial reports; RBA

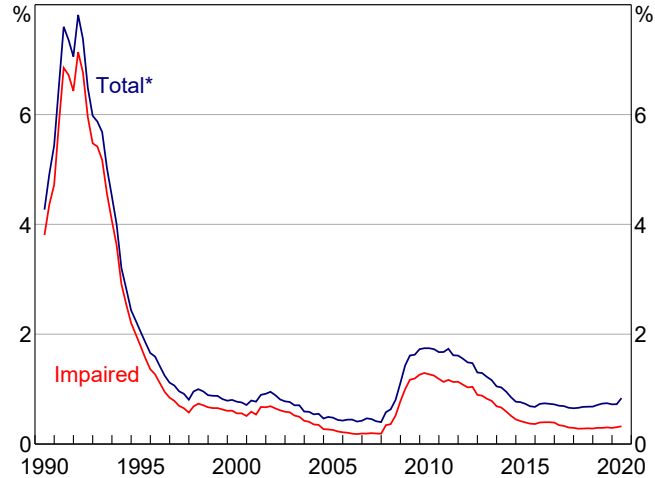
## Australian Bank Profits



Sources: APRA; RBA

### Banks' Non-performing Assets

Consolidated global operations, share of on-balance sheet assets

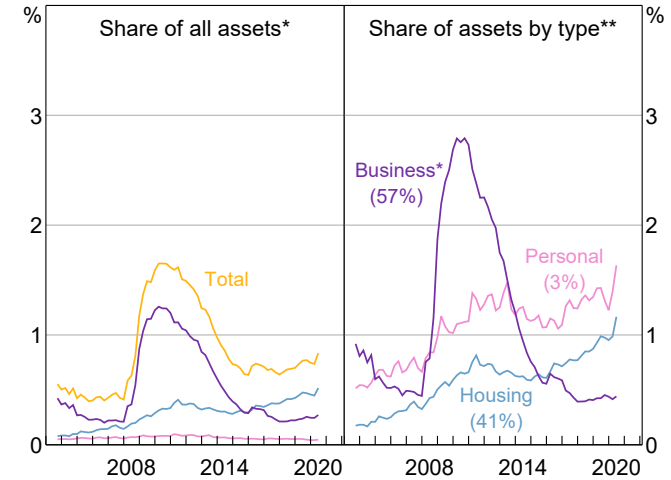


\* Includes assets 90+ days past due that are well secured

Source: APRA

### Banks' Non-performing Assets

Domestic books



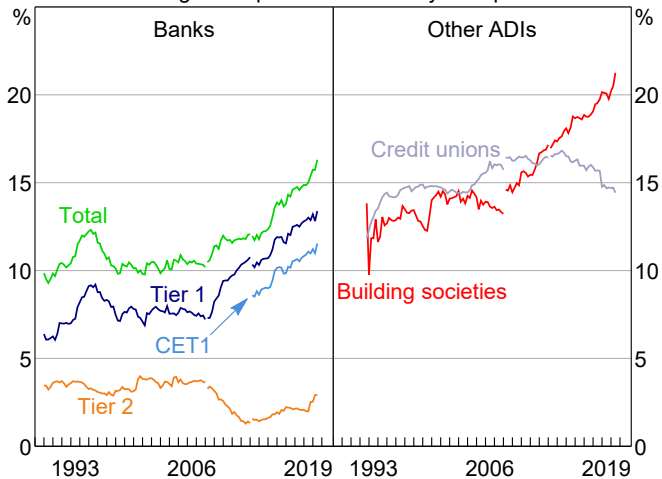
\* Includes lending to financial businesses, bills, short-term and long-term debt securities and other non-household loans

\*\* Each category's share of total domestic lending at June 2020 is shown in parentheses; shares may not add up to 100 due to rounding

Sources: APRA; RBA

### Capital Ratios\*

Consolidated global operations of locally incorporated ADIs

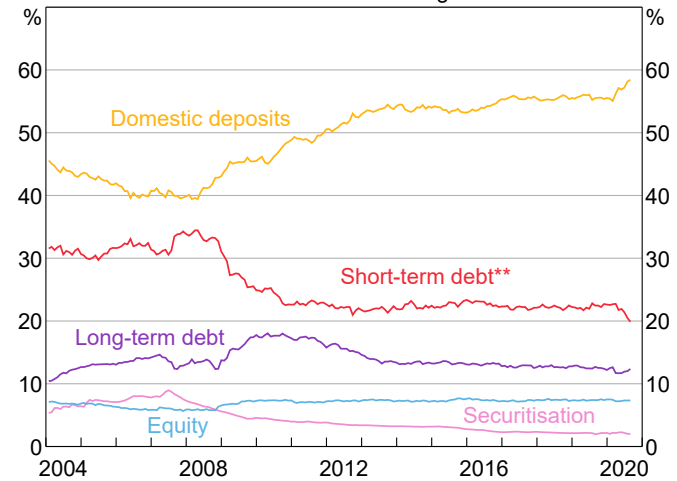


\* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most ADIs; break in March 2013 due to the introduction of Basel III for all ADIs

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: ABS; APRA; Bloomberg; RBA; Refinitiv; Standard & Poor's

