## The Australian Economy and Financial Markets

Chart Pack | November 2020



### The Australian Economy and Financial Markets

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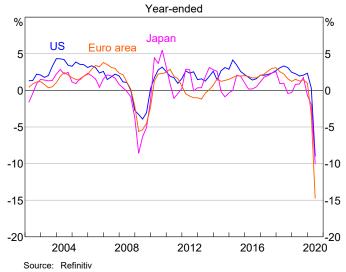
#### **World Economy**

#### **GDP Growth - World**

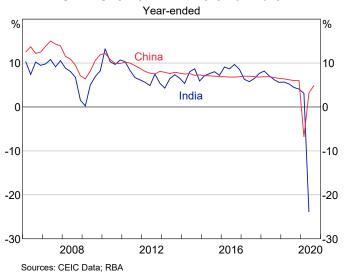


- Weighted using Australian export shares
- \*\* PPP-weighted; accounts for 85 per cent of world GDP Sources: ABS; CEIC Data; IMF; RBA; Refinitiv

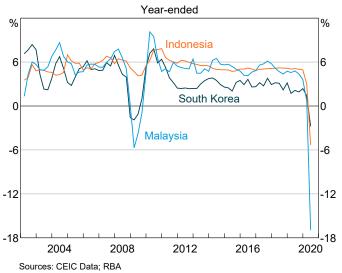
#### **GDP Growth - Advanced Economies**



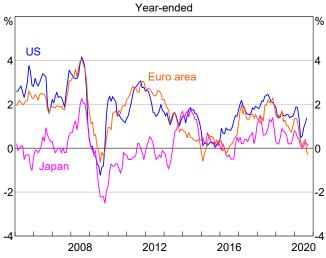
#### **GDP Growth - China and India**



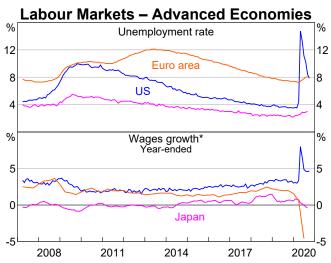
#### **GDP Growth - East Asia**



#### Inflation - Advanced Economies\*



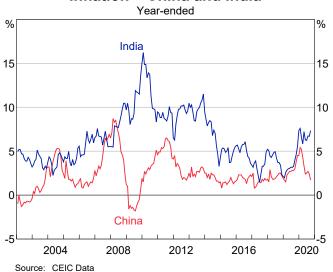
Personal consumption expenditure (PCE) inflation for the US; Japan data excludes the effects of the consumption tax increase in April 2014 Sources: RBA; Refinitiv



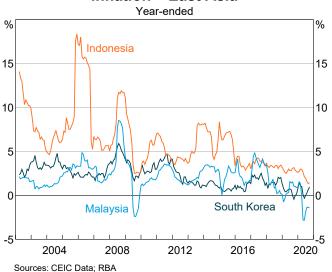
Average hourly earnings for the US; compensation per employee for the euro area; smoothed full-time base wages for Japan

Sources: ECB; Eurostat; RBA; Refinitiv

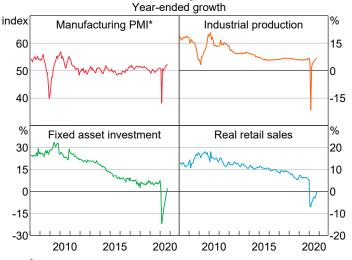
#### Inflation - China and India



#### Inflation - East Asia

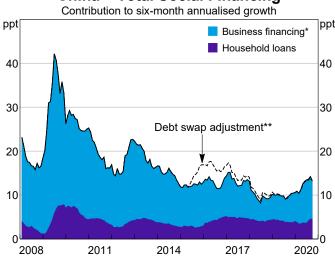


#### **China – Activity Indicators**



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

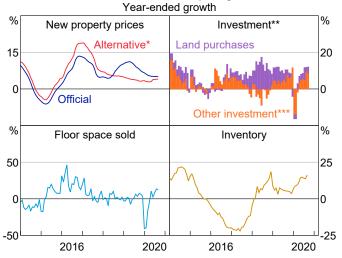
#### China - Total Social Financing



- Sum of business loans, securities financing and off-balance sheet
- Upper bound estimate after including local government bond issuance to pay off debt previously included in TSF

Sources: CEIC Data; RBA

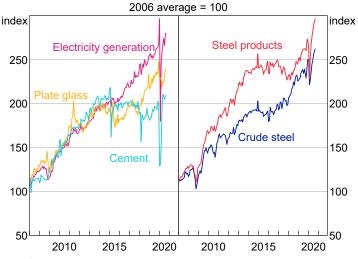
#### China - Residential Property Indicators



- China Index Academy
- Contributions of residential and non-residential investment
- Construction, installation, equipment purchases and other

Sources: CEIC Data: CIA: CRIC: RBA

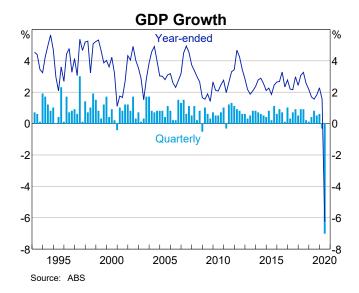
#### China - Gross Output of Selected Products\*



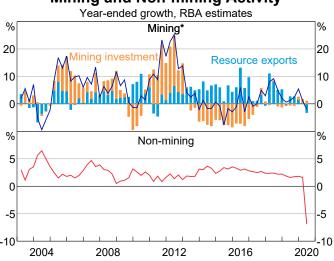
Seasonally adjusted by RBA

Sources: CEIC Data; RBA

#### **Australian Growth**



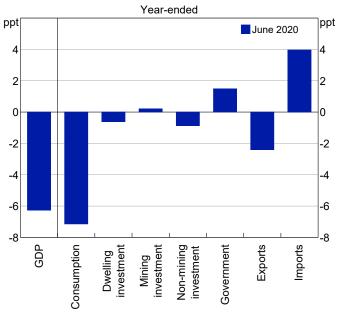
#### **Mining and Non-mining Activity**



Net of mining-related imports; components are contributions to year-ended mining activity growth; contribution from changes in inventories not shown

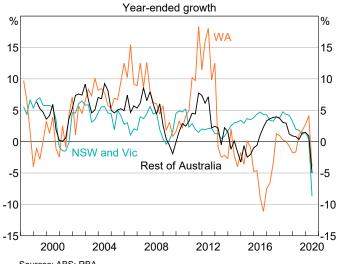
Sources: ABS; RBA

#### **Contributions to GDP Growth**



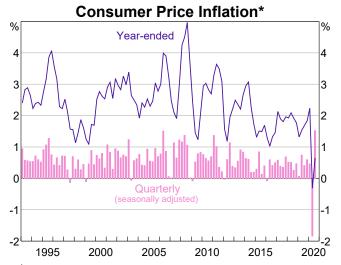
Sources: ABS; RBA

#### **State Final Demand**



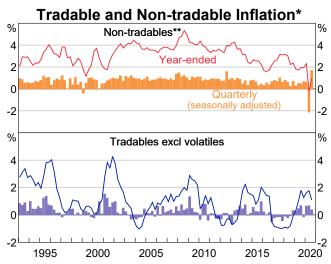
Sources: ABS; RBA

#### **Australian Inflation**



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

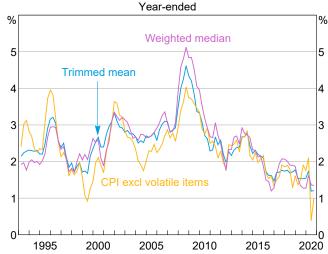
Sources: ABS: RBA



- Adjusted for the tax changes of 1999–2000
- Excludes interest charges and indirect deposit & loan facilities

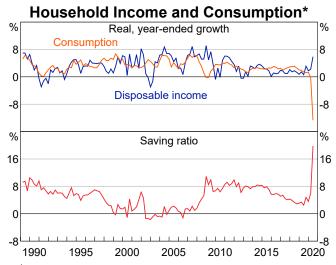
Sources: ABS; RBA

#### **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

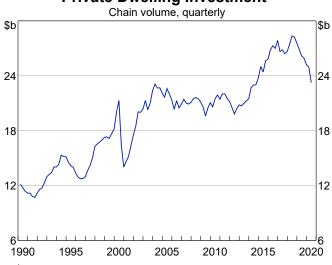
#### **Household Sector**



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

Sources: ABS; RBA

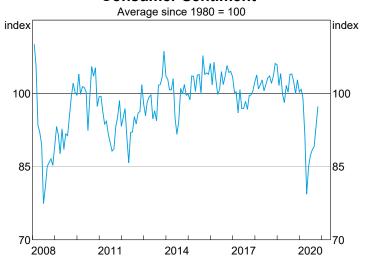
#### **Private Dwelling Investment\***



Reference year is 2017/18

Source: ABS

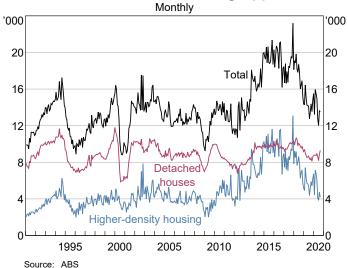
#### **Consumer Sentiment\***



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

#### **Private Residential Building Approvals**



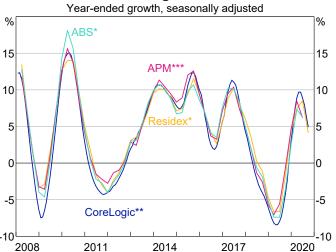
#### **Housing Prices and Household Debt\***

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

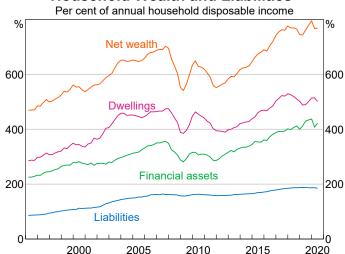
#### **Housing Prices**



- 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

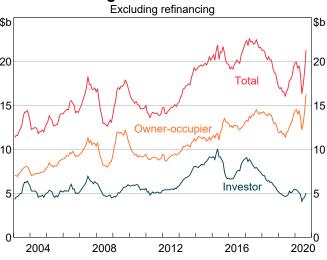
Sources: ABS; APM; CoreLogic; RBA; Residex

#### **Household Wealth and Liabilities\***



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

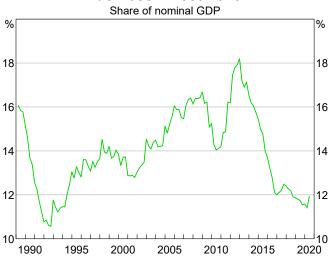
#### **Housing Loan Commitments\***



Seasonally adjusted Sources: ABS; RBA

#### **Business Sector**

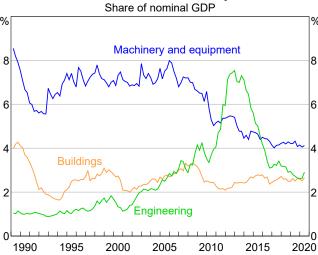
#### **Business Investment\***



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

Source: ABS

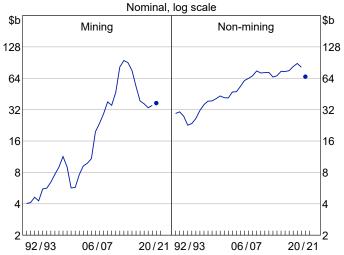
#### **Business Investment Components\***



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

Source: ABS

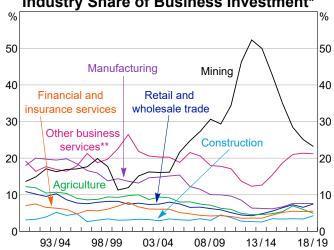
#### Capital Expenditure - Mining and Non-mining\*



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

Sources: ABS: RBA

#### Industry Share of Business Investment\*

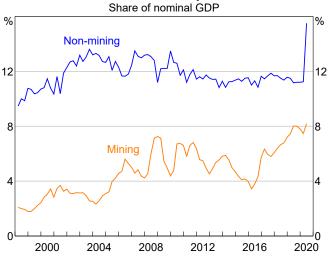


- Nominal; includes second hand asset transfers
- Includes: information media and telecommunications; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services

Source: ABS

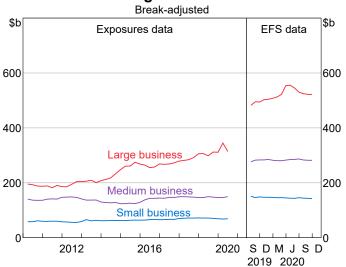


### Private Non-financial Corporation Profits\* Share of nominal GDP



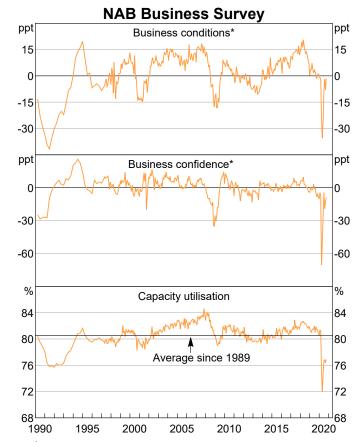
\* Gross operating profits; inventory valuation adjusted Sources: ABS; RBA

#### Lending to Business\*



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

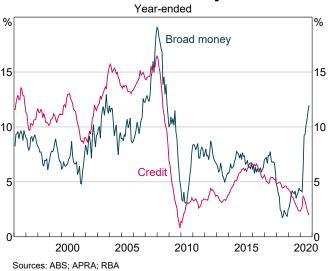


\* Net balance; deviation from average since 1989 Sources: NAB; RBA

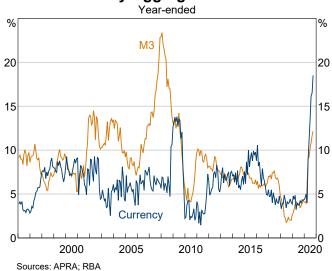


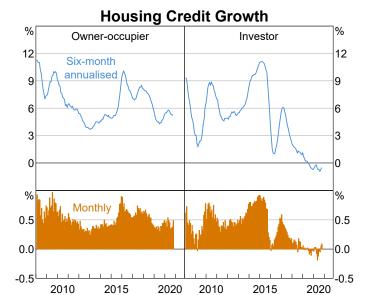
#### **Credit and Money**

#### **Credit and Broad Money Growth**

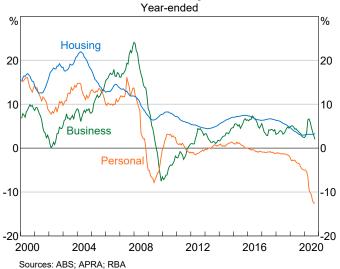


#### **Monetary Aggregates Growth**





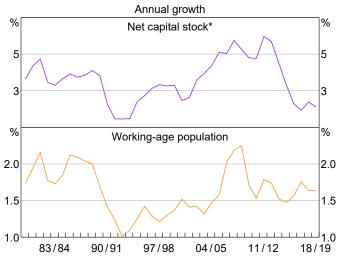
#### **Credit Growth by Sector**



Sources: APRA; RBA

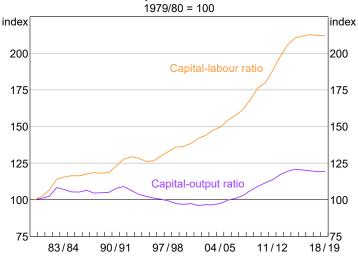
#### Factors of Production and Labour Market

#### **Factors of Production**



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

#### Capital Ratios\*



Capital stock excludes livestock & orchards, dwellings and ownership transfer costs

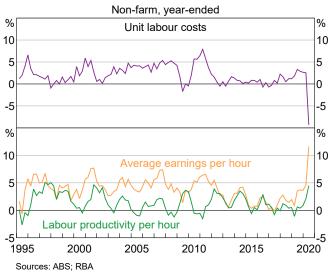
Sources: ABS; RBA



Total pay excluding bonuses

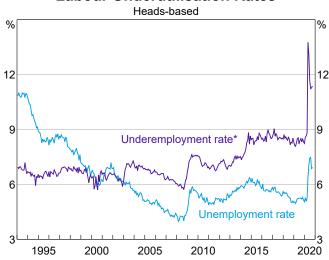
Source: ABS

#### **Unit Labour Costs Growth**



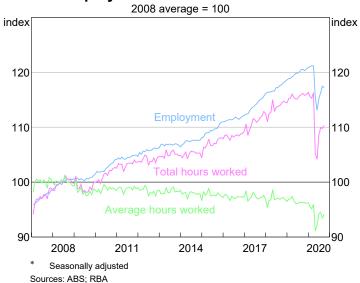
# Participation rate Participation rate 64 61 58 Employment to working-age population ratio 55 1995 2000 2005 2010 2015 2020 Source: ABS

#### **Labour Underutilisation Rates**

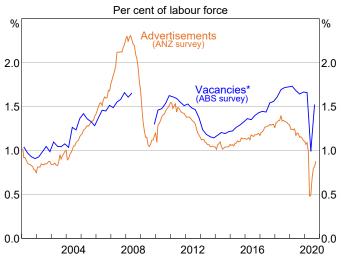


\* Full-time workers on reduced hours for economic reasons and part-time workers who would like, and are available, to work more hours Source: ABS

#### **Employment and Hours Worked\***



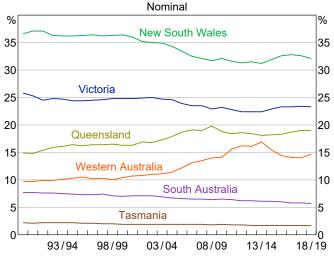
#### **Job Vacancies and Advertisements**



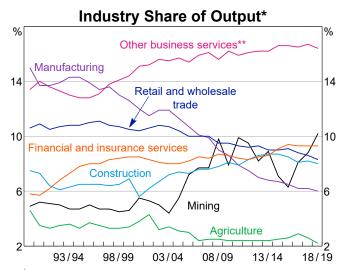
\* This survey was suspended between May 2008 and November 2009 Sources: ABS; ANZ

#### **Regions and Industry**

#### **State Share of Output**



Source: ABS

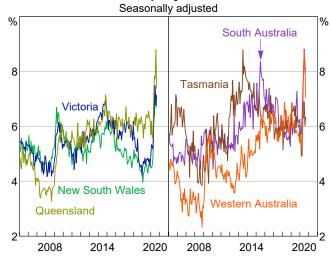


\* Nominal gross value added

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

Source: ABS

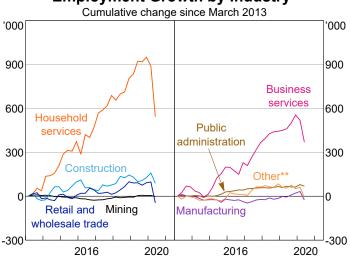
#### **State Unemployment Rates\***



\* 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

#### **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

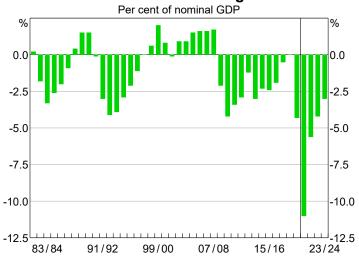
\*\* Includes agriculture, forestry & fishing; transport, postal & warehousing; and electricity, gas, water & waste services

Source: ABS



#### Government

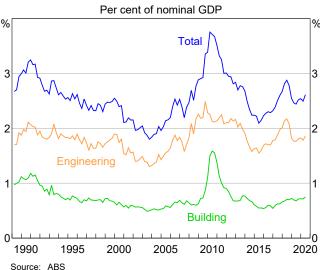
#### **Australian Government Budget Balance\***



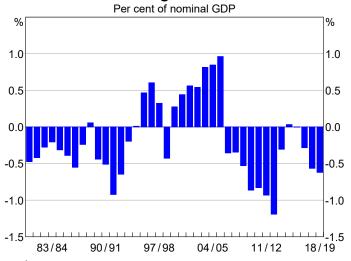
Underlying cash balance; 2020/21 Budget

Source: Australian Treasury

#### **Public Construction Work Done**



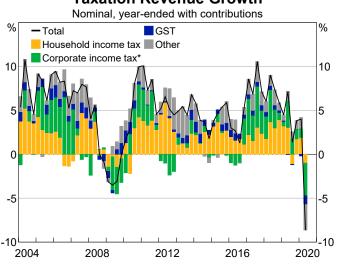
#### **State Budget Balances\***



Underlying cash balance

Source: ABS

#### **Taxation Revenue Growth**

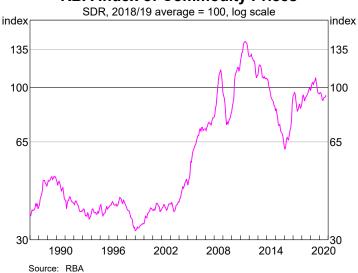


Only includes taxation of resident corporations

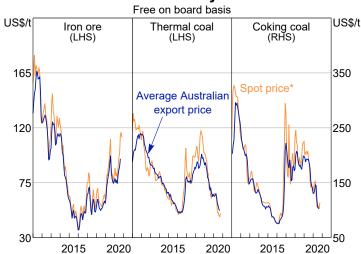
Source: ABS

#### **Commodity Prices**

#### **RBA Index of Commodity Prices**



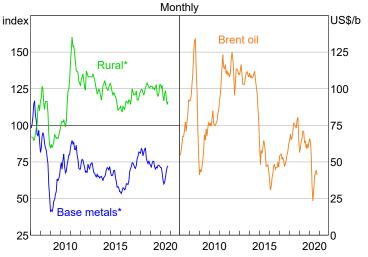
#### **Bulk Commodity Prices**



Iron ore 62% Fe Fines Index; Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS Markit; RBA

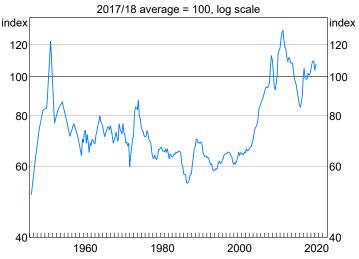
#### **Base Metals, Rural and Oil Prices**



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

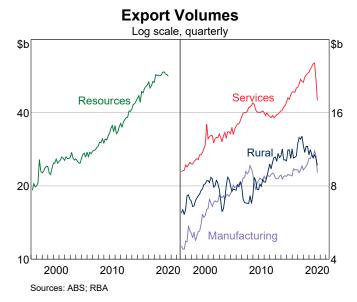
Sources: Bloomberg; RBA

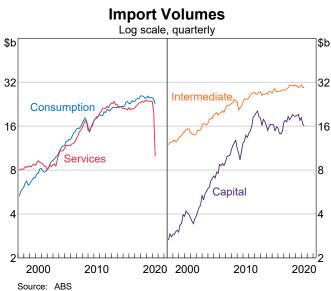
#### **Terms of Trade\***

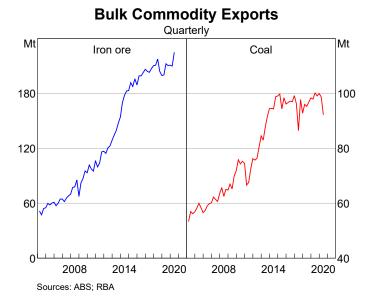


\* Annual data are used prior to 1960 Sources: ABS; RBA

#### **Balance of Payments and External Position**

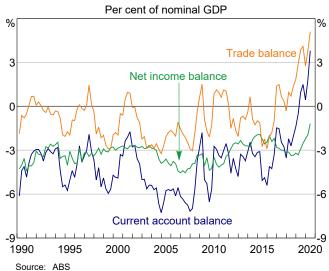




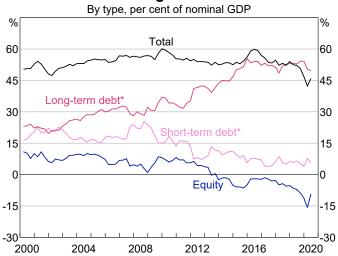




#### **Current Account Balance**



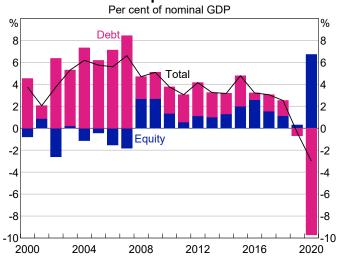
#### **Net Foreign Liabilities**



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

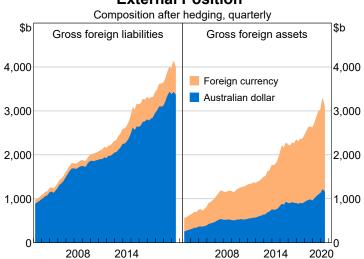
Source: ABS

#### **Net Capital Inflow\***



\* 2020 values include the March and June quarters Source: ABS

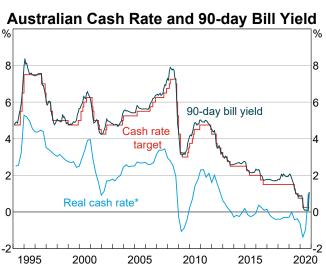
#### **External Position\***



\* Hedge ratios inferred from ABS Foreign Currency Exposure surveys Sources: ABS; RBA

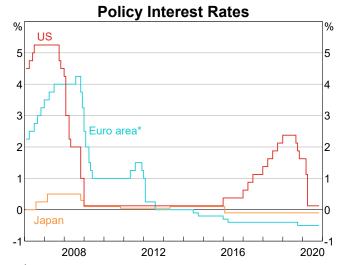
#### **Interest Rates**





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

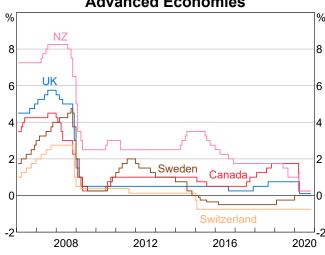
Sources: ABS; AFMA; ASX; RBA



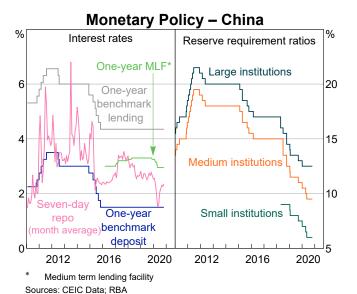
\* Main refinancing rate until the introduction of 3-year LTROs in December 2011; deposit facility rate thereafter

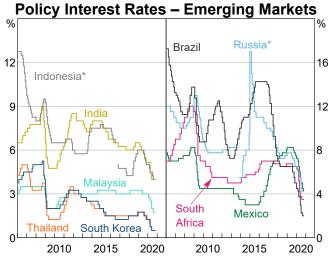
Source: Central banks

## Policy Interest Rates – Selected Advanced Economies



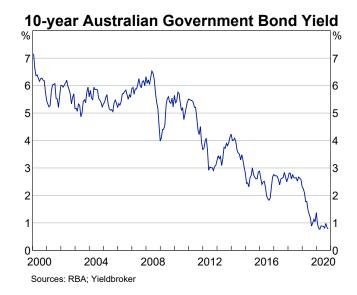
Source: Central banks

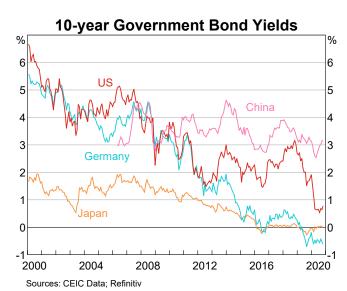




Breaks in series indicate changes in the official policy rates for Russia (September 2013) and Indonesia (August 2016)

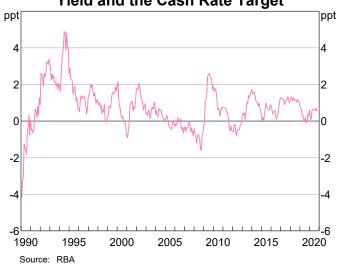
Source: Central banks



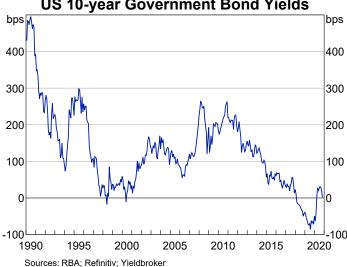




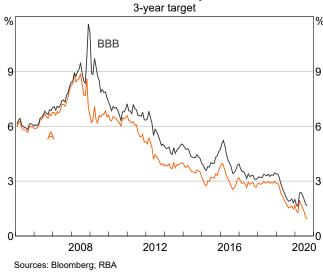
#### Spread between Australian 10-year Bond Yield and the Cash Rate Target



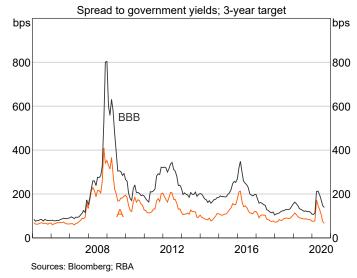
## Differential between Australian and US 10-year Government Bond Yields



#### **Australian Non-financial Corporate Bond Yields**



#### **Australian Non-financial Corporate Bond Spreads**

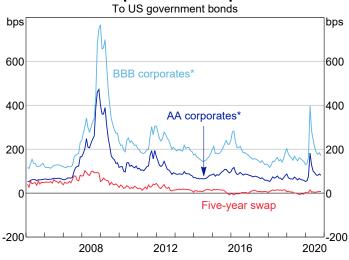




#### **US Corporate Bond Yields** 10 10 BBB corporates\* AA corporates\* Five-year swap 2016 2008 2012 2020 Includes financials and non-financials

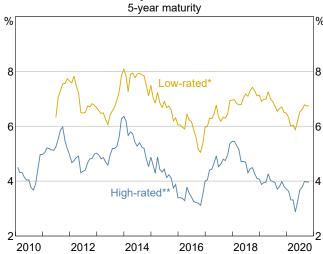
Source: ICE Data is used with permission

#### **US Corporate Bond Spreads**



Includes financials and non-financials Sources: Bloomberg; ICE Data is used with permission

#### **Chinese Corporate Bond Yields**

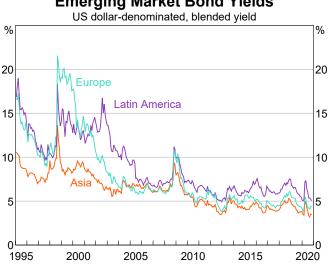


Based on AA- domestically rated bond

Based on AAA domestically rated bond

Source: CEIC Data

#### **Emerging Market Bond Yields**

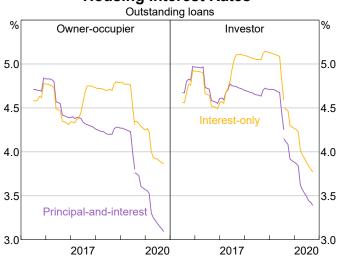


Source: Refinitiv

## Variable Housing Interest Rates Major banks' reference rates Outstanding loans\* New loans\* 4 3 2 2015 2016 2017 2018 2019 2020

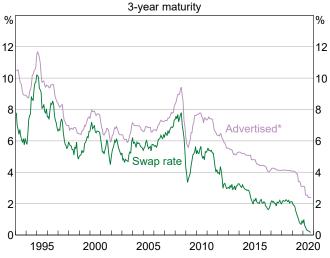
\* Series break in July 2019; thereafter, data based on EFS collection Sources: APRA; banks' websites; CANSTAR; RBA; Securitisation System

#### **Housing Interest Rates\***



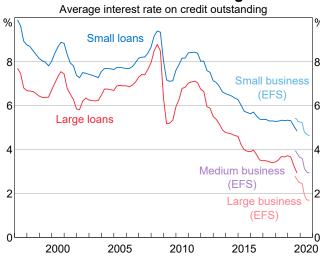
\* Average of variable-rate securitised loans to 2019; thereafter, average of fixed and variable-rate loans, based on EFS data Sources: APRA; RBA; Securitisation System

#### **Fixed Housing Interest Rates**



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

#### Australian Business Lending Rates\*

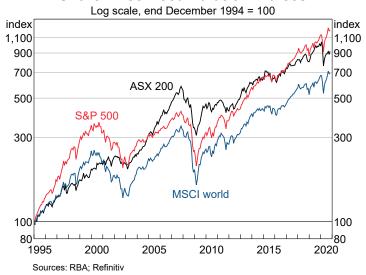


\* Small loans are loans less than \$2 million; large loans are loans \$2 million or more; new series from July 2019 are from the Economic and Financial Statistics (EFS) collection (see Statistical Table F7)
Sources: APRA: RBA

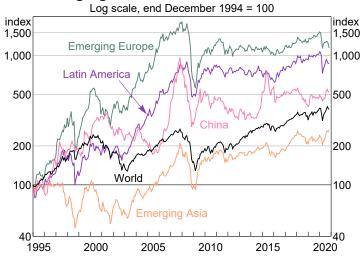


#### **Share Markets**

#### **Share Price Accumulation Indices**

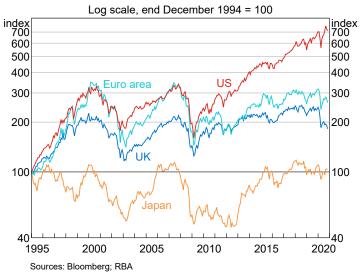


#### **Emerging Markets' Share Price Indices\***

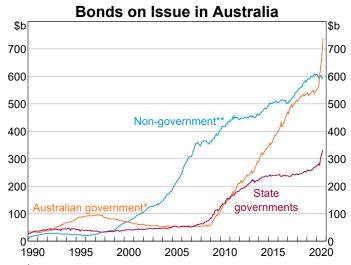


\* MSCI indices; Shanghai Composite Index for China Sources: Bloomberg; MSCI; RBA

#### **Advanced Economies' Share Price Indices**



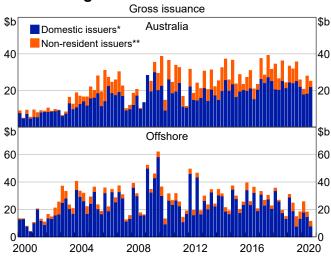
#### **Bond Issuance**



- 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

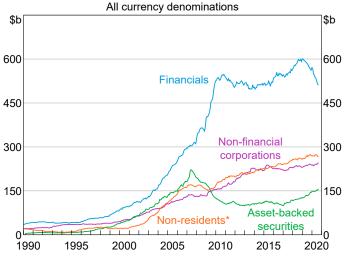
#### **Non-government Bond Issuance**



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

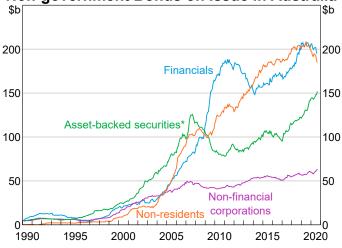
Sources: Bloomberg; KangaNews; Private Placement Monitor; RBA

#### **Total Non-government Bonds on Issue**



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

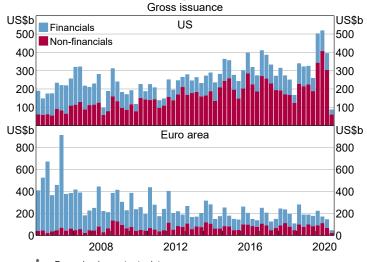




\* Excludes ADIs' self-securitisations

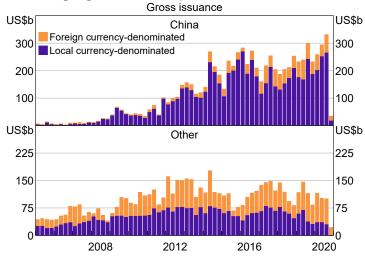
Sources: ABS; Bloomberg; KangaNews; Private Placement Monitor; RBA

#### US and Euro Area Corporate Bond Issuance\*



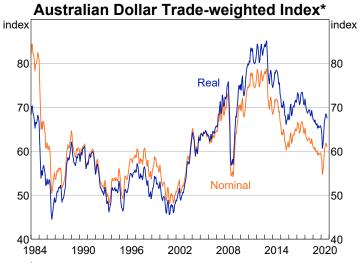
December is quarter-to-date Sources: Dealogic; RBA

#### **Emerging Market Corporate Bond Issuance\***

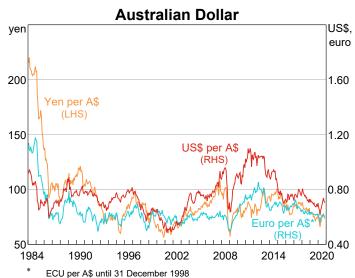


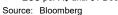
December is quarter-to-date Sources: Dealogic; RBA

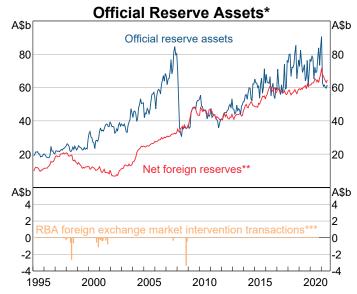
#### **Exchange Rates**



\* 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

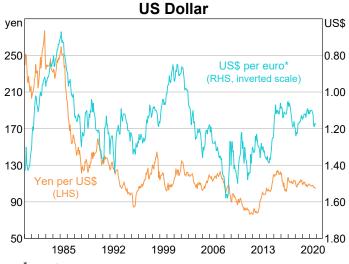






- \* The reporting methodology for official reserve asset data changes in 2015
- \*\* Excludes net forward foreign currency commitments
- \*\*\* Data up to 30 June 2019; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

Source: RBA

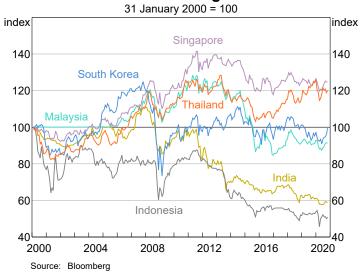


\* US\$ per ECU until 31 December 1998

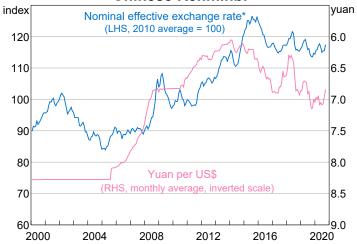
Sources: Bloomberg; Eurostat



#### Selected Asian Currencies against the US Dollar

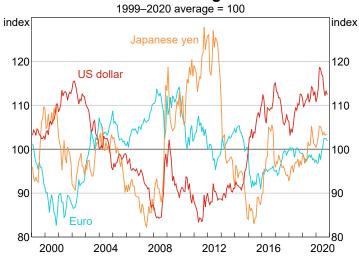


#### **Chinese Renminbi**



\* Monthly average nominal rate calculated using BIS EER weights Sources: BIS; Bloomberg; RBA

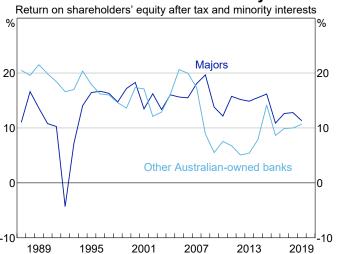
#### **G3 Nominal Trade-weighted Indices**



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

#### **Banking Indicators**

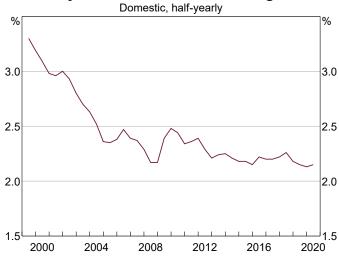
#### Australian Bank Profitability\*



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

Sources: APRA; Banks' annual reports; RBA

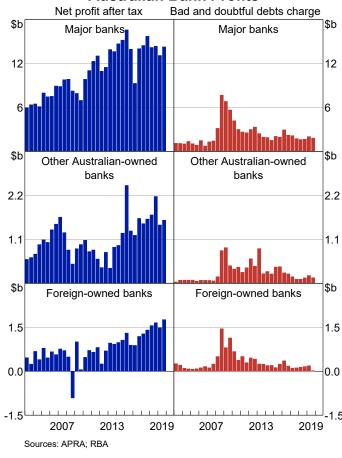
#### Major Banks' Net Interest Margin\*



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

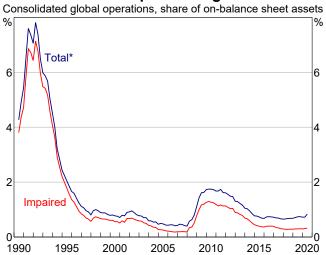
Sources: Banks' financial reports; RBA

#### **Australian Bank Profits**





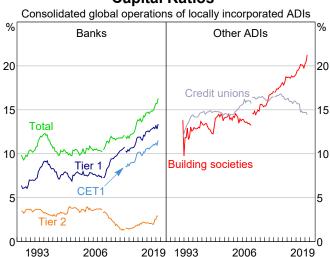
#### **Banks' Non-performing Assets**



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

Source: APRA

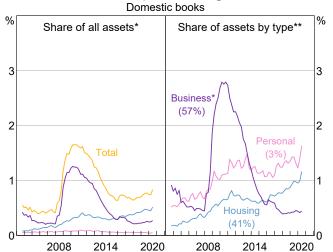
#### **Capital Ratios\***



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

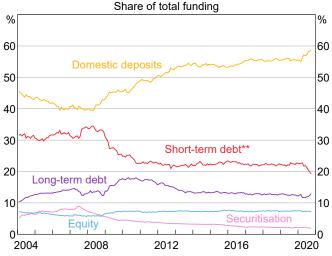
#### **Banks' Non-performing Assets**



- \* 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

#### Funding Composition of Banks in Australia\*



- 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