# The Australian Economy and Financial Markets

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**Reserve Bank of Australia**
World Economy

GDP Growth – World
Year-ended

Major trading partners*
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
Year-ended

US
Euro area
Japan

Source: Refinitiv

GDP Growth – China and India
Year-ended

China
India

Sources: CEIC Data; RBA

GDP Growth – East Asia
Year-ended

Indonesia
South Korea
Malaysia

Sources: CEIC Data; RBA
World Economy

Inflation – Advanced Economies*
Year-ended

- US
- Euro area
- Japan

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

Labour Markets – Advanced Economies
Unemployment rate

- US
- Euro area

Wages growth*
Year-ended

* 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
Year-ended

- India
- China

Sources: Bloomberg; CEIC Data

Inflation – East Asia
Year-ended

- Indonesia
- Malaysia
- South Korea

Sources: CEIC Data; RBA
World Economy

China – Activity Indicators
Year-ended growth

Manufacturing PMI*
Industrial production

Fixed asset investment
Real retail sales

Sources: CEIC Data; Markit Economics; RBA

China – Residential Property Indicators
Year-ended growth

New property prices
Investment**

Floor space sold
Inventory

Sources: CEIC Data; CIA; CRIC; RBA

China – Total Social Financing
Contribution to six-month annualised growth

Business financing*
Household loans

Debt swap adjustment**

Sources: CEIC Data; RBA

China – Gross Output of Selected Products*

Electricity generation
Plate glass
Steel products

Sources: CEIC Data; RBA

* Diffusion index; average of the official and Caixin

** Contributions of residential and non-residential investment

*** Construction, installation, equipment purchases and other

China – Gross Output of Selected Products*

2006 average = 100

Electricity generation
Plate glass
Steel products

Sources: CEIC Data; RBA

* Seasonally adjusted by RBA

China – Activity Indicators

Year-ended growth

Manufacturing PMI*
Industrial production

Fixed asset investment
Real retail sales

Sources: CEIC Data; Markit Economics; RBA

China – Residential Property Indicators

Year-ended growth

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China – Gross Output of Selected Products*

2006 average = 100

Electricity generation
Plate glass
Steel products

Sources: CEIC Data; RBA

* Seasonally adjusted by RBA

Sources: CEIC Data; RBA
Australian Growth

GDP Growth

Year-ended

Quarterly

Source: ABS

Contributions to GDP Growth

Year-ended

Sources: ABS; RBA

Mining and Non-mining Activity

Year-ended growth, RBA estimates

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

Sources: ABS; RBA

State Final Demand

Year-ended growth

Sources: ABS; RBA
**Australian Inflation**

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**Consumer Price Inflation***

![Graph of Consumer Price Inflation](chart)

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

Sources: ABS; RBA

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**Measures of Underlying Inflation***

![Graph of Measures of Underlying Inflation](chart)

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

Sources: ABS; RBA

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** Tradable and Non-tradable Inflation***

![Graph of Tradable and Non-tradable Inflation](chart)

*Adjusted for the tax changes of 1999–2000

** Excludes interest charges and indirect deposit & loan facilities

Sources: ABS; RBA
**Household Sector**

**Household Income and Consumption**

- **Real, year-ended growth**
  - **Consumption**
  - **Disposable income**
  - **Saving ratio**

**Private Dwelling Investment**

- **Chain volume, quarterly**

**Private Residential Building Approvals**

- **Monthly**

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- **Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; saving ratio is net of depreciation**
- **Source:** ABS, RBA

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- **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

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- **Reference year is 2017/18**
- **Source:** ABS
Household Sector

Housing Prices and Household Debt*

Ratio to household disposable income

Housing prices

Household debt


ratio

* Household disposable income is after tax, before the deduction of interest payments, and includes income of unincorporated enterprises

Sources: ABS; CoreLogic; RBA

Housing Prices

Year-ended growth, seasonally adjusted

ABS*

APM***

Residex*

CoreLogic**


%

* 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

Household Wealth and Liabilities*

Per cent of annual household disposable income

Net wealth

Dwellings

Financial assets

Liabilities


%

* Household disposable income is after tax, before the deduction of interest payments, and includes income of unincorporated enterprises

Sources: ABS; RBA

Household Wealth and Liabilities*

Per cent of annual household disposable income

Net wealth

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Financial assets

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* Household disposable income is after tax, before the deduction of interest payments, and includes income of unincorporated enterprises

Sources: ABS; RBA

Household Loan Commitments*

Excluding refinancing

Total

Owner-occupier

Investor


$M

* Seasonally adjusted

Sources: ABS; RBA
Business Sector

**Business Investment**

* Share of nominal GDP

- **Machinery and equipment**
- **Buildings**
- **Engineering**

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

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

* Nominal, log scale

- **Mining**
- **Non-mining**

Notes:
- * Dots are firms’ expectations for 2019/20; adjusted for historical differences between expected and realised spending
- Sources: ABS; RBA

**Industry Share of Business Investment**

* Nominal; includes second hand asset transfers

- **Manufacturing**
- **Mining**
- **Retail and wholesale trade**
- **Other business services**
- **Construction**
- **Financial and insurance services**
- **Agriculture**

Notes:
- **Includes**: information media and telecommunications; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services
- Source: ABS
Business Sector

Private Non-financial Corporation Profits*

Share of nominal GDP

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

Business Lending by Banks*

Break-adjusted

* Credit exposures on the balance sheets of banks allowed by APRA to use an internal ratings-based approach for credit risk management
Sources: APRA; RBA

NAB Business Survey

Business conditions*

Business confidence*

Capacity utilisation

Average since 1989

* Net balance; deviation from average since 1989
Sources: NAB; RBA
Credit and Money

Credit and Broad Money Growth
Year-ended

Monetary Aggregates Growth
Year-ended

Housing Credit Growth

Credit Growth by Sector
Year-ended

Sources: ABS; APRA; RBA
Factors of Production and Labour Market

Factors of Production

**Annual growth**

- **Net capital stock***
  - 1979/80 = 100

- **Working-age population**

**Capital Ratios***

1979/80 = 100

- **Capital-labour ratio**
- **Capital-output ratio**

Wage Price Index Growth*

- **Year-ended**
- **Quarterly**

Unit Labour Costs Growth

Non-farm, year-ended

- **Unit labour costs**
- **Average earnings per hour**
- **Labour productivity per hour**

* Excluding livestock & orchards, dwellings and ownership transfer costs

Sources: ABS; RBA

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**Unit Labour Costs Growth**

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Sources: ABS; RBA

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* Excluding livestock & orchards, dwellings and ownership transfer costs

Sources: ABS; RBA
Factors of Production and Labour Market

Employment and Participation Rates

- Participation rate
- Employment to working-age population ratio

Source: ABS

Labour Underutilisation Rates

- Underemployment rate*
- Unemployment rate

* 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

- Advertisements (ANZ survey)
- Vacancies* (ABS survey)

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

Employment and Hours Worked*

- Employment
- Total hours worked
- Average hours worked

* Seasonally adjusted; trend in darker colour
Sources: ABS; RBA
Regions and Industry

**State Share of Output**
- Nominal

- New South Wales
- Victoria
- Queensland
- Western Australia
- South Australia
- Tasmania

Source: ABS

**Industry Share of Output***

- Manufacturing
- Retail and wholesale trade
- Financial and insurance services
- Construction
- Mining
- Other business services**

*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**

- South Australia
- Victoria
- Tasmania
- Queensland
- New South Wales

Source: ABS

**Employment Growth by Industry**

- Household services
- Business services
- Public administration
- Other*

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

Source: ABS
Government

**Australian Government Budget Balance***
Per cent of nominal GDP

**State Budget Balances***
Per cent of nominal GDP

**Public Construction Work Done**
Per cent of nominal GDP

**Taxation Revenue Growth**
Nominal, year-ended with contributions

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* Underlying cash balance: 2019/20 mid-year economic and fiscal outlook
Source: Australian Treasury

* Underlying cash balance
Source: ABS

* Only includes taxation of resident corporations
Source: ABS
Commodity Prices

RBA Index of Commodity Prices
SDR, 2018/19 average = 100, log scale

Source: RBA

Bulk Commodity Prices
Free on board basis
Iron ore (LHS)
Thermal coal (LHS)
Coking coal (RHS)

Average Australian export price

Spot price*

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
Monthly

Terms of Trade*
2017/18 average = 100, log scale

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

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

Source: RBA
Balance of Payments and External Position

Export Volumes
Log scale, quarterly

Import Volumes
Log scale, quarterly

Bulk Commodity Exports
Quarterly

Exports by Destination
Annual, share of total values

Sources: ABS; RBA
Balance of Payments and External Position

**Current Account Balance**
Per cent of nominal GDP

- Trade balance
- Net income balance

Current account balance

Source: ABS

**Net Capital Inflow***
Per cent of nominal GDP

- Debt
- Equity
- Total

* 2019 values include the March, June and September quarters

Source: ABS

**Net Foreign Liabilities**
By type, per cent of nominal GDP

- Total
- Long-term debt*
- Short-term debt*
- Equity

* 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

- Gross foreign liabilities
- Gross foreign assets

- Foreign currency
- Australian dollar

* Hedge ratios inferred from ABS Foreign Currency Exposure surveys

Sources: ABS; RBA
Interest Rates

**Australian Cash Rate Target**

- 1994 to 2019
- Source: RBA

**Policy Interest Rates**

- 2007 to 2019
- Source: Central banks
- *Main refinancing rate until the introduction of 3-year LTROs in December 2011; deposit facility rate thereafter*

**Australian Cash Rate and 90-day Bill Yield**

- 1994 to 2019
- Sources: ABS; ASX; RBA
- *Calculated using average of year-ended weighted median inflation and year-ended trimmed mean inflation*

**Policy Interest Rates – Selected Advanced Economies**

- 2007 to 2019
- Source: Central banks
Interest Rates

Monetary Policy – China

Policy Interest Rates – Emerging Markets

10-year Australian Government Bond Yield

10-year Government Bond Yields
Interest Rates

**US Corporate Bond Yields**

- BBB corporates*
- AA corporates*
- Five-year swap

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

**Chinese Corporate Bond Yields**

- Low-rated*
- High-rated**

* Based on AA- domestically rated bond
** Based on AAA domestically rated bond
Source: CEIC Data

**US Corporate Bond Spreads**

- BBB corporates*
- AA corporates*
- Five-year swap

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

**Emerging Market Bond Yields**

- Europe
- Latin America
- Asia

Sources: Bloomberg; RBA; Refinitiv
**Variable Housing Interest Rates**

- **Standard variable reference rate**
- **Outstanding loans**
- **New loans**

* Data to November; average across major banks’ rates
** Data to October; data from the Securitisation Dataset, re-weighted using housing credit shares
*** Data to September; quarter-average data from APRA

Sources: APRA; major banks’ websites; RBA; Securitisation System

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**Australian Fixed Interest Rates**

- **3-year maturity**

* Available to owner-occupiers

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

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**Variable Housing Interest Rates**

- **Outstanding loans**

* Data to October; average of securitised loans, re-weighted using housing credit shares

Sources: APRA; RBA; Securitisation System

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**Australian Business Lending Rates**

- **Average interest rate on outstanding lending**

* RBA estimates

Sources: APRA; RBA
**Bond Issuance**

**Bonds on Issue in Australia**

![Graph showing bonds on issue in Australia over time](image1)

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

Sources: ABS; AGFM; Bloomberg; KangaNews; RBA; State Treasury Corporations

**Non-government Bond Issuance**

![Graph showing non-government bond issuances over time](image2)

* 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**

![Graph showing total non-government bonds on issue](image3)

* Australian dollar-denominated bonds only

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

**Non-government Bonds on Issue in Australia**

![Graph showing non-government bonds on issue in Australia](image4)

* Excludes ADIs’ self-securitisations

Sources: ABS; Bloomberg; KangaNews; RBA
Bond Issuance

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

<table>
<thead>
<tr>
<th>Year</th>
<th>US</th>
<th>Euro area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>400</td>
<td>800</td>
</tr>
<tr>
<td>2011</td>
<td>300</td>
<td>700</td>
</tr>
<tr>
<td>2015</td>
<td>200</td>
<td>600</td>
</tr>
<tr>
<td>2019</td>
<td>100</td>
<td>500</td>
</tr>
</tbody>
</table>

* Gross issuance

Sources: Dealogic; RBA

**Emerging Market Corporate Bond Issuance***

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>150</td>
<td>75</td>
</tr>
<tr>
<td>2011</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>2015</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>2019</td>
<td>25</td>
<td>12.5</td>
</tr>
</tbody>
</table>

* Gross issuance

Sources: Dealogic; RBA

* December quarter-to-date
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; 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.

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* Official Reserve Assets

**Net foreign reserves**

***RBA foreign exchange market intervention transactions***

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* Official Reserve Assets

**Net foreign reserves**

***RBA foreign exchange market intervention transactions***

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* Exchange Rates

**Yen per A$**

- (LHS)

**US$ per A$**

- (RHS)

**Euro per A$**

- (RHS)

---

* Exchange Rates

**Yen per A$**

- (LHS)

**US$ per A$**

- (RHS)

**Euro per A$**

- (RHS)

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Exchange Rates

Selected Asian Currencies against the US Dollar
31 January 2000 = 100

India
Thailand
South Korea
Malaysia
Singapore
Indonesia
Source: Bloomberg

US Dollar

Yen per US$ (LHS)
US$ per euro* (RHS, inverted scale)

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

G3 Nominal Trade-weighted Indices
1999–2019 average = 100

Japanese yen
US dollar
Euro

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

Chinese Renminbi
Nominal effective exchange rate (LHS, 2010 average = 100)

Yuan per US$ (RHS, inverted scale)

Sources: BIS; Bloomberg; RBA
## Banking Indicators

### Banks’ Non-performing Assets

**Consolidated global operations, share of on-balance sheet assets**

- **Total***
- **Impaired**

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

Source: APRA

### Capital Ratios*

**Consolidated global operations of locally incorporated ADIs**

- **Total**
- **Tier 1**
- **Tier 2**
- **CET1**
- **Credit unions**
- **Building societies**

* 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**

- **Domestic deposits**
- **Short-term debt***
- **Long-term debt**
- **Equity**
- **Securitisation**

* 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

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* Each category’s share of total domestic lending at June 2019 is shown in parentheses; shares may not add up to 100 due to rounding

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

Sources: APRA; RBA