The Australian Economy and Financial Markets

Chart Pack | June 2019
# The Australian Economy and Financial Markets

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World Economy

GDP Growth – World
Year-ended

GDP Growth – Advanced Economies
Year-ended

GDP Growth – East Asia
Year-ended

China – Contributions to GDP Growth

Sources:
- ABS; CEIC Data; IMF; RBA; Refinitiv
- CEIC Data; RBA

* Weighted using Australian export shares
** PPP-weighted; accounts for 85 per cent of world GDP

Source: Refinitiv
World Economy

Inflation – Advanced Economies*

<table>
<thead>
<tr>
<th>Year-ended</th>
<th>US</th>
<th>Euro area</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>-4</td>
<td>-2</td>
<td>-4</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2019</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Unemployment rate</th>
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<tr>
<td>Year-ended</td>
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<table>
<thead>
<tr>
<th>US</th>
<th>Euro area</th>
<th>Japan</th>
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<tbody>
<tr>
<td>2007</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2011</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>2015</td>
<td>4</td>
<td>4</td>
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<tr>
<td>2019</td>
<td>2</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Wages growth*</th>
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<tbody>
<tr>
<td>Year-ended</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Japan</th>
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<tbody>
<tr>
<td>2007</td>
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<tr>
<td>2011</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>2019</td>
</tr>
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</table>

* 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

<table>
<thead>
<tr>
<th>Year-ended</th>
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<table>
<thead>
<tr>
<th>Malaysia</th>
<th>South Korea</th>
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<tr>
<td>2007</td>
<td>5</td>
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<tr>
<td>2011</td>
<td>10</td>
</tr>
<tr>
<td>2015</td>
<td>15</td>
</tr>
<tr>
<td>2019</td>
<td>15</td>
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Sources: CEIC Data; RBA

Inflation – China and India

<table>
<thead>
<tr>
<th>Year-ended</th>
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</table>

<table>
<thead>
<tr>
<th>China</th>
<th>India</th>
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<tbody>
<tr>
<td>2007</td>
<td>5</td>
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<tr>
<td>2011</td>
<td>10</td>
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<tr>
<td>2015</td>
<td>15</td>
</tr>
<tr>
<td>2019</td>
<td>6</td>
</tr>
</tbody>
</table>

Sources: Bloomberg; CEIC Data
China – Activity Indicators

Year-ended growth

- Manufacturing PMI*
  - Index: 45
  - 55
- Industrial production
  - %: 10
  - 20
- Fixed asset investment
  - %: 0
  - 10
  - 20
  - 30
- Real retail sales
  - %: 0
  - 10
  - 20
- Sources: CEIC Data; Markit Economics; RBA

China – Residential Property Indicators

Year-ended growth

- New property prices
  - %: 0
  - 10
- Investment
  - %: 0
  - 20
- Floor space sold
  - %: -25
  - 0
  - 25
- Inventory
  - %: -50
  - 0
  - 50
- Sources: CEIC Data; RBA

China – Total Social Financing

Contribution to six-month annualised growth

- Business financing*
  - ppt: 0
  - 10
  - 20
  - 30
  - 40
- Household loans
  - ppt: 0
  - 10
  - 20
  - 30
  - 40
- Debt swap adjustment**
  - ppt: 0
  - 10
  - 20
  - 30
- Sources: CEIC Data; RBA

China – Gross Output of Selected Products*

Index: 2006 average = 100

- Electricity generation
  - Index: 100
  - 150
  - 200
  - 250
- Plate glass
  - Index: 100
  - 150
  - 200
  - 250
- Cement
  - Index: 100
  - 150
  - 200
  - 250
- Steel products
  - Crude steel
  - Index: 100
  - 150
  - 200
  - 250

* Seasonally adjusted by RBA

** Sum of business loans, securities financing and off-balance sheet financing

Sources: CEIC Data; RBA
Australian Growth

GDP Growth

Year-ended
Quarterly

Source: ABS

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

Contributions to GDP Growth

Year-ended

Sources: ABS; RBA

State Final Demand

Year-ended growth

Sources: ABS; RBA
Australian Inflation

**Consumer Price Inflation***

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

Sources: ABS; RBA

**Tradable and Non-tradable Inflation***

* Adjusted for the tax changes of 1999–2000
** Excludes volatile items (fruit, vegetables & automotive fuel)
*** Excludes interest charges prior to the September quarter 1998, and deposit & loan facilities prior to the September quarter 2011

Sources: ABS; RBA

**Underlying Inflation***

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

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**

**Consumer Sentiment**

- **Average since 1980 = 100**

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

*Reference year is 2016/17*

Sources: ABS, RBA

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

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

Housing Prices and Household Debt*
Ratio to annual household disposable income

Housing Prices
Year-ended growth, seasonally adjusted

Household Wealth and Liabilities*
Per cent of annual household disposable income

Housing Loan Approvals
Excluding refinancing

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

Sources: ABS; CoreLogic; RBA

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

*** Monthly hedonic price index; non-seasonally adjusted

Sources: ABS; APM; CoreLogic; RBA; Residex
Business Sector

**Business Investment***
Share of nominal GDP

- Engineering
- Buildings
- Machinery and equipment

* 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

* Dots are firms’ expectations for 2018/19 and 2019/20, adjusted for historical differences between expected and realised spending

Sources: ABS; RBA

**Business Investment Components***
Share of nominal GDP

- Machinery and equipment
- Buildings
- Engineering

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

Source: ABS

**Industry Share of Business Investment***

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

* 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
Business Sector

Private Non-financial Corporation Profits*

Share of nominal GDP

Non-mining

Mining

Business conditions*

Business confidence*

Capacity utilisation

Average since 1989

Private Non-financial Corporation Profits*

Net balance; deviation from average since 1989

Sources: NAB; RBA

NAB Business Survey

Net balance; deviation from average since 1989

Sources: NAB; RBA

Business Lending by Banks*

Break-adjusted

Large business**

Small business**

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

** Large business is the corporate category in APRA's capital framework; small business is the sum of the SME corporate and SME retail categories (the SME categories include businesses that have reported consolidated annual sales of less than $50 million)

Sources: APRA; RBA
Credit and Money

Credit and Broad Money Growth

Year-ended

Sources: ABS; APRA; RBA

Monetary Aggregates Growth

Year-ended

Sources: APRA; RBA

Credit Growth by Sector

Year-ended

Sources: ABS; APRA; RBA

Housing Credit Growth

Owner-occupier

Investor

Six-month annualised

Monthly

Sources: APRA; RBA

Credit and Money

Credit and Broad Money Growth

Year-ended

Sources: ABS; APRA; RBA

Monetary Aggregates Growth

Year-ended

Sources: APRA; RBA

Credit Growth by Sector

Year-ended

Sources: ABS; APRA; RBA

Housing Credit Growth

Owner-occupier

Investor

Six-month annualised

Monthly

Sources: APRA; RBA
Factors of Production and Labour Market

Factors of Production

Annual growth

Net capital stock*

Working-age population

Capital Ratios*

1979/80 = 100

Capital-output ratio

Capital-labour 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

Sources: ABS; RBA
Factors of Production and Labour Market

Employment and Participation Rates

- Participation rate
- Employment to working-age population

Labour Market

- Underemployment rate*
- Unemployment rate

Job Vacancies and Advertisements

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

Employment and Hours Worked*

- Employment
- Total hours worked
- Average hours worked

- * Smoothed lines are 13-period Henderson trends

Sources: ABS; RBA

* 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

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

Trend

- South Australia
- Tasmania
- Queensland
- Western Australia

Source: ABS

Employment Growth by Industry

Cumulative change since March 2013

- Household services
- Business services
- Retail and wholesale trade
- Public administration
- Other*

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

Source: ABS
**Commodity Prices**

**RBA Index of Commodity Prices**
SDR, 2017/18 average = 100, log scale

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

**Bulk Commodity Prices**
Free on board basis

**Terms of Trade**
2016/17 average = 100, log scale

*Iron ore 65% Fe Fines Index; Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS Markit; RBA

* Annual data are used prior to 1960

Sources: ABS; RBA
Balance of Payments and External Position

Export Volumes
Quarterly, 2016/17 prices, log scale

Import Volumes
Quarterly, 2016/17 prices, log scale

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

Net Capital Inflow
Per cent of nominal GDP

Net Foreign Liabilities
By type, per cent of nominal GDP

External Position
Composition after hedging, quarterly*

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

Sources: ABS; RBA
Interest Rates

**Australian Cash Rate Target**

![Graph showing Australian Cash Rate Target](image)

- **Source:** RBA

**Policy Interest Rates**

![Graph showing Policy Interest Rates](image)

- **US**
- **Euro area**
- **Japan**
- **Switzerland**

*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**

![Graph showing Australian Cash Rate and 90-day Bill Yield](image)

- **Cash rate**
- **90-day bill yield**
- **Real cash rate**

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

**Source:** ABB, ASX, RBA

**Policy Interest Rates – Selected Advanced Economies**

![Graph showing Policy Interest Rates – Selected Advanced Economies](image)

- **NZ**
- **UK**
- **Sweden**
- **Canada**
- **Switzerland**

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

**Source:** Central banks
Interest Rates

**Interest Rates – China**

- One-year benchmark lending
- Seven-day repo (month average)
- One-year benchmark deposit

Sources: CEIC Data; RBA

**10-year Australian Government Bond Yield**

Source: RBA

**Policy Interest Rates – Emerging Markets**

- Indonesia*
- Brazil
- Russia*
- India
- Malaysia
- South Korea
- South Africa
- Mexico

* 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**

- US
- Germany
- Japan

Source: Refinitiv
Interest Rates
Interest Rates

US Corporate Bond Yields

Emerging Market Bond Yields
US dollar-denominated, blended yield

US Corporate Bond Spreads
To US government bonds

Emerging Market Bond Spreads
To US government bonds, duration-matched

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

* Includes financials and non-financials
Sources: Bloomberg; RBA; Refinitiv
**Interest Rates**

### Variable Housing Interest Rates

**Standard variable reference rate***

**Outstanding loans**

**New loans**

* Average across major banks’ rates; data to May  
** Data to April; data from the Securitisation Dataset, re-weighted using housing credit shares  
*** Average new variable lending rates based on APRA quarterly data; the last observation is preliminary

Sources: APRA; RBA; Securitisation System

### Australian Fixed Interest Rates

3-year maturity

**Small business**

**Swap rate**

**Housing***

* Available to owner-occupiers

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

### Australian Business Lending Rates***

Average interest rate on outstanding lending

**Small business**

**Large business**

* RBA estimates

Sources: APRA; RBA
Share Markets

Share Price Accumulation Indices
Log scale, end December 1994 = 100

Advanced Economies’ Share Price Indices
Log scale, end December 1994 = 100

Australian Share Price Indices*
Log scale, end December 1994 = 100

Emerging Markets’ Share Price Indices
Log scale, end December 1994 = 100

* ASX 200 companies
Sources: Bloomberg; RBA

Sources: MSCI; RBA; Refinitiv

Sources: Bloomberg; MSCI; RBA

* ASX 200 companies
Sources: Bloomberg; RBA
Share Markets

**Forward PE Ratios**

- MSCI World excluding Australia
- ASX 200

**Forecast Earnings per Share**

- MSCI Australia

**Dividend Yields**

- ASX 200
- MSCI World excluding Australia

**Australian Net Equity Raisings**

- * All listed companies
- ** Includes banks and non-bank financials

Sources:
- Bloomberg
- MSCI
- Refinitiv

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Non-financial corporations
Financials**

Australian Net Equity Raisings*

---

* All listed companies
** Includes banks and non-bank financials

Sources: ASX; RBA
**Bond Issuance**

**Bonds on Issue in Australia**

- **Non-government**
- **State governments**
- **Australian government**

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

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

**Non-government Bond Issuance**

- Domestically issued
- Non-resident issuers

*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**

- **Financials**
- **Non-financial corporations**
- **Non-residents**
- **Asset-backed securities**

*Australian dollar-denominated bonds only

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

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

- **Financials**
- **Non-financial corporations**
- **Non-residents**
- **Asset-backed securities**

*Excludes ADIs’ self-securitisations

Sources: ABS; Bloomberg; KangaNews; RBA
Bond Issuance

US and Euro Area Corporate Bond Issuance*

Emerging Market Corporate Bond Issuance*

* June quarter-to-date
Sources: Dealogic; RBA
**Exchange Rates**

**Australian Dollar Trade-weighted Index**

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

Sources: ABS; RBA; 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 2018; a positive value indicates a purchase of foreign exchange, while a negative value indicates a sale of foreign exchange

Sources: RBA

**Australian Dollar**

* ECU per A$ until 31 December 1998

Source: Bloomberg

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The charts and graphs provide insights into various economic indicators, including trade-weighted indices, official reserve assets, and exchange rates. The data is sourced from reputable financial institutions, ensuring accuracy and reliability.
Exchange Rates

Selected Asian Currencies against the US Dollar

Selected Asian Currencies against the US Dollar

G3 Nominal Trade-weighted Indices

Chinese Renminbi

US Dollar

Selected Asian Currencies against the US Dollar

G3 Nominal Trade-weighted Indices

Chinese Renminbi

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

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

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

Sources: BIS; Bloomberg; RBA
Banking Indicators

Australian Bank Profits
Net profit after tax
Bad and doubtful debts charge

Major banks
6
12
$b

Other Australian-owned banks
1.1
2.2
$b

Foreign-owned banks
2012
2006
2018
-1.5
0.0
1.5
$b

Sources: APRA; RBA

Australian Bank Profitability*
Return on shareholders’ equity after tax and minority interests

Majors

Other Australian-owned banks

1988
1993
1998
2003
2008
2013
2018
-10
0
10
20
%

* 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*
Domestic, half-yearly

* 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
**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**
- **CET1**
- **Tier 2**
- **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**
- **Securitisation**
- **Equity**

* Adjusted for movements in foreign exchange rates; tenor of debt is estimated on a residual maturity basis

** Includes deposits and intragroup funding from non-residents

Sources: APRA; Bloomberg; RBA; Refinitiv; Standard & Poor’s

**Banks’ Non-performing Assets**

Domestic books

- **Share of all loans**
- **Share of loans by type***

* Each category’s share of total domestic lending at December 2018 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