The Australian Economy and Financial Markets

Chart Pack | April 2020
The Australian Economy and Financial Markets

Contents

World Economy 1
Australian Growth 4
Australian Inflation 5
Household Sector 6
Business Sector 8
Credit and Money 11
Factors of Production and Labour Market 12
Regions and Industry 14
Government 15
Commodity Prices 16
Balance of Payments and External Position 17
Interest Rates 19
Share Markets 24
Bond Issuance 25
Exchange Rates 27
Banking Indicators 29
Australian Inflation

**Consumer Price Inflation**

- Year-ended
- Quarterly (seasonally adjusted)

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

Sources: ABS; RBA

**Measures of Underlying Inflation**

- Weighted median
- Trimmed mean
- CPI excl volatile items

*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**

- Non-tradables
  - Year-ended
  - Quarterly (seasonally adjusted)

- Tradable excl volatiles

*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

* 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*

- Chain volume, quarterly

* Reference year is 2017/18

Source: ABS

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 Residential Building Approvals

- Monthly

Source: ABS
Housing Prices and Household Debt*

Ratio to household disposable income

- Housing prices
- Household debt

* 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

Housing Loan Commitments*

Excluding refinancing

- Total
- Owner-occupiers
- Investor

* Seasonally adjusted

Sources: ABS; RBA
Private Non-financial Corporation Profits*

Share of nominal GDP

- Non-mining
- Mining

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

NAB Business Survey

- Business conditions*
- Business confidence*
- Capacity utilisation

* Net balance; deviation from average since 1989
Sources: NAB, RBA
Business Lending by Banks* 
Break-adjusted

$\text{b}$

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.
Sources: APRA, RBA
Credit and Money

Credit and Broad Money Growth

Monetary Aggregates Growth

Credit Growth by Sector

Housing Credit Growth

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

Factors of Production
Annual growth

- Net capital stock*
- Working-age population

<table>
<thead>
<tr>
<th>Year</th>
<th>Net capital stock*</th>
<th>Working-age population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2000</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2001</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2002</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>2003</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

* Excluding livestock & orchards, dwellings and ownership transfer costs

Sources: ABS; RBA

Wage Price Index Growth*

- Year-ended
- Quarterly

<table>
<thead>
<tr>
<th>Year ended</th>
<th>Wage Price Index Growth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.5</td>
</tr>
<tr>
<td>2006</td>
<td>1.0</td>
</tr>
<tr>
<td>2007</td>
<td>1.5</td>
</tr>
<tr>
<td>2008</td>
<td>2.0</td>
</tr>
<tr>
<td>2009</td>
<td>2.5</td>
</tr>
</tbody>
</table>

* Total pay excluding bonuses

Source: ABS

Capital Ratios*
1979/80 = 100

- Capital-labour ratio
- Capital-output ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital-labour ratio</th>
<th>Capital-output ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>2000</td>
<td>105</td>
<td>115</td>
</tr>
<tr>
<td>2001</td>
<td>110</td>
<td>120</td>
</tr>
<tr>
<td>2002</td>
<td>115</td>
<td>130</td>
</tr>
<tr>
<td>2003</td>
<td>120</td>
<td>140</td>
</tr>
</tbody>
</table>

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

Sources: ABS; RBA

Unit Labour Costs Growth
Non-farm, year-ended

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit labour costs</th>
<th>Average earnings per hour</th>
<th>Labour productivity per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>0.5</td>
<td>2.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2000</td>
<td>1.0</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2001</td>
<td>1.5</td>
<td>3.0</td>
<td>1.5</td>
</tr>
<tr>
<td>2002</td>
<td>2.0</td>
<td>3.5</td>
<td>2.0</td>
</tr>
<tr>
<td>2003</td>
<td>2.5</td>
<td>4.0</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Sources: ABS; RBA
Employment and Participation Rates

* Participation rate

Employment to working-age population ratio

Source: ABS

Labour Underutilisation Rates

Heads-based

* Underemployment rate

Unemployment rate

Source: ABS

Employment and Hours Worked*

2008 average = 100

* Seasonally adjusted; trend in darker colour

Sources: ABS; RBA

Job Vacancies and Advertisements

Per cent of labour force

* This survey was suspended between May 2008 and November 2009

Sources: ABS; ANZ
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*
2017/18 average = 100, log scale

Source: RBA

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

* Iron ore 62% 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
Interest Rates

**Australian Cash Rate Target**

**Policy Interest Rates**

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

Source: RBA

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

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

Source: ABS; ASX; RBA

**Policy Interest Rates – Selected Advanced Economies**

Source: Central banks
Monetary Policy – China

Interest rates

Reserve requirement ratios

* Medium term lending facility

Sources: CEIC Data; RBA

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 Australian Government Bond Yield

Sources: RBA; Yieldbroker

10-year Government Bond Yields

Sources: Bloomberg, Refinitiv
Variable Housing Interest Rates

- Major banks’ reference rates
- Outstanding loans*
- New loans*

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

Australian Fixed Interest Rates

- 3-year maturity
- Small business
- Swap rate
- Housing*

Sources: Banks’ websites; Bloomberg; CANSTAR; RBA

Variable Housing Interest Rates*

- Outstanding loans
- Owner-occupier
- Investor
- Interest-only
- Principal-and-interest

Sources: APRA; RBA; Securitisation System

Australian Business Lending Rates*

- Average interest rate on outstanding lending
- Small business
- Large business

Sources: APRA; RBA
Share Markets

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

ASX 200
S&P 500
MSCI world

Sources: RBA; Refinitiv

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

Euro area
US
UK
Japan

Sources: Bloomberg; RBA

Australian Share Price Indices*
Log scale, end December 2014 = 100

All other sectors
Resources
Financials

Sources: Bloomberg; RBA; Refinitiv

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

Emerging Europe
Latin America
China
World
Emerging Asia

Sources: Bloomberg; MSCI; RBA

* ASX 200 companies
* MSCI indices; Shanghai Composite Index for China

RESERVE BANK OF AUSTRALIA
CHART PACK 24
Bond Issuance

**Bonds on Issue in Australia**

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

* 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**

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

* Australian dollar-denominated bonds only

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

**Non-government Bond Issuance**

- **Domestic issuers**
- **Non-resident issuers**

* 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**

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

* Excludes ADIs’ self-securitisations

Sources: ABS; Bloomberg; KangaNews; Private Placement Monitor; RBA
US and Euro Area Corporate Bond Issuance*

Gross issuance

US

- Financials
- Non-financials

Euro area

Emerging Market Corporate Bond Issuance*

Gross issuance

China

- Foreign currency-denominated
- Local currency-denominated

Other

* March quarter-to-date

Sources: Dealogic; RBA
Exchange Rates

Australian Dollar Trade-weighted Index*

- Real
- Nominal

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>80</td>
</tr>
<tr>
<td>1990</td>
<td>70</td>
</tr>
<tr>
<td>1996</td>
<td>60</td>
</tr>
<tr>
<td>2002</td>
<td>50</td>
</tr>
<tr>
<td>2008</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>30</td>
</tr>
<tr>
<td>2020</td>
<td>20</td>
</tr>
</tbody>
</table>

* 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*

<table>
<thead>
<tr>
<th>Year</th>
<th>Official reserve assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2000</td>
</tr>
<tr>
<td>2005</td>
<td>3000</td>
</tr>
<tr>
<td>2010</td>
<td>4000</td>
</tr>
<tr>
<td>2015</td>
<td>5000</td>
</tr>
<tr>
<td>2020</td>
<td>6000</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Yen per A$ (LHS)</th>
<th>US$ per A$ (RHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>200</td>
<td>1.20</td>
</tr>
<tr>
<td>1990</td>
<td>150</td>
<td>1.70</td>
</tr>
<tr>
<td>1996</td>
<td>100</td>
<td>2.20</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
<td>2.70</td>
</tr>
<tr>
<td>2008</td>
<td>150</td>
<td>3.20</td>
</tr>
<tr>
<td>2014</td>
<td>200</td>
<td>3.70</td>
</tr>
<tr>
<td>2020</td>
<td>250</td>
<td>4.20</td>
</tr>
</tbody>
</table>

* ECU per A$ until 31 December 1998

Source: Bloomberg

US Dollar

<table>
<thead>
<tr>
<th>Year</th>
<th>Yen per US$ (LHS)</th>
<th>US$ per Euro* (RHS, inverted scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>90</td>
<td>0.90</td>
</tr>
<tr>
<td>1990</td>
<td>130</td>
<td>1.10</td>
</tr>
<tr>
<td>1996</td>
<td>170</td>
<td>1.30</td>
</tr>
<tr>
<td>2002</td>
<td>210</td>
<td>1.50</td>
</tr>
<tr>
<td>2008</td>
<td>250</td>
<td>1.70</td>
</tr>
<tr>
<td>2014</td>
<td>290</td>
<td>1.90</td>
</tr>
<tr>
<td>2020</td>
<td>330</td>
<td>2.10</td>
</tr>
</tbody>
</table>

* US$ per ECU until 31 December 1998

Sources: Bloomberg, Eurostat
**Major Banks’ Net Interest Margin**

*Domestic, half-yearly*

![Graph showing Major Banks’ Net Interest Margin](chart1)

* Data for the 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

**Banks’ Non-performing Assets**

*Domestic books*

![Graph showing Banks’ Non-performing Assets](chart2)

* 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 September 2019 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*

![Graph showing Capital Ratios](chart3)

* 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