IMF Country Report No. 18/44

AUSTRALIA

February 2018

2017 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; STAFF STATEMENT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR AUSTRALIA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2017 Article IV consultation with Australia, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its February 7, 2018, consideration of the staff report that concluded the Article IV consultation with Australia.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on February 7, 2018, following discussions that ended on November 20, 2017, with the officials of Australia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 23, 2018.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Australia.

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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Press Release No. 18/60
FOR IMMEDIATE RELEASE
February 20, 2018

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Australia

On February 7, the Executive Board of the International Monetary Fund (IMF) concluded the 2017 Article IV consultation with Australia.[1]

Australia has enjoyed a comparatively robust economic performance while adjusting to the end of the commodity price and mining investment booms of the 2000s. The recovery from these shocks has advanced further in 2017. Aggregate demand has been led by strong public investment growth amid a boost in infrastructure spending and private business investment has picked up, but private consumption growth has remained subdued. Employment growth has strengthened markedly over the year, although the economy is not yet back at full employment. Wage growth is weak and inflation is below its target range.

The macroeconomic policy stance has become more supportive with the infrastructure investment boost. The monetary policy stance is accommodative, with the current policy rate setting implying a real policy rate at zero relative to estimates of the real neutral long-term interest rate in the range of 1 to 2 percent. Infrastructure spending at the Commonwealth and State levels has increased by an average of 0.5 percent of GDP annually over the next 4 years relative to the last Article IV Consultation.

A housing boom has supported the Australian economy’s adjustment to the end of the boom, but has led to housing market imbalances and household vulnerabilities, which the authorities have addressed with a multipronged approach. The supply response to higher house prices has been strengthened, through increased spending on infrastructure, which helps increase the supply of accessible and developable land, and through zoning and planning reforms. The Australian Prudential Regulation Authority (APRA) used prudential policies to lower housing-related risks to household balance sheets and the banking system. Market entry for first-time home buyers has been facilitated through tax relief, grants, and support for accumulating deposits for down payments within the Superannuation framework.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Australian banks have further strengthened their resilience to negative housing and other shocks in 2017 and improved their funding profile. The capital adequacy ratio of the Australian banking system rose by another 0.8 percentage points through 2017, reaching 14.6 percent by end-September, with 10.6 percent in the form of Common Equity Tier 1 (CET-1) capital. The liquidity coverage ratio was comfortably above minimum requirements. By end-September 2017, many banks already had Net Stable Funding Ratios (NSFR) above the 100 percent required from January 1, 2018.

Recent structural policy efforts have focused on addressing infrastructure gaps, strengthening competition, and fostering research and development (R&D). Reforms to the competition law at the Commonwealth level, as proposed in the 2015 *Competition Policy Review* (the "Harper Review"), were enacted in November 2017, which should encourage more competitive behavior in the economy. The National Innovation and Science Agenda (NISA) seeks to strengthen R&D. In 2014, the government committed to reduce the gender gap in labor force participation by 25 percent by 2025 as part of the Brisbane Commitments in the G-20 process. The company tax rate for small companies with a turnover of up to A$50 million has been lowered from 30 to 27½ percent over the next 5 years.

Executive Board Assessment[2]

Executive Directors commended Australia's robust economic performance during the rebalancing of the economy in the wake of the mining investment boom of the 2000s. This has been helped by a resilient economy and strong policy frameworks. Directors noted that a more robust global outlook, employment growth, and infrastructure investment should help accelerate economic expansion. Nonetheless, while near-term risks to growth have become more balanced, negative external risks could interact with domestic financial vulnerabilities and pose a threat to the recovery. Directors urged the authorities to maintain prudent policies, continue to address financial vulnerabilities, and raise long-term productivity.

Directors agreed that continued macroeconomic policy support is needed to secure employment and inflation objectives. With inflation below target and the economy not yet back at full employment, the monetary policy stance should remain accommodative until stronger domestic demand growth and inflation are evident. Directors welcomed the more supportive fiscal policy stance due to infrastructure investment. They concurred that the Commonwealth budget repair strategy remains appropriately anchored by medium-term budget balance targets. They noted that in the case of a more gradual recovery, Australia has the fiscal space to absorb this risk and protect spending for macrostructural reforms.

Directors considered appropriate the multipronged policy for addressing housing imbalances and vulnerabilities, including a tightening of prudential policies, a strengthening of housing supply, and targeted demand policies. They took note of the staff's assessment that some policies are

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[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in Summings Up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

classified as capital flow management measures (CFMs) under the Fund's Institutional View (IV), although their use has been consistent with the IV in most cases—in particular, that the CFMs have not substituted for warranted macroeconomic policies. In this context, many Directors raised the issue of intent and emphasized the need to consider the substance of the measures, and to assess their effectiveness in reducing financial stability risks. Some Directors, nonetheless, encouraged the authorities to consider measures that do not distinguish between residents and non-residents where feasible (for example, on vacant properties). Directors noted that the housing policy package could be complemented by tax reform, including a gradual shift to more efficient property taxation through the introduction of a systematic land tax regime. Strong supply-side policies will remain critical.

Directors highlighted that increased infrastructure investment should provide a welcome lift to productivity and longer-term growth. Sustained structural policy efforts in promoting innovation and competition, upgrading labor force skills and reducing gender gaps, and advancing broad tax reform would complement these positive effects.

Table 1. Australia: Main Economic Indicators, 2013-2023

(Annual percent change, unless otherwise indicated)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
					Est.	Projections					
NATIONAL ACCOUNTS											
Real GDP	2.2	2.6	2.5	2.6	2.2	2.9	3.1	2.9	2.7	2.7	2.6
Domestic demand	0.8	0.9	1.2	1.8	2.6	2.7	2.8	2.7	2.9	2.7	2.6
Private consumption	1.8	2.5	2.4	2.8	2.1	2.4	2.8	2.8	2.8	2.8	2.8
Public consumption	1.5	0.1	4.5	4.1	3.3	2.1	2.2	2.2	2.1	1.9	1.8
Investment	-1.7	-2.0	-3.6	-2.1	3.1	3.9	3.1	3.0	2.9	2.8	2.6
Public	-11.1	-3.0	-2.2	13.6	10.0	6.4	2.2	0.3	0.0	0.0	0.0
Private business	-1.3	-6.1	-9.6	-11.4	2.7	4.5	4.5	5.0	4.8	4.5	4.2
Dwelling	3.5	9.9	9.6	8.6	-2.3	1.2	1.5	1.5	1.5	1.4	1.3
Net exports (contribution to growth, percentage	1.5	1.5	0.8	1.2	-0.6	0.1	0.3	0.1	0.0	0.0	0.0
Gross domestic income	1.3	1.0	-0.1	2.7	4.5	1.7	2.8	2.5	2.5	2.6	2.5
Investment (percent of GDP)	27.0	26.3	25.8	24.6	24.4	25.0	25.0	25.0	25.1	25.0	24.9
Public	4.6	4.4	4.4	4.8	5.0	5.4	5.3	5.2	5.1	4.9	4.8
Private	22.5	21.9	21.3	19.7	19.1	19.6	19.6	19.7	19.9	20.0	20.0
Mining investment	8.5	7.2	5.5	4.0	3.0	3.0	2.6	2.6	2.6	2.6	2.6
Non-mining investment	14.0	14.7	15.8	15.7	16.1	16.6	17.0	17.1	17.3	17.4	17.4
Savings (gross, percent of GDP)	23.7	23.1	21.5	21.0	22.0	22.6	22.6	22.4	22.5	22.4	22.4
Potential output	2.8	2.7	2.6	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6
Output gap (percent of potential)	-0.7	-0.9	-1.0	-0.9	-1.2	-0.9	-0.4	-0.1	0.0	0.0	0.0
LABOR MARKET											
Employment	1.0	0.7	2.0	1.7	2.0	2.0	1.9	1.9	1.7	1.7	1.7
Unemployment (percent of labor force)	5.7	6.1	6.1	5.7	5.6	5.3	5.2	5.0	5.0	5.0	5.0
Wages (nominal percent change)	2.9	2.5	2.1	1.9	1.9	2.3	2.3	2.5	2.8	2.9	2.9
PRICES											
Terms of trade index (goods, avg)	131	121	106	105	119	110	108	106	105	104	104
% change	-3.5	-8.0	-12.4	-0.2	12.7	-7.4	-1.8	-1.8	-1.2	-0.4	-0.5
Iron ore prices (index)	107	77	44	46	56	51	48	45	45	45	45
Coal prices (index)	97	81	67	75	101	105	97	94	94	94	94
LNG prices (index)	97	95	61	42	40	52	52	52	52	52	52
Crude prices (Brent; index)	100	91	48	40	50	56	54	53	52	52	52
Consumer prices (avg)	2.5	2.5	1.5	1.3	1.9	2.1	2.2	2.3	2.5	2.5	2.5
Core consumer prices (avg)	2.4	2.6	2.3	1.7	1.7	1.8	2.1	2.3	2.5	2.5	2.5
GDP deflator (avg)	1.3	0.4	-0.8	1.1	3.3	1.3	1.8	2.0	2.3	2.6	2.9
FINANCIAL											
Reserve Bank of Australia cash rate (percent, avg)	2.7	2.5	2.1	1.7	1.5	1.6	2.0	2.5	3.0	3.4	3.5
10-year treasury bond yield (percent, avg)	3.7	3.7	2.7	2.3	2.7	2.9	3.2	3.7	4.1	4.4	4.4
Mortgage lending rate (percent, avg)	6.2	6.0	5.6	5.4	5.1	5.4	5.9	6.4	6.9	7.1	7.1
MACRO-FINANCIAL											
Credit to the private sector	5.9	7.4	8.1	7.0	5.6	6.6	4.9	4.5	4.3	3.6	3.6
To households	6.6	7.3	7.7	6.8	6.4	6.2	4.9	4.1	3.6	2.7	2.6
To business	3.0	5.2	8.0	6.0	4.3	7.2	4.9	5.0	5.2	5.0	5.0
House price index	113	120	131	140	149	158	166	172	179	183	188
% change	10.0	6.7	8.7	6.9	6.4	6.2	4.9	4.1	3.6	2.7	2.6
House price-to-income, capital cities (ratio)	4.2	4.2	4.5	4.7	4.9	4.9	4.8	4.8	4.7	4.6	4.4
Interest payments (percent of disposable income)	8.8	8.8	8.6	8.2	8.3	8.9	9.6	10.5	10.4	10.8	10.8
Household savings (percent of disposable income)	6.6	7.0	6.0	4.6	3.5	4.9	5.6	6.3	6.3	6.2	5.9
Household debt (percent of disposable income) 1/	171	175	183	188	195	196	192	190	189	188	188
Business credit (percent of GDP)	48	48	51	52	51	53	52	53	53	52	52
GENERAL GOVERNMENT (percent of GDP) 2/											
Revenue	33.8	34.0	34.6	34.8	34.8	35.2	35.3	35.6	35.7	35.7	35.7
Expenditure	36.6	36.9	37.4	37.5	37.0	37.0	36.4	35.7	35.4	35.4	35.4
Net lending/borrowing	-2.8	-2.9	-2.8	-2.7	-2.2	-1.8	-1.1	-0.1	0.3	0.3	0.3
Operating balance	-1.5	-1.6	-1.5	-1.3	-0.9	-0.3	0.5	1.2	1.5	1.5	1.5
Cyclically adjusted balance	-2.5	-2.5	-2.4	-2.2	-1.7	-1.4	-0.9	0.0	0.3	0.3	0.3
Gross debt	30.6	34.1	37.8	41.0	42.6	43.4	42.9	40.6	38.1	36.2	34.3
Net debt	13.1	15.5	17.8	19.5	20.0	20.6	20.3	19.0	17.4	15.8	14.2
Net worth	53.7	52.1	49.3	50.3	53.1	52.9	52.6	53.0	52.8	52.1	51.2
BALANCE OF PAYMENTS											
Current account (percent of GDP)	-3.4	-3.1	-4.7	-2.9	-1.9	-2.5	-2.5	-2.6	-2.5	-2.6	-2.5
Export volume	5.8	6.9	6.5	6.8	5.1	6.8	7.4	6.7	5.8	5.7	5.6
Import volume	-2.0	-1.4	1.9	0.2	7.6	5.8	5.6	5.8	5.3	5.4	5.3
Net international investment position (percent of GDP)	-53	-53	-57	-58	-54	-54	-54	-54	-54	-54	-54
Gross official reserves (bn US$)	59	66	67	76	…	…	…	…	…	…	…
MEMORANDUM ITEMS											
Nominal GDP (bn A$)	1,565	1,612	1,638	1,700	1,795	1,871	1,964	2,061	2,165	2,280	2,406
Percent change	3.5	3.0	1.6	3.8	5.6	4.2	5.0	4.9	5.1	5.3	5.5
Real net national disposable income per capita (%	-1.0	-0.8	-2.1	1.7	2.6	0.0	0.8	0.3	0.5	0.3	0.2
Population (million)	23.3	23.7	24.0	24.4	24.8	25.1	25.5	25.9	26.3	26.7	27.2
Nominal effective exchange rate	105	99	92	92	…	…	…	…	…	…	…
Real effective exchange rate	105	100	93	93	…	…	…	…	…	…	…

Sources: Authorities' data: IMF *World Economic Forum Outlook* database; and IMF staff estimates and projections.

1/ Reflects the national accounts measure of household debt, including to the financial sector, state and federal governments and foreign overseas banks and It also includes other accounts payable to these sectors and a range of other smaller entities including pension funds.

2/ Calendar year.

INTERNATIONAL MONETARY FUND

AUSTRALIA

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

January 23, 2018

KEY ISSUES

Context. Australia has enjoyed a comparatively robust economic performance while adjusting to the end of the large mining boom of the 2000s. But the economy has not yet returned to full employment, and inflation is below its target range. Housing market imbalances and high household debt have become important vulnerabilities. As in other advanced economies, average growth has been lower since the Global Financial Crisis.

Outlook and risks. With stronger global economic prospects, recent strong employment growth, and higher infrastructure spending as a catalyst, conditions for an acceleration in activity and above-trend growth seem in place. Near-term risks to growth are broadly balanced, but large negative shocks, most likely external, and their interaction with domestic housing markets remain concerns on the downside.

Policy recommendations. The policy priorities are the following:

- **Securing the return to full employment and inflation objectives.** The current monetary policy stance is appropriately accommodative. Policy normalization should be predicated on sustained stronger domestic demand and inflation momentum. The more supportive fiscal policy stance from the infrastructure boost is welcome.

- **Reducing housing imbalances and vulnerabilities.** The multi-pronged approach to addressing these issues through a tightening of prudential policies, strengthening housing supply through planning and zoning reforms and higher infrastructure spending, and targeted demand policies is appropriate. Supply-side policies will remain critical, given prospects for future strong housing demand growth in the eastern capital cities, and should be complemented by tax reform, while some demand-side measures should be reconsidered once pressures abate.

- **Raising potential growth.** Higher infrastructure investment should provide for a welcome lift to productivity and longer-term growth. Sustained reform efforts in promoting innovation and competition, upgrading labor force skills and reducing gender gaps, and advancing broad tax reform would complement these positive effects.

Approved By
Odd Per Brekk (APD) and Sanjaya Panth (SPR)

Discussions were held in Canberra, Melbourne, and Sydney during November 6-20, 2017. The staff team comprised Thomas Helbling (head), Philippe Karam, Kyungsuk Lee, Dirk Muir (all APD), and Grace Bin Li (RES). Yu Ching Wong (APD), Douglas Laxton, Tomas Motl, Hou Wang (all RES) and Siegfried Steinlein (OAP) contributed to the team's work. Christine Barron and Gemma Preston (OED) joined the discussions. Ioana Hussiada and Nadine Dubost assisted from HQ.

CONTENTS

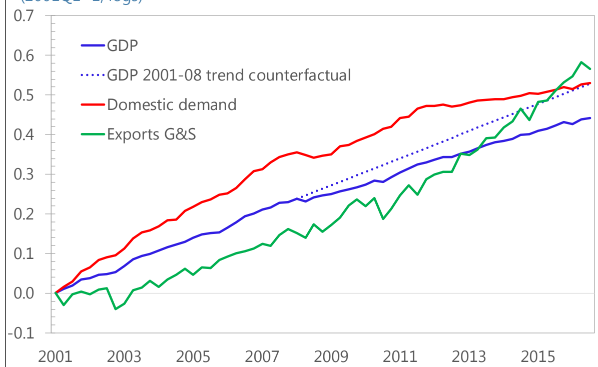
TABLES

ANNEXES

CONTEXT

1. Australia has enjoyed a comparatively robust economic performance while adjusting and rebalancing after the end of the large mining boom of the 2000s. Exchange rate flexibility and prompt monetary easing have moderated the adverse demand impacts of lower commodity prices after 2011 and the unwinding of the large mining investment boom of the 2000s, as have Australia's export orientation to the dynamic Asia economies and its relatively high population growth supported by immigration. Nevertheless, as in many other advanced economies (AEs) since the Global Financial Crisis, the adjustment to the demand shocks has been protracted, with persistent economic slack, and average growth has been lower (Figure 1, top left chart). Nominal and real wage growth have declined, both reflecting and contributing to inflation being below the Reserve Bank of Australia's (RBA's) target range of 2 to 3 percent since 2014.

Real GDP and Demand Components
(2001Q1=1, logs)



Sources: Haver Analytics and IMF staff calculations.

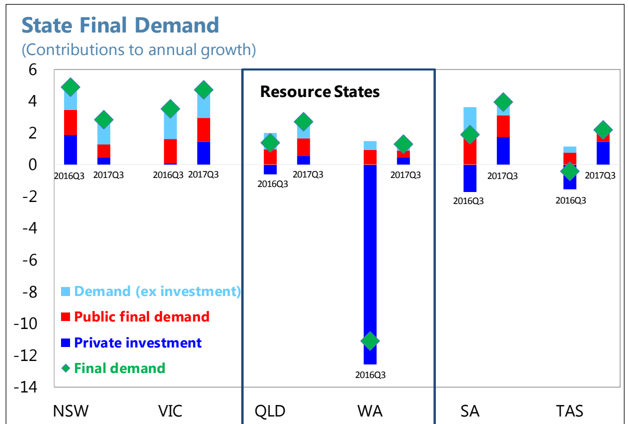
2. A housing boom has supported the adjustment, but has led to housing market imbalances and higher household vulnerabilities. House prices in the major eastern capital cities of Melbourne and Sydney have risen sharply over the past few years, driven by demand fundamentals, including lower interest rates, high population growth, and foreign investor interest, and amplified by legacy supply constraints. Standard metrics indicate house price overvaluation in the order of 5 to 15 percent at the national level, and household debt ratios are high by international comparison. Commercial banks' housing exposure is substantial at over 50 percent of total assets.

3. Australia has benefited from China's rapid growth and its growing middle class, but needs to lay the foundation for future growth. The country faces infrastructure gaps after more than a decade of rapid population growth and challenges from urbanization, and structural and regional shifts in the economy. While increased trade and commodity linkages with China have led to substantial income gains, productivity has been lagging. As in other advanced economies, securing future productivity growth in a more services-based economy while avoiding higher structural unemployment after protracted adjustment and further reducing gender imbalances in labor force participation are important policy challenges.

RECENT DEVELOPMENTS, OUTLOOK, AND RISKS

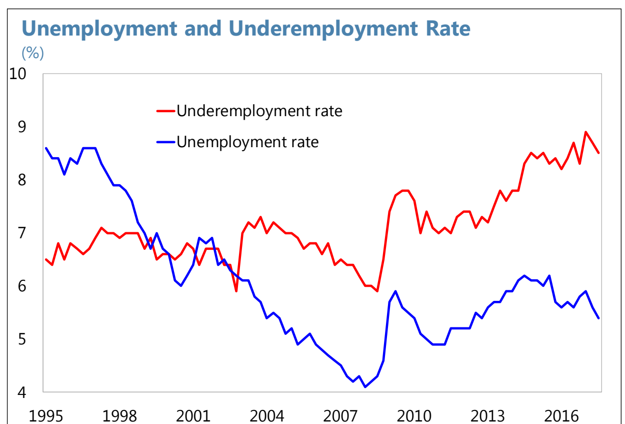
A. Developments over the Past Year

4. The rebalancing after the mining boom advanced further despite setbacks from temporary factors, but domestic demand momentum is not yet broad-based.



Sources: ABS and Haver Analytics.

- ***Demand.*** While volatile, average quarterly growth over the past year was close to potential, with much of the volatility due to weather-related disruptions to construction, and mining activity and exports. Aggregate demand was led by strong public investment growth amid a boost in infrastructure spending and a long-awaited recovery in business investment. Private consumption growth, however, remained subdued, held back by weak real income growth, and residential investment declined while net exports contributed less to growth. At the State[1] level, final demand growth remained strong in the non-resource-led states and began to recover in the resource-led states.



Source: Haver Analytics.

- ***Labor markets.*** Strengthening domestic demand was mirrored in strong employment growth in 2017, with declines in unemployment, which dropped to 5.4 percent in the third quarter, and, more recently and tentatively, underemployment. Despite declining labor market slack, annual nominal wage growth has remained weak, consistent with the experience of changes in this relationship in other AEs (Box 1). A 3.3 percent increase in the statutory national minimum wage in mid-2017, which directly affects about 20 percent of the employed and could indirectly affect another 5 percent, has not yet had a discernible impact on aggregate wage statistics.

- ***Prices.*** Inflation increased over the past year, but is still slightly below the Reserve Bank of Australia (RBA) target range of 2-3 percent. A rebound in nontradable inflation was largely the result of one-off increases in utility prices and higher tobacco excise, although inflation rate for

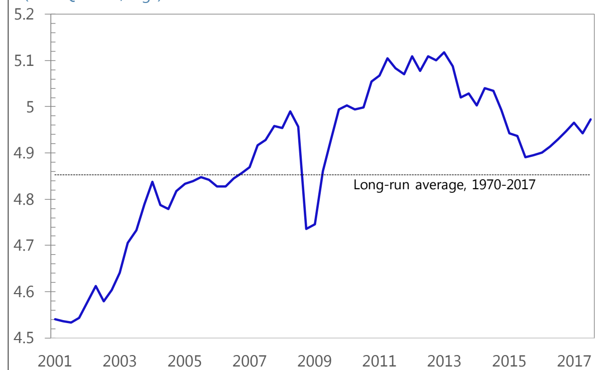
[1] States refer to both States and Territories in this report.

domestic market services also increased modestly. Tradable inflation declined, reflecting in part the real exchange rate appreciation over much of the year but also increased competition in some sectors, including in retail trade.[2]

5. With stronger terms of trade, the current account deficit narrowed substantially and is broadly in line with fundamentals and desired policies. The terms of trade improved more than expected, primarily because of higher world prices for coal and iron ore, and the trade balance moved into surplus in the year through 2017Q3 (Figure 2, top right chart).[3] Some of the improvements in the terms of trade are likely temporary, and the underlying current account deficit is estimated to have narrowed by less than the headline number. These developments have resulted in a narrowing of the midpoint estimate of the current account gap in 2017 to -0.5 percent of GDP in the 2017 EBA Update, suggesting that the current account deficit is broadly in line with fundamentals and desirable policies (Annex I). The picture is less clear-cut on the exchange rate side, where some approaches suggest continued overvaluation. In Staff's view, the exchange rate overvaluation is moderate.

Real Effective Exchange Rate

(1995Q1=100, logs)



Sources: Haver Analytics and IMF staff calculations.

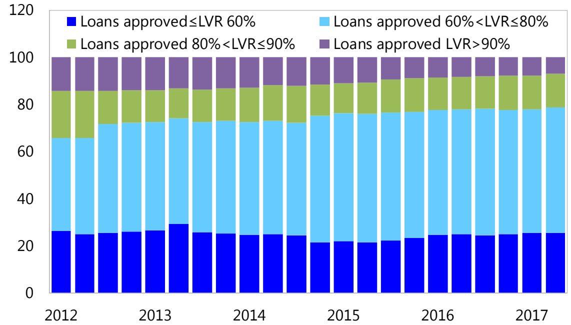
6. The housing market is cooling in the eastern capitals and price increases moderated in real terms. A broad set of indicators, including lower housing approvals following a mid-2016 peak and a lower share of residential real estate sold through public auctions, suggest cooling market conditions, concentrated in inner-city apartments in the eastern capitals (Brisbane, and especially in Melbourne and Sydney) (Figure 3, bottom right chart). Much of the recent increase in residential construction has occurred in these markets. Across capitals, the cooling has been notable in Sydney where housing affordability is lowest and house prices declined slightly, while it has been moderate in Melbourne where population growth is still running at above 3 percent per year and where prices are still increasing.

7. Household credit growth slowed after another round of prudential tightening aimed at riskier loan categories. The Australian Prudential Regulation Authority (APRA) further strengthened lending standard requirements in late 2016 and in early 2017. The new requirements involve tighter restrictions on the origination of interest-only mortgage loans, and retaining the 10 percent cap on lending growth (annually) for investment properties. But at an annualized rate of around 5½ percent, credit

[2] For more details on the decomposition of CPI inflation, see the accompanying Selected Issues Paper, Karam and Pranovich, 2018, "Insights into Recent Inflation Dynamics in Australia."

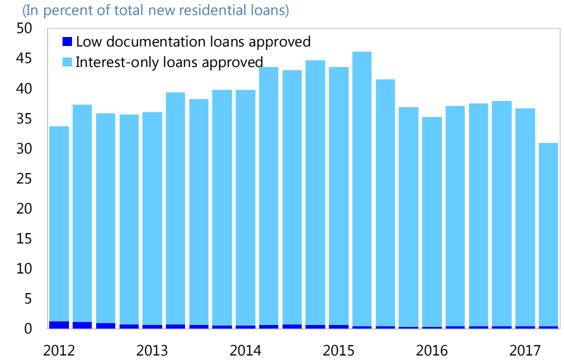
[3] See the accompanying Selected Issues Paper, Lee, 2018, "Prospects for Australia's Current Account Deficit: Lower for Longer?"

New Residential Term Loan Approvals by Loan-to-Valuation Ratio
(In percent of total new residential loans)



Source: APRA

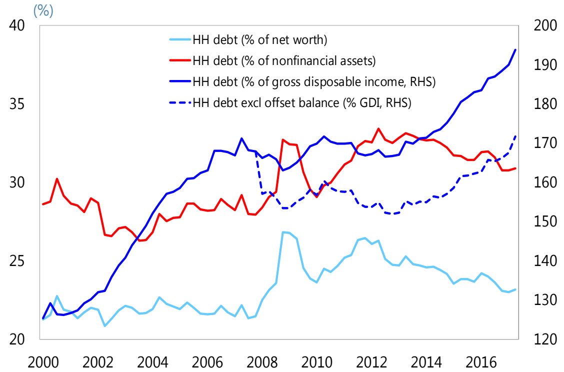
New Residential Term Loan Approvals
(In percent of total new residential loans)



Source: APRA

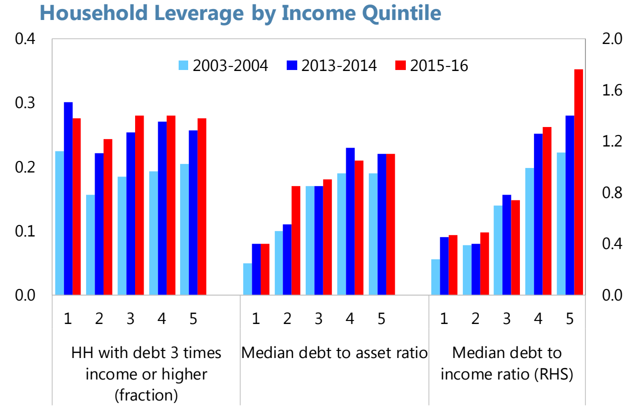
to households continued to grow faster than their income, which increased at around 2 percent, and household debt ratios rose further through 2017. There is considerable variation in balance sheet health across households, although the most recent household income and wealth survey indicates that the share of households facing debt-to-income ratios of three or higher rose further across income quintiles.

Household Leverage in the Flow of Funds
(%)



Sources: Haver Anaytics and IMF staff estimates.

Household Leverage by Income Quintile



Source: ABS.

B. Outlook

8. The recovery is expected to accelerate and gradually return to full employment, building on the momentum from the infrastructure investment boost.

- ***Investment-driven acceleration to broaden.*** Growth is forecast to strengthen over the next few years. The boost from infrastructure investment should remain strong—New South Wales increased its spending in its mid-year budget update—and broaden domestic demand momentum. Mining investment is expected to bottom out and will not subtract from growth any longer, increasing at rates consistent with capital stock maintenance. The rebound in business and public investment is expected to outweigh softening residential investment and a small rebound in import growth from higher investment growth. Export growth should remain robust amid higher global growth, continued strong demand for Australia's key commodities, especially in Asia, and demand for services by Asia's growing middle class. Private consumption is expected to step up on the back of recent strong employment growth and, eventually, rising compensation.

- ***Inflation is forecast to return to the midpoint of the target range within the next three years.*** With growth above potential, the output gap should gradually close and the economy will return to full employment, eventually leading to upward pressure on wages and prices. In the near term, though, disinflationary effects from stronger retail competition, recent real appreciation, and shelter costs slowing with house prices are forecast to weigh on inflation.

- ***The baseline outlook assumes a soft landing in the housing market.*** Household credit and debt growth are forecast to align with that of household income as house price increases slow, reflecting a combination of increased supply after stronger residential investment and demand shifts toward renting, as rental rates have become relatively more attractive, and, eventually, higher interest rates. A sharp price correction is not forecast, given robust underlying demand from strong population growth and little evidence of a rising inventory of new residential units.

9. After declining over the past decade, potential output growth is projected to remain broadly stable. Staff has updated its estimates of potential output, implying a small downward revision in medium-term growth prospects. Potential output growth declined by some ¾ percentage points over 2007-16 and is estimated at 2½ percent in 2016. The decline was mainly driven by lower net migration and lower rates of capital accumulation. Both developments reflect adjustments to the end of the mining boom that are assumed to be completed. Trend total factor productivity (TFP) growth has picked up, reflecting primarily sector-specific dynamics in mining, and it is assumed to remain at recent rates.[4]

C. Risks

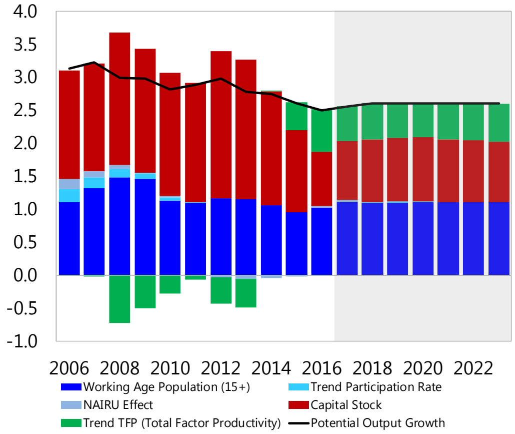
10. Risks to the near-term growth outlook are broadly balanced, but downside risks from housing-related vulnerabilities and their interaction with large negative shocks are a concern. Over the past year, the near-term risk outlook has improved with more supportive macroeconomic policies and a stronger global outlook (Annex II).

- ***Domestic risks.*** On the upside, and against the backdrop of stronger global growth and further increases in infrastructure investment, the pickup in non-mining business investment and domestic momentum could turn out stronger than it is currently expected. On the downside, private consumption growth could be weaker if improvements in household incomes turn out to

[4] The mining sector has transitioned to higher capital stock utilization after a long period of underutilization during the capacity buildup stage coinciding with the boom. In standard growth accounting, the underutilization of the capital stock with long time-to-build lags resulted in annual TFP declines of some 6 to 9 percent in the mining sector in the late stages of the boom—declines large enough to shape aggregate outcomes.

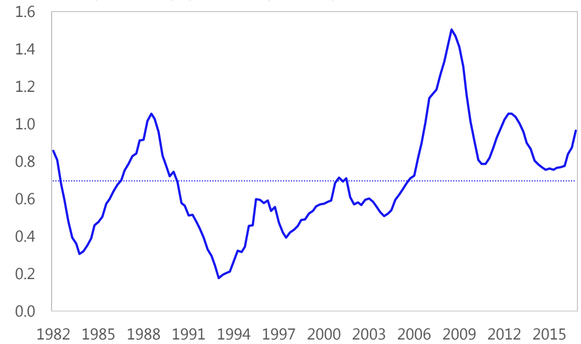
be more gradual, or if a cooling housing market and high debt-to-income ratios lead to more risk aversion among consumers.

Potential Output Decomposition
(Percent or Percentage Points)



Sources: ABS, Authorities' data, IMF staff calculations

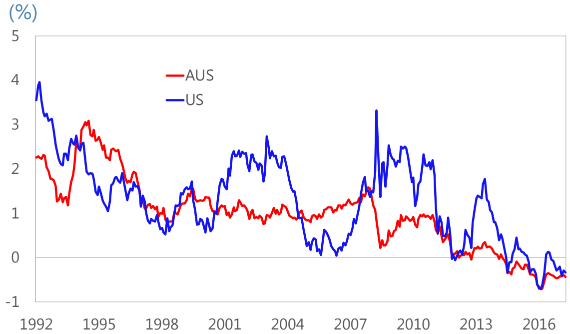
Net Migration
(Annual, in percent of population of previous period)



Sources: Haver Analytics and IMF staff calculations.

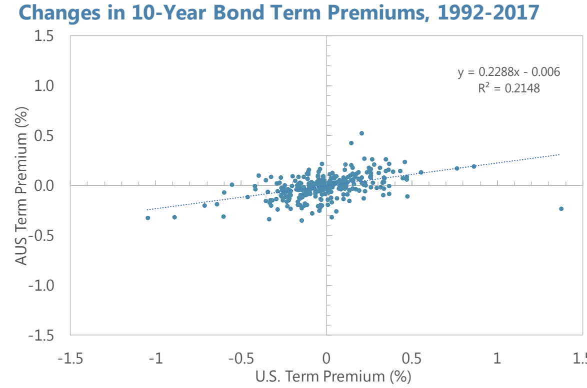
- ***External risks.*** Unexpectedly tighter global financial conditions could flow through to domestic financial conditions and result in lower growth in business investment and other interest-sensitive components of demand in Australia, where cyclical conditions are lagging those in the major advanced economies. That said, the passthrough of external financial shocks might be small, depending on the underlying drivers. The correlation between term premium changes on U.S. government bonds to Australian governments bonds has generally been low, consistent with the insulation provided by exchange rate flexibility and monetary policy autonomy. Given strong trade and commodity linkages, Australia is strongly exposed to economic and financial risks in China. While exchange rate flexibility in the context of flexible inflation targeting provides for substantial cushioning, the impact on specific sectors and demand components could still be large (Box 2).

10-Year Government Bond Term Premiums
(%)



Sources: Federal Reserve Bank of New York; Australian Office of Financial Management.
Note: The term premiums are estimates based on the term structure model of Adrian, Crump, and Moench (2013).

Changes in 10-Year Bond Term Premiums, 1992-2017



Sources: Federal Reserve Bank of New York; Australian Office of Financial Management; and IMF staff calculations.

- ***Housing risks.*** A large negative shock, most likely external, could interact with housing-related vulnerabilities and trigger a sharp house price correction ("hard landing"), leading to negative feedback loops between prices, household wealth and financial positions, lending capacity of the financial sector, and aggregate demand. Against the backdrop of some house price overvaluation, the housing market cooling could also be less benign than in the baseline projections.[5] Such a scenario could entail a larger non-completion of large apartment projects already approved and tentatively pre-sold on deposit, lower dwelling investment, and a larger house price correction than under the baseline, with corresponding negative aggregate demand effects.

- ***Potential growth.*** The authorities expect potential growth at around 2¾ percent, broadly consistent with Staff's updated estimates, given the large fluctuations in TFP growth over the recent mining investment cycle. Risks to potential growth over the IMF's 5-year projection horizon are two-sided. On the upside, the ongoing infrastructure investment push and cost control efforts in the mining sector could raise TFP growth more than expected. The government's policy package to reduce gender gaps in labor force participation could result in higher labor supply, and higher business investment could raise capital stock and productivity growth, the latter because of new technology embodied in investment. Increased competition could also help, as related recommendations from the 2015 *Competition Policy Review* have been implemented (see below). On the downside, TFP gains might be more difficult to realize than expected in a more services-oriented economy.

D. Authorities' Views on Outlook and Risks

11. The authorities expect the economy to expand at a solid pace, with a gradual pickup in growth. Non-mining investment growth has been stronger than previously thought, and labor market conditions have also strengthened considerably of late. Looking forward, average GDP growth is projected to strengthen gradually to 3 percent over the next few years. The ramp-up in LNG production following the final leg of the capacity expansion would contribute to growth in 2018-19; non-mining investment growth is forecast to increase, driven initially by the rise in infrastructure activity and favorable financing conditions, and, eventually, through the reinforcement from stronger economic activity more generally.

12. The risks to growth are assessed as balanced. On the external front, the authorities noted that the current expansion in the global economy could be more self-sustaining than expected, particularly if investment growth gained momentum, which would also lead to higher potential output growth. Meanwhile, the possibility of a hard landing in China remained a medium-term concern, while geopolitical tensions and increased global trade protectionism had become more prominent risks. Domestically, public infrastructure work could generate larger flow-on effects and

[5] See the accompanying Selected Issues Paper, Helbling and Li, 2018, "Housing Market Imbalances in Australia: Development, Prospect, and Policies" for details on house price overvaluation.

boost private business investment more than forecast. On the downside, consumption growth could be weaker if households started viewing lower income growth as being more persistent.

MACROECONOMIC POLICIES TO ENSURE RETURN TO FULL EMPLOYMENT

Context

13. **Australia's rebalancing to non-mining based growth is not yet complete.** While growth is forecast to be above potential by next year, it will likely take time for domestic demand momentum to broaden and for the economy to return to full employment. As in other advanced economies that have experienced drawn-out adjustment to shocks, widespread upward pressure on prices and wages are expected to develop only once the economy has operated at full employment for some time.

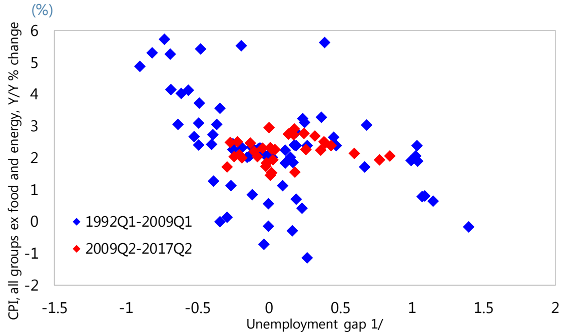
14. **The macroeconomic policy stance has become more supportive with the infrastructure investment boost.** The monetary policy stance is accommodative, with the current policy rate setting implying a real policy rate at zero relative to estimates of the real neutral long-term interest rate in the range of 1 to 2 percent (Figure 4, top right chart). Infrastructure spending at the Commonwealth and State levels has increased by an average of 0.5 percent of GDP annually over the next 4 years relative to the last Article IV Consultation (Figure 5, lower left chart).

Staff's Views

15. **Securing the return to full employment and inflation objectives will require continued macroeconomic policy support.** While the case for ex-ante policy insurance against downside risks has weakened compared to the last Article IV Consultation, given the improved balance of risks to growth in the near term, a premature unwinding of policy support should equally be avoided, given current macroeconomic conditions and prospects.

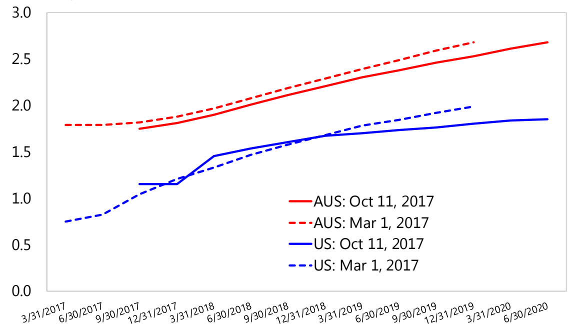
16. **The monetary policy stance should remain accommodative until stronger domestic demand growth and inflation are highly likely.** The RBA has signaled that its policy stance is sufficiently accommodative for inflation to return gradually to the 2-3 percent target. Staff agrees on the benefits of being flexible about the monetary policy horizon, given uncertainty about the unwinding of recent temporary disinflation (lower oil prices, stronger retail competition, and a real appreciation), and given that inflation has developed broadly as expected over the past year. At the same time, with such uncertainty, the RBA should communicate its commitment to meeting inflation objectives under the circumstances, as well as the implications for the monetary stance. In the current environment, in which monetary policy normalization in some other advanced economies has begun, forward guidance could help in avoiding a market-induced premature tightening of monetary and financial conditions in Australia (Box 3).

Unemployment Gap and Core Inflation
(%)



Source: Haver analytics and IMF staff calculations.
1/ Defined as actual minus HP filtered unemployment rate.

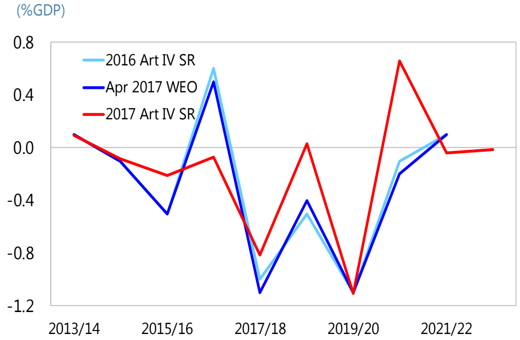
Policy Rate Expectations 1/



Source: Bloomberg.
1/ Based on future contracts for 30-day Federal Funds rate for the US and 90-day Bank Bill rate for Australia.

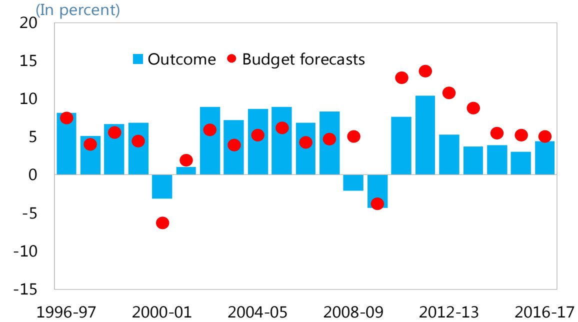
17. The turn to a more supportive fiscal policy stance because of the national infrastructure investment boost is welcome. While the fiscal impulse based on the general government structural budget balance remains negative, it underestimates both the multiplier from the higher infrastructure spending and the amount of the increase in spending since the Commonwealth also provides equity injections into non-financial public corporations and targets public-private partnerships. In Staff's assessment, the overall fiscal stance is expected to be broadly neutral in 2017 and 2018, allowing increased infrastructure investment to support the adjustment and economic rebalancing of the economy.

Fiscal Impulse
(%GDP)



Source: IMF, World Economic Outlook.

Budget Forecasts of Tax Receipts Growth
(In percent)



Note: Forecast error for 2016-17 is an estimate.
Source: ABS cat. no 5206.0, Budget papers and Treasury.

18. The Commonwealth budget repair strategy is appropriately anchored by medium-term budget balance targets, but it is vulnerable to lower nominal growth. Infrastructure spending relative to output will slightly decline in the next fiscal year, as the Commonwealth government remains committed to returning to a balanced budget by FY2020/21. The consolidation plan laid out in the FY2017/18 budget is consistent with strong growth, and is predicated on a rapid rebound of nominal growth to trend, leading to structural revenue and expenditure improvements because of income bracket creep for personal income tax collection and informal caps on real spending growth. The risk is that with a gradual recovery, the rebound to trend nominal growth might not be as rapid as forecast, posing risks to spending envelopes supporting macrostructural reforms, including infrastructure spending.

19. Australia has substantial fiscal space to absorb the risk from lower nominal growth and protect or, if needed, increase the spending envelopes for macrostructural reforms. Standard metrics, including gross debt, suggest that Australia has fiscal space under both the baseline and economic stress scenarios (Annex IV). The envelopes include infrastructure investment (given Australia's current infrastructure gap relative to its needs, Box 4) and, structural reforms supporting growth and productivity in the longer term, including on research and development (R&D).

Authorities' Views

20. The RBA assessed its current monetary stance as appropriately accommodative. Under the baseline outlook, it would support a gradual return of inflation toward the midpoint of the target range, while employment growth would be robust. RBA officials expect that tighter labor markets will eventually lift wages and prices. In the meantime, strong employment growth should support household income and consumption growth even if wage growth is slow to rise. The RBA does not see a case for further easing under the baseline outlook to try to achieve a more rapid rise in inflation, as it would come with higher risks to financial stability. While macroprudential policies have helped to lower medium-term risks to financial stability from high and rising household debt, a renewed boost to household borrowing from lower policy rates would still be unhelpful.

21. The government continues with its budget repair strategy, including a focus on containing recurrent spending. Both Commonwealth and State governments have markedly increased infrastructure spending, including through funding from previous partial privatization ("asset recycling"), or by encouraging public-private partnerships. Infrastructure is understood to contribute to broader economic growth and productivity, and will not be a recurrent drain on finances. The Commonwealth has accordingly shifted its approaches to financing for new recurrent spending, such as the upcoming increase in the Medicare levy to meet the remaining financing needs of the National Disability Insurance Scheme, and by earmarked funding pools to be drawn down in the long term, as is the case for the new *Skilling Australians Fund* for job retraining. Consequently, the Treasury noted that the projected increases in the public debt ratios are attributable for the most part to productive investment.

REDUCING HOUSING-RELATED IMBALANCES AND VULNERABILITIES

Context

22. **With house price increases moderating, related imbalances and vulnerabilities in the eastern capitals are expected to stabilize but they are unlikely to decline soon.** In the absence of a significant house price correction, a prospective reduction in imbalances and vulnerabilities will likely be driven by higher income growth, implying a slow decline in price-to-income or debt-to-income ratios.[6]

23. **The authorities have pursued a multipronged approach to manage these imbalances and vulnerabilities.[7]** In Australia's federal structure, the Commonwealth and State governments share responsibilities in policies influencing housing market outcomes. The eastern states' efforts have focused on strengthening the supply response, through increased spending on infrastructure, which helps increase the supply of accessible and developable land, and through zoning and planning reforms (Annex III). With the FY2017/18 budget, the Commonwealth also supported these efforts. APRA has addressed risks to the banking system and household balance sheets from rising housing-related vulnerabilities through prudential policies.

24. **On the demand side, the policies include measures that discriminate between residents and nonresidents and are designed to limit capital inflows, hence being classified as capital flow management measures (CFMs) under the IMF's Institutional View.** Victoria, New South Wales, and Queensland have levied stamp duty surcharges on non-resident buyers, while Victoria and New South Wales have also levied land tax surcharges on foreign residential property owners (see Table). At the Commonwealth level, the CFMs include limits on sales for foreign investors by developers (but not individual owners) and the withdrawal of the primary residency exemption from capital gain taxes of nonresident investors.

25. **Australian banks have further strengthened their resilience to negative housing and other shocks in 2017 and improved their funding profile (**Figure 6). The capital adequacy ratio of the Australian banking system rose by another 0.8 percentage points through 2017, reaching 14.6 percent by end-September, with 10.6 percent in the form of Common Equity Tier 1 (CET-1) capital. For the four large banks, CET-1 capital amounted to 10 percent of risk-weighted assets. The liquidity coverage ratio was comfortably above minimum requirements. By end-September, many banks already had Net Stable Funding Ratios (NSFR) above the 100 percent required from January 1, 2018.

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[6] The speed at which these ratios decline depends on the relative growth between income and house prices, and the level of mortgage interest rates. This process can be fast or slow. But mechanically, for the ratios to decrease substantially, given the high value of the numerator in the ratio (debt), income growth should be relatively larger than if debt levels were lower.

[7] See also the accompanying Selected Issues Paper, Helbling and Li, 2018, "Housing Market Imbalances in Australia: Development, Prospect, and Policies" for details on housing market policies.

Australia: Key Features of Property-related Measures Applying to Foreigners

	Application	Introduction	Rate: Initial	Rate: 1st revision	Comments
National level					
Annual charge on foreign owners of under-utilized residential property (on vacant properties only)	Foreign owners	May 2017	Amount 1/	...	...
Prohibition of property developers to sell more than 50% of new residential housing developments to foreigners	Foreign buyers	May 2017	...	...	Unlikely to be a binding constraint
Eliminating the main residence capital gains tax exemption, increasing the withholding tax rate and reducing the withholding threshold on capital gains	Foreign owners	May 2017	...	...	Improving the integrity of capital gains tax rules
Victoria					
Foreign purchaser additional duty (stamp duty)	Foreign buyers	Aug 2015	3%	7% in Jul 2016	...
Land tax surcharge (on vacant properties only)	Foreign owners	Aug 2015	0.5%	1.5% in Jan 2017	...
New South Wales					
Surcharge purchaser duty (stamp duty)	Foreign buyers	June 2016	4%	8%	...
Land tax surcharge	Foreign owners	June 2016	0.75%	2% in June 2017	...
Queensland					
Additional foreign acquirer duty (stamp duty)	Foreign buyers	Aug 2016	3%	...	...

1/ The amount is generally equivalent to the relevant foreign investment application fee imposed on the property at the time it was acquired.

Staff's Views

26. **The broad multipronged policy to addressing housing imbalances and vulnerabilities is appropriate, given their macroeconomic and financial stability repercussions.** The risks to domestic financial stability have been addressed through prudential measures, including the tightening of bank lending standards, although risks from a housing market hard landing remain a concern. Mirroring the experience in other countries, the measures and the resulting credit supply shifts have not reduced demand-side incentives for real estate investment. Besides the return to full employment and higher incomes, improving housing affordability in the eastern capital cities will ultimately require a strong supply response and more effective use of land.

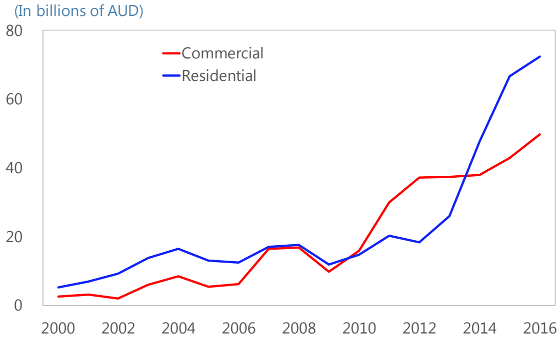
27. **Supply-side measures remain critical, as housing-related imbalances and vulnerabilities need to be lowered also from a longer-term perspective.** Legacy supply-demand imbalances in the eastern capital cities are narrowing after strong residential investment growth. Nevertheless, house prices are expected to remain high, reflecting higher land scarcity and expectations of robust future demand for additional housing in these cities, given continued relatively high population growth. As is typical for densely populated areas, the empirical evidence points to a long-term price elasticity of housing supply well below unity (Box 5). But the flipside of low housing affordability is the possibility of "spatial" or geographical misallocation of resources

because labor and business might not be able to afford to move to urban areas where their productivity would be higher. This, in turn, could hold back aggregate productivity growth in the economy, given the significant share of the eastern capital cities in national economic activity. This underscores the need for continued efforts at fostering housing and land supply as the eastern capitals become even larger, including through streamlining development processes, continued strengthening of planning processes, and providing for growth in smaller urban areas.

28. The effectiveness of supply-side measures should be strengthened through tax reform. At the State level, a prime revenue source is stamp duties, which tax real estate transactions and discourage alternative uses of urban land at a time of adjustment to higher relative prices in the eastern capitals by household and firms. Stamp duties may also hamper labor mobility. At the Commonwealth level, preferential tax treatment of home ownership and investment (e.g., capital gain tax exemptions for owner-occupiers and a 50 percent capital gain tax discount for investment property owned for more than one year combined with few limits on negative gearing) favor residential real estate relative to many other investments, supporting higher demand and valuation relative to a counterfactual of no or lower tax preferences.

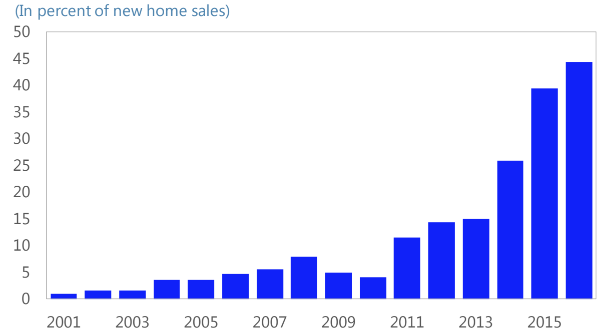
29. Replacing stamp duties by broader land taxes should be a priority. Replacing the stamp duties with a systematic land tax with fewer exemptions (e.g., no unlimited exemptions for owner-occupiers) could be done gradually and with deferral options, to make it palatable to States, given the importance of stamp duties as a revenue source, and to currently-exempt owner-occupiers.[8] In addition, lower capital gains discounts and limits to negative gearing for investors and limits to capital gains tax exemptions of owner-occupiers are desirable. Such reform would lower incentives for leveraged real estate investment, but should consider broader tax parameters, including possible land tax reform, to avoid disruptive valuation changes in housing markets.

Approvals for New Residential Property Purchases by Foreigners
(In billions of AUD)



Source: Australian Foreign Investment Review Board, *Annual Reports*.

Approvals for New Residential Property Purchases by Foreigners
(In percent of new home sales)



Sources: Australian Foreign Investment Review Board, *Annual Reports*; Haver Analytics; and IMF staff calculations.

[8] In its *5-Year Productivity Review*, the Productivity Commission suggests other options to facilitate the switch from a stamp duty to a land tax regime.

30. The role of foreign buyers in the house price run-up is difficult to quantify, but data point to a capital inflow surge in the eastern capitals' housing markets during 2012-16. Foreign investment approvals data for residential real estate purchases—the only comprehensive source for data across time and market—suggest a marked increase in the interest of foreign buyers to acquire residential real estate in the eastern capitals from 2012, especially in Melbourne and Sydney but also in Brisbane (which, together, accounted for more than 90 percent of the increase in approvals).[9] The surge in the demand for residential property mirrors that in commercial property, recorded in approvals data. The RBA estimates that one fourth of new apartments in the eastern capitals over the past few years were purchased by foreign buyers, and about 10 to 15 percent of transactions in newly-built residential property overall.

31. The use of CFMs to counter demand pressure from a capital inflow surge into housing has been consistent with the IMF's Institutional View in most cases. The CFMs have not substituted for warranted macroeconomic policies. A tightening of the latter for greater regional housing market stability and affordability is not warranted under current cyclical conditions, as discussed in the previous section. The authorities' policy response to the housing market imbalances has been broad and has addressed all domestic sources of upward pressure on house prices. The CFMs are assessed to complement those measures by reducing price pressure from foreign buyers as an interim tool before supply measures become effective. APRA's prudential measures could not address the capital inflow surge into the housing markets of the eastern capitals through credit supply channels, given the reliance of many nonresident investors on foreign sources of finance. The CFMs were designed as price measures to discourage, but not ban, the acquisition of residential property ("demand") by foreign buyers. However, less discriminatory alternatives would have been possible in the case of CFMs targeting vacant property—a general surcharge on all vacant property in urban settings would have been more appropriate, as externalities from prolonged vacancy arise irrespective of the residency of owners.

32. The housing CFMs should be reconsidered. CFMs should be replaced by alternative and effective nondiscriminatory measures where available. As for the others, their use has been appropriate, but they should be removed once the inflow surge abates. Anecdotally, purchases by foreign buyers have declined recently, and the housing market is expected to cool. The role of foreign buyers in the local housing markets should therefore diminish and the use of CFMs would no longer be appropriate. At the same time, the completion of implementation of the housing policy packages should also be considered, as discussed above.

33. The capital adequacy framework is appropriately being refined further, raising capital requirements and addressing the concentrated exposure to mortgages.[10] In July, APRA issued a framework that clarified the capital requirements for Australian banks to be "unquestionably strong," as suggested by the 2014 Financial Sector Inquiry. For the four major banks, which use internal risk

[9] Foreign buyers subject to approvals are buyers who do not hold Australian or New Zealand citizenship or are not holders of a permanent residency visa.

[10] Financial sector performance, risks, and policy frameworks will be reviewed more comprehensively in the upcoming Financial Sector Assessment Program (FSAP) scheduled in 2018.

rating models, the framework implies CET-1 capital ratios of at least 10.5 percent by January 1, 2020, some 1.5 percentage points above current requirements and some 0.5 percentage points above ratios in 2017Q3. After adjusting for stricter requirements in capital and risk weight calculations in Australia, APRA estimates that this would translate into substantially higher CET-1 capital ratios on an internationally comparable basis.[11] It is also preparing regulations to address the systemic risks from banks' concentrated exposure to residential mortgages, by making capital requirements also a function of exposure concentration, within unchanged overall capital adequacy requirements.

Authorities' Views

34. Responding to growing concerns about household balance sheets, property market risks and housing affordability, Australia has implemented a range of policies. The policies have involved domestically-oriented macroprudential policies and measures to promote housing supply, through higher infrastructure spending and reforms to zoning and other regulations. The authorities have been encouraged by recent developments in lending activity following macroprudential policy interventions of recent years. The quality of new mortgage lending assets has started to improve, helping to lowering medium-term risks to financial stability. Housing supply has increased substantially over the past few years, lowering the gap between underlying demand and supply and thereby contributing to moderating upward pressure on house prices. Further efforts were in train, however, and housing markets are widely expected to stabilize. While recognizing that demand-side policies might contribute to upward pressures, the authorities felt that recent measures have been more targeted (e.g., new home buyers).

35. Australia remains a strong supporter of open capital markets and a flexible exchange rate and sees policy measures that have implications for non-resident investors as part of the broad policy package to safeguard financial stability and promote housing affordability. In view of the reliance of many non-resident investors on foreign sources of finance, and Australia's jurisdictional inability to regulate related lending practices of banks operating in foreign countries, Australia has chosen to implement a range of additional policy measures that impact individual non-resident investors, which complement and balance measures put in place that impact only on domestic investors. These measures seek to ensure that foreign investment in Australian residential property increases dwelling supply, consistent with Australia's foreign investment framework. The measures are mostly price-based and do not ban foreign investment. Moreover, they have been calibrated such that they only impose a small additional cost on foreign investors. Other Commonwealth measures have been aimed at closing tax loopholes and ensuring that large-scale developments seek to meet broad demands, rather than catering exclusively to a narrow group only. Alternative measures that would been less discriminatory with respect to the residency of buyers would either have been less effective or introduced other distortions. Against this backdrop, the authorities did not think that their measures should qualify as CFMs since they were not designed with a view to reducing capital flows or to delay warranted macroeconomic adjustment.

[11] APRA estimates that at end-2016, the four major banks' CET-1 capital ratio of 9.55 percent translated into 14.2 percent on an internationally comparable basis.

36. The authorities agreed that reform of some real estate taxation could contribute to housing market stabilization, but only in the longer term. States recognize the benefits of shifting from stamp duties to broad-based land taxes for revenue stability, redevelopment of property, and to encourage labor mobility. They noted, however, any change would have to be gradual, given the important share of stamp duties in their revenue and given the additional burden on existing property owners. And politically, such reforms were sensitive, including because of the need to coordinate land taxes with local council property taxes. Because the latter element was not present, State officials think that the ongoing, gradual switch from stamp duties to land taxes in the Australian Capital Territory (ACT) is unlikely to be a role model. As for the reform of capital gain taxation on residential real estate, the authorities noted that changing related tax parameters could have large valuation implications, which could potentially involve destabilizing house price effects. Prudential measures were preferable to address risks to financial stability in the shorter term.

FOSTERING LONG-TERM GROWTH OPPORTUNITIES

Context

37. Recent developments highlight Australia's productivity challenge. Over the past few decades, Australia has maintained its relative per capita income position vis-à-vis the United States in purchasing power terms. Since the early 2000s, both productivity and terms-of-trade gains have contributed to this outcome. While, unlike in many other AEs, trend TFP growth in the aggregate did not decline, on average, over the past five to seven years, this outcome largely reflects sector-specific dynamics in mining. Many other sectors recorded lower average productivity growth, and, in a cross-country comparison, Australia's recent productivity performance was below average among AEs (Figure 9, top left chart).

38. Recent structural policy efforts have focused on addressing infrastructure gaps, strengthening competition, and fostering R&D. As discussed above, both the Commonwealth and eastern state governments have increased their infrastructure spending envelope. Reforms to the competition law at the Commonwealth level, as proposed in the 2015 *Competition Policy Review* (the "Harper Review"), were enacted in November 2017, which should encourage more competitive behavior in the economy. The National Innovation and Science Agenda (NISA) seeks to strengthen R&D. In 2014, the government committed to reduce the gender gap in labor force participation by 25 percent by 2025 as part of the Brisbane Commitments in the G-20 process. Company tax reform has sought to reduce the statutory corporate income tax rate gradually from 30 to 25 percent. So far, only the rate reduction to 27½ percent over 5 years for small companies with a turnover of up to A$50 million has been legislated.

39. The *5-Year Productivity Review* released in October 2017 proposes an updated agenda for structural reforms. In its inaugural *Review*, the Productivity Commission, an independent government advisory body, proposes structural reforms to improve outcomes in health and education, foster urban development, and improve regulation affecting market efficiency, including in network industries, and strengthen government effectiveness, including in intergovernmental relations in the context of a complex overlap over responsibilities. These proposals could define an extended structural reform agenda, adding to recent priorities. The Commission suggests that these proposals form a joint reform agenda endorsed by the Council of Australian Governments (COAG).

Staff's Views

40. **The structural reform agenda appropriately focuses on key structural gaps.** The reform agenda addresses gaps in infrastructure, R&D, and female labor force participation, as identified in analyses and reviews, including by the Productivity Commission and the OECD. Funding envelopes are limited for some programs, however, notwithstanding scope for efficiency gains in delivery, and longer-dated funding envelopes would increase certainty for potential participants. The delivery of reform is complicated by the overlap in responsibilities between the Commonwealth and States.

41. **Further infrastructure spending increases should be considered.** The recent spending increases have narrowed the Australia's infrastructure gap. While there is uncertainty about the magnitude of the gap, given model and estimation uncertainty, the increases do not seem large enough to close it. Further increases in infrastructure investment thus have the potential to improve physical and digital interconnectivity, both internally and with Australia's trading partners, thereby contributing to higher growth. Locally, such increases would also contribute to increasing the supply of developable land and reducing risks of geographical resource misallocation. Staff estimates that closing the infrastructure gap would raise real GDP by as much as 0.7 percent in the long term (Box 4).

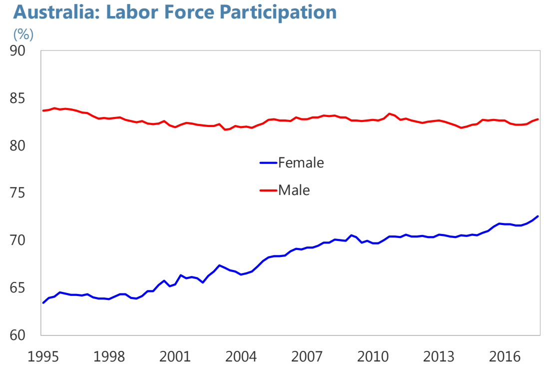
42. **Reforms aimed at fostering innovation should be supported by longer-dated resource commitments, underpinning a longer-term vision.** Australia's R&D share of GDP lags other OECD members. But the relatively small-scale A$1.1 billion (0.06 percent of GDP) NISA is only funded through FY2018/19. A clear implementation of the upcoming *2030 Strategic Plan for the Australian Innovation, Science and Research System* by defining the scope and funding of policy instruments would help strengthen the reach and magnitude from its possible positive productivity externalities.

43. **Stronger labor market and education reforms would complement better infrastructure.** Flexible labor markets have provided for a relatively smooth reallocation of labor after the mining boom, but there may be residual frictions (e.g., skill mismatches) that hinder the adjustment and labor force participation. Active labor market policies for labor force re-education and skills upgrades are currently funded at low levels (A$1.8 billion, about 0.1 percent of GDP). There are efforts to secure long-term funding, including through a levy proposed to maintain the *Skilling Australians Fund*. With the transition toward non-mining sources of growth, the education system should support the development of new sectors, at a rate commensurate with the needs of growing population and realistic projections of the efficiency gains that can be incentivized through funding cuts.

44. **The government's strategy to reduce gender gaps in labor force participation and representation in senior positions will lift potential output directly and indirectly.** Over the past few decades, female labor force participation has been close to the median in AEs. Reducing

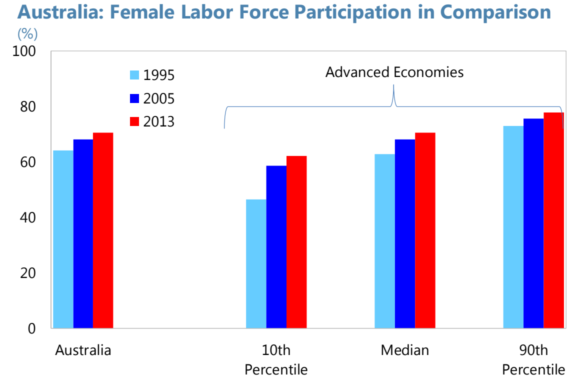
the gender gap in labor force participation—around 12 percentage points in 2014—by one fourth would lift real GDP by about 1 percent through the labor supply effect. In addition, greater work place gender diversity would have dynamic indirect effects through increased trend TFP growth. The government presented its implementation plan for the strategy in 2017, planning to raise women's participation through an integrated strategy that raises incentives for participation, through enhancing availability of child care, improving workplace diversity, promoting the skill base for better integration into jobs of the future and fast-growing technology-intensive sectors, and enhancing financial incentives, and awareness building. The Commonwealth government is setting the pace for greater female representation in senior positions, with every government agency required to set targets for gender equality in leadership positions and gender equity in the workplace since 2016.

Australia: Labor Force Participation



Source: OECD.

Australia: Female Labor Force Participation in Comparison



Source: OECD and IMF staff calculations.

45. A broad tax reform package would benefit productivity and reduce inequality. The government seeks to broaden the corporate tax reduction beyond small enterprises. With Australia being a capital importer, it is appropriately concerned about the international standing of corporate tax rates. Australia's effective average corporate tax rates are currently in the upper third among advanced economies, but the international environment is evolving.[12] A more comprehensive tax reform has the potential to increase efficiency of the tax system, increase investment and labor demand, and reduce inequality.[13] This would entail lowering taxes on income from mobile factors of production (capital and labor) and increasing reliance on taxes on immobile factors of production (land) and indirect taxes on consumption, undertaken in a revenue-neutral way. According to a comprehensive reform scenario outlined in Pitt (2015), such a reform could raise real GDP by at least 1.3 percent. Concerns about the regressive nature of higher taxes on consumption at a time of low wage growth could be addressed by broadening the base, reducing generous tax concessions (some of which are not means-tested or are limited), and revising the design of the income tax reform.

[12] See CBT, 2017, "CBT_tax_database_web_2017" (Oxford Centre for Business Taxation (CBT) online database, Saïd Business School (SBS), Oxford).

[13] See, for example, Pitt, 2015, "Options for Tax Policy and Federal Fiscal Relations Reform" in *Australia Selected Issues*, IMF Country Report No.15/275.

46. The structural reform agenda could also be rejuvenated by drawing on measures proposed in the *5-Year Productivity Review*. These proposals could define new policy parameters, which could also increase certainty about policy directions for business investment decisions. These would also build upon the recently enacted legislative agenda of the *Competition Policy Review* at the Commonwealth level. At the State level, there are still further agreements needed to meet its recommendations.

Authorities' Views

47. Jobs and growth remain the economic policy priority, and the authorities are seeking to reinforce structural reforms. The Treasury has established a new structural reform group that will collaborate on reform priorities, within the Commonwealth government and across different levels of government. With shared responsibilities, the latter is a constraint in Australia's federal system. New measures are being undertaken at the Commonwealth level for infrastructure, education, reducing gender gaps, energy and innovation. The Government will also work with the recommendations from the Productivity Commission's inaugural *5-Year Productivity Review*.

48. The authorities continue to implement the reforms proposed in previous reviews and inquiries. Most of the *Financial Services Inquiry* recommendations have been implemented to sustain a productive financial sector. The Commonwealth recently enacted important competition law reforms recommended by the *Competition Policy Review*, although States still have other microeconomic reform measures to implement, a subject of ongoing discussions in the COAG. The latter is also involved in implementing the recommendations of the *Independent Review into the Future Security of the National Electricity Market* (the "Finkel Report"), in tandem with a new framework—the National Energy Guarantee (NEG)—to ensure the reliability and security of the National Electricity Market (NEM), and to meet carbon emissions targets from the Paris Agreement.

49. The Commonwealth is continuing its commitment to encouraging innovation, although it is in the process of developing a new framework. The Commonwealth will let the existing NISA continue until and wind down by FY2018/19, and maintain some of the programs started under its aegis. It will use the upcoming release of the *2030 Strategic Plan for the Australian Innovation, Science and Research System* to frame a new process going forward to encourage innovation.

50. The authorities agree with the merit of tax reform. The Commonwealth government continues to push for corporate tax cuts for all companies. The first tranche of this reform, which applies the lower rate to companies with turnover up to A$50 million, has already been legislated. Legislation for the remainder of the company tax cuts is before the Parliament. The way in which GST is used for fiscal equalization is also under review, with the possibility of reform to encourage more stable funding for States.

STAFF APPRAISAL

51. Australia's recovery from the end of the mining boom has advanced further in 2017 but is not yet complete. An infrastructure investment push has contributed to domestic momentum, and private business investment has picked up. Employment growth has thus strengthened markedly and unemployment has moderated further. But wage growth is weak, and private consumption growth has been subdued. Inflation outcomes remain below the midpoint of the Reserve Bank of Australia's 2 to 3 percent target range. The external position is broadly consistent with medium-term fundamentals and desirable policies.

52. Conditions are in place for a pickup in economic growth to above-trend rates and further declines in economic slack. A stronger global outlook, recent stronger employment growth, and continued strong contributions from infrastructure investment are driving the growth pickup, with positive spillovers to private investment and the rest of the economy, more than offsetting the impact of slowing dwelling investment growth. But household consumption and real wages are expected to pick up later. Upward pressure on prices and wages should start once the economy has been at full employment for some time.

53. Continued macroeconomic policy support will be essential until stronger domestic demand momentum and inflation close to the target range midpoint are secured. With a pickup in public investment, the overall fiscal stance is expected to be broadly neutral in 2017 and 2018, contributing to a welcome rebalancing to a more supportive macroeconomic policy mix. With the cash rate at 1.5 percent, monetary policy remains appropriately accommodative. With Australia's recovery lagging that of other major advanced economies, monetary policy should remain firmly focused on securing the domestic recovery.

54. The Commonwealth government's budget repair strategy is appropriately anchored by medium-term budget balance targets. The strategy is predicated on a rapid rebound of nominal growth to trend, leading to structural revenue and expenditure improvements. The risk is that with a gradual recovery, the rebound to trend might not be as quick as expected. Australia has substantial fiscal space to absorb this risk and protect or, if needed, increase the spending envelopes for infrastructure investment, structural reforms supporting trend growth and productivity.

55. Australia has monetary and fiscal policy space to respond if downside risks to growth should materialize. The near-term balance of risks has improved, with both upside and downside risks to the recovery, but large external shocks, including their interaction with the domestic housing markets and high household debt, remain a concern. Australia is also particularly exposed to downside risk from China through its trade links in commodities and services.

56. Household vulnerabilities imbalances are unlikely to be corrected soon, even with a soft landing of the housing market. With continued strong population growth, demand growth for housing is expected to remain robust, and, in the absence of a large inventory of vacant properties, prices should stabilize, rather than fall significantly. Declines in household debt-to-income ratios would thus need to be driven by strong nominal income growth and amortization.

57. Supply-side policies will remain critical to manage housing affordability and risks, given continued demand for more urban space and should be complemented by tax reform. The broad set of measures at the State and Commonwealth levels to strengthen the housing supply response should be fully implemented, including reforms to rationalizing planning and zoning that further promote efficient use of land in denser urban settings. The States' stamp duty tax regimes are inefficient and should be replaced with a systematic land tax regime applying to all residential and commercial properties. The capital gains discounts on housing should be reduced and other tax incentives limited. The housing CFMs should be reconsidered. Alternative, effective measures that do not discriminate between residents and nonresidents should be implemented where feasible (i.e., on vacant properties), and the rest of the CFMs should be phased out once the capital inflow surge into the housing market abates.

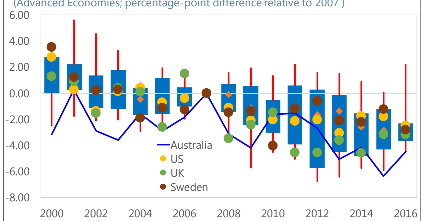
58. The structural reform agenda appropriately focuses on fostering productivity and strengthening labor force skills and composition but would benefit from new momentum. The increase in infrastructure spending has provided for a welcome catch-up with needs after a decade of strong population growth. Strengthening trend TFP growth through a stronger innovation system, labor force skills upgrades, and reduced gender imbalances is critical, and related programs should be underpinned by longer-term strategies and longer-dated resource commitments. The reform agenda should be rejuvenated by drawing on the structural reforms proposed in the inaugural *5-Year Productivity Review*.

59. It is recommended that the next Article IV consultation be held on the standard 12-month cycle.

Box 1. Australia's Wage Dynamics in International Comparisons

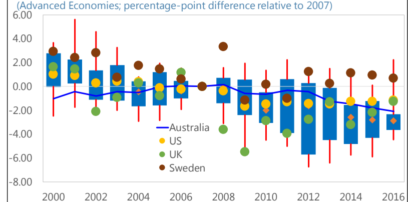
In Australia, like in virtually all advanced economies, nominal wage growth has declined since the Global Financial Crisis. A comparison based on Chapter 2 in the IMF's October 2017 *World Economic Outlook* suggests that average annual wage growth in Australia declined from close to 6 percent in 2007 to about 1 percent in 2016, exceeding the median decline in advanced economies (AEs) by a substantial margin (left chart).[1]

Nominal Wage Growth (Compensation per Hour)
(Advanced Economies; percentage-point difference relative to 2007)



Source: IMF, World Economic Outlook and IMF staff calculations.
Note: The wage variable is compensation per hour of workers. The upper and bottom edges of the box represent the 25th and 75th percentile respectively. The orange marker between the boxes shows the median and the red markers the 10th and 90th percentile.

Nominal Wage Growth (Wage Price Index)
(Advanced Economies; percentage-point difference relative to 2007)



Source: Haver Analytics; IMF, World Economic Outlook and IMF staff calculations.
Notes: The wage variables used are the Wage Price Index for Australia, Employment Cost Index for US, and Labor Cost Index for UK and Sweden. The upper and bottom edges of the box represent the 25th and 75th percentile respectively. The orange marker between the boxes shows the median and the red markers the 10th and 90th percentile.

The common set of macroeconomic and structural factors identified in IMF (2017) can explain much of the weak nominal wage growth in Australia and other AEs.[2]

- *Economic slack*. Despite recent improvements, increased labor market slack since the Global Financial Crisis has reduced wage growth. While the unemployment rate did not rise much in Australia and declined since early 2016, this measure underestimates the extent of slack. As in many other AEs, underemployment—people working fewer hours than desired—has also increased and still is above pre-recession levels.
- *Inflation expectations.* Nominal wage growth is influenced by recent inflation outcomes and inflation expectations. The lower inflation rates over the past few years have translated into lower nominal wage growth also in Australia, as reflected in the declines of the average size and frequency of wage increases (Bishop and Cassidy, 2017).
- *Labor productivity growth.* Declining trend labor productivity growth in many AEs has also been another factor behind declining wage growth. In Australia, however, mining-related development have resulted in different productivity dynamics. Labor productivity has increased since the end of the mining boom.
- *Structural factors.* Technological change, globalization of production processes, and changes in labor market institutions (e.g., lower worker bargaining power) have also contributed to lower wages.

Some country-specific factors need to be considered to understand the large decline in Australia's wage growth. Australia benefited from sharply higher commodity prices before the Global Financial Crisis, and producer prices and wages were rising rapidly, unlike in most other AEs. Since the end of the mining boom, the economy has been rebalancing toward other sources of growth, with large compositional changes in labor markets, including employees moving from higher paid, mining-related job to lower paid jobs in other sectors, especially in services. The latter also accounted for much of the increase in female labor force participation in recent years. This labor market adjustment has contributed to the large decline in the wage growth measure shown in the left chart above. A wage measure that is not affected by such compositional change shows relatively smaller wage declines (right chart). Lastly, the recent modest appreciation of the real effective exchange rate may have also put downward pressure on wages with increased international competition in some sectors.

Tighter labor market conditions should eventually result in stronger wage growth in Australia. The country's recovery is lagging that in other advanced economies, as its economy is adjusting to the negative demand effects from the end of the mining investment boom and lower commodity prices.

[1] IMF, 2017, "Recent Wage Dynamics in Advanced Economies: Drivers and Implications", October 2017 *World Economic Outlook,* Chapter 2. The wage measures are based on compensation per hour, using national accounts data.

[2] The Australian Treasury, 2017, "Analysis of Wage Growth"; and Bishop, and Cassidy, 2017, "Insights into Low Wage Growth in Australia", RBA, *Reserve Bank of Australia Bulletin* (March) provide Australia-specific analyses.

Box 2. Australia's Linkages with China: Adjusting to Risks

China and Australia have increasingly strong linkages, especially through trade and commodity channels.[1] These are driven by demand from China for commodities such as coal and iron ore, or services such as tourism and education, of which Australia is a major supplier.

During China's transition, both upside and downside risks may lead to rebalancing in Australia that dampens the overall impact. Scenario analysis suggests that real GDP often moves very little if a shock materializes. With Australia's fully floating exchange rate regime, the economy can rebalance along two demand dimensions – between domestic and external demand, and between trade with China and the rest of Asia (and the world). On the supply side, production can rebalance across sectors after most shocks.

A disorderly rebalancing scenario in China illustrates the complexity of the linkages. Using the IMF's ANZIMF (Australia-New Zealand Integrated Monetary and Fiscal model), China experiences a broad-based slowdown in growth under the scenario.[2] China's real GDP is 10 percent lower after 10 years, because of a downward revision in its expected future path for productivity (leading to an appreciation of its REER, and a contraction of its exports), weaker imports and activity in the steel industry (with knock-on effects for demand for iron ore and coking coal), a decline in the housing market, and increased corporate risk.

The implications for Australia vary across sectors. While Australia's net commodity and services exports to China fall permanently, the Australian REER depreciates, and exports to the rest of Asia (and the world) increase. This more than offsets some of the negative effects of lower exports to China; on net, services exports are appreciably stronger. On the other hand, the depreciation and loss of commodity wealth leads to weaker consumption and therefore imports. These movements in the components of aggregate demand lead to broadly offsetting effects on real GDP, which increases slightly (almost 0.4 percent) in the long term.

For the rest of Asia, there are two competing effects which allow for Australia to benefit on net. The first (negative) effect is lower Chinese demand for goods. The second (positive) effect is the large decline in global commodities prices because of China, which encourages demand for commodities and stimulates GDP in most of the rest Asia as net commodity importers. Other net commodity importers also benefit, with positive spillovers for the rest of Asia.

These relatively benign overall effects are conditional on a lack of financial contagion from China, or existing resilient financial sectors which can withstand a contraction in China's financial sector. A scenario with substantial financial turmoil would dampen an otherwise optimistic outcome for Australia and the rest of Asia.

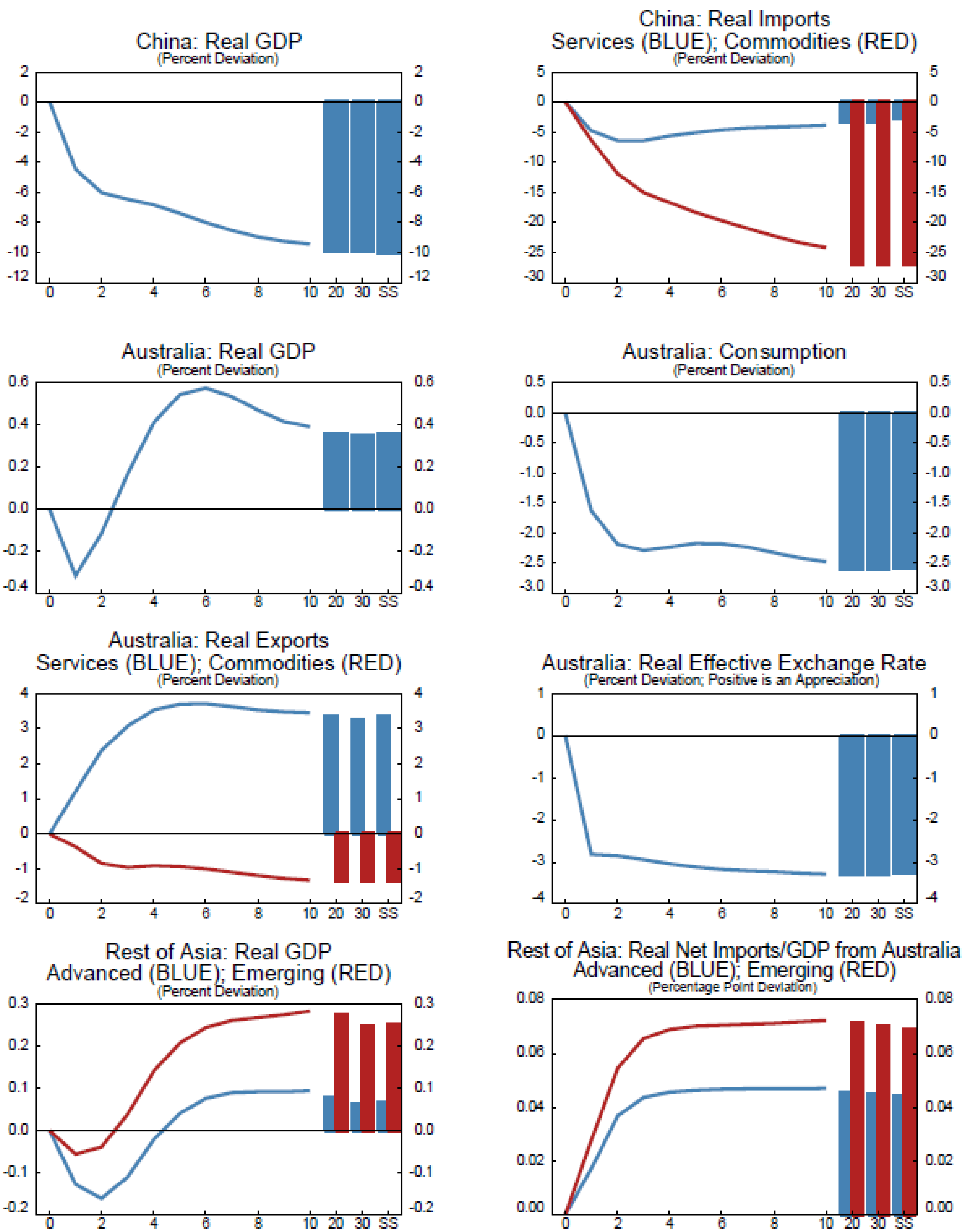
[1] Further details can be found in the accompanying Selected Issues Paper, Karam and Muir, 2018, "Australia's Linkages with China: Prospects and Ramifications of China's Economic Transition."

[2] ANZIMF is a specialized version of the IMF's Global Integrated Monetary and Fiscal model (GIMF) that includes trade and production of consumer services (tourism and education) and commodities (coal, iron ore, other metals).

Box 2. Australia's Linkages with China: Adjusting to Risks (concluded)

A Disorderly Rebalancing in China

(Percent or percentage point deviation from the WEO baseline)



Source: IMF Staff calculations.

Box 3. Forward Guidance Under Current Conditions

A baseline forecast with confidence bands, based on a prudent risk-management strategy to monetary policy is provided in the attached figure.[1] The path of the policy rate is derived by minimizing a loss function which places equal weights on output gap and inflation deviations, rather than a path produced based on a standard linear reaction function.[2] The scenario is based on assumptions of a modest expansion of the world economy going forward and some policy tightening by the U.S. Fed, with initial conditions reflecting Australia's economic conditions as of 2017Q3.

In the baseline, the RBA would plan to keep the policy rate at its current level for about a year before raising rates gradually over time. This would eliminate slack fairly quickly by keeping nominal and real interest rates in an accommodative stance for an extended period of time. Headline inflation moves back to the 2.5 percent midpoint of the target range by 2020Q1.

The logic for not raising the policy rate is the risk of a premature tightening in financial conditions that would hamper the modest recovery. In this, as in other difficult situations, publication of all key aspects of a complete macroeconomic forecast, including the conditional interest rate path, would help the central bank give a credible public account of its intentions and strategies and minimize market mispricing or misinterpreting those intentions.

The RBA would not be committed to following this policy rate path, but would instead be prepared to adjust the policy rate path in response to new information that results in revisions in its forecasts. This is illustrated in the figure by confidence bands around the baseline forecast. If demand conditions were to end up being stronger than in the baseline, inflation would end up being higher and would call for a steeper path in the future policy rate. To emphasize that the central bank is not committed to a specific policy rate path, it could simply publish the bands without the modal baseline forecast (the red line) for the policy rate over the forecast horizon.

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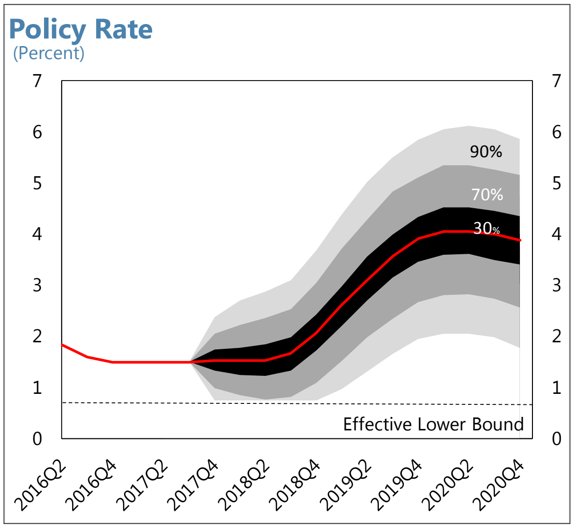
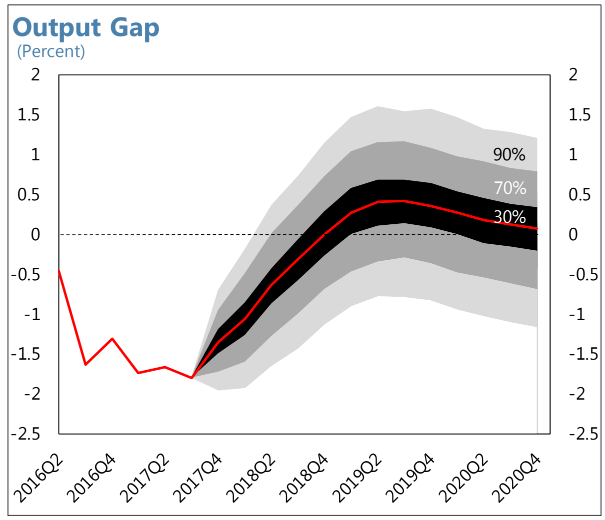
[1] The baseline is illustrative and does not necessarily reflect the final baseline adopted by Staff in this Report.

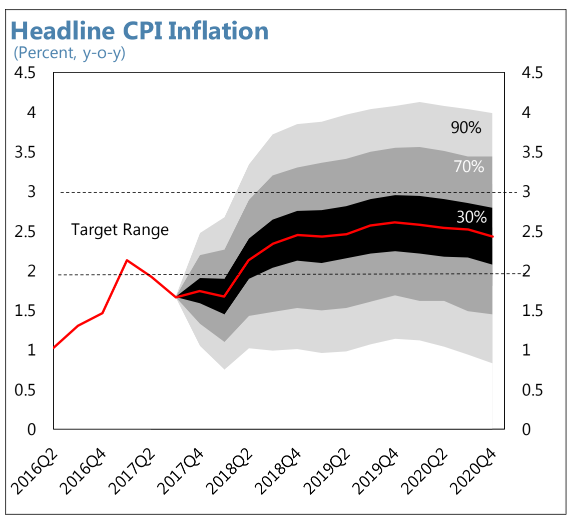
[2] See Obstfeld and others (2016) for a comparison of the loss-minimization approach and the standard linear interest rate reaction function applied to the case of Canada. See also Helbling and others (2017) for an application to Australia.

Box 3. Forward Guidance under Current Conditions (concluded)

Baseline Conditional Projections with Confidence Bands





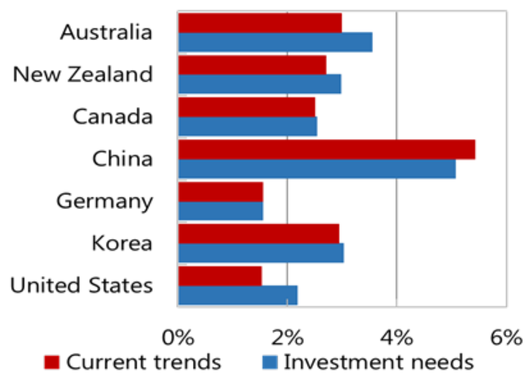


Source: IMF Staff simulations.

Box 4. Australia's Infrastructure Gap and Fiscal Policy

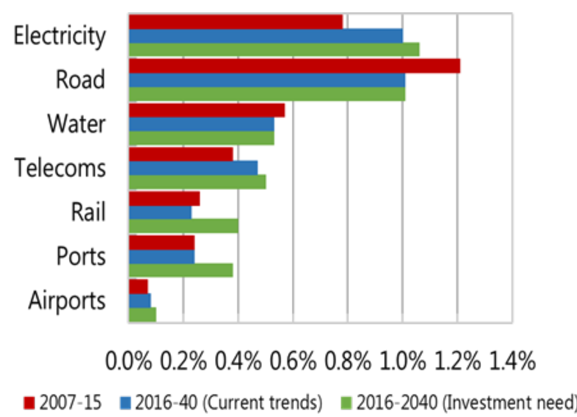
Commonwealth and State governments have increased spending on infrastructure. The concerted effort aims to address the infrastructure gaps that have been identified in Australia. According to analysis published by the Global Infrastructure Hub, Australia is facing an annual shortfall of almost 0.4 percent of GDP on infrastructure investment in transportation, telecommunications, electricity and water services, translating into a cumulative gap of 10 percent of GDP by 2040.[1]

Australia versus Comparators
(Percent of GDP, per year)



Source: *Global Infrastructure Outlook*, Oxford Economics.

Infrastructure Components for Australia
(Percent of GDP, per year)



Source: *Global Infrastructure Outlook*, Oxford Economics.

Real GDP gains from closing the gap
(Percent of GDP, deviation from baseline)

Gap Closed by:	***2040 1/***	***2027 2/***
Real GDP as of:		
2018	*0.1-0.2*	*0.2-0.3*
2022	*0.0-0.2*	*0.4-0.5*
2027	*0.2-0.4*	*0.6-0.7*
Long term	*0.5-0.7*	*0.7*

1/ Using Deficit or tax financing or PPP funding.

2/ Using Deficit financing and/or PPP funding.

Source: IMF staff calculations.

There are important benefits to closing the infrastructure investment gap for Australia by 2040. Estimated long-term gains (from an IMF DSGE model) range from 0.5 to 0.7 percent of real GDP.[2] The gains are higher with deficit financing or public-private partnership (PPP) agreements. Here, most of the costs and risks of the PPP are borne by the private sector, so its GDP gains are an upper bound.[3] Tax financing (PIT and/or GST) would offset almost one third of the long-term gains.

Using the closure of the gap as a fiscal policy instrument can yield greater short-term gains. If the gap were to be closed instead by 2027, short-term GDP gains would be twice as much until 2027, shortly after which real GDP would reach its new long-term level.

[1] The Global Infrastructure Hub is a new initiative of the G-20. Its prime output is the quantification of infrastructure investment gaps for over 50 countries, including Australia. The results published in its 2017 joint work with Oxford Economics as *Global Infrastructure Outlook: Infrastructure Investment Needs, 50 Countries, 7 Sectors to 2040.*

[2] Further details can be found in the accompanying Selected Issues Paper, Muir, 2018, "Infrastructure Investment in Australia: Gaps and Multiplier Effects."

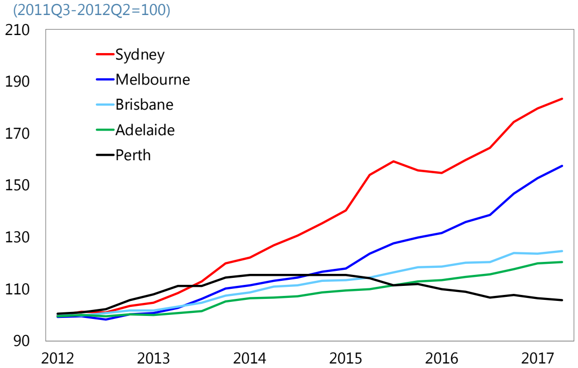
[3] For more on the issue of fiscal risks from PPPs see Corbacho and Schwartz, 2008, "PPPs and Fiscal Risks: Should Governments Worry? "in Schwartz, Corbacho and Funke (eds.) *Public Private Partnerships: Addressing Infrastructure Challenges and Managing Fiscal Risks,* New York: Palgrave Macmillan.

Box 5. Australia's Housing Boom[1]

Australia's housing boom of the past six years has primarily been a regional housing boom, concentrated in Sydney and Melbourne. Much of the increase in the average real price of existing houses in the 8 capital cities has been driven by prices in the two major eastern metropolitan areas. This suggests that local factors have influenced the price dynamics. On the demand side, the metropolitan areas of Sydney and Melbourne have seen stronger growth in economic activity—they accounted for two-thirds of national GDP growth in 2015-16—and they have registered population growth at around twice the national rate of 1.5 percent, reflecting the geographic shifts in activity and resource allocation after the end of the mining boom. Both cities have also seen growing foreign investor interest, particularly from the dynamic economies in eastern Asia.

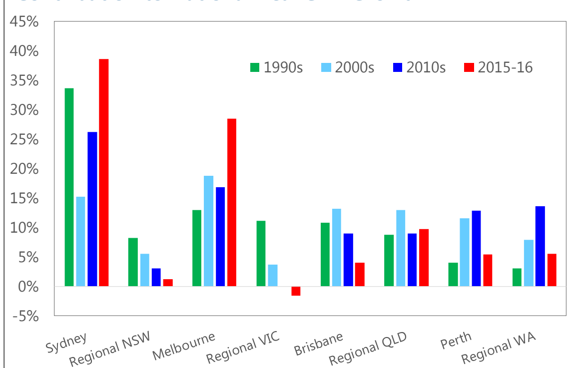
House Price Developments in Major Cities

(2011Q3-2012Q2=100)



Sources: Haver Analytics and IMF staff calculations.

Contribution to National Real GDP Growth

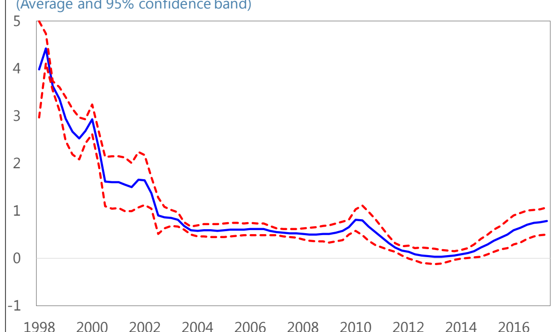


Sources: Haver Analytics and IMF staff calculations.

The price dynamics in Sydney and Melbourne have also been amplified driven by supply constraints. Sydney already faced a housing shortage when the boom began, reflecting zoning restrictions aiming to limit city growth. Empirical research by Staff suggests that the housing supply elasticity (the elasticity of residential investment with respect to real house prices) in Australia is low in international comparison. Estimates of a standard supply equation yield an average elasticity of about 0.56 at the national level. In the United States, in comparison, the elasticity is well above unity. At the regional level, the supply elasticities in Sydney and Melbourne are estimated at 0.21 and 0.61, respectively.

National Housing Supply Elasticities

(Average and 95% confidence band)



Source: IMF staff calculations.

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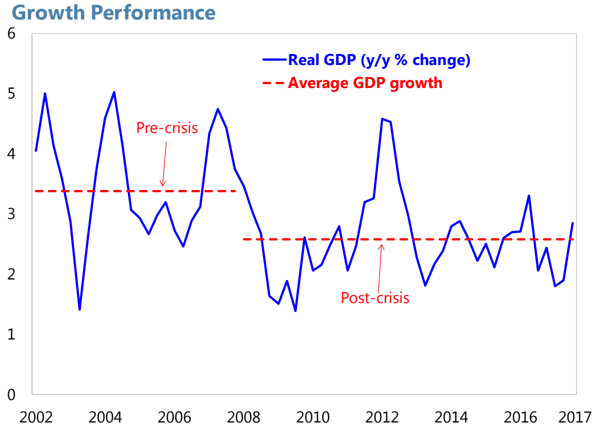
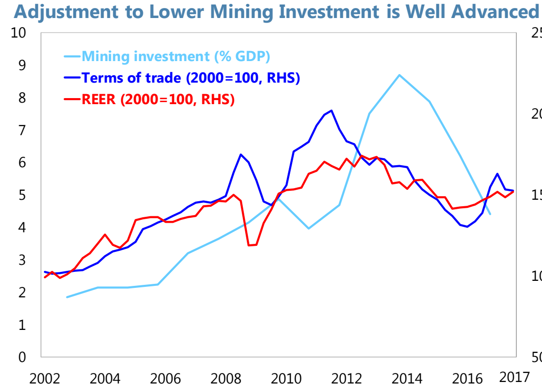
[1] See the accompanying Selected Issues Paper, Helbling and Li, 2018, "Housing Market Imbalances in Australia: Developments, Prospects, and Policies."

Figure 1. Strong Advances in the Adjustment and Rebalancing after the Mining Boom

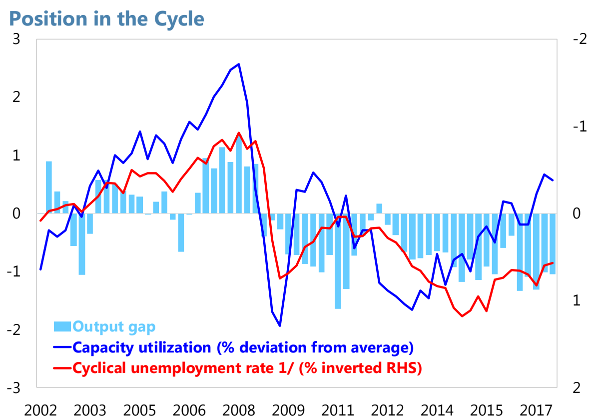
Growth has picked up after recent setbacks, but remains lower on average that it was before the Global Financial Crisis



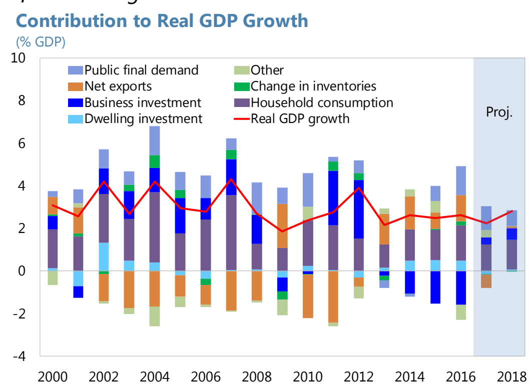
Mining investment has declined sharply after a long boom but seems close to bottoming out



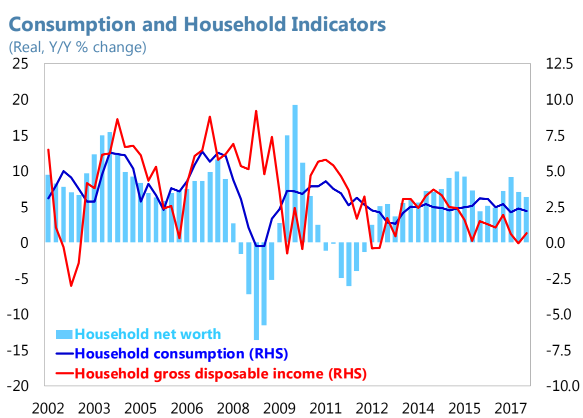
Economic slack has started to decrease with the pickup in activity



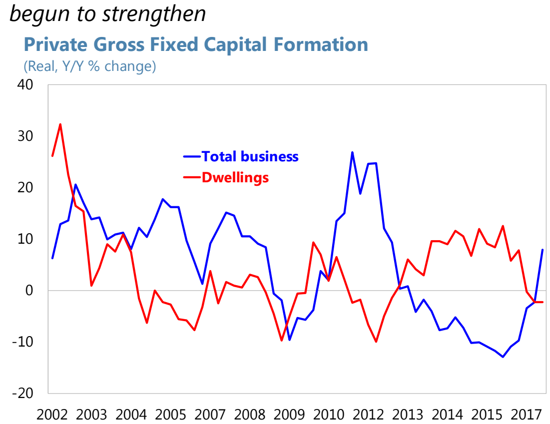
The rebalancing from domestic to external sources of growth has contributed to the moderate growth impact of the mining bust



Private consumption growth has remained lackluster since the end of the mining boom…



…while the support from residential investment growth has faded recently, that of business investment has begun to strengthen

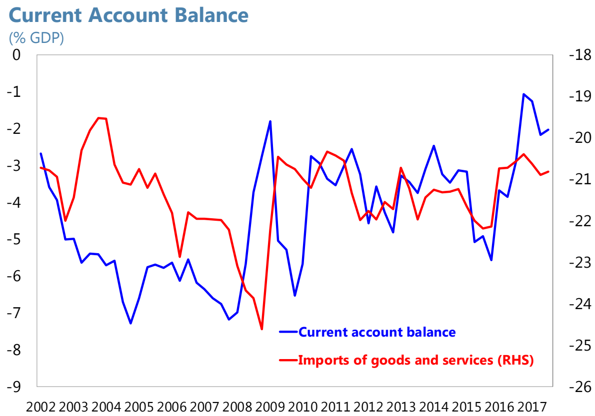


Sources: ABS; Haver Analytics; EconData; and IMF staff calculations.

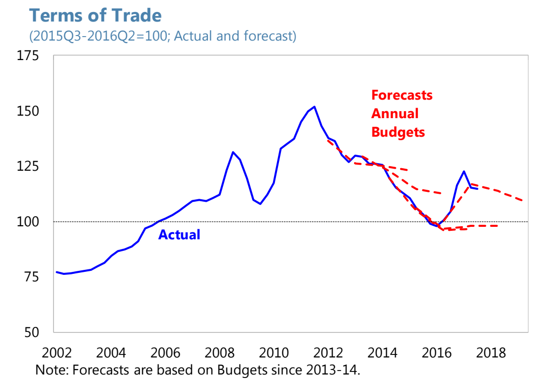
1/ Defined as unemployment rate minus the non-accelerating inflation rate of unemployment (NAIRU).

Figure 2. Current Account Improving After Rebalancing and a Terms-of-Trade Rebound

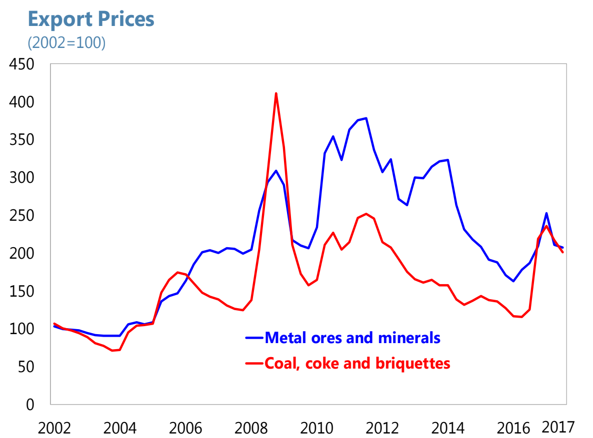
The current account balance has improved to reach its lowest level in almost four decades



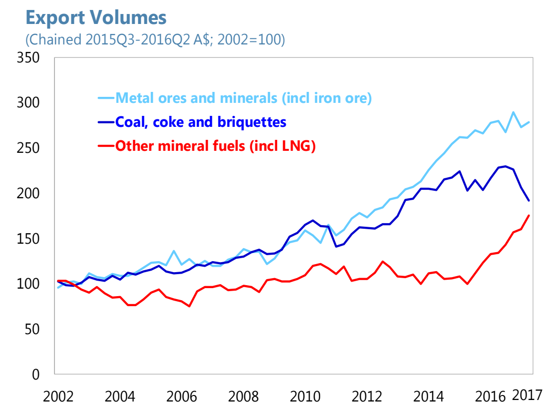
The terms of trade rebounded in 2016 and in early 2017 and remain above their early-2016 after recent declines



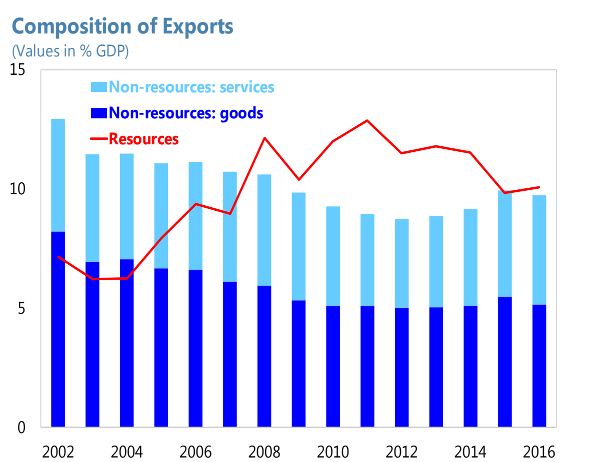
Iron ore prices have recovered from their low reached in early 2016 although some of the gains have been lost recently



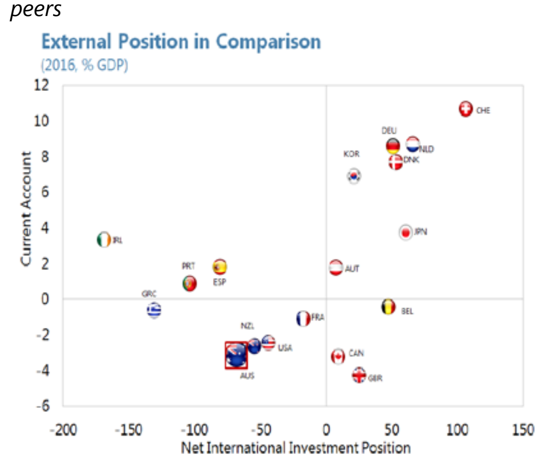
Commodity export volumes have increased further since the end of the mining boom…



…keeping the value of resource exports broadly constant



The net external liability position is high compared to peers

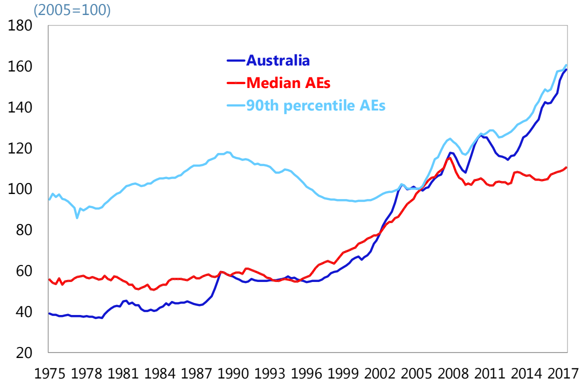


Sources: ABS; RBA; Haver Analytics; IMF, *World Economic Outlook*; and IMF staff calculations.

Figure 3. Housing Market Imbalances and Vulnerabilities After a Boom

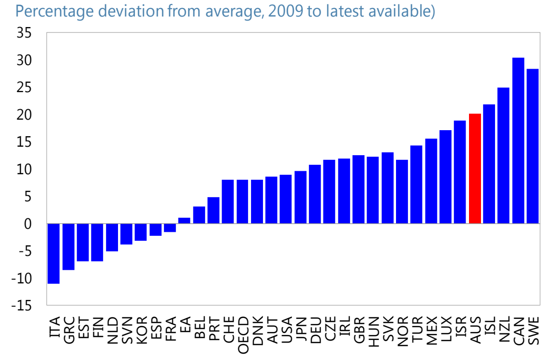
Australia has experienced large house price increases recently, similar to those in other buoyant markets…

Real House Prices
(2005=100)



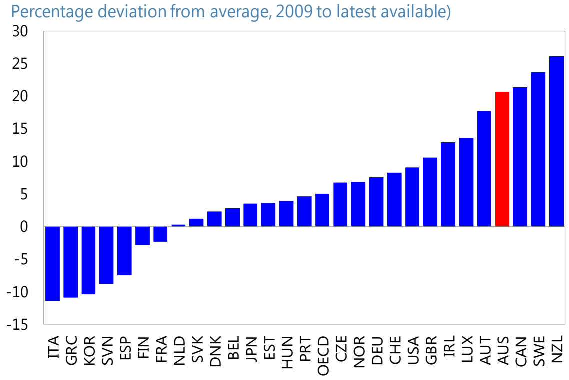
…which has led to upward shifts in valuation metrics…

Price-to-Rent Ratio
(Nominal house prices over rent prices;
Percentage deviation from average, 2009 to latest available)



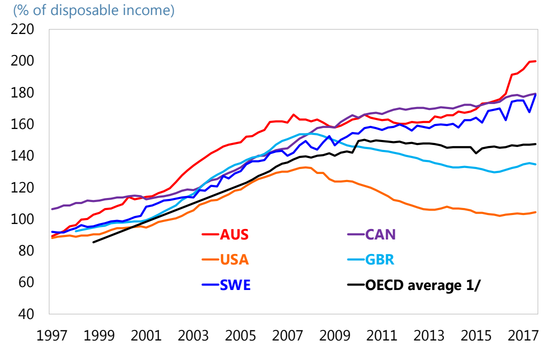
…and downshifts in affordability metrics…

House Price-to-Income Ratio
(Nominal house prices over nominal disposable income per head;
Percentage deviation from average, 2009 to latest available)



… and household debt ratios are among the highest in AEs

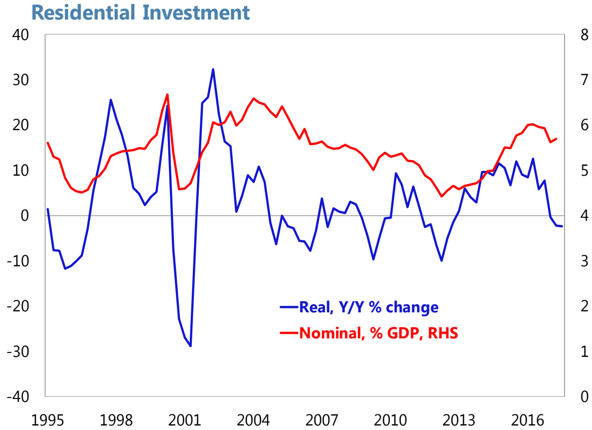
Household Debt
(% of disposable income)



1/ Based on a limited number of countries due to lack of data.

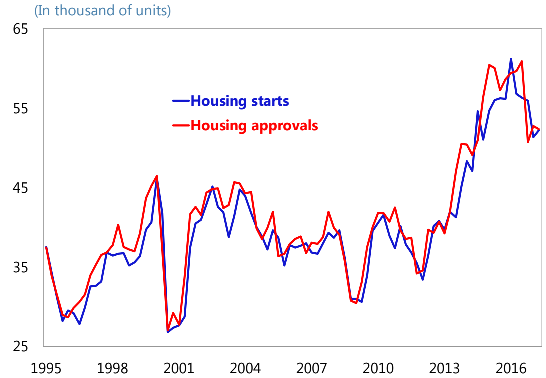
Rising house prices only triggered a minor residential investment boom

Residential Investment



Recent indicator readings suggest a cooling in the housing market

Housing Starts and Approvals
(In thousand of units)

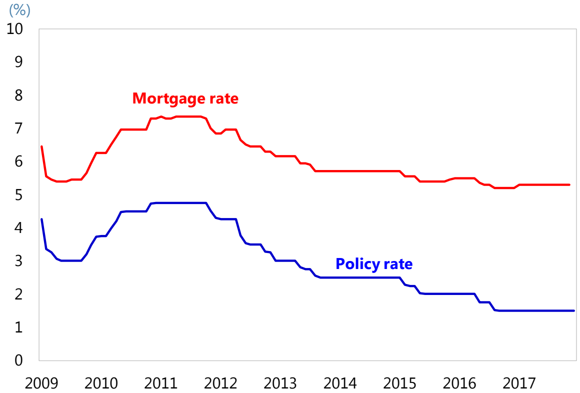


Sources: OECD and Haver Analytics.

Figure 4. Monetary Policy has Supported the Adjustment After the End of the Mining Boom

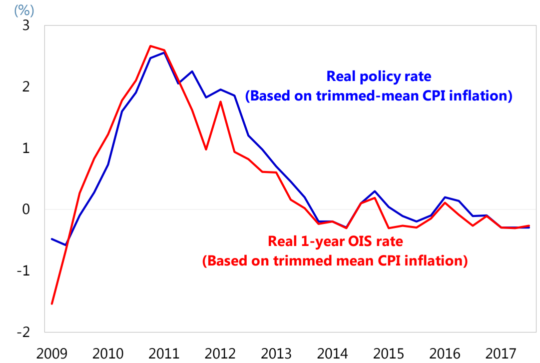
The RBA has kept the policy rate at 1.5 percent since August 2016…

Policy Rate and Mortgage Rate



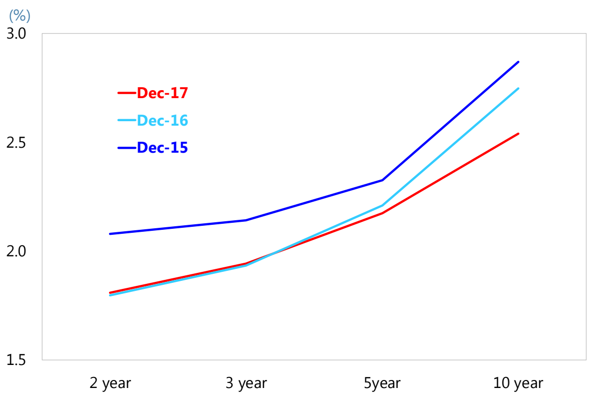
…ensuring an accommodative monetary policy stance

Real Interest Rates



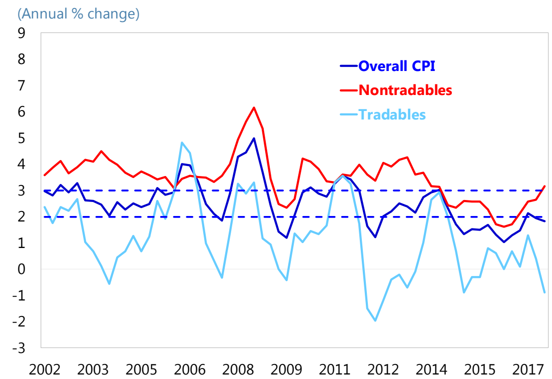
As in other AEs, the yield curves have shifted down

Australia Commonwealth Yield Curves



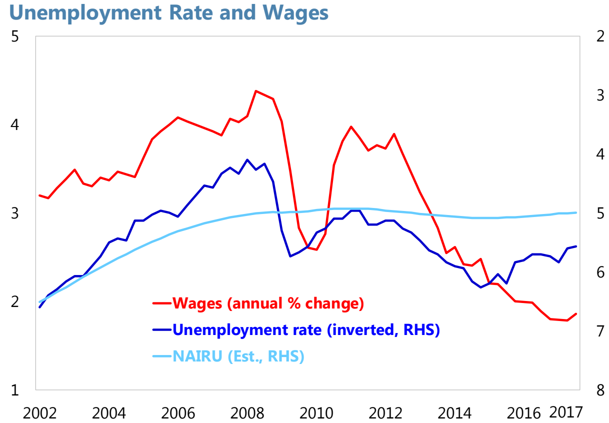
Consumer price inflation has risen from its 2016 low, driven by a pickup in nontradable inflation

Consumer Price Inflation



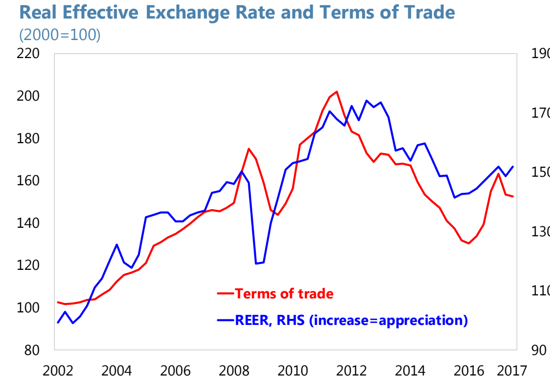
Wage growth has been decreasing even after unemployment has has started to decline

Unemployment Rate and Wages



The easing of domestic financial conditions due to lower policy rates has recently been partly offset by real currency appreciation

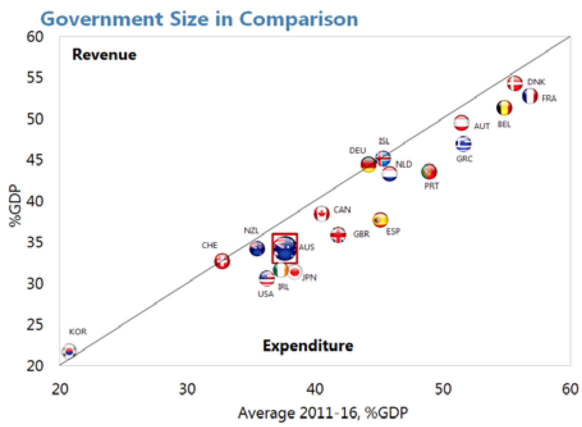
Real Effective Exchange Rate and Terms of Trade



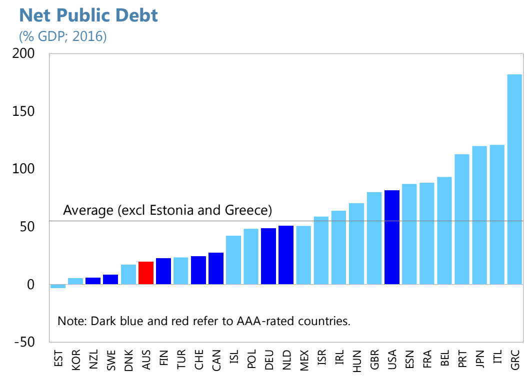
Sources: RBA; Haver Analytics; and IMF staff estimates.

Figure 5. A Shift in Focus for Public Finances

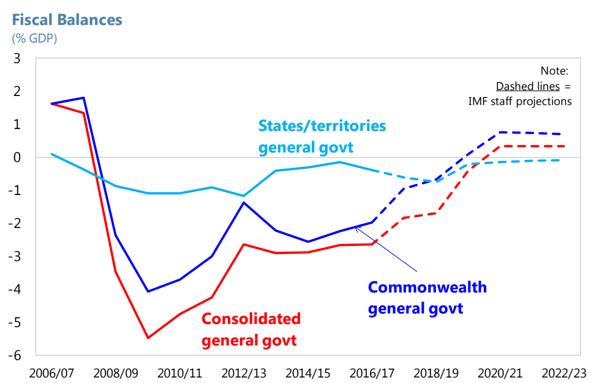
Australia has a relatively small government…



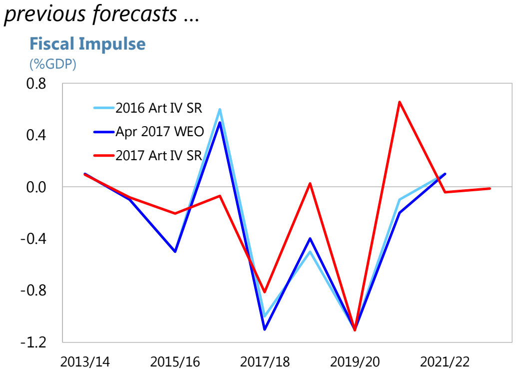
…and a low level of public debt



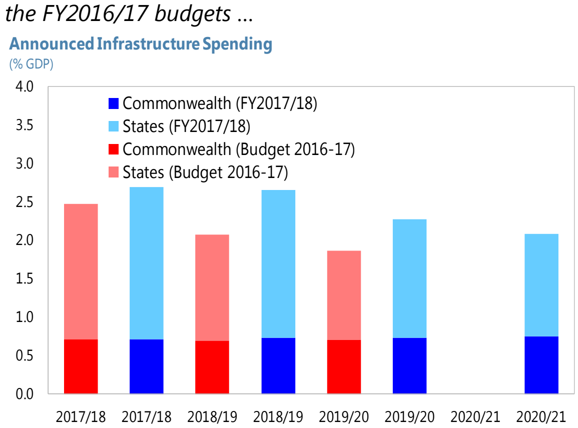
Governments continue to consolidate, led by the Commonwealth, while States and Territories keep their budgets close to balance …



… resulting in a continued negative fiscal impulse, but less so in FY2017-18 and FY2018-19 compared to previous forecasts …

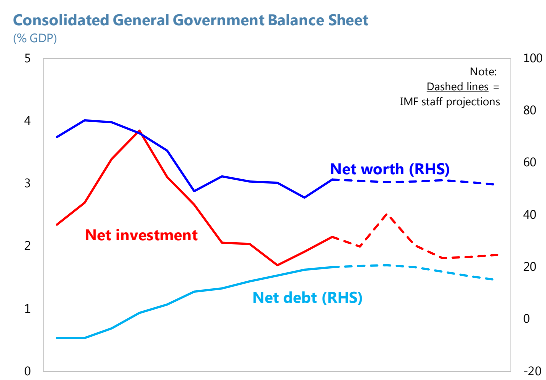


… as governments increased infrastructure investment relative to the FY2016/17 budgets …



Notes: FY2017/18 includes budgets and mid-year reviews; Budget 2016-17 draws only from FY2016/17 budgets, with no data available for FY2020/21.

… maintaining their net worth, without much cost to their net debt

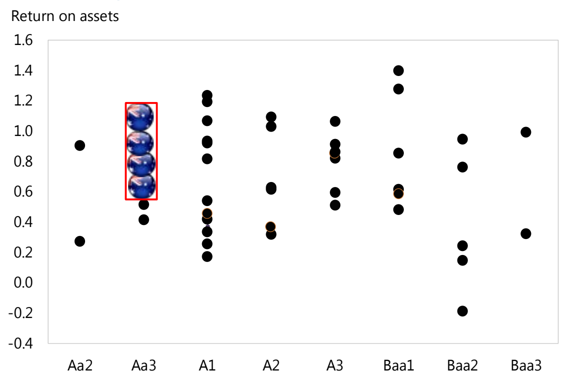


Sources: Commonwealth and State/Territory Treasuries, FY2016/17 and FY2017/18 budgets; IMF, *World Economic Outlook*; and IMF staff estimates and projections.

Figure 6. Banking System Remains Strong

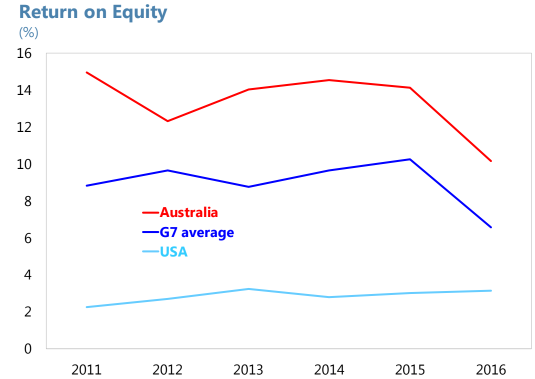
Australian major banks are highly rated…

Bank Ratings



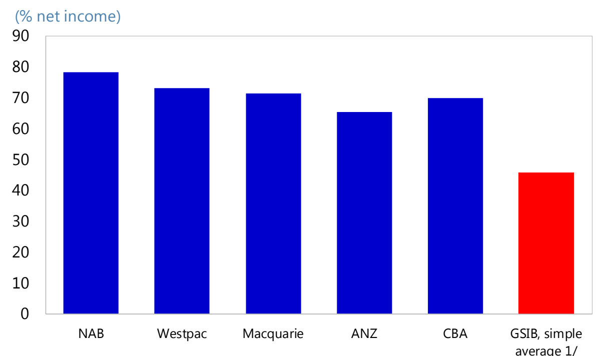
…and profitable even after complying with tighter capital and liquidity requirements

Return on Equity



Dividend pay-out ratios are high

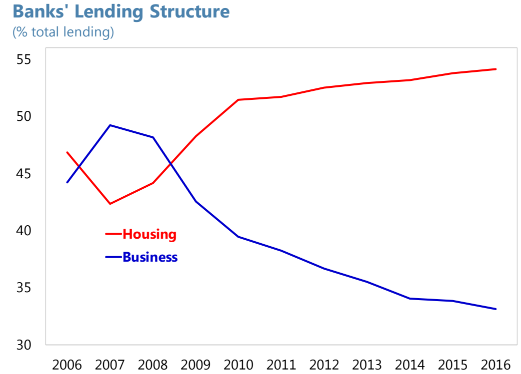
Australian Banks and GSIBs: Dividend Payout Ratio, latest available



1/ Simple average of 19 banks.

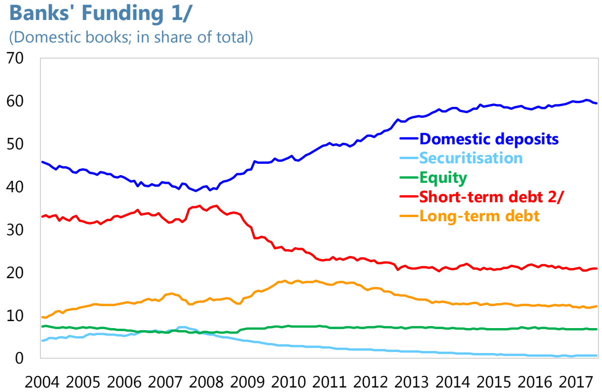
Bank lending is concentrated in housing

Banks' Lending Structure



Banks have reduced the share of short-term offshore wholesale funding and have increased domestic deposit funding

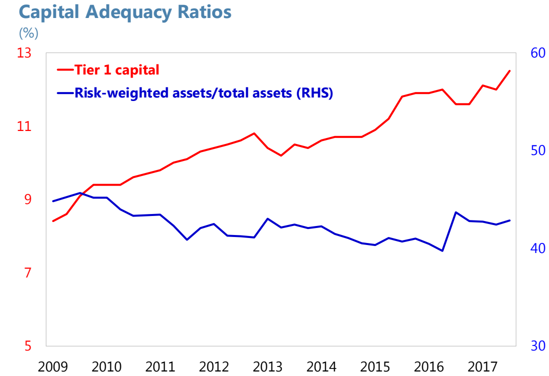
Banks' Funding 1/



1/ Adjusted for movements in foreign exchange rates.
2/ Includes deposits and intragroup funding from non-residents.

Higher capital ratios have been in part the result of lower risk weighted assets due to a higher share of mortgage lending

Capital Adequacy Ratios



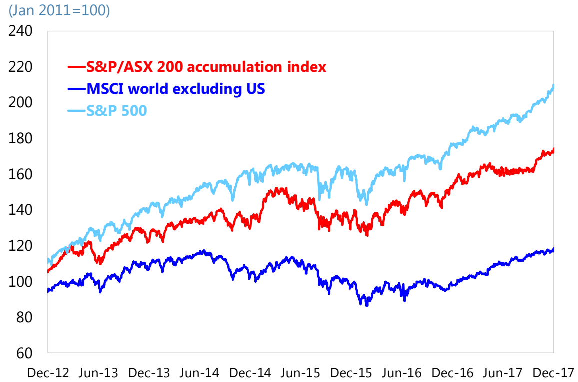
Sources: Orbis by Bureau van Dijk; RBA; APRA; IMF, *Financial Soundness Indicators*; and IMF staff calculations.

Figure 7. Financial Market Indicators: New Lows for Yields and Spreads

Australian equity has moved sideways recently

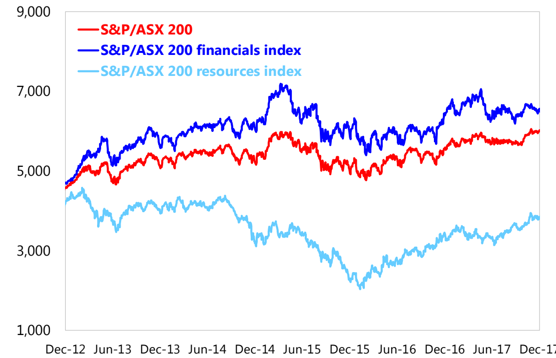
Stock Market Indices

(Jan 2011=100)



The higher commodity prices in 2016-17 and efficiency gains have boosted the share prices of resource sector companies

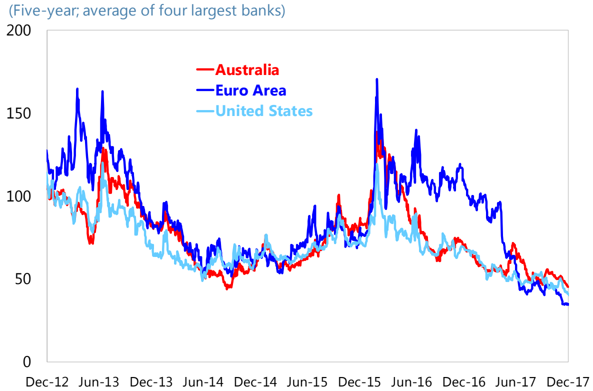
Stock Market Indices



Bank risk spreads are low

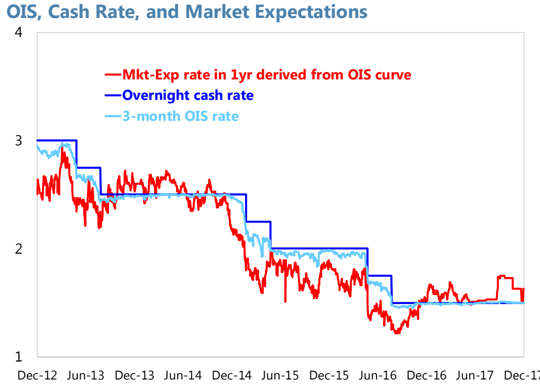
Credit Default Swap (CDS) Spreads

(Five-year; average of four largest banks)



Markets expect policy rates to remain low through 2018

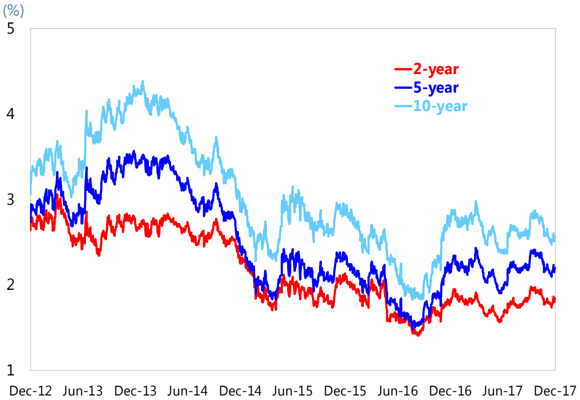
OIS, Cash Rate, and Market Expectations



Yields have increased after reaching new lows in 2016 but remain at lowest they have been in decades

Australia Commonwealth Debt Yields

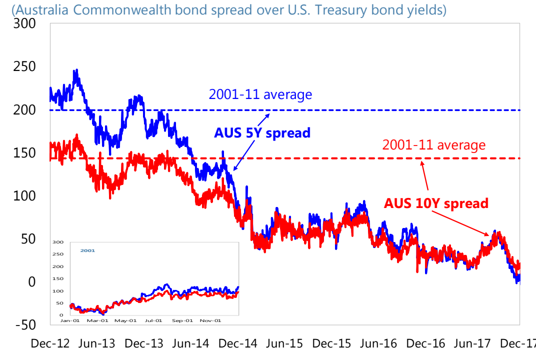
(%)



Spreads between Australian and U.S. Treasury yields have slightly increased but remain close to their lowest levels since 2001

Australia Sovereign Spreads

(Australia Commonwealth bond spread over U.S. Treasury bond yields)

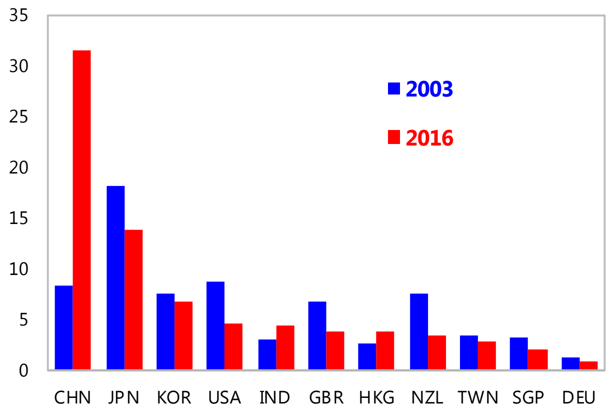


Sources: Bloomberg; RBA; and IMF staff calculations.

Figure 8. Interconnections and Spillovers

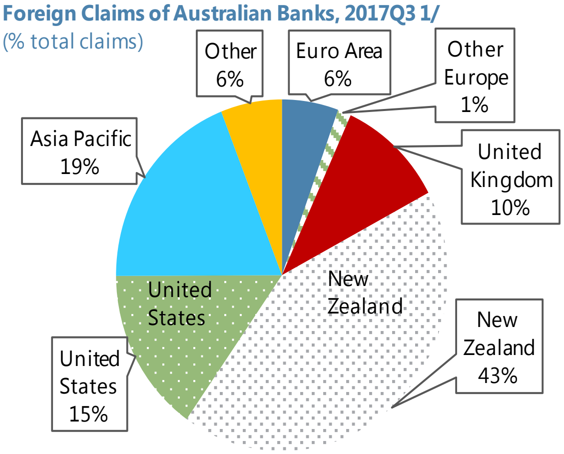
Trade links are mainly with China, with exposure to commodity price shocks…

Merchandise Exports by Destination
(% total)



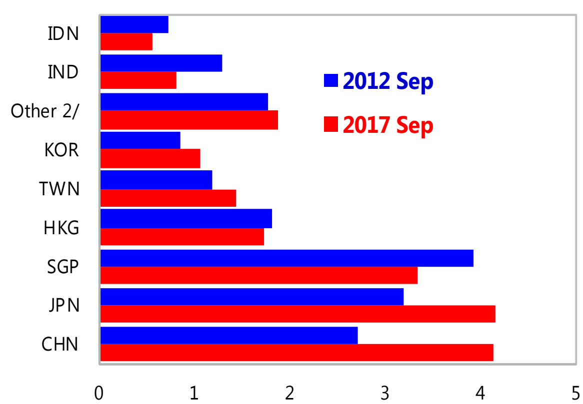
…while financial links are with New Zealand, Asia-Pacific, US, and UK

Foreign Claims of Australian Banks, 2017Q3 1/
(% total claims)



Financial links with Asia are increasingly focused on Japan and China

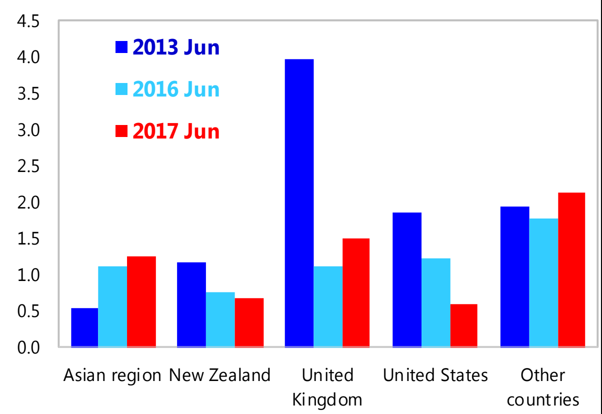
Australian-owned Banks' Claims on Asia 1/
(% total claims)



1/ Measured on a consolidated, ultimate risk basis.
2/ Includes Cambodia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam.

Non-performing assets of banks' overseas operations are low

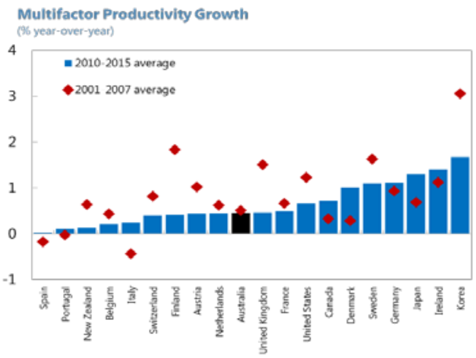
Non-performing Assets of Australian-owned Banks' Overseas Operations
(% loans by region)



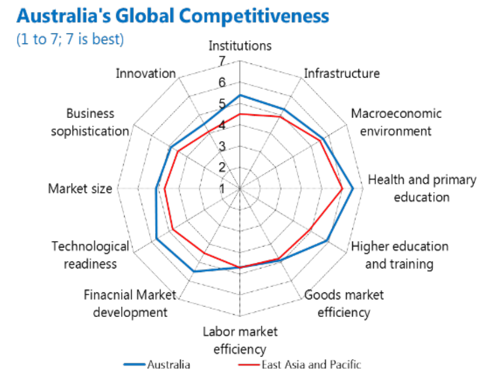
Sources: ABS; APRA; RBA; IMF, *Direction of Trade Statistics*; BIS; and IMF staff calculations.
1/ Measured on a consolidated, ultimate risk basis.

Figure 9. Australia's Macro-Structural Position

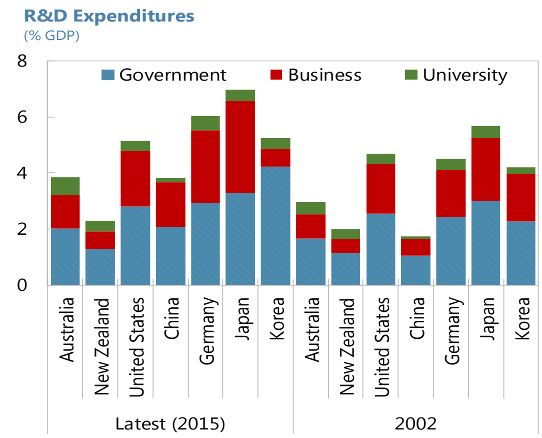
Australia has consistent, but rather low, productivity growth, with potential to improve its standing among its peers …



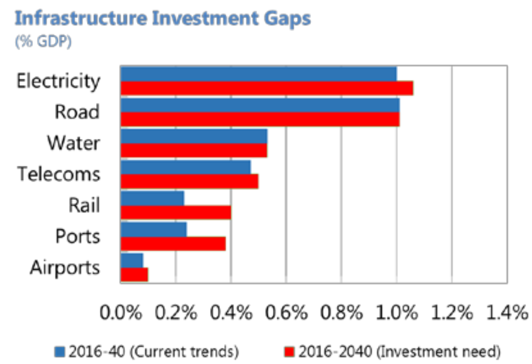
… as it has a favorable economic and regulatory environment (21 out of 137 economies), with room for improvement …



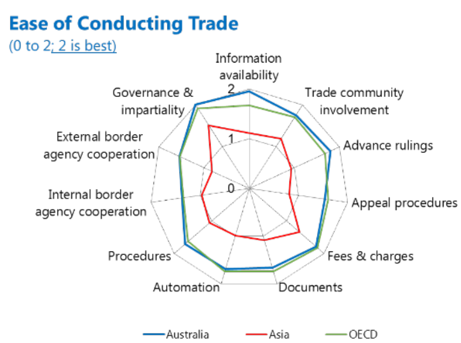
… lagging behind other advanced economies in terms of R&D spending, although it is improving over time …



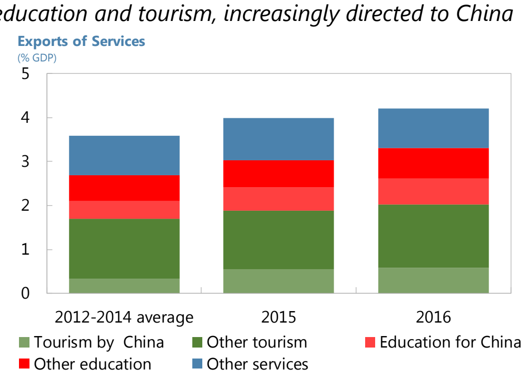
… and it could raise productivity growth by closing infrastructure investment gaps



This would complement a trade environment which is already highly conducive to strong foreign relationships…



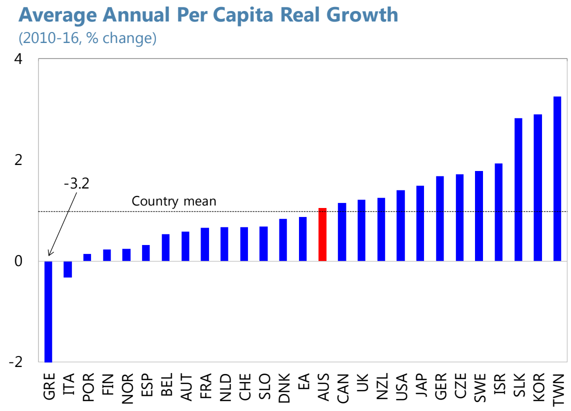
… and its expanding services exports, dominated by education and tourism, increasingly directed to China



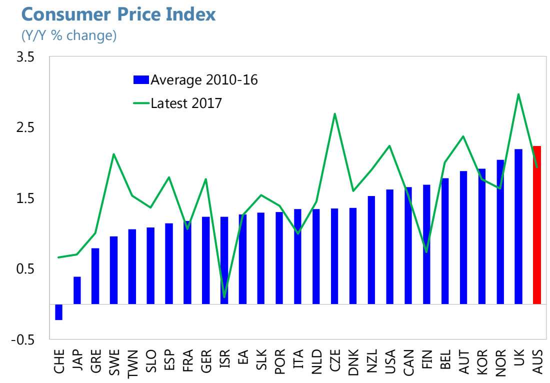
Sources: OECD.Stat; World Economic Forum, *The Global Competitiveness Report 2017-2018;* OECD Main Science and Technology Indicators; Oxford Economics and G-20 Global Infrastructure Hub, *Global Infrastructure Outlook*; OECD Trade Facilitation Indicators; Department of Foreign Affairs and Trade, *Trade in Services Australia*, for 2014 and 2016.

Figure 10. Australia in International Comparison

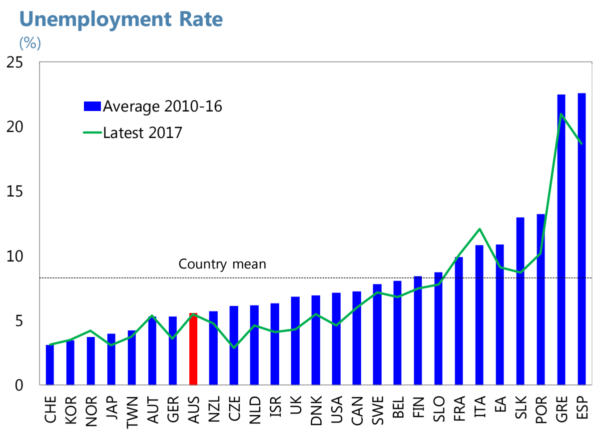
Australia has enjoyed high growth in per capita terms



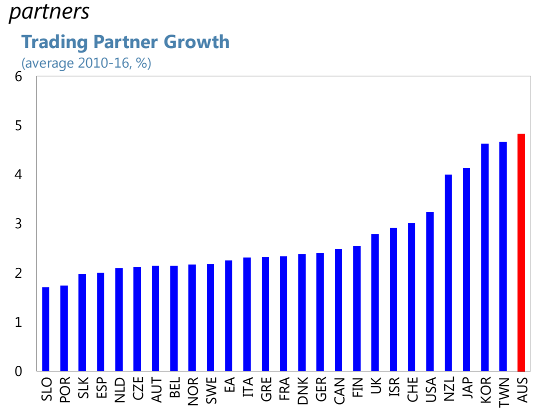
Australia's inflation remained higher than in many other advanced economies



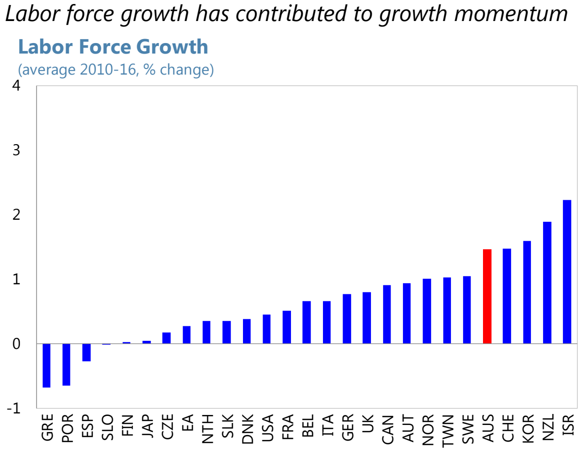
Unemployment is relatively low



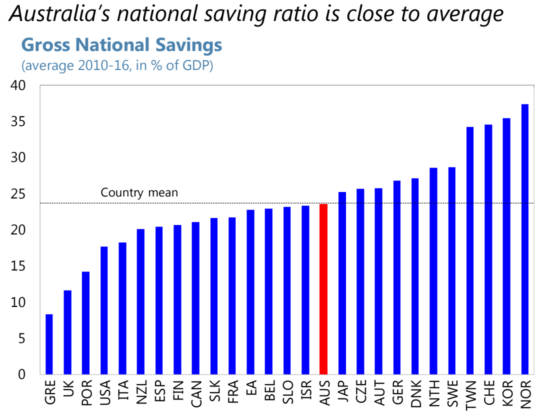
Australia has benefited from growth in dynamic Asian partners



Labor force growth has contributed to growth momentum



Australia's national saving ratio is close to average



Source: IMF, *World Economic Outlook* database.

Table 1. Australia: Main Economic Indicators, 2013-2023

(Annual percent change, unless otherwise indicated)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
					Est.	Projections					
NATIONAL ACCOUNTS											
Real GDP	2.2	2.6	2.5	2.6	2.2	2.9	3.1	2.9	2.7	2.7	2.6
Domestic demand	0.8	0.9	1.2	1.8	2.6	2.7	2.8	2.7	2.9	2.7	2.6
Private consumption	1.8	2.5	2.4	2.8	2.1	2.4	2.8	2.8	2.8	2.8	2.8
Public consumption	1.5	0.1	4.5	4.1	3.3	2.1	2.2	2.2	2.1	1.9	1.8
Investment	-1.7	-2.0	-3.6	-2.1	3.1	3.9	3.1	3.0	2.9	2.8	2.6
Public	-11.1	-3.0	-2.2	13.6	10.0	6.4	2.2	0.3	0.0	0.0	0.0
Private business	-1.3	-6.1	-9.6	-11.4	2.7	4.5	4.5	5.0	4.8	4.5	4.2
Dwelling	3.5	9.9	9.6	8.6	-2.3	1.2	1.5	1.5	1.5	1.4	1.3
Net exports (contribution to growth, percentage points)	1.5	1.5	0.8	1.2	-0.6	0.1	0.3	0.1	0.0	0.0	0.0
Gross domestic income	1.3	1.0	-0.1	2.7	4.5	1.7	2.8	2.5	2.5	2.6	2.5
Investment (percent of GDP)	27.0	26.3	25.8	24.6	24.4	25.0	25.0	25.0	25.1	25.0	24.9
Public	4.6	4.4	4.4	4.8	5.0	5.4	5.3	5.2	5.1	4.9	4.8
Private	22.5	21.9	21.3	19.7	19.1	19.6	19.6	19.7	19.9	20.0	20.0
Mining investment	8.5	7.2	5.5	4.0	3.0	3.0	2.6	2.6	2.6	2.6	2.6
Non-mining investment	14.0	14.7	15.8	15.7	16.1	16.6	17.0	17.1	17.3	17.4	17.4
Savings (gross, percent of GDP)	23.7	23.1	21.5	21.0	22.0	22.6	22.6	22.4	22.5	22.4	22.4
Potential output	2.8	2.7	2.6	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6
Output gap (percent of potential)	-0.7	-0.9	-1.0	-0.9	-1.2	-0.9	-0.4	-0.1	0.0	0.0	0.0
LABOR MARKET											
Employment	1.0	0.7	2.0	1.7	2.0	2.0	1.9	1.9	1.7	1.7	1.7
Unemployment (percent of labor force)	5.7	6.1	6.1	5.7	5.6	5.3	5.2	5.0	5.0	5.0	5.0
Wages (nominal percent change)	2.9	2.5	2.1	1.9	1.9	2.3	2.3	2.5	2.8	2.9	2.9
PRICES											
Terms of trade index (goods, avg)	131	121	106	105	119	110	108	106	105	104	104
% change	-3.5	-8.0	-12.4	-0.2	12.7	-7.4	-1.8	-1.8	-1.2	-0.4	-0.5
Iron ore prices (index)	107	77	44	46	56	51	48	45	45	45	45
Coal prices (index)	97	81	67	75	101	105	97	94	94	94	94
LNG prices (index)	97	95	61	42	40	52	52	52	52	52	52
Crude prices (Brent; index)	100	91	48	40	50	56	54	53	52	52	52
Consumer prices (avg)	2.5	2.5	1.5	1.3	1.9	2.1	2.2	2.3	2.5	2.5	2.5
Core consumer prices (avg)	2.4	2.6	2.3	1.7	1.7	1.8	2.1	2.3	2.5	2.5	2.5
GDP deflator (avg)	1.3	0.4	-0.8	1.1	3.3	1.3	1.8	2.0	2.3	2.6	2.9
FINANCIAL											
Reserve Bank of Australia cash rate (percent, avg)	2.7	2.5	2.1	1.7	1.5	1.6	2.0	2.5	3.0	3.4	3.5
10-year treasury bond yield (percent, avg)	3.7	3.7	2.7	2.3	2.7	2.9	3.2	3.7	4.1	4.4	4.4
Mortgage lending rate (percent, avg)	6.2	6.0	5.6	5.4	5.1	5.4	5.9	6.4	6.9	7.1	7.1
MACRO-FINANCIAL											
Credit to the private sector	5.9	7.4	8.1	7.0	5.6	6.6	4.9	4.5	4.3	3.6	3.6
To households	6.6	7.3	7.7	6.8	6.4	6.2	4.9	4.1	3.6	2.7	2.6
To business	3.0	5.2	8.0	6.0	4.3	7.2	4.9	5.0	5.2	5.0	5.0
House price index	113	120	131	140	149	158	166	172	179	183	188
% change	10.0	6.7	8.7	6.9	6.4	6.2	4.9	4.1	3.6	2.7	2.6
House price-to-income, capital cities (ratio)	4.2	4.2	4.5	4.7	4.9	4.9	4.8	4.8	4.7	4.6	4.4
Interest payments (percent of disposable income)	8.8	8.8	8.6	8.2	8.3	8.9	9.6	10.5	10.4	10.8	10.8
Household savings (percent of disposable income)	6.6	7.0	6.0	4.6	3.5	4.9	5.6	6.3	6.3	6.2	5.9
Household debt (percent of disposable income) 1/	171	175	183	188	195	196	192	190	189	188	188
Business credit (percent of GDP)	48	48	51	52	51	53	52	53	53	52	52
GENERAL GOVERNMENT (percent of GDP) 2/											
Revenue	33.8	34.0	34.6	34.8	34.8	35.2	35.3	35.6	35.7	35.7	35.7
Expenditure	36.6	36.9	37.4	37.5	37.0	37.0	36.4	35.7	35.4	35.4	35.4
Net lending/borrowing	-2.8	-2.9	-2.8	-2.7	-2.2	-1.8	-1.1	-0.1	0.3	0.3	0.3
Operating balance	-1.5	-1.6	-1.5	-1.3	-0.9	-0.3	0.5	1.2	1.5	1.5	1.5
Cyclically adjusted balance	-2.5	-2.5	-2.4	-2.2	-1.7	-1.4	-0.9	0.0	0.3	0.3	0.3
Gross debt	30.6	34.1	37.8	41.0	42.6	43.4	42.9	40.6	38.1	36.2	34.3
Net debt	13.1	15.5	17.8	19.5	20.0	20.6	20.3	19.0	17.4	15.8	14.2
Net worth	53.7	52.1	49.3	50.3	53.1	52.9	52.6	53.0	52.8	52.1	51.2
BALANCE OF PAYMENTS											
Current account (percent of GDP)	-3.4	-3.1	-4.7	-2.9	-1.9	-2.5	-2.5	-2.6	-2.5	-2.6	-2.5
Export volume	5.8	6.9	6.5	6.8	5.1	6.8	7.4	6.7	5.8	5.7	5.6
Import volume	-2.0	-1.4	1.9	0.2	7.6	5.8	5.6	5.8	5.3	5.4	5.3
Net international investment position (percent of GDP)	-53	-53	-57	-58	-54	-54	-54	-54	-54	-54	-54
Gross official reserves (bn US$)	59	66	67	76	...	...	...	...	...	...	...
MEMORANDUM ITEMS											
Nominal GDP (bn A$)	1,565	1,612	1,638	1,700	1,795	1,871	1,964	2,061	2,165	2,280	2,406
Percent change	3.5	3.0	1.6	3.8	5.6	4.2	5.0	4.9	5.1	5.3	5.5
Real net national disposable income per capita (% change)	-1.0	-0.8	-2.1	1.7	2.6	0.0	0.8	0.3	0.5	0.3	0.2
Population (million)	23.3	23.7	24.0	24.4	24.8	25.1	25.5	25.9	26.3	26.7	27.2
Nominal effective exchange rate	105	99	92	92	...	...	...	...	...	...	...
Real effective exchange rate	105	100	93	93	...	...	...	...	...	...	...

Sources: Authorities' data; IMF *World Economic Outlook* database; and IMF staff estimates and projections.

1/ Reflects the national accounts measure of household debt, including to the financial sector, state and federal governments and foreign overseas banks and governments. It also includes other accounts payable to these sectors and a range of other smaller entities including pension funds.

2/ Calendar year.

Table 2. Australia: Fiscal Accounts, 2012/13-2022/23

(In percent of GDP, unless otherwise indicated)

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
						Est.			Projections		
CONSOLIDATED GENERAL GOVERNMENT OPERATIONS 1/											
Revenue	**33.7**	**34.0**	**34.3**	**34.6**	**34.6**	**35.2**	**35.1**	**35.5**	**35.7**	**35.7**	**35.7**
Tax revenue	27.1	27.5	27.5	27.8	27.9	28.6	28.8	29.2	29.5	29.4	29.4
Direct taxes	19.4	19.6	20.1	20.2	20.5	21.1	21.2	21.6	21.8	21.8	21.8
Individual and withholding	13.0	13.4	14.2	14.7	14.6	14.5	14.7	14.9	15.2	15.2	15.2
Corporate	6.4	6.2	5.9	5.7	5.8	6.5	6.5	6.7	6.6	6.6	6.6
Indirect taxes	7.6	7.8	7.4	7.6	7.4	7.6	7.6	7.6	7.6	7.6	7.6
Of which: GST	3.3	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Non-tax revenue	6.6	6.5	6.8	6.8	6.7	6.6	6.3	6.3	6.3	6.3	6.3
Expenditure	**36.3**	**36.9**	**37.1**	**37.3**	**37.3**	**37.0**	**36.9**	**36.0**	**35.4**	**35.4**	**35.4**
Expense	35.2	35.5	35.9	36.0	35.8	35.7	35.1	34.6	34.2	34.2	34.2
Employee expenses	9.8	9.6	9.7	9.9	10.0	9.8	9.5	9.3	9.1	9.1	9.1
Other operating expenses (excl. depreciation)	9.2	9.3	9.6	9.8	10.2	10.7	10.8	10.7	10.6	10.6	10.6
Transfers	12.4	12.7	12.6	12.2	11.5	11.2	10.7	10.6	10.5	10.4	10.4
Current	11.8	12.1	12.1	11.8	11.2	10.9	10.4	10.3	10.2	10.2	10.1
Capital	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Interest (excl. superannuation)	1.3	1.4	1.5	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.4
Other	2.4	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.7	2.7	2.7
Net acquisition of nonfinancial assets	1.2	1.4	1.2	1.3	1.5	1.2	1.8	1.3	1.2	1.2	1.2
Of which: Gross fixed capital formation	3.0	2.9	2.9	2.9	3.6	3.5	3.6	3.2	3.0	3.0	3.0
Operating balance	-1.5	-1.5	-1.7	-1.4	-1.2	-0.6	0.0	0.9	1.5	1.5	1.5
Primary balance	-1.3	-1.5	-1.4	-1.2	-1.2	-0.4	-0.3	1.0	1.7	1.7	1.7
Net lending (+)/borrowing (-)	**-2.6**	**-2.9**	**-2.9**	**-2.7**	**-2.6**	**-1.8**	**-1.7**	**-0.5**	**0.3**	**0.3**	**0.3**
CONSOLIDATED GENERAL GOVERNMENT BALANCE SHEET											
Liabilities	**59.0**	**64.3**	**69.0**	**78.0**	**70.0**	**69.2**	**68.5**	**66.6**	**62.3**	**59.3**	**56.3**
Gross debt	28.7	32.6	35.8	39.3	42.2	43.1	43.4	42.3	39.0	37.1	35.2
Commonwealth	19.8	23.1	26.3	30.3	33.3	33.4	33.6	32.9	30.3	28.6	26.9
States, territories and local governments	8.9	9.4	9.4	9.0	8.9	9.7	9.8	9.4	8.7	8.5	8.3
Other liabilities	30.3	31.7	33.2	38.7	27.8	26.1	25.1	24.3	23.3	22.2	21.1
Assets	**113.9**	**117.0**	**120.7**	**124.4**	**123.4**	**122.2**	**121.0**	**119.2**	**115.5**	**111.7**	**107.9**
Financial assets	45.1	48.0	49.3	50.5	51.3	52.2	52.4	52.5	50.7	49.0	47.2
Other assets	68.7	68.9	71.4	74.0	72.1	70.0	68.7	66.8	64.8	62.8	60.7
Net financial worth	-13.9	-16.2	-19.7	-27.5	-18.7	-17.0	-16.1	-14.1	-11.6	-10.3	-9.1
Net debt	**11.7**	**14.5**	**16.5**	**19.0**	**19.9**	**20.3**	**20.7**	**19.8**	**18.2**	**16.6**	**15.0**
Commonwealth 2/	10.0	12.8	14.9	17.8	18.9	19.0	18.8	17.9	16.2	14.7	13.2
States, territories and local governments	1.7	1.8	1.6	1.2	0.9	1.3	1.9	2.0	1.9	1.9	1.8
Net worth	**54.8**	**52.7**	**51.7**	**46.5**	**53.4**	**53.0**	**52.5**	**52.7**	**53.1**	**52.4**	**51.6**
Commonwealth	-12.6	-14.5	-17.7	-25.1	-17.6	-18.0	-17.4	-16.2	-14.2	-12.5	-10.8
States, territories and local governments	67.4	67.2	69.4	71.5	71.0	71.0	70.0	68.8	67.4	64.9	62.4
MEMORANDUM ITEMS											
Cyclically adjusted balance (in percent of potential GDP)	-2.4	-2.5	-2.5	-2.2	-2.2	-1.3	-1.4	-0.3	0.3	0.3	0.3
Fiscal impulse (change in CAB; in percent of potential GDP)	-1.5	0.1	-0.1	-0.2	-0.1	-0.9	0.1	-1.1	0.7	0.0	0.0
Change in real revenue (percent)	4.5	1.7	1.1	2.4	3.1	4.5	2.2	3.7	3.1	2.7	2.9
Change in real primary expenditure (percent)	-2.1	4.3	1.1	0.4	3.2	0.9	2.7	0.9	1.2	2.8	3.1
Commonwealth general government 3/											
Revenue	20.2	20.2	19.9	20.1	20.4	21.0	21.3	21.7	22.0	22.0	22.0
Expenditure	21.6	22.4	22.5	22.4	22.3	22.0	22.0	21.6	21.2	21.3	21.3
Net lending (+)/borrowing (-)	-1.4	-2.2	-2.6	-2.2	-2.0	-1.0	-0.7	0.1	0.8	0.7	0.7
States, territories and local governments 4/											
Revenue	12.7	13.3	13.7	13.9	13.7	13.6	13.2	13.2	13.2	13.1	13.1
Expenditure	13.8	13.7	13.7	14.0	14.0	14.1	14.0	13.5	13.3	13.2	13.2
Net lending (+)/borrowing (-)	-1.1	-0.4	0.0	-0.1	-0.3	-0.5	-0.7	-0.2	-0.1	-0.1	-0.1
Commonwealth transfers to subnational governments	6.0	6.2	6.4	6.4	6.8	6.5	6.6	6.3	6.2	6.2	6.2
Of which: General revenue assistance	3.3	3.4	3.6	3.5	3.6	3.5	3.6	3.6	3.6	3.6	3.6
Nonfinancial public sector capital stock	95.8	96.4	99.5	102.8	101.6	101.2	100.8	99.8	98.1	96.4	94.3
GDP (in billion A$)	1,539	1,588	1,625	1,669	1,747	1,833	1,917	2,012	2,113	2,222	2,343

Sources: Authorities' data and IMF staff estimates and projections.

1/ Accrual basis; GFS. Comprises the Commonwealth, and state, territory, and local goverments.

2/ Includes Future Fund assets.

3/ Excludes general revenue assistance to states and territories from revenue and expenditure.

4/ Excludes Commonwealth payments for specific purposes from revenue and expenditure.

Table 3. Australia: Balance of Payments, 2013-2023
(In percent of GDP, unless otherwise indicated)

	2013	2014	2015	2016	2017 Est.	2018	2019	2020 Projections	2021	2022	2023
BALANCE OF PAYMENTS											
(% GDP)											
Current account	-3.4	-3.1	-4.7	-2.9	-1.9	-2.5	-2.5	-2.6	-2.5	-2.6	-2.5
Balance on goods and services	-0.7	-0.6	-2.3	-0.8	0.7	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6
Exports of goods and services	20.6	20.6	19.7	19.8	21.8	22.1	22.5	22.8	23.1	23.4	23.6
Exports of goods	16.8	16.6	15.3	15.2	17.0	17.0	17.4	17.6	17.9	18.1	18.3
Of which: Resources	10.7	10.5	8.8	8.8	10.6	10.5	10.6	10.7	11.0	11.3	11.5
Exports of services	3.8	4.1	4.4	4.6	4.9	5.1	5.1	5.1	5.2	5.3	5.3
Imports of goods and service	21.3	21.3	22.0	20.6	21.2	22.6	22.8	23.3	23.8	24.1	24.3
Imports of goods	16.3	16.4	16.8	15.7	16.2	17.3	17.5	17.9	18.3	18.5	18.7
Imports of services	5.0	4.9	5.2	4.9	4.9	5.3	5.4	5.4	5.5	5.5	5.6
Primary income, net	-2.6	-2.3	-2.4	-2.0	-2.5	-2.0	-2.0	-2.1	-1.8	-1.9	-1.8
Interest payments	-1.3	-1.3	-1.3	-1.2	-1.1	-1.0	-1.2	-1.2	-1.1	-1.1	-1.1
Equity income	-1.0	-0.6	-0.7	-0.4	-1.0	-0.9	-0.8	-0.9	-0.8	-0.8	-0.7
Secondary income, net	-0.1	-0.2	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Capital and financial account											
Capital account, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account, net	3.2	3.2	4.9	2.9	2.3	2.5	2.5	2.6	2.5	2.6	2.5
Direct investment	3.7	2.8	3.3	3.5	3.8	2.6	2.1	1.6	1.4	1.2	1.1
Equity	1.3	2.2	0.8	3.0	3.3	2.2	1.7	1.2	0.9	0.7	0.5
Debt	2.3	0.6	2.5	0.5	0.5	0.3	0.4	0.4	0.5	0.6	0.7
Portfolio investment	3.2	1.4	2.4	-2.2	0.3	1.9	1.8	1.4	1.2	1.2	1.2
Equity	-0.3	-0.8	0.9	-0.1	-0.5	-0.2	-0.6	-0.5	-0.4	-0.3	-0.3
Debt	3.5	2.2	1.5	-2.0	0.8	2.2	2.4	1.9	1.6	1.5	1.5
Financial derivatives	-0.9	-0.2	-0.1	0.2	-0.6	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Other investment	-2.3	-0.5	-0.9	2.0	-1.2	-1.8	-1.0	-0.1	0.2	0.5	0.5
Reserve assets	-0.4	-0.3	0.2	-0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	0.2	-0.1	-0.1	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
BALANCE SHEET											
Net international investment position	-53	-53	-57	-58	-54	-54	-54	-54	-54	-54	-54
Equity, net	2	5	5	2	1	-1	-2	-3	-3	-3	-3
Assets	60	64	66	67	70	71	71	71	71	71	71
Liabilities	57	59	60	65	69	72	73	73	74	74	74
Debt, net	-55	-58	-62	-59	-55	-53	-52	-52	-51	-51	-51
Assets	53	60	67	66	59	60	60	60	60	60	60
Liabilities	108	118	128	125	114	113	112	112	111	111	111
External assets (gross)	112	124	132	133	129	131	131	131	131	131	131
Equity	60	64	66	67	70	71	71	71	71	71	71
Debt	53	60	67	66	59	60	60	60	60	60	60
External liabilities (gross)	165	177	189	191	183	185	185	185	185	185	185
Equity	57	59	60	65	69	72	73	73	74	74	74
Debt	108	118	128	125	114	113	112	112	111	111	111
Of which: foreign currency, hedged	36	40	49	43	34	34	33	33	33	33	33
A$-denominated	50	54	53	57	57	57	56	56	56	56	55
Short-term	37	40	43	43	37	36	36	36	36	36	35
MEMORANDUM ITEMS											
Gross official reserves (bn A$)	59	66	67	76	...	...	...	...	...	...	...
In months of prospective imports	2.1	2.2	2.3	2.4	...	...	...	...	...	...	...
In percent of short-term external debt	10.2	10.3	9.6	10.4	...	...	...	...	...	...	...
Net official reserves (bn A$)	50	53	58	...	...	...	...	...	...	...	...
Iron ore prices (index)	107	77	44	46	56	51	48	45	45	45	45
Coal prices (index)	97	81	67	75	101	105	97	94	94	94	94
Oil prices (Brent crude; index)	97	95	61	42	40	52	52	52	52	52	52

Sources: Authorities' data and IMF staff estimates and projections.

Table 4. Australia: Balance Sheet of Monetary and Financial Sector, 2013-2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
					Est.			Projections			
BALANCE SHEET					In billions of A$						
Total assets	3,340	3,719	4,023	4,230	4,467	4,655	4,888	5,128	5,387	5,673	5,987
Currency and deposits	202	273	275	310	327	341	358	376	395	415	439
Securities other than shares	513	566	607	626	661	689	723	758	797	839	886
Loans	2,390	2,609	2,894	3,043	3,213	3,407	3,575	3,738	3,904	4,060	4,224
Claims on government	12	12	12	11	12	12	13	13	14	15	16
Claims on MFI	304	345	382	391	413	430	452	474	498	525	554
Claims on non-MFIs	1900	2040	2,204	2,359	2,490	2,654	2,784	2,909	3,033	3,143	3,256
Claims on non-residents	174	213	295	282	298	310	326	342	359	378	399
Shares and other equity	64	59	56	49	52	54	57	60	63	66	70
Other	170	211	192	202	214	164	175	196	229	292	369
Total liabilities	3,340	3,719	4,023	4,230	4,467	4,655	4,888	5,128	5,387	5,673	5,987
Capital and reserves	212	224	256	254	268	280	294	308	324	341	360
Borrowing from RBA	59	73	73	78	82	85	90	94	99	104	110
Liabilities to other MFIs	593	673	759	792	836	872	915	960	1009	1062	1121
Deposits of non-banks	1,954	2,166	2,359	2,503	2,643	2,755	2,892	3,034	3,188	3,357	3,543
Debt securities	358	381	385	405	428	446	468	491	516	543	574
Other liabilities	164	202	191	198	209	218	229	240	252	266	280
					In percent of GDP						
Total assets (w/o residual)	213	231	246	249	249	249	249	249	249	249	249
Loans	153	162	177	179	179	182	182	181	180	178	176
Claims on MFI	19	21	23	23	23	23	23	23	23	23	23
Claims on non-MFIs	121	127	135	139	139	142	142	141	140	138	135
					Percent change						
Credit non-bank private sector	5.9	7.4	8.1	7.0	5.6	6.6	4.9	4.5	4.3	3.6	3.6
o/w Housing credit	7.6	9.3	8.7	8.5	6.4	6.2	4.9	4.1	3.6	2.7	2.6
o/w Investor housing	16.5	12.4	1.6	5.0	6.4	6.2	4.9	4.1	3.6	2.7	2.6
Business credit	1.7	4.5	6.8	5.6	4.3	7.2	4.9	5.0	5.2	5.0	5.0

Sources: IFS (Other Depository Corporations, Table ODC-2SR) , RBA, APRA, and IMF staff projections.

Table 5. Australia: Selected Financial Soundness Indicators of the Banking Sector
(Year end, in percent)

	2011	2012	2013	2014	2015	2016	2017 Latest quarter
Capital Adequacy							
Regulatory capital to risk-weighted assets	11.8	12.1	11.8	12.4	13.9	13.8	14.6
Regulatory Tier I capital to risk-weighted assets	10.3	10.8	10.4	10.7	11.9	11.6	12.5
Capital to assets	6.1	6.1	6.0	5.9	6.0	6.6	6.7
Large exposures to capital	68.1	73.7	72.2	76.0	82.0	83.3	77.5
Nonperforming loans net of loan-loss provisions to capital	18.2	16.3	13.2	9.8	7.9	7.8	8.0
Asset Quality							
Nonperforming loans to total gross loans	2.0	1.8	1.5	1.1	0.9	1.0	1.0
Sectoral distribution of loans to total loans							
Residents	95.5	94.9	94.1	92.9	90.5	92.2	93.5
Deposit-takes	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Central bank	0.0	0.0	0.0	0.0	0.0	0.0	-
Other financial corporations	2.9	2.6	2.7	2.8	3.1	3.3	3.3
General government	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Non-financial corporations	24.5	24.1	23.4	23.2	22.7	23.0	23.3
Other domestic sectors	67.6	67.8	67.7	66.6	64.3	65.5	66.7
Nonresidents	4.5	5.1	5.9	7.1	9.5	7.8	6.5
Earnings and Profitability							
Return on assets	1.2	1.1	1.2	1.2	1.4	0.8	1.5
Return on equity	19.7	17.7	20.1	20.8	23.8	12.0	22.0
Interest margin to gross income	68.3	68.0	67.3	66.9	59.4	82.5	60.6
Noninterest expenses as a percentage of gross income	48.7	49.8	47.4	47.9	42.8	53.8	41.1
Liquidity							
Liquid assets to total assets	15.3	16.9	17.0	16.4	17.0	17.6	17.7
Liquid assets to short-term liabilities	39.2	42.8	42.0	40.2	39.7	41.2	40.6

Sources: APRA and IMF, Financial Soundness Indicators (FSI) database.

Annex I. External Sector Assessment

Foreign asset and liability position and trajectory	**Background**. Australia has a high negative net international investment position (NIIP), reaching -58 percent of GDP in 2016. The ratio has varied in a range between -40 and -60 percent of GDP since 1988. Liabilities are largely denominated in Australian dollars while assets are in foreign currency. Foreign liabilities are composed of around one quarter of FDI, one half of portfolio investment (principally banks borrowing abroad and foreign holdings of government bonds), and one quarter of other investment and derivatives. The NIIP is expected to improve in 2017 (by 4 percent of GDP relative to 2016), partly driven by the narrowing of current account deficit. The NIIP to GDP ratio is expected to remain around -55 percent of GDP over the medium term. **Assessment**. The NIIP level and trajectory are sustainable. The External Stability (ES) approach suggests that the NIIP would be stabilized at around current levels with a CA deficit between 2½-3 percent, which is larger than the expected cyclically-adjusted CA deficit in 2017. The structure of Australia's external balance sheet reduces the vulnerability associated with its large negative NIIP. Since Australia's external liabilities are mainly in Australian dollars and there is a net foreign currency asset position, a nominal depreciation tends to strengthen the external balance sheet, all else equal. The banking sector has a net foreign currency liability position but it is fully hedged. The maturity of banks' external funding has improved since the global financial crisis, and even in a tail risk event where domestic banks suffer a major loss, the government's strong balance sheet position allows it to offer credible support.	**Overall Assessment** *The external position of Australia in 2017 was assessed to be broadly consistent with medium term fundamentals and desirable policies. The* CA deficit in 2017 is projected to narrow to 1.9 percent of GDP primarily reflecting stronger terms of trade, because of higher coal and iron ore prices in response to measures restricting domestic supply in China, and ramp-up in new resource export. The depreciation of the Australian dollar observed over 2014-15 has been partly reversed since September 2015, though it remains below the peaks observed in 2011-2013. The depreciation in 2014-15 reduced much the prior, substantial overvaluation of the Australian dollar. **Potential Policy Responses** If growth remains on the weak side, or commodity prices fall again, further monetary accommodation would be warranted. The government's planned gradual fiscal consolidation over the longer term should help improve the current account by boosting national savings.
Current account	**Background**. Australia has run CA deficits for most of its history, reflecting a structural saving-investment imbalance with very high private investment relative to a saving rate which is already high by advanced country standards. Since the early 1980s, deficits have averaged around 4 percent of GDP. The CA deficit in 2017 is projected to narrow to 1.9 percent of GDP primarily reflecting stronger terms of trade, because of higher coal and iron ore prices in response to measures restricting domestic supply in China, and ramp-up in new resource export. Over the medium term, the CA deficit is expected at around 2.5 percent of GDP. This is lower than the historical average of around 4 percent, given the end of the prolonged import intensive mining investment boom and a lower interest differential on Australian bonds compared to foreign bonds. With around half of Australia's exports going to emerging Asia, a key risk is a sharper than expected slowdown in China which could result in a further sharp decline in commodities prices. **Assessment**. The EBA CA regression approach for 2017 estimates a CA norm of -1.6 percent of GDP, with a standard deviation of 0.6. Taking relative output gap into account, the cyclically adjusted CA for 2017 is estimated to be -2.1 percent of GDP, indicating a CA gap with -0.5 percent of GDP.	
Real exchange rate	**Background**. After depreciating by 17 percent between 2012 and 2015, the real effective exchange rate (REER) appreciated by 1 percent in 2016 relative to its 2015 average and the average REER through September 2017 is up by 3.8 percent compared to its 2016 average. The REER as of September, 2017 is some 17 percent above its thirty year average, although well off the peak in 2012. Continued substantial capital inflows may have contributed to the continued relative strength of the Australian dollar. **Assessment**. Considering estimates of the CA gap based on the EBA CA regression and the estimated REER gap staff assesses the REER to be 0 to 10 percent above the level implied by medium-term fundamentals and desirable policy settings. The recent appreciation of the exchange rate, accompanying the increase in terms of trade, suggests that the REER would remain somewhat overvalued.1/	
Capital and financial accounts: flows and policy measures	**Background**. The mining investment boom has been funded predominantly offshore. Net FDI inflows into this sector have partially offset the reduced need for the banking sector to borrow abroad. As investment in new mining projects winds down, related demand for imports will decrease, buffering the impact on the overall balance of payments. Australia also received large inflows in recent years into bond markets given its sound fiscal position relative to other advanced economies, and owing to relatively high interest rate differentials. The weighted average maturity of government bonds is 6.6 years, and has lengthened over time, with 90 percent of the issue maturing by 2027. **Assessment**. Credible commitment to a floating exchange rate and a strong fiscal position limit the vulnerabilities.	
FX intervention and reserves level	**Background**. A free-floater since 1983. The central bank undertook brief but large intervention in 2007–08 when the market for Australian dollars became illiquid (bid-ask spreads widened) following banking sector disruptions in the U.S. The authorities are strongly committed to a floating regime, which reduces the need for reserve holding. **Assessment**. Although domestic banks' external liabilities are sizable, they are either in local currency or hedged with little or no counterparty risks, so reserve needs for prudential reasons are also limited.	
Technical Background Notes	1/ Using the EBA estimated CA-to-REER elasticity of 0.19, the -0.5 percent of GDP estimate of the CA gap under the CA regression approach is consistent with an exchange rate overvaluation of around 2.6 percent in 2017. The EBA REER index regression approach, and the EBA REER level regression provide estimates of a gap encompassing a wide range from 7.1 to 19.3 percent in 2017.	

Annex II. Risk Assessment Matrix

	Source of risks	Likelihood	Time horizon	Impact	Policies to reduce impact
	Domestic risks				
	Stronger recovery momentum	**M**	Short term	**M** Business investment could recover faster with an infrastructure push and continued favorable financing conditions.	The Australian dollar would likely appreciate; monetary policy tightening if output gap closes much faster than expected.
	Slowing of economic recovery	**M**	Short to medium term	**M** Consumption growth could be weaker with continued low wage growth and a higher incidence of part-time work.	Monetary policy easing with minor slowing; combined monetary and fiscal policy easing if economy hits the zero lower bound.
	Housing market downturn	**L**	Short to medium term	**H** A sharp housing market correction would lower residential investment and private consumption. A negative feedback loop of declining house prices, higher non-performing loans, tighter bank credit, and lower activity could amplify the downturn.	Monetary policy easing; fiscal policy stimulus; measures to facilitate mortgage debt restructuring, including selected fiscal intervention.
	External Risks				
	Significant China slowdown and its spillovers	**M**	Medium term	**H** A sharp adjustment in China resulting in large commodity price declines would lead to a major downturn in Australia	Combined monetary policy and fiscal policy easing as economy could reach the zero lower bound quickly; structural fiscal measures to facilitate adjustment in commodity sectors and regions, including active labor market policies.
	Structurally weak growth in key advanced economies	**H**	Medium term	**M** Lower growth in these economies would result in lower commodity prices and commodity consumption, thereby lead to a downturn in Australia.	For temporary easing: monetary policy easing; combined monetary and fiscal policy easing if economy hits the zero lower bound. Structural reforms, including fiscal ones, to raise productivity.
	Tighter global financial conditions	**H**	Short term	**M** Australia would be affected through direct asset price channels, their impact on international funding conditions of Australian banks, and spillovers from their broader effects on global growth and commodity prices. Much would depend on how investor sentiment toward Australia changed.	Monetary policy easing; combined monetary and fiscal policy easing if economy hits the zero lower bound.
	Policy uncertainty including retreat from cross-border integration	**M**	Short to medium term	**M** As an open economy depending on trade, Australia would be negatively affected if a rise in populism and nationalism in large economies would reverse trade liberalization reduce global growth and commodity prices, and exacerbate financial market volatility.	Monetary policy easing; combined monetary and fiscal policy easing if economy hits the zero lower bound. Continued pursuit of open market policies.
	Geopolitical uncertainties leading to strong Australian dollar	**H**	Short to medium term	**H** Escalated tensions in North East Asia surrounding North Korea could lead to significant decrease in external demand for Australia given its strong linkage to the region. And, capital inflows seeking for a safe haven not associated with favorable terms of trade, thereby leading to a stronger Australian dollar, would result in a slower pickup in economic activity and inflation.	Monetary policy easing; combined monetary and fiscal policy easing if economy hits the zero lower bound.
	Lower energy prices	**L**	Short to Medium term	**L** If fuel prices did not increase as expected, real incomes of consumers would be higher, but coal and LNG sectors would be hurt, as would the coal mining regions. The net effect on the economy would also depend on the global growth impact.	The exchange rate would likely act as a shock absorber and dampen the impact; monetary policy response if needed.

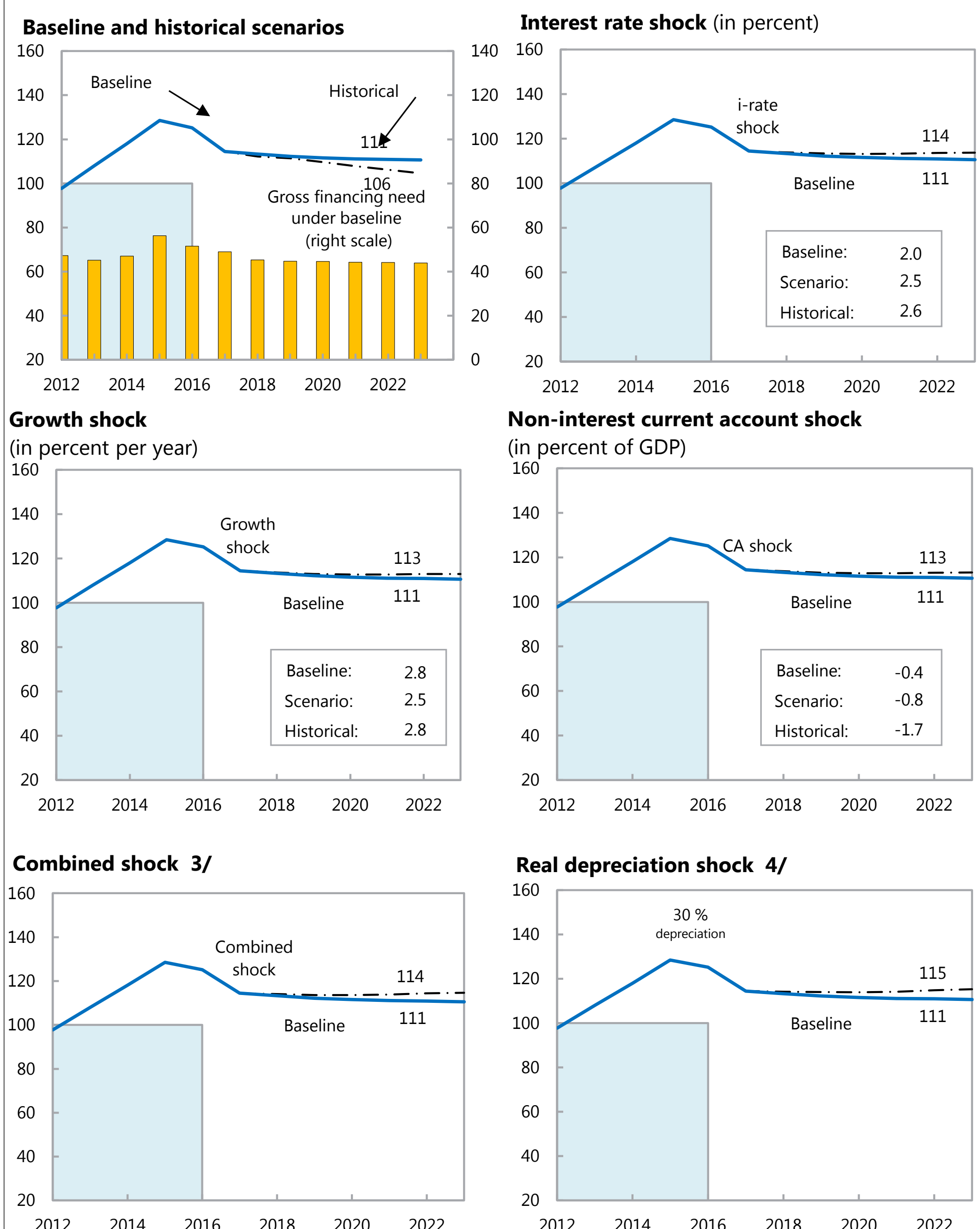
Annex III. Housing Policy Measures

Measure	Effective date	Description
Commonwealth Level		
First Home Super Saver Scheme	Jul 1 2017	Contribute money from annual superannuation contribution limit (up to $15,000 per year for a maximum of $30,000) for a first-home deposit. Provides tax advantages to saving within superannuation framework.
National Housing Infrastructure Facility (NHIF)	Jul 1 2018	Administered by newly established National Housing Finance and investment Corporation (NHFIC). $1bn ($600 mn concessional loans; $$225 mn equity investment; $175 grants) to provide financing to State/Territory and local-government owned corporations for housing and utilities, and Community Housing Providers (CHPs). Will also invest its funds to become self-sustaining.
Affordable housing bond aggregator	Jul 1 2018	The affordable housing bond aggregator is designed to provide cheaper and longer-term finance to CHPs and will be underpinned by a government guarantee.
Western Sydney housing package	2018	Deliver a coordinated package of planning reform to accelerate housing supply in Western Sydney. The package will be delivered as part of the Western Sydney City Deal, a collaborative partnership between the Commonwealth, New South Wales and eight local governments.
National Homeless and Housing Agreement (NHHA)	Jul 1 2018 (projected)	The new National Housing and Homelessness Agreement sets out a small number of specific conditions which States need to meet to receive 100 per cent of their share of the Commonwealth housing and homelessness funding. This will secure improved outcomes, but in a way that is achievable for the States and Territories and does not jeopardise the funding of core social housing and homelessness services. The new agreement will maintain the level of funding under existing agreements and, for the first time, ensure that funding allocated to homelessness services will be ongoing and indexed. The new agreement is needed because three out of four of the benchmarks under the current National Affordable Housing Agreement have not, or are unlikely, to be met."
Release surplus Commonwealth lands	Jul 1 2017	The Commonwealth has established an Australian Government Property Register, which encourages proposals for alternate use of Commonwealth land. Commonwealth land in Melbourne has been released for approximately 6,000 new dwellings.
Adding home sale proceeds to superannuation funds for Australians 65+	Jul 1 2018	Up to $300,000 from the sale of a home owned as a principal residence for at least 10 years may be deposited into their superannuation account. Incentivizing further sales of homes.
Capital gains tax (CGT) discount for investors in affordable housing	Jan 1 2018	Additional 10 percent discount on CGT for affordable housing managed through a CHP, and must be held as affordable housing for at least 3 years.
New South Wales		
Infrastructure investment to unlock housing supply	Jul 1 2017	$1.6 bn for priority projects; $369 mn grants and $500 mn concessional loans to local government; additional $545 mn over 4 years for Special Infrastructure Contributions to speed up development in more regions.
Stamp duty exemptions and grants for first time buyers	Jul 1 2017	No stamp duty for first time buyers for any home under $650,000; discount for up to $800,000; $10,000 grant.
Rezoning as Priority Precincts	Jul 1 2017	Allow for faster and easier approvals, to allow fast-tracking of house building.
Victoria		
First Home Owner Grant	Jul 1 2017	Up to $20,000 for regional Victoria (next 3 years); retained at $10,000 in Melbourne.
Social Housing Growth Fund	Jul 1 2017	$1 bn to support up 2200 social housing places over 5 years
Stamp duty exemptions for first time buyers	Jul 1 2017	No stamp duty for first time buyers for any home under $600,000; discount for up to $750,000
Vacant Residential Property Tax	Jan 1 2018	Applies to dwelling vacant more than 6 months in previous calendar year, in inner and middle rings of Melbourne; relies on self-reporting.
HomesVic	Jul 1 2017	Co-purchase properties for up to 400 first home buyers without a large enough deposit (2-year pilot)
Queensland		
First Home Owners' Grant	Jul 1 2016	$15,000 ($20,000 in FY2017/18) grant to first-time home buyers for new houses under $750,000
Queensland Housing Strategy	Jul 1 2017	$1.8 bn over 10 years. Encourages partnership between private firms and CHPs to build up to 8000 units across state of social and affordable housing. Support homeownership for disadvantaged and aboriginal populations.

Sources: Commonwealth, New South Wales, Victoria and Queensland budget documents for FY2017/18; Commonwealth Mid-Year Economic and Fiscal Outlook 2017; https://www.qld.gov.au/housing/building-home/first-home-grant; http://www.hpw.qld.gov.au/housingstrategy

Annex IV. External and Fiscal DSAs

Figure 1. Australia: External Debt Sustainability: Bound Tests 1/ 2/
(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2018 and 80 percent of fx denominated external debts are assumed to be hedged to local currency.

Figure 2. Australia Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

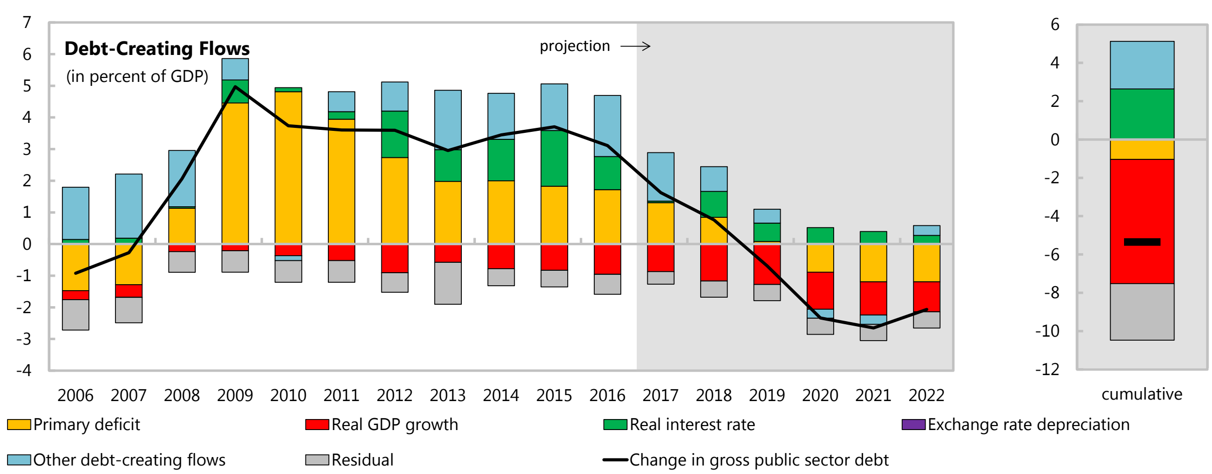
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

	Actual			Projections						As of December 12, 2017		
	2006-2014 [2/]	2015	2016	2017	2018	2019	2020	2021	2022	Sovereign Spreads		
Nominal gross public debt	20.6	37.8	40.9	42.5	43.3	42.6	40.3	37.6	35.5	EMBIG (bp) 3/		16
Public gross financing needs	2.4	2.9	2.7	4.9	4.3	3.9	3.4	2.7	3.4	5Y CDS (bp)		45
Real GDP growth (in percent)	2.8	2.5	2.6	2.2	2.9	3.1	2.9	2.7	2.7	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	3.0	-0.8	1.1	3.3	1.3	1.8	2.0	2.3	2.6	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	6.0	1.6	3.8	5.6	4.2	5.0	4.9	5.1	5.3	S&Ps	AAA	AAA
Effective interest rate (in percent) [4/]	6.1	4.4	4.0	3.5	3.4	3.3	3.3	3.4	3.4	Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2006-2014	2015	2016	2017	2018	2019	2020	2021	2022	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	2.6	3.7	3.1	1.6	0.8	-0.7	-2.3	-2.7	-2.1	-5.4	
Identified debt-creating flows	3.3	4.2	3.7	2.0	1.3	-0.2	-1.8	-2.1	-1.6	-2.4	
Primary deficit	2.0	1.8	1.7	1.3	0.8	0.1	-0.9	-1.2	-1.2	-1.0	-0.4
Primary (noninterest) revenue and grants	33.2	34.1	34.3	34.3	34.7	34.8	35.1	35.2	35.2	209.3	
Primary (noninterest) expenditure	35.2	35.9	36.0	35.6	35.5	34.9	34.2	34.0	34.0	208.3	
Automatic debt dynamics [5/]	0.1	0.9	0.1	-0.8	-0.3	-0.7	-0.7	-0.7	-0.7	-3.8	
Interest rate/growth differential [6/]	0.1	0.9	0.1	-0.8	-0.3	-0.7	-0.7	-0.7	-0.7	-3.8	
Of which: real interest rate	0.6	1.8	1.0	0.0	0.8	0.6	0.5	0.4	0.3	2.6	
Of which: real GDP growth	-0.5	-0.8	-1.0	-0.9	-1.2	-1.3	-1.2	-1.0	-0.9	-6.5	
Exchange rate depreciation [7/]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	1.2	1.5	1.9	1.5	0.8	0.4	-0.3	-0.3	0.3	2.5	
Net privatization proceeds (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Stock-flow adjustment, incl. asset changes	1.2	1.5	1.9	1.5	0.8	0.4 a		-0.3	0.3	2.8	
Residual, including asset changes [8/]	-0.8	-0.5	-0.6	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-3.0	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi (1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

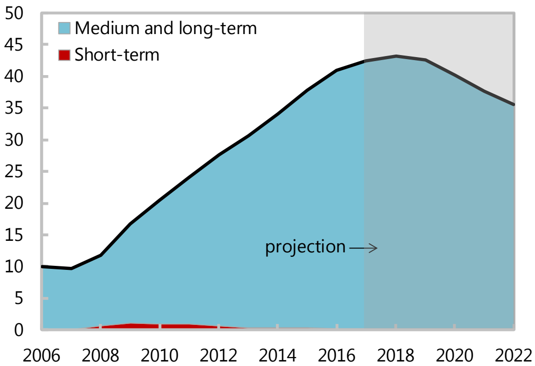
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 3. Australia Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

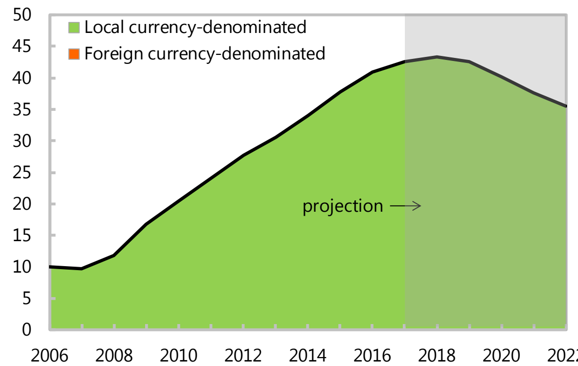
By Maturity

(in percent of GDP)



By Currency

(in percent of GDP)

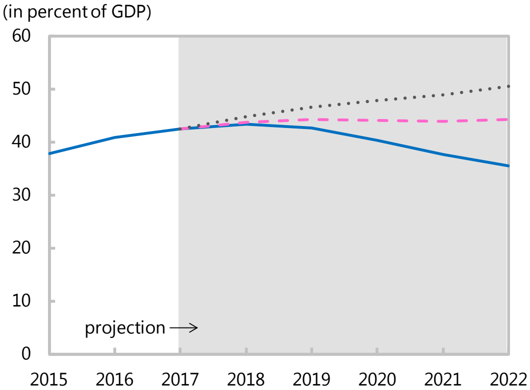


Alternative Scenarios

Baseline   Historical   Constant Primary Balance

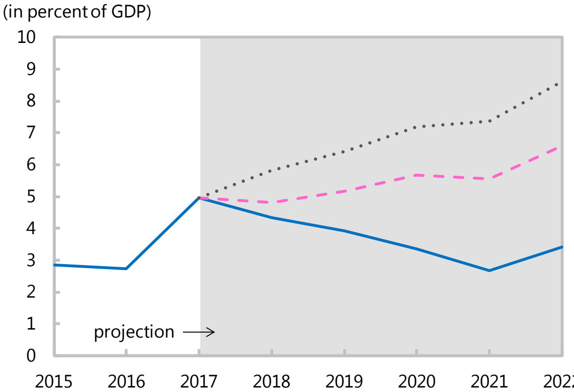
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	2.2	2.9	3.1	2.9	2.7	2.7
Inflation	3.3	1.3	1.8	2.0	2.3	2.6
Primary Balance	-1.3	-0.8	-0.1	0.9	1.2	1.2
Effective interest rate	3.5	3.4	3.3	3.3	3.4	3.4
Constant Primary Balance Scenario						
Real GDP growth	2.2	2.9	3.1	2.9	2.7	2.7
Inflation	3.3	1.3	1.8	2.0	2.3	2.6
Primary Balance	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Effective interest rate	3.5	3.4	3.3	3.3	3.3	3.4

Historical Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	2.2	2.8	2.8	2.8	2.8	2.8
Inflation	3.3	1.3	1.8	2.0	2.3	2.6
Primary Balance	-1.3	-2.3	-2.3	-2.3	-2.3	-2.3
Effective interest rate	3.5	3.4	3.6	3.9	4.2	4.5

Source: IMF staff.

INTERNATIONAL MONETARY FUND

AUSTRALIA

January 23, 2018

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By | Asia and Pacific Department

CONTENTS

FUND RELATIONS

(As of December 31, 2017)

Membership Status: Joined: August 5, 1947; Article VIII

General Resources Account:

	SDR Million	Percent Quota
Quota	6,572.40	100.00
Fund holdings of currency (exchange rate)	6,266.85	95.35
Reserve tranche position	305.93	4.65
Lending to the Fund New Arrangements to Borrow	245.60	

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	3,083.17	100.00
Holdings	2,833.20	91.89

Outstanding Purchases and Loans: None

Financial Arrangements: None

Type	Date of Arrangement	Expiration Date	Amount Approved **(SDR Million)**	Amount Drawn **(SDR Million)**
Stand-By	May 01, 1961	Sep 05, 1961	100.00	0.00

Projected Obligations to Fund[1]

(SDR million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2018	2019	2020	2021	2022
Principal					
Charges/interest	1.93	1.94	1.94	1.94	1.94
Total	1.93	1.94	1.94	1.94	1.94

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Rate Arrangement. Australia has accepted the obligations of Article VIII, Sections 2, 3, and 4 of the Articles of Agreement, and maintains an exchange system that is free from restrictions on the making of payments and transfers for current international transactions, except for exchange restrictions that are maintained solely for the preservation of national or international security and which have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51). The exchange rate is free floating, but the Reserve Bank of Australia retains discretionary power to intervene. There are no taxes or subsidies on purchases or sales of foreign exchange.

Restrictions on Capital Transactions. Australia maintains a capital transactions regime that is virtually free of restrictions. Two main restrictions on foreigners require: authorization for significant ownership of Australian corporations; and approval for acquisition of real estate.

Article IV Consultation. Australia is on the 12-month consultation cycle. The 2017 Article IV consultation discussions were held during November 6-20, 2017; the Executive Board discussed the staff report and concluded the consultation on February 7, 2018.

FSAP Participation. The last FSAP Update was discussed by the Executive Board on November 12, 2012 (IMF Country Report No. 12/308). The next FSAP Update is scheduled for 2018 and will be aligned with the 2018 Article IV discussions with Australia.

Fourth Amendment. Australia has accepted the Fourth Amendment to the Articles of Agreement.

STATISTICAL ISSUES

Data provision is adequate for surveillance. Australia has subscribed to the Special Data Dissemination Standard (SDDS) since April 1996, and its metadata are posted on the Fund's Dissemination Standards Bulletin Board (DSBB). Australia implemented all the recommendations of the first phase of the G-20 Data Gaps Initiative (DGI), with the exception of semi-annual reporting of Coordinated Portfolio Investment Survey (CPIS) data. Australia also participates in the second phase of the DGI but has no plans to adhere to the SDDS Plus. In recent years, the Australian Bureau of Statistics (ABS) has taken several initiatives to further improve the quality of the data, such as issues relating to seasonal adjustment of unemployment and employment statistics. Adding monthly inflation data to the suite of statistics would assist surveillance.

Table of Common Indicators Required for Surveillance
(As of January 5, 2017)

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	12/13/16	12/13/16	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	11/16	12/22/16	M	M	M
Reserve/Base Money	11/16	1/2/17	M	M	M
Broad Money	11/16	1/2/17	M	M	M
Central Bank Balance Sheet	12/07/16	12/09/16	W	W	W
Consolidated Balance Sheet of the Banking System	10/16	11/29/16	M	M	M
Interest Rates[2]	12/13/16	12/13/16	D	D	D
Consumer Price Index	Q3 2016	10/26/16	Q	Q	Q
Revenue, Expenditure, and Balance – General Government[4]	09/16	12/07/16	Q	Q	Q
Revenue, Expenditure, and Balance – Central Government	09/16	12/07/16	Q	Q	Q
Composition of Financing[3] – General Government[4]	10/16	11/29/16	M	M	M
Composition of Financing[3]– Central Government	10/16	11/29/16	M	M	M
External Current Account Balance	Q3 2016	12/06/16	Q	Q	Q
Exports and Imports of Goods and Services	10/16	12/08/16	M	M	M
GDP/GNP	Q3 2016	12/07/16	Q	Q	Q
Gross External Debt[5]	Q3 2016	12/06/16	Q	Q	Q
International Investment Position[6]	Q3 2016	12/06/16	Q	Q	Q

[1]Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] Consists of the central government (including budgetary, extra budgetary, and social security funds) and state and local government
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).

Statement by the IMF Staff Representative
February 7, 2018

This statement contains information that has become available since the Staff Report was circulated to the Executive Board on January 24, 2018.

At 1.9 percent in the fourth quarter, headline and core inflation rose in line with the previous quarter (in year-on-year terms). Annual price increases in market goods and services excluding volatile items remain close to 1 percent, while prices of tradables fell again, as in the previous quarter. These developments are broadly in line with the Reserve Bank's latest inflation forecast and IMF staff's projections.

Growth in private sector credit slowed further in December. In year-on-year terms, it declined to less than 5 percent, with the bulk of the slowdown accounted for by business and housing investor loans, with the latter highlighting the continued impact of recent prudential steps taken by APRA to restrict riskier forms of mortgage lending, in line with expectations discussed in the Staff Report.

The authorities have informed staff about additional housing-related capital flow management measures (CFMs). The state of South Australia introduced as of January 1, 2018 a stamp duty surcharge of 7 percent on residential property purchases by foreign buyers and temporary residents. Based on press reports, the main reason appears to be concerns that more attractive property values in the state could start attracting investor interest this year, given high residential real estate valuations in the major east coast capitals. The pre-emptive imposition of CFMs would be inconsistent with the Fund's Institutional View on capital flows. Another potential new CFM is the removal, as of July 1, 2017, of a stamp duty concession in South Australia for presales of new apartments that was renewed for another year only for domestic buyers but not for foreign buyers. Pending further discussion with the authorities and an assessment of housing markets in South Australia, staff has yet to form a view of the appropriateness of these measures.

Statement by Christine Barron, Alternate Exeutive Director,
Gemma Preston, Senior Advisor, and Anna Park, Advisor
February 7, 2018

Australia has completed its 26th year of economic growth. This record of solid economic growth has been achieved despite the recent challenge of adjusting to both one of the largest terms of trade booms (and subsequent falls) and the largest mining *investment* boom in our history. Economic adjustment has been supported by an open economy with a flexible exchange rate regime, liberalized capital account, and flexible labor and product markets, backed by adaptive macroeconomic policies and strong institutional arrangements.

Economic growth is expected to return to around trend levels in the near term and to be above potential from 2019-20, closing the output gap. Authorities agree that near-term risks to growth are broadly balanced and are continuing to pursue policies to boost potential growth. They remain committed to open trade, foreign investment and immigration for future economic growth.

Since the time of the 2017 IMF Article IV consultation in November 2017, the Australian economy has continued to perform strongly. Notably, strong employment growth continued in December 2017, with employment now increasing in each of the past 15 months, equaling the longest consecutive streak of increases since records began. Underlying inflation in the December quarter 2017 was 0.4 percent, to be 1.8 percent higher through the year. Both underlying and headline inflation remain subdued reflecting weak wage growth and continued strong retail competition. The Government also released its Mid-Year Economic and Fiscal Outlook (MYEFO) update in December 2017, which forecast a smaller fiscal deficit in 2017-18 than that forecast in the 2017-18 Budget. Most recently, Australia worked closely with trading partners to successfully reach agreement on the final Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

The Australian economy is expected to grow at a solid pace in 2017-18 supported by public final demand, in particular the Government's investment in infrastructure; non-mining business investment which is growing at a stronger pace than expected; household consumption; and exports, including the ramp up in capacity from iron ore and LNG projects coming online. The unemployment rate has fallen slightly over 2017 to 5.5 percent, accompanied by a near record participation rate of 65.7 percent. The female participation rate has reached a record high of 60.6 percent. However, the underemployment rate, while having fallen, remains elevated indicating some additional spare capacity in the labor market which is contributing to slow wages growth.

Australia remains firmly committed to an open economy in trade, foreign investment and immigration and underscores its commitment to a cooperative multilateral trading framework, promoting openness over protectionism. Australia remains well placed to benefit from its diversification and integration into Asia, and continues to benefit from recent FTAs with China, Japan and South Korea. Australia is also working to develop new trade agreements with major trading partners as this forms part of the Government's broader strategy to maximize economic opportunity by extending Australia's FTA network with the countries that account for 80 percent of Australia's two-way trade by 2020.

In January 2018, Australia together with important trading partners reached an agreement on the CPTPP. The CPTPP will significantly increase market access for Australia's exporters of goods and services to a regional free trade area with a combined GDP of A$13.7 trillion. In 2016-17, one quarter of Australia's total exports, worth close to $87 billion, went to CPTPP countries. The CPTPP will provide more opportunities for Australian exporters and considerable gains for Australian consumers with new trade agreements with Canada and Mexico and greater market access to Japan, Chile, Singapore, Malaysia, Vietnam and Brunei.

The accommodative stance of monetary policy is appropriate and consistent with achieving the inflation target of 2–3 percent, on average, over time. Inflation is expected to pick up gradually, underpinned by wage growth as the economy strengthens and as excess capacity in the labor market is reduced. The current stance of monetary policy balances the need to support the economy in the final days of the transition to lower levels of mining investment against the risks stemming from rising household debt. The Reserve Bank of Australia (RBA)'s flexible inflation-targeting framework ensures that it remains well-placed to respond to future developments. The RBA notes staff's suggestion to consider forward guidance. The RBA will continue to ensure that the public understands its reaction function, allowing them to form their own views on the potential path of interest rates.

Australia's current account deficit continues to reflect that Australia's strong investment outcomes are not able to be fully met by domestic savings. While Australia has a net foreign liability position, it has a net foreign currency asset position, meaning that the bulk of Australia's foreign liabilities are issued in or hedged back into Australian dollars. The banking sector not only hedges its foreign currency liabilities but does so in a way that generally matches the duration of its hedges with the underlying liabilities. Additionally, over the last decade Australia has tended to issue debt with longer term maturities reducing risks associated with rollover or refinancing. For these reasons, Australia's net external liabilities have a relatively robust structure, minimizing exposure to exchange rate and other macro-financial risks. The current account deficit is expected to remain towards the low end of the range in which it has fluctuated over recent decades, and net foreign liabilities have been stable as a share of GDP over the past decade.

The Australian Government continues to maintain a responsible fiscal stance, while implementing its plan to support the economy's transition to broader-based sources of growth. Consistent with the Government's commitment to responsible budget repair, the fiscal position is projected to maintain an improving trajectory with a return to surplus in 2020-21. The Government is focused on containing recurrent expenditure, projecting real payments growth of 1.9 percent of GDP on average over the forward estimates, while prioritizing sustainable, growth friendly spending and tax measures aimed at boosting potential output.

The Government's economic strategy seeks to boost jobs and growth through tax cuts for Australian businesses and government investment in areas that will improve long-run productivity. As a capital importing economy, Australia's company tax regime needs to remain competitive. Data released by the Oxford Centre for Business Tax indicate that Australia's average and effective corporate tax rates are currently in the upper third among advanced economies. My authorities consider that the recent US company income tax package only increases the need for Australia to address its relatively uncompetitive company tax. The Enterprise Tax Plan will reduce the company tax rate to 25 per cent for all businesses, supporting investment, employment and wage rises. The Government is continuing its ten-year A$75 billion investment in transport infrastructure, a comprehensive investment in our defense industry, as well as increasing incentives for research & development, skills development, enhanced competition, support for innovation and incentives for new start-up businesses.

Australian authorities note staff advice that more infrastructure investment could be undertaken given the identified infrastructure gaps. But the quality of investment in infrastructure is as important as the quantity of investment to deliver a boost to potential growth. The Australian Government has processes in place to facilitate high quality investment in infrastructure. *Infrastructure Australia* works to prioritize and progress nationally significant infrastructure projects that are underpinned by robust business cases. The authorities consider they have the balance right between rebuilding fiscal buffers to provide policy space in the event of a future crisis, while supporting initiatives that will increase potential growth.

Household debt is elevated relative to incomes, and has been rising as moderate growth in debt has outpaced the very low growth in household incomes in recent years. Authorities have been concerned that as the household sector takes on ever-more debt relative to its income, the sector's vulnerability to shocks increases. This is especially so when this debt is taken on in a low-interest rate environment. While some segments of the overall housing market have experienced rapid price gains, housing credit growth is not unusually strong, and many households have built significant mortgage buffers. Further, the distribution of debt is skewed towards high income households with households in the top two income quintiles holding over 60 percent of Australian household debt. To the extent that higher income households are comprised of high skill workers that may be less vulnerable to unemployment, this distribution enhances debt sustainability.

That said, the authorities also agree with staff that there is the potential for a large external shock to interact with, or even trigger, domestic risks. The Australian Prudential Regulation

Authority (APRA), with strong support from the Council of Financial Regulators[1], has taken action to maintain strong lending standards and responded to rising household indebtedness by introducing new supervisory measures and by requiring credit standards to be tightened for new borrowers. The Australian Securities and Investments Commission (ASIC) has targeted responsible mortgage lending practices. As a result, there has been a reduction in riskier types of lending, growth in lending to housing investors has slowed, fewer loans are being made with very high loan-to-valuation ratios, debt-servicing tests have been tightened and fewer interest-only loans are being made. Recently house price growth appears to have moderated. These are positive developments but it is an area the Council of Financial Regulators will continue to closely monitor.

As the staff note, recent strong house price growth in the eastern states of Australia reflects an excess of housing demand over supply. In response to concerns about property market risks, Australia has implemented a range of policies aimed at promoting housing affordability and safeguarding financial stability into the future. This has predominantly involved domestically-oriented microprudential and macroprudential policies, while broader policy settings have sought to promote housing supply growth over time.

However, the macroprudential interventions that have been put in place are ineffective with respect to non-resident investors that use foreign sources of finance. Given Australia's jurisdictional inability to regulate the lending practices of banks operating in foreign countries, Australia has chosen to implement a number of additional policy measures that have demand-side implications for individual non-resident investors.

A number of recent measures of the Australian Government and some of the eastern State governments that are directed at non-residents have nevertheless been labelled by the IMF as capital flow measures (CFMs). My authorities dispute this representation.

- **The 'Annual charge on foreign owners of under-utilized residential property (on vacant properties only)'** does not seek to limit foreign investment in Australian residential property. Instead, it is to give effect to the long-standing policy intent that foreign investment in Australian residential property adds to housing supply. Property that is neither lived in by the owner nor made available for rent is not adding to the supply of housing. This measure does not seek to target only new capital flows, it applies to the stock of housing owned by foreign persons.

- The measure '**Prohibition of property developers to sell more than 50 percent of new residential housing development to foreigners'** has been mischaracterised. The measure only applies to the pre-approvals granted to *property developers* to sell new

[1] The Council of Financial Regulators is the coordinating body for Australia's main financial regulatory agencies. It comprises the Reserve Bank of Australia, the Australian Prudential Regulation Authority, the Australian Securities and Investments Commission, and The Treasury.

dwellings in a specified development to non-residents, without each non-resident purchaser seeking their own foreign investment approval. Previously, no cap applied to these pre-approvals. The pre-approval for property developers is now capped at 50 percent. This policy does not act to limit foreign investment in Australian residential property and is not intended to limit the flow of capital. Foreign investment in excess of 50 percent in new developments will still be possible through individuals seeking independent approval for a given development outside of a developer pre- approval.

- Using the **Capital Gains Tax (CGT) withholding regime** for the collection of non-resident tax liabilities is consistent with global norms. A withholding tax does not impose a higher final tax liability on non-residents compared with residents—it merely seeks to ensure tax owing is paid. The CGT withholding regime seeks to address the low levels of compliance by non-residents with their Australian tax obligations. As it is a non-final withholding tax, a non-resident can lodge an Australian income tax return to recover amounts withheld in excess of their Australian tax liability. The non-resident may also be eligible for a tax credit in their home jurisdiction. Similarly, the denial to non-residents of the main residence CGT exemption is a tax integrity measure, not a capital flow measure.

- In regard to the **foreign investor surcharge on stamp duty** and land tax imposed by the New South Wales state government, the then NSW Treasurer noted that 'These new measures will ensure NSW's property market continues to be an attractive destination for international investors while making sure that we are able to fund vital services into the future.' The measure is therefore clearly intended to raise revenue and is not expected to impede the flow of capital into the NSW residential home market.

My authorities remain supporters of the Institutional View on Capital Flows (IV). However, they consider that the purpose for which the IV was intended has been ill-served by its application. The use of a rule that deems all measures that discriminate between residents and non- residents to be a capital flow measure does not reflect a key plank of the IV that the intent of the measure matters. The application of the IV needs to address the underlying **substance** of the measure not merely the form, and its materiality, and for this staff will need to be able to exercise judgement. We share the concern expressed by several Chairs that application of the IV under the current guidance could undermine the credibility of Fund advice and undermine support for the IV.

In addition, the resources both of staff and the authorities have been spent on a discussion of how to categorize housing affordability measures that touch upon foreign investors rather than a discussion of whether or not the policies implemented are effective at addressing the risk that rising household debt poses to the future strength of the Australian economy. We would have strongly preferred a focus on the effectiveness of the policies to achieve their stated intent.

My authorities therefore repeat the call for a review of the application of the Institutional View on Capital Flows, including an assessment of current implementation experience in the context of the original intent of the IV which was to guide the IMF's policy advice to members on how to harness the benefits while managing the risks of capital flows. Finally, we note that similar policies in place are not being assessed as CFMs as they existed prior to the Institutional View being established in 2012. They highlight this as a matter of consistency that staff should consider further.

On the recommended changes to the tax treatment of housing we note that investment in housing (other than owner-occupied housing) is treated the same as investment in other assets. The ability to deduct expenses incurred in generating income is part of the normal operation of the Australian tax system and applies to a wide range of investments and business activities. Indeed in the 2017-18 Budget there were some limitations imposed on the expenses that can be deducted from returns on housing investment. The 50 percent capital gains tax discount is also applied to all assets held for more than one year. We also note that stamp duties and land tax are levied by the state governments not the Australian Government.

The Australian authorities appreciated the ability to discuss with the mission team the outlook for the Australian economy and the policy mix to address the opportunities and risks it faces. We thank staff for the highly relevant analysis in the Selected Issues Papers and for the constructive and open dialogue.