INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/50

AUSTRALIA

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

February 2023

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 2022 Article IV consultation with Australia, the following documents have been released and are included in this package:

- A **Press Release**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis, following discussions that ended on November 16, 2023, 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 9, 2023.
- An **Informational Annex** prepared by the IMF staff.

The document listed below has been 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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International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2022 Article IV Consultation with Australia

FOR IMMEDIATE RELEASE

Washington, DC – **February 1, 2023:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Australia on January 25, 2023 and endorsed the staff appraisal without a meeting on a lapse-of-time basis.[2]

With a rapid post-pandemic economic recovery and favorable terms of trade, Australia has reached a stronger cyclical position than many other advanced economies, with limited scarring. While labor markets confront significant tightening, wage growth thus far has remained modest relative to many other advanced economies. Inflation has nonetheless risen to significantly above the RBA's target, driven both by high commodity prices and strong domestic demand, prompting decisive monetary policy tightening. Fiscal policy consolidated significantly in FY2021/22 with the ending of pandemic-era support measures, and the pace of tightening is slowing significantly in the current fiscal year.

With tighter financial conditions, housing prices have started declining from their peak. While the financial sector faces significant exposure to housing markets, stability risks appear to remain well-contained, as banks have remained liquid and well-capitalized, while households have built substantial financial buffers. Pockets of vulnerability may nonetheless build up, for example among households that purchased their home recently at high valuations.

Australia's economy is on a narrow path to a soft landing, with downside risks. Growth is expected to slow to 1.6 percent in 2023 from about 3.6 percent in 2022, as higher interest rates and weaker global growth cut into domestic demand and net exports. Inflation is projected to decelerate gradually toward the 2-3 percent inflation target by end-2024. Downside risks to the economic outlook dominate, with significant uncertainty regarding global growth, commodity prices, and domestic developments surrounding wages, housing prices, and the effect of tighter monetary conditions.

Executive Board Assessment

In concluding the 2022 Article IV consultation with Australia, Executive Directors endorsed the staff's appraisal, as follows:

From its strong cyclical position, Australia's economy is expected to come to a soft landing in 2023, although risks are skewed significantly to the downside. Tighter financial conditions, erosion of real incomes amid high inflation, declining housing prices, and

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[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.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

soft global growth point to a significant deceleration in Australia. Inflation is projected to decline gradually but remains above target until 2024, subject to significant uncertainty. Downside risks to growth stem from a stronger global downturn, persistently high inflation expectations, and rising geo-economic fragmentation.

Restrictive macroeconomic policies are needed in the near term to mitigate strong domestic demand and address inflation. Monetary policy needs to continue tightening in the short term as envisaged, but given considerable uncertainty regarding the speed and intensity of monetary policy transmission, the pace of rate increases should continue to be data-dependent. Transparency in communication, underpinned by the assessment of the balance of risks, should continue to convey policy intentions to keep inflation expectations well anchored. Near-term fiscal restraint should support monetary policy in addressing demand. Budgetary revenue overperformance should be saved, and the implementation of spending programs should remain judicious, with any additional cost-of-living support amid high inflation to be kept temporary and well targeted to the vulnerable.

Implementing comprehensive tax reforms and improving efficiency in expenditure programs will pave the road for a credible consolidation path over the medium-term. Sizable structural spending pressures limit the degree of consolidation and risk crowding out important spending priorities. Reviewing existing, large spending programs and improving expenditure efficiency will be important to underpin medium-term fiscal consolidation. At the same time, there are opportunities to make the tax system more efficient and equitable, rebalancing it from currently high direct to indirect taxes, and raise sufficient revenues to fund the government programs. The Commonwealth Government should direct windfall revenue gains to budget repair, with a view to creating additional fiscal buffers to address future shocks.

Financial stability risks from the housing price correction appear to remain contained, and policies should aim to alleviate deteriorating housing affordability. With rising interest rates, housing prices are expected to continue declining significantly from their pandemic-era highs, but this is unlikely to raise material financial stability concerns given prudent lending standards and significant buffers among banks and households. Affordability concerns are increasing given strongly rising rents and higher mortgage rates. A strong focus on boosting housing supply remains essential, supported by well-targeted support for lower-income households.

Close monitoring of the financial system amid tightening financial conditions will still be important. The financial system appears to be robust, and the increase in banks' required capital buffers is welcome. An expected increase in bank wholesale funding at a time of higher rates and slowing growth may pose some vulnerabilities, although liquidity coverage ratios are well above regulatory minimum requirements. Potential cyberthreats on financial infrastructure require adequate investment, close monitoring, and contingency planning. Close scrutiny of non-bank financial institutions is important given their rapid growth, albeit from a low base. Financial integrity regulation should be expanded to cover DNFBPs and enhance beneficial ownership transparency.

Australia's new climate mitigation targets are welcome and should be supported with strong policy actions. The new 2030 Nationally Determined Contribution is broadly in line with the long-term goal of reaching net zero greenhouse gas emissions by 2050, and the new Climate Change Act creates a framework for accountability and future action to meet the target. A broad-based carbon price, coupled with measures to mitigate transition risks for impacted regions and industries, remains the most cost-effective way to achieve abatement goals. If political economy constraints prevent the adoption of an economy-wide carbon price, alternative sectoral policies, with price signals where possible, can help reduce emissions. In this context, planned reforms to the Safeguard Mechanism for industrial emissions are welcome. Adding price signals in the energy and transport sectors, potentially in the form of feebates, can further incentivize emissions reduction.

Reigniting productivity growth and boosting inclusion will require a strong focus on structural reforms. Delivering quality infrastructure to meet policy goals will require further streamlining the infrastructure pipeline and working proactively with the construction sector to overcome capacity constraints. Recent initiatives to tackle skill shortages, including free vocational training, expansion of university capacity, and a temporary increase in migration, are welcome. Scope remains to further boost innovation, promote competition, and improve education outcomes. Australia's continued support for an open trade environment, including through reforms at the WTO, is very welcome.

Table. Australia: Main Economic Indicators, 2018-28

(Annual percentage change, unless otherwise Indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Projections						
NATIONAL ACCOUNTS											
Real GDP	2.8	1.9	-1.8	5.2	3.6	1.6	1.7	2.1	2.2	2.3	2.3
Domestic demand	2.7	1.2	-2.2	6.0	4.9	2.0	1.6	2.0	2.2	2.3	2.3
Private consumption	2.4	1.1	-5.8	5.0	6.8	2.5	2.2	2.7	2.7	2.8	2.8
Public consumption	4.1	6.2	7.8	5.3	5.2	0.4	0.3	0.5	0.6	0.6	0.6
Investment	2.3	-2.5	-2.8	10.4	1.5	2.4	1.7	1.9	2.7	2.8	2.8
Public	2.7	2.1	-0.6	6.8	3.4	1.3	1.1	0.5	0.4	0.4	0.4
Private business	2.6	-0.8	-3.8	8.9	4.1	4.8	2.0	2.4	3.8	3.9	3.7
Dwelling	4.3	-7.2	-5.6	9.9	-2.7	0.9	1.6	2.0	2.4	2.6	2.8
Net exports (contribution to growth, percentage points)	0.4	1.0	0.1	-1.4	-1.7	0.3	0.1	0.2	0.0	0.0	0.0
Gross domestic income	3.3	3.2	-1.9	9.0	5.1	-0.2	0.3	2.0	2.1	2.3	2.3
Investment (percent of GDP) 1/	24.2	22.6	22.3	23.1	23.3	23.6	24.0	23.9	24.0	24.1	24.2
Public	5.1	5.1	5.2	5.0	5.0	5.3	5.3	5.2	5.1	5.0	4.9
Private	18.9	17.6	17.3	18.0	17.7	18.4	18.7	18.7	18.9	19.1	19.3
Savings (gross, percent of GDP)	22.0	23.1	24.6	26.3	24.4	24.1	23.5	23.6	23.6	23.6	23.6
Households	9.3	9.9	17.0	14.6	10.1	8.7	12.1	12.7	12.4	12.2	12.0
Potential output	2.4	2.3	1.3	1.5	1.9	2.0	2.1	2.3	2.3	2.3	2.3
Output gap (percent of potential)	-0.7	-1.0	-4.0	-0.5	1.1	0.8	0.4	0.2	0.0	0.0	0.0
LABOR MARKET											
Employment	2.7	2.3	-1.5	3.1	3.6	1.0	1.2	1.5	1.6	1.5	1.7
Unemployment (percent of labor force)	5.3	5.2	6.5	5.1	3.7	4.0	4.2	4.4	4.5	4.6	4.6
Wages (nominal percent change)	2.1	2.3	1.6	2.0	3.2	3.2	3.1	3.0	2.9	2.8	2.8
PRICES											
Terms of trade index (goods, avg)	83	90	90	110	119	105	99	99	99	99	99
% change	3.2	8.3	0.2	21.8	8.1	-11.1	-5.8	-0.4	-0.1	0.0	0.2
Iron ore prices (index)	101	135	156	228	171	136	136	136	136	136	136
Consumer prices (avg)	1.9	1.6	0.9	2.8	6.7	5.5	3.2	2.8	2.5	2.5	2.6
Core consumer prices (avg)	1.6	1.6	1.2	2.8	5.7	5.3	3.2	2.8	2.5	2.5	2.6
GDP deflator (avg)	2.2	3.2	0.7	5.6	7.7	-1.2	0.4	2.9	2.4	2.5	2.5
FINANCIAL											
Reserve Bank of Australia cash rate target (percent, avg)	1.5	1.2	0.3	0.1	1.6	3.8	3.9	3.4	3.0	3.0	3.0
10-year treasury bond yield (percent, avg)	2.6	1.4	0.9	1.6	3.6	4.5	4.5	4.3	4.3	4.3	4.3
Mortgage lending rate (percent, avg)	5.3	4.8	4.5	4.5	6.6	7.1	7.0	6.3	6.3	6.3	6.3
MACRO-FINANCIAL											
Credit to the private sector	4.7	2.5	2.1	7.4	3.3	2.0	2.1	3.9	4.8	5.0	5.6
Interest payments (percent of disposable income)	8.9	7.0	5.8	5.2	9.7	11.0	9.8	8.3	8.2	8.2	8.2
Household savings (percent of disposable income)	4.6	5.9	15.5	13.1	6.5	4.1	9.1	9.9	9.5	9.1	8.8
Household debt (percent of disposable income) 2/	186	185	179	186	187	192	176	170	170	170	169
Business credit (percent of GDP)	50.5	49.1	50.1	48.9	44.7	46.2	47.3	47.4	47.9	48.3	48.7
GENERAL GOVERNMENT (percent of GDP) 3/											
Revenue	35.7	35.8	34.6	35.1	36.5	35.6	36.6	36.4	36.8	37.0	37.0
Expenditure	37.0	37.0	42.2	44.4	40.0	38.4	39.3	39.3	39.3	39.3	39.1
Net lending/borrowing	-1.3	-1.2	-7.7	-9.3	-3.5	-2.9	-2.7	-2.9	-2.5	-2.3	-2.1
Commonwealth only	-0.5	-0.1	-4.8	-6.9	-1.5	-1.3	-1.7	-2.1	-1.7	-1.6	-1.6
Operating balance	0.6	0.9	-5.5	-7.0	-1.2	-0.6	-0.4	-0.8	-0.3	-0.1	0.1
Cyclically adjusted primary balance	0.4	0.5	-5.0	-7.1	-2.3	-2.0	-1.3	-1.4	-0.9	-0.4	-0.3
Gross debt	41.3	42.2	52.7	58.2	56.8	56.7	61.2	62.3	62.6	62.6	62.4
Net debt	23.7	24.5	32.1	34.8	31.8	34.0	37.1	38.6	39.2	39.6	39.7
BALANCE OF PAYMENTS											
Current account (percent of GDP)	-2.2	0.3	2.3	3.1	0.9	0.4	-0.4	-0.4	-0.5	-0.5	-0.6
Export volume	5.1	3.2	-9.7	-2.0	4.1	7.4	3.3	2.8	2.1	2.2	2.2
Import volume	4.3	-1.0	-12.8	5.4	14.6	6.7	3.0	2.4	2.4	2.4	2.4
Net international investment position (percent of GDP)	-54.7	-47.7	-50.2	-35.4	-35.0	-34.4	-34.1	-32.8	-31.9	-30.9	-30.1
Gross official reserves (bn A$)	76	84	56	81	…	…	…	…	…	…	…
MEMORANDUM ITEMS											
Nominal GDP (bn A$)	1,894	1,992	1,971	2,190	2,444	2,454	2,507	2,635	2,759	2,892	3,031
Percent change	5.1	5.2	-1.1	11.1	11.6	0.4	2.2	5.1	4.7	4.8	4.8
Real GDP per capita (% change)	1.3	0.4	-2.8	5.0	2.9	0.5	0.5	0.8	0.9	1.1	1.1
Population (million)	25.2	25.5	25.6	25.8	26.0	26.3	26.6	27.0	27.3	27.5	27.8
Nominal effective exchange rate	90.0	86.3	86.0	90.8	…	…	…	…	…	…	…
Real effective exchange rate	90.0	86.0	85.3	90.5	…	…	…	…	…	…	…

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

1/ Includes changes in inventories.

2/ 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.

3/ Fiscal year ending June.

INTERNATIONAL MONETARY FUND

AUSTRALIA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

January 9, 2023

KEY ISSUES

Context. A strong post-pandemic recovery and favorable terms of trade have led Australia to a stronger cyclical position than most advanced economies. Tight labor markets reflect the strength of the recovery with labor and skills shortages, although wage growth has remained more subdued than in many other advanced economies. Inflation has risen to significantly above target, prompting decisive monetary policy tightening. Financial conditions have since tightened, and housing prices started declining from their peak.

Outlook and risks. Australia is on a narrow path to a soft landing. Growth is expected to slow to 1.6 percent in 2023 from 3.6 percent in 2022 as higher interest rates and weaker global growth cut into domestic demand and net exports. Inflation is projected to decelerate slowly toward the 2-3 percent inflation target by the end of 2024. Downside risks to the economic outlook dominate, with significant uncertainty regarding global growth, commodity prices, and domestic developments surrounding wages, housing prices, and the effect of tighter monetary conditions.

Policy recommendations:

- **Macroeconomic policies** should continue to tighten in the near term, rebalancing domestic demand and supply and prioritizing a sustainable return of inflation to target. The RBA should continue raising interest rates, with the pace remaining data-dependent. Near-term fiscal restraint will help support monetary policy in holding back excess demand. Medium-term fiscal policy should ensure credible consolidation amid structural spending pressures, and tax reforms should help mobilize revenues, strengthen economic efficiency, and improve equity.

- **Financial and macroprudential policies** are adequate, but ongoing monitoring of risks is warranted due to potential pockets of vulnerability stemming from the interaction of higher interest rates, high household debt, and falling housing prices.

- **Structural policies** can help foster sustainable, equitable and inclusive growth. The new climate change mitigation targets should be supported with strong policies, while continued structural reform efforts can help address the labor productivity slowdown and achieve greater inclusion.

Approved By
Anne-Marie Gulde-Wolf (APD) and Stephan Danninger (SPR)

Discussions took place in Canberra, Melbourne, and Sydney during November 2–16, 2022. The staff team comprised Harald Finger (head), Pragyan Deb, Kenichiro Kashiwase, Siddharth Kothari, Evan Papageorgiou, and Nour Tawk (all APD). Rob Nicholl and Tanuja Doss (both OED) joined the discussions. Ricardo Davico and Nadine Dubost (both APD) assisted from HQ.

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TABLES

ANNEXES

CONTEXT

1. **Having recovered from the pandemic, Australia—like most advanced economies (AEs)—is facing challenges from rising inflation and the global slowdown.** Fast post-pandemic recovery and favorable terms of trade developments in the wake of the Ukraine war have propelled Australia to a stronger cyclical position than most AEs, with rising inflation becoming increasingly broad-based. Policies have been broadly in line with Fund recommendations (Annex I). While a soft landing is projected amid a deteriorating external environment and fiscal and monetary policy tightening, risks are skewed to the downside. Housing prices, which surged during the pandemic, are now declining faster than in most AEs but are unlikely to create significant financial stability risks. Under the new Labor government, Australia plans to expand social welfare programs and focus on climate change mitigation policies.

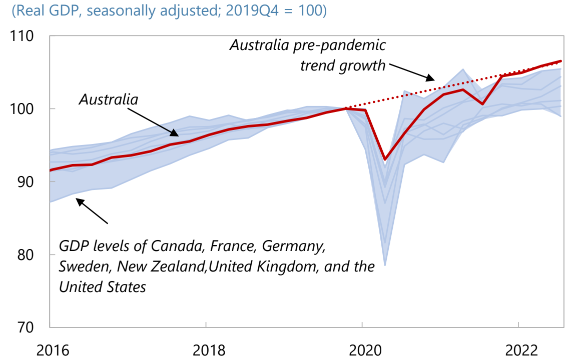
A SOFT LANDING WITH DOWNSIDE RISKS

A. Recent Developments

2. **Australia's economy recovered in 2022 to its pre-pandemic trend.** With limited scarring, growth became broad-based and recovered faster than most AEs, with the output gap turning positive. High export commodity prices supported growth through 2022Q3 (5.9 percent y/y), despite headwinds from the omicron variant, floods, tighter domestic and external financial conditions, China's slowdown, and global growth uncertainty given the Ukraine war. Despite robust domestic consumption, consumer confidence fell to low levels given rising interest rates and falling real wages amid high inflation.

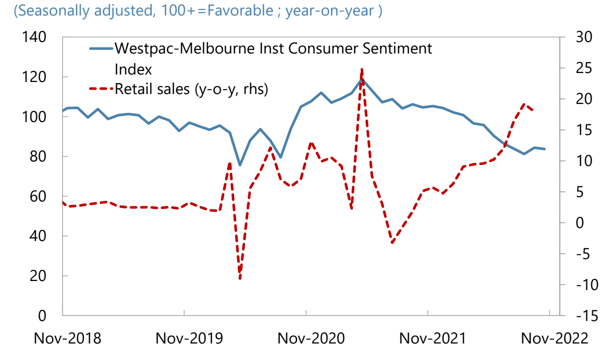
Robust Growth Recovery, But Divergence between Consumer Sentiment and Consumption

Activity Recovered in Australia Faster Than in Most AEs
(Real GDP, seasonally adjusted; 2019Q4 = 100)



Sources: National statistical agencies; and IMF staff calculations.

Divergence Between Consumer Sentiment and Retail Sales
(Seasonally adjusted, 100+=Favorable ; year-on-year)



Sources: Haver Analytics; and IMF staff calculations

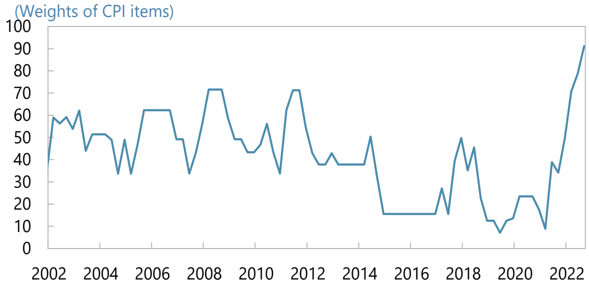
3. **Inflation rose significantly above the RBA's target range amid external and domestic pressures.** Headline inflation reached 7.3 percent in 2022Q3 and has become broad-based, driven by higher commodity prices, lingering supply-chain disruptions, domestic floods, and strong domestic demand. As weather disruptions raised food prices, higher energy prices have increased

transport and electricity costs. Costs of new dwellings construction surged from higher labor and materials costs, given acute labor shortages and supply disruptions.

Inflation Is High and Broad-Based

CPI Items Rising By More Than 3 Percent

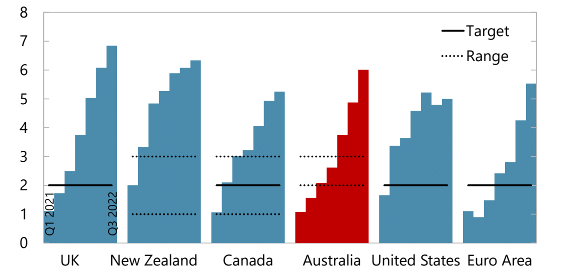
(Weights of CPI items)



Sources: Reserve Bank of Australia; Haver Analytics; and IMF staff calculations.
Note: Chart is based on y-o-y growth rates of non-seasonally adjusted data for the 11 CPI groups (food, alcohol and tobacco, clothing and footwear, housing, household furnishings, supply and services, health, transportation, communication, recreation, education, and financial and insurance services). Line is computed as the sum of the weights of CPI items rising by more than 3 percent year-on-year.

Core Inflation and Inflation Target 1/

(Seasonally adjusted; y/y in percent; quarterly figures Q1 2021 - Q3 2022)



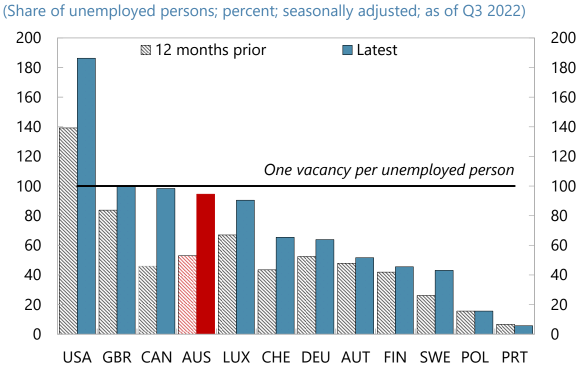
Sources: National authorities; and IMF staff calculations.
1/ Australia: CPI trimmed mean; Canada, UK, New Zealand: Core CPI; Euro Area: HICP core; US: Core PCE. Targets and ranges vary and may refer to headline inflation or over different horizons such as the medium (ECB) and longer run (Federal Reserve).

4. **With unemployment at a 50-year low, the economy faces significant labor and skills shortages.** The unemployment rate declined to 3.4 percent (November 2022), well below the NAIRU (~4.7 percent), with high job vacancy rates (in construction and manufacturing, for example) following a COVID-induced drag on inward migration. Underemployment and underutilization rates have also compressed, while employment and labor force participation reached record highs in 2022Q3. Nonetheless, average hours worked per employee have remained below pre-pandemic levels. Wage growth remained somewhat subdued at 3.1 percent y/y in 2022Q3, partly due to the prevalence of wage agreements with long contract duration (see accompanying Selected Issues Paper).

Spare Labor Capacity Has Declined to Low Levels

Job Vacancies in Select Advanced Economies

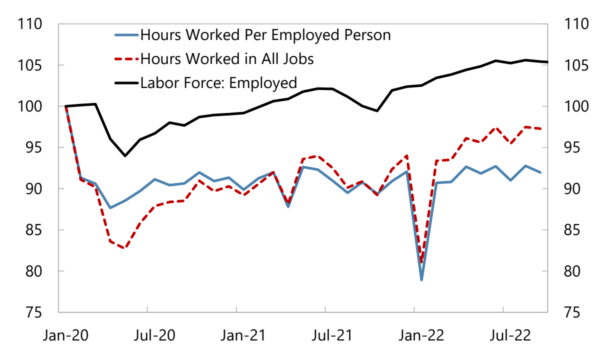
(Share of unemployed persons; percent; seasonally adjusted; as of Q3 2022)



Sources: OECD; Haver Analytics; and IMF staff calculations.

Hours Worked and Employment

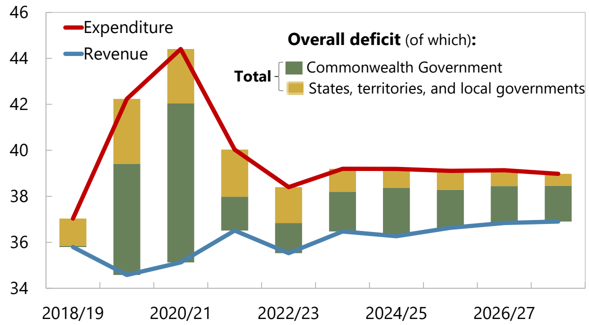
(Index, Jan 2020=100; seasonally adjusted)



Sources: ABS; and IMF staff calculations.

5. Steep fiscal consolidation in FY2021/22 (ending June 2022) was supported by the strong economy and commodity prices. Tax revenues exceeded pre-pandemic levels, and expenditure contracted significantly with the expiry of COVID-support programs. Temporary measures to alleviate cost-of-living pressures, announced in the 2022-23 Budget in March 2022, did not materially add to the overall deficit, which has declined to 3½ percent of GDP, from 9¼ percent in FY2020/21. The pace of consolidation has exceeded that of most other AEs, bolstering Australia's substantial fiscal space. Gross public debt, at 57 percent of GDP, remains sustainable (Annex II).

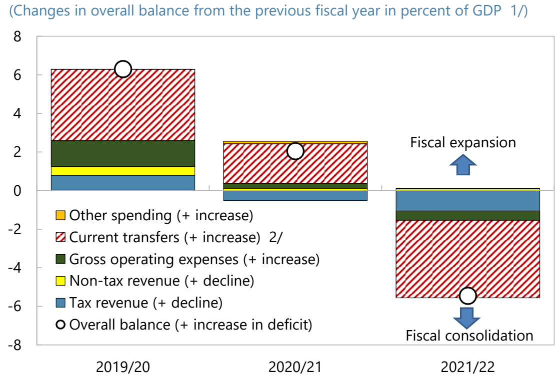
Structural Deficits Stall Post-Pandemic Fiscal Consolidation
(Consolidated general government, percent of GDP)



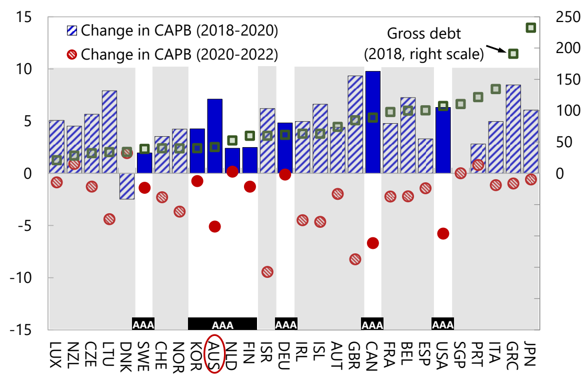
Sources: Authorities' data; and IMF staff projections.

Fast Stimulus Withdrawal and Higher Tax Revenues Contributed to Sizable Fiscal Consolidation

Fiscal Consolidation Started Taking Place in Australia
(Changes in overall balance from the previous fiscal year in percent of GDP 1/)



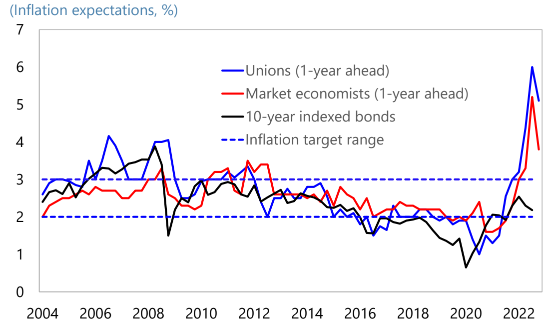
Consolidation Has Been Fast, Compared to Other AEs
(Cyclically-adjusted primary balance, percent of GDP 3/)



Sources: Haver Analytics; and IMF staff calculations.
1/ Based on fiscal outturns of the consolidated general government operations.
2/ Include grants, subsidies, and other current transfers.
3/ Based on cyclically adjusted primary balance (CAPB). A positive (negative) difference in CAPB shows fiscal expansion (contraction). A bar with solid blue shows countries with a "AAA" sovereign rating for comparison.

6. Following a late start, monetary policy has tightened rapidly. Pandemic-era, extraordinary monetary easing has ended (**Box 1**). In response to rising inflation, the RBA has hiked the policy rate by cumulatively 300 bps since May 2022, to a roughly neutral stance. Unlike some other AE central banks, it decided to hold to maturity the bonds from its asset purchase portfolio. Medium-term inflation expectations have remained anchored. Policy tightening is leading to financial losses and a moderately negative equity position for the RBA, projected at 0.9 percent of GDP at the trough (Box 2).

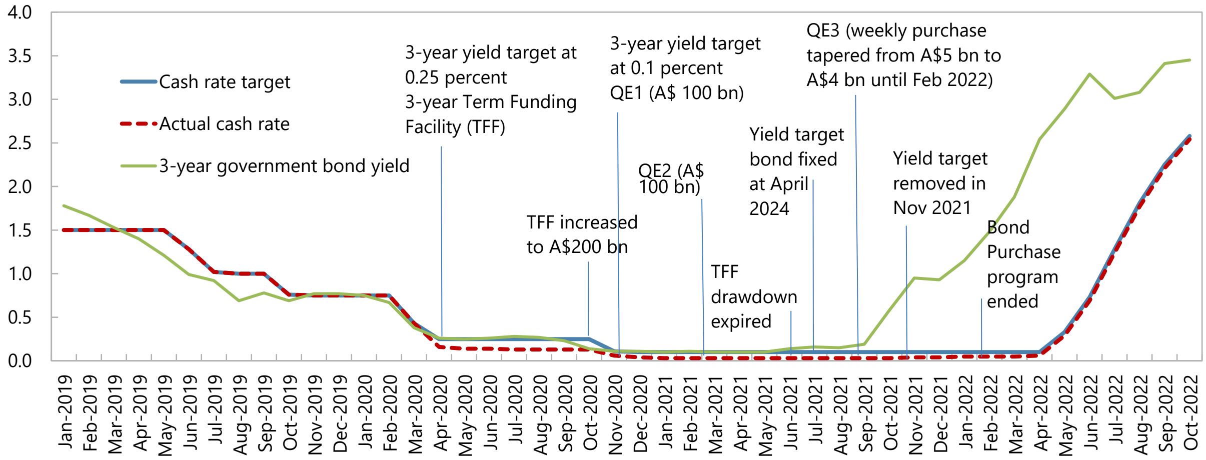
Short-term Inflation Expectations Have Risen, But Medium-term Expectations Remain Anchored
(Inflation expectations, %)



Source: RBA.

Withdrawal of Monetary Easing Since COVID and the Tightening Cycle

(Interest rate, in percent)

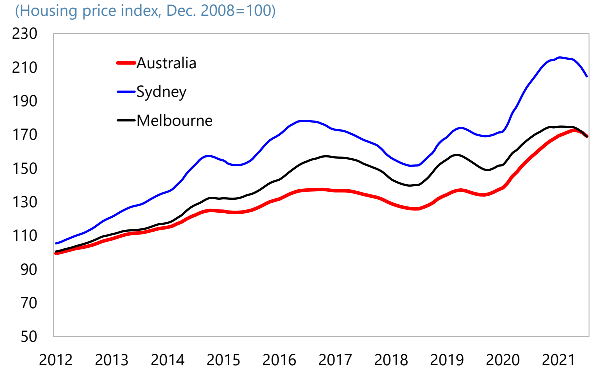


Sources: RBA; and IMF staff estimates.

7. **The housing market has turned, driven by the steep increase in mortgage rates, but credit growth has remained strong.** Following a pandemic-era surge, housing prices have declined by 8 percent from their peak, with falling sales volumes and building approvals. Housing credit growth is beginning to moderate, but business credit, particularly to medium and large firms, has remained strong. Business credit is supported by economic conditions and merger and acquisitions activity, but is expected to slow with the lagged effect of rising interest rates.

Housing Prices Have Started to Correct

(Housing price index, Dec. 2008=100)



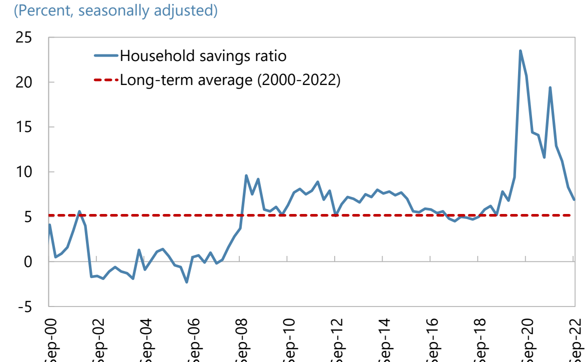
Source: Corelogic.

B. Outlook and Risks

8. **Growth is expected to moderate further but avoid a recession, with the outlook subject to significant downside risks.** Growth is projected to slow from 3.6 percent in 2022 to 1.6 percent in 2023 before gradually recovering to potential growth of around 2¼ percent. Rising mortgage payments, declines in real disposable income from high inflation, higher energy prices, and the decline in housing prices will likely

The Household Saving Ratio Has Started to Decline Again

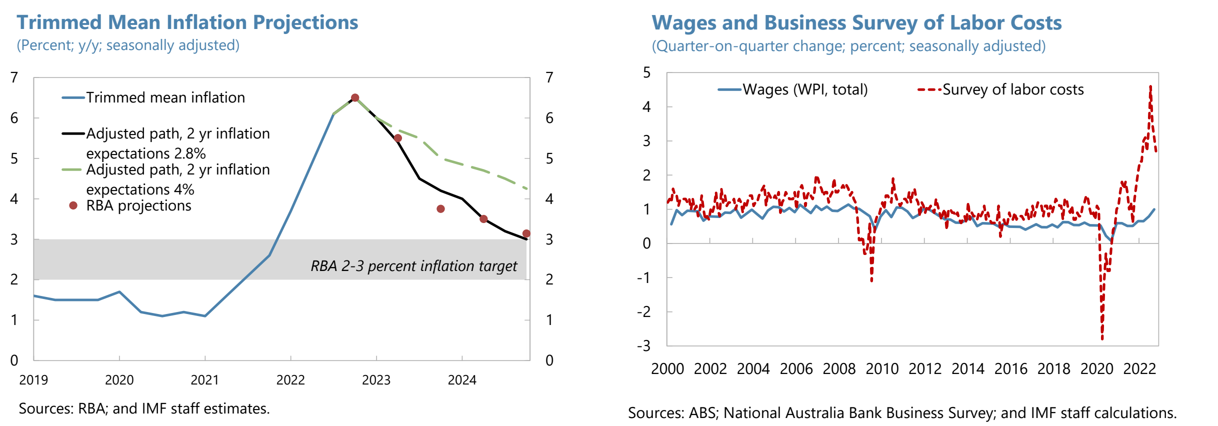
(Percent, seasonally adjusted)



Sources: Australian Bureau of Statistics; and IMF staff calculations dampen household consumption.[1] That said, households are expected to draw down the savings buffers they accumulated during the pandemic, softening the impact on consumption. Export demand will likely slow, given subdued growth in trading partners, including China. Private non-mining investment is expected to remain relatively resilient given pent-up demand and historically high capacity utilization, but supply chain disruptions and skills shortages, including from weak migration, pose risks.

9. Inflation is projected to remain above target through 2024. Broad-based inflationary pressures are expected to persist in the near term given high energy, food and transport costs, lingering supply disruptions, gradually rising nominal wages and pent-up domestic demand. Headline inflation is expected to have peaked at around 8 percent y/y in 2022Q4 (trimmed mean at 6.5 percent y/y in 2022Q4) and to gradually decline as near-term pressures wane, reaching the inflation target band in 2024 or later, subject to significant uncertainty. Though aggregate wage growth has remained subdued, it is picking up in some industries, and survey readings of labor costs have spiked. This could potentially lead to broader wage acceleration and add to inflation. By contrast, the resumption of migration and the expected growth slowdown should ease labor and wage pressures over time.

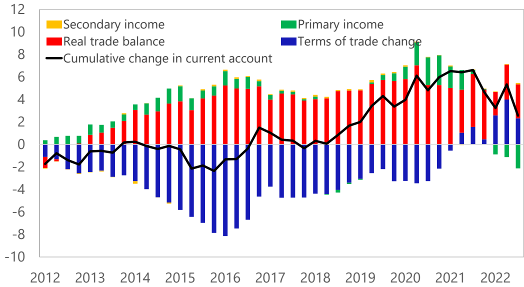
Inflation Is Projected to Remain Above Target Until at Least 2024 amid Second Round Effects



10. Based on a preliminary assessment, the 2022 external position is in line with the level implied by medium-term fundamentals and desirable policies (Annex III). The current account balance is expected to moderate to 0.9 percent of GDP in 2022 (2021: 3.1 percent). While higher commodity prices (notably thermal coal and LNG) related to the Ukraine war will support exports, the expected decline in the current account is driven by higher outward dividend payments by mining companies. After appreciating by 6 percent in 2021, the REER has remained broadly stable through 2022Q3.

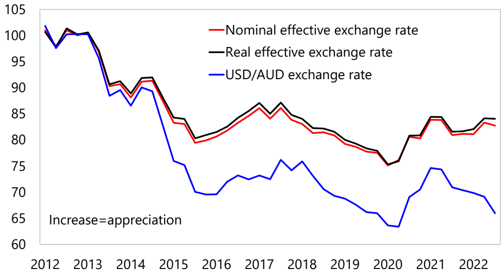
[1] A 10 percent annual decline in Australian home prices is estimated to lead to a 0.1–0.3 percentage point decline (per year) in household consumption.

The Current Account Surplus Remains High, Supported by the Strong Terms of Trade
(Current account balance, cumulative change from end-2011, % of GDP)



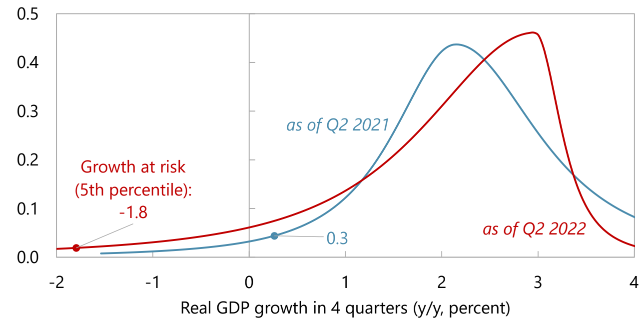
Sources: Haver Analytics; and IMF staff calculations.

The Effective Exchange Rates Have Remained Stable, Despite a Decline in the USD/AUD Exchange Rate
(2012=100)



Sources: Haver Analytics; Information Notice System; and IMF staff calculations.

Growth-at-Risk: Downside Risks Have Increased
(Probability density function of growth outcomes, 4 quarters ahead)



Source: IMF staff estimates.
Note: The mode of the distribution is conditioned at staff's forecast for 1-year ahead real GDP growth. For methodological information see Prasad et. al. (2019).

11. **Downside risks to the economic outlook are elevated in a challenging global environment (Annex IV)**. Near-term risks center around a stronger global downturn, including China and other major trading partners, which would impair Australia's exports. Higher commodity prices from the Ukraine war would lead to higher inflation and costs of living, despite boosting Australia's terms of trade. Persistently high inflation expectations would likely lead to further interest rate hikes and lower growth (downside scenario in Box 3). Other downside risks include natural disasters from climate change, rising geo-economic fragmentation hampering trade, and cybersecurity risks. A stronger-than-expected decline in housing prices, alongside tighter financial conditions and corporate retrenchment, would reduce domestic demand and weaken banks' balance sheets. Overall, growth-at-risk analysis points to a significant decline from last year in expected growth at the 5th percentile.

C. Authorities' Views

12. **Like staff, the authorities expected a soft landing amid near-term headwinds.** They expected a slowdown in domestic demand as the impact of higher interest rates feeds through to the economy, while external demand would be held back by subdued global growth. The authorities expected the housing market correction to continue, and, while they saw financial stability risks as well-contained, consumption would be affected. They viewed inflation as being driven by both supply- and demand-side factors and remaining above target through 2024, with further supply and energy disruptions potentially leading to higher and more prolonged inflation. They agreed with staff's preliminary external sector assessment and noted that movements in the Australian dollar were in line with interest rate differentials and commodity price developments. The authorities pointed to high uncertainty with respect to the economic outlook, especially with respect to consumers' reaction to high inflation and rising mortgage rates amid significant accumulated

savings buffers. They also perceived a sharper global downturn as a key risk to growth, with lower growth especially in China impacting Australia's commodity and services exports.

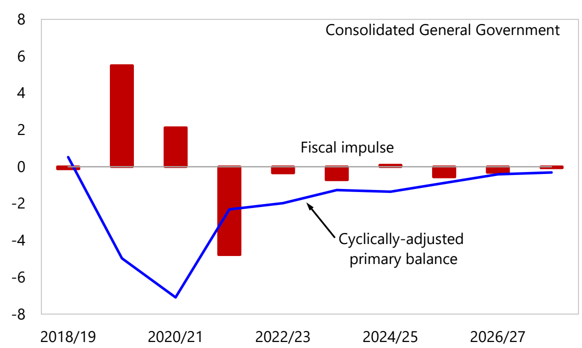
REBALANCING THE ECONOMY THROUGH POLICY TIGHTENING

13. With a positive output gap, a tight labor market, and high inflation, further monetary policy tightening, complemented by fiscal consolidation, is warranted. Monetary policy tightening is warranted in response to high inflation and strong domestic demand, with the pace of further tightening determined by incoming data. The already sizable tightening should be supported by fiscal discipline to contain demand, with income support to alleviate regressive impacts of inflation remaining temporary and targeted. In the downside scenario of lower external demand and higher inflation (Box 3), additional monetary tightening would be necessary, with targeted additional fiscal policy support to be implemented judiciously to avoid fueling domestic demand.

A. Fiscal Policy

14. Fiscal consolidation is expected to continue in FY2022/23, albeit at a significantly slower pace. New spending measures in the October 2022 Commonwealth Government budget provide targeted cost-of-living relief and address structural economic issues by alleviating labor and skills shortages, promoting productivity growth, and facilitating the climate transition. The fiscal impact is partially offset by reductions in other spending, including by reprioritizing infrastructure spending, and new revenue measures. Considering a likely stronger than budgeted revenue intake at the Commonwealth level (reflecting conservative budget assumptions for commodity prices) and ongoing fiscal consolidation at the state and territory level, overall consolidation of the general government cyclically adjusted primary balance is expected at about 0.3 percent of potential GDP, following stronger-than-expected consolidation of 4¾ percent of potential GDP in FY2021/22. A temporary cap on domestic gas and coal price was recently introduced to tackle pressures from high energy prices. Further measures are expected to be implemented in 2023Q1, including direct, targeted subsidies for household and small business energy bills and a permanent mandatory code of conduct and reasonable pricing provision for the domestic gas market.

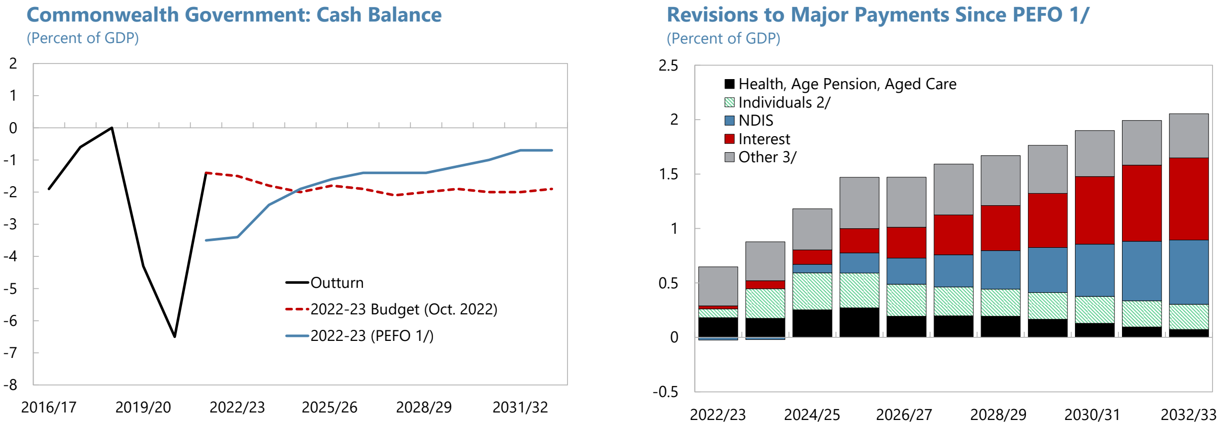
The Pace of Fiscal Consolidation Is Expected to Moderate
(Cyclically-adjusted primary balance; percent of potential GDP)



Sources: Authorities' data; and IMF staff projections.

15. Structural spending pressures and an income tax cut limit the pace of medium-term consolidation despite the Commonwealth Government's focus on budget repair. In addition to higher interest payments, cost projections for the National Disability Insurance Scheme (NDIS) have been revised up significantly. Higher expenses for health and aged care also add to the deficit, together with a lower assumption for labor productivity growth. Stage three of the personal income tax (PIT) reforms legislated in 2018 is projected to lower tax receipts by around 1 percent of GDP annually starting in FY2024/25, partially offset by gains from bracket creep during ensuing years. Work on budget repair has begun, with 1¼ percent of 2022 GDP savings identified over the next four years. Still, the Commonwealth cash balance is projected to remain in deficit through the medium term, with overall fiscal consolidation at the general government level driven by state-level budget tightening.

Increases in Structural Spending Slow the Pace of Fiscal Consolidation



Source: The Commonwealth of Australia, Budget October 2022-23.
1/ The Pre-election Economic and Fiscal Outlook (PEFO), April 2022.
2/ "Individuals" include targeted payments, including JobSeeker payment, youth allowances, career payment, family tax benefit, childcare subsidy and rebate, and paid parental leave, among other payments.
3/ Includes education, infrastructure, and superannuation, among other payments.

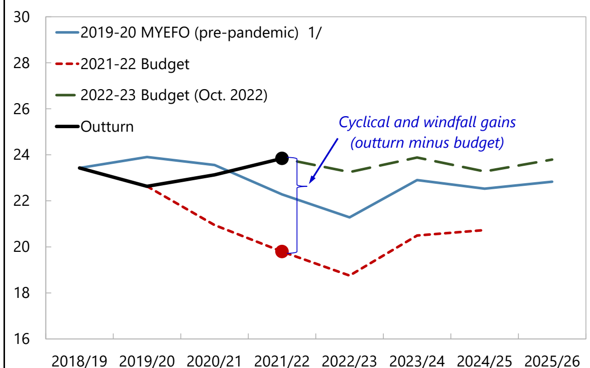
Staff's Views

16. Strong aggregate demand and the tight labor market warrant continued focus on fiscal consolidation in the near term. Saving of expected revenue overperformance and judicious implementation of spending programs, notably infrastructure investment, would help in containing demand pressures and inflation. Implementation of below-the-line activity through newly created investment vehicles (National Reconstruction Fund, Rewiring the Nation, and Housing Australia Future Fund) should be phased appropriately, and, more broadly, a proliferation of such vehicles should be avoided. Cost-of-living support in light of high energy prices should be targeted, aimed at protecting vulnerable households and small viable firms. Untargeted policies that weaken price signals should not be extended. Broader regulatory changes should be designed carefully to minimize risks to domestic energy supply. In the downside scenario, any additional fiscal support should be temporary and well-targeted, with policy options including an extension of low-income tax offsets and top-up payments to welfare and JobSeeker recipients. Safeguarding spending for human and physical capital to support productivity growth would remain essential.

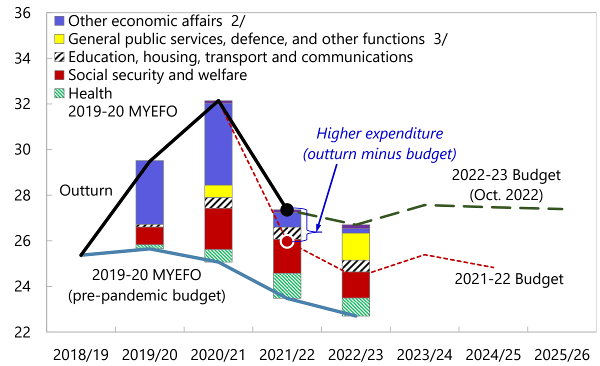
17. Medium-term fiscal plans should target a continued consolidation path in the face of significant spending pressures. Sizable structural spending increases risk crowding out other priority spending and prevent faster fiscal consolidation to rebuild and supplement buffers for future shocks. A multipronged approach is needed to contain spending growth in the NDIS (Box 4). The planned review of the program is welcome and should review all aspects to make it efficient, equitable, and sustainable. Separately, transforming the limited, tax-funded JobSeeker unemployment benefit into a full-fledged, contribution-based unemployment insurance would close a gap in social protection and strengthen Australia's automatic stabilizers (Box 5).

Windfall Revenue Gains Have Given Rise to More Spending in Previous Years

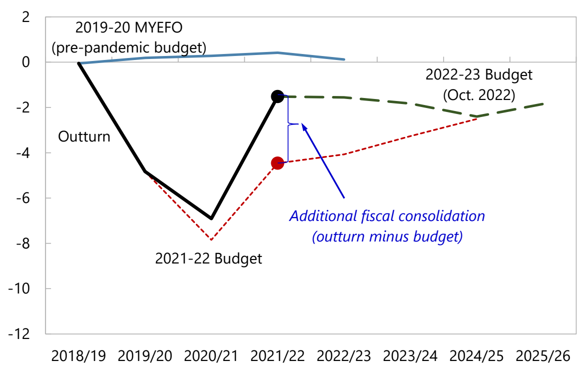
Cyclical and Windfall Gains Pushed Tax Revenues Higher
(Commonwealth Government tax revenue, percent of GDP)



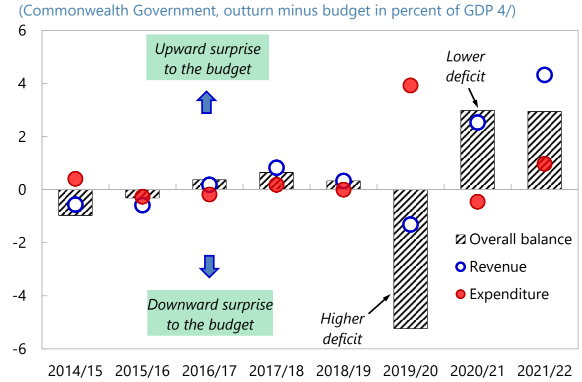
Spending Exceeded the 2021-22 Budget Envelope
(Commonwealth Government expenditure, percent of GDP)



Fiscal Consolidation Outpaced the Budget in 2021/22
(Commonwealth Government overall balance, percent of GDP)



Tax Revenue Gains Resulted in Lower Deficits in FY21-FY22
(Commonwealth Government, outturn minus budget in percent of GDP 4/)



Sources: Budget papers, Treasury; World Bank Commodities Price Data; and IMF staff calculations.
1/ The pre-pandemic budget is based on the 2019-20 Mid-Year Economic and Fiscal Outlook (MYEFO).
2/ Include payments to cover various COVID-19 economic stimulus measures, including the JobKeeper program, boosting cash flow for employers available to support businesses, and other COVID-19 economic stimulus packages.
3/ Other functions include public order and safety, recreation and culture, fuel and energy, agriculture, forestry and fishing, Mining, manufacturing and construction, and other purposes.
4/ FY15 refers to FY2014/15. Figures from the original budget of a given fiscal year are applied to calculate differences against budget outturns.

18. Comprehensive medium-term tax reforms are needed to meet higher structural spending needs and support economic efficiency and growth. The scope of government operations has expanded for the economy to transition to more inclusive and sustainable growth. The underlying tax system should support this transition by making the system more efficient and equitable. This should include a rebalancing from currently high direct to underutilized indirect taxes, with the regressive impacts mitigated by targeted cash transfers to vulnerable households.

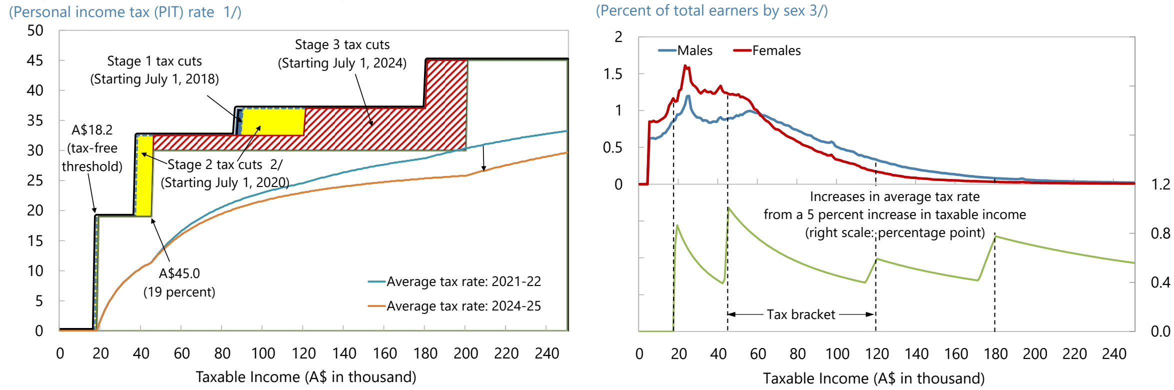
- The stage 3 personal income tax cuts will reduce the personal income tax burden. With the cuts taking effect from FY2024/25, there would be time, if needed, to re-assess the parameters to appropriately balance costs on the budget and benefits to the economy. Addressing bracket creep in PIT by raising the tax brackets periodically will limit distributional implications, including for low-income households and women.

- The goods and services tax (GST) base should be broadened by limiting exemptions. For example, healthcare spending is exempt and likely to erode the GST base with population aging.

Inflation Disproportionately Hurts Low-income Earners and Women Due to Bracket Creep

Stage 3 PIT Reform Will Benefit High Income Earners
(Personal income tax (PIT) rate 1/)

Bracket Creep Raises Average Tax Rates
(Percent of total earners by sex 3/)

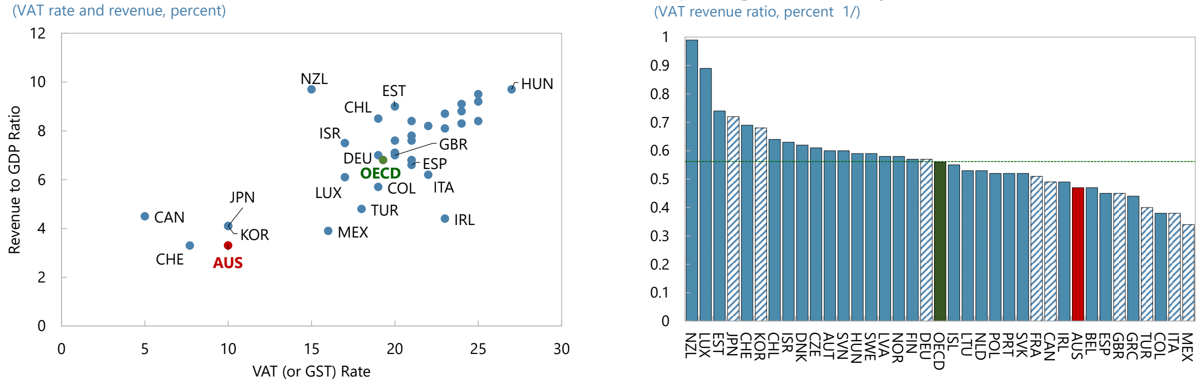


Sources: Parliamentary Budget Office (2021); and IMF staff calculations.
1/ The Commonwealth Government announced its Personal Income Tax Plan (PITP) in the 2018-19 Budget, reducing personal income taxes in three stages over seven years through FY2024/25. The chart does not include changes to tax offsets for low- and middle-income earners.
2/ The Government brought forward stage 2 tax cuts by two years, with the upper tax bracket of 19 percent marginal rate rising to $45,000 instead of $41,000, with higher tax offsets.
3/ The calculation excludes individuals earning less than A$4,000 in 2021-22, and does not consider behavioral changes in hours work resulting from bracket creep.

Broadening the GST Base Will Improve Efficiency and Strengthen Revenue

GST Rate and Its Revenue Are Both Low
(VAT rate and revenue, percent)

Improving GST Efficiency in Revenue Yield Is Needed
(VAT revenue ratio, percent 1/)



Sources: OECD Tax Database (2020); and OECD Consumption Tax Trends (2020).
1/ The ratio, based on the 2018 data, takes a value between 0 and 1. The value takes 1 if a single VAT rate is applied to a comprehensive base of all expenditure on goods and services consumed in an economy with perfect enforcement.

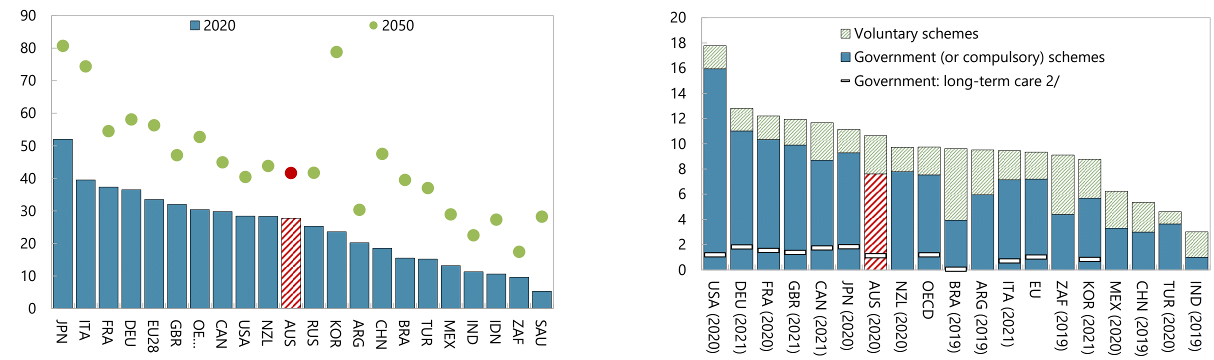
- Reviewing tax exemptions could help make the tax system more efficient and equitable. The capital gains tax exemption for the sale of main residences, costing around 2½ percent of GDP annually in foregone revenues, should be restricted. More broadly, the planned publication of additional information on the distributional features of the tax system will be helpful in identifying areas where the tax system can be further strengthened.

- At the state and territory level, implementing recurring property taxes in lieu of stamp duties on housing transactions would promote housing affordability, more efficient use of the housing stock, labor mobility, and more stable tax bases over the medium term. Transitional revenue losses, if substantial, could be bridged with higher GST.[2]

Projected Increases in Health Expenditure Create Challenges, Comparable to Other Economies

Projected Aging of the Population Is Modest in Australia
(Old-age dependency ratio in percent 1/)

Public Health Expenditure Remains High
(Percent of GDP)



Sources: Commonwealth of Australia, 2021 Intergenerational Report; OECD Health Statistics (2022); and OECD (2022), Old-age dependency ratio (indicator).
1/ Based on the number of individuals aged 65 and over per 100 people of working age defined as those at ages 20 to 64.
2/ Based on the latest available data.

Authorities' Views

19. The authorities expressed commitment to near-term fiscal discipline in support of monetary policy efforts to dampen inflation. In the near term, the strategy calls for fiscal policy to avoid adding to inflationary pressures, with spending restraint and a commitment to save any revenue overperformance in support of budget repair. The authorities highlighted that the current budget already streamlines pre-existing plans for rising infrastructure investment in the face of changing priorities and construction industry bottlenecks. They stressed that the disruption in global energy markets following the war in Ukraine had required temporary emergency measures to mitigate the rise in domestic energy prices, and that longer-term policies for the domestic gas market would be designed so as not to discourage private investment and supply in the domestic gas sector.

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[2] The Australian Capital Territory embarked on a tax reform program in 2012, phasing out stamp duties over twenty years and replacing the revenue by increasing land value taxation in a revenue-neutral way. Other jurisdictions should consider a similar reform. In 2022, New South Wales (NSW) introduced a choice for first-time homebuyers to pay an annual land tax instead of stamp duties. This scheme could be expanded to phase out stamp duties more broadly over time.

20. Medium-term budget repair remains an important goal. The authorities' strategy directs higher-than-expected tax receipts to rebuild fiscal buffers to withstand economic shocks and better manage the fiscal pressures from an aging population and climate change. The strategy also aims at redirecting spending toward high-quality and targeted investments and priorities to build a stronger, more resilient and inclusive economy.

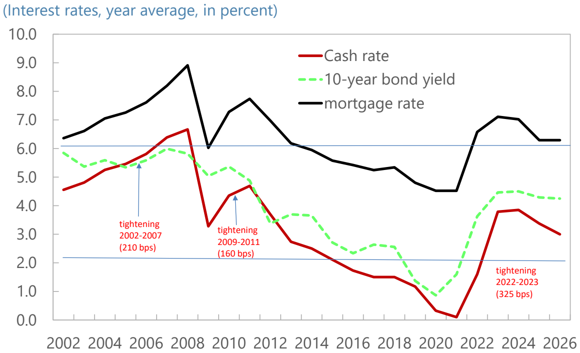
21. Concerns of rising cost pressures underscore the urgency to conduct spending program reviews. Given the estimated cost pressures from the NDIS, the government has brought forward the planned independent review as part of its broader assessment of its design, operations, and sustainability. The review will be completed by October 2023 and offer steps to improve value for money of the scheme. The authorities also noted their intention to revisit long-term cost estimates of government programs in the 2023 Intergenerational Report, brought forward by two years, to better assess cost pressures of the NDIS, health, and aged-care spending, among other programs.

22. The authorities emphasized that the ongoing review of Australia's current tax bases and forgone revenues will inform next steps in tax reforms. They noted that the current tax system continues to rely disproportionately on personal income taxation, and bracket creep is estimated to raise average personal income tax rates to record levels over the medium term due to inflation and wage growth. The Commonwealth, state and territory governments would need to engage with the public to determine what services Australians expect from the governments and how they should be funded. The authorities stressed that future tax reforms should ensure that the system remains equitable, including from lifetime and intergenerational perspectives.

B. Monetary Policy

23. Monetary policy has tightened appropriately, with room for more hikes. The cash rate (3.1 percent) has reached broadly neutral territory, and staff expect it to peak at around 3.85 percent in 2023Q2, given inflationary pressures and the tight labor market. The significant rate hikes to date and uncertainty about the strength and lags of transmission channels imply high uncertainty for monetary policy going forward.

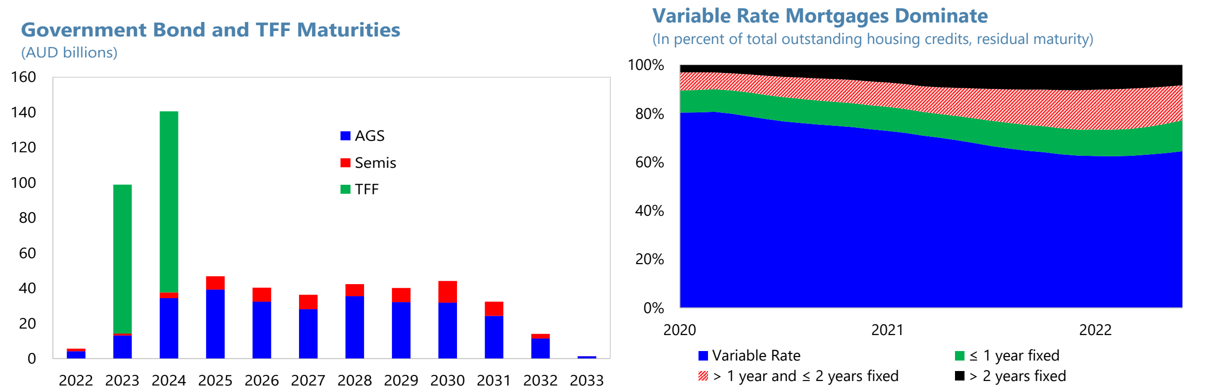
A Steep Monetary Policy Cycle
(Interest rates, year average, in percent)



Sources: RBA; and IMF staff estimates.

24. Financial conditions may tighten by more than what the cash rate implies, weighing on corporate and household balance sheets. Households face considerably higher mortgage payments since mortgages are at variable rate or fixed for only a few years, with a large share resetting to sharply higher rates in 2023. On average, household interest payments as a share of disposable income are set to double, from 5.2 percent in 2021 to around 10 percent, adding pressures on household balance sheets, with uncertain impact on consumption given households' significant savings buffers. Banks will face rising funding costs as cheap funding from the pandemic-era Term Funding Facility (TFF) will expire in 2023-24. Although business bankruptcies remain low (Figure 6), less credit-worthy corporations face higher borrowing costs, and there may be pockets of vulnerability in certain sectors, such as construction.

Financial Conditions to Tighten as TFF Funding Expires and Fixed Rate Mortgages Reset



Source: RBA.

Sources: APRA; and RBA.

Staff's Views

25. Given considerable uncertainty, the pace of further rate increases should be data-dependent, ensuring that inflation expectations remain well anchored. This points to more tightening in the short term, but there remains significant uncertainty with respect to the speed and intensity of monetary policy transmission. High household debt and the large share of mortgages that is either on a floating rate or resetting within short periods point to relatively strong transmission, considering also the decline in real wages. By contrast, accumulated savings during the pandemic and the still elevated household savings rate point to significant buffers that could dampen and delay the transmission, depending on households' behavioral responses. Careful communication of the assessment of the balance of risks and of policy intentions will continue to be key in guiding market expectations.

26. The ongoing independent review of the RBA presents an opportunity to revisit the RBA's policy framework and governance. The review by independent outside experts (to conclude by March 2023) is considering the RBA's objectives, mandate, governance, culture, and operations; and the interaction between monetary, fiscal and macroprudential policies. The review presents an opportunity to reaffirm the inflation targeting regime within a clearly focused mandate and revisit the RBA's objectives, governance arrangements, and decision-making processes. This could also be an occasion to institute periodic reviews in line with the practice in some other central banks.

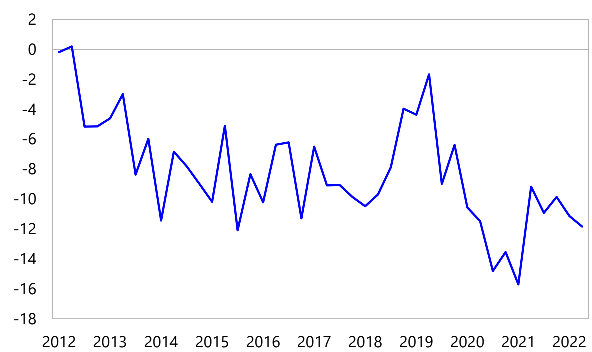
Authorities' Views

27. The authorities emphasized their resolve to return inflation to target by establishing a more sustainable balance of demand and supply in the economy. They highlighted that interest rates have increased considerably over a short period of time and pointed to lags in monetary policy transmission along with their aim to achieve a soft landing for the economy. While household consumption still appeared broadly resilient in available high-frequency data, they expected it to slow significantly in the period ahead as pent-up demand during the holidays abates and past rate hikes feed through more fully to mortgage payments. The authorities noted that, in contrast to many other AEs and despite some pick-up, aggregate wage growth remains moderate and consistent with the inflation target. The authorities also stressed that the prospects for a significant global slowdown have increased, in part due to fast and synchronized monetary policy tightening globally, which should moderate external price pressures. Given significant uncertainty regarding external developments and the speed and intensity of domestic monetary policy transmission, the RBA noted that monetary policy was data-dependent and not on a pre-set path.

MAINTAINING FINANCIAL SECTOR RESILIENCE AMID FALLING HOUSING PRICES

28. Housing prices are declining. Rising interest rates, along with repricing of existing mortgages and increased supply, will further dampen housing price growth. Housing price-at-risk (HaR) analysis indicates significant downside risks, which are partially materializing. Risks started widening in late 2021, reflecting increasing price misalignment and tightening global and domestic financial conditions.[3] In staff's baseline projections, prices are projected to decline by about 16 percent in nominal terms from their peak in April 2022 through 2023, before normalizing. Given their large gain during the pandemic, housing prices would still remain above pre-pandemic levels, limiting stability risks.

Downside Risks in the Housing Market Have Increased
(House-Price-at-Risk in Austalia, 5th percentile, 4 quarter change, real, percent)



Source: IMF staff calculations.

29. The financial sector's exposure to housing is large, but stability risks, while increasing, appear to remain well contained. With house prices likely remaining above pre-pandemic levels, absence of limited-recourse mortgages, and most households having built up significant savings into mortgage offset and redraw accounts, default risk in the face of rising interest rates appears limited.[4] While higher liquidity buffers tend to be concentrated in households with high income and high debt, pockets of vulnerability may exist among households that purchased their home recently at high valuations or those exposed to natural disasters. However, RBA analysis suggests that these

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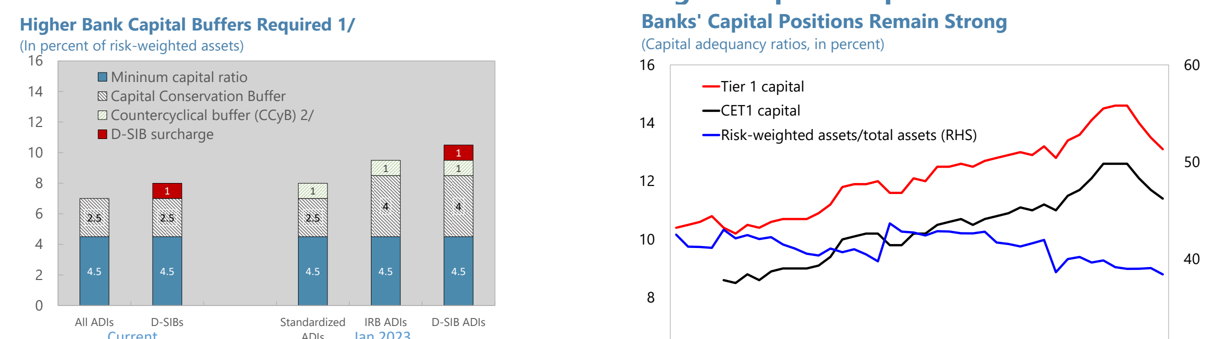
[3] The IMF's HaR methodology quantifies downside risks to future house price growth using quantile regression methods, by linking real house price dynamics to fundamental factors such as macroeconomic conditions, demand and supply factors, financial conditions, and house price valuations. See April 2019 Global Financial Stability Report (Chapter 2) for methodology and discussion.

[4] Households saved 3 percent of disposable income over the two years to June 2022 in mortgage redraw and offset accounts, compared with an average of 1 percent pre-pandemic.

borrowers accounted for less than 5 per cent of owner-occupier variable rate borrowers in early 2022. Financial stability risks from the commercial property sector remain low overall, with banks' exposures limited to around 6 percent of assets.

30. The banking system is robust, and the planned implementation of the bank capital framework will further increase capital buffers. Only 5 percent of loans have an outstanding LVR greater than 75 percent, though this share may rise as housing prices fall. Banks assess new mortgages with a serviceability buffer of 300 bps above the contracted mortgage rate (raised from 250 bps in 2021). The strong labor market and low incidences of negative equity contributed to declines in the overall NPL ratio, driven by housing-specific NPLs. Banks could absorb a significant asset-quality deterioration, with high capital already exceeding the levels required under the new capital framework, effective January 2023.[5] With limited financial stability risks in the housing downcycle, there is currently no strong case for either loosening or tightening macroprudential policies. The Australian Prudential Regulation Authority's (APRA) new framework for macroprudential policy utilizes forward-looking indicators for risk assessment to make timely decisions, coordinated through the Council of Financial Regulators (CFR), which includes APRA, RBA, ASIC, and the Australian Treasury.

Banks Are Well Placed to Absorb Higher Capital Requirements



Sources: APRA; and IMF staff.
1/ Requirement on CET1 capital.
2/ The CCyB is currently set at zero percent. The default level of CCyB will be 1 percent in the new framework.

Source: APRA.

31. Banks' liquidity positions are adequate, but some funding risks could emerge. Holdings of high-quality liquid assets remain high, and liquidity coverage ratios are comfortably above regulatory requirements. However, banks require refinancing of TFF funding (A$190 billion; 3 percent of total liabilities) in 2023-24. Although their funding composition has improved, with an increased share of deposits, needed refinancing could raise banks' exposure to wholesale funding at a period of higher global rates.

Staff's Views

32. While the financial system appears resilient, close monitoring amid falling housing prices and tightening financial conditions will be important. The financial system is robust, with

[5] Major banks' CET1 ratios have decreased slightly in recent quarters because banks have returned capital to shareholders.

adequate buffers and an overall good liquidity position, and financial stability risks, while increasing, remain contained. That said, higher global and domestic interest rates and falling housing and stock prices warrant close monitoring for any emerging pockets of vulnerability. Prudent lending guidelines and high savings during the pandemic suggest adequate buffers for households, though lower-income, highly indebted households with recent mortgages may be disproportionately at risk from a combination of rising interest rates and declining real incomes. While some increase in non-performing loans is thus likely, this is unlikely to pose material stability risks, particularly if the labor market remains resilient. An expected increase in bank wholesale funding at a time of higher rates and slowing growth may pose some vulnerabilities, although liquidity coverage ratios are well above regulatory minimum requirements and the share of deposits in the funding mix has improved. The increase in capital buffers in the 2023 capital framework is welcome. Close scrutiny of non-bank financial institutions is important given their rapid growth, albeit from a low base.

33. Continued focus on climate, cyber, and financial integrity risks remains important. The recent Climate Vulnerability Assessment for the five largest banks found a measurable impact of climate risks on loan losses, though these banks are likely to be able to absorb losses without stress to the banking system. However, climate-related data quality and accessibility remain a challenge. To facilitate assessment of climate adaptation and transition risks and foster better allocation of capital, the Council of Financial Regulators, including ASIC, can further improve standardized climate-risk disclosures for large, listed companies. Potential cyberthreats on financial infrastructure require adequate investment, close monitoring, and contingency planning. The Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) regime should be expanded to cover designated non-financial businesses and professionals and enhance beneficial ownership transparency.

34. Australia's crypto regulatory agenda is evolving and should aim to provide broad protection while allowing for innovation to continue. Crypto assets are currently largely unregulated for conduct and prudential purposes in Australia, with various agencies providing supervision under frameworks not originally designed to regulate crypto assets. While greater efforts are underway with respect to classifying the crypto ecosystem via "token mapping" and identifying needed regulation, there is also an opportunity to achieve greater clarity in the regulatory architecture to ensure timely risk monitoring, provide clarity with respect to the roles and coordination of existing regulatory agencies, and strengthen consumer protection (see Annex VI). More broadly, reforms to the payments regulatory framework are also needed to address new products and technologies in the payments system.

Authorities' Views

35. The authorities saw financial sector risks as well-contained despite falling housing prices. They noted that banks' capital and liquidity buffers remain strong and saw loan quality risks as well-contained as long as the labor market remains broadly resilient. The interest serviceability buffer on housing loans, which was increased to 300 bps in 2021, provides some expectation that households can deal with interest rate increases. The authorities also noted that almost three quarters of mortgage debt is owed by households in the top 40 percent of the income distribution, who can draw on substantial incomes and savings buffers, even though they have larger loans than average. That said, the authorities were aware of pockets of vulnerability, particularly among lower-income households with recent mortgages and those who borrowed at high loan-to-income ratios and have low prepayment buffers.

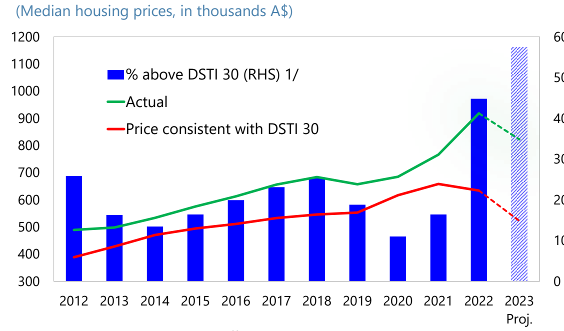
36. The authorities stressed their commitment to continued financial sector reforms and progress in implementing FSAP recommendations. Significant progress has been made in strengthening the integration of systemic risk analysis and stress testing in APRA's supervisory processes and extending resolution funding options by expanding loss-absorption capacity for banks. Consultations and further work are planned on enhancing APRA's supervisory approach to address governance and risk management and closing gaps in data collection to support robust financial supervision (Annex V). The authorities expressed commitment to introducing standardized, internationally aligned climate-related financial disclosure for large, listed companies and financial institutions in consultation with the industry.

37. The authorities are committed to ensuring that the AML/CFT regime remains fit for purpose and in compliance with international standards. This includes introducing a public beneficial ownership registry with respect to companies and legal vehicles. In relation to expanding the AML/CFT regime to cover high-risk services provided by designated non-financial businesses and professions (DNFBPs), the authorities' approach has been to consider where policy and regulatory changes can make the most impact within the broader context of transnational serious and organized crime, with consideration of the regulation of DNFBPs forming part of their longer-term strategy.

RESTORING HOUSING AFFORDABILITY

38. Housing affordability is suffering from higher mortgage rates and rents. The baseline trajectory of interest rates suggests that borrowing capacity may have fallen as much as 30 percent by the end of 2022. In 2022, the median housing price is estimated to have been almost 50 percent above the price the median household could afford to finance with a debt service-to-income ratio of 30 percent. As interest rates increase further, affordability is expected to continue declining, despite falling housing prices.[6] Separately, housing

Mortgage Attainability Is Worsening
(Median housing prices, in thousands A$)



Sources: Haver Analytics; and IMF staff calculations.
1/ DSTI 30 means Debt-service-to-Income ratio of 30, i.e. an average household uses 30 percent of its annual household disposable income on mortgage payments.

[6] Attainable housing prices are estimated by using average annual household disposable income by fiscal year-end (end-June). Affordable housing cost is assumed to be in the conventional range of a debt-service-to-household-income ratio (DSTI) of 30 to 40 percent. The mortgage rate is the 1-year fixed average residential mortgage rate (monthly), applying to a principal and interest loan of 30-year maturity. The mortgage is to finance a purchase with up to 80 percent loan-to-value. Actual housing prices are the median value of dwellings in June of each year.

rents have risen at a fast pace, with rental markets likely remaining tight in the period ahead amid the resumption of inward migration.

39. The authorities' planned policies have the potential to boost supply and help affordability. The Commonwealth and state/territory governments are working with local governments to facilitate faster supply of land through more efficient planning and zoning. Moreover, the A$10 billion Housing Australia Future Fund plans to provide an additional 30,000 social and affordable housing units over the next 5 years. Though small in the context of the total dwelling stock, it will add significantly to the flow of public dwelling completions.

Staff's Views

40. Although the housing market downturn is likely to continue, housing affordability concerns are likely to increase, putting a premium on a strong policy focus. Affordability concerns are increasing given rising rents and lower borrowing capacity reflecting much higher mortgage rates. The reopening of borders is adding to affordability pressures in the short term. Boosting housing supply remains essential, supported by well-targeted support for lower-income households. However, measures such as state-level land tax surcharges for non-residents have a limited role in supporting affordability and should be replaced by measures not discriminating by residency, such as a general surcharge on vacant property (see 2021 Article IV Staff Report).[7]

Authorities' Views

41. Like staff, the authorities were concerned about deteriorating housing affordability. They pointed to quickly rising rents and noted that affordability, as measured by the income-to-mortgage repayment ratio, has continued to worsen with rising interest rates. They highlighted the need to boost supply, particularly for affordable housing, and pointed to the October 2022 National Housing Accord that brings together states and territories, the Australian Local Government Association, and representatives from the superannuation and construction sectors with an aspirational target of delivering one million new homes over 5 years from 2024.

SECURING SUSTAINABLE AND INCLUSIVE GROWTH

42. Australia has raised its ambition in climate change mitigation. Australia's upgraded 2030 Nationally Determined Contribution (NDC) under the Paris Agreement commits to a 43 percent reduction in emissions from 2005 levels. The recently passed Climate Change Act, 2022, creates a framework for accountability by (i) codifying the 2030 NDC and the net-zero target, (ii) requiring an annual statement to Parliament outlining progress towards the target, with the first such statement already presented in December 2022, and (iii) empowering the Climate Change Authority, an

[7] New South Wales increased the land tax surcharge for non-residents from 2 to 4 percent from the 2023 tax year to generate additional revenues and encourage owner occupies as opposed to non-resident investors. Tasmania introduced a land tax surcharge for non-residents from July 2022 at 2 percent, excluding principal residences. Both measures are considered capital flow management measures under the IMF's Institutional View on capital flows.

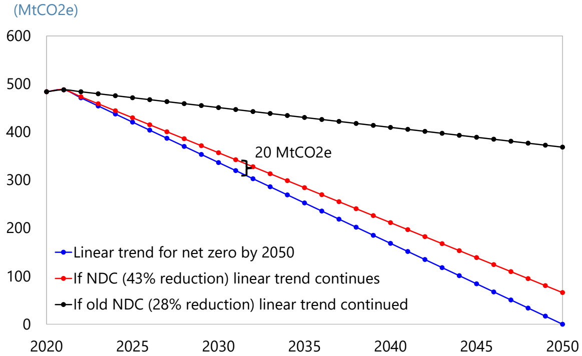
independent statutory agency, to advise on the climate statement and future emission targets. The authorities are also ramping up policy actions, including by reforming the Safeguard Mechanism, developing a National Electric Vehicle Strategy, and ramping up electricity grid investments (see the accompanying Selected Issues Paper).

43. Continued structural reforms are essential for tackling Australia's productivity slowdown and to promote inclusion. Australia compares favorably to peers on product market efficiency and has an open trade environment. However, productivity growth has slowed significantly. Labor and skill shortages and capacity constraints in the construction sector, if left unaddressed, are likely to constrain growth further. The recent Jobs and Skills Summit highlighted several policy priorities to boost productivity and inclusion (Annex VII).

Staff's Views

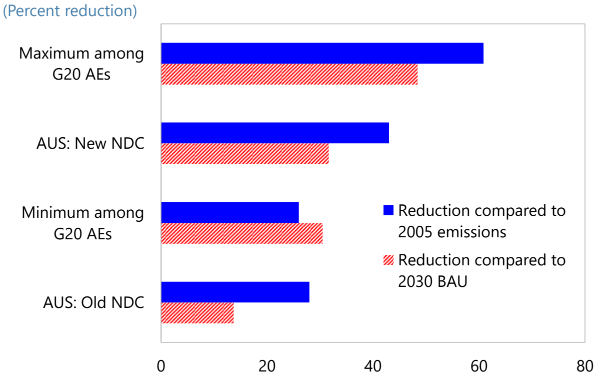
44. Australia's upgraded climate change mitigation targets are welcome and should be supported with strong policies. The new NDC is broadly in line with the goal of reaching net zero by 2050 and puts Australia within the range of targets of other advanced G20 economies. While politically challenging, an economy-wide carbon price would be the most effective way to achieve emission reductions. In the absence of a broad-based carbon price, strong sectoral policies, with price signals where possible, can help deliver the needed abatement. In this context, transforming the Safeguard Mechanism into a binding baseline-and-credit scheme, as planned, is welcome and can drive down industrial emissions in an efficient manner. Stepping up energy sector investment under the Rewiring the Nation program can help speed up the deployment of renewables. Additional price signals, such as feebates in the energy and transport sectors, could elicit broad behavioral responses without impacting average prices. Other sectoral policies, such as vehicle emission standards, can complement price signals.

Australia's Path to Net-Zero Compared to NDC
(MtCO2e)



Source: IMF staff calculations.

Comparing Australia's NDC to Other G20 AEs
(Percent reduction)



Source: IMF staff calculations.

45. Ensuring smooth delivery of high-priority infrastructure projects, and promoting innovation and competition are priorities to boost productivity. Sustained infrastructure spending will be needed to deliver on key policy goals, including the climate transition. However, given the strong cyclical position and binding constraints in the construction sector, the government should continue to reprioritize the ambitious infrastructure pipeline, coordinating with states and only undertaking significant projects that have been evaluated by Infrastructure Australia. Reducing the administrative burden of the R&D tax incentive and promoting university-business R&D collaboration can boost innovation. Expanding digital infrastructure and skills, reducing the regulatory burden on businesses, and further expanding the scope of automatic mutual recognition of occupational licenses across jurisdictions can boost competition.

46. Australia's efforts to support the rules-based international trading system and the Fund's resource envelope for vulnerable countries are welcome. Australia's continued strong support for the WTO is helping to buttress the rules-based international trading system. Australia's recent contributions totalling the equivalent of 39 percent of its 2021 SDR allocation to the Fund's Poverty Reduction and Growth Trust and the Resilience and Sustainability Trust is highly welcome. Recent changes to Australia's FDI framework eased the regulatory burden of the regime but also increased approval fees and expanded notification requirements under the national security test.[8] Continued judicious use of the national security test will help ensure that the FDI approval process remains transparent. Finally, the authorities continue to engage public and private sector stakeholders in addressing correspondent banking relationship pressures in the Pacific and facilitating discussion on developing regional solutions.

47. Labor market reforms can help tackle skill shortages and promote inclusion. Recent initiatives to tackle skill shortages, including free vocational training, expansion of university capacity, and a temporary increase in migration, are welcome. The announced increase in child-care subsidies and expanded parental leave can also boost female labor force participation, alleviating labor shortages while also reducing gender gaps. Scope remains to improve the migration system to attract skilled workers. Continued education sector reforms can improve school outcomes, which have deteriorated in recent years. The impact of recent changes to the industrial relations framework, including providing greater access to multi-employer bargaining, is likely to depend on how the law's provisions are interpreted and implemented (see also Annex VII). Thus, the authorities should closely monitor the implementation phase to assess effects on wages and labor market flexibility and review the law in two years as is statutorily required.

Authorities' Views

48. The authorities expressed confidence in achieving climate change mitigation targets using sectoral policies. While an economy-wide carbon tax is not being considered, the authorities highlighted the rapid implementation of sectoral policies, using market mechanisms where possible. They emphasized the ambitious commitment to increase the share of renewables in electricity generation from 29 percent in 2021 to 82 percent in 2030 under the Rewiring the Nation plan. They

[8] Amendments in 2022 to the Security of Critical Infrastructure Act 2018 increased the number of critical infrastructure asset types with implications for mandatory notification requirements under the national security test of the Foreign Acquisitions and Takeovers Act 1975. Australia also imposed sanctions on Russia following its invasion of Ukraine. In line with the IMF's Institutional View on capital flows, the changes to the national security test and some of the sanctions are considered capital flow management measures imposed for national and international security reasons.

reiterated their commitment to reform the Safeguard Mechanism by mid-2023 into a binding baseline-and-credit scheme and introduce further regulatory measures to curb transport emissions, including as part of the upcoming National Electric Vehicle Strategy.

49. The authorities agreed on the need to boost productivity by prioritizing infrastructure projects, supporting innovation, and promoting competition. The Budget cancelled or delayed several projects from the infrastructure pipeline, with further reprofiling expected going forward. The recently completed review of Infrastructure Australia recommends enhancing its role as an independent adviser. The authorities emphasized initiatives to boost innovation and competition, including greater investment in broadband internet, continued efforts to digitize government-business interactions, and reforms to reduce the administrative burden of the R&D tax offset by implementing recommendations of two recent reviews. They reiterated their commitment to an open and transparent FDI regime, including by continuing to use the national security test judiciously.

50. The authorities highlighted the policy initiatives implemented after the Jobs and Skills Summit aimed at tackling skill shortages and promoting inclusion. In addition to already announced expansion of childcare subsidies, vocational training, migrant intake, and university seats, the authorities emphasized plans to develop a Migration Strategy to attract high-skill workers that complement the domestic workforce. They noted efforts to improve the education system through increased and targeted needs-based funding. On industrial relation reforms, the authorities signaled their expectation that greater access to multi-employer bargaining would improve wage outcomes, especially for low-paid workers, without adversely impacting labor market flexibility, and noted their commitment to a statutory review of the law in two years. They also highlighted plans to publish an Employment White Paper in 2023 that will provide a roadmap for Australia to build a better-trained and more productive workforce.

STAFF APPRAISAL

51. From its strong cyclical position, Australia's economy is expected to come to a soft landing in 2023, although risks are skewed significantly to the downside. Tighter financial conditions, erosion of real incomes amid high inflation, declining housing prices, and soft global growth point to a significant deceleration in Australia. Inflation is projected to decline gradually but remains above target until 2024, subject to significant uncertainty. Downside risks to growth stem from a stronger global downturn, persistently high inflation expectations, and rising geo-economic fragmentation.

52. Restrictive macroeconomic policies are needed in the near term to mitigate strong domestic demand and address inflation. Monetary policy needs to continue tightening in the short term as envisaged, but given considerable uncertainty regarding the speed and intensity of monetary policy transmission, the pace of rate increases should continue to be data-dependent. Transparency in communication, underpinned by the assessment of the balance of risks, should continue to convey policy intentions to keep inflation expectations well anchored. Near-term fiscal restraint should support monetary policy in addressing demand. Budgetary revenue overperformance should be saved, and the implementation of spending programs should remain judicious, with any additional cost-of-living support amid high inflation to be kept temporary and well targeted to the vulnerable.

53. Implementing comprehensive tax reforms and improving efficiency in expenditure programs will pave the road for a credible consolidation path over the medium-term. Sizable structural spending pressures limit the degree of consolidation and risk crowding out important spending priorities. Reviewing existing, large spending programs and improving expenditure efficiency will be important to underpin medium-term fiscal consolidation. At the same time, there are opportunities to make the tax system more efficient and equitable, rebalancing it from currently high direct to indirect taxes, and raise sufficient revenues to fund the government programs. The Commonwealth Government should direct windfall revenue gains to budget repair, with a view to creating additional fiscal buffers to address future shocks.

54. Financial stability risks from the housing price correction appear to remain contained, and policies should aim to alleviate deteriorating housing affordability. With rising interest rates, housing prices are expected to continue declining significantly from their pandemic-era highs, but this is unlikely to raise material financial stability concerns given prudent lending standards and significant buffers among banks and households. Affordability concerns are increasing given strongly rising rents and higher mortgage rates. A strong focus on boosting housing supply remains essential, supported by well-targeted support for lower-income households.

55. Close monitoring of the financial system amid tightening financial conditions will still be important. The financial system appears to be robust, and the increase in banks' required capital buffers is welcome. An expected increase in bank wholesale funding at a time of higher rates and slowing growth may pose some vulnerabilities, although liquidity coverage ratios are well above regulatory minimum requirements. Potential cyberthreats on financial infrastructure require adequate investment, close monitoring, and contingency planning. Close scrutiny of non-bank financial institutions is important given their rapid growth, albeit from a low base. Financial integrity regulation should be expanded to cover DNFBPs and enhance beneficial ownership transparency.

56. Australia's new climate mitigation targets are welcome and should be supported with strong policy actions. The new 2030 Nationally Determined Contribution is broadly in line with the long-term goal of reaching net zero greenhouse gas emissions by 2050, and the new Climate Change Act creates a framework for accountability and future action to meet the target. A broad-based carbon price, coupled with measures to mitigate transition risks for impacted regions and industries, remains the most cost-effective way to achieve abatement goals. If political economy constraints prevent the adoption of an economy-wide carbon price, alternative sectoral policies, with price signals where possible, can help reduce emissions. In this context, planned reforms to the Safeguard Mechanism for industrial emissions are welcome. Adding price signals in the energy and transport sectors, potentially in the form of feebates, can further incentivize emissions reduction.

57. Reigniting productivity growth and boosting inclusion will require a strong focus on structural reforms. Delivering quality infrastructure to meet policy goals will require further streamlining the infrastructure pipeline and working proactively with the construction sector to overcome capacity constraints. Recent initiatives to tackle skill shortages, including free vocational training, expansion of university capacity, and a temporary increase in migration, are welcome. Scope remains to further boost innovation, promote competition, and improve education outcomes. Australia's continued support for an open trade environment, including through reforms at the WTO, is very welcome.

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

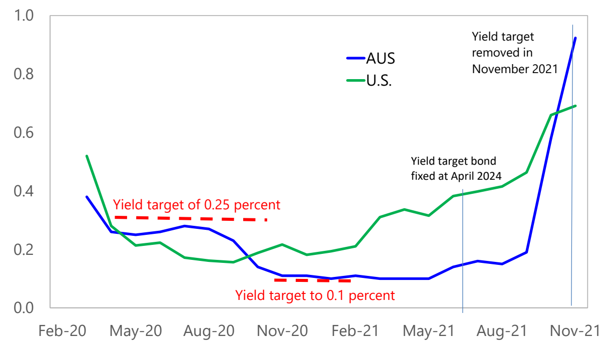
Box 1. Monetary Policy During the Pandemic

The RBA implemented a comprehensive package of monetary easing during the pandemic, including unconventional measures. The cash rate was successively cut from 0.75 to 0.1 percent in March-November 2020. In addition, a 3-year government bond yield target was introduced in March 2020, and banks were offered up to A$213 billion (9.7 percent of GDP) in three-year funding under the Term Funding Facility (TFF) at discounted borrowing rates of 0.25 percent for funding drawn between March and November 2020, and then 0.1 percent until June 2021. In addition, between November 2020 and February 2022, assets worth A$280 billion, or 14 percent of GDP, were purchased under the Bond Purchase Program. The RBA also provided forward guidance that the cash rate would remain low until progress was being made towards full employment and it was confident that inflation was sustainably within the 2-to-3 per cent target band.

Together, these measures compressed bond yields and led to significant reductions in firms' and households' borrowing rates. The RBA's policy measures were effective in helping the banking sector deal with substantial disruption to funding markets at the onset of the pandemic, reducing volatility and improving sentiments, and were effective in lowering funding costs. Household mortgage rates declined to historic lows, reflecting the combined effects of these policies. Business lending rates also fell, providing support for business funding and investment, though the latter tends to be relatively insensitive to borrowing costs (Lane and Rosewall 2015).[1]

3-year Government Yields

(In percent)



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

This extraordinary monetary support ended over the course of 2021 and 2022. The drawdown of the 3-year Term Funding Facility (TFF) ended in June 2021, the yield target was terminated in November 2021 after the target was tested by investors in light of the shifting inflation outlook, and the bond purchase program ended in February 2022. Inflationary pressures, driven initially by a spike in international food and energy prices and supply chain and shipping disruptions, led the RBA to begin raising the cash rate from May 2022.

[1]Lane K and T Rosewall (2015), 'Firms' Investment Decisions and Interest Rates ', RBA Bulletin, June, pp 1–8.

Box 2. Impact of Interest Rate Increases on the RBA Balance Sheet[1]

The RBA expanded its balance sheet to ease monetary conditions during the pandemic, which increased its interest rate risk and resulted in revaluation losses. Its balance sheet is now 3.5 times its pre-COVID level, resulting from purchases of Australian and state government bonds (A$360 billion, including purchases for yield target and market operations) and provision of low-interest bank funding under the TFF (A$188 billion). Interest rates across the yield curve moved up sharply in 2022 as inflation pressures mounted and the RBA responded with increases in its policy rate (the cash rate target has increased from 0.1 percent in May 2022 to 3.1 percent at the end of 2022). As a result, the RBA incurred large mark-to-market losses on its bond portfolio and is facing net realized losses over the medium-term due to higher interest payments on its remunerated liabilities—Exchange Settlement Balances (ESB) and government deposits—as against the fixed income on its bonds portfolio. Total capital has been negative since June 2022.

A balance sheet model is used to project RBA earnings and capital over a five-year horizon (Box Figure 2.1). The recursive adjustment of balance sheet items incorporates increases in the policy rate, and a dividend distribution rule (assumed as zero given ongoing losses). Total capital is divided into realized capital (the accumulation of net realized earnings), and the revaluation account (unrealized valuation losses).[2] As the RBA currently intends to hold the domestic bonds until maturity, the associated unrealized valuation losses from marking-to-market unwind as bonds mature. The yield curve is assumed to shift up with the policy rate, and to flatten over time while remaining upward sloping. The projection of the RBA's foreign assets uses implied forward rates while fluctuations in exchange rates and gold prices are excluded.

The expected losses are sizeable, but the negative capital position will likely remain below one percent of GDP. As the net realized losses accumulate due to large interest payments on liabilities and low returns on government bonds, realized capital deteriorates throughout the projection window.[3] Total capital is estimated to decline to A$ -19.5 billion by December 2024, then recover and gradually converge to zero.[4] The revaluation account is estimated to reach its lowest level of A$ -8.4 billion by June 2023, primarily due to the unrealized revaluation loss of the RBA's domestic government bonds holdings; it is projected to improve to A$16.9 billion by December 2027, by which time around 50 percent of existing bonds will have matured.

The losses will not hinder RBA operations, but the magnitude of the losses calls for clear communication. It is important to communicate that the losses arise from the RBA pursuing its price and financial stability mandates, and that they are partly offset by cheaper funding and greater revenues (due to better economic outcomes) for the Treasury (these benefits have not been quantified here). With capital stabilizing, as the balance sheet shrinks and more seigniorage accrues (the income derived from the issuance of zero-interest bank notes), the RBA will be able to continue its operations unhindered by a temporary period of negative capital. However, the RBA capital and dividend rules could be revisited in the light of the COVID experience to assess whether additional buffers are needed to cushion future periods of negative equity should unconventional monetary policies be used again.

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[1] Prepared by Darryl King and Yuan "Monica" Gao Rollinson (MCM). The full model is described in the forthcoming IMF Working Paper "Stress Testing Central Bank Balance Sheets".

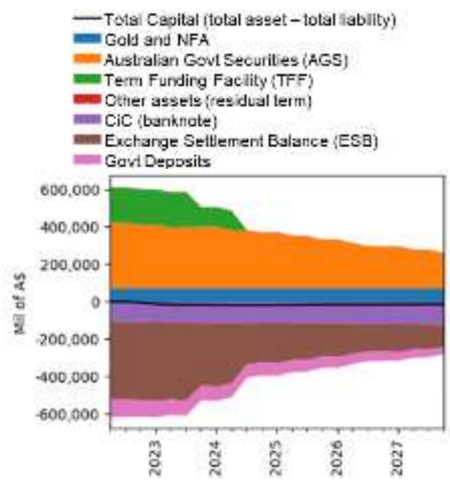
[2] See explanations in note (1)-(2) of Figure 2.1.

[3] The majority of the RBA's existing holdings of government bonds were purchased at a premium, therefore the returns the RBA will earn on these bonds (the purchase yield) are below their coupon rates. As of September 2022, the weighted average return is 1.03 percent whereas the weighted average coupon rate is 2.52 percent.

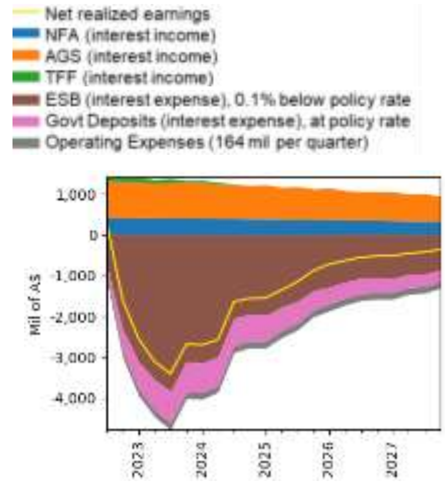
[4] The total capital (net equity) is expected to gradually restore over time, given the reduced negative carry as more government bonds mature and the reduction in interest payments on the remunerated liabilities. The model projection is consistent with the RBA's projection under its moderate scenarios (see graph "Projection of Net Equity" in the RBA's 2022 Annual Report)

Box Figure 2.1. RBA Balance Sheet Projections

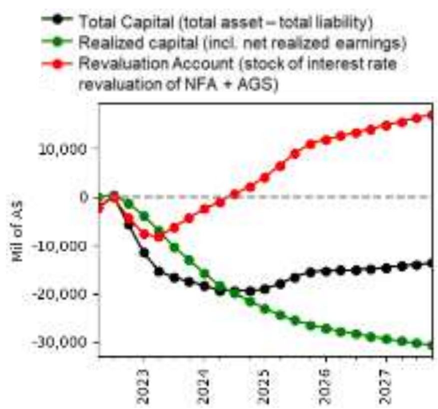
(a) Projection of RBA Balance Sheet



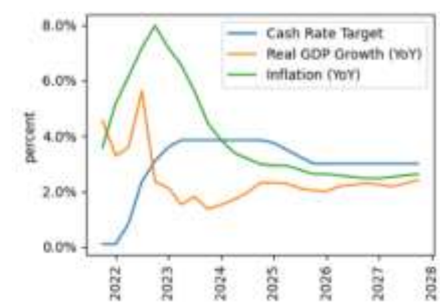
(b) Projection of Net Realized Earnings



(c) Path of Capital



(d) Baseline Scenario



Sources: RBA; IMF desk inputs; and IMF staff calculations.

Note: (1) The starting point for the projection is June 30, 2022. The initial value of item "Revaluation Account" is taken from RBA's balance sheet "other liability", which captures the revaluations of domestic and foreign assets (accumulated gains or losses due to domestic/foreign interest and exchange rate impacts), the current year earnings, provisions, and some additional items. The projection of revaluation account movement (the red line) accounts for the interest rate valuation of AGS and NFA going forward.
(2) This analysis treats "net realized earnings" differently from the RBA's balance sheet accounting. According to international standard, "realized capital" is calculated as the sum of general reserves (reserves fund) and net realized earnings. The RBA's balance sheet, however, it is classified under the revaluation account ("other liabilities"). In addition, RBA calculates its net realized earnings each June prior to dividend distribution. The model calculates it quarterly, and quarterly adjustment of balance sheet items are made accordingly.
(3) The RBA accounts for the premium loss of domestic bonds (purchased at a higher price than face values during COVID) based on fair value accounting, which results in the premiums being unwound and recorded as valuation losses on a straight-line basis over the remaining term of the bonds. This analysis incorporates it in the periodic calculation of revaluation change (captures pull-to-par return and curve return). The different accounting treatments have a marginal impact on the path of revaluation account (red line) and realized capital (green line), while the total capital path remains unchanged.

Box 3. Downside Scenario

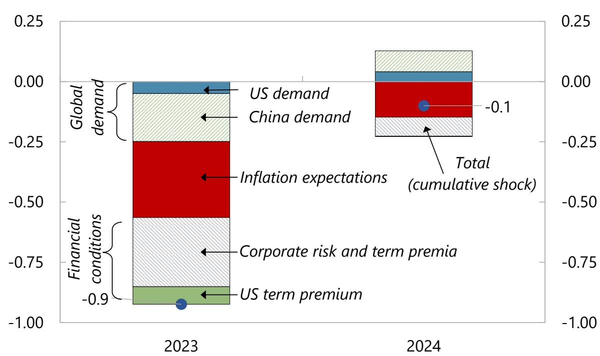
A combined shock of a slowdown in trading partners, rise in inflation expectations, and tighter financial conditions could significantly impact Australia's output. We employ the IMF's G20 Model[1] to illustrate the potential effects of downside scenarios on Australia. Key assumptions for 2023 include:

- Domestic demand shocks to trading partners: a one percent decline in GDP from the baseline, decaying over four years, in China and the US.
- Inflation expectations shock: a 50 bp increase in one-year-ahead inflation expectations for Australia and all other countries in the model.
- Financial conditions shock: a 50 bp sovereign term premium shock in the US that transmits to other countries' term premia; and a 100 bp increase in corporate risk and term premia (in addition to the sovereign premia).

Altogether, these shocks could reduce Australia's real output by 0.9 percentage point in 2023, dissipating to 0.1 percentage point in 2024. A tightening of financial conditions (through a rise in inflation expectations, as well as corporate and term premia) explains most of the decline in output, while a slowdown in China's demand explains the rest.

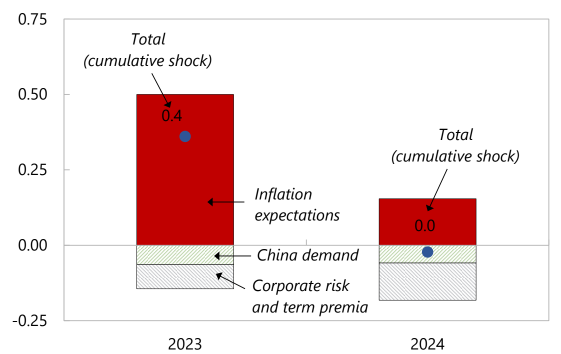
The rise in inflation expectations leads to higher core inflation in 2023 and 2024 but is partly offset by the deflationary impact of weaker global demand, and the tightening of financial conditions through higher corporate and term premia. As a result, Australia's core inflation would increase by 0.4 percentage point in 2023, with the effect dissipating fully in 2024.

Downside Scenarios: Effect on Australia's Real Output
(Percentage points deviation from the baseline forecast y/y real GDP growth)



Source: IMF staff estimates.

Downside Scenarios: Effect on Australia's Core Inflation
(Percentage points deviation from the baseline forecast y/y core inflation)



Source: IMF staff estimates.

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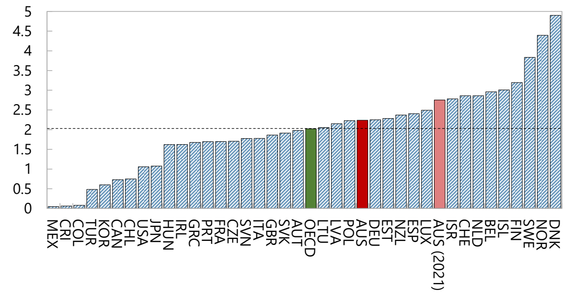
[1] Andrle and others (2015).

Box 4. Ensuring Sustainability of the National Disability Insurance Scheme

The National Disability Insurance Scheme (NDIS) is among the largest spending programs of the Commonwealth government, and it is projected to grow rapidly. The NDIS ensures that Australians under 65 with permanent and significant disability can access lifetime care and support. It was first introduced in 2013 with a trial phase and expanded across the country through FY2019-20. Due to the progressive implementation of the NDIS, spending grew rapidly in line with the rising number of participants and is among the largest spending programs in FY2021/22, reaching nearly 1¼ percent of GDP. Public spending on incapacity, including the NDIS, is above the average of OECD countries, and is set to increase further.

Public Spending on Incapacity 1/

(2017 data in percent of GDP)

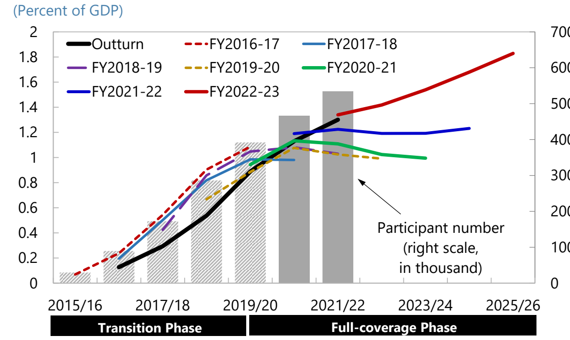


Sources: Authorities' data; IMF staff calculation; and OECD public spending on incapacity.
1/ Includes spending due to sickness, disability and occupational injury. For Australia, the 2021 data is based on spending for assistance to people with disabilities only.

Growth in new participants creates high uncertainty regarding medium-term budget estimates. In 2017, revised estimates projected spending to reach around 1 percent of GDP after the program reached full coverage in FY2019/20. However, the number of participants and average support costs have continued to increase above expectations, and the FY2022/23 October budget forecasts expenses would reach 1.9 percent of GDP by FY2025/26, with the number of participants reaching 0.7 million. However, the forward estimates are subject to considerable uncertainty since the number of eligible Australians with disabilities could be sizable.[1]

Evolution of NDIS Expenses: Outturn vs. Budgets 1/

(Percent of GDP)



Sources: Budget papers, Treasury; and IMF staff calculations.
1/ The outturn data for 2021/22 is from the 2022-23 October Budget.

NDIS expenses are projected to increase by around one percentage point of GDP over the coming decade. The latest actuarial report estimates NDIS expenses would reach A$89 billion (2.4 percent of GDP) by FY2031/32, with the number of participants nearly doubling from the level in FY2021/22.[2] The estimate assumes growth in the average payment per participant gradually declining by FY2031/32, but to remain significantly higher than projected CPI inflation. A stochastic simulation suggests the cost could reach 2.0-3.1 percent of GDP for FY2031/32 at a 90 percent confidence interval. NDIS expenses are not projected to stabilize in the foreseeable future, driven by several factors. Growth in the number of children entering the NDIS with autism or developmental delay is a major driver. Population aging is also an important factor, with the proportion of participants in the NDIS aged over 65 expected to continue increasing for many years.[2,3] Growing utilization of attendant care and high-intensity care will escalate growth in average payments.

The program needs to improve value for money and attain sustainability to limit crowding out of other priority spending. Given the anticipated cost escalation, the government has decided to bring forward its planned independent review of the scheme to consider financial sustainability alongside participant outcomes and scheme design. This comprehensive review should inform policy options. Incorporating some progressivity in the program with a cost sharing scheme or means testing, ensuring consistent and equitable access to the NDIS, could be considered as part of the options.

---

[1] Australian Institute of Health and Welfare (2022), "People with disability in Australia."

[2] Johnson and Gifford (2022), "National Disability Insurance Scheme: Annual Financial Sustainability Report."

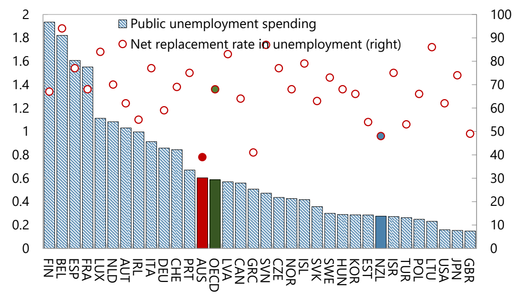
[3] Existing participants can remain in the NDIS after they reach age 65.

Box 5. Strengthening Unemployment Benefits and Automatic Stabilizers

Australia's automatic stabilizers are relatively small. During shocks to household disposable income, about one half of lost income is offset by automatic stabilizers, below the OECD average.[1] That said, automatic stabilizers, while small, have been found to be relatively effective in international comparison.

An important reason is Australia's limited unemployment benefit program. Australia has a tax-financed, means-tested unemployment benefit ("JobSeeker") program, but its benefit level is low. Although its expenses prior to the pandemic were comparable to the OECD average, its income replacement rate is among the lowest. The JobSeeker program provides means-tested cash support for an unlimited period as long as the unemployed meets a set of conditions. Benefit levels are fixed and not linked to the earnings level of the previous job, corresponding to 41 percent of pre-tax earnings for a single person working full time on the minimum wage.[2]

Public Unemployment Spending and Net Replacement Rate
(Percent of GDP, 2017 data)

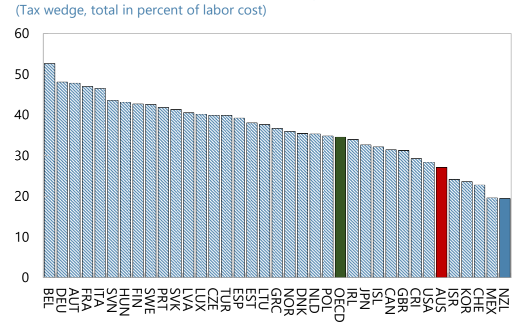


Source: OECD.

Introducing a contributions-based social unemployment insurance program (UIP) linked to workers' wages can help close a gap in social protection and enhance automatic stabilizers. Australia is the only OECD country without contribution-funded unemployment insurance, and a well-designed scheme would reduce the need for ad-hoc support during downturns. Compared with discretionary measures, a UIP would be time-bound and enhance timeliness and targeting of income support with transparency during future economic downturns.

UIP must be designed carefully to ensure cost effectiveness and avoid distortionary labor market impacts. Introduction of a UIP would raise the tax wedge as employers and employees typically need to make contributions. The costs will depend on the targeted rate of income replacement, the maximum level of earnings to be insured, and the duration of payouts. These parameters should strike an appropriate balance between maintaining adequate income for stabilization and creating incentives for unemployed persons to find suitable jobs. Program interactions need to be considered as well, including workers compensation programs administered by state and territory governments, with varying rates of income replacement.

Tax Wedge in Australia is Relatively Low
(Tax wedge, total in percent of labor cost)



Source: OECD (2022), Tax wedge indicator.

Consideration can be also given to semi-automatic stabilizers. The trade-off between incentives and protection can be improved by making replacement ratios and payout duration state-dependent. In the event of an economic downturn with high cyclical unemployment, benefit levels could be more generous than under baseline settings, strengthening the stabilization feature of the program while limiting adverse incentive effects for job seekers during normal times.

---

[1] Maravalle and Rawdanowicz, 2020. "How Effective Are Automatic Fiscal Stabilizers in the OECD Countries?" OECD Working Papers No. 1635.

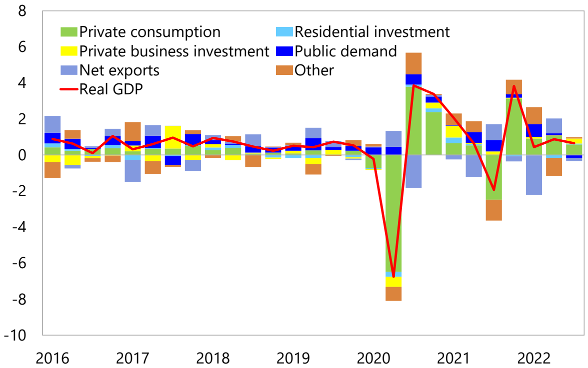
[2] Based on IMF staff calculations assuming 38 hours of work per week at the minimum wage. The underlying unemployment benefit figure (as at September 2022) refers to the maximum Jobseeker rate for singles with no children and excludes eligible allowances, such as energy supplement or Commonwealth rental assistance.

Figure 1. The Australian Economy Has Shown a Strong Recovery

The economy's recovery continued as lockdowns were fully lifted, supported by strong private consumption…

GDP Growth Decomposition

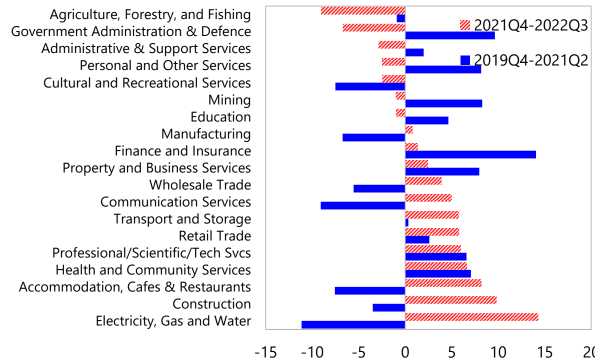
(Contributions to q/q growth, %)



…with a continued recovery in the services sector.

Employment by Industry

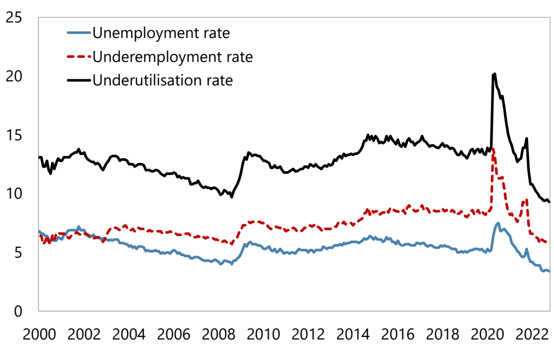
(Percent change over the period noted; seasonally adjusted)



The unemployment rate has declined to its lowest level in decades…

Labor Market Indicators

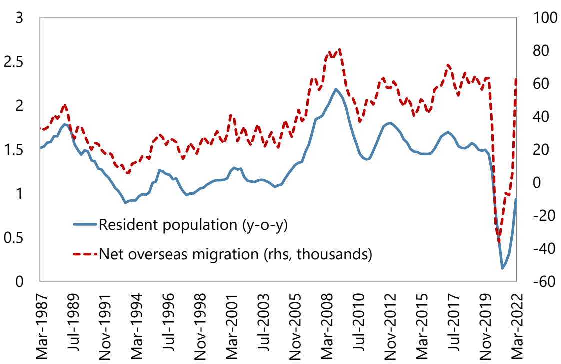
(Percent, seasonally adjusted)



…partly reflecting the disruption in migration flows during the pandemic.

Population and Migration Dynamics

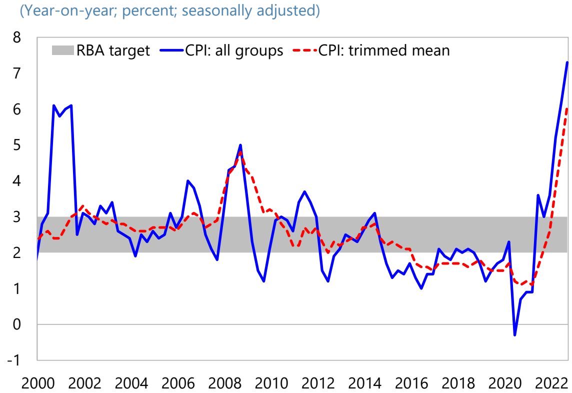
(LHS: year-on-year change, RHS: thousands, 2-quarter moving average)



Inflation has accelerated well above the RBA target range, driven by both supply and demand…

Consumer Price Inflation and RBA Target

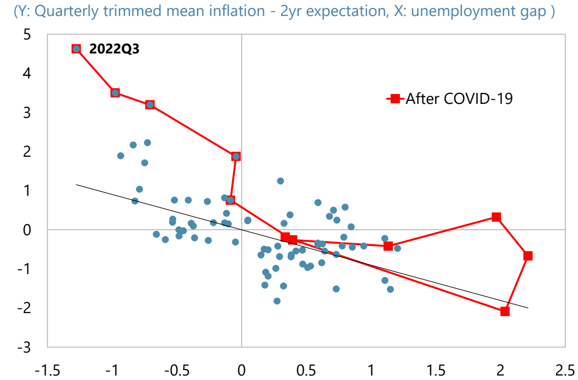
(Year-on-year; percent; seasonally adjusted)



… in the context of a historically low unemployment gap.

Phillips curve: trimmed mean inflation and slack

(Y: Quarterly trimmed mean inflation - 2yr expectation, X: unemployment gap)



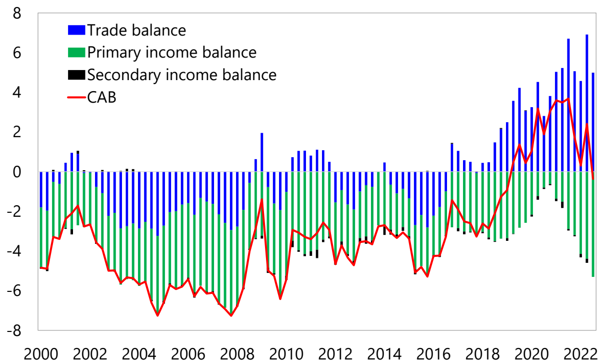
Sources: ABS; Haver Analytics; RBA; and IMF staff calculations.

Figure 2. The External Position Remains Strong, Supported by High Commodity Prices

The current account surplus remained high through 2022Q2 despite a rising income deficit, driven by historically large trade surpluses…

Current Account Balance

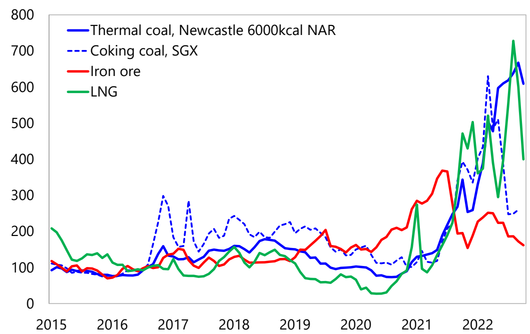
(Percent of GDP)



…amid high commodity prices for Australia's main exports…

Export Prices

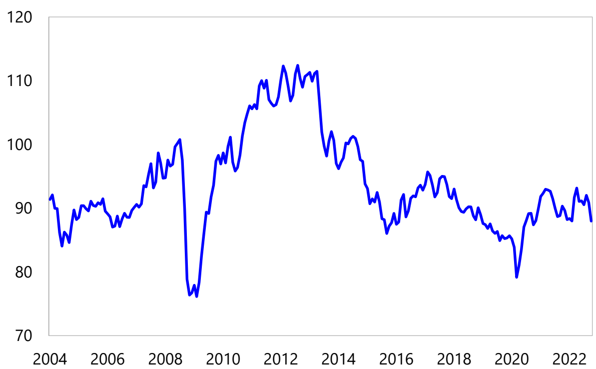
(2016=100)



…which has supported the exchange rate.

Nominal Effective Exchange Rate

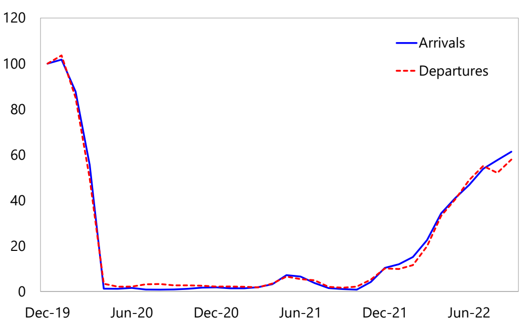
(Index, 2010=100 1/)



With the opening of borders, tourism flows are gradually returning.

Arrivals and Departures

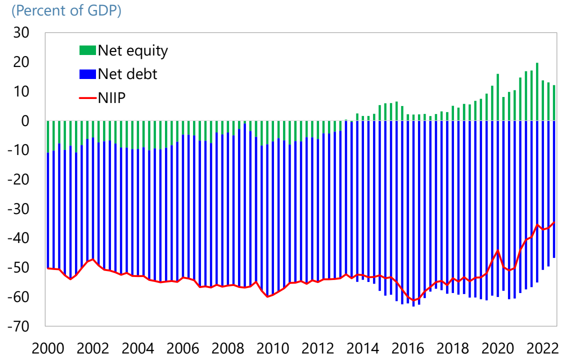
(Index, 2019=100)



Recent current account surpluses have contributed to an improvement in the net investment position…

International Investment Position, Net

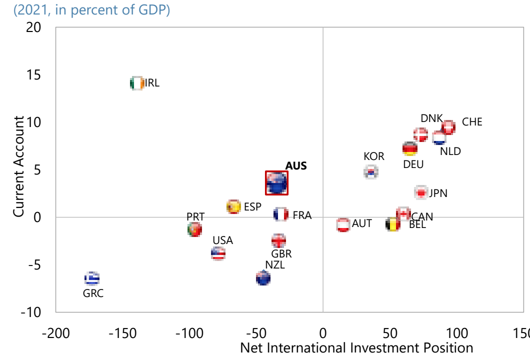
(Percent of GDP)



… though net external liabilities remain relatively high compared to peers.

External Position in Comparison

(2021, in percent of GDP)



Sources: Australia's Merchandise Exports and Imports; Haver Analytics; IMF, World Economic Outlook; and IMF staff calculations.

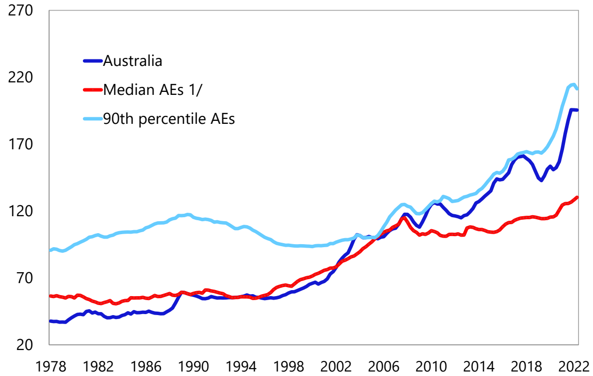
1/ An increase indicates an appreciation of the Australian dollar.

Figure 3. The Housing Market Is Consolidating

The housing market has turned, with prices peaking in 2022Q1.

Real House Prices

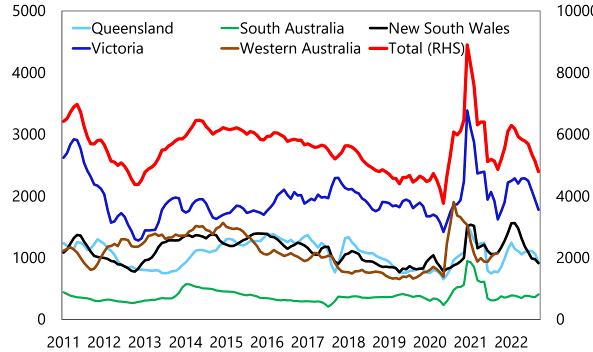
(2005=100)



Housing sales have declined…

New Home Sales

(Detached Houses Units, SA, 3-month moving average)

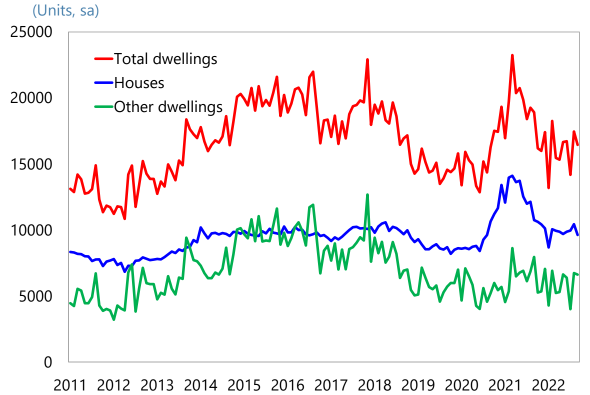


Sources: Housing Industry Association and Haver Analytics.

… and building approvals have softened.

Dwelling Approvals

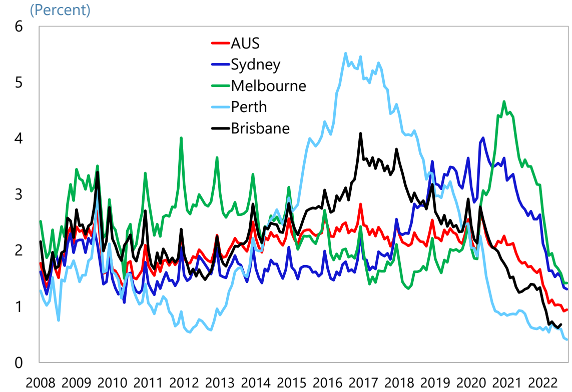
(Units, sa)



The rental market is still strong, with very low vacancy rates.

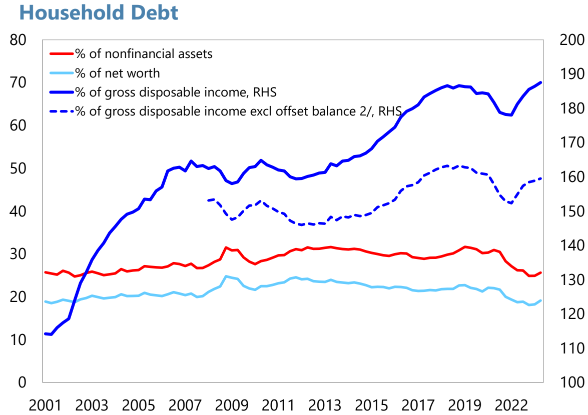
Residential Rental Vacancies

(Percent)



The household leverage ratio picked up again as house prices surged, but offset accounts provide buffers.

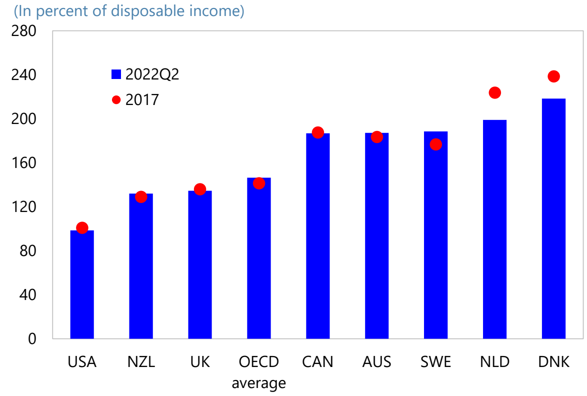
Household Debt



Household debt continues to be among the highest in OECD countries.

Household Debt

(In percent of disposable income)

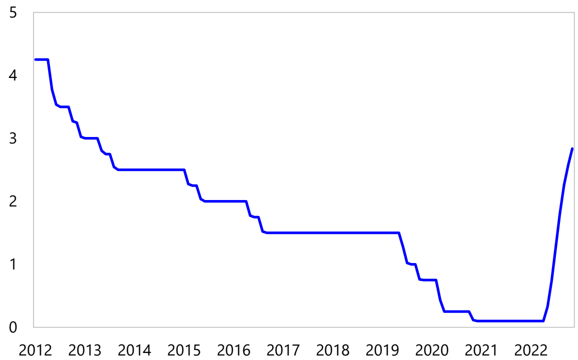


Sources: OECD; RBA; Haver Analytics, and IMF staff estimates.
1/ Based on a limited number of countries due to lack of data.
2/ Offset accounts are deposit accounts that are linked to mortgage loans such that funds deposited into an offset account effectively reduce the borrower's net debt position and the interest payable on the mortgage.

Figure 4. Monetary Policy Has Begun to Tighten Substantially

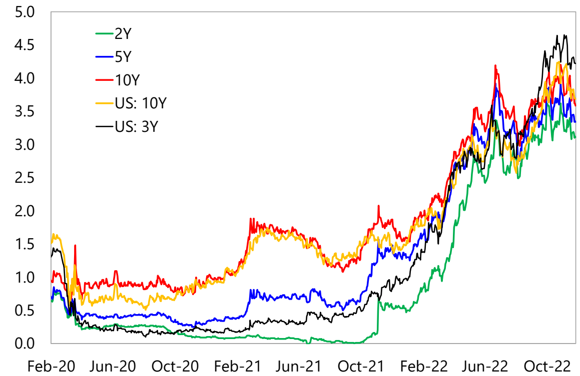
As inflation surprised on the upside, the cash rate has increased rapidly,...

Policy Rate
(In percent per annum)



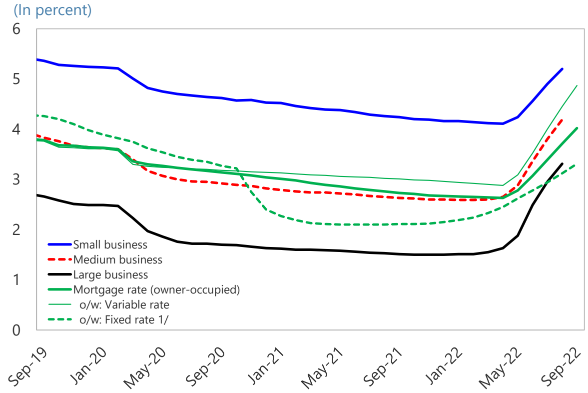
... bond yields have risen,...

Bond Yields
(In percent)



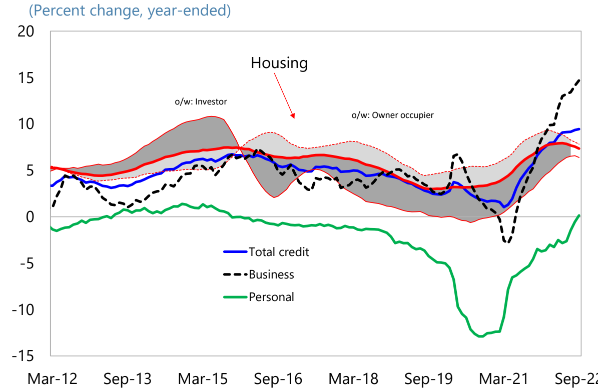
... lending rates have picked up,...

Lending Rates
(In percent)



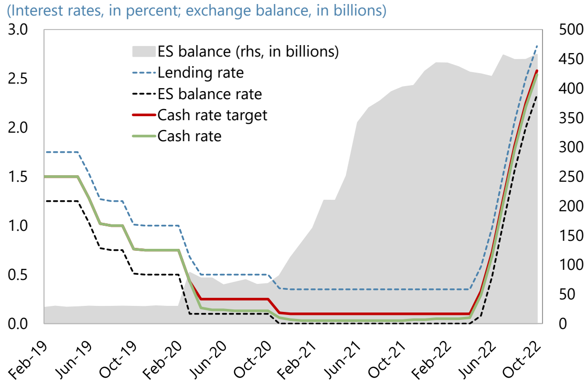
...but credit growth has not yet slowed.

Credit Growth by Sector
(Percent change, year-ended)



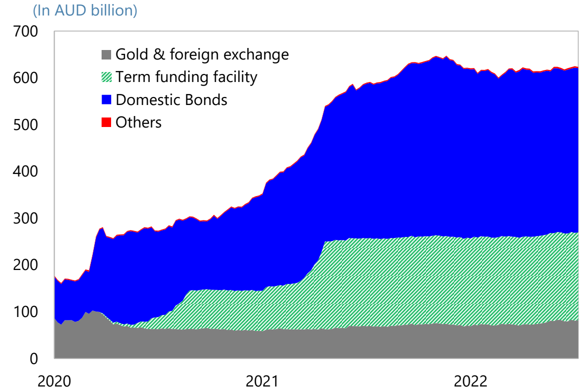
There is sufficient liquidity despite the increase in policy rates.

Overnight Interest Rates and Exchange Settlement Balance
(Interest rates, in percent; exchange balance, in billions)



The RBA holdings of government bonds plateaued with the end of the large-scale asset purchase program.

Reserve Bank Assets
(In AUD billion)

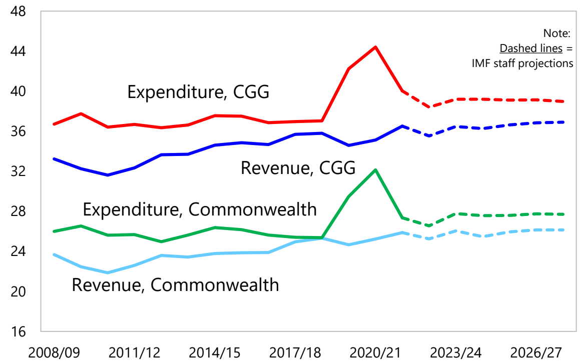


Sources: RBA; Haver Analytics; and IMF staff estimates.
1/ By residual fixed term, greater than 3 years.

Figure 5. The Public Sector Balance Sheet Remains Resilient

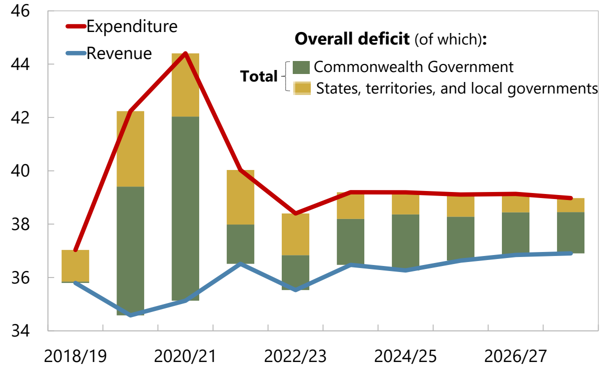
Sizable stimulus withdrawal and better-than-anticipated tax revenues led to significant fiscal consolidation in 2021/22,...

Consolidated General Government (CGG) and Commonwealth Government Revenue and Expenditure
(% GDP)



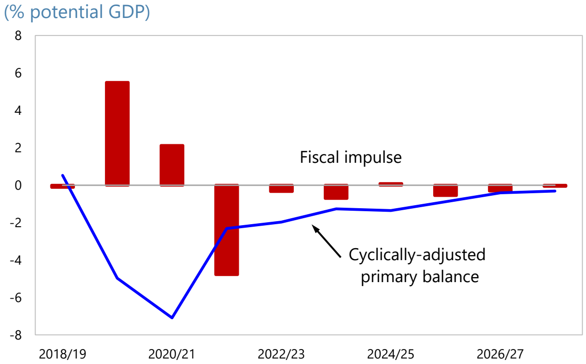
... however, the Commonwealth government has identified sizable structural deficits in the October budget.

Structural Deficits Stall Post-Pandemic Fiscal Consolidation
(Consolidated general government, percent of GDP)



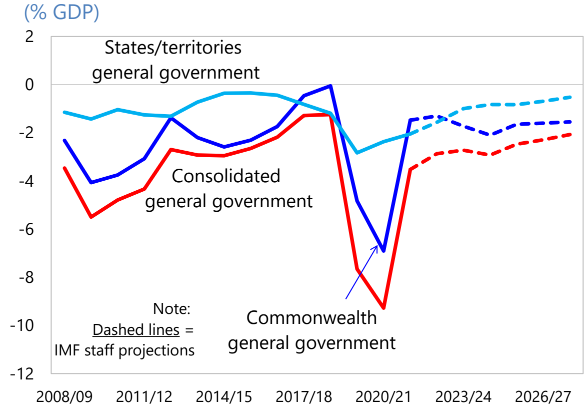
The pace of fiscal consolidation is projected to slow in 2022/23 and beyond...

Cyclically-adjusted Primary Balance and Fiscal Impulse
(% potential GDP)



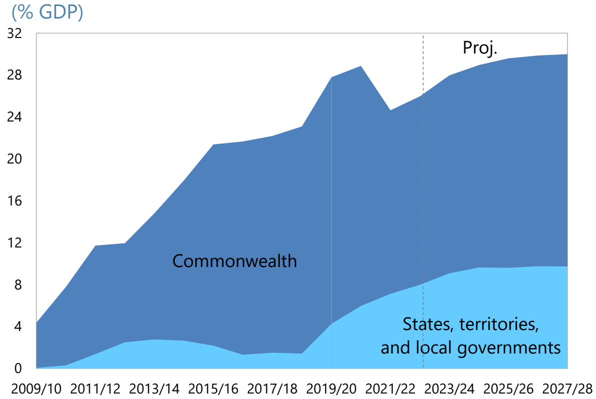
...and additional efforts by state and territory governments are also needed for further consolidation.

Fiscal Balances
(% GDP)



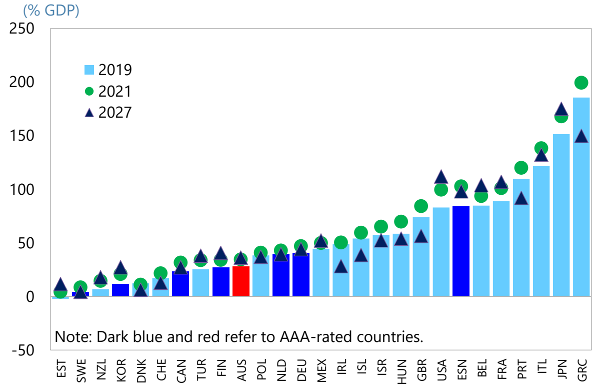
Net public debt is projected to stabilize over the medium term...

Net Public Debt
(% GDP)



...and remains low compared to other advanced economies.

Net Public Debt
(% GDP)



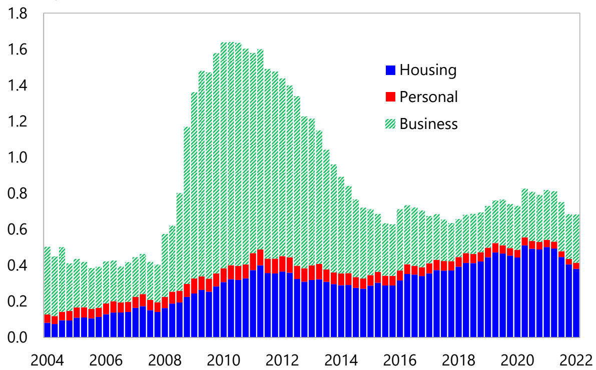
Sources: Commonwealth and State/Territory Treasuries, FY2022/23 budgets; IMF, *World Economic Outlook*; and IMF staff estimates and projections.

Figure 6. The Banking Sector Remains Strong

The NPL ratio increased less than expected during the pandemic…

Banks' Non-performing Household Loans

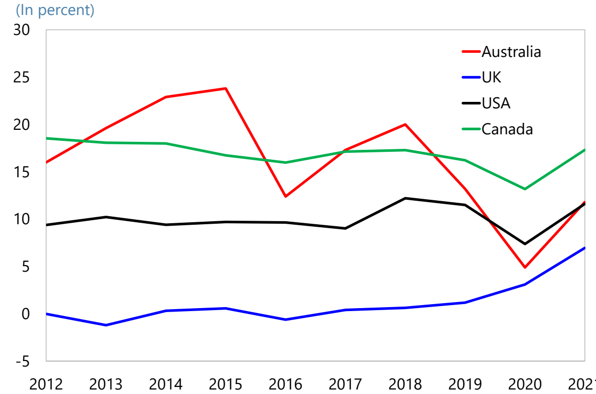
(In percent of all assets, domestic books)



…and bank profitability is recovering.

Return on Equity

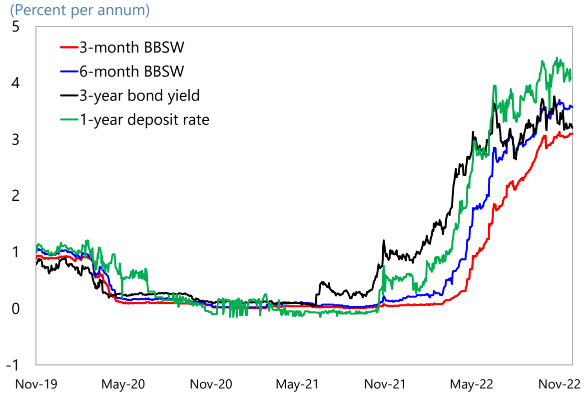
(In percent)



Funding costs have increased rapidly with domestic and global financial tightening…

Banks' Funding Costs

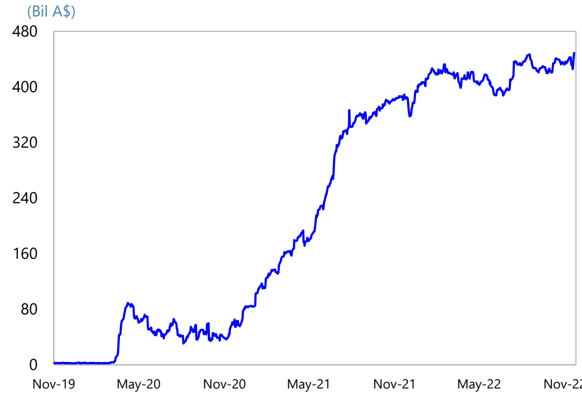
(Percent per annum)



…but there remains ample liquidity reflected also in banks' high reserves balances at the RBA.

Exchange Settlement Balances

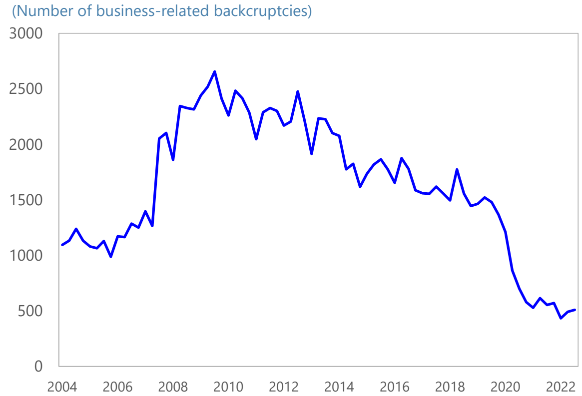
(Bil A$)



Business bankruptcies have remained low…

Business Bankruptcy

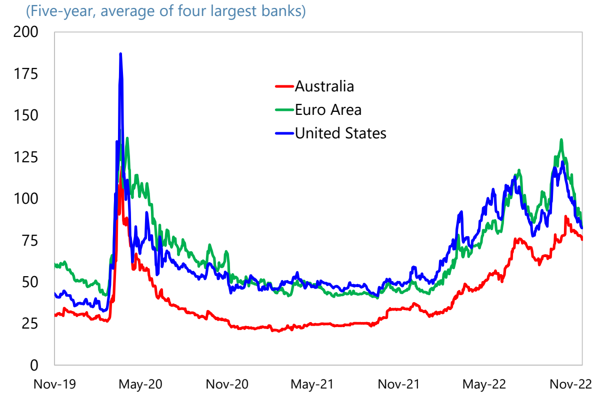
(Number of business-related backcruptcies)



…and market-perceived bank default risks is contained.

Credit Default Swap (CDS) Spreads

(Five-year, average of four largest banks)

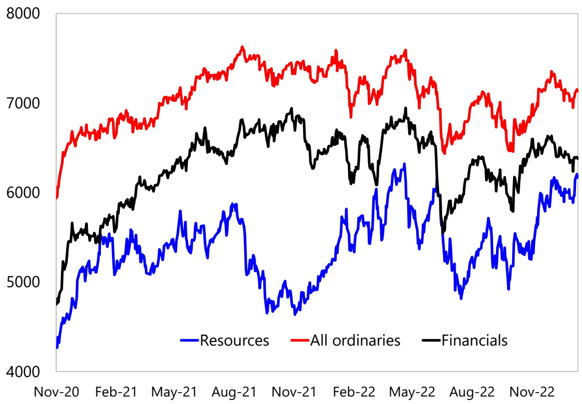


Sources: Bloomberg; and IMF staff calculations.

Figure 7. Financial Market: Tightening Financial Conditions

Australian equity prices have been volatile…

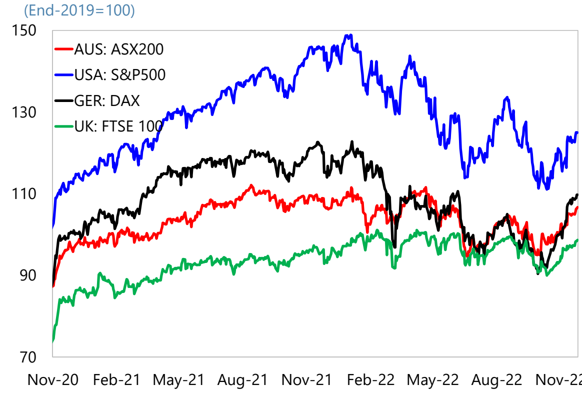
Stock Market Indices



…following global markets.

Advanced Economies: Stock Market Indices

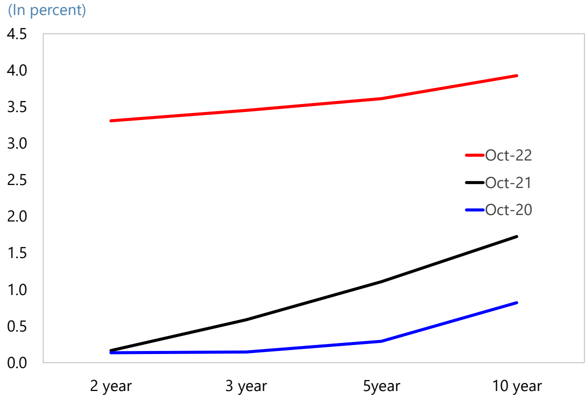
(End-2019=100)



The yield curve has shifted upwards and flattened…

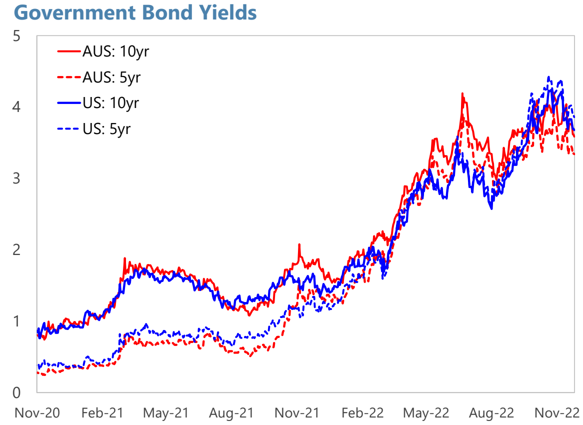
Australia Commonwealth Yield Curves

(In percent)



…while longer-term yields have moved up in line with global developments.

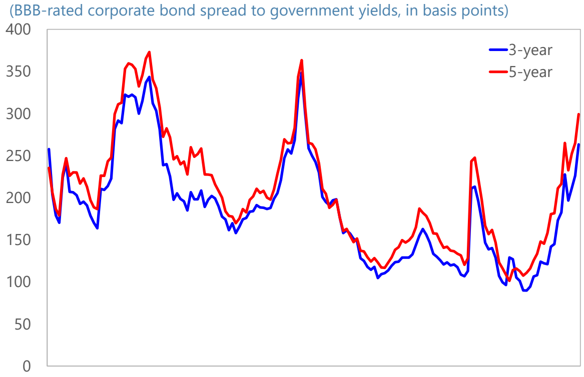
Government Bond Yields



Corporate bond spreads have increased.

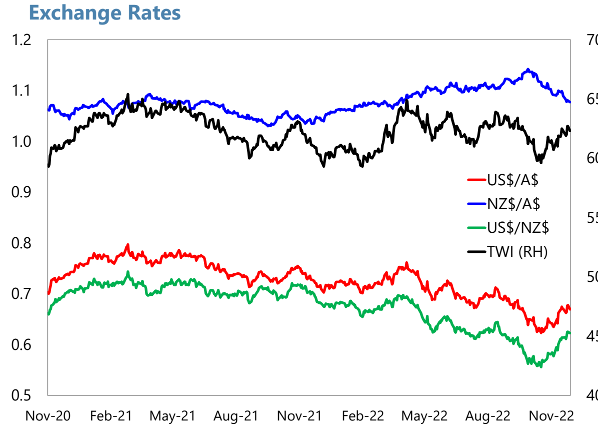
Non-Financial Corporate Bond Spreads

(BBB-rated corporate bond spread to government yields, in basis points)



The exchange rate weakened against the US dollar but remained steady in trade-weighted terms (TWI).

Exchange Rates

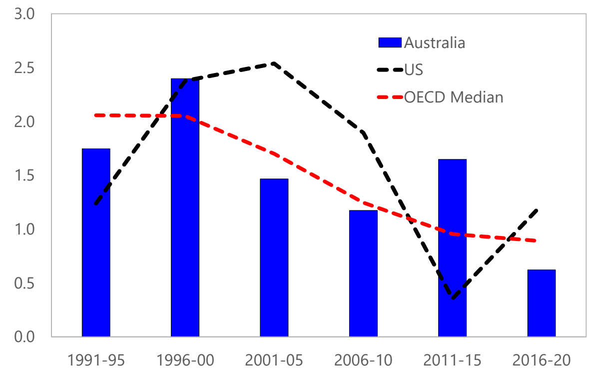


Sources: RBA; Bloomberg; and IMF staff calculations.

Figure 8. Australia's Macro-Structural Position Highlights Issues Predating the Pandemic

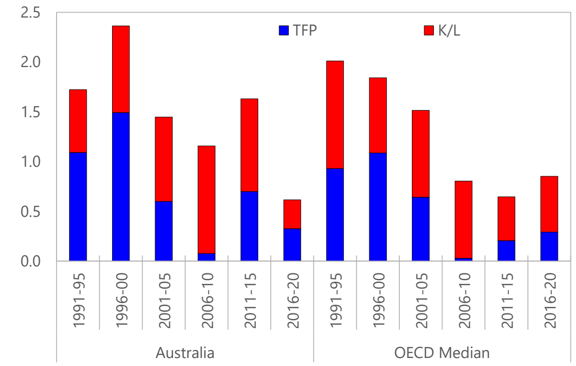
After an extended period of steady performance, labor productivity growth in Australia has slowed significantly…

Labor Productivity Growth
(In percent)



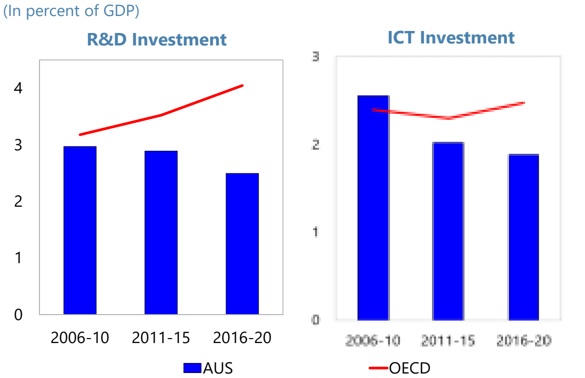
…driven by lower TFP growth as well as a smaller contribution from capital deepening.

Labor Productivity Growth, Role of TFP & Capital Deepening
(In percent)



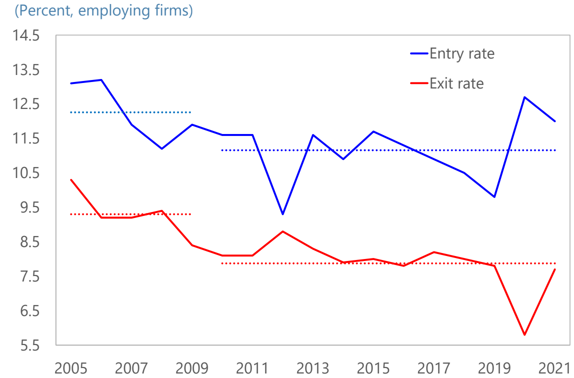
R&D and ICT investment declined, potentially contributing to the productivity slowdown,…

R&D and ICT Investment
(In percent of GDP)



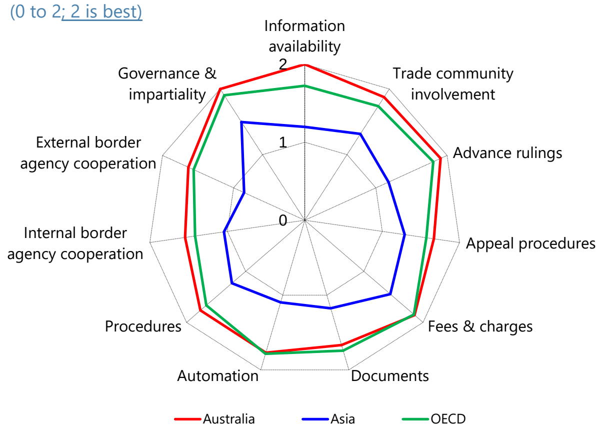
…and measures of firm dynamism and competition, such as firm entry and exit rates, have also deteriorated.

Firm Entry and Exit Rates 1/
(Percent, employing firms)



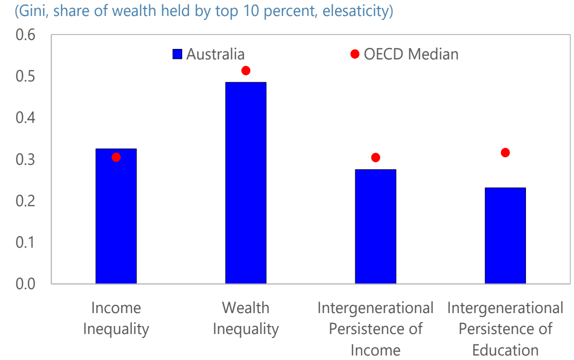
That said, Australia's trade environment remains open and conducive to growth.

Ease of Conducting Trade
(0 to 2; 2 is best)



While income inequality is relatively high, wealth inequality and inequality of opportunity are below those of peers.

Measures of Inequality
(Gini, share of wealth held by top 10 percent, elesaticity)



Notes: Income inequality: gini coefficient; wealth inequality: share of wealth held by top 10 percent; intergeneration persistence: coefficient of regressions of parents outcome on childrens outcomes.

Sources: ABS; OECD Stat; De Locker and Eackout (2020); OECD Trade Facilitation Indicators; and Global Database on Intergenerational Mobility.
1/ Dotted lines show the average entry and exit rate for the period 2005 to 2009 and 2010 to 2019.

Table 1. Australia: Main Economic Indicators, 2018–28
(Annual percentage change, unless otherwise indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
								Projections			
NATIONAL ACCOUNTS											
Real GDP	2.8	1.9	-1.8	5.2	3.6	1.6	1.7	2.1	2.2	2.3	2.3
Domestic demand	2.7	1.2	-2.2	6.0	4.9	2.0	1.6	2.0	2.2	2.3	2.3
Private consumption	2.4	1.1	-5.8	5.0	6.8	2.5	2.2	2.7	2.7	2.8	2.8
Public consumption	4.1	6.2	7.8	5.3	5.2	0.4	0.3	0.5	0.6	0.6	0.6
Investment	2.3	-2.5	-2.8	10.4	1.5	2.4	1.7	1.9	2.7	2.8	2.8
Public	2.7	2.1	-0.6	6.8	3.4	1.3	1.1	0.5	0.4	0.4	0.4
Private business	2.6	-0.8	-3.8	8.9	4.1	4.8	2.0	2.4	3.8	3.9	3.7
Dwelling	4.3	-7.2	-5.6	9.9	-2.7	0.9	1.6	2.0	2.4	2.6	2.8
Net exports (contribution to growth, percentage points)	0.4	1.0	0.1	-1.4	-1.7	0.3	0.1	0.2	0.0	0.0	0.0
Gross domestic income	3.3	3.2	-1.9	9.0	5.1	-0.2	0.3	2.0	2.1	2.3	2.3
Investment (percent of GDP) 1/	24.2	22.6	22.3	23.1	23.3	23.6	24.0	23.9	24.0	24.1	24.2
Public	5.1	5.1	5.2	5.0	5.0	5.3	5.3	5.2	5.1	5.0	4.9
Private	18.9	17.6	17.3	18.0	17.7	18.4	18.7	18.7	18.9	19.1	19.3
Savings (gross, percent of GDP)	22.0	23.1	24.6	26.3	24.4	24.1	23.5	23.6	23.6	23.6	23.6
Households	9.3	9.9	17.0	14.6	10.1	8.7	12.1	12.7	12.4	12.2	12.0
Potential output	2.4	2.3	1.3	1.5	1.9	2.0	2.1	2.3	2.3	2.3	2.3
Output gap (percent of potential)	-0.7	-1.0	-4.0	-0.5	1.1	0.8	0.4	0.2	0.0	0.0	0.0
LABOR MARKET											
Employment	2.7	2.3	-1.5	3.1	3.6	1.0	1.2	1.5	1.6	1.5	1.7
Unemployment (percent of labor force)	5.3	5.2	6.5	5.1	3.7	4.0	4.2	4.4	4.5	4.6	4.6
Wages (nominal percent change)	2.1	2.3	1.6	2.0	3.2	3.2	3.1	3.0	2.9	2.8	2.8
PRICES											
Terms of trade index (goods, avg)	83	90	90	110	119	105	99	99	99	99	99
% change	3.2	8.3	0.2	21.8	8.1	-11.1	-5.8	-0.4	-0.1	0.0	0.2
Iron ore prices (index)	101	135	156	228	171	136	136	136	136	136	136
Consumer prices (avg)	1.9	1.6	0.9	2.8	6.7	5.5	3.2	2.8	2.5	2.5	2.6
Core consumer prices (avg)	1.6	1.6	1.2	2.8	5.7	5.3	3.2	2.8	2.5	2.5	2.6
GDP deflator (avg)	2.2	3.2	0.7	5.6	7.7	-1.2	0.4	2.9	2.4	2.5	2.5
FINANCIAL											
Reserve Bank of Australia cash rate target (percent, avg)	1.5	1.2	0.3	0.1	1.6	3.8	3.9	3.4	3.0	3.0	3.0
10-year treasury bond yield (percent, avg)	2.6	1.4	0.9	1.6	3.6	4.5	4.5	4.3	4.3	4.3	4.3
Mortgage lending rate (percent, avg)	5.3	4.8	4.5	4.5	6.6	7.1	7.0	6.3	6.3	6.3	6.3
MACRO-FINANCIAL											
Credit to the private sector	4.7	2.5	2.1	7.4	3.3	2.0	2.1	3.9	4.8	5.0	5.6
Interest payments (percent of disposable income)	8.9	7.0	5.8	5.2	9.7	11.0	9.8	8.3	8.2	8.2	8.2
Household savings (percent of disposable income)	4.6	5.9	15.5	13.1	6.5	4.1	9.1	9.9	9.5	9.1	8.8
Household debt (percent of disposable income) 2/	186	185	179	186	187	192	176	170	170	170	169
Business credit (percent of GDP)	50.5	49.1	50.1	48.9	44.7	46.2	47.3	47.4	47.9	48.3	48.7
GENERAL GOVERNMENT (percent of GDP) 3/											
Revenue	35.7	35.8	34.6	35.1	36.5	35.6	36.6	36.4	36.8	37.0	37.0
Expenditure	37.0	37.0	42.2	44.4	40.0	38.4	39.3	39.3	39.3	39.3	39.1
Net lending/borrowing	-1.3	-1.2	-7.7	-9.3	-3.5	-2.9	-2.7	-2.9	-2.5	-2.3	-2.1
Commonwealth only	-0.5	-0.1	-4.8	-6.9	-1.5	-1.3	-1.7	-2.1	-1.7	-1.6	-1.6
Operating balance	0.6	0.9	-5.5	-7.0	-1.2	-0.6	-0.4	-0.8	-0.3	-0.1	0.1
Cyclically adjusted primary balance	0.4	0.5	-5.0	-7.1	-2.3	-2.0	-1.3	-1.4	-0.9	-0.4	-0.3
Gross debt	41.3	42.2	52.7	58.2	56.8	56.7	61.2	62.3	62.6	62.6	62.4
Net debt	23.7	24.5	32.1	34.8	31.8	34.0	37.1	38.6	39.2	39.6	39.7
BALANCE OF PAYMENTS											
Current account (percent of GDP)	-2.2	0.3	2.3	3.1	0.9	0.4	-0.4	-0.4	-0.5	-0.5	-0.6
Export volume	5.1	3.2	-9.7	-2.0	4.1	7.4	3.3	2.8	2.1	2.2	2.2
Import volume	4.3	-1.0	-12.8	5.4	14.6	6.7	3.0	2.4	2.4	2.4	2.4
Net international investment position (percent of GDP)	-54.7	-47.7	-50.2	-35.4	-35.0	-34.4	-34.1	-32.8	-31.9	-30.9	-30.1
Gross official reserves (bn A$)	76	84	56	81	…	…	…	…	…	…	…
MEMORANDUM ITEMS											
Nominal GDP (bn A$)	1,894	1,992	1,971	2,190	2,444	2,454	2,507	2,635	2,759	2,892	3,031
Percent change	5.1	5.2	-1.1	11.1	11.6	0.4	2.2	5.1	4.7	4.8	4.8
Real GDP per capita (% change)	1.3	0.4	-2.8	5.0	2.9	0.5	0.5	0.8	0.9	1.1	1.1
Population (million)	25.2	25.5	25.6	25.8	26.0	26.3	26.6	27.0	27.3	27.5	27.8
Nominal effective exchange rate	90.0	86.3	86.0	90.8	…	…	…	…	…	…	…
Real effective exchange rate	90.0	86.0	85.3	90.5	…	…	…	…	…	…	…

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

1/ Includes changes in inventories.

2/ 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.

3/ Fiscal year ending June.

Table 2. Australia: Fiscal Accounts, 2017/18-2027/28
(In percent of GDP, unless otherwise indicated)

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
					Est.			Projections			
CONSOLIDATED GENERAL GOVERNMENT OPERATIONS 1/											
Revenue	**35.7**	**35.8**	**34.6**	**35.1**	**36.5**	**35.6**	**36.6**	**36.4**	**36.8**	**37.0**	**37.0**
Tax revenue	28.7	28.8	27.9	28.5	30.0	29.4	30.1	29.7	30.3	30.6	30.7
Direct taxes	21.2	21.4	20.6	21.0	22.5	21.6	21.9	21.6	22.2	22.4	22.5
Individual and withholding	14.5	14.6	14.5	14.3	14.6	14.3	15.6	14.7	15.0	15.2	15.3
Corporate	6.7	6.9	6.1	6.7	7.8	7.3	6.3	6.9	7.2	7.2	7.2
Indirect taxes	7.5	7.4	7.3	7.5	7.5	7.8	8.2	8.1	8.2	8.2	8.2
Of which: GST	3.5	3.3	3.2	3.5	3.2	3.4	3.7	3.6	3.6	3.6	3.6
Non-tax revenue	7.0	7.0	6.7	6.6	6.5	6.2	6.5	6.7	6.4	6.4	6.4
Expenditure	**37.0**	**37.0**	**42.2**	**44.4**	**40.0**	**38.4**	**39.3**	**39.3**	**39.3**	**39.3**	**39.1**
Expense	35.1	34.9	40.0	42.1	37.7	36.1	37.0	37.2	37.1	37.1	36.9
Employee expenses	8.5	8.5	8.9	8.8	8.3	8.0	8.1	8.1	7.9	7.9	7.8
Other operating expenses (excl. depreciation)	11.3	11.6	12.5	12.9	12.4	12.3	12.4	12.3	12.3	12.3	12.3
Transfers	10.3	9.8	13.6	15.6	12.3	11.3	11.4	11.4	11.3	11.3	11.2
Interest (excl. superannuation)	1.4	1.3	1.3	1.2	1.3	1.4	1.7	1.7	1.6	1.8	1.8
Other	3.7	3.7	3.7	3.5	3.4	3.1	3.5	3.6	3.8	3.7	3.7
Net acquisition of nonfinancial assets	1.8	2.1	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2
Of which: Gross fixed capital formation	3.5	3.7	3.7	3.7	3.6	4.2	4.4	4.4	4.4	4.4	4.4
Operating balance	0.6	0.9	-5.5	-7.0	-1.2	-0.6	-0.4	-0.8	-0.3	-0.1	0.1
Primary balance	0.1	0.1	-6.4	-8.0	-2.3	-1.4	-1.1	-1.2	-0.8	-0.5	-0.2
Net lending (+)/borrowing (-)	**-1.3**	**-1.2**	**-7.7**	**-9.3**	**-3.5**	**-2.9**	**-2.7**	**-2.9**	**-2.5**	**-2.3**	**-2.1**
CONSOLIDATED GENERAL GOVERNMENT BALANCE SHEET											
Liabilities	**76.0**	**83.0**	**95.7**	**97.6**	**89.4**	**84.9**	**89.7**	**89.7**	**89.7**	**89.5**	**89.0**
Gross debt	41.3	42.2	52.7	58.2	56.8	56.7	61.2	62.3	62.6	62.6	62.4
Commonwealth	32.5	33.4	40.9	43.8	41.2	40.4	43.4	44.1	44.5	44.6	44.5
States, territories and local governments	8.9	8.8	11.8	14.3	15.6	16.3	17.8	18.2	18.0	18.0	17.8
Other liabilities	34.6	40.8	43.0	39.5	32.6	28.2	28.5	27.4	27.1	26.9	26.7
Assets	**126.0**	**124.1**	**130.5**	**130.3**	**121.3**	**114.9**	**122.1**	**120.0**	**118.2**	**115.7**	**113.3**
Financial assets	52.5	51.2	54.9	54.6	50.7	47.0	51.0	50.2	49.3	47.8	46.4
Other assets	73.5	72.9	75.5	75.7	70.5	67.9	71.0	69.7	68.9	67.9	66.9
Net financial worth	**-23.5**	**-31.8**	**-40.7**	**-43.0**	**-38.7**	**-37.9**	**-38.6**	**-39.4**	**-40.4**	**-41.7**	**-42.7**
Net debt	**23.7**	**24.5**	**32.1**	**34.8**	**31.8**	**34.0**	**37.1**	**38.6**	**39.2**	**39.6**	**39.7**
Commonwealth 2/	22.2	23.1	27.8	28.9	24.6	26.0	28.0	29.0	29.6	29.9	30.0
States, territories and local governments	1.5	1.4	4.3	6.0	7.1	8.0	9.1	9.6	9.6	9.8	9.7
Net worth	**50.0**	**41.1**	**34.8**	**32.7**	**31.9**	**30.0**	**32.4**	**30.3**	**28.5**	**26.2**	**24.3**
Commonwealth	-23.2	-28.5	-33.8	-35.3	-27.5	-25.3	-25.3	-26.0	-26.4	-27.0	-27.3
States, territories and local governments	73.2	69.6	68.5	68.0	59.4	55.3	57.7	56.3	54.9	53.1	51.6
MEMORANDUM ITEMS											
Cyclically adjusted primary balance (in percent of potential GDP)	0.4	0.5	-5.0	-7.1	-2.3	-2.0	-1.3	-1.4	-0.9	-0.4	-0.3
Fiscal impulse (change in CAPB; in percent of potential GDP)	-0.7	-0.1	5.5	2.1	-4.8	-0.3	-0.7	0.1	-0.6	-0.3	-0.1
Change in real revenue (percent)	5.7	4.3	-3.1	5.2	10.4	-2.2	-0.9	2.1	3.0	2.9	2.4
Change in real primary expenditure (percent)	1.7	3.9	17.3	13.4	-10.1	-2.8	0.8	1.8	2.3	2.3	1.9
Commonwealth general government 3/											
Revenue	21.3	21.8	21.4	21.6	22.3	21.6	22.3	21.8	22.3	22.5	22.5
Expenditure	21.8	21.8	26.2	28.5	23.8	22.9	24.0	23.9	24.0	24.2	24.1
Net lending (+)/borrowing (-)	-0.5	-0.1	-4.8	-6.9	-1.5	-1.3	-1.7	-2.1	-1.7	-1.6	-1.6
States, territories and local governments 4/											
Revenue	13.2	12.9	12.0	12.4	14.0	13.7	14.3	14.3	14.3	14.3	14.4
Expenditure	13.8	13.8	14.7	14.9	15.9	15.1	15.0	15.0	14.9	14.7	14.7
Net lending (+)/borrowing (-)	-0.6	-1.0	-2.7	-2.5	-1.9	-1.4	-0.8	-0.7	-0.6	-0.5	-0.3
Commonwealth transfers to subnational governments	6.2	6.1	6.1	6.6	7.3	6.9	7.3	7.1	6.9	6.9	6.9
Of which: General revenue assistance	3.6	3.6	3.3	3.6	3.5	3.6	3.9	3.8	3.7	3.7	3.7
Nonfinancial public sector capital stock	100.8	98.7	101.6	100.2	99.8	96.9	103.9	104.4	105.3	105.9	106.9
GDP (in billion A$)	1,842	1,945	1,978	2,080	2,309	2,483	2,451	2,578	2,693	2,825	2,962

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, 2018-2028

(In percent of GDP, unless otherwise indicated)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Projections						
Current account	-2.2	0.3	2.3	3.1	0.9	0.4	-0.4	-0.4	-0.5	-0.5	-0.6
Balance on goods and services	1.1	3.3	3.6	5.5	5.4	3.3	2.1	2.1	1.9	1.8	1.8
Exports of goods and services	23.1	24.7	22.1	23.7	27.5	27.4	26.8	26.7	26.3	25.9	25.6
Exports of goods	18.3	19.6	18.5	21.0	24.4	23.2	22.3	21.9	21.6	21.2	20.9
Of which: Resources	12.1	13.3	12.4	14.9	16.9	14.4	13.2	12.1	11.4	11.3	10.8
Exports of services	4.9	5.1	3.6	2.7	3.1	4.2	4.6	4.7	4.7	4.7	4.6
Imports of goods and service	22.0	21.4	18.5	18.2	22.1	24.1	24.7	24.6	24.4	24.1	23.8
Imports of goods	16.7	16.2	15.5	15.7	18.1	19.0	19.3	19.2	19.0	18.7	18.4
Imports of services	5.3	5.2	3.0	2.5	4.0	5.1	5.4	5.4	5.4	5.4	5.4
Primary income, net	-3.3	-3.0	-1.2	-2.3	-4.4	-2.8	-2.5	-2.4	-2.3	-2.3	-2.3
Interest payments	-1.3	-1.0	-0.7	-0.6	-1.1	-1.7	-1.7	-1.6	-1.6	-1.5	-1.5
Equity income	-1.6	-1.5	-0.2	-1.4	-3.0	-0.8	-0.5	-0.5	-0.5	-0.6	-0.6
Secondary income, net	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Capital and financial account											
Capital account, net	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account, net	2.1	-0.6	-2.3	-2.8	-0.9	-0.4	0.5	0.4	0.5	0.6	0.6
Direct investment	4.2	2.1	0.6	1.1	-1.6	1.0	2.3	2.3	2.4	2.4	2.5
Equity	4.1	2.6	1.0	1.1	-1.4	1.0	2.2	2.2	2.2	2.2	2.2
Debt	0.1	-0.5	-0.4	0.0	-0.2	0.0	0.0	0.1	0.2	0.2	0.3
Portfolio investment	-1.0	-2.2	-1.1	-3.7	3.4	-0.5	-0.5	-0.8	-0.9	-1.0	-1.2
Equity	-3.0	-2.3	-1.2	-5.4	1.7	-1.6	-1.7	-1.9	-2.1	-2.3	-2.4
Debt	2.0	0.1	0.1	1.7	1.8	1.1	1.2	1.1	1.2	1.3	1.1
Financial derivatives	-0.5	-0.3	-1.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Other investment	-1.3	0.1	-1.9	1.0	-2.7	-0.9	-1.3	-1.1	-1.0	-0.8	-0.7
Reserve assets	0.8	-0.2	1.3	-1.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	0.1	0.3	0.0	-0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
BALANCE SHEET											
Net international investment position 1/	-54.7	-47.7	-50.2	-35.4	-35.0	-34.4	-34.1	-32.8	-31.9	-30.9	-30.1
Equity, net	5.5	11.9	10.4	19.7	12.0	12.5	11.7	10.8	10.2	9.9	9.6
Assets	74.1	85.5	85.8	94.6	86.3	82.8	85.8	85.0	85.3	85.3	85.2
Liabilities	68.6	73.6	75.4	74.9	74.2	70.3	74.0	74.2	75.1	75.4	75.7
Debt, net	-60.3	-59.6	-60.6	-55.1	-47.0	-46.9	-45.8	-43.7	-42.1	-40.8	-39.6
Assets	64.2	65.8	70.5	60.2	77.3	74.3	76.9	76.2	76.5	76.5	76.4
Liabilities	124.4	125.4	131.1	115.3	124.3	121.2	122.7	119.9	118.5	117.3	116.0
External assets (gross)	138.3	151.3	156.3	154.8	163.6	157.1	162.7	161.3	161.8	161.8	161.6
Equity	74.1	85.5	85.8	94.6	86.3	82.8	85.8	85.0	85.3	85.3	85.2
Debt	64.2	65.8	70.5	60.2	77.3	74.3	76.9	76.2	76.5	76.5	76.4
External liabilities (gross)	193.0	199.0	206.5	190.2	198.5	191.5	196.8	194.1	193.6	192.7	191.7
Equity	68.6	73.6	75.4	74.9	74.2	70.3	74.0	74.2	75.1	75.4	75.7
Debt	124.4	125.4	131.1	115.3	124.3	121.2	122.7	119.9	118.5	117.3	116.0
Of which: A$-denominated	59.7	59.0	67.7	60.8	62.8	61.2	62.0	60.5	59.8	59.2	58.6
Short-term	42.5	40.4	42.5	43.1	48.3	47.1	47.7	46.6	46.1	45.6	45.1
MEMORANDUM ITEMS											
Gross official reserves (bn A$)	76	84	56	81	...	...	...	...	...	...	...
In months of prospective imports	2.2	2.8	1.7	1.8	...	...	...	...	...	...	...
In percent of short-term external debt	9.5	10.4	6.7	8.6	...	...	...	...	...	...	...
Net official reserves (bn A$)	62	63	61	84	...	...	...	...	...	...	...

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

1/ NIIP figures as a percent of GDP for 2022 differ from those reported in Annex III. Before computing ratios, Annex III converts NIIP stocks to USD using end-of-period exchange rates while GDP is converted to USD using average exchange rates. Table 3 computes ratios based on AUD numbers reported by ABS.

Table 4. Australia: Selected Financial Soundness Indicators of the Banking Sector
(Year-end, unless otherwise noted, in percent)

	2014	2015	2016	2017	2018	2019	2020	2021Q4	2022Q1	2022Q2
Capital Adequacy										
Regulatory capital to risk-weighted assets	12.2	13.8	13.7	14.6	14.8	15.7	17.6	17.9	17.2	17.0
Regulatory Tier I capital to risk-weighted assets	10.6	11.8	11.4	12.4	12.7	13.1	14.0	13.9	13.4	13.1
Capital to assets	4.7	5.3	5.4	5.9	5.9	6.2	6.4	6.2	6.0	5.9
Large exposures to capital	116.5	93.4	91.7	82.7	84.8	99.7	82.7	82.9	85.1	91.3
Nonperforming loans net of loan-loss provisions to capital	9.3	7.3	7.6	6.9	7.5	7.6	7.7	6.5	...	...
Asset Quality										
Nonperforming loans to total gross loans	1.0	0.9	0.9	0.9	0.9	1.0	1.1	0.9	0.8	0.8
Sectoral distribution of loans to total loans										
Residents	92.9	90.5	92.2	93.3	93.1	93.9	93.5	94.6 1/	...	...
Deposit-takers	0.06	0.12	0.12	0.15	0.18	0.24	0.03	0.03 1/	...	...
Central bank	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00 1/	...	...
Other financial corporations	2.8	3.1	3.3	3.4	3.6	2.7	2.7	2.8 1/	...	...
General government	0.3	0.3	0.3	0.2	0.2	1.0	0.9	0.8 1/	...	...
Non-financial corporations	23.2	22.7	23.0	23.0	22.9	22.9	22.8	23.0 1/	...	...
Other domestic sectors	66.6	64.3	65.5	66.5	66.2	67.1	67.1	68.0 1/	...	...
Nonresidents	7.1	9.5	7.8	6.7	6.9	6.1	6.5	5.4 1/	...	...
Earnings and Profitability										
Return on assets	1.2	1.5	0.8	1.2	1.4	1.0	0.4	0.9	1.2	1.2
Return on equity	22.9	23.8	12.4	17.3	20.0	13.2	4.9	11.8	15.9	16.4
Interest margin to gross income	65.9	59.4	82.5	71.3	64.9	74.3	88.2	76.7	65.9	64.8
Noninterest expenses as a percentage of gross income	47.1	42.8	53.8	47.5	44.7	52.6	64.5	55.2	47.0	46.3
Liquidity										
Liquid assets to total assets	17.1	17.7	18.3	18.6	18.7	16.5	20.2	23.2	22.8	23.4
Liquid assets to short-term liabilities	40.2	39.7	41.2	40.1	41.9	34.2	37.0	37.7	37.4	39.6

Source: IMF, Financial Soundness Indicators (FSI) database.
1/ As of 2021Q2.

Annex I. Previous IMF Policy Recommendations

1. **Sound macroeconomic policies contributed to the post-pandemic recovery.** Policies have been broadly consistent with staff's advice. During the pandemic, Australia implemented one of the largest fiscal stimulus packages among AEs. Together with monetary easing, this helped weather the pandemic, pave the way for economic recovery despite repeated lockdowns in 2020 and 2021, and limit economic scarring. Since the last Article IV consultation, the accommodative policies have been gradually withdrawn to support a durable handover from public to private demand and address inflation.

2. **The pace of fiscal consolidation was well-calibrated to the strength of the underlying economic recovery.** The overall deficit in FY2020/21 reached a record high, with sizable stimulus spending. Subsequent economic recovery, supported by favorable terms-of-trade and a successful vaccination campaign, allowed the authorities to unwind the pandemic-era stimulus. Cyclical recovery in tax revenues, together with the stimulus withdrawal, led to large consolidation in FY2021/22 at a pace commensurate with the strength of labor market recovery, in line with staff advice to calibrate the fiscal stance to support the transition from public to private demand.

3. **Unprecedented monetary easing during the pandemic provided needed support and was withdrawn as inflation surprised on the upside.** Consistent with staff advice, forward guidance changed, focusing on state-contingency of envisaged policies amid high uncertainty. Once upside risks to inflation materialized, monetary policy was tightened at a steep pace, consistent with staff's contingent advice in the 2021 Article IV consultation.

4. **Financial sector reforms have progressed, and the increase in banks' interest serviceability buffer enhanced resilience.** Strong bank capitalization provides additional buffers, despite banks' high concentration in mortgage lending. Consistent with staff recommendations, APRA raised the minimum serviceability buffer from 2.5 to 3 percent, requiring lenders to use the higher interest rate spread in assessing borrowers' ability to service their mortgage loans, thereby strengthening their repayment capacity as interest rates increase. Progress is being made in addressing climate and cyber risks, which is essential to ensure financial resilience in a changing environment.

5. **Progress has been made on structural policies, especially in climate change mitigation, though tax policy reforms remain elusive.** The new NDC brings Australia's 2030 emissions target in line with its long-term goal of achieving net zero by 2050, while codifying the target through legislation has helped reduce uncertainty, helping to catalyze environmentally friendly investments. The authorities' readiness to make greater use of price signals and market mechanisms in achieving emissions reductions is consistent with past staff advice, though a broad-based economy-wide carbon price is still not being considered. The government's focus on education and female labor force participation is also consistent with previous staff recommendations, though the longstanding policy advice of rebalancing the tax structure away from direct taxes to indirect taxes remains difficult to implement.

Annex II. Sovereign Risk and Debt Sustainability Assessment

Sizable fiscal consolidation has taken place at a pace well-calibrated to the strength of the economy. The overall deficit has declined sharply in FY2021/22, but the pace of fiscal consolidation is projected to slow in FY2022/23 and beyond. With rising debt-servicing costs, gross general government debt[1] is projected to increase in the near term, but stabilize over the medium term, reaching a peak of around 62½ percent of GDP by FY2025/26. Despite recent exchange rate volatility, demand for the Australian Government Securities (AGS) by nonresidents is expected to remain robust. Rising gross financing needs should be monitored closely, although potential vulnerabilities are mitigated by Australia's strong institutions, policy frameworks, and a deep and liquid capital market.

1. Background. Australia's cyclical position is stronger than in most advanced economies, with a positive output gap and a tight labor market, supported by favorable terms-of-trade developments. Commonwealth and state/territory governments started unwinding stimulus measures in FY2021/22 at pace well-calibrated to the strength of the recovery. The overall fiscal deficit reached 3½ percent of GDP, sharply declining from a record high of 9¼ percent in FY2020/21. Coupled with stimulus withdrawal, cyclical factors and gains in commodity-related windfall revenues also lent support to the sizable fiscal consolidation.

Baseline Scenario

2. Macroeconomic assumptions. The economic expansion is expected to moderate, with growth projected to decline to around 1.6 percent in 2023 before gradually recovering over the medium-term to around 2¼ percent, consistent with staff's potential output estimates. Inflation reached 7.3 percent (y/y) in 2022Q3, well-above the RBA target band, and it is projected to remain high in the near term. The RBA has tightened monetary policy by 300 basis points (cumulative) since May 2022, with its cash rate target at 3.1 percent. Long-term inflation expectations remain well anchored. The 10-year Treasury bond yield peaked at around 4¼ percent in October 2022, and has since declined to around 3½ percent in December. Monetary policy is projected to tighten further through mid-2023.

3. Debt trajectory. After sizable withdrawal of stimulus in FY2021/22, the pace of fiscal consolidation is projected to slow in FY2022/23 and beyond. The deficit is projected to decline at the consolidated general government level but only by a limited magnitude in this fiscal year and beyond[2], with moderating growth and growing debt servicing costs. Gross public debt is projected to increase as a share of GDP in the near term but stabilize over the medium term as the primary balance improves gradually.

4. Realism. Baseline economic assumptions are generally within the error band observed for all countries. The baseline fiscal projections and implied near-term adjustments are in the upper

[1] General government includes the Commonwealth, state/territory, and local governments.

[2] In FY2024/25, the deficit is projected to increase, mainly resulting from the already-legislated personal income tax reform, lowering its tax revenue by around 1 percent of GDP, as per the FY2022/23 budget.

quartile compared with historical and cross-country experience, but are nevertheless realistic given the moderate pace of fiscal consolidation over the medium term.

5. Vulnerabilities. The share of Australian Government Securities (all denominated in local currency) held by non-residents has continued to decline since end-2020, reaching around 45 percent at end 2022Q2 (or 16 percent of GDP). Given Australia's sound fiscal and monetary policy frameworks, strong institutions, and triple-A sovereign rating, foreign demand for Treasury securities is expected to remain high. Gross financing needs are projected to increase in the near term as the governments rely more on short-term securities to finance deficit. Nevertheless, risks remain low with deep and liquid capital markets in Australia.

Annex II. Figure 1. Australia: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	…	Low	The overall risk of sovereign stress is low, reflecting a relatively low level of vulnerability in the near-term and low levels of vulnerability in the medium-, and long-term horizons.
Near term 1/	Low	Low	The near-term risk of sovereign stress is low. While unprecedented fiscal stimulus raised the public debt-to-GDP ratio in 2020, fiscal consolidation has already started, reducing the ratio in 2021.
Medium term	Low	Low	Medium-term risks are assessed as low against a mechanical low signal on the basis of the strength of institutions, the depth of the investor pool, the role of the Australian dollar in the international system, and the credibility of macroeconomic policies in Australia to play a stabilizing role.
Fanchart	Low	…	
GFN	Low	…	
Stress test	…	…	
Long term	…	Low	Long-term risks are low as aging-related expenses on health feed into debt dynamics and their increase is projected to be limited, compared to other advanced economies with a faster pace of population aging.
Sustainability assessment 2/	Not required for surveillance countries	Sustainable with high probability	The debt path is projected to stabilize over the medium term at moderate levels. GFNs will remain at manageable levels with deep capital markets and the role of the Australian dollar. With primary balance improving at the consolidated level, debt is assessed as sustainable with high probability.
Debt stabilization in the baseline			Yes

DSA Summary Assessment

Commentary: Australia is at a low overall risk of sovereign stress, and debt is sustainable with an AAA sovereign credit rating. The post-pandemic economic recovery has been well underway, with Australia's cyclical position stronger than most advanced economies (AEs). Tax revenues have exceeded the pre-pandemic highs, and withdrawal of fiscal stimulus has contributed to sizable consolidation in FY2021/22 (ended June 2022). Moving forward, fiscal consolidation is expected to continue, albeit at slower pace. Nonetheless, debt is projected to stabilize over the medium term. With high and persistent inflation and monetary policy tightening, medium-term liquidity risks as analyzed by the GFN Financeability Module are moderate. Long term risks remain low. Structural spending in disability programs has increased. Growth in age-related spending is projected to pick up, but its pace is contained relative to other AEs since population aging in Australia is not as acute as in other AEs.

Source: IMF staff.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

Annex II. Figure 2. Australia: Debt Coverage and Disclosures

						Comments
1. Debt coverage in the DSA: 1/	CG	GG	NFPS	CPS	Other	
1a. If central government, are non-central government entities insignificant?					n.a.	

2. Subsectors included in the chosen coverage in (1) above:

					Subsectors captured in the baseline	Inclusion	Comments
CPS	NFPS	GG: expected	CG	1	Budgetary central government	Yes	
				2	Extra budgetary funds (EBFs)	No	Not applicable
				3	Social security funds (SSFs)	No	
				4	State governments	Yes	
				5	Local governments	Yes	
				6	Public nonfinancial corporations	No	
				7	Central bank	No	
				8	Other public financial corporations	No	

3. Instrument coverage:	Currency & deposits	Loans	Debt securities	Oth acct. payable 2/	IPSGSs 3/

4. Accounting principles:	Basis of recording		Valuation of debt stock		
	Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/

5. Debt consolidation across sectors:	Consolidated	Non-consolidated

Color code: chosen coverage; Missing from recommended coverage; Not applicable

Reporting on Intra-government Debt Holdings

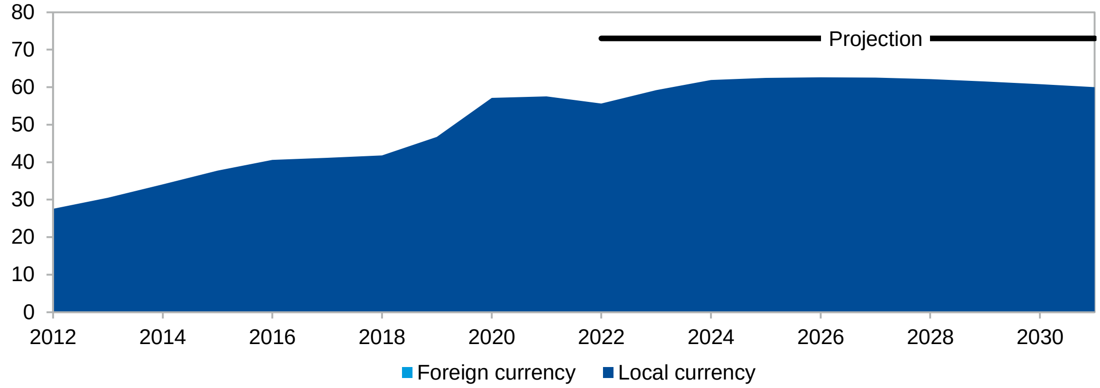
					Holder / Issuer	Budget. central govt	Extra-budget. funds	Social security funds	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
CPS	NFPS	GG: expected	CG	1	Budget. central govt									0
				2	Extra-budget. funds									0
				3	Social security funds									0
				4	State govt.									0
				5	Local govt.									0
				6	Nonfin pub. corp.									0
				7	Central bank									0
				8	Oth. pub. fin. corp									0
					Total	0	0	0	0	0	0	0	0	0

1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.
2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.
3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.
4/ Includes accrual recording, commitment basis, due for payment, etc.
5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.
7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

Annex II. Figure 3. Australia: Public Debt Structure Indicators

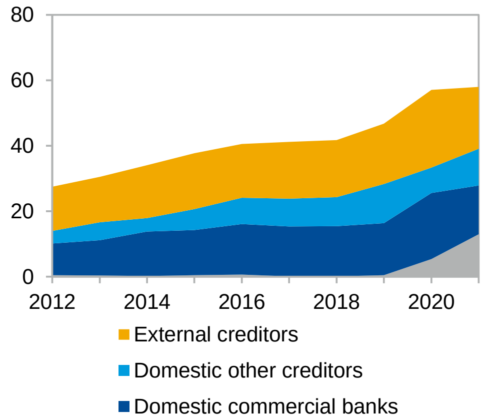
Australia: Public debt structure indicators

Debt by Currency (percent of GDP)



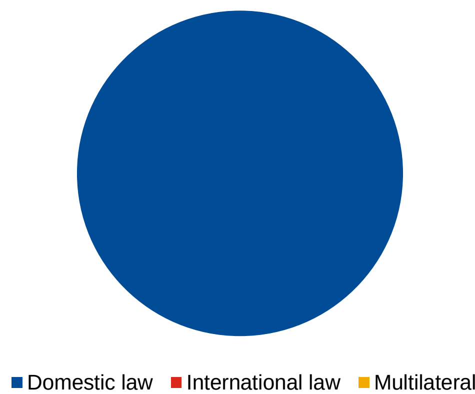
Note: The perimeter shown is general government.

Public Debt by Holder (percent of GDP)



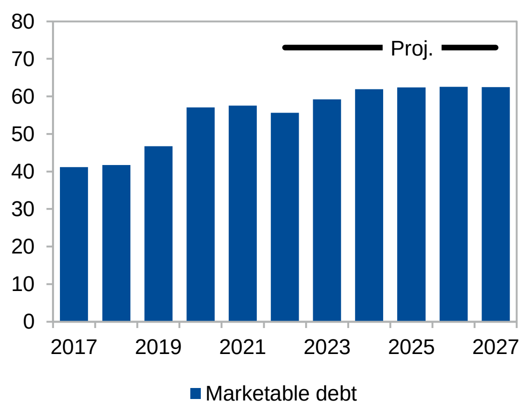
Note: The perimeter shown is general government.

Public Debt by Governing Law, 2021 (percent)



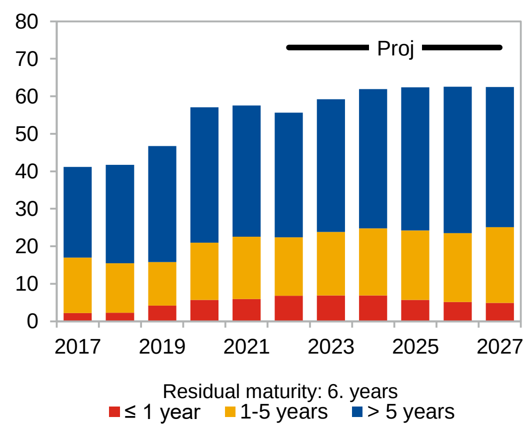
Note: The perimeter shown is general government.

Debt by Instruments (percent of GDP)



Note: The perimeter shown is general government.

Public Debt by Maturity (percent of GDP)

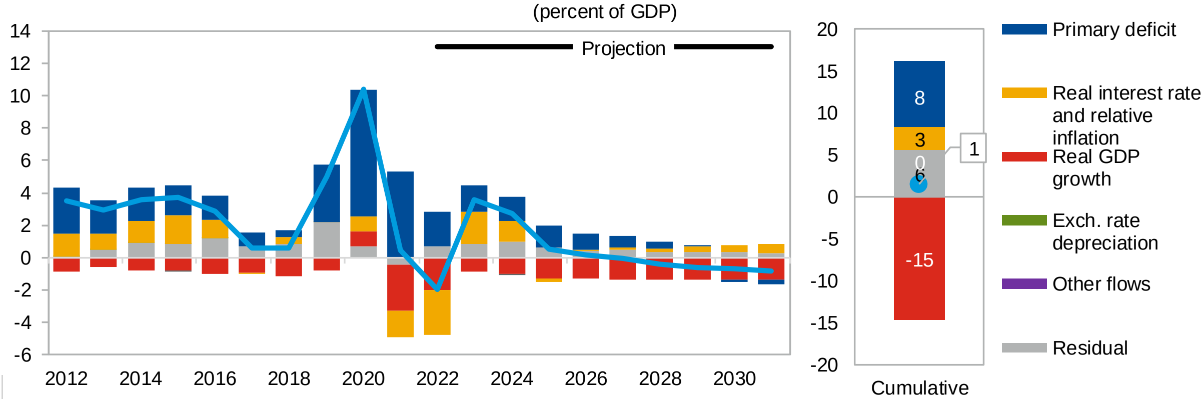


Note: The perimeter shown is general government.

Annex II. Figure 4. Australia: Baseline Scenario
(Percent of GDP unless indicated otherwise)

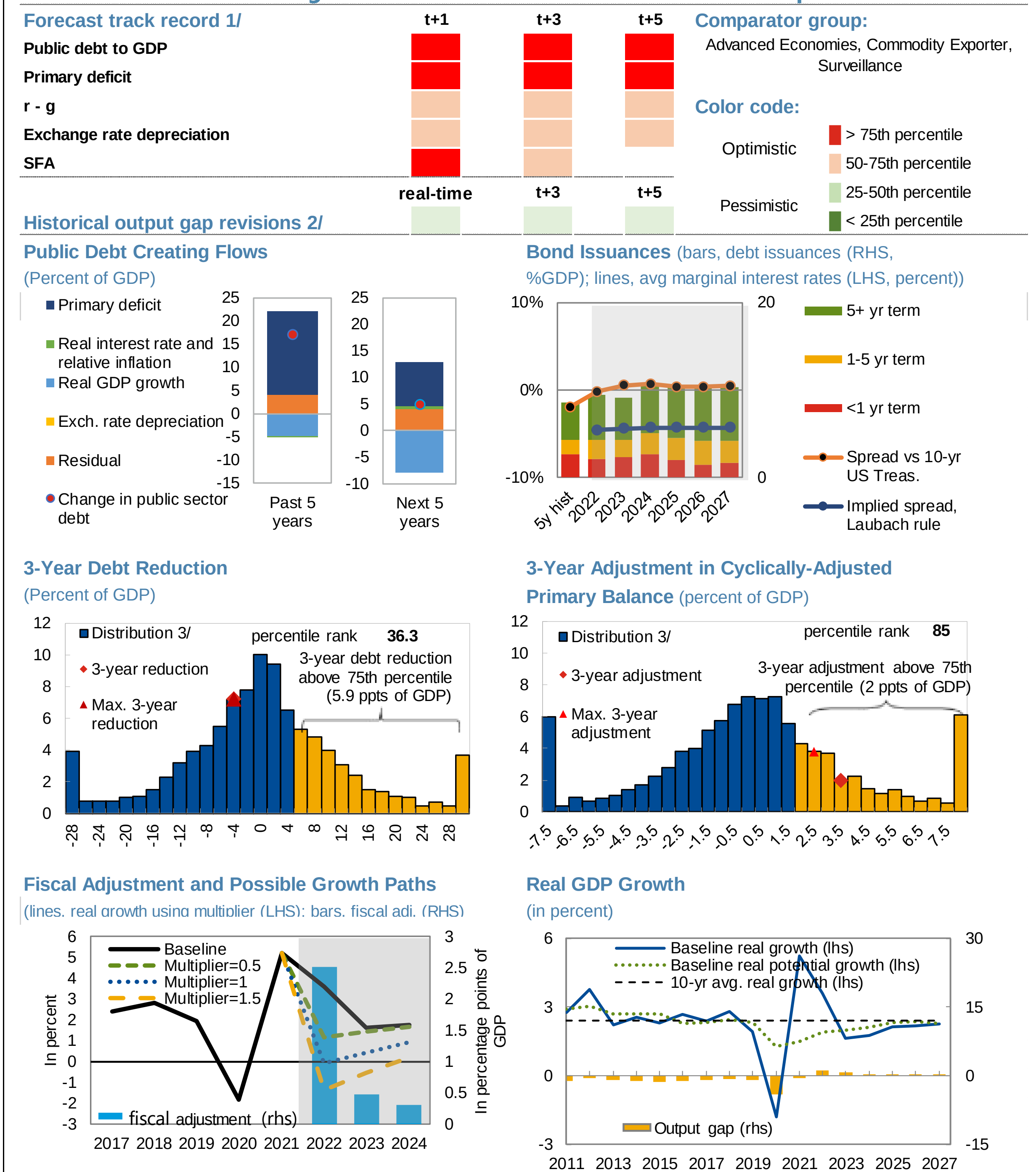
	Actual	Medium-term projection						Extended projection			
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Public debt	57.6	55.6	59.2	61.9	62.4	62.6	62.5	62.1	61.5	60.8	60.0
Change in public debt	0.5	-1.9	3.6	2.7	0.5	0.2	-0.1	-0.4	-0.6	-0.7	-0.8
Contribution of identified flows	0.9	-2.7	2.8	1.7	-0.1	-0.2	-0.6	-0.8	-0.9	-1.0	-1.1
Primary deficit	5.3	2.1	1.6	1.5	1.4	1.0	0.7	0.4	0.1	-0.1	-0.3
Noninterest revenues	35.6	35.0	35.9	36.3	36.2	36.5	36.7	36.7	36.8	36.8	36.9
Noninterest expenditures	40.9	37.1	37.5	37.8	37.6	37.5	37.4	37.1	36.9	36.7	36.6
Automatic debt dynamics	-4.5	-4.8	1.1	0.2	-1.5	-1.3	-1.3	-1.2	-1.0	-0.9	-0.8
Real interest rate and relative inflation	-1.6	-2.8	2.0	1.2	-0.2	0.1	0.1	0.2	0.3	0.5	0.6
Real interest rate	-1.6	-2.8	2.0	1.2	-0.2	0.1	0.1	0.2	0.3	0.5	0.6
Relative inflation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real growth rate	-2.8	-2.0	-0.9	-1.0	-1.3	-1.3	-1.4	-1.4	-1.4	-1.4	-1.3
Real exchange rate	0.0	…	…	…	…	…	…	…	…	…	…
Other identified flows	0.0	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	0.0
Other transactions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contribution of residual	-0.4	0.7	0.8	1.0	0.6	0.4	0.5	0.4	0.3	0.3	0.3
Gross financing needs	13.4	9.5	9.1	10.6	10.6	10.4	10.4	10.7	11.3	11.5	11.6
of which: debt service	8.4	7.7	7.8	9.4	9.6	9.7	10.0	10.6	11.5	12.0	12.2
Local currency	8.4	7.7	7.8	9.4	9.6	9.7	10.0	10.6	11.5	12.0	12.2
Foreign currency	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memo:											
Real GDP growth (percent)	5.2	3.6	1.6	1.7	2.1	2.2	2.3	2.3	2.3	2.3	2.3
Inflation (GDP deflator; percent)	5.6	7.7	-1.2	0.4	2.9	2.4	2.5	2.5	2.5	2.5	2.5
Nominal GDP growth (percent)	11.1	11.6	0.4	2.2	5.1	4.7	4.8	4.8	4.8	4.8	4.8
Effective interest rate (percent)	2.4	2.3	2.5	2.6	2.6	2.6	2.7	2.9	3.1	3.3	3.5

Contribution to Change in Public Debt
(percent of GDP)



Staff commentary: Public debt is projected to increase in the near term due to rising debt servicing costs and primary deficits, but stabilize over the medium term. The primary balance is projected to improve more gradually due to increases in structural spending.

Annex II. Figure 5. Australia: Realism of Baseline Assumptions



Commentary: The strong economic recovery and favorable terms-of-trade developments raised tax revenues, outperforming the budgets by a significant margin, and reduced the overall deficit and the debt-to-GDP ratio. The staff projections in the recent years are more closely aligned with the outturns. Moving forward, the primary balance is projected to improve, albeit at a moderate pace, and debt reduction will be limited due to rising debt servicing costs.

Source: IMF staff.

1/ Projections made in the October and April WEO vintage.

2/ Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estimates and final estimates in the latest October WEO) in the total distribution of revisions across the data sample.

3/ Data cover annual observations from 1990 to 2019 for MAC advanced and emerging economies. Percent of sample on vertical axis.

Annex II. Figure 6. Australia: Medium-term Risk Analysis

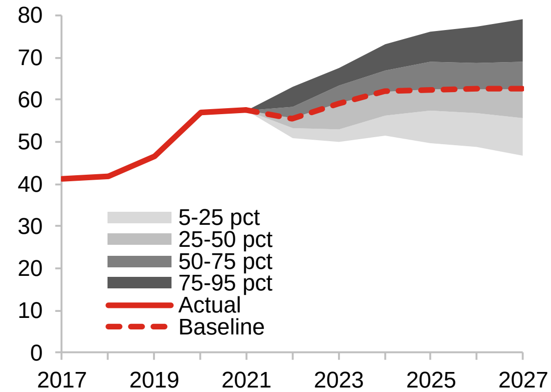
Debt fanchart and GFN financeability indexes

(percent of GDP unless otherwise indicated)

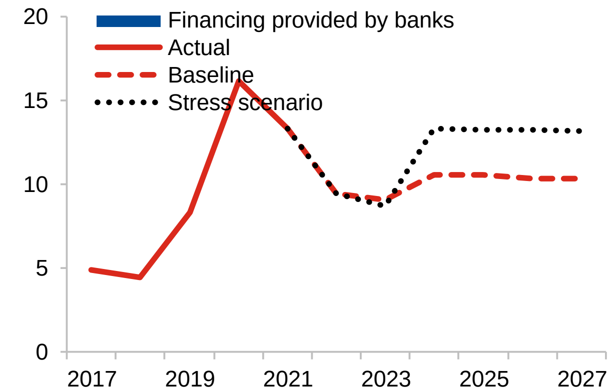
Module	Indicator	Value	Risk index	Risk signal	Advanced Economies, Commodity (0 – 25 – 50 – 75 – 100)
Debt fanchart module	Fanchart width	32.4	0.5	…	
	Probability of debt not stabilizing (pct)	21.4	0.2	…	
	Terminal debt level x institutions index	9.5	0.2	…	
	Debt fanchart index	**…**	**0.9**	**Low**	
GFN finance-ability module	Average GFN in baseline	10.1	3.4	…	
	Bank claims on government (pct bank assets)	5.2	1.7	…	
	Chg. in claims on govt. in stress (pct bank assets)	2.3	0.8	…	
	GFN financeability index	**…**	**5.9**	**Low**	

Legend: Interquartile range; Australia

Final Fanchart (pct of GDP)



Gross Financing Needs (pct of GDP)

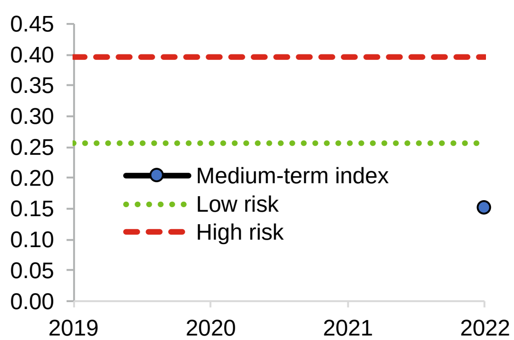


Triggered stress tests (stress tests not activated in gray)

Banking crisis | Commodity prices | Exchange rate | Contingent liab. | Natural disaster

Medium-term Index

(index number)



Medium-term Risk Analysis

	Low risk threshold	High risk threshold	Weight in MTI	Normalized level
Debt fanchart index	1.1	2.1	0.5	0.2
GFN finaceability index	7.6	17.9	0.5	0.1
Medium-term index (MTI)	0.3	0.4	…	0.2, Low

Prob. of missed crisis, 2022-2027 (if stress not predicted): 0.0 pct.

Prob. of false alarm, 2022-2027 (if stress predicted): 70.5 pct.

Commentary: A risk of debt not stabilizing in the medium term remains low. Likewise, a debt-rollover risk remains low, as indicated by the signal from the gross financing needs (GFN) analysis, driven by the depth of the financial sector and domestic capital markets to meet increased financing needs. The results are consistent with Australia's credible fiscal framework, institutions, and deep capital markets.

Annex III. External Sector Assessment

Overall Assessment: *On a preliminary basis, the external position in 2022 is expected to be broadly in line with the level implied by medium-term fundamentals and desirable policies.* The CA surplus is expected to decline from 3.1 percent of GDP in 2021 to 0.9 percent of GDP in 2022, as the impact of higher prices for Australia's commodity exports is offset by a lower primary income balance and larger service imports. In the medium term, the CA is projected to return to a slight deficit as commodity prices decline, savings return to historical levels, and investment picks up. This assessment is highly uncertain given the lack of full-year data for 2022 and volatility in commodity prices. A more complete analysis will be provided in the 2023 External Sector Report.

Potential Policy Responses: Given the strong economic recovery and elevated inflation, withdrawing fiscal and monetary stimulus at an appropriate pace is warranted for Australia. While the closing of the output gap will push the current account surplus higher, this should be offset by a decrease in private savings, which are at elevated levels in part due to the large pandemic-related fiscal stimulus. Furthermore, policies that boost investment (executing planned infrastructure investment, streamlining product market regulation, promoting R&D and innovation investment) can also contribute to reducing the CA surplus. Australia's commitment to a floating exchange rate should help keep the external position in line with fundamentals going forward.

<table>
<tr><td>Foreign Asset and Liability Position and Trajectory</td><td colspan="5">Background. Australia's NIIP is projected to improve slightly to –33.2 percent of GDP in 2022 from –33.8 percent of GDP in 2021 (and an average of –49 percent over the last five years), driven by the CA surplus. While about 40 percent of Australia's gross liabilities are debt obligations, more than half of the debt liabilities are denominated in domestic currency, while assets are largely denominated in foreign currency. Foreign liabilities are composed of about one-quarter FDI, one-half portfolio investment (principally banks' borrowing abroad and foreign holdings of government bonds), and one-quarter other investments and derivatives.

Assessment. The NIIP level and trajectory are sustainable. The structure of Australia's external balance sheet reduces the vulnerability associated with its negative NIIP. With a positive net foreign currency asset position, a nominal depreciation tends to strengthen the external balance sheet, all else being equal. The banking sector's net foreign currency liability position is mostly hedged and the maturity of banks' external funding has lengthened since the global financial crisis. Despite the recent increase in debt, the government's balance sheet remains strong and can provide credible support in a tail-risk event in which domestic banks suffer a major loss.</td></tr>
<tr><td>2022 (% GDP)</td><td>NIIP: -33.2</td><td>Gross Assets: 155.1</td><td>Debt Assets: 35.0</td><td>Gross Liab.: 188.2</td><td>Debt Liab.: 74.5</td></tr>
<tr><td>Current Account</td><td colspan="5">Background. While Australia has historically run deficits, the CA balance has been in surplus from 2019 through to 2021. After peaking at 3.1 percent of GDP in 2021, the CA balance is projected to decline to 0.9 percent of GDP in 2022. The merchandise trade balance is projected to increase further, from 5.3 percent of GDP in 2021 to 6.3 percent of GDP in 2022, driven by high prices for Australian commodity exports, most notably thermal coal and LNG (even as iron ore prices come off their 2021 highs). The higher merchandise trade balance is expected to be offset by a 2.2 percent of GDP deterioration in the primary income balance (due to higher dividend payments on Australia's equity liabilities, including in the mining sector) and a 1.2 percent deterioration in the services balance (due to higher transport service costs and a return to lower tourism surpluses as tourism imports recover). From a savings-investment perspective, the decline in surplus in 2022 is driven by a projected decline in the savings rate from the pandemic-era highs. While there is considerable uncertainty, the CA is expected to gradually return to a small deficit over the medium term as commodity prices decline, investment picks up, and savings decline further from still elevated levels.

Assessment. On a preliminary basis, the EBA model estimates a cyclically adjusted CA balance of -1.9 percent of GDP compared with a CA norm of –0.7 percent of GDP, suggesting a model-based CA gap of -1.2 percent of GDP. However, in IMF staff's view, a net adjustment of +0.6 percent of GDP is warranted to reflect temporary factors related to the COVID-19 shock, including changes to the transport services</td></tr>
</table>

	balances (+0.6) due to high shipping costs. Taking this adjustment into consideration, the IMF staff-adjusted CA gap is in the range of -1.2 to 0 percent of GDP, with a midpoint of -0.6 percent of GDP.						
2022 (% GDP)	CA: 0.9	Cycl. Adj. CA: -1.9	EBA Norm: –0.7	EBA Gap: -1.2	COVID-19 Adj.: 0.6	Other Adj.: 0	Staff Gap: -0.6
Real Exchange Rate	**Background.** As with most other currencies, the Australian dollar has depreciated against the US dollar in 2022. However, as of October, Australia's average REER in 2022 is broadly at the same level as its 2021 average, and about 1.8 percent higher than its five-year average. **Assessment.** IMF staff CA gap implies a REER gap of 3 percent (applying an estimated elasticity of 0.2). The EBA REER level model points to an overvaluation of 22 percent, while the index model points to an undervaluation of 18.6 percent. Consistent with the CA gap, the IMF staff assesses the REER gap to be in the range of 0 to +6 percent, with a midpoint of 3 percent.						
Capital and Financial Accounts: Flows and Policy Measures	**Background.** The financial account recorded net cumulative outflows through the first three quarters of 2022, reflecting the CA surplus. While Australia has historically had net FDI inflows, there were large net FDI outflows in the first three quarters of the year (2.6 percent of GDP), driven by asset purchases abroad by Australian residents. Other investment outflows were also large (2.1 percent of GDP). FDI and other investment outflows were partly offset by large net portfolio inflows (4.1 percent of GDP), mainly reflecting inflows into Australian equities. Net derivative flows were small. **Assessment.** Vulnerabilities related to the financial account remain contained, supported by a credible commitment to a floating exchange rate.						
FX Intervention and Reserves Level	**Background.** The currency has been free-floating since 1983. The central bank has not intervened in the FX market since the global financial crisis. Reserve assets have remained stable in 2022. **Assessment.** The authorities are strongly committed to a floating regime, which reduces the need for reserve holdings. Although domestic banks' external liabilities remain sizable, they are either in local currency or hedged, so reserve needs for prudential reasons are also limited.						

Annex IV. Risk Assessment Matrix

	Source of risks	Likelihood	Time horizon	Impact	Policies to reduce impact
	Conjunctural Risks				
	Abrupt global slowdown or recession	**H**	Short term	**H** Idiosyncratic risk factors in the US (persistently high inflation where the Fed tightens more than expected, resulting in a "hard landing"), China (COVID-19, geopolitical tensions, larger-than-expected slowdown in the property sector), and in Europe (war in Ukraine, acute gas shortages), could cause a synchronized sharp growth slowdown. Weak external demand from trading partners will adversely affect export commodity prices and export volumes.	Fiscal policy should ease the pace of consolidation and provide targeted support to the vulnerable and to susceptible sectors.
	Intensifying spillovers from Russia's war in Ukraine and impact on commodity prices.	**H**	Short term	**H** Further sanctions from the war exacerbate trade and financial disruptions, and commodity price volatility. Australia benefits from high commodity prices, but volatility could increase uncertainty and impact the business environment, while import prices could increase and have bigger-than-expected effects on inflation and supply chains.	Monetary policy should tighten faster than in the baseline, especially if inflation expectations rise. In case of heightened uncertainty, fiscal stimulus can provide targeted support as needed but should avoid fueling inflation.
	Local COVID-19 outbreaks	**M**	Short to medium term	**M/L** Outbreaks in slow-to-vaccinate countries or emergence of more contagious vaccine-resistant variants force new lockdowns or inhibit commerce and extend supply chain disruptions. Uncertainty will adversely affect household consumption and business investment.	Continued multilateral efforts for higher vaccination outcomes worldwide. In case of severe outbreaks, implement targeted fiscal stimulus in a timely manner with use of fiscal space, while monetary tightening could pause.
	Structural Risks				
	Deepening geo-economic fragmentation and geopolitical tensions	**H**	Short to medium term	**M/H** Geopolitical tensions and reduced international cooperation in selected countries/regions may cause economic/political uncertainty, reconfiguration of trade, supply disruptions, technological fragmentation, and lower confidence, with potential spillovers to Australia.	Continued pursuit of open market policies for trade and a renewed effort in international cooperation to foster trade.

	Source of risks	Likelihood	Time horizon	Impact	Policies to reduce impact
↓	Cyberthreats	**M**	Short to medium term	**M/H** Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) trigger financial instability and disrupt economic activities.	Increase spending on cybersecurity to ward off cyberattacks and to improve the resiliency to incidents.
Domestic Risks					
↓	De-anchoring of inflation expectations leading to tightening domestic financial conditions	**M**	Short term	**H** Tighter financial conditions due to de-anchoring of inflation expectations would adversely affect asset prices, household consumption, and investment.	Monetary policy should be tightened decisively, and should be dependent on the evolution of wages and inflation expectations.
↓	Unexpectedly large or disorderly housing market disruptions	**M**	Short to medium term	**M** Larger than expected declines in housing prices alongside tightening of financial conditions would adversely affect household wealth and consumption, and could expose pockets of financial vulnerabilities.	Monetary policy should remain focused on inflation but should be re-calibrated if private demand falls more than expected, with targeted fiscal support for vulnerable households as appropriate. Close financial sector supervision remains essential.
↓	Higher frequency and severity of natural disasters related to climate change	**H**	Short to medium term	**H** Stronger and more frequent economic disruptions, including recurrence of severe droughts, bushfires, and floods.	Strengthen preparedness and resilience in vulnerable regions. Mitigate the economic impact on affected regions through disaster-related government programs. Strengthen international efforts to reduce global carbon emissions.

Annex V. Financial Sector Assessment Program Update[1]

Recommendation	Time Frame	Developments and Implementation
Banking and Insurance Supervision		
Strengthen the independence of APRA and ASIC, by removing constraints on policy making powers and providing greater budgetary and funding autonomy; strengthen ASICs enforcement powers and expand their use to mitigate misconduct (Treasury, APRA, ASIC).	ST	**In process.** • The Government sets ASIC's total budget to fund its regulatory activities, of which ASIC recovers the majority through its industry funding model (IFM) which was established in 2017. Within this total budget, ASIC determines how it allocates its resources to regulate different industry sectors and achieve its statutory objectives. The Government is currently reviewing the ASIC IFM. • ASIC has been provided with significant additional funding since 2019-20 to support the implementation of the Financial Services Royal Commission, as well other measures. • The Australian Government has also made a number of changes to ASIC's enforcement powers: (i) on April 6, 2019, ASIC was granted a product intervention power. It allows ASIC to temporarily intervene in a range of ways, including to ban financial products and credit products when there is a risk of significant consumer detriment. ASIC has used this power in the area of short-term credit, continuing credit contract, binary options, and CFDs; and (ii) on February 18, 2019, Parliament passed legislation to significantly increase penalties for corporate and financial sector misconduct. (iii) On February 6, 2020, Parliament passed legislation to strengthen ASIC's licensing and banning powers and enhance ASIC's investigatory capability. (iv) On December 10, 2020, Parliament passed legislation to: - enable ASIC to designate enforceable code provisions in approved codes of conduct which, if breached, may attract civil penalties; and establish a mandatory code of conduct framework for the financial services and consumer credit industry through regulations, with the ability to designate

[1] I Immediate (within 1 year); ST Short term (within 1-2 years); MT Medium term (within 3-5 years).

Sources: IMF (2019), Australia, Financial Sector Assessment Program—Financial System Stability Assessment; and the Australian authorities.

Recommendation	Time Frame	Developments and Implementation
		certain provisions as civil penalty provisions. The regime became effective from January 1, 2020. - enhance ASIC's regulatory and supervisory tools by strengthening breach reporting requirements for financial service and credit licensees. The regime commenced on October 1, 2021 • The Government sets APRA's total budget to fund its regulatory activities, of which APRA recovers the majority through its Financial Institutions Supervisory Levies (FISLs) levied on APRA-regulated institutions. Within this total budget, APRA determines how it allocates its resources to regulate different industry sectors and achieve its statutory objectives • APRA was provided A$67.3 million in additional funding in the 2021-22 MYEFO to maintain its capacity to respond to risks within the financial system. This built on $145 million provided in the 2019-20 Budget to strengthen APRA's supervisory and enforcement activities, and $28.8 million provided in the 2020-21 Budget to boost APRA's capacity to respond to risks in the financial system. This funding is cost-recovered from industry.
Enhance APRA's supervisory approach by carrying out periodic in-depth reviews of governance and risk management (APRA).	ST	**In process.** • APRA has built the capability to undertake in-depth reviews of governance and risk management and conducts entity-specific and thematic reviews in this area on a regular basis. • Since its November 2019 information paper *Transforming Governance, Culture, Remuneration and Accountability: APRA's Approach*, APRA has concentrated its supervisory efforts on ensuring risk governance deficiencies in a number of financial institutions identified from a program of self-assessments in 2018 are addressed to APRA's satisfaction through remediation plans. The first of these are now complete, leading to removal of capital overlays put in place to address these weaknesses. • This enhanced supervisory approach to addressing risk governance weaknesses is being applied to other institutions which show similar deficiencies. Work is underway to codify this supervisory methodology for assessing risk transformation into APRA's supervision model. • The enhanced focus on governance and risk management under APRA's Supervision Risk and Intensity (SRI) model has detailed guidance supporting assessment of governance, risk culture, remuneration and accountability (GCRA). This ensures weaknesses in these areas in individual entities

Recommendation	Time Frame	Developments and Implementation
		drives escalation and requires supervisory action to address them. • APRA is also reviewing prudential standards for governance and risk management and intends to revise Prudential Standard CPS 510 Governance and Prudential Standard CPS 220 Risk Management.
Strengthen the integration of systemic risk analysis and stress testing into supervisory processes (APRA, RBA).	I	**Complete.** • APRA's Supervision Risk and Intensity (SRI) model incorporates an External Factors category covering macro and systemic risk for each industry. In addition, macro and industry risks are identified by dedicated Strategic Insights teams, with these risks being captured in Industry Risk registers, overseen by Industry Groups. These risks are considered in the development of Industry Strategies, which can result in the conduct of thematic reviews across industries and / or specific entity reviews. • The capital section of the SRI model requires supervisors to consider the results of recent stress tests in determining the appropriate rating of capital. Stress testing is also an input into various supervisory processes including annual ICAAP reviews, capital reductions, dividend considerations and broader capital settings. A stress testing handbook has been developed to provide supervisors with guidance in assessing stress testing approaches. • APRA increased its stress testing activities across all regulated industries and analyzed results under a range of scenarios to identify potential vulnerabilities, including regulated institutions that may be at a heightened risk of failure. Collaboration with the RBA in modeling scenarios and comparing results also increased. Ongoing development of scenarios to reflect contemporary macro risk, such as high inflation is also incorporated into regular practice. APRA has transitioned to an annual stress testing program for the ADI industry. APRA has continued to develop internal stress testing models across banking, insurance and superannuation to provide insight and inform supervisory and policy priorities.
Financial Stability Analysis		
Commission and implement results of a comprehensive forward-looking review of potential data needs. Improve the quantity, quality, granularity and consistency of data available to the CFR agencies to support financial supervision, systemic	MT	**In process.** • A Multi-Agency Data Collection Committee has been established which includes APRA, ASIC, RBA, Treasury, the Australian Taxation Office, and the Australian Bureau of Statistics. • The Committee is reviewing the potential data needs of agencies in a forward-looking way to identify data gaps and exploring opportunities to streamline activities associated

Recommendation	Time Frame	Developments and Implementation
risk oversight and policy formulation (CFR agencies).		with the collection and use of data to improve the quantity, quality, granularity and consistency. Goal is to support the agencies to perform their functions and exercise their powers, and allow for a unified and strategic approach to data across the agencies. • The Committee has endorsed a work program that includes regularly reviewing a list of programs to close identified data gaps. • A new data collection solution for APRA and all reporting entities, APRA Connect, launched in September 2021. Data collected by APRA is used for prudential supervision, statistical publications and shared with other agencies. APRA's new data collections are structured to contain granular data, requiring less transformation and manipulation by reporting entities, and a greater ability for APRA to reuse the data. • APRA released a discussion paper on APRA's Direction for data collections in March 2022 which provides a vision for data collections that are multi-use, deeper and broader data sets that have a greater capacity to be shared with other agencies. • APRA's pipeline of new and amended data collections across industries includes: (i) new tactical and strategic collections capturing relevant data for credit activities of banks; (ii) new data collections to support better insights relating to APRA's prudential standards about remuneration and operational risk and additional non-financial risk data collections; and (iii) enhancements to existing data collections to reflect forthcoming changes in the capital framework for insurers. APRA's Superannuation Data Transformation (SDT) project will also facilitate the collection of more granular data. • ASIC has built an advanced data collection portal to improve how data is collected recurrently, consistently, safely, and securely. A trial was conducted in November 2021 with limited firms. Phase 2 of the project, which is scheduled for August 2023, will see a significant increase in participating firms.
Enhance the authorities' monitoring, modeling, and stress testing framework for assessing solvency, liquidity and contagion risk. Draw on the results to inform policy formulation and evaluation (CFR agencies).	ST	**Complete.** • APRA undertakes a number of stress tests based on a range of scenarios designed to assess the resilience of the banking system and insurance industries to a continually evolving economic outlook, with an emphasis on severe downside risks. The industry stress tests include both a solvency and a liquidity risk component.

Recommendation	Time Frame	Developments and Implementation

		• APRA has further continued to build the functionality of its internal stress testing modeling to enable it to challenge industry stress test submissions and to more nimbly stress test output to internally generated stress testing scenarios. APRA and RBA stress testing teams engage directly to share and build stress testing model capabilities.
		• APRA has transitioned to an annual stress testing of large ADIs.
		• APRA also undertakes stress testing of resilience to broader scenarios and a broader range of risks, including the impacts from operational and climate change financial risks. APRA undertook a Climate Vulnerability Assessment (CVA) of large banks in 2021-22, with results published in November 2022. This is a joint CFR initiative and has three key objectives:
		  • to assess potential financial exposure to climate risk;
		  • to understand how banks may adjust business models and implement management actions in response to different scenarios; and
		  • to foster improvement in climate risk management and stress testing capabilities.

Encourage further maturity extension and lower use of overseas wholesale funding (APRA).	I	**In process.** • Banks' offshore funding is kept under close scrutiny by the CFR agencies, and while such funding can create vulnerabilities, they are mitigated in Australia because a sizeable portion of foreign funding is swapped into Australian dollars and used to acquire Australian dollar assets. • Australian banks' overseas wholesale funding is currently lower than in recent history given their use of the RBA's TFF. The Term Funding Facility (TFF) closed to new drawdowns in June 2021, and banks' overseas issuance is expected to pick up as they refinance maturing TFF debt through to June 2024. The refinancing task is assessed to be sizeable but manageable.
Systemic Risk Oversight and Macroprudential Policy		
Raise formalization and transparency of the CFR and accountability of its member agencies through publishing meeting records as well as publication and presentation of an Annual Report to Parliament by CFR agency Heads (CFR agencies).	I	**In process.** • The CFR has taken a number of steps to increase transparency, including: (i) publishing a statement following regular CFR meetings since December 2018; (ii) increasing coverage of the CFR's work in the RBA's Financial Stability Review (released bi-annually); and (iii) updating the CFR website to be more informative about the role and work of CFR.

Recommendation	Time Frame	Developments and Implementation
		• The Government has established the Financial Regulator Assessment Authority (FRAA), which will report on the effectiveness and capability of ASIC and APRA. The FRAA conducts biennial reviews of each regulator, and completed its inaugural review of ASIC in August 2022. The FRAA has commenced its review of APRA, and is due to report its findings to the Government in June 2023. The FRAA does not have the power to direct the regulators, assess single cases or decisions, or deal with complaints about the regulators. The Government's Review of the Reserve Bank will consider macroprudential governance arrangements. Macroprudential policies are discussed by the CFR and APRA may take account of those discussions in determining macroprudential policy.
Undertake a CFR review of the readiness to apply an expanded set of policies to address systemic risks, including data and legal/regulatory requirements; and address impediments to their deployment (CFR agencies).	I	**In process.** • The Housing Market Risks Working Group, under the CFR, actively considers risks to the financial system as well as appropriate policies to address potential risks. The group continues to work on what tools might be available were they needed at some point in the future, the circumstances when they might be suitable, and any restrictions on their use (e.g., data availability). • In November 2021, APRA published an information paper setting out its framework for macroprudential policy. APRA's paper outlines its policy objectives, macroprudential toolkit and approach to implementing macroprudential policy, including the role of the CFR. APRA has also made changes to APRA's prudential framework to require banks to be operationally positioned to implement specified macroprudential policy measures (e.g. limit higher risk lending) if needed. These changes came into effect from September 2022, and are aimed at improving the transparency, timeliness and effectiveness of future responses to systemic risks.
Commission analysis by the CFR member agencies on relevant financial stability policy issues, including: policies affecting household leverage; as well as factors affecting international investment flows and their implications for real estate markets (CFR agencies).	MT	**In process.** • The CFR actively considers the impact of policy changes on financial stability. The Housing Market Risks Working Group frequently reports to the CFR on any risks in the housing market. • The RBA participated in a Committee on the Global Financial System (CGFS) working group which studied property price dynamics and, in particular the influence of international investors. Its report was released in February 2020. • The RBA is participating in a new CGFS study group on policies to mitigate housing-related risks. The aim of the group is to take stock of recent experience with macroprudential measures targeting housing markets. The

Recommendation	Time Frame	Developments and Implementation
		group commenced work in October 2022 and will submit its report in September 2023.
Financial Crisis Management and Safety Nets		
Complete the resolution policy framework and expedite development of resolution plans for large and mid-sized banks and financial conglomerates, and subject them to annual supervisory review (APRA, Treasury).	ST	**In process.** • APRA is on track to have a resolution planning framework in place for Australia in 2024, through APRA's new standard CPS 900 Resolution Planning. • Over the past 12 months, APRA issued CPS 900 for consultation along with accompanying guidance. The standard and guidance are expected to be become effective from 1 January 2024. • APRA's internal readiness to execute a resolution continues to progress, with specific live case examples driving significant enhancements to the resolution operating model and continued resource build. • Work on resolution planning is ongoing, with considerable progress made on select entities APRA has conducted pilot resolution planning exercises with, including establishing entity-specific Crisis Management Groups (CMGs). APRA anticipates additional pilot exercises will commence prior to the in-force date of CPS 900. • The FRAA is currently conducting its first review of APRA. The FRAA are assessing APRA's effectiveness and capability of its supervision and resolution functions, focusing on superannuation. The review will be made public in the second half of 2023.
Extend resolution funding options by expanding loss-absorption capacity for large and mid-sized banks and introduce statutory powers (APRA, Treasury).	ST	**Complete.** • On November 8, 2018, APRA released a discussion paper outlining its proposed changes to the application of the capital adequacy framework for banks, increasing loss-absorbing capacity (LAC) to support orderly resolution in the unlikely event of failure. These changes follow the Australian Government's 2014 Financial System Inquiry recommendation to APRA to implement a framework for minimum loss-absorbing and recapitalization capacity in line with emerging international practice, sufficient to facilitate the orderly resolution of banks and minimize taxpayer support. • In early July 2019, APRA finalized its approach to LAC for banks, including requiring the D-SIBs to lift Total Capital by three percentage points of RWA by January 1, 2024. In 2021 APRA finalized the requirement for the D-SIBs increasing Total Capital by 4.5 percentage points in aggregate. Requirements for the other entities, including mid-sized banks will be determined as part of resolution planning,

Recommendation	Time Frame	Developments and Implementation
		which APRA will seek to undertake following the finalization of CPS 900.
Advance mutual understanding between the Australia and New Zealand resolution authorities on cross-border bank resolution modalities, through the Trans-Tasman Banking Council (TTBC) (CFR agencies).	ST	**In process**. • The TTBC, comprised of Australian and New Zealand authorities, continues to discuss and develop mutual understanding of matters relating to cross-border financial stability and bank resolution. APRA continues to work closely with members of the CFR and TTBC on crisis preparedness related work. • APRA, in conjunction with the RBNZ, has established the first entity-specific Crisis Management Group (CMG) for a Trans-Tasman bank at end-2019, the group comprises APRA and RBNZ resolution specialists, supervisors and members of ASIC, FMA and RBA. Due to COVID-19 the CMG did not hold a meeting until 2021; a second meeting was held in 2022. The CMG has proven to be an effective forum for the development and evaluation of detailed resolution strategies. • Once CPS 900 resolution planning is in force, APRA will look to undertake resolution planning with a broader cohort of the regulated population, which would include detailed resolution planning for other Trans-Tasman banks.
Financial Market Infrastructure		
Strengthen independence of RBA and ASIC for supervisory oversight, enhance enforcement powers and promote compliance with regulatory requirements.	I	**In process.** • The CFR provided advice to government in July 2020 recommending enhancements to Australia's FMI regulatory regime. This included proposals for: o enhanced powers for ASIC and the RBA to support their supervision of FMIs, their ability to take action to address any identified deficiencies, and o the transfer of a range of licensing and supervisory powers from the Minister to ASIC and the RBA.
Finalize the resolution regime for FMIs in line with the FSB Key Attributes (RBA, ASIC, Treasury).	ST	**In process.** • The CFR provided advice to government in July 2020 recommending enhancements to Australia's FMI regulatory regime. This included a proposal to establish a resolution regime for domestic clearing and settlement facility licensees. • The government is committed to FMI reforms, but given complexities, implementation will take a few years.
Anti-Money Laundering / Countering the Financing of Terrorism (AML/CFT)		
Expand the AML/CFT regime to cover all designated non-financial businesses and	I	**In process.** *Undertaking supervision*

Recommendation	Time Frame	Developments and Implementation
professions (DNFBPs) and strengthen AML/CFT supervision by: improving data collection and risk analysis; increasing oversight of controls and compliance; and undertaking more formal enforcement action in the event of breaches (Attorney-General's Department, Treasury, AUSTRAC).		• AUSTRAC oversees the compliance of more than 17,000 Australian regulated businesses, referred to as reporting entities. These include businesses such as banks and credit unions, non-bank lenders and stockbrokers, gambling and bullion service providers, remittance providers and digital currency exchanges. • The *Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (AML/CTF Act) recognises that reporting entities are the first line of defence in protecting the financial system. The legislative framework instils a risk-based approach placing the onus on reporting entities to identify, mitigate and manage their money laundering/terrorism financing risk. AUSTRAC's approach to regulation reflects this dynamic. • AUSTRAC supervisory teams initiated 19 assessments which cover the operations of 174 reporting entities. 9 of the 19 assessments initiated in 2021-22 were in the banking sector. These compliance assessments involve conducting a detailed review of a reporting entities compliance with certain AML/CTF obligations. • AUSTRAC's supervisory teams also manage an increasing number of reporting entities undertaking remediation to strengthen their AML/CTF controls following AUSTRAC regulatory activities. During 2021-22, AUSTRAC monitored 13 remediation activities which were either open from a previous period or were initiated and will continue into future years. • Approximately 220 reporting entities are impacted through those remediation engagements. In addition, AUSTRAC's supervisory teams have longstanding engagements with multiple reporting entities that have been undertaking remediation. *Improving data collection and building a picture of compliance risk* • In 2021, AUSTRAC delivered the first strategic assessment of compliance risk – the first of its kind to be produced by AUSTRAC. It provides a consolidated picture of the key compliance concerns across Australia's regulated population. This assessment has strengthened AUSTRAC's view of the compliance risk environment and provided an overarching strategic context for our work. • AUSTRAC continues to harness emerging technology to expand its regulatory capabilities. This is particularly important as AUSTRAC is responsible for regulating over 17,000 reporting entities. AUSTRAC has introduced a data

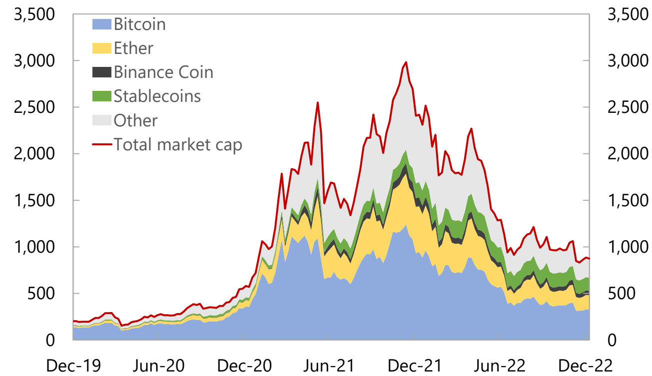
Recommendation	Time Frame	Developments and Implementation
		modelling capability to optimise its strategic use of data. The data modelling capability harnesses several data inputs to build an understanding of compliance risk • In April 2019, AUSTRAC implemented a program of regulatory monitoring and alerting, which analyses extensive data holdings to generate alerts that may indicate non-compliance with legislation. This capability has resulted in AUSTRAC swiftly engaging with reporting entities. • During the 2020-21 financial year, AUSTRAC finalized 31 compliance assessments across a range of sectors, including in the banking sector. *Risk assessments* • In 2020-21, to further enhance AUSTRAC capacity to identify current and emerging AML/CTF threats, AUSTRAC established a strategic intelligence capability. This capability built upon AUSTRAC's established risk assessment program. Since the standing up of the unit, eight strategic assessments have been completed on a diverse range of current and emerging issue impacting Australia's AML/CTF environment. Topics and sectors explored in these assessments include the post covid-19 environment, cash hoarding, casinos (3 assessments), Central Bank Digital Currencies, cryptocurrencies, labour hire and sanctions evasion. AUSTRAC also delivered three risk assessments examining the AML/CTF risks of remittance service providers, independent remitters and bullion dealers in Australia, and a ML/TF threat update of Australia's superannuation sector. *Education and Guidance* • AUSTRAC supports reporting entities through a comprehensive education and guidance program, tailored to suit their needs and capabilities. During 2021/22, AUSTRAC responded to over 13,000 enquiries via the Contact Centre, published 13 guidance products, undertook 21 induction workshops to over 800 participants, and completed 274 face to face onsite education sessions, predominantly to the pubs and clubs sector. *Enforcement* • AUSTRAC has taken formal enforcement actions against reporting entities for breaches of the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (AML/CTF Act). AUSTRAC applied to the Federal Court of Australia in March 2022 for civil penalty orders against Crown Melbourne Limited and Burswood Nominees Limited (Crown Perth). AUSTRAC also accepted an enforceable

Recommendation	Time Frame	Developments and Implementation
		undertaking requiring a range of remedial actions from National Australia Bank on 29 April 2022. • From June 17, 2021, reforms to the AML/CTF Act came into effect. The reforms clarify obligations regarding customer due diligence before providing a designated service, involve changes to strengthen the protections for correspondent banking relationships, expand the circumstances in which reporting entities can rely on a third party for customer identification and verification, and expand the exceptions to the prohibition of tipping off.

Annex VI. Recent Crypto and CBDC Developments in Australia

1. **During the ongoing global crypto market stress, the focus of market participants is largely on evolving steps toward greater regulation.** Efforts to enact regulation for crypto assets and their associated ecosystem are underway globally. The urgency and importance of having comprehensive regulation, supervision, and oversight of the crypto ecosystem was highlighted several times in 2022 following the crash of Luna, a major crypto asset, and the failure of its associated algorithmic stablecoin, TerraUSD in May, liquidation of Three Arrows Capital, a Singapore-based hedge fund in June, and the collapse of FTX, Alameda Research and BlockFi, globally among the largest crypto asset exchanges, crypto market makers, and crypto lenders, respectively, in November.

Crypto Market Capitalization
(US dollars, billions)



Sources: CoinGecko; and IMF staff calculations.

2. **The crypto ecosystem in Australia is small, with limited ties to the broader financial system, but with considerable interest across age cohorts.** There are more than 400 crypto asset exchanges registered in Australia, but the largest 10-12 account for the majority of retail activity. Precise estimates for the size of the crypto market in Australia are not available, but the authorities report that crypto activities and crypto products are a small part of overall transactions and offerings in Australia. The Australian Tax Office estimates that over 1 million Australians had crypto capital transactions in 2021-22. This is consistent with a 2022 survey[1] which showed that around 5 percent of the population owned crypto assets. A 2022 Australian Securities and Investments Commission (ASIC) report[2] found that, as of November 2021, surveyed people aged 18-34 were the most likely to own crypto assets (58 percent), but many people aged 35 and over also held crypto assets (46 percent of those aged 35-54 and 20 percent of those aged 55 and over). The ASIC survey also showed that 41 percent of all surveyed investors said they had used social media as a main source of information since March 2020, which may raise consumer and investor protection risks. The Australian Prudential Regulation Authority (APRA) and the Australian Transaction Reports and Analysis Centre (AUSTRAC) have also released reports in 2022 warning about the scale and risks related to crypto assets.[3] Following the collapse of crypto exchange FTX, FTX's Australian entities entered administration to determine the recovery of client funds, though linkages with the banking system appear to be very limited. In terms of stablecoins, a number of AUD-denominated ones have

[1] See April 2022 Roy Morgan, Article No. 8929 available on www.roymorgan.com.

[2] See August 2022 ASIC Report 735 Retail investor research in collaboration with SEC Newgate Research.

[3] See https://www.apra.gov.au/crypto-assets-risk-management-expectations-and-policy-roadmap and https://www.austrac.gov.au/sites/default/files/2022-04/AUSTRAC_FCG_PreventingCriminalAbuseOfDigitalCurrencies_FINAL.pdf

emerged, such as A$DC (a pilot issued by ANZ Bank), AUDT and TrueAUD, though their usage has reportedly remained limited.

3. Global regulatory efforts have sought to develop consistent rules, on a broad set of deliverables. Global standards setters are providing new guidance toward *best practices* or setting frameworks to ensure adequate prudential regulation, consumer protection, and financial stability, promoting coordination among countries. The Financial Action Task Force (FATF) has provided the standards for virtual asset service providers with respect to promoting and adhering to AML/CFT efforts. The International Organization of Securities Commissions (IOSCO) has provided considerations for analyzing and responding to market integrity and investor protection concerns within crypto asset markets through the IOSCO Fintech Task Force's workstreams on Crypto and Digital Assets (CDA) and Decentralized Finance (DeFi). The Basel Committee for Banking Supervision (BCBS) is framing the structure of prudential treatment of banks' crypto asset exposures. In recent months the Committee on Payments and Market Infrastructures (CPMI) and IOSCO have published regulatory guidance on stablecoins, and in October 2022 the Financial Stability Board (FSB) offered a new set of high-level recommendations for crypto regulation building on the work of the Crypto Advisory Working Group, and revised high-level recommendations on global stablecoins updating earlier recommendations based on outcomes of the working group for Regulatory Issues of Stablecoins.

4. Rollout of national regulation around the world increased in 2022. Most domestic regulators have sought to complete regulatory action against illicit activities and ensure compliance with anti-money laundering and combatting the financing of terrorism (AML/CFT) laws, such as via the directives of FATF. But on other issues such as definitions, the prudential and conduct regulatory treatment of crypto assets, or crypto exchanges, there is varying progress. The challenge for domestic regulators is that crypto assets, by definition, fall under the jurisdiction of a wide range of regulatory and supervisory bodies, depending on their use case, such as payments, investments or other functions. For that reason, there is a wide range of regulatory actions taken by major advanced economies and jurisdictions. In 2022, the European Union started drafting the Markets in Crypto Assets (MiCA) regulation that lays out a broad agenda for digital money, including crypto assets, exchanges and wallet providers. The United Kingdom Treasury presented a roadmap for crypto asset regulation with an initial focus on stablecoins and eventually including unbacked crypto assets. Japan, with one of the earliest legislative actions, has set a regulatory perimeter on crypto service providers via the Payment Service Act, which was amended subsequently to clarify regulation on wallets, exchanges and, more recently in 2022, stablecoins. In Canada, the Canadian Securities Administrators (CSA) now expect crypto asset trading platforms (CTP) to provide a pre-registration undertaking to their principal regulator to continue operations while their application is reviewed. The CSA also released guidance on the concerns about trading platforms using advertising or marketing strategies that include contests, promotions and bonuses encouraging investors to engage in trading and to act quickly for fear of missing out on an investment opportunity or a reward. In the United States, the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission have increased their enforcement efforts, and in 2022 lawmakers have introduced bills in Congress to clarify the responsibility of regulators and treatment of crypto assets, particularly, stablecoins. In September 2022, the US authorities set out a framework to regulate digital assets with a combination of increased oversight by existing regulatory arrangements and a "whole of government" approach involving the collaboration of several federal and state regulators to develop rules and legislation. The SEC has also been testing whether certain crypto assets are "securities" through case law.

5. Crypto regulation in Australia is progressing as well. Crypto asset exchanges must register with AUSTRAC and are supervised for AML/CFT compliance. Currently, crypto assets are largely unregulated for conduct and prudential purposes, with different agencies providing some supervision under frameworks not designed to regulate crypto assets. ASIC monitors other crypto activity involving financial products or services regulated under the Corporations Act and ASIC Act, which often leaves a grey area on whether a particular crypto asset or service offering is a "financial product" or "financial service." Some licensed financial services entities are beginning to offer crypto exchange services alongside other financial services. The Treasury publicly consulted on options for licensing and custody requirements for crypto asset secondary service providers (CASSPrs) in March 2022. APRA and ASIC are also considering the treatment of crypto in their frameworks. To that end, APRA wrote to regulated entities with initial expectations on the risk management of crypto in April 2022. The Treasury is in the process of understanding the broad groups of crypto assets that are in circulation as part of a "token mapping" exercise to help identify gaps in the regulatory framework and inform how crypto asset service providers should be regulated.[4] Once token mapping is completed, the government plans to release a consultation paper on a proposed custody and licensing regulatory framework. This follows a 2021 senate enquiry which recommended wide-ranging regulations for the crypto ecosystem.[5] Stablecoins are, for the time being, not prudentially regulated in Australia, but the Treasury with other members of the Council of Financial Regulators (CFR) is working toward establishing a regulatory perimeter for payment stablecoins. A range of regulatory proposals for payment stablecoins, which offer a promise of redemption in fiat currency, are being considered, which may utilize the framework for Stored-Value Facilities (SVFs).[6] The framework could be adapted with appropriate additions and modification to capture the unique risks of stablecoins. Consultation on the payments licensing framework, including SVFs, is expected to be undertaken in 2023.[7]

[4] Token mapping aims to provide a practical walk-through for assessing crypto tokens against some discrete aspects of the financial services regulatory framework in Australia. The aim is to identify notable gaps in the regulatory framework, inform work on a custody and licensing framework for crypto asset service providers, and lay the foundations for informed discussions between policy makers, regulators, industry participants, and consumers.

[5] Select Committee on Australia as a Technology and Financial Center, October 2021 (https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/024747/toc_pdf/Finalreport.pdf).

[6] SVFs are payment services that enable customers to store funds in facilities for the purpose of making future payments and are designed to enable greater competition and innovation for retail payments while maintaining consumer protection and system-wide safety (see CFR, 2020). They include services such as international money transfers, gift cards, prepaid cards, and digital wallets.

[7] CFR Quarterly Statement, December 2022 (https://cfr.gov.au/news/2022/mr-22-06.html).

6. Australia's crypto regulatory agenda should continue with a view to provide appropriate protection to consumers and the financial system and allow for innovation to continue. Australia is planning to take steps toward adopting crypto legislation after token mapping and related consultations. Regarding major elements of the crypto ecosystem, including issuers, crypto exchanges, wallet providers, validators, miners and other entities, international standards setting bodies, such as the FSB, provide some guidance, but domestic regulation needs to fit the needs and realities of Australia's financial system. The IMF has outlined a framework for the regulation of unbacked crypto assets and their ecosystem (Bains and contributors, 2022a), as well as stablecoins and other arrangements (Bains and contributors, 2022b). Consistent with this framework, there is a need to build the regulatory crypto architecture to:

(1) Develop a comprehensive regulatory framework for the broad crypto ecosystem. This is a broad set of recommendations for prudential and conduct regulation, which includes a comprehensive coverage of all important activities and entities such as for crypto asset providers, the determination of the legal classification of crypto assets, application of prudential regulation commensurate with risk, wind-down arrangements and resolution, legislation to boost consumer protection such as against operation failures, and more (see Bains and contributors, 2022a);

(2) Consider the risks of crypto assets as part of the existing regulatory and supervisory duties via the regulated banking system and newer entrants to address the spillover risk from crypto assets to the financial sector and the financial system. To that end, APRA should enhance its prudential regulation of the banking system to mitigate such spillover risks, and ASIC should be given a clear mandate to investigate, evaluate and supervise conduct risks for crypto asset providers and new entrants in the market;

(3) Provide greater clarity with respect to the coordination efforts among all regulatory and supervisory entities (Treasury, APRA, ASIC, AUSTRAC and RBA) and, where necessary, enhance their regulatory expertise, including by augmenting resources and training, and seek to promote greater international cooperation given the cross-border nature of many service providers; and

(4) Ensure effective and timely risk monitoring for early detection of risks, including better access to data, and commit to a continuous assessment of risks and regulations to protect markets, consumers and the financial system, for example via the CFR.

Finally, with respect to the regulation of stablecoin arrangements, the regulatory framework could seek to set out requirements related to matters such as issuance, redemption rights, and stabilization mechanisms, and include management, disclosure and auditing requirements of the reserve assets. Collaboration with foreign regulators is also needed due to the nature of stablecoin arrangements which may fit different purposes in different jurisdictions (such as a store of value in one country, and payment in another). Additional considerations such as for financial stability, consumer and investor protection, and operational risks should also be undertaken to allow the potential of stablecoins to materialize in a technology-neutral manner (see Bains and contributors, 2022b)

7. The RBA has been researching central bank digital currencies (CBDCs) actively but has no immediate plans for issuing one. It has conducted a proof of concept for a CBDC using DLT under Project Atom, which was completed in 2021. It has also been collaborating with the Bank of International Settlements (BIS), participating in Project Dunbar, as well as with other central banks. The RBA embarked on a new research project in August 2022 to explore use cases for a CBDC, via the operation of a limited-scale pilot. In addition, as part of the payments system reforms, the RBA and the Treasury are exploring the policy case for a CBDC in Australia, but so far there are no plans to issue one. This approach is similar to trends in other advanced economies (especially in Asia; see Jahan and contributors, 2022), who are also looking at potential use cases of CBDCs.

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Jahan, Sarwat; Elena Loukoianova; Evan Papageorgiou; Natasha Che; Ankita Goel; Mike Li; Umang Rawat; and Yong Sarah Zhou. 2022. "Towards Central Bank Digital Currencies in Asia and the Pacific." IMF Fintech Note 2022/009, International Monetary Fund, Washington, DC.

Annex VII. Outcomes of the Jobs and Skills Summit

1. The government held a Jobs and Skills Summit in early September 2022 to discuss labor market policy priorities. While the unemployment rate is near historic lows, the Australian labor market faces cyclical as well as structural challenges, including labor and skill shortages, weak productivity growth, and declining real wages. Against this backdrop, the Summit brought together diverse stakeholders—including unions, employers, civil society, and governments—to discuss policy priorities to address labor and skills shortages, boost productivity and living standards, and foster inclusion. An Employment White Paper is expected to be published in 2023 based on the outcomes of the summit and ensuing, broader consultations.

2. The Summit identified areas for immediate policy action as well as issues for further discussion:

- **Skills and training:** The commonwealth and state governments agreed to expanding free vocational training, accelerating the delivery of 465,000 additional places. The government will also establish Jobs and Skills Australia, a statutory body that will provide independent advice on current, emerging, and future workforce, skills, and training needs.
- **Labor shortages and migration:** To tackle labor and skill shortages in the short term, the intake under the permanent migration program in 2022-23 was increased from 160,000 to 195,000, and additional funding was provided to accelerate visa processing. The duration of post-study work rights for recent graduates with degrees in areas of verified skills shortages will be increased by two years. The government also committed to conduct a broader review of Australia's migration system to ensure it meets the challenges of the coming decade.
- **Promoting equal opportunities and inclusion:** In addition to earlier commitments on increasing child-care subsidies and parental leave, the government also committed to stronger reporting standards for large companies on gender pay gaps and other metrics of gender equality. Pensioners will also be allowed to earn an extra A$4000 before seeing a reduction in their pensions payments, a policy which should also help promote labor participation.
- **Industrial relations:** The government committed to updating the Fair Work Act with the aim of ensuring that workers and businesses have flexible options for reaching wage agreements. The recently passed Fair Work Legislation Amendment (Secure Jobs, Better Pay) Act, 2022 implements several reforms aimed at improving wage outcomes, closing the gender gap, and improving job security. The Act reduces barriers and improves access to multi-employer bargaining by simplifying the process for bargaining for a single-interest agreement and by broadening the scope and removing barriers to the supported bargaining stream (aimed at lower-paid sectors). Greater multi-employer bargaining can increase workers bargaining power and improve wage outcomes but can also potentially reduce labor market flexibility, with the impact of the law likely depending on how its provisions are interpreted and implemented. The

Act also makes other changes to the industrial relations framework, including provisions to simplify the "Better Off Overall Test".[1]

- **Other areas:** The government plans to implement a Digital and Tech Skills Compact with business and unions, to deliver 'Digital Apprenticeships' in entry-level technology roles, with equity targets for those traditionally under-represented in digital and tech fields.

[1] The Better Off Overall Test (BOOT) requires the Fair Works Commission to find that all current and prospective award-covered employees should be better off under any wage agreement between employers and employees compared to the relevant *modern award* (where the *modern award* sets out the minimum pay rates and conditions of employment for an industry or occupation).

INTERNATIONAL MONETARY FUND

AUSTRALIA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

January 9, 2023

Prepared By
Asia and Pacific Department

CONTENTS

FUND RELATIONS

(As of December 31, 2022)

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)	4,647.54	70.71
Reserve tranche position	1,925.11	29.29
Lending to the Fund		
New Arrangements to Borrow	21.28	

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	9,382.52	100.00
Holdings	9,253.50	98.62

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 1, 1961	September 5, 1961	100.00	0.00

Projected Obligations to Fund[1]

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

	Forthcoming				
	2023	2024	2025	2026	2027
Principal					
Charges/interest	4.79	3.88	3.88	3.88	3.88
Total	4.79	3.88	3.88	3.88	3.88

[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, and maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions and multiple currency practices, 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). Both the de jure and the de facto exchange rate arrangements are classified as 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 Executive Board Meeting for the 2021 Article IV consultation was held on November 22, 2021 (IMF Country Report No. 21/255).

FSAP. The 2018 FSAP missions were held during June 6-26 and August 29-September 14, 2018. The findings were discussed with the authorities during the Article IV consultation discussions in November 2018 and were presented to the Executive Board for discussion alongside the Article IV staff report on February 4, 2019 (IMF Country Report No. 19/54). The previous FSAP Update was discussed by the Executive Board on November 12, 2012 (IMF Country Report No. 12/308).

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.

I. Assessment of Data Adequacy for Surveillance
Real Sector. GDP is compiled on a quarterly basis in current prices and chained volume terms, with timely, regular publication in the first week of the third month after the end of a quarter. Based on the 2008 SNA, GDP is derived by income, expenditure, and production approaches, with their estimates aligned annually based on supply and use tables, which are incorporated in published quarterly estimates 17 months after the reference period. Seasonal and trend estimates are also published. According to the ABS, Australia's implementation of the 2008 SNA standards reflect local conditions and requirements, with departures from the standards relatively minor and not affecting the cross-country comparability of national accounts information. The compiling methodology and the departures from 2008 SNA recommendations are disseminated to the public in detail. The Consumer Price Index (CPI) is published quarterly in the month following the end of a quarter, based on almost 900,000 separate price quotations collected each quarter, together with a breakdown by categories and geographical locations, as well as various analytical series. While the quarterly CPI is considered to be Australia's key measure of inflation, a monthly publication of a CPI indicator commenced in 2022, reflecting updated prices between 62 and 73 percent of the weight of the quarterly CPI basket. Since 2018, the CPI expenditure weights have been updated annually. The ABS also publishes quarterly producer, trade, wage cost, and living cost indices.
Fiscal Sector. The ABS provides annual data (operating statement, balance sheet, government expenses by function, taxation revenue and non-financial assets reconciliation) on the general government and its Commonwealth (central), state/territorial and local government subsectors following the Government Finance Statistics Manual 2014 (GFSM 2014) recommendations, publishing data from 10 years back (with or without revision) on a fiscal year (July-June) basis. It is published roughly 10 months following the fiscal year end, preceded by data on a provisional basis at the time of the budget (usually in May, based on data from 3 months prior to fiscal year end). The Commonwealth, State and Territorial governments also provide data on a timely basis for their respective public sectors that complies with the ABS implementation of the GFS on an

accrual basis and the Australian Accounting Standards (AAS). They are presented using the Uniform Presentation Framework to enhance comparability among states and territories, and with the Commonwealth. They are provided on a monthly basis (with a one-month lag), with an annual statement published within 4 months of the fiscal year end, and are also part of the budgets and mid-year reviews of their respective governments.

The provided data enable adequate assessment of the impact of fiscal policy measures on Australia's economic performance.

Monetary and Financial Sectors.

The Reserve Bank of Australia (RBA) publishes monthly and quarterly data on a broad range of financial variables for financial institutions, the payments system, money and credit statistics, and household and business finances. Most data are monthly, quarterly for banking lending, and weekly or daily series for open market operations, exchange and interest rates.

Monetary and Financial Statistics: The RBA reports monthly monetary and financial statistics (MFS) to the IMF Statistics department based on the standardized report forms. While MFS for Australia are broadly in line with the concepts and definitions of the *IMF's Monetary and Financial Statistics Manual* (2000), the scope of the other financial corporations' sector data could be improved by also including insurance corporations, pension funds, and other financial institutions. The ABS, the Australian Prudential Regulation Authority, and the RBA are reviewing some of their MFS reporting forms with the aim to increase the quality and granularity of source data and to meet the G-20 Data Gaps Initiative (DGI-2) recommendations.

Financial Sector Surveillance: The RBA reports all core financial soundness indicators (FSI) for deposit takers except for the FSIs on the "net open position in foreign exchange to capital" and 21 of the 28 encouraged FSIs for other sectors on a quarterly basis.

Financial Access Survey: Australia reports data on several series and indicators of the Financial Access Survey (FAS) including the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

External Sector. The ABS publishes the Balance of Payment (BOP) and International Investment Position (IIP) statistics based on the IMF's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). Comprehensive data reporting systems support the accuracy and reliability of the external sector statistics. The statistics are disseminated quarterly and published in the first week of the third month after the end of the reference quarter. The BOP and IIP data are consistent and reconcilable with national accounts, monetary, financial and external debt statistics. Historical time series date back to 1959.

Table of Common Indicators Required for Surveillance
(As of January 9, 2023)

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	1/8/23	1/8/23	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	11/22	12/07/22	M	M	M
Reserve/Base Money	10/22	11/30/22	M	M	M
Broad Money	10/22	11/30/22	M	M	M
Central Bank Balance Sheet	12/07/22	12/07/22	W	W	W
Consolidated Balance Sheet of the Banking System	9/22	12/1/22	M	M	M
Interest Rates[2]	12/15/22	12/15/22	D	D	D
Consumer Price Index	Q3 2022	10/26/22	Q	Q	Q
Revenue, Expenditure, and Balance – General Government[3]	Q2/22	10/30/22	Q	Q	Q
Revenue, Expenditure, and Balance – Central Government	Q2/22	10/30/22	Q	Q	Q
Composition of Financing[4] – General Government	Q2/22	10/30/22	Q	Q	Q
Composition of Financing[4]– Central Government	6/22	10/31/22	M	M	M
External Current Account Balance	Q3/22	12/6/22	Q	Q	Q
Exports and Imports of Goods and Services	10/22	12/8/22	M	M	M
GDP/GNP	Q3/22	12/7/22	Q	Q	Q
Gross External Debt[5]	Q3/22	12/6/22	Q	Q	Q
International Investment Position[6]	Q3/22	12/6/22	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] Consists of the central government (including budgetary, extra budgetary, and social security funds) and state and local governments.
[4] Foreign, domestic bank, and domestic nonbank financing.
[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).