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#### **Further information**

For more information on data or government initiatives please access the report from the Department's website at: www.industry.gov.au/oce

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### **Executive Summary**

The profile for Australian resource and energy export earnings is little changed from the September 2023 *Resources and Energy Quarterly* (REQ) report, improving slightly in aggregate. Exports are forecast to be \$408 billion in 2023–24, down from a record \$466 billion in 2022–23 — when the fallout from the Russian invasion of Ukraine contributed to a major spike in energy prices. Exports are forecast at \$348 billion in 2024–25 as prices soften and the AUD/USD lifts.

World economic growth remains relatively soft, weighed down by tighter financial conditions; central banks in the major Western economies continue to clamp down on inflation, and inflation appears to be easing in some nations. The IMF's latest forecasts (October) are largely unchanged. However, concerns around a hard landing in the US have eased considerably and the outlook for China has improved, given stronger than expected economic results and the Government taking further measures to stabilise the nation's residential property sector. Both developments help the outlook for resource and energy commodity demand.

Strong capital expenditure (on infrastructure and in the manufacturing sector) and rising motor vehicle exports have helped sustain Chinese steel production in the face of falling residential construction. Steady world steel output and low Chinese iron ore inventories recently helped push iron ore prices above US\$120 a tonne. Other bulk commodity prices also remain high in historical terms. The metallurgical coal market remains tight due to supply problems, including lower Russian exports. Improving supply is expected to see bulk commodity prices to drift down in the outlook period.

To date, there has been very limited impact of the conflict in the Middle East on the global economy and energy prices. After repeated OPEC+ supply cuts, world oil stocks remain relatively low, keeping oil prices more vulnerable to supply shocks. Worries that the Hamas-Israel conflict could cause a disruption to Middle East oil and LNG supplies sparked a rise in energy prices early in the December quarter. But weak world demand and the absence of any fallout on Middle East oil supply has helped move oil and LNG prices back close to pre-conflict levels.

Nonetheless, reduced global supply of energy commodities following the implementation of Russian sanctions has raised the vulnerability of gas/LNG/coal prices to supply outages and demand spikes. As such, there is more uncertainty than in the past around how energy prices may develop through the Northern Hemisphere winter and summer demand peaks. Stockpiles of gas in Europe are high heading into winter. Likewise, high stocks of thermal coal in China and Europe have seen thermal coal prices come down.

There has been a surge in uranium prices in recent months. New supply problems have added to the impact of hoarding and, on the demand side, some nations continue to favourably reconsider the role nuclear power can make in meeting their 'net zero' targets and ensuring their energy security.

Bond yields recently hit decade highs, as the fixed interest market reassessed how high the US Fed Funds rate would need to go and for how long. High bond yields would normally have hurt the gold price, but geopolitical tensions have helped sustain gold at close to US\$2,000 an ounce.

There are high chances of drier than normal conditions in eastern Australia over the next 3-6 months. This lowers the risk of wet weather and flooding that have adversely impacted mines and transport routes since 2020. However, the El Niño-driven drought in Indonesia is lowering river levels, making it increasingly difficult to barge thermal coal to export ports.

Lithium prices have fallen further from the record peak in late 2022. Driving the fall has been concerns about short term demand for electric vehicles and ongoing increases in lithium supply. Export volumes of Australian lithium ores and chemicals are still expected to grow strongly over the outlook period, with lithium hydroxide set to account for a rising share of those exports. The long-term outlook for lithium demand remains strong, as does Australian lithium producers' ability to compete.

# **Overview**



### Australia's mining sector



Contributes to around 13.4% of GDP



Makes up more than **two-thirds** of Australia's total merchandise exports



The resources sector directly employs around 300,000 people

#### **Outlook**



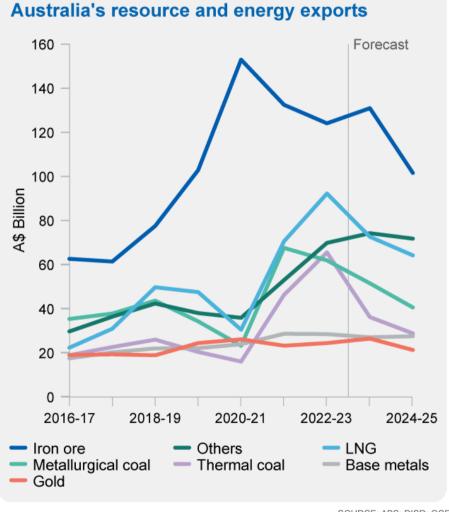
The forecast for commodity earnings has been revised up slightly



Investment in new deposits and mines remains solid



Commodity **prices** and **earnings** are expected to **ease** over the outlook period, from a record level in 2022–23



SOURCE: ABS; DISR; OCE

#### 1.1 **Summary**

- In net terms, the outlook for Australian resource and energy commodity exports has improved slightly since the September edition of the REQ. The world economy has not slowed as sharply as feared a few months ago and the Chinese Government has taken further measures to stabilise the nation's residential property sector, maintaining demand for a range of resource and energy commodities.
- The latest forecast is for weaker growth in world demand and improving world commodity supply to cut Australia's resource and energy export earnings from a record \$466 billion in 2022–23 to \$408 billion in 2023–24. Another fall seems likely in 2024–25, as commodity prices soften further and monetary policy expectations imply a stronger AUD/USD.
- Key September-quarter price developments include: higher iron ore prices as firm Chinese demand persists, higher uranium prices on supply problems and as countries re-evaluate nuclear power, and lower lithium prices due to rising stockpiles and concerns about near-term EV production/demand.

# **1.2 Macroeconomic, geopolitical and policy factors**The world economy is growing at a relatively slow rate

The world economy remains relatively subdued, mainly due to tighter monetary conditions adopted by most central banks over the past twenty months. Since the last REQ, most Western central banks have kept a tightening bias to cut inflation and anchor inflation expectations. Services inflation in the West remains high, due to tightness in their labour markets.

Forecasts are for OECD economic growth to slow and labour market tightness to ease, so that services inflation should fall, giving central banks scope to withdraw their current restrictive monetary stance. There are signs that China's economic growth has steadied at relatively low levels as Beijing rolls out more measures to stabilise China's residential property sector.

The relatively slow rate of economic growth in China is causing higher unemployment — especially among young people — and deterring foreign

investment: with slow company sales, Chinese equities are weak, and high/rising interest yields in the West are also causing capital flows away from China, where official rates are falling. In the September quarter 2023, China recorded negative foreign direct investment (of US\$11.8 billion) for the first time since 1998. Nevertheless, there are pockets of strength: the Chinese steel and auto sectors have proven significant sources of demand for resource commodities in recent months. Chinese steel output has been assisted by higher infrastructure spending in China and strong steel exports. Chinese auto exports have risen six-fold in the past 3 years to 4.2 million a year. China recently overtook Germany as the world's 2nd biggest car exporter.

Geopolitical developments continue to pose risks to the outlook for commodity markets. The Hamas-Israel conflict has caused volatility in energy markets. New sanctions on Russia over its invasion of Ukraine would further harm its ability to produce/export resource and energy commodities. While Europe has sourced new supplies of natural gas, the implications for energy pricing during hot and cold seasons in the Northern Hemisphere are not yet well understood. Government policies to drive net zero and geostrategic interests are also having ongoing impacts on the demand for low emission minerals and energy commodities.

Climate drivers have recently shifted. The current El Niño weather episode has a high chance of lasting through H1 2024, and the Indian Ocean Dipole is very high at present. Both factors suggest miners in Australia are less likely than normal to be affected by wet weather and the flooding of mines and transport routes. But drought in Indonesia is lowering river levels, making it more difficult to barge thermal coal to ports used by large cargo ships in the export trade.

The IMF expects global economic growth of 3.0% in 2023 and 2.9% in 2024, down from 3.5% in 2022. Growth in developed nations is expected to slow from 2.6% in 2022 to 1.5% in 2023 and 1.4% in 2024. Developing and emerging market economies are forecast to grow by 4.0% in 2023 and 2024. China is forecast to grow by 4.6% in 2024, down from 5.4% in 2023.

#### **AUD** finding support

The AUD/USD has steadied in recent months. Influences include market optimism over Chinese government efforts to stabilise China's property sector, and currency market expectations that the Australian-US interest rate differential is likely to narrow. The consensus forecast adopted is for the AUD/USD to lift over the outlook period.

#### Risks are evenly balanced

Risks to the aggregate revenue forecasts appear evenly balanced. While the outlook for the world economy is for relatively modest growth in the forecast period, unemployment remains low in historical terms, helping to sustain household consumption and corporate profitability. Inflation has eased in a number of nations Unemployment may rise as the more recent official interest rate hikes impact fully. A widening of the Hamas—Israel conflict poses a significant risk to energy commodity and financial markets.

#### 1.3 Export values

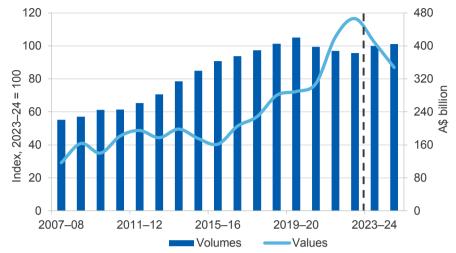
#### Australia's export values are forecast to be \$408 billion in 2023-24

The world economic slowdown and fewer supply disruptions generally reduced commodity prices over the past quarter. The Resources and Energy Export Values Index fell 20% from the September quarter 2022: a small rise in volumes partly offset the impact of a sharp fall in prices.

There is only modest change in the aggregate forecasts since September. Resource and energy exports are forecast to be \$408 billion in 2023–24, down from a record \$466 billion in 2022–23 (Figure 1.1). Weak demand and improved global commodity supply imply a fall prices, more than offsetting the impact of a forecast small rise in export volumes (Figure 1.2). Export values are forecast to fall by 15% to \$348 billion in 2024–25: prices will fall but volumes will be flat.

Within the totals, energy export earnings are set to fall sharply. LNG earnings are forecast to fall by \$20 billion to \$73 billion in 2023–24, as prices settle well below 2022 levels. A further fall of \$8 billion is forecast in 2024–25. Thermal coal exports are forecast to fall even more sharply, from \$66 billion in 2022–23 to \$36 billion in 2023–24 and \$28 billion in 2024–25.

Figure 1.1: Australia's resource and energy export values/volumes



Source: ABS (2023) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2023)

Figure 1.2: Annual growth in Australia's resources and energy export values, contributions from prices and volumes



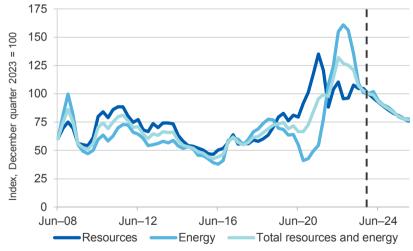
Source: ABS (2023) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2023)

Among resource commodities, iron ore remains the largest earner by far, forecast to earn about \$131 billion in 2023–24, but fall to \$102 billion in 2024–25. The sharp retracement in lithium prices is expected to see lithium exports fall from \$20 billion in 2022–23 to \$14 billion in 2023–24. Export values should stabilise at around \$15 billion in 2024–25.

#### 1.4 Prices

Since the September 2023 Resources and Energy Quarterly, resource and energy prices have generally declined in US\$ terms (Figure 1.3). Slower world economic growth has overwhelmed the impact of new efforts by the Chinese government to boost growth. Prices are likely to fall further but remain above pre-pandemic levels as markets expect a recovery in demand — with inflation falling towards target levels overseas, central banks (particularly the US) are expected to move away from their current restrictive monetary policy stance.

Figure 1.3: Resource and energy export prices, A\$ terms



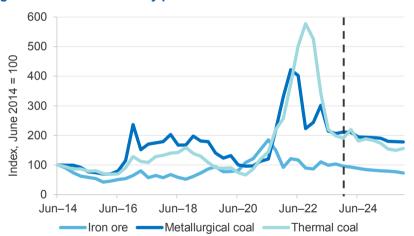
Notes: The export price index is based on Australian dollar export unit values (EUVs, export values divided by volumes); the export price index is a Fisher price Index, which weights each commodity's EUV by its share of total export values.

Source: ABS (2023) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2023)

In Australian dollar terms, the Resources and Energy Commodity Price Index fell by 3% (preliminary estimate) in the December quarter 2023, to be down 20% on a year ago. In US dollar terms, the index fell by 4% in the quarter, to be down 22% on a year ago. Resource export prices (in A\$ terms) rose by 4% in the year to the December quarter 2023, while energy prices fell by 36%.

**Iron ore** prices have lifted in recent months driven by improved market sentiment following a series of Chinese government measures to support growth (Figure 1.4). Chinese stockpiles are on the low side. **Metallurgical coal** prices have edged up due to concerns over tight supply. Prices remain above pre-war levels, as some Russian supply remains stranded from world markets.

Figure 1.4: Bulk commodity prices



Notes: Prices are in US dollars, and are the international benchmark prices Source: Bloomberg (2023); Department of Industry, Science and Resources (2023)

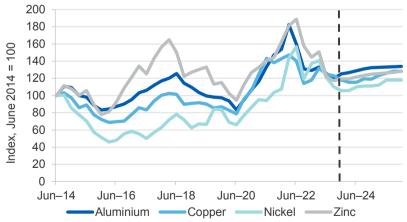
Energy prices remain elevated in historical terms but are continuing to ease. **Thermal coal** prices have experienced some recent weakness due to high inventory levels in China and Europe but are still holding well above pre-pandemic levels. **LNG** prices are expected to lift slightly as the Northern Hemisphere winter peaks. Prices should subsequently edge

back, with a more rapid decline when new supply from the US and Qatar comes online in 2025. Gas/LNG markets remain more vulnerable to supply shocks following the stranding of significant quantities of Russian output, but strong European inventories should provide a degree of insulation.

**Oil** prices have declined substantially after peaking at US\$98 a barrel in late September. Strong supply from the US, Brazil and Iran is offsetting output cuts by Saudi Arabia. Chinese imports of industrial fuels have been strong but this has been offset by falls in OECD demand. Lower prices have prompted the US Administration to make plans to refill Strategic Reserves in early 2024.

Base metal prices remain relatively soft, due to a poor near term outlook for construction and manufacturing in major markets such as Europe and Advanced Asia (Figure 1.5). Nickel has been particularly weak as Indonesian production continues to surge. Prices are expected to be relatively soft over 2024, though low inventories of most metals and increased infrastructure-related (particular for energy) demand are expected to constrain price falls. Prices may pick up if signs of a rebound in the world economy become evident.

Figure 1.5: Base metal prices



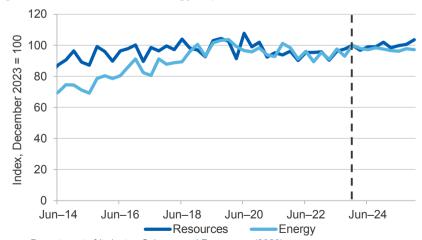
Notes: Prices are in US dollars, and are the international benchmark prices Source: Bloomberg (2023); Department of Industry, Science and Resources (2023) Since the last REQ, **lithium prices** (spodumene and lithium hydroxide) have given up some more of the sharp gains of recent years. Lithium is entering a period of market surplus, and some producers have announced production cuts in response to the weakness in the market and prices. Finally, the **gold** price has risen since the last REQ on the back of rising geopolitical tensions in the Middle East. In the short term, worries over the Chinese property market could boost Chinese demand for gold.

#### 1.5 Export volumes

#### December quarter export volumes rose

The Resources and Energy Export Volumes Index (preliminary estimate) rose 5% in the December quarter 2023 from the September quarter, to be up 5% on a year ago. Resource commodity volumes rose by 5% in the year to the December quarter 2023 and energy export volumes recorded similar gains (Figure 1.6). Better weather conditions and easing workforce problems have driven the improvement. In volume terms, most resource exports are likely to show only modest growth in 2024 but pick up with improved world economic growth in 2025. High prices and the global energy transition may hurt energy production and exports.

Figure 1.6: Resource and energy export volumes



Source: Department of Industry, Science and Resources (2023)

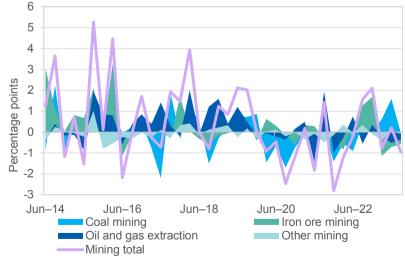
Energy exports will level out in 2024, as the sharp price falls of the past year temper production and encourage delayed maintenance to occur. An El Niño climate episode is under way, and the Indian Ocean Dipole is strongly positive. Both phenomena dramatically lower the chances of the type of wet weather disruptions that hampered the production and transportation of Australian mining products in the two years before 2023.

#### 1.6 Contribution to growth and investment

#### In real terms, mining output fell while the overall economy grew modestly

Australia's real GDP rose by 0.2% in the September quarter 2023, to be up 2.1% from a year before. Mining value-added fell by 1.0% in the September quarter but was still 0.5% higher than in June 2022 (Figure 1.7). The quarterly fall was driven by weaker Iron Ore Mining (down by 1.6% (partly due to maintenance issues), Oil and Gas Extraction (down 1.5%) and Other Mining (down by 1.2%). Coal Mining (down by 0.2%) continues to recover from the impact on production of the La Niña weather episode. Exploration rose by 3.5% to be up 11.8% over the year.

Figure 1.7: Contribution to quarterly growth, by sector

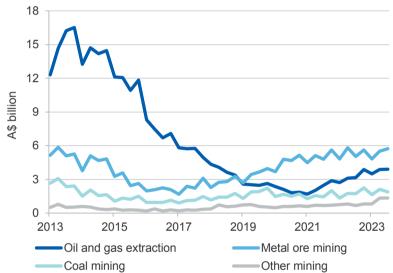


Source: ABS (2023) Australian National Accounts, 5206.0

#### Mining investment is picking up year-on-year

The latest ABS Private New Capital Expenditure and Expected Expenditure survey shows that Australia's resources industry invested \$12.9 billion in the September quarter 2023, up 22% from the September quarter 2022. In quarterly terms, investment grew for oil & gas mining and 'other mining', which includes lithium and some other critical minerals (Figure 1.8).

Figure 1.8: Mining capex by commodity, not seasonally adjusted



Notes: Other mining includes non-metallic mineral mining and quarrying and exploration and other mining support services; chart data is in nominal, original terms

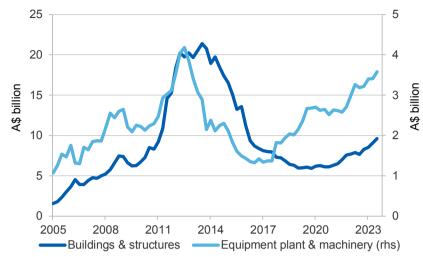
Source: ABS (2023) Private New Capital Expenditure and Expected Expenditure, 5625.0

Expenditure for buildings and structures rose by 6% in the September quarter, while investment in equipment, plant and machinery rose by 5%,

capping off two years of strong growth (Figure 1.9).

Spending on plant and machinery has accounted for a steadily rising share of total investment spending since 2017, but spending on buildings and structures is now growing steadily.

Figure 1.9: Mining industry capital expenditure by type, quarterly



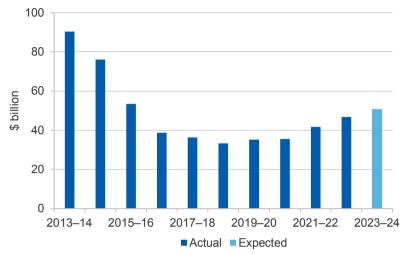
Notes: Chart data is in nominal terms, seasonally adjusted.

Source: ABS (2023) Private New Capital Expenditure and Expected Expenditure, 5625.0

Forward expectations suggest that total mining industry investment in 2023–24 is set to rise in the near-term (Figure 1.10). The fourth estimate for 2023–24 suggests the mining industry will invest \$51 billion during the financial year. This is around 9% higher than the third estimate in the survey and more than 15% higher than the second estimate for 2023–24.

The latest data on investment among individual commodities shows 'other mining' (including lithium) has been sustained at relatively high levels, and this may be driving the recent upward revisions to future spending estimates across the mining sector.

Figure 1.10: Mining industry capital expenditure, fiscal year



Notes: Chart data is in nominal terms

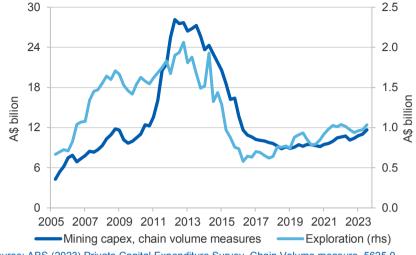
Source: ABS (2023) Private New Capital Expenditure and Expected Expenditure, 5625.0

Exploration expenditure (adjusted for inflation) rose by 6% to \$1.04 billion in the September quarter 2023. In trend terms, exploration is rising, encouraged by relatively high commodity prices and the need for minerals vital to the global energy transition (Figure 1.11).

Industries recording significant growth in exploration expenditure include petroleum (up by 42% in the September quarter), coal (up by 45%), and iron ore (up by 24%). 'Other minerals', which includes lithium, grew at a slower rate in the quarter (up by 9%). However, this follows several quarters of very strong growth. Exploration overall rose solidly in the September quarter, with growth across a wide range of commodities (Figure 1.12).

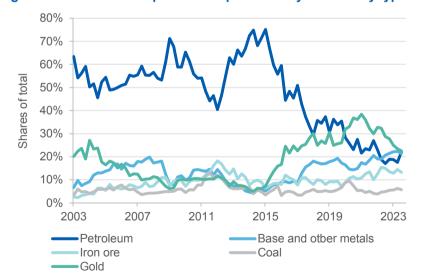
Exploration spending is a leading indicator of broader capital investment, and recent growth suggests interest is rising in base metals and critical minerals following recent strong price outcomes. Given the typical lags involved, we could expect capital spending by resource and energy companies to continue to lift over the next few years.

Figure 1.11: Mining capital expenditure vs exploration (real, quarterly)



Source: ABS (2023) Private Capital Expenditure Survey, Chain Volume measure, 5625.0

Figure 1.12: Shares of exploration expenditure by commodity type

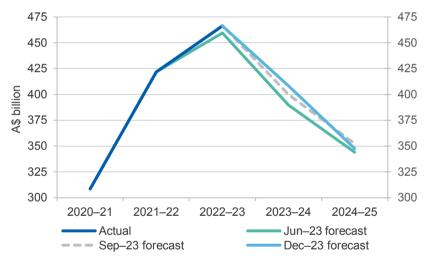


Source: ABS (2023) Private Mineral and Petroleum Exploration, 8412.0

#### 1.7 Revisions to the outlook

The forecast for Australia's resources and energy exports in 2023–24 is \$8 billion higher than the forecast contained in the September 2023 Resources and Energy Quarterly. The forecast for 2024-25 (nominal prices) is \$5 billion lower than the same report (Figure 1.13). The 2023-24 revisions have largely been driven by an upward revision to the iron ore price and the impact of a weaker than expected exchange rate against the US dollar (AUD/USD). The 2024–25 revisions have been driven by the impact of a stronger forecast exchange rate.

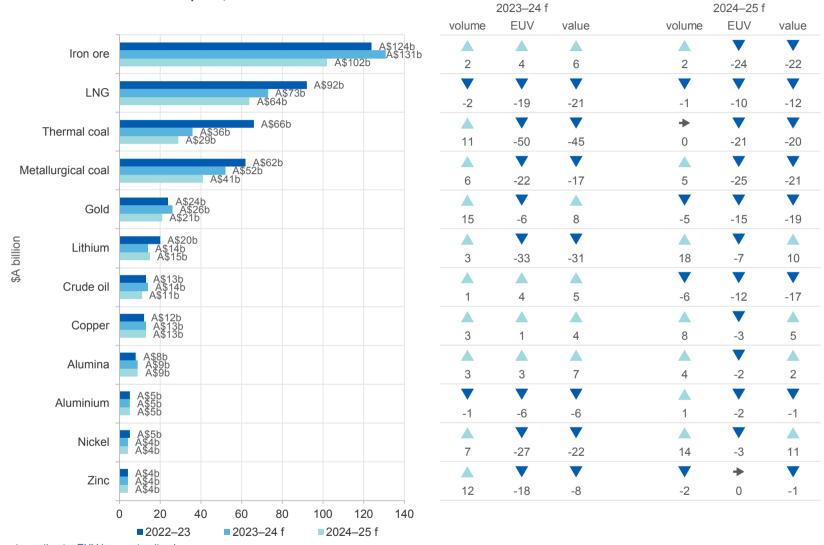
Figure 1.13: Resource and energy exports, by forecast publication



Source: Department of Industry, Science and Resources (2023)

Figure 1.14: Australia's major resources and energy commodity exports, nominal

#### **Annual per cent change**



Notes: f forecast; s estimate. EUV is export unit value.

Source: ABS (2023) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2023)

Table 1.1: Outlook for Australia's resources and energy exports in nominal and real terms

				Percentage change					
Exports (A\$m)	2021–22	2022–23	2023-24 <sup>f</sup>	2024–25 <sup>f</sup>	2021–22	2022–23	2023-24 <sup>f</sup>	2024–25 <sup>f</sup>	
Resources and energy	421,691	466,310	408,380	347,717	36.7	10.6	-12.4	-14.9	
– real <sup>b</sup>	471,246	486,898	408,380	336,112	30.9	3.3	-16.1	-17.7	
Energy	204,056	238,727	180,336	151,092	151.2	17.0	-24.5	-16.2	
– real <sup>b</sup>	228,035	249,267	180,336	146,049	140.5	9.3	-27.7	-19.0	
Resources	217,635	227,583	228,044	196,625	-4.2	4.6	0.2	-13.8	
– real <sup>b</sup>	243,211	237,631	228,044	190,063	-8.3	-2.3	-4.0	-16.7	

Notes: **b** In 2023–24 Australian dollars; **f** forecast; **g** growth rate on 2022-23 levels.

Source: ABS (2023) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2023)

Table 1.2: Australia's resource and energy exports, selected commodities

	Prices			Export volumes				Export values, A\$b			
	Unit	2022–23	2023-24 <sup>f</sup>	2024-25 <sup>f</sup>	Unit	2022–23	2023-24 <sup>f</sup>	2024-25 <sup>f</sup>	2022–23	2023-24f	2024-25 <sup>f</sup>
Iron ore	US\$/t	95	99	80	Mt	895	910	931	124	131	102
LNG	A\$/GJ	21.4	17.3	15.5	Mt	82	80	78	92	73	64
Thermal coal	US\$/t	302	143	126	Mt	182	202	203	66	36	29
Metallurgical	US\$/t	277	259	210	Mt	156	166	174	62	52	41
Gold	US\$/oz	1,831	1,933	1,851	t	228	263	250	24	26	21
Lithium	US\$/t	5,174	2,535	2,250	Kt	3,311	3,408	4,031	20	14	15
Crude oil <sup>a</sup>	US\$/bbl	87	86	79	Kb/d	282	284	267	13	14	11
Copper	US\$/t	8,289	8,144	8,227	Kt	854	882	951	12	13	13
Alumina	US\$/t	343	343	345	Kt	16,566	17,094	17,788	8.3	8.9	9.0
Aluminium	US\$/t	2,333	2,248	2,381	Kt	1,440	1,429	1,444	5.3	4.9	4.9
Nickel	US\$/t	23,911	18,217	18,375	Kt	161	172	195	5.0	3.9	4.3
Zinc	US\$/t	2,981	2,511	2,622	Kt	1,247	1,392	1,370	4.3	4.0	3.9
Uranium	US\$/lb	51	77	87	t	4,809	5,441	6,167	0.8	1.2	1.5

Notes: a Export data covers both crude oil and condensate; f forecast. **Price information:** Iron ore fob (free-on-board) at 62 per cent iron content estimated netback from Western Australia to Qingdao China; Metallurgical coal premium hard coking coal fob East Coast Australia; Thermal coal fob Newcastle 6000 kc (calorific content); LNG fob Australia's export unit values; Gold LBMA PM; Alumina fob Australia; Copper LME cash; Crude oil Brent; Aluminum LME cash; Zinc LME cash; Lithium spodumene ore.

Source: ABS (2023) International Trade in Goods and Services, Australia, Cat. No. 5368.0; LME; London Bullion Market Association; The Ux Consulting Company; US Department of Energy; Metal Bulletin; Japan Ministry of Economy, Trade and Industry; Department of Industry, Science and Resources (2023)

# **Macroeconomic Outlook**



#### Global GDP and economic change in 2022

Country	China	US	EU	India	ASEAN	Japan	S Korea	Taiwan	Australia
Per cent share of global GDP (PPP)	18	16	15	7	5	4	2	1	0
Yearly change	▲ 3.0%	<b>▲</b> 2.1%	▲ 3.7%	<b>▲</b> 7.2%	▲ 5.3%	<b>1.0%</b>	<b>▲</b> 2.6%	<b>▲</b> 2.5%	<b>▲</b> 3.7%
Share of Australia's two-way trade	30%	6%	9%	4%	10%	12%	7%	4%	-

### **Global overview**

- In 2022, global economic activity increased by 3.5%. Growth is expected to slow to 3.0% in 2023 and 2.9% in 2024.
- Tight fiscal and monetary conditions in most major economies are expected to slow global economic growth in late 2023 and early 2024.



#### **Global risks**

- Tight monetary policy for longer if inflation pressures, particularly in services, persist or rebound.
- Continuation of China's property sector downturn could dampen its economic recovery
- Geoeconomic risks and energy security



SOURCE: IMF; ABS; OCE

#### 2.1 Summary

- Global industrial production and manufacturing activity have continued to soften in H2 2023, due to falling goods demand in major economies.
- The core outlook for global growth in 2024 has weakened slightly, with the balance of risks surrounding the outlook remaining tilted to the downside. As inflation returns to target levels, central banks will be able to adopt less restrictive stances, allowing growth to pick up in 2025.
- Despite better-than-expected growth in the September quarter 2023, key downside risks challenge China's growth outlook, including ongoing issues in the real estate sector.

#### 2.2 World economic outlook

#### Tighter fiscal and monetary conditions weighing on global growth

The International Monetary Fund (IMF) forecasts the world economy to grow by 3.0% in 2023 and 2.9% in 2024, with growth then rising to 3.2% in 2025 (Figure 2.1). Compared to the July 2023 World Economic Outlook, this represents a downgrade of 0.1 percentage points for 2024 but no change for 2023 and 2025.

Over the next couple of years, the IMF continues to expect a notable divergence to emerge between the performance of Advanced and Emerging economies. The US economy has surprised on the upside with resilient consumption and investment this year, however European economies appear to have slowed substantially in 2023 under the weight of tighter monetary policy.

Weaker consumer demand for goods relative to services over the past year in the US and Europe has weighed on the economic growth of manufacturing exporters — including China, Japan and Korea. Demand for services now also looks to be also weakening, with manufacturing in a prolonged slowdown, suggesting a slowing of global growth over the remainder of the year and into 2024.

After recording growth below the global average in 2022, the IMF expects China's economy to grow by 5.4% in 2023. Due to stronger-than-expected

growth in the September quarter 2023 and recent policy announcements, the IMF issued a 0.4 percentage point upgrade to China's growth outlook in November to 4.6% in 2024.

While global growth forecasts were only revised marginally from the July update, the IMF stated the balance of risks is less negative than it was in April, however it is still tilted to the downside.

Headline and core inflation measures have continued to moderate in most economies in recent months, but they remain above central bank targets, as do near-term inflation expectations. There is a risk that ongoing labour market tightness and further drawdown of excess savings in some nations could see inflation fail to return to central bank targets, or even rebound. This would lead to monetary policy staying restrictive, constraining economic growth.

An additional risk to global growth the IMF has emphasised is the potential for China's economic recovery to disappoint, or its financial stability to worsen if the property downturn continues.

World China United States Euro Area

Figure 2.1: GDP growth forecasts

Source: IMF (2023)

Additional sources of global economic vulnerability include possible escalations of the wars in Ukraine and the Middle East, geopolitical fragmentation and increasing trade restrictions.

#### Global industrial production and trade weaken as demand remains low

Global industrial production (IP) increased in the September quarter 2023 by 0.4% year-on-year (Figure 2.2). Positive annual growth largely reflects China's economic rebound following COVID-related declines through the middle of 2022. Growth remained weak overall due to continued contraction in the industrial sectors of Europe and Advanced Asia. High energy prices and tighter monetary policy contributed here.

Global merchandise trade volumes declined in the September quarter 2023 to be 3.6% lower year-on-year (Figure 2.2). Weaker demand for goods in advanced economies, especially electronic equipment, has driven exports from Japan, Republic of Korea and emerging Asia lower year-on-year.

Figure 2.2: World industrial production, trade and PMI



Notes: PMI data is up to October 2023; IP and trade data only available to September 2023. Source: Bloomberg (2023); CPB Netherlands Bureau for Economic Policy Analysis (2023)

Forward indicators of manufacturing activity continue to indicate a prolonged contraction. The JP Morgan Global Manufacturing Purchasing Managers Index (PMI) was 48.8 in October 2023, and has remained in contractionary territory (less than 50) since September 2022.

Global manufacturing activity has continued to decline through H2 2023 due to weakening activity in Asia and a sharp downturn in the European manufacturing sector. Global manufacturing orders declined in October, signalling a further deterioration in the demand for goods — linked to pressures from inflation and monetary policy — as well as a post-pandemic preference for services consumption. Optimism among manufacturers dropped to an 11-month low in October, with weak demand leading to cutbacks in employment, purchasing and inventory indices.

#### Inflation pressures gradually easing while new risks emerge

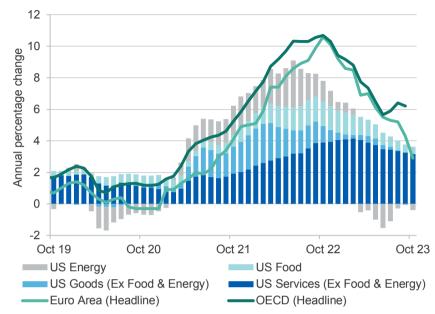
Headline inflation measures have continued to decline over recent months in many major economies; however, progress to return inflation to target levels has been slowed by persistence in core inflation measures and recent strength in energy commodity prices.

US headline inflation measured 3.2% in October 2023, falling from a recent spike of 3.7% due to lower energy prices and slowing growth in food and services (Figure 2.3). US core inflation — which excludes food and energy — declined to a 2-year low of 4.0% in October 2023, with monthly price growth of only 0.2% supporting hopes of further disinflation.

Eurozone inflation declined notably in October 2023 to 2.9%, its lowest since July 2021. Headline inflation has declined consistently throughout 2023 due largely to falling energy prices, with energy price deflation reaching 11% in October 2023. Recent decreases in headline inflation have also come from slowing core inflation. Eurozone core inflation declined to 4.2% in October 2023, having persistently held above 5% from October 2022 to August 2023.

The Israel–Hamas conflict and the potential for escalated geopolitical tensions in the Middle East present future upside risks to inflation through energy commodity prices. Disruption to shipping routes in the region (such

Figure 2.3: Consumer Price Indices — US, Europe and OECD



Source: Bloomberg (2023); Board of Governors of the Federal Reserve System (2023); U.S. Bureau of Economic Analysis (2023); OECD (2023)

as the Suez canal) also presents a risk to global shipping prices and by extension, global goods price inflation. This would compound current backlogs building up around the Panama Canal, where shipping throughput is being reduced by low water levels.

In October 2023, the IMF forecast global inflation would fall from 8.7% in 2022 to 6.9% in 2023 and 5.8% in 2024. Compared to the July 2023 outlook, the forecast for 2023 was revised up marginally, while the forecast for 2024 was revised up by 0.6 percentage points, higher-than-expected core inflation.

Inflation is expected to decline more quickly in advanced economies due to tighter monetary policy and the lower exposure of these economies to commodity price and exchange rate shocks.

#### 2.3 Major trading partners' economic outlook

The outlook for Australia's major trading partners remains weak, with their GDP growth in 2024 and 2025 forecast by the RBA to be around 3.1%, well below its pre-pandemic decade average and lower than the August 2023 forecast. Slower growth in Australia's major trading partners is expected to reduce demand for Australia's exports. With that said, the IMF expects a recovery in China's economy and ongoing development in India to contribute about half of global economic growth this year. Growth from these key markets should support growth in their trade partners' economies, underpinning Australian resource and energy export earnings over the outlook period.

#### China's recent growth exceeded expectations, but risks remain

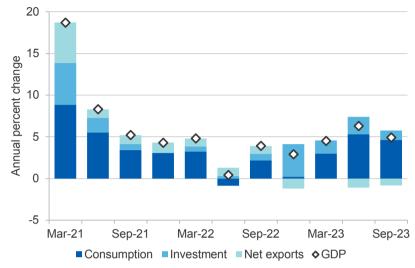
China's economy grew by 1.3% in the September quarter 2023, with GDP 4.9% higher year-on-year (Figure 2.4). Strong consumption growth was the key driver of China's economic growth over the quarter, supported to a lesser extent by continued investment in infrastructure and manufacturing.

While the rebound in consumption demand appeared to fade through the middle of 2023, recent indicators point to a strengthening in consumption, particularly in services. The official index of services production increased by 7.7% year-on-year in October 2023, led by growth in accommodation and food services (21%), transport (13%) and wholesale or retail trade (10%). Retail sales rose in October 2023 by 7.6% year-on-year, exceeding market expectations.

China's consumer price inflation once again fell below zero in October 2023, with year-on-year declines in energy and food prices, outweighing price growth in services, where consumer demand has been directed. China's core inflation — which excludes food and energy prices — was still below policy targets at 0.6% year-on-year in October.

Year-to-date fixed asset investment increased by 2.9% year-on-year in October 2023, underpinned by 5.9% growth in infrastructure and 6.2% growth in manufacturing investment. Particularly strong growth was reported for investment in high-tech manufacturing (such as aerospace)

Figure 2.4: China – contributions to quarterly real GDP



Notes: Consumption is made up of both household and government sectors. Source: Bloomberg (2023); National Bureau of Statistics of China (2023)

and high-tech services (such as science and technology R&D). Overall investment growth continues to be weighed down by weakness in the property sector, with year-to-date residential investment declining by 9.3% year-on-year.

China's industrial production increased by 4.6% year-on-year in October 2023, the strongest rate since April 2023. Growth was driven by year-on-year increases in manufacturing output (5.1%), mining output (2.9%) and utility output (1.5%) such as energy and water. Output growth was significant for key strategic products such as solar cells (63%), service robots (59%) and integrated circuits (35%).

The Caixin Manufacturing Purchasing Managers' Index (PMI) fell to 49.5 in October, signalling the sector's return to contraction following two months of expansion. Weak conditions were reported, with declining output being

driven by reduced foreign demand and falling growth in overall sales. Business sentiment fell to its lowest since September 2022, due to concerns about the global outlook.

The property sector downturn has continued to act as a drag on China's economic activity, with conditions remaining weak through H2 2023. New property starts (by floor space) were on average 25% lower year-on-year from July-October 2023. Sales in large cities have recovered slightly — in line with monetary and fiscal policy easing — however this has not passed through to investment in smaller cities where most new home sales occur.

Continued weakness in the property sector is compounded by ongoing financial stability concerns. According to the RBA<sup>1</sup>, more than half of large private developers in China have defaulted and many others are likely to find it difficult to meet upcoming debt repayments, given stringent financial conditions. Country Garden — one of the largest private property developers in China — is seeking debt restructuring after defaulting on a US dollar bond in October.

Chinese authorities have further loosened policy to stabilise the property sector and support the announced 2023 GDP growth target of 5%. In addition to continued monetary easing (such as reductions in mortgage lending rates and reserve requirement ratios), the People's Bank of China (PBoC) introduced lower mortgage down payment requirements in August. Targeted interest rate reductions on outstanding first-home mortgages (estimated to account for half of all housing loans) are likely supporting household consumption.

In October, authorities announced CNY1 trillion in central government bond issuance to be transferred to local governments and spent in 2023 and 2024 —likely targeted towards infrastructure. Concerns have also been raised regarding local government debt levels, with financing limits and refinancing quotas allocated by authorities to aid repayments of local government financing vehicles.

<sup>&</sup>lt;sup>1</sup> RBA Statement on Monetary Policy November 2023

The IMF released updated projections for the Chinese economy in November, revising up their growth forecasts by 0.4 percentage points on account of recent policy announcements and stronger-than-expected GDP growth in the September quarter. The IMF forecasts Chinese GDP growth of 5.4% in 2023, reflecting rebounding consumption compared with COVID-related disruptions in 2022, as well as continued investment in infrastructure and manufacturing. The IMF forecasts growth to decline to 4.6% in 2024 due to continued weakness in the property sector and weak external demand. Growth is then forecast to slow further to 4.1% in 2025, in line with a long-term trend towards structurally lower growth.

#### Japan and Republic of Korea slowing due to weaker external demand

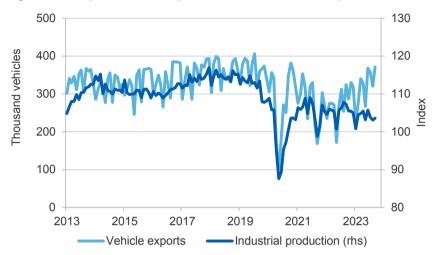
Japan's GDP fell by 0.5% in the September quarter 2023, although it was still 1.4% higher year-on-year due to base effects in the September quarter 2022. Depreciation of the Yen in the September quarter 2023 contributed to a 10% quarter-on-quarter decrease in net exports.

Private consumption — which accounts for 53% of GDP — fell year-onyear and tracked flat on the previous quarter, as cost of living pressures have weakened consumers' real wages and consumer confidence has weakened over the second half of the year.

Slowing growth in Japan's major trading partners is a key issue for its economy, particularly its industrial sector. Japanese industrial production was down by 3.4% year-on-year in September 2023 (Figure 2.5). Machinery orders have, on average, decreased at an annual rate of 6.4% since October 2022. The Jibun Bank Japanese Manufacturing PMI improved, but remained in contraction at 48.7 in October, marking 9 months of contraction so far in 2023. Weakening demand both domestically and externally also led to declines in new orders and output.

Japan's core inflation — which excludes fresh food but includes fuel costs — was 2.8% in September 2023, still exceeding the Bank of Japan (BoJ) inflation target of 2%, but down sharply from 4.2% in January. Supporting expectations for cost pressures to ease further, Japan's wholesale inflation fell to 0.8% in October 2023, having peaked at around 11% in December 2022. The BoJ has maintained its accommodative monetary policy and

Figure 2.5: Japan industrial production and vehicle exports



Source: Bloomberg (2023)

continues to target the 10-year Japanese Government Bond yield at 0%.

The IMF expects Japan's economic growth to rise to 2.0% in 2023, a 0.6 percentage point upgrade from July, driven by pent-up demand, a surge in inbound tourism, and accommodative fiscal and monetary policy. Japan's growth in 2023 has also been supported by a strong rebound in vehicle exports as supply chain issues have eased (Figure 2.5). As the effects of past stimulus efforts fade, Japan's economic growth is expected to slow to 1.0% in 2024, before slowing further to 0.7% in 2025.

The Republic of Korea's GDP grew by 1.2% year-on-year in the September quarter 2023. Annual growth was primarily driven by 3.1% year-on-year growth in exports which, combined with imports tracking flat, led to a 26% expansion in the country's trade balance.

Korea's industrial production increased in September 2023 to be 3.0% higher year-on-year, the first annual growth recorded since September 2022 (Figure 2.6). Monthly growth of 1.8% exceeded market expectations (of a 0.9% decline) and was driven by an unexpected

turnaround in semiconductor output. Exports of semiconductors declined by only 3.1% year-on-year in October 2023, following a prolonged decline which commenced in August 2022 (Figure 2.6).

Korea's manufacturing PMI declined slightly in October to 49.8, remaining in contraction territory for a 16th consecutive month. The negative result was due to small declines in output and new orders, continuing to be driven by subdued economic conditions (domestically and internationally). Input price inflation increased to its strongest since December 2022 due to raw material prices and currency weakness. Despite this, expectations for the year-ahead production outlook improved over the month due to slowing declines in output and new orders.

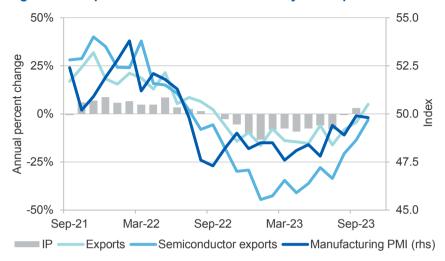
In October, the IMF forecast the Republic of Korea's economic growth to weaken from 2.6% in 2022 to 1.4% in 2023, driven by muted external goods demand, particularly for semiconductors. Beyond this, growth is forecast to increase to 2.2% in 2024 and 2.3% in 2025. The IMF noted that the downturn in the technology cycle and global goods demand is expected to act as a drag on Korea's growth momentum in the short-term.

#### Resilient US labour market and strong investment supporting growth

The US economy grew by 2.9% year-on-year in the September quarter 2023, driven by stronger-than-expected quarterly growth of 1.2%. This growth was driven by personal consumption of goods and services. While goods consumption growth has remained weak in real terms since early 2022 (countered by strong growth in services activity), it began to strengthen again in the September quarter 2023 (Figure 2.7).

US labour market resilience and remaining savings buffers<sup>2</sup> have continued to support strong consumption. However, signs have emerged that the labour market is softening. The unemployment rate rose to 3.9% in October 2023, the highest (albeit still low) rate since January 2022. Employment growth has slowed further over H2 2023, with nonfarm payroll employment rising by 150,000 in October 2023 — below the average rise

Figure 2.6: Republic of Korea industrial activity and exports



Source: Bloomberg (2023)

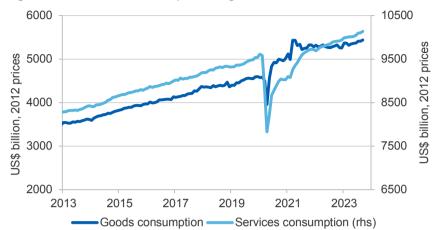
of about 258,000 over the past 12 months. Wage growth has also eased further, down from 7.1% in June 2023 to 2.3% in September 2023.

Combined with declining US inflation (both headline and core) and a sharp rebound in US labour productivity growth in the September quarter 2023 to 2.2% year-on-year, this has reduced expectations that further monetary tightening will be necessary. This recently resulted in lower US Treasury yields and a weaker US dollar, from elevated levels in October 2023.

US industrial production rose by 0.1% year-on-year in September 2023, driven by a 0.4% year-on-year rise in manufacturing output. The US Manufacturing PMI stayed in contractionary territory at 46.7 in October, marking a year of continuous contraction for the sector. The continued deterioration in manufacturers' operating conditions reflects increasingly sharp falls in new orders as both domestic and external demand weaken.

<sup>&</sup>lt;sup>2</sup> Barbiero & Patki 2023, "Have US households depleted all the excess savings they accumulated during the pandemic?", Federal Reserve Bank of Boston, November 2023.

Figure 2.7: Real US consumption of goods and services



Notes: Consumption data is monthly, reported in annualised terms. Source: Bloomberg (2023)

A notable source of growth has been private non-residential investment, which rose by 3.7% year-on-year in the September quarter 2023 in real terms. US private investment in manufacturing structures rose in real terms by 66% year-on-year in the same period, driven by sharp growth in computers, electronics and electrical manufacturing. Policies such as the Inflation Reduction Act and the CHIPS & Science Act have provided strong incentives for investment into clean energy and semiconductor manufacturing in the US since their inception in August 2022.

In October 2023, the IMF upgraded its forecast for US economic growth in 2023 by 0.3 percentage points to 2.1% due to resilient consumption and ongoing labour market tightness. Growth is then forecast to ease to 1.5% in 2024 — a 0.5 percentage point upgrade — as tight monetary policy and the elimination of excess savings slow private consumption. This is expected to reduce labour market tightness and moderate wage growth. The IMF expects the US unemployment rate to reach a peak of 4.0% in the December quarter 2024 — a 1.2 percentage point downgrade from April — consistent with a softer landing than previously expected.

#### Eurozone economies face slower growth, manufacturing downturn

Eurozone GDP growth was -0.1% over the September quarter 2023, bringing annual GDP growth to 0.1% year-on-year. This was the Eurozone's first quarterly contraction since the 2020–21 recession. Among the larger economies Spain grew by 0.3% over the quarter, France grew by 0.1%, while Italy's quarterly growth was approximately zero. Germany's economy contracted over the quarter, to be down 0.3% year-on-year.

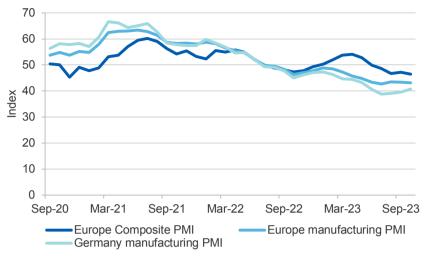
In August 2023, the Eurozone Composite PMI Index decreased to 46.5, signifying the worst slump in private sector activity since November 2020 (Figure 2.8). The fifth consecutive month of decline reflected a further deterioration in manufacturing conditions and the contraction of the services sector for the second time in three months.

Industrial production in the Eurozone declined by 5.1% year-on-year in August 2023, led by a 4.9% year-on-year decline in manufacturing production. Industrial production in major producer Germany was down in September by 3.7% year-on-year. This resulted from a 1.4% decline month-on-month, the fourth contraction in as many months. Significant monthly output declines were reported for Germany's auto sector (-5%) and electrical equipment (-4.4%). The Eurozone manufacturing PMI recorded a reading of 43.1 in October 2023, with declines in output, new orders, employment and purchasing activity. The PMI survey reported the fastest reduction in factory employment levels since August 2020.

Germany's manufacturing sector continued its deep contraction with a PMI reading of 40.8 in October. This reflected a continued deterioration in demand, with customers reportedly destocking and holding back on investments against a backdrop of uncertainty and high interest rates.

In its October update, the IMF forecast Euro Area growth to be lower than previously expected: at 0.7% in 2023 and 1.2% in 2024. With the IMF now projecting a near-completion in the recovery of the region's services sector, growth forecasts in services- and tourism-driven economies (such as France and Spain) were kept steady or revised a touch lower. The weak outlook for manufacturing resulted in a downgrade to growth in Germany (now -0.5% in 2023).

Figure 2.8: Eurozone composite and manufacturing PMIs



Source: Bloomberg (2023)

#### India's GDP growth to be relatively resilient

India's GDP growth was 7.6% year-on-year in the September quarter 2023, a slight decrease from 7.8% in the June quarter. This annual growth figure was above market expectations, driven by continued strength in fixed capital formation, as well as private consumption expenditure. India's manufacturing PMI remained expansionary in October 2023, but 2 points lower month-on-month at 55.5. Slower growth was reported in output and new orders, with manufacturers reporting the lowest new order growth in over a year. Combined with an acceleration in input price growth, surveyed firms' sentiment fell to a five-month low.

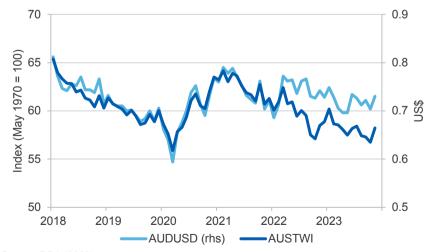
The IMF forecasts India's economic growth to slow to 6.3% in 2023, revised up from 6.1% in July due to stronger-than-expected consumption in the June quarter 2023. Growth is expected to remain steady at 6.3% in 2024. From 2024 onwards, household spending is expected to pick up as pressures from inflation and monetary policy ease.

#### Exchange rate assumption revised lower

Over the past quarter, the Australian dollar fell both relative to the US dollar and in trade-weighted terms (Figure 2.9). In the December quarter, the Australian dollar has been supported by expectations the US-Australian interest rate spread could narrow, as well as market optimism over Chinese government efforts to stabilise the country's property sector.

The AUD/USD exchange rate assumption has been revised marginally lower; by US\$0.03 in 2024 and by US\$0.01 in 2025 compared with the September 2023 *Resources and Energy Quarterly*. Assumption adjustments were made in line with changes in market consensus (surveyed by Bloomberg) on the exchange rate outlook. The Australian dollar is expected by markets to appreciate against further the US dollar over the outlook period as interest rates increase further in Australia and interest rate cuts commence in the United States. The median consensus on 5 November 2023 for the AUD/USD exchange rate was an average of US\$0.64 during the December quarter 2023, US\$0.67 in the first nine months of 2024 and US\$0.73 in 2025.

Figure 2.9: Australian trade-weighted index and AUD/USD



Source: RBA (2023)

Table 2.1: IMF annual GDP growth projections for major trading partners

	2022	2023ª	<b>2024</b> <sup>a</sup>	2025 <sup>a</sup>
World <sup>b</sup>	3.5	3.0	2.9	3.2
China <sup>c</sup>	3.0	5.4	4.6	4.1
Japan	1.0	2.0	1.0	0.7
Republic of Korea	2.6	1.4	2.2	2.3
India <sup>d</sup>	7.2	6.3	6.3	6.3
ASEAN-5°	5.3	4.9	5.3	5.2
Eurozone	3.6	0.7	1.5	2.1
United States	2.1	2.1	1.5	1.8

Notes: a Assumption. b Calculated by the IMF using purchasing power parity (PPP) weights for nominal country gross domestic product. c Excludes Hong Kong. d Based on fiscal years, starting in April; e Indonesia, Malaysia, Philippines, Thailand and Vietnam.

Sources: IMF (2023); Bloomberg (2023)

Table 2.2: Exchange rate and inflation assumptions

	2022	2023a	2024 <sup>a</sup>	2025 <sup>a</sup>
AUD/USD exchange rate	0.69	0.66	0.68	0.72
Inflation rate <sup>b</sup>				
United States	8.0	4.1	2.8	2.4
	2021–22	2022–23	2023-24a	2024–25 <sup>a</sup>
Australia	4.4	7.0	4.4	3.5

Notes: a Assumption; b Average CPI growth over the specified year (fiscal or calendar).

Sources: ABS (2023) Consumer Price Index, 6401.0; Bloomberg (2023); Department of Industry, Science and Resources; RBA (2023); IMF (2023)