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Executive Summary

Australian resource and energy export earnings are estimated to have declined by about 10% in 2023–24, to $417 billion from $466 billion in 2022–23. This estimate is consistent with the forecast in the March 2024 *Resources and Energy Quarterly* (REQ). In 2024–25, export earnings are forecast to fall to about $380 billion, largely reflecting further bulk commodity price declines and a rise in the AUD/USD. Earnings declines will start to diminish in 2025–26 — with exports forecast at $356 billion. Drivers will include a bottoming out in bulk commodity prices and a peaking in the AUD/USD; with prices set in USD's, a rise the AUD/USD pushes down AUD revenue.

World economic growth remains relatively soft, weighed down by relatively tight financial conditions. However, key economic indicators suggest the world economy picked up modestly in the first half of 2024. In the United States, economic growth remains firm, and inflation is declining. In China, government support measures in 2023 and early 2024 have yet to turn around ongoing weakness in the residential property sector. This weakness has detracted from the impact of strong Chinese exports and large investments in infrastructure and manufacturing capacity.

Reflecting the recent improvement in economic activity and the prospect of less restrictive monetary policy in major Western economies, ferrous and non-ferrous metal prices have generally risen since the March 2024 REQ. The iron ore price has steadied above US$100 a tonne, and copper recently traded above US$10,000 a tonne.

The gold price has hit new record highs since the March 2024 REQ, driven by central bank buying and Chinese household demand for alternative investments amidst property and share market weakness.

The prices of lithium and nickel appear to have started a recovery after large falls in 2023 and early 2024. Despite both prices hitting multi-year lows in H1 2024, some new Australian nickel and lithium projects are proceeding. Australian spodumene production is competitive with rival lithium brines.

Measures by a number of governments to intervene in trade with China will have implications for the direction and quantity of Australian resource and energy exports. While Chinese domestic demand will remain the primary demand for Australian resources, widespread trade measures may see the competitiveness of Chinese manufacturers deteriorate relative to other Asian trading nations that Australia supplies — such as Japan and South Korea. However, Australian exports could suffer if some of China's manufacturing base is lost to North America and Western Europe instead — since higher transport costs may preclude some of our producers from accessing these markets.

The pace of US adoption of EVs and renewable energy technologies (including importation rates) could change depending on the outcome of the US Presidential election in November, with significant implications for the demand for Australian critical minerals in the short term. Demand growth in other major markets (the EU and China) is likely to rise strongly.

Recent moves by the UK and US to ban Russian metal from entering London Metal Exchange and Comex warehouses are likely to push even more Russian metal towards China and India. Australian miners will be more likely to replace Russian metal sales to Japan and South Korea. With Russia being a major producer, nickel and aluminium will be the most affected metals.

The continued growth in the adoption of emerging technologies that are power intensive — including generative artificial intelligence — will increase demands on power generation in many countries. This is expected to increase demands for (especially) gas-powered electricity generation in the short term.

There are a number of risks to the export forecasts. Hurricane season is approaching in the Gulf of Mexico making some US oil production vulnerable to disruption. A broadening in the Hamas-Israel conflict could disrupt Middle East oil and gas exports and raise prices. Higher-than-normal odds of a La Niña weather episode in 2024–25 raises the risk of wet weather and flooding that could impact Australian mines, transport routes and ports.

Overview

Australia's mining sector

Contributes to around **13.4% of GDP**

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

Directly employs **around 300,000** people

Outlook

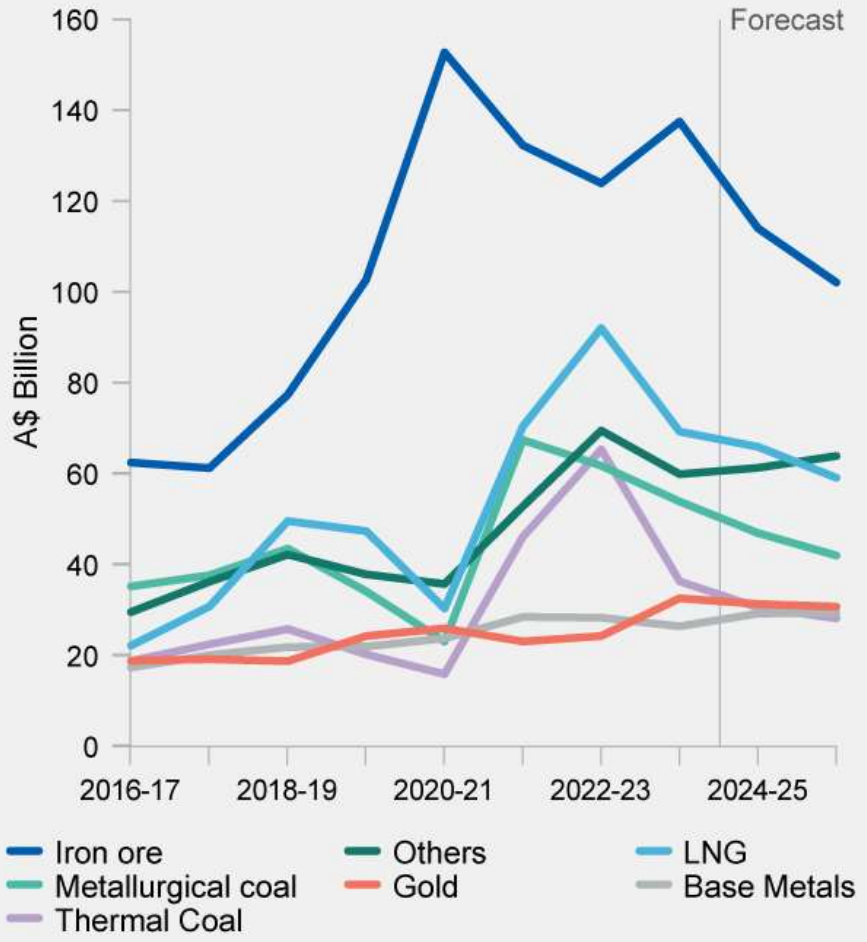
Near-term outlook for Australian resource and energy commodity exports **slightly improved**

Pace of world economic growth to 2025–26 partly depends on whether **monetary policy eased** in major economies

Gold price hitting **new highs**; lithium, nickel prices appears to have started a **recovery** after falls in 2023, early 2024

Investment in **new deposits and mines** is on the rise

Australia's resource and energy exports



SOURCE: ABS; DISR; OCE

1.1 Summary

- The near-term outlook for Australian resource and energy commodity exports has improved slightly in net terms since the March 2024 REQ. Major economies have seen a modest uptick in economic activity, and the outlook is for an improvement in world economic growth in 2025.
- Relatively weak growth in world demand and rising world commodity supply is estimated to have seen Australia's resource and energy exports decline to $417 billion in 2023–24 from $466 billion in 2022–23. A decline to $380 billion is forecast in 2024–25, as commodity prices drift down and the AUD/USD lifts. A further modest decline to $356 billion is forecast in 2025 26, as price weakness fades.
- Nickel and lithium prices have managed to make modest recoveries as global supply is wound back closer to demand. Gold has hit a new record high, and iron ore prices have steadied as the Chinese government adopts substantive measures to support the real estate sector.

1.2 Macroeconomic, geopolitical and policy factors

While inflation is falling, consumer demand remains relatively soft

Since the last REQ, consumer demand has remained relatively weak, tied down by relatively tight monetary policy. But leading indicators of manufacturing activity have picked up and there has been a modest uptick in global industrial activity. As inflation continues to moderate, moves towards a more neutral monetary stance by the world's major central banks will support a rise in global growth over the next two years.

The IMF now expects China's economy to grow by 5.0% in 2024 and 4.5% in 2025, easing to 4.1% by 2026 — in line with a long-term trend towards lower economic growth. In mid-May, Chinese policymakers announced a series of measures to help local governments act to support the Chinese property market. Prospective property buyers in China appear to have been holding off purchases in case of further price falls; the lack of bids has made those price falls self-fulfilling. If taken up sufficiently by local governments, the new measures by Beijing will act to support household confidence and thus lift domestic demand.

Government trade and policy changes impacting resource commodities

Recent measures by a number of governments to intervene in their nation's trade with China will have implications for the direction and quantity of Australian resource and energy exports.

The US Administration has raised Section 301 tariffs on "strategic" goods from China — primarily low emissions technology and steel/aluminium exports. The immediate impact of the move will be muted, mattering most for batteries used for stationary storage purposes. The 100% tariff on Chinese EVs will likely prevent Chinese producers capturing a meaningful share of the US market. The tariff hikes are of no real significance when it comes to sectors like solar and steel.

In mid-June, the European Commission announced it will impose an additional 17-38% duty on Chinese EVs starting in July. The higher tariff will likely slow the influx of Chinese-made EVs into the EU, but it won't stop the flow completely.

In mid-April, the UK and US governments introduced further restrictions on metal exports from Russia, in protest over its invasion of Ukraine. The UK government banned the importation of Russian metal and prohibited the trading of Russian metal on the London Metal Exchange (LME). Two executive orders by the US Administration now prohibit the importation of Russian-origin aluminium, copper and nickel into the US, and limit the use of Russian-origin aluminium, copper and nickel on global metal exchanges and in over-the-counter derivatives trading. Russian copper is now effectively prohibited from entering Comex warehouses.

There have been numerous impacts from these restrictions already, with more to come. Firstly, large amounts of Russian material being held "off warrant" in LME warehouses have been brought back "on warrant". And with traders reluctant to take Russian metal out of LME warehouses, the arbitrage flow of metal from LME warehouses to Comex has been disrupted, causing a spike in the price of copper on Comex. Russian companies now have fewer markets to access and will have to accept lower prices from sanction-neutral nations such as China.

Chile's government has laid out the details of its plan to significantly boost the country's lithium production. The plan aims to expand state control over the production of the critical mineral used in batteries for EVs while attracting private investment in the sector. Projects in strategic areas will now be required to partner with state-owned companies such as major copper producer Codelco, which will have a majority control.

Market moves in lithium and nickel have settled down

The prices of lithium and nickel appear to have bottomed, after large falls in 2023 and early 2024. Despite prices hitting multi-year lows in H1 2024, some new Australian lithium/nickel projects are going ahead. Australian spodumene production remains highly competitive to rival lithium brines, thanks to the relative scale and ease of completing a spodumene project. Spodumene is also viewed as simpler to process.

Geopolitical tensions and the weather pose risks to commodity markets

Geopolitical developments continue to pose risks to the outlook for commodity markets. Any broadening of the Hamas-Israel conflict could impact the global supply of oil/gas/LNG with many producers in the region.

The Russian invasion of Ukraine appears likely to continue for some time yet. The war is adversely impacting Russia's resource and energy output and has led to an increasing bifurcation of world trade.

Weather drivers have shifted since the last REQ: the El Niño weather event has ended and some weather forecasters now attach a higher-than-normal chance of the start of a La Niña episode in H2 2024. Should a La Niña episode emerge, Australian miners may experience a repeat of the wet weather and the associated flooding of mines, transport routes and ports that hampered output in the 2021-2023 period. Hurricane season is approaching in the Gulf of Mexico, making some US oil production vulnerable to disruption.

Surge in artificial intelligence is raising power usage in many countries

Continued growth in the use of power-intensive emerging technologies, such as generative AI, is leading to higher power usage in some countries, particularly the United States. This will boost the demand for energy commodities in the short term. While some heavy AI users have committed to building new renewable energy to help meet the extra power demand, it will take some time and a re-organisation of some existing power grids. This will likely lead to an increase in the demand for gas to firm and supplement power generation.

AUD rising against the USD

The AUD/USD has risen slightly in recent months. This largely reflects market optimism over Chinese government efforts to stabilise the nation's property sector. The currency market also sees moves in Australian-US interest rate differentials favouring the holding of AUD fixed interest assets. The consensus forecast adopted is for the AUD/USD to lift modestly in the outlook period, from 66 US cents in 2024 to 71 cents in 2026.

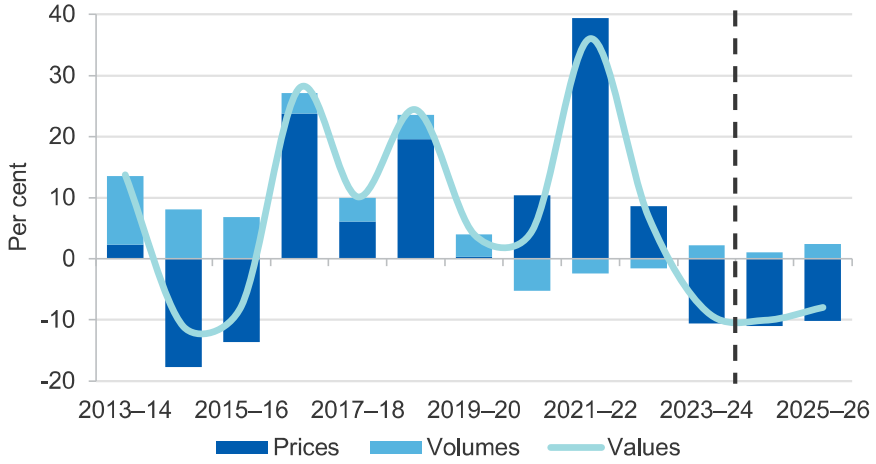
1.3 Export values

Australia's export values in 2023–24 are estimated at $417 billion

Relatively slow world economic growth and fewer supply disruptions generally reduced commodity prices over the June quarter. The Resources and Energy Export Values Index fell nearly 2% from the March quarter 2024: a 5.2% rise in volumes only partly offset the impact of a 9.3% fall in prices (Figure 1.1).

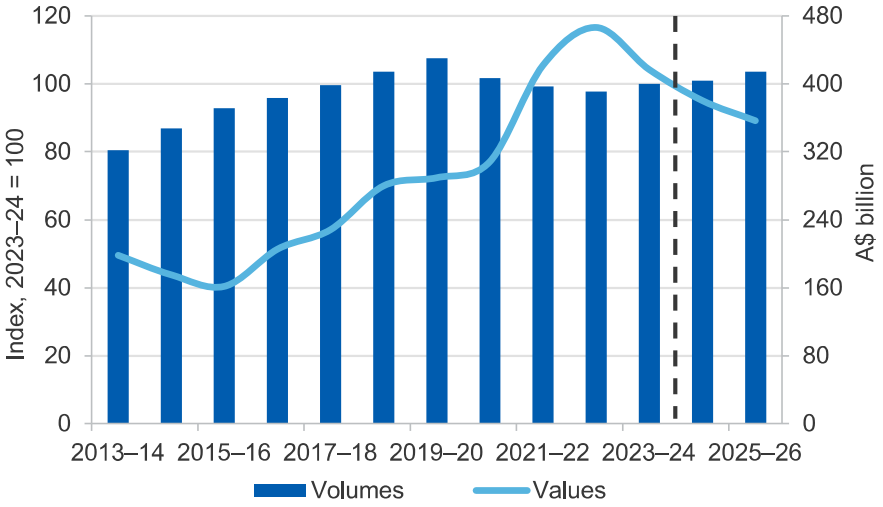
There has been a significant upward revision to the aggregate forecasts since March. Resource and energy exports are forecast to be $380 billion in 2024–25 and $356 billion in 2025–26 (Figure 1.2). Within the totals, energy export earnings are set to show double digit falls. LNG earnings are forecast to fall by $3 billion to $66 billion in 2024–25, and then fall to $59 billion in 2025–26. Lower prices will drive the falls. Thermal coal exports are forecast to fall from $37 billion in 2023–24 to $31 billion in 2024–25 and $28 billion in 2025–26. Metallurgical coal exports should fall to $47 billion in 2024–25 from $54 billion in 2023–24. For the first time, uranium is estimated to have earned Australia in excess of a billion dollars in 2023–24 and is forecast to reach more than $1.4 billion in 2024–25 and around $1.7 billion in 2025–26.

Figure 1.1: 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 (2024)

Figure 1.2: Australia's resource and energy export values/volumes



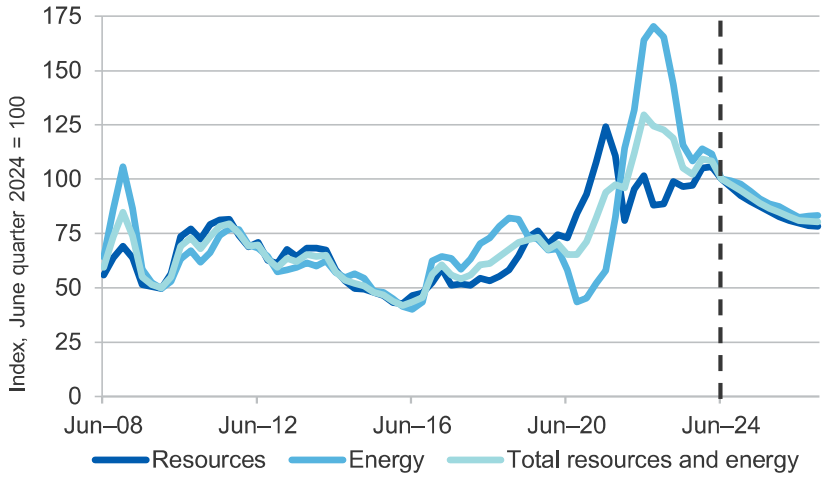
Source: ABS (2024) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2024)

Among resource commodities, **iron ore** remains the largest earner, estimated to earn about $138 billion in 2023–24, but fall to $114 billion in 2024–25 and $102 billion in 2025–26. The sharp retracement in **lithium** prices is estimated to have seen lithium exports fall from $20 billion in 2022–23 to $10 billion in 2023–24. Export values should stabilise at around the $7-9 billion mark over the two-year outlook period.

1.4 Prices

Since the March 2024 *Resources and Energy Quarterly*, resource and energy prices have declined in US$ terms (Figure 1.3): a sharp fall in the metallurgical coal price and bouts of weakness in the iron ore price dominated strength in other prices. Prices rose in the latter half of the quarter, helped by signs of stronger world growth and new efforts by the Chinese government to stabilise the property sector and boost economic growth. Prices are likely to fall modestly over the outlook period but remain above pre-pandemic levels, as supply generally rises faster than demand.

Figure 1.1: 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 (2024) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2024)

In Australian dollar terms, the Resources and Energy Commodity Price Index fell by 9% (preliminary estimate) in the June quarter 2024 to be down 6% on a year ago. In US dollar terms, the index fell by 9% in the quarter to be down 8% year-on-year. Resource export prices (in A$ terms) were unchanged from the June quarter 2023, while energy prices fell by 14%.

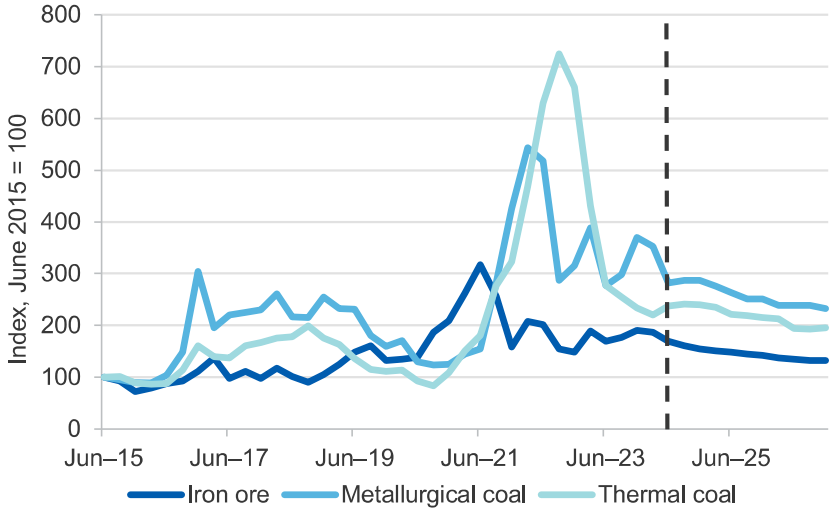
Iron ore prices have declined in net terms in recent months. Prices eased from elevated levels early in 2024 due to worries of falling Chinese demand and the end of Chinese stockpiling (Figure 1.4). The price of **metallurgical coal** has been relatively steady since the last REQ, having eased through the March quarter as production issues subsided. Some Russian supply remains stranded from world markets and demand is steady.

Energy prices have risen recently as unseasonably hot weather in Asia lifted demand. However, price increases have been offset to some extent by continued improvements in supply. The enormous supply chain disruptions that pushed prices to extraordinary highs in 2022 and 2023 have continued to ease, with Western European nations obtaining supply elsewhere from Russia. Slow world economic growth has constrained energy usage.

Thermal coal prices are still above pre-pandemic levels, with some Russian production shut in and isolated from major markets. **LNG** prices have risen largely due to demand from Asia, however demand from Europe is contained as storage levels remain relatively high. Prices should come under downward pressure from rising US and Qatari supply in 2025. Gas/LNG markets remain highly vulnerable to supply shocks following the stranding of some Russian supply.

The **gold** price has hit a record above US$2,400 since the last REQ, on the back of numerous supportive factors: the prospect of lower interest rates in most economies in 2024–25, geopolitical tensions, purchasing by emerging market central banks and Chinese household concerns over the Chinese property market.

Figure 1.4: Bulk commodity prices

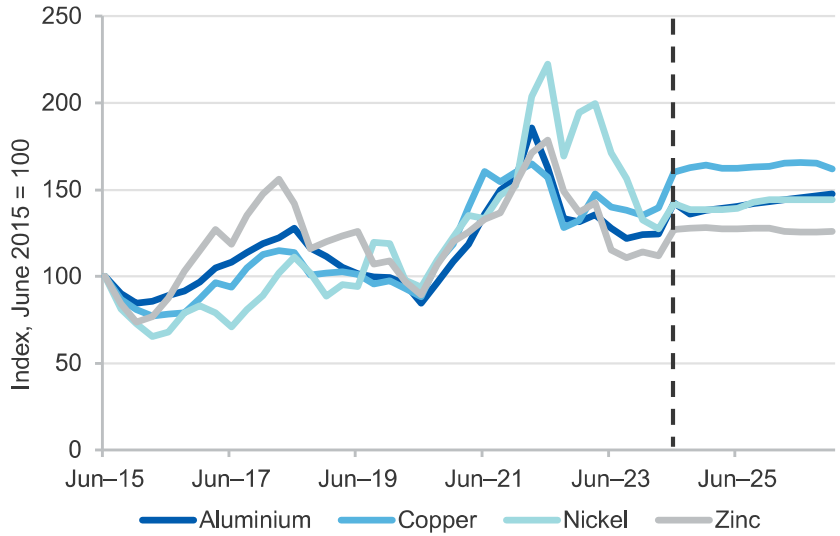


Notes: Prices are in US dollars, and are the international benchmark prices
Source: Bloomberg (2024); Department of Industry, Science and Resources (2024)

Oil prices have fallen modestly since the last REQ, with easing geopolitical tensions in the Middle East and OPEC+ expected to end output cuts. The rising take-up of EV's will detract from demand over the outlook period.

Base metal prices have risen since the last REQ, supported by an improving outlook for manufacturing in China and ongoing supply issues (Figure 1.5). The price of **nickel** rebounded strongly through April and May, following cuts to global production (ex. Indonesia), and strengthening global demand (particularly from China). However, new supply presents an ongoing risk of further price falls over the outlook period. Exchange inventories of Russian **aluminium** are rising, shunned by Western consumers. Stocks of most base metals are low for this stage of the economic cycle, which skews price risks for most metals to the upside. Rising infrastructure-related demand (particularly for the global energy transition) is expected to support prices over the outlook period, combined with broader demand following easing monetary policy.

Figure 1.5: Base metal prices



Notes: Prices are in US dollars, and are the international benchmark prices
Source: Bloomberg (2024); Department of Industry, Science and Resources (2024)

Since the last REQ, **lithium** prices (spodumene and lithium hydroxide) have risen modestly from 5-year lows. Inventories have risen and low prices have driven producers in a number of nations (including Australia) to announce cuts/closures. However, Australian lithium exports will continue to contribute substantially to resource and energy export earnings.

1.5 Export volumes

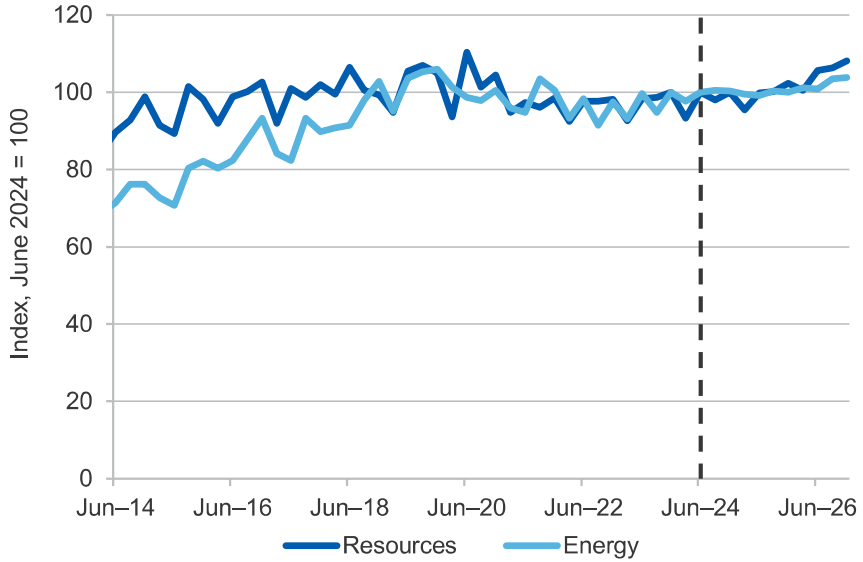
Export volumes are estimated to have fallen in the June quarter

The Resources and Energy Export Volumes Index (preliminary estimate) fell 1.1% in the June quarter 2024 from the March quarter 2023 but was up 6.7% on the June quarter 2023. Resource commodity volumes rose by 5.1% in the year to the June quarter 2024 and energy export volumes recorded 8.5% gains (Figure 1.6). High prices, 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 and 2026. The global energy transition will support resource export volumes over the outlook period. Relatively high prices (due to low investment in new supply) and the global energy transition are set to see energy production and exports stagnate over the outlook period.

Energy exports will level out in 2024 25, as the sharp price falls of the past year temper production and encourage delayed maintenance to occur.

Figure 1.6: Resource and energy export volumes



Source: Department of Industry, Science and Resources (2024)

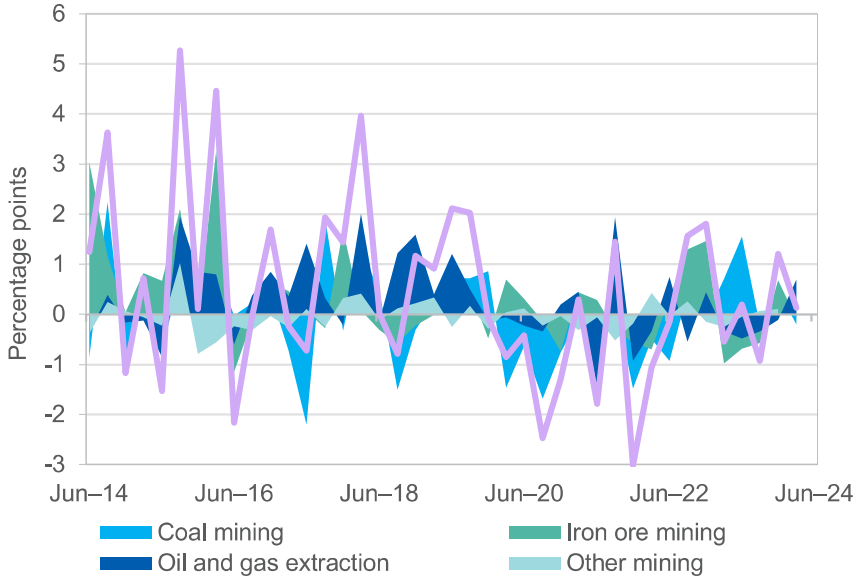
The El Niño climate episode has ended and the Bureau of Meteorology has classified the current outlook as ‘La Niña watch’. This means there is a strong chance of a La Niña episode developing in 2024–25, raising the odds of the type of wet weather disruptions that hampered the production and transportation of Australian mines in the 2021 to 2023 period.

1.6 Contribution to growth and investment

Mining output rose marginally in line with the overall economy

Australia's real GDP rose by 0.1% in the March quarter 2024, to be up 1.1% from a year before. Mining value-added rose by 0.1% in the March quarter and was 0.5% higher than in March 2023 (Figure 1.7). Strong oil and gas output (up by 2.9%) was offset by a sharp fall in 'other mining' (down 3.7%), associated with closures and cutbacks in the nickel and lithium sectors.

Figure 1.7: Contribution to quarterly growth, by sector

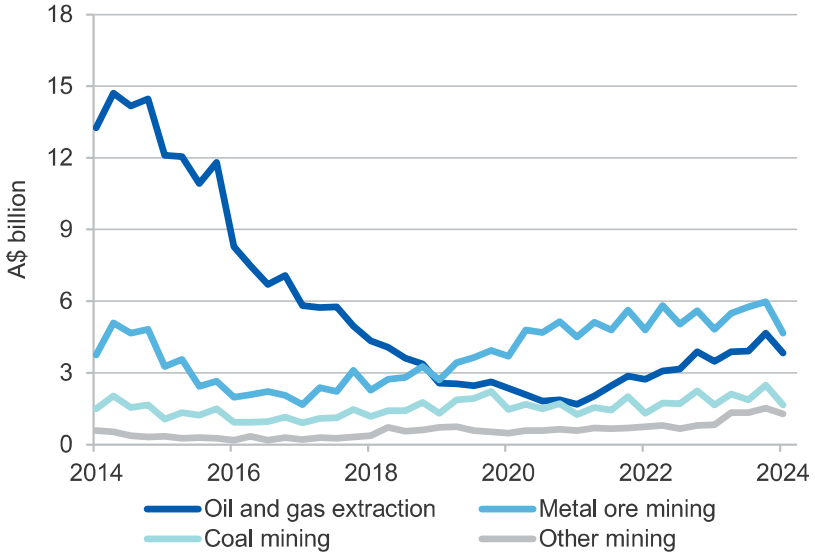


Source: ABS (2023) Australian National Accounts, 5206.0

Mining investment is growing noticeably

The latest ABS Private New Capital Expenditure and Expected Expenditure survey shows that Australia's resources industry invested $11.5 billion in the March quarter 2024, up 6% from the March quarter 2023. However, total capital spending declined in quarterly terms, falling across all categories (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

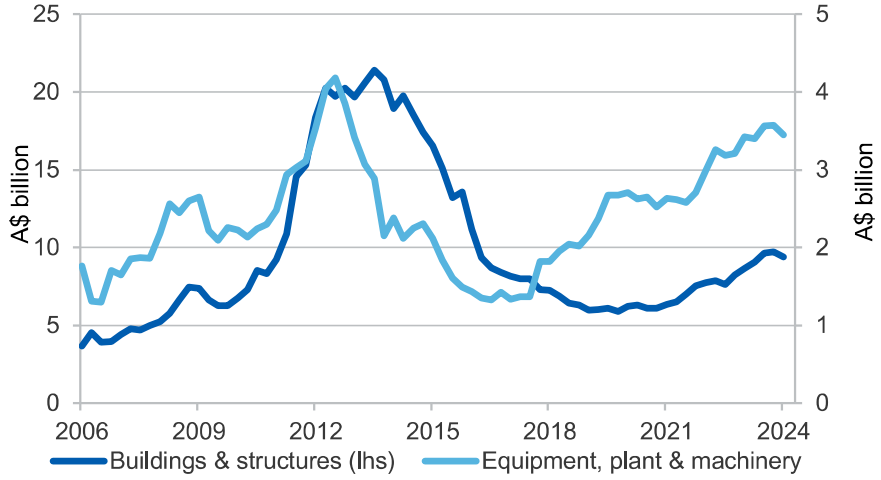
Source: ABS (2024) Private New Capital Expenditure and Expected Expenditure, 5625.0

Expenditure for buildings and structures fell by 4.2% in the March quarter, while investment in equipment, plant and machinery fell by 4.8%, bringing an end to 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. However, in recent years, moves in spending on buildings and structures has started to move closer in lockstep with spending on plant and equipment.

Total mining industry investment in 2023–24 is set to rise in the near-term (Figure 1.10). The sixth estimate for 2023–24 suggests the mining industry will invest $53 billion during the financial year. This is up from $52 billion recorded in the fifth estimate. The second estimate for 2024–25 ($48 billion) is around 7% higher than the first estimate. Estimates for forward spending tend to be revised up over time, so the data suggest no deterioration in the investment outlook.

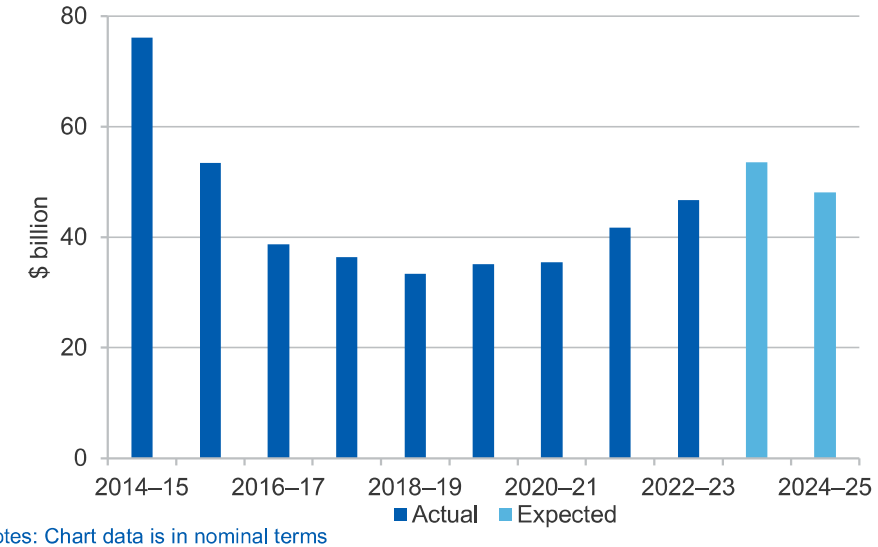
Figure 1.9: Mining industry capital expenditure by type, quarterly



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

Source: ABS (2024) Private New Capital Expenditure and Expected Expenditure, 5625.0

Figure 1.10: Mining industry capital expenditure, fiscal year



Notes: Chart data is in nominal terms

Source: ABS (2024) Private New Capital Expenditure and Expected Expenditure, 5625.0

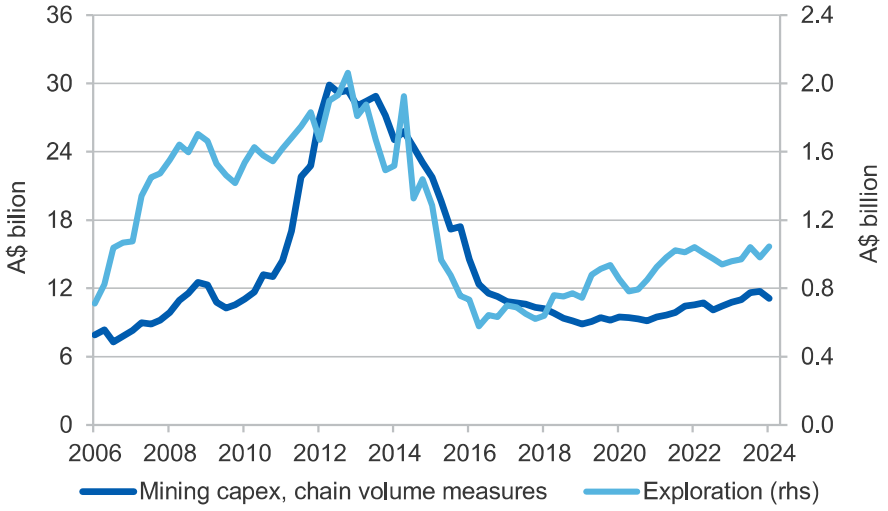
Further out in the outlook period, capital expenditure in the lithium and nickel industries is expected to edge back after recent price declines.

Energy commodities including coal, gas and (especially) uranium are experiencing relatively strong prices at present, with expectations for enhanced exploration activity over the next few years.

Exploration expenditure (adjusted for inflation) rose by 6% to $1.05 billion in the March quarter 2024. This is 9% above the level of a year ago, and suggests that relatively high commodity prices for traditional energy commodities — which have pushed export earnings to record levels — are also drawing investment. In recent years, exploration has been drawn to minerals needed for the global energy transition (Figure 1.11).

Exploration spending grew strongly for petroleum (up by 15% in the March quarter). However, other industries recorded declining quarterly spending, including base and other metals (down by 28%); coal and gold (both down by 13%), and iron ore (down by 10%).

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

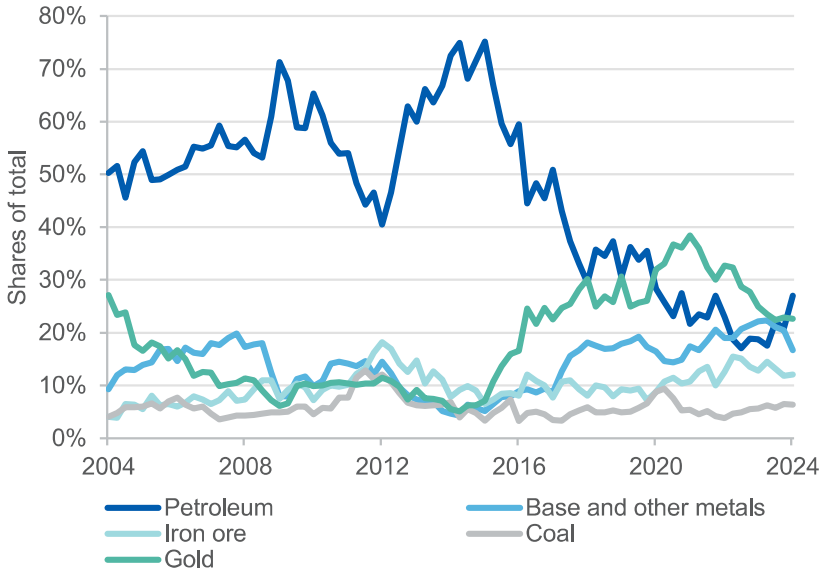


Source: ABS (2024) Private Capital Expenditure Survey, Chain Volume measure, 5625.0

Most industries have recorded steady growth in exploration since 2020, and exploration for most industries remains above the recent average.

Exploration spending is a leading indicator of broader capital investment, and growth since 2020 suggests interest is rising in precious and industrial metals (such as copper and iron ore), and critical minerals. Given the typical lags involved, capital spending by resource and energy companies is expected to continue to lift over the next few years.

Figure 1.12: Shares of exploration expenditure by commodity type



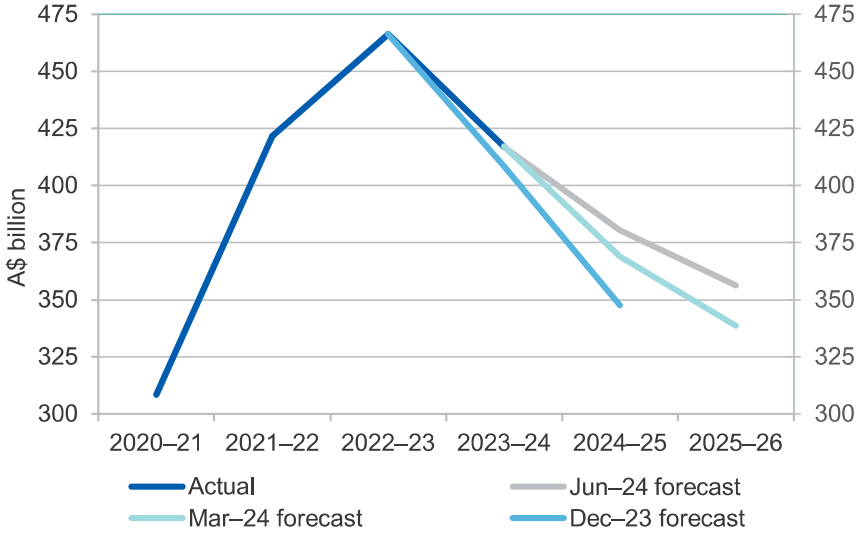
Source: ABS (2024) Private Mineral and Petroleum Exploration, 8412.0

1.7 Revisions to the outlook

The estimate for Australia's resources and energy exports in 2023–24 is comparable with the forecast contained in the March 2024 *Resources and Energy Quarterly*. The forecast for 2024–25 (nominal prices) is $11 billion higher and the 2025 26 forecast is $18 billion higher than than the same report (Figure 1.13).

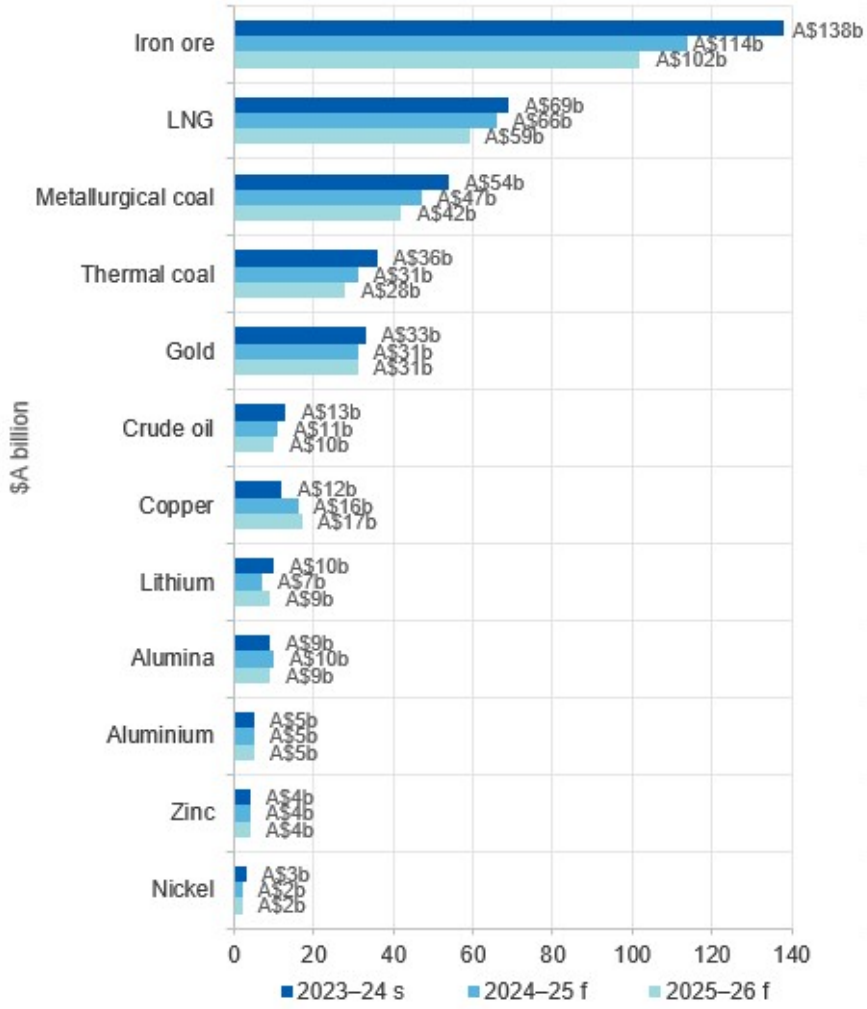
The 2024–25 and 2025–26 forecast revisions have been largely driven by an upward revision to prices of iron ore and gold, and by the impact of a weaker than expected exchange rate against the US dollar (AUD/USD).

Figure 1.13: Resource and energy exports, by forecast publication



Source: Department of Industry, Science and Resources (2024)

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



Annual per cent change

	2024–25 f			2025–26 f		
	volume	EUV	value	volume	EUV	value
Iron ore	2	-18	-17	3	-13	-10
LNG	-3	-2	-5	0	-10	-10
Metallurgical coal	11	-21	-13	3	-13	-10
Thermal coal	0	-16	-16	2	-10	-8
Gold	-6	2	-4	7	-8	-2
Crude oil	-5	-7	-11	-6	-9	-14
Copper	14	14	31	9	-1	8
Lithium	12	-41	-33	19	16	38
Alumina	0	9	8	0	-4	-3
Aluminium	1	2	4	0	-1	-1
Zinc	-3	12	8	0	-5	-5
Nickel	-41	10	-35	-32	1	-32

Notes: s estimate; f forecast. EUV is export unit value.
Source: ABS (2024) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2024)

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

					Percentage change			
Exports (A$m)	2022–23	2023–24 s	2024–25 f	2025–26 f	2022–23	2023–24 s	2024–25 f	2025–26 f
Resources and energy	466,293	416,951	380,341	356,469	11	–11	–8.8	–6.3
– real[b]	485,293	416,951	368,837	336,397	3.3	–14	–12	–8.8
Energy	238,711	179,688	160,853	145,493	17	–25	–10	–9.5
– real[b]	248,438	179,688	155,988	137,301	9.3	–28	–13	–12
Resources	227,582	237,264	219,488	210,975	4.6	4.3	–7.5	–3.9
– real[b]	236,855	237,264	212,849	199,096	–2.3	0.2	–10	–6.5

Notes: **b** In 2023–24 Australian dollars; **s** estimate; **f** forecast.
Source: ABS (2024) International Trade in Goods and Services, 5368.0; Department of Industry, Science and Resources (2024)

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

		Prices				Export volumes			Export values, A$b		
	Unit	2023–24 s	2024–25 f	2025–26 f	Unit	2023–24 s	2024–25 f	2025–26 f	2023–24 s	2024–25 f	2025–26 f
Iron ore	US$/t	104	88	81	Mt	891	905	933	138	114	102
LNG	A$/GJ	16	16	14	Mt	80	78	78	69	66	59
Metallurgical coal	US$/t	285	244	215	Mt	155	172	177	54	47	42
Thermal Coal	US$/t	137	136	122	Mt	205	205	209	37	31	28
Gold	US$/oz	2,084	2,234	2,145	t	257	248	265	33	31	31
Crude oil	US$/bbl	85	83	80	Kb/d	264	250	236	13	11	10
Copper	US$/t	8,666	9,868	9,952	Kt	791	905	987	12	16	17
Lithium	US$/t	1,843	1,116	1,286	Kt	457	512	609	10	7	9
Alumina	US$/t	352	395	398	Kt	16,711	16,636	16,708	9.0	9.7	9.4
Aluminium	US$/t	2,266	2,445	2,540	Kt	1,474	1,495	1,495	5.2	5.4	5.4
Zinc	US$/t	2,541	2,798	2,777	Kt	1,363	1,319	1,315	3.9	4.2	4.0
Nickel	US$/t	18,170	18,025	18,750	Kt	156	92	62	3.5	2.3	1.5
Uranium	US$/lb	82	95	100	t	6,096	5,842	6,417	1.3	1.4	1.7

Notes: **a** Export data covers both crude oil and condensate; **b** Lithium carbonate equivalent; **s** estimate. **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; Nickel 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 (2024)

Macroeconomic Outlook

Global GDP and economic change in 2023

Country	China	US	EU	India	ASEAN	Japan	S Korea	Taiwan	**Australia**
Per cent share of global GDP (PPP)	**19**	**15**	**15**	**8**	**5**	**4**	**2**	**1**	**1**
Yearly change	▲ 5.2%	▲ 2.5%	▲ 0.6%	▲ 7.8%	▲ 4.9%	▲ 1.9%	▲ 1.4%	▲ 1.4%	▲ **2.1%**
Share of Australia's two-way trade	30%	6%	9%	4%	10%	12%	7%	4%	–

Global overview

- The global economic and industrial outlook **improved** in the first half of 2024, with risks now **evenly balanced**.
- **Steady** disinflation and **easing** monetary conditions in major economies is expected to **support growth** in late 2024 and 2025.
- **China's economic growth** is projected to slow from **5.0%** in 2024 to **4.1%** in 2026.

Global risks

- **Tight monetary policy for longer** if inflation pressures, particularly in services, persist or rebound.
- Continuation of **China's property sector downturn** could further weigh on the Chinese economy
- **Increasing risks** to global trade and geoeconomic **fragmentation**

SOURCE: IMF; ABS; OCE

2.1 Summary

- Global industrial production lifted in the first half of 2024, on account of improving global goods demand. China accounted for most of the growth in global industrial production and merchandise exports.
- The outlook for global growth in 2024 has improved slightly, with risks evenly balanced. As inflation returns to target levels, central banks will exit restrictive stances, with growth to pick up in 2025.
- In May, China's growth outlook for 2024 and 2025 was revised up, on account of better-than-expected growth in the March quarter 2024 and policies recently announced targeting the property sector.

2.2 World economic outlook

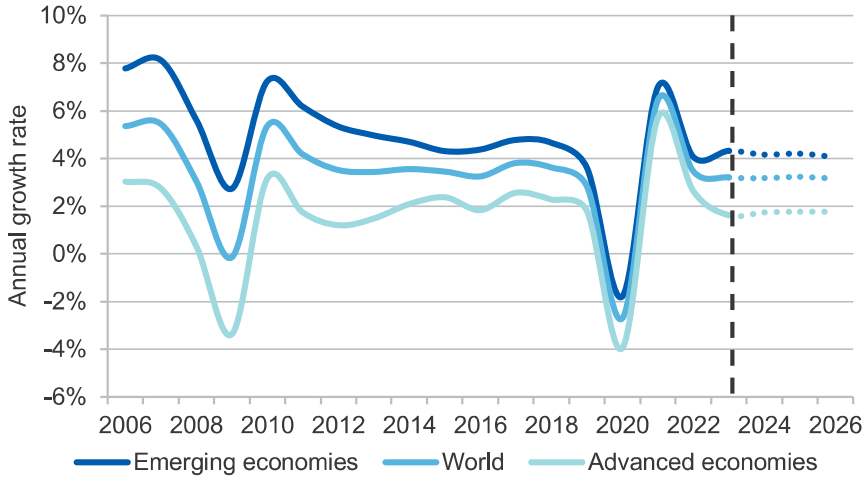
Declining inflation and resilient growth still expected, with risks balanced

The International Monetary Fund's (IMF) April forecasts were for the world economy to grow by 3.2% in 2024 and then continue at the same pace through to 2026. This represented an upgrade of 0.1 percentage points for 2024 compared to the IMF's January 2024 outlook — reflecting upgrades made to forecast growth for the US, offset by downward revisions across several other economies. The IMF stated the risks to the outlook have eased and are broadly balanced compared to their January update.

Growth in advanced economies is expected to rise to 1.7% in 2024 and 1.8% in 2025 and 2026. The forecast is revised upward by 0.2 percentage point for 2024, given improved outlook for the US — revised up by 0.6 percentage points. Emerging economies are expected to continue their relatively strong growth during the outlook period, with growth rising to 4.2% in 2024 and 2025. The growth rate for 2024 has been revised up by 0.1 percentage points, given a stronger growth outlook in India and Brazil.

The IMF noted that the global economy has been resilient, avoiding recession despite the various shocks that have played out over the past few years. Tight labour markets have softened the effects of tightened monetary policy on consumption growth, with global goods demand improving over H1 2024 and lifting the global manufacturing outlook.

Figure 2.1: GDP growth forecasts



Source: IMF (April 2024)

Recent policy moves and a better economic performance in China in the March quarter led the IMF to revise up its growth forecasts compared with the April outlook (see *China* section). The IMF now expects China's economy to grow by 5.0% in 2024 and 4.5% in 2025, easing to 4.1% by 2026 — in line with a long-term trend towards lower economic growth.

The IMF emphasised both upside and downside risks to global growth, including the degree to which inflation persists or geoeconomic fragmentation intensifies. Additional risks stem from the outlook for China, depending on the further scale and duration of its property sector downturn. Additional property sector reforms and large-scale investment may boost subdued confidence; however, structural challenges and local government financing constraints pose risks to the pace of recovery.

Increasing risks to the global trading system and geoeconomic fragmentation with growing sanctions and trade policies present a downside risk to global growth. The IMF notes this may detract 0.5-0.7% from global growth over next 5 years, depending on the severity of the fragmentation.

Global industrial production and trade on a recovering trajectory

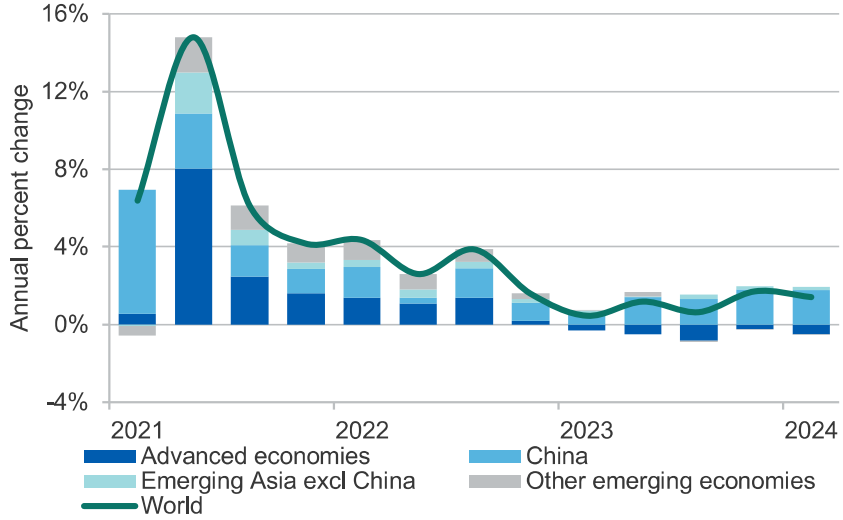
Global industrial production (IP) increased by 1.4% year-on-year in the March quarter 2024 (Figure 2.2). Positive annual growth largely reflected strengthening industrial activity in China and emerging Asian economies. Industrial production growth has been weak in advanced economies, under pressure from relatively tight monetary policy and rising input costs. Exceptions include Advanced Asian (excluding Japan) economies, as the recent upturn in the global technology cycle and heightened demand for advanced semiconductor chips (for AI applications) drive strong demand for South Korea's and Taiwan's chip products.

Global merchandise trade volumes increased by 1.5% year-on-year in the March quarter 2024. This reflected a marked improvement in global goods demand, following a prolonged decline throughout 2023 that weighed on the manufacturing sectors of most major economies. Similar to recent trends in industrial production, growth in global merchandise exports has largely been driven by increased exports from China and Advanced Asian economies (excluding Japan) (Figure 2.3). This suggests an improving demand outlook for Australian resources and energy exports, as these are Australia's key export markets.

Forward indicators of manufacturing activity suggest the prospect of a recovery from a prolonged contraction. The JP Morgan Global Manufacturing Purchasing Managers Index (PMI) measured 50.9 in May 2024 — the fourth consecutive month in expansionary territory — and its highest level in 22 months. The rise was driven by accelerating output growth in major producers such as the United States and China, with an easing in contractions in the manufacturing sectors of Europe and Japan.

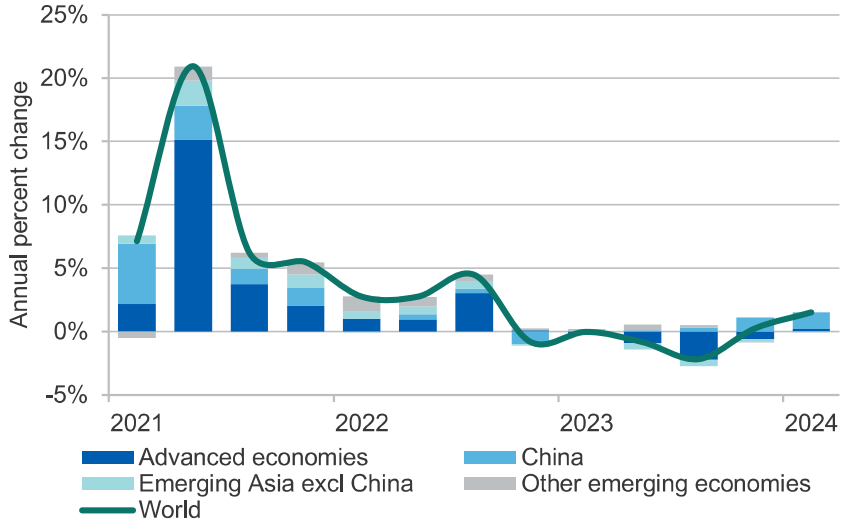
Improvements in global manufacturing activity have come through increasing output growth (at a 2.5-year high), increasing manufacturing employment and new orders growth (at a 2-year high). New export business continued modestly in expansionary territory, reinforcing improvements seen in global merchandise trade. However, while optimism in the global manufacturing sector has turned positive, price pressures are also gaining traction, with input cost inflation at a 15-month high.

Figure 2.2: Contributions to growth of industrial production



Source: CPB Netherlands Bureau for Economic Policy Analysis (2024).

Figure 2.3: Contributions to growth of merchandise exports



Source: CPB Netherlands Bureau for Economic Policy Analysis (2024).

The IMF expects world trade to grow by 3% in 2024 and 3.3% in 2025, reflecting 0.3% downward revisions for both years compared to the January WEO. This is in line with recent shifts in trade patterns, as IMF analysis has demonstrated that growth in trade flows between hypothetical blocs has declined notably compared to the growth of trade within them. Rising trade restrictions, as well as increased concerns over supply chain resilience and national security, are expected to weigh on global trade going forward.

Persistent inflation taking longer than expected to dissipate

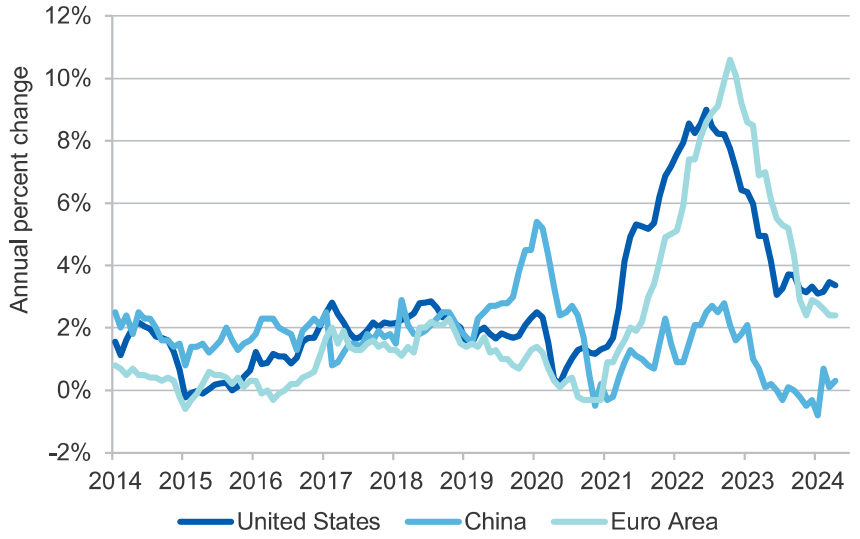
Progress in easing headline inflation has slowed over recent months in many major economies (Figure 2.4), however most advanced economy central banks still expect inflation to be close to 2% by the end of 2025. Headline inflation has tracked relatively flat on average in both the US and the Euro Area in H1 2024, while monthly core inflation measures (excluding volatile goods such as food and energy) have accelerated.

Despite these concerns, the European Central Bank (ECB) and the Bank of Canada were the first major central banks to ease monetary policy in June, each cutting 25 basis points on key interest rates. Market expectations indicate that monetary easing will commence in most major economies by the end of 2024, but to a lesser extent than was priced in when the March 2024 *Resources and Energy Quarterly* was released.

In April 2024, the IMF forecast global headline inflation would fall from 6.8% in 2023 to 5.9% in 2024 and 4.5% in 2025. Compared to the January 2024 outlook, the forecast for 2024 and 2025 was revised up marginally (by 0.1 percentage points). Inflation is expected to fall more quickly in advanced economies and reach 2% in 2025.

The potential for further inflationary shocks remains a risk, due to heightened geopolitical risks, ongoing regional conflicts and persistent services inflation in many major economies. Escalations in ongoing conflicts pose a risk to supply and trade flows of food and energy, as well as transportation costs (such as through the Red Sea).

Figure 2.4: CPI inflation in the United States, China and Europe



Source: Bloomberg (2024)

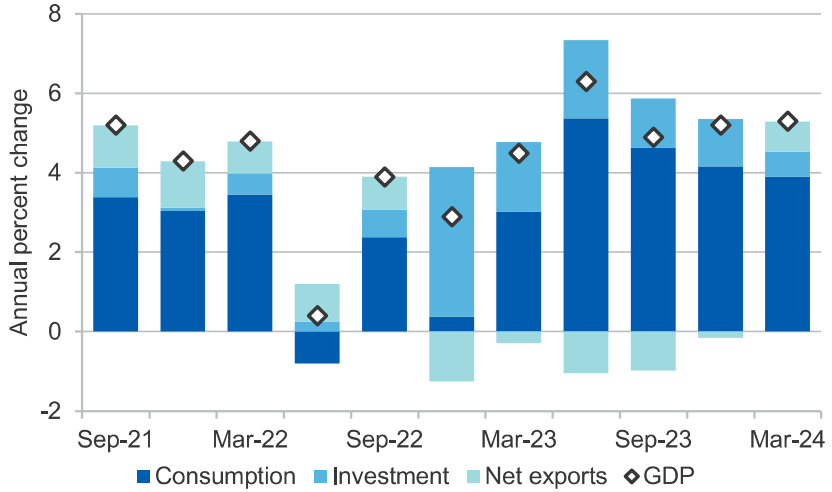
2.3 Major trading partners' economic outlook

The outlook for Australia's major trading partners remains weak, with the RBA forecasting their 2024 GDP growth at around 3.2%, and 3.0% in 2025 — well below its pre-pandemic decade average. However, the IMF expects robust economic growth in China and the US, as well as ongoing expansion in India. Growth from these key markets should support growth in their trading partners' economies, underpinning Australian resource and energy export earnings over the outlook period.

China's industrial sector underpinning overall growth

China's economy grew by 1.6% in over the March quarter 2024, to be 5.3% higher year-on-year (Figure 2.5). The result was largely driven by growth in consumption, with investment and net exports contributing to a lesser extent. Of note, China's net export balance made its first positive contribution to GDP growth since September quarter 2022, as exports rose by more than imports. Surging net exports have been supported by

Figure 2.5: China – contributions to real GDP growth



Notes: Consumption is made up of both household and government sectors.
Source: Bloomberg (2024); National Bureau of Statistics of China (2024)

strength in industrial output and weak domestic demand in China, sparking international attention to China's manufacturing export capacity. This export growth has been accompanied with declining export prices: while China's export volumes rose by 1.5% year-on-year in the March quarter 2024, average export prices fell by 11%.

China's industrial sector was a key driver of overall growth in the March quarter, with value added by the industrial sector up by 6.1% year-on-year. Growth over the quarter was driven strongly by increased production in the utilities (6.9%) and manufacturing sectors (6.7%). China's manufacturing output was supported by investment in electricity infrastructure and the production of clean energy technologies, for example electronic equipment and electric vehicle charging stations were both up by about 40%.

Industrial production has continued to lift into the June quarter and China's industrial outlook has strengthened to an almost 2-year high. Continued increases in manufacturing and utilities output led China's industrial production 6.7% higher year-on-year in April 2024. The Caixin Manufacturing PMI rose to an almost 2-year high in May 2024. Output was reported to be growing at its fastest pace in nearly two years, while strong new orders and business optimism led to growth in purchasing activity rising to a 3-year high.

Strong growth in manufacturing output as well as improving industrial sentiment have been underpinned by continued strength in investment. Year-to-date fixed asset investment for manufacturing increased by 9.7% in April 2024. Alongside 6% growth in infrastructure investment, this lifted total fixed asset investment up by 4.2% year-on-year.

The persistent downturn of China's property sector continues to act as a drag on China's economic activity: excluding real estate investment, year-to-date total fixed asset increased by 8.9%. Investment in real estate development declined by 8.6% year-on-year in April 2024 – its largest decline since March 2020. New property starts (by floor space) were 26% lower year-on-year in April 2024, following declines of 21% in 2023 and 40% in 2022. In a recent turn, property completions were up by 88% year-on-year.

After it met in April 2024, China's politburo signalled more support for China's property sector to respond to the ongoing property downturn. The key proposal of note was a policy directing local governments to purchase unsold homes — to be converted into affordable housing — while other policy measures were directed towards property investment (such as reduced mortgage rates, downpayment and residency requirements). The People's Bank of China (PBoC) announced a CNY 300 billion (US$41.5 billion) initiative to fund commercial bank loans for local state-owned enterprises to support such purchases. Transferring the debt burden of unfinished property projects from financially distressed developers to financially distressed local governments raises concerns on the feasibility and likely uptake of this proposal.

The IMF is forecasting China's economy to grow by 5.0% in 2024 and by 4.6% in 2025, given recent upgrades — of about 0.4 percentage points in each year — following their Article IV consultation. The IMF projects growth will slow to 4.1% in 2026 in line with a long-term trend towards

lower growth. While conditions improved over the last quarter, the IMF noted that uncertainties remain with the ongoing real estate downturn, surging local government debts, and headwinds to its export-led growth.

Another risk lies in the growing headwinds to the country's surging trade surplus — particularly its manufacturing surplus. Geopolitical tensions and trade sanctions are increasingly challenging its export market growth prospects, with the recent EU and US tariff increases on Chinese high-tech exports (such as semiconductors, solar cells, lithium-ion batteries and electric vehicles) representing a renewed escalation in their trade war.

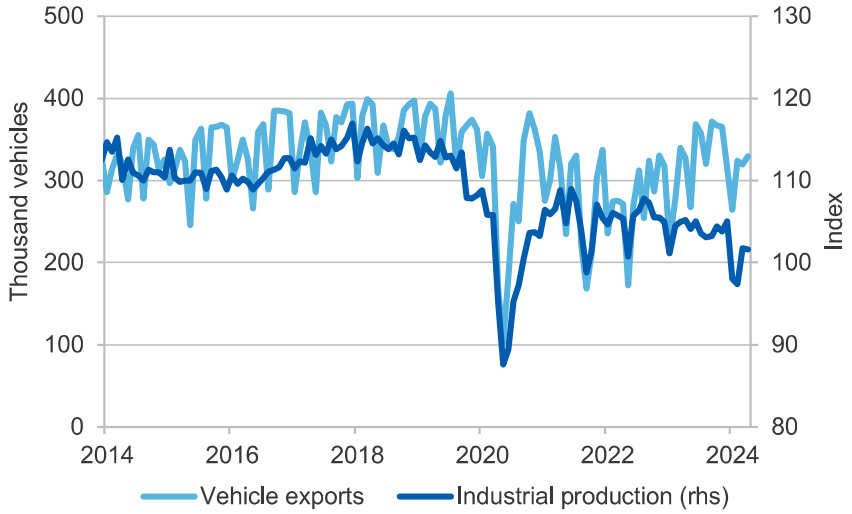
Japan's industrial outlook improving; Yen amplifying cost pressures

Japan's GDP decreased by 0.5% in the March quarter 2024, to be 0.4% lower year-on-year. Private consumption — accounting for 53% of GDP — was the key drag on GDP growth. Cost-of-living pressures have weakened consumers' real incomes, resulting in four consecutive quarterly contractions in private consumption (down 2.0% year-on-year). Offsetting this to some extent was net exports, which contributed 1.2% to annual GDP growth in the March quarter 2024, due to higher exports (up by 1.6%) and lower imports (down by 4.3%).

The depreciation of the Yen — to a 55-year low in real terms in April 2024 — has continued to contribute to growth in the value of Japan's exports, rising by 8.3% year-on-year in April 2024. Export volumes of several products have been on an improving trend, however overall merchandise export volumes tracked steady in the March quarter 2024. Vehicle exports improved over the year (up by 8.2% year-on-year in the March quarter 2024), as did growth in machinery orders (up by 23% in March 2024) (Figure 2.6). However, the weak Yen has also contributed to more expensive imports for consumers and input cost pressures in Japan's industrial sector.

Japan's industrial production has been weak so far in 2024, down on average by 4.1% year-on-year in January-April 2024. This has been weighed down by weak manufacturing output, for example with vehicle production 18% lower year-on-year in March 2024. Despite weak industrial

Figure 2.6: Japan industrial production and vehicle exports



Source: Bloomberg (2024)

output so far, Japan's industrial outlook has improved since the start of 2024. The Jibun Bank Japanese Manufacturing PMI returned to expansionary territory in May 2024, for the first time in a year. This improvement was attributed to employment growth and improved input inventories, with demand and output both tracking steady over the month.

Input cost inflation in Japan's manufacturing sector rose to a 13-month high in May, driven by rising costs for labour, materials and transportation. Despite this, firms remained optimistic about the 12-month outlook, citing positive expectations for demand recovery in the automotive and semiconductor industries.

The IMF expects Japan's economic growth to slow to 0.9% in 2024, then lift to 1.0% in 2025 — a 0.2 percentage point upgrade from January 2024.

Growth is expected to slow as factors that supported strong growth in 2023 fade, such as COVID-related pent-up demand and the surge in inbound tourism. While real household incomes have been a drag on consumption, recent outcomes from wage negotiations are set to boost

wage growth in Japan and support domestic demand going forward. Further support is also anticipated to come from the economic relief package announced in November 2023, for example with temporary cuts to income and residential taxes coming into effect in June 2024.

South Korea's industrial sector and exports driving growth

South Korea's GDP grew by 3.2% year-on-year in the March quarter 2024, a pronounced rebound from 0.9% in the June quarter 2023. Annual growth was primarily driven by 7.0% year-on-year growth in exports which, combined with imports decreasing marginally, led to a 70% expansion in the country's trade balance.

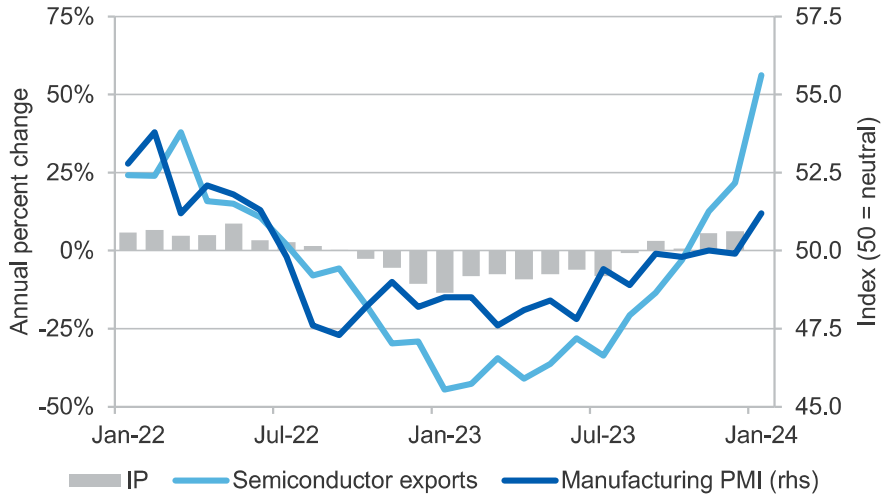
South Korea's industrial sector and goods exports are in an upswing, having been weighed down in 2022–23 by the downturn in the global technology cycle and falling global goods demand. Demand for South Korea's semiconductor exports in particular has been strong, due to the recent turn in the global technology cycle, and the boom in demand for advanced processing and memory chips for AI applications. For example, many major consumer electronics companies are launching new AI-enabled devices this year.

Industrial production in South Korea in April was 6.1% higher year-on-year, largely driven by higher manufacturing output (Figure 2.7). South Korea's exports have continued to grow strongly, increasing by 12% year-on-year in May 2024, driven by sales of manufactured products, including semiconductors (54.5%), ships (108%) and cars (4.8%).

South Korea's manufacturing PMI rose strongly into expansion in May 2024, following a contraction in the prior 2 months due to rising growth in new orders (a 2-year high) and output growth (almost 3-year high).

Strength in new orders was attributed to strong demand from both domestic and international markets, leading firms to lift purchasing activity strongly to shore up input stocks. Recent surges in raw materials prices (such as metals and energy commodities) led to further inflation in both input and output prices, however firms' expectations for business over the next 12 months remained positive — leading to increased employment.

Figure 2.7: South Korean industrial activity and exports



Source: Bloomberg (2024)

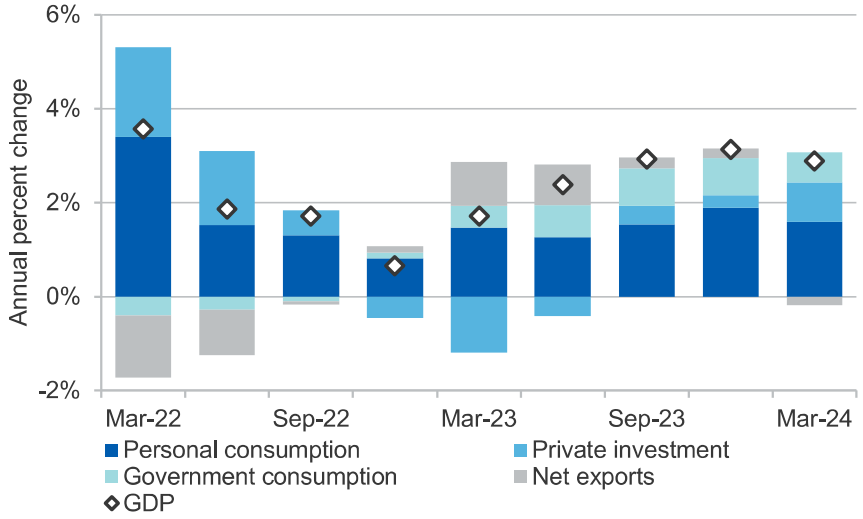
The IMF forecasts South Korea's economic growth to be 2.3% in 2024 and 2025, supported by further robust growth in goods exports and investment.

Resilient US labour market and fiscal spending supporting growth

The US economy grew by 2.9% year-on-year in the March quarter 2024, driven by robust personal consumption and strong contributions from government consumption and private investment (Figure 2.8). US consumption (measured by personal consumption expenditures) rose by 3.1% year-on-year in March 2024, above the average of 2.5% in H2 2023. This was marked by a rebound in services consumption (up by 2.8%) and renewed strength in goods consumption (up by 3.5%) to a lesser extent.

US labour market resilience has supported consumption so far in 2024, however there are signs that this tightness is easing, as the gap between labour demand and supply narrows. Employment growth has slowed so far in 2024, with official employment growth slowing to an average of 0.4% year-on-year from January-April 2024, while job openings fell to a 3-year low in April 2024, down by 19% year-on-year. The unemployment rate was 3.9% in April 2024, a touch higher than the average of 3.7% in H2 2023.

Figure 2.8: Contributions to annual US GDP growth



Source: Bloomberg (2024)

US fiscal spending has been another source of strength in the US economy. Investment programs such as the Infrastructure Investment and Jobs Act, Inflation Reduction Act and the CHIPS and Science Act, have continued to drive strong investment growth in early 2024.

For example, US private non-residential investment rose by 5.1% year-on-year in the March quarter 2024 and US non-residential construction spending rose by 12% year-on-year in April 2024. Investment growth has continued to be particularly strong in power and manufacturing, with private investment in manufacturing structures rising in real terms by 38% year-on-year in the March quarter 2024.

The US industrial outlook appears to be again slowing, following an initial recovery in 2024. US industrial production decreased by 0.4% year-on-year in April 2024, due to declines in manufacturing (down by 0.5%) and mining output (down by 1.3%), offset to some extent by higher utilities output (up by 2.3%).

The US Manufacturing PMI stayed in contractionary territory in May, driven by a sharp decline in domestic demand as output, employment and new export orders were in expansion. The prices sub-index remained in elevated territory (57.0), indicating cost pressures on firms from recent surges in the prices of raw materials such as fuel, natural gas, plastics and metals (e.g. aluminium and copper).

In April 2024, the IMF upgraded its forecast for US economic growth in 2024 by 0.6% to 2.7% due to ongoing strength in US consumption and ongoing labour market tightness. Recent persistence in US inflation (Growth is then forecast by the IMF to ease to 1.9% in 2025 as gradual fiscal tightening and softening of labour markets slow aggregate demand.

Recent strength in monthly US core inflation (average monthly increases of 0.4% from January-April 2024) has cast doubts over the pace of further declines in services inflation, however the US Federal Reserve is still expected to commence monetary easing by the end of 2024.

Eurozone economies on an improving growth trajectory

Eurozone GDP growth picked up in the March quarter 2024, with annual GDP growth increasing to 0.4% year-on-year. Among the larger economies, annual GDP growth picked up in Spain (up by 2.4%), France (up by 1.1%) and Italy (up by 0.7%). Germany's GDP growth rebounded to 0.2% over the quarter (up from -0.5% in the December quarter 2023) but remained down by 0.2% year-on-year — marking two consecutive quarters of negative annual GDP growth.

Europe's manufacturing sector has been in a prolonged downturn since July 2022, driven by the rapid surge in energy prices (Figure 2.9). Europe's industrial outlook remains weak, however the worst of the sector's downturn is most likely over. In May 2024, the Eurozone manufacturing PMI remained in contractionary territory, however it was the highest reading in 14 months. Business sentiment in Europe's manufacturing sector improved markedly to a 2-year high in May, as output declined by the slowest extent in over a year, while falls in new orders were at 2-year lows.

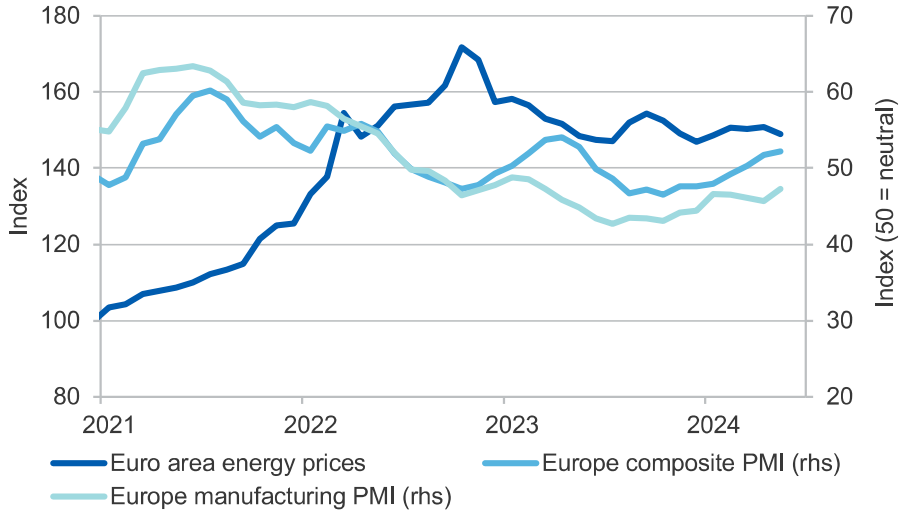
The near-term economic outlook for Europe no longer appears to be

dominated by ongoing weakness in the industrial sector, with the Eurozone Composite PMI rising into a greater expansion in May 2024, pulled up by improving services sector activity as inflation eases, labour markets remain tight and improving real household incomes support consumer sentiment.

In its April outlook, the IMF forecast Euro Area growth at 0.8% in 2024, revised down by 0.1% from January 2024. Ongoing weakness in manufacturing output and consumer sentiment led to more downgrades to German growth (now 0.2% in 2024, up from -0.3% in 2023).

As monetary policy continues to ease in the region (following the first interest rate cut in June 2024), rate pressures on consumers and businesses are expected to ease and allow real income growth to drive a recovery in H2 2024. The IMF expects Euro Area growth to pick up further to 1.5% in 2025, driven by a continued recovery in consumption and industrial activity, as monetary policy eases further.

Figure 2.9: European energy price index and PMIs



Source: Bloomberg (2024); Eurostat (2024)

India's economy is still growing strongly

India's GDP growth was 7.8% year-on-year in the March quarter 2024. GDP growth was driven by strong private consumption expenditure — especially for services — as well as continued strength in fixed capital formation. India's manufacturing PMI declined but remained expansionary in May 2024. Despite the decline, manufacturing activity was still growing strongly in the month, due to demand growth — notably with new export orders at a 13-year high. Ongoing strength in demand conditions and marketing improvements led business optimism about the coming year to its highest in almost a decade, with manufacturing employment also rising sharply.

The IMF forecasts India's economic growth to slow to 6.8% in 2024 and 6.5% in 2025, revised up by 0.3% in 2024 due to stronger-than-expected domestic demand.

Exchange rate assumption revised lower

Since the start of 2024, the Australian dollar has weakened relative to the US dollar but strengthened marginally in trade-weighted terms (Figure 2.10). The AUD/USD move arose on market expectations for US interest rates to remain at current levels for longer than was expected earlier in the year, lifting US bond yields.

The forecasts for Australian export values made in this REQ adopt the market consensus on the outlook for the AUD/USD. The market consensus (surveyed by Bloomberg) is for the AUD/USD to appreciate over the outlook period, as interest rates decrease quicker in the US than in Australia.

In mid-May 2024, the median consensus for the AUD/USD exchange rate was an average of US$0.66 in 2024, US$0.70 in 2025 and US$0.71 in 2026. Adopting these consensus expectations has led to downgrades of about US$0.02 in both 2024 and 2025, and US$0.03 in 2026 compared with the March 2024 *Resources and Energy Quarterly*.