

Overview

Australia's mining sector



Around 10% of GDP

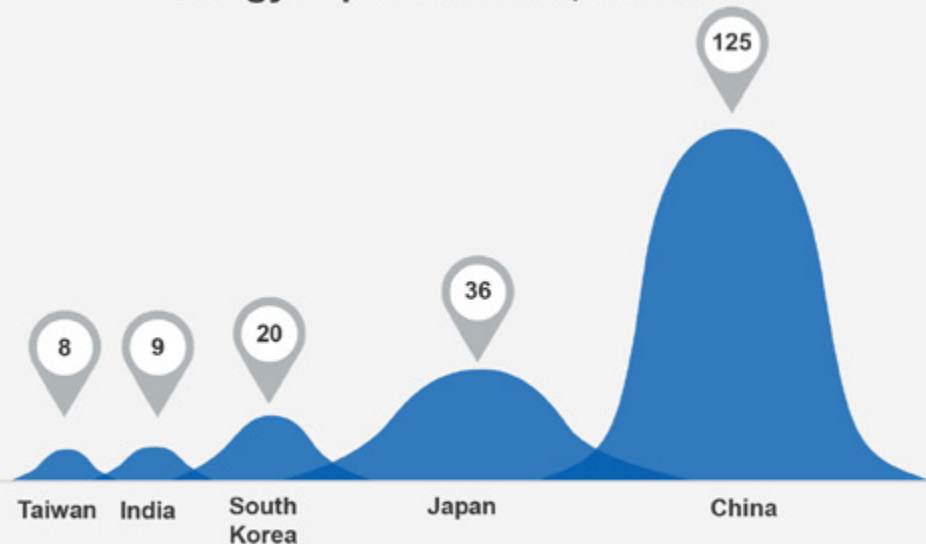


Makes up more than half of Australia's total exports

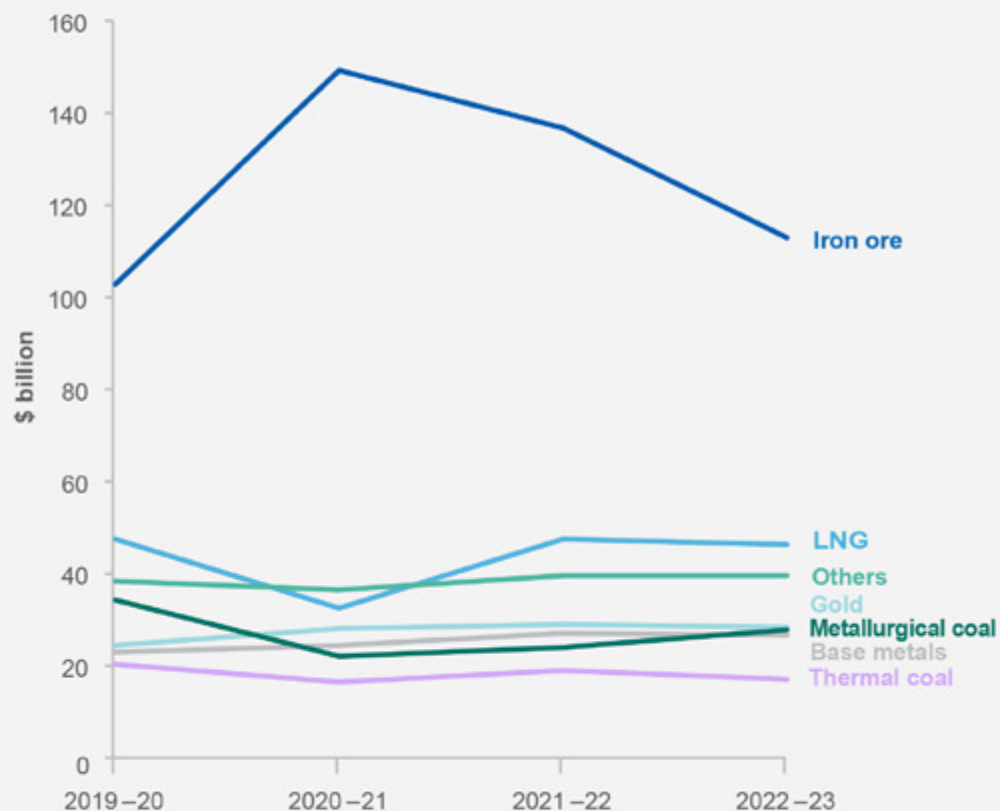


Directly employs around a quarter of a million people

Major markets for Australia's resources and energy exports in 2020, A\$billion



Australia's resources and energy exports



1.1 Summary

- The outlook for Australia's mineral exports continues to improve, as the world economy rebounds from the impact of the COVID-19 pandemic. As the world economy recovers, record iron ore prices have driven a surge in export earnings. Our metallurgical coal mining firms are also benefiting from the surge in world steel production.
- 2020–21 export earnings are estimated at \$310 billion, up almost 7% on the record set in 2019–20. Earnings are expected to rise further to \$334 billion in 2021–22, before declining to \$304 billion in 2022–23.
- Australian thermal coal miners are pivoting to ex-China markets, helped by critical shortages after a very cold Northern Hemisphere winter.

1.2 Export values

Australia's export values are estimated at about \$310 billion in 2020–21

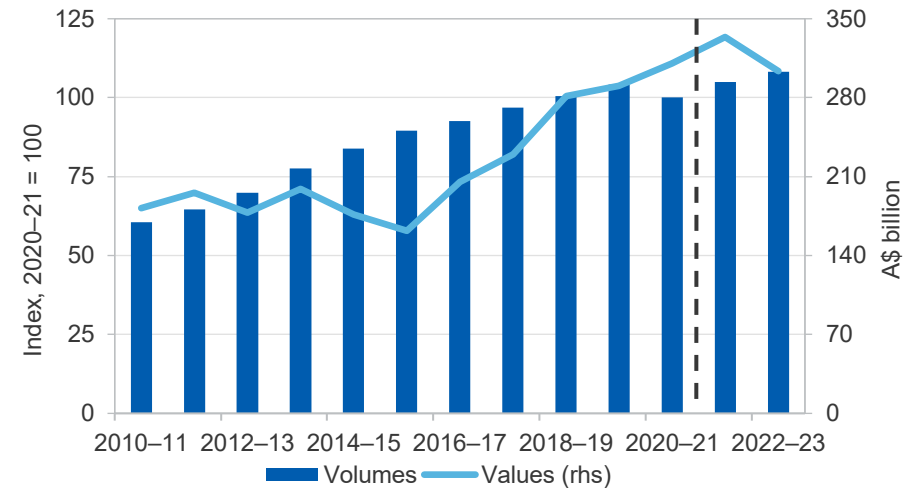
In the June quarter 2021, the Office of the Chief Economist's (OCE) Resources and Energy Export Values Index rose 33% from June quarter 2020; a 3% fall in volumes partly offset a 38% gain in prices.

Exports are forecast to reach a record \$334 billion in 2021–22, up from an estimated \$310 billion in 2020–21 (Figure 1.1), then fall to \$304 billion in 2022–23. With volumes growing modestly, price movements are expected to determine much of the change in earnings (Figure 1.2). Heighten commodity prices are set to adjust once supply shortfalls subside and demand moderates.

Rising Australian dollar constrained some of the surge in earnings

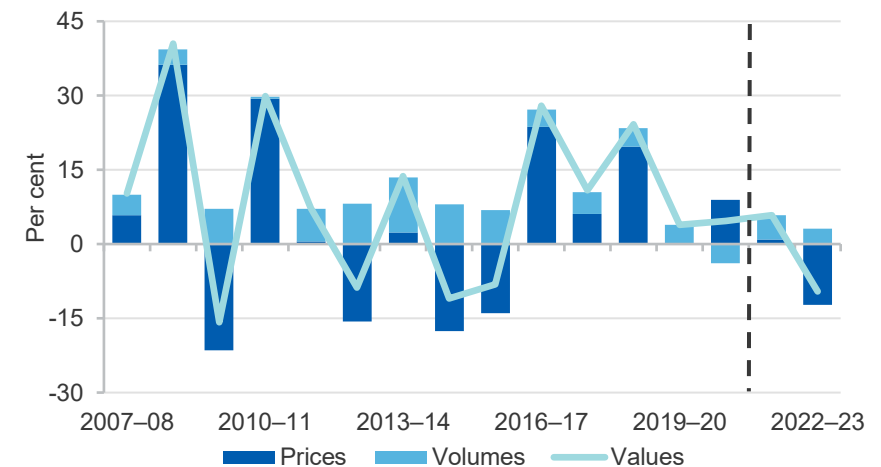
In Australian dollar terms, the OCE's Resources and Energy Commodity Price Index rose by 11% (preliminary estimate) in the June quarter 2021, up 38% on a year ago. In US dollar terms, the index rose by 10% in the quarter, and was 61% higher than a year ago. The index of prices for resource commodity exports (Australian dollar terms) rose by an estimated 57% in the year to the June quarter 2021, while energy commodity prices rose by 5% (Figure 1.3). The iron ore price surge to a record high drove the sharp gains in the resource commodity price index.

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



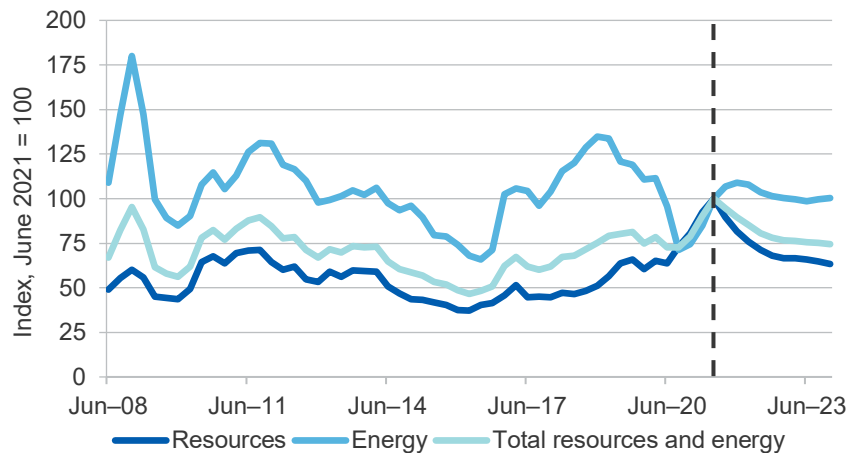
Source: ABS (2021) International Trade in Goods and Services, 5368.0; Department of Industry, Science, Energy and Resources (2021)

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



Source: ABS (2021) International Trade in Goods and Services, 5368.0; Department of Industry, Science, Energy and Resources (2021)

Figure 1.3: Resource and energy export prices, AUD 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 (2021) International Trade in Goods and Services, 5368.0; Department of Industry, Science, Energy and Resources (2021)

1.3 Macroeconomic, policy, trade and other factors

World economic activity continues to recover, as the COVID-19 vaccine rollout gathers pace. Renewed containment measures in a number of economies hurt economic activity in the first half of 2021, however, China and the United States are now proving very effective locomotives for the world economy. The outlook is for world growth to be relatively strong over the 2021–22 and 2022–23 outlook period, as a pathway out of COVID-19 pandemic becomes increasingly visible.

COVID-19 infections are falling in many nations, as vaccines are rolled out and containment measures are in place. So far, COVID-19 variants do not appear to represent a threat to the world recovery, and vaccines appear to be able to be modified to cover new strains of the virus.

The world economic recovery has been accompanied by a rise in prices for many goods and services. As a result, inflation has picked up, causing bouts of weakness in bond markets so far in 2021. During the second half

of 2021, and in 2022, it is likely that the supply of goods will tend to catch up with demand, resolving bottlenecks in global commodities and other goods markets. Several structural factors (such as ageing demographics, high global debt levels and ongoing technological change and innovation) are likely to help keep price rises in check.

The Chinese economy continues to expand at a relatively good pace. The government has pledged to gradually scaling back fiscal and monetary stimulus, and there is evidence China's property sector has cooled, in response to modest government measures.

Having passed a US\$1.9 trillion fiscal stimulus package to boost the US economy in the first quarter of 2021, the US Administration is seeking passage of a similar sized package of spending on infrastructure. This spending will be spread out over many more years than the first package, which aimed at supporting the economy while the COVID-19 vaccine rollout attempts to bring about herd immunity.

The most recent IMF forecasts world GDP growth at 6.0% in 2021, after a contraction of 3.3% in 2020. The IMF forecasts world growth to moderate towards more typical levels in 2022 and 2023. Advanced nations will likely recover before emerging nations, where access to vaccines is not as high.

Commodity demand should thus be healthy over the outlook period. In a sharp turnaround of fortunes, Australian exporters of premium thermal coal are enjoying multi-year price highs. However, Australian producers of mid-calorific thermal coal and metallurgical coal have taken longer to pivot from China to other markets, where supply has been better able to keep up with sometimes constrained demand. Once India and other parts of Asia have slowed the COVID-19 pandemic, sales of these coal types should pick up.

Our projections suggest that resource and energy export earnings will peak in 2021–22, but remain over \$300 billion in 2022–23. The extent of any further disruption to Australian resource and energy commodity trade with China poses a downside risk to these forecasts. A spike in global inflation and a sharper than expected tightening of monetary policy by the major central banks also pose a downside risk.

1.4 Prices

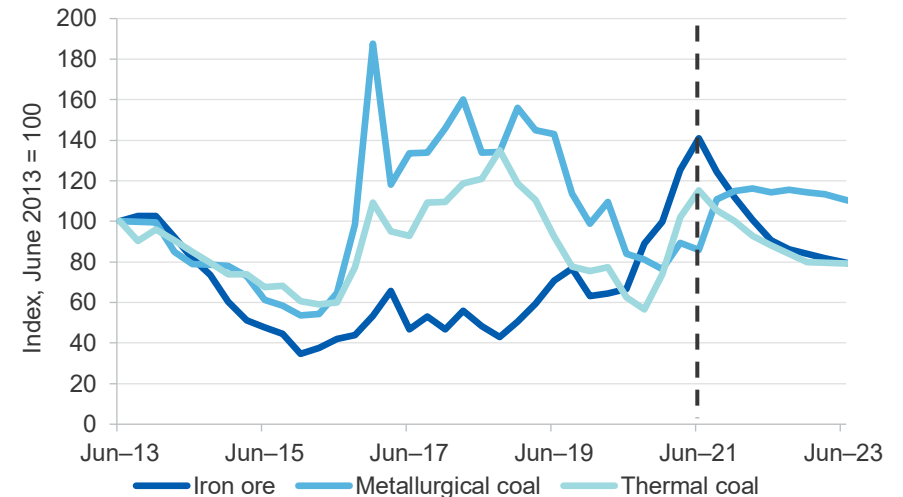
Since the March 2021 *Resources and Energy Quarterly*, iron ore broke the US\$200 a tonne mark and reached an all-time high. A recovery in demand in some of the advanced industrialised nations has added to strong Chinese demand, to keep prices high in a market still heavily constrained by low Brazilian supply (Figure 1.4). Prices are expected to ease by 2022, as Brazilian supply recovers and world demand moderates.

Surging demand from steel producers has seen Australian metallurgical coal prices regain all of the losses incurred as a result of COVID-19 and China's informal import restrictions. Australia's dominant position in the seaborne market has meant that our exporters have been able to sell coal to replace the (mainly North American and Russian) cargoes bought by China that have typically been sold elsewhere. Prices are expected to be firm in 2021–22, as ex-Chinese usage recovers further. Thermal coal prices have risen, with premium Australian coal hitting its highest level in more than ten years. With economic activity rebounding, power utilities are scrambling to rebuild stocks before cooling demand peaks in summer. Prices are likely to ease back in the outlook period, as supply gains match rising demand (Figure 1.4).

Oil prices have regained all of the sharp falls of the COVID-19 pandemic. The price seems likely to be capped at US\$70 a barrel over the outlook period, as further recovery in demand is matched by increased production. Spot LNG prices are forecast to be flat, as new supply enters the market.

The gold price has risen recently and is flirting with the US\$1,900 an ounce mark, as the US\$ weakens and gold demand recovers. A recovery in scrap supply is likely to offset improved jewellery demand over the outlook period. The price is likely to fall over the outlook period, as equity markets rise further and real bond yields rise. Base metal prices have more than recovered their COVID-19 losses, largely on the back of the global economic rebound (Figure 1.5). Supply worries have also pushed prices higher, with copper hitting record highs. Base metal demand should rise, as world industrial activity recovers further from COVID-19 restrictions and as the world energy transition continues.

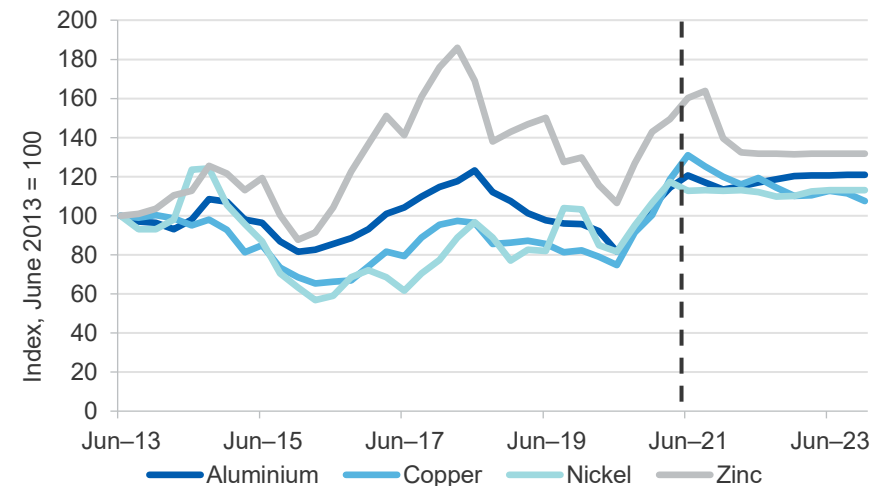
Figure 1.4: Bulk commodity prices



Notes: Prices are in US dollars, and are the international benchmark prices

Source: Bloomberg (2021); Department of Industry, Science, Energy and Resources (2021)

Figure 1.5: Base metal prices



Notes: Prices are in US dollars, and are the international benchmark prices

Source: Bloomberg (2021); Department of Industry, Science, Energy and Resources (2021)

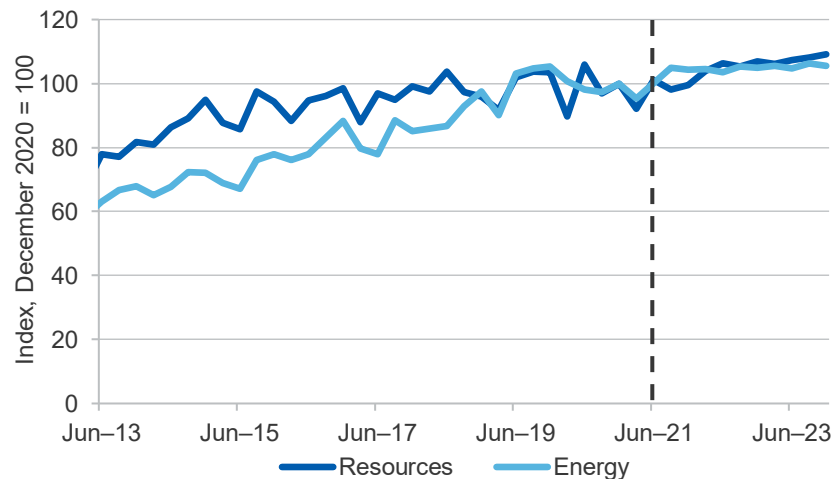
1.5 Export volumes

June quarter export volumes recovered, driven by resource exports

The OCE's Resources and Energy Export Volumes Index (preliminary estimate) rose by 8% in the June quarter 2021 from the March quarter, but was 2% lower than a year before (Figure 1.6). Within this total, resource commodity volumes fell by 5% in the year to the June quarter 2021, while energy commodity volumes rose by 2%. The volume of resource exports was affected by the global economic slowdown (due to COVID-19).

In volume terms, resources exports are likely to show further significant growth over the outlook period. Economic growth and industrial production is rebounding amongst our main trading partners, increasing their demand for our ferrous and non-ferrous metals. The production of electric vehicles and new energy technologies will see growing demand for commodities such as copper, lithium and nickel. Energy export volumes are forecast to recover pandemic losses during 2022–23. However, this volume recovery will likely not be sufficiently strong to offset low energy prices and push export earnings above pre-COVID-19 levels.

Figure 1.6: Resource and energy export volumes



Source: Department of Industry, Science, Energy and Resources (2021)

1.6 Contribution to growth and investment

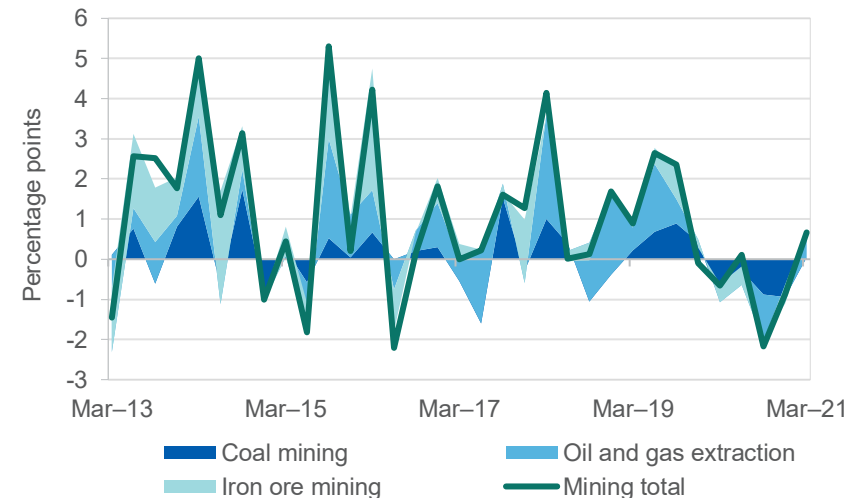
Mining industry contracted, but by much less than the rest of the economy

Australia's real Gross Domestic Product (GDP) rose by 1.8% in the March quarter 2020, and was up 1.1% through the year since the June quarter 2020.

Mining value-added rose by 0.7% in the March quarter, but was down 2.3% over the previous twelve months.

In the coming two years, it is likely that the iron ore sector will make a significant contribution to GDP growth, as high prices and margins drive growing volumes. The coal sector is likely to make only a modest contribution to growth in the outlook period. Gas production is likely to make a positive contribution to growth, on the back of stronger LNG demand and firm prices.

Figure 1.7: Contribution to quarterly growth, by sector

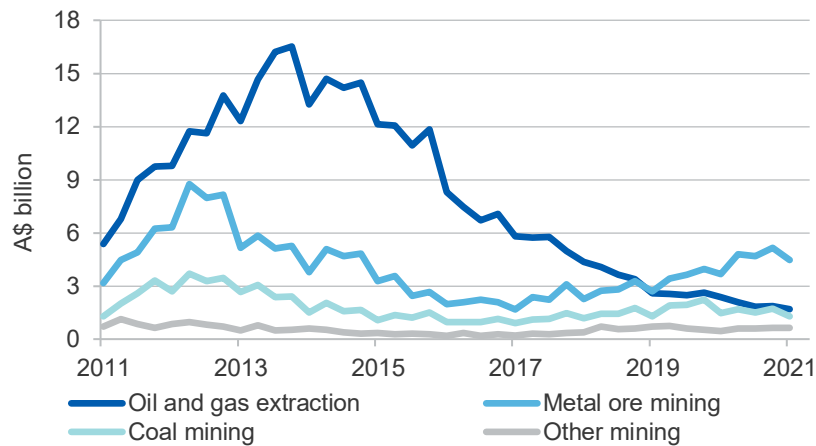


Source: ABS (2021) Australian National Accounts, 5206.0

Mining investment is picking up

The ABS Private New Capital Expenditure and Expected Expenditure survey for the March quarter 2021 shows that Australia's mining industry invested \$8.1 billion in the quarter. This is down by 14% in the quarter, but up 1.3% from the March quarter 2020. In recent quarters, strong iron ore prices has supported growth in investment by the metal ore mining sector, though there are signs that this growth is tailing off in the March quarter (Figure 1.8).

Figure 1.8: Mining industry capital expenditure by commodity

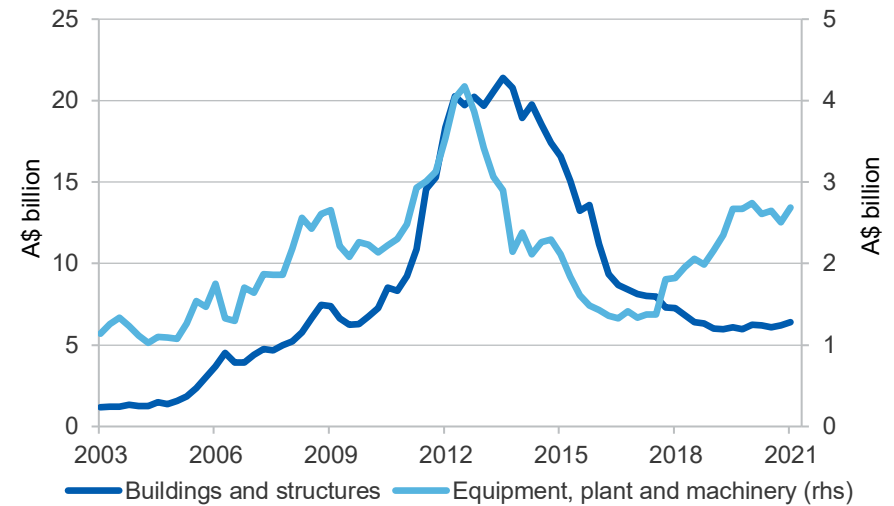


Notes: Other mining includes non-metallic mineral mining and quarrying and exploration and other mining support services; chart data is in nominal, original terms

Source: ABS (2021) Private New Capital Expenditure and Expected Expenditure, 5625.0

Expenditure rose both for buildings and structures and for machinery and equipment in the March quarter 2021 (Figure 1.9). Spending on plant and equipment remains well above its average level of recent years, though the reverse trend has been evident in buildings and structures. Forward expectations suggest that investment in 2020–21 will be slightly higher than in 2019–20 (Figure 1.10). Strong prices for gold, iron ore and other minerals are leading to new investment plans, including the re-opening of mines. However, investment in new greenfield projects remains well below the levels of the previous decade, when seven LNG plants were built.

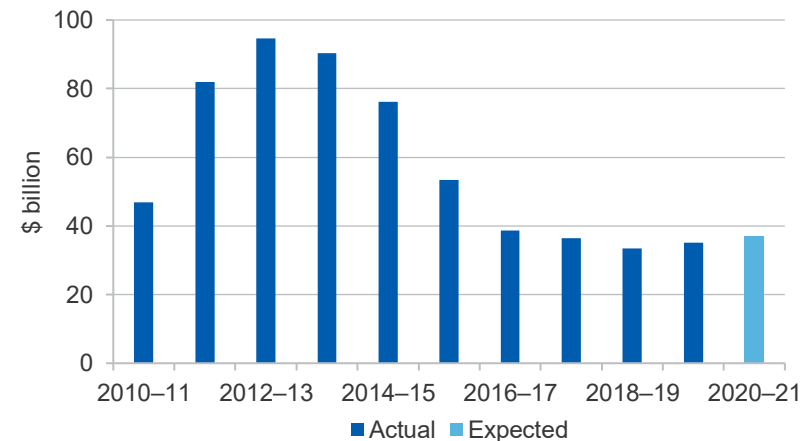
Figure 1.9: Mining industry capital expenditure by type, quarterly



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

Source: ABS (2021) Private New Capital Expenditure and Expected Expenditure, 5625.0

Figure 1.10: Mining industry capital expenditure, fiscal year

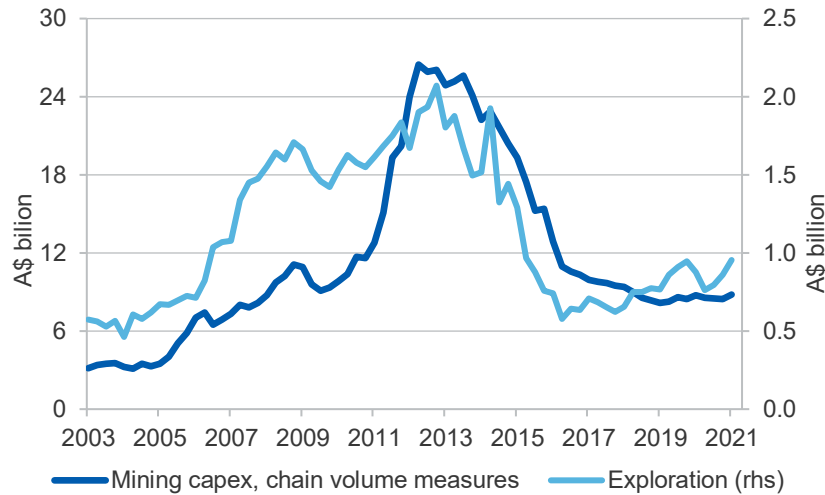


Notes: Chart data is in nominal terms

Source: ABS (2021) Private New Capital Expenditure and Expected Expenditure, 5625.0

Data on exploration spending (adjusted for inflation) suggests that mining capital expenditure is recovering at a marginal pace following falls in early 2020 (Figure 1.11). Exploration spending edged up in the March quarter, with spending for all commodities reaching \$956 million.

Figure 1.11: Mining capital expenditure vs exploration, quarterly



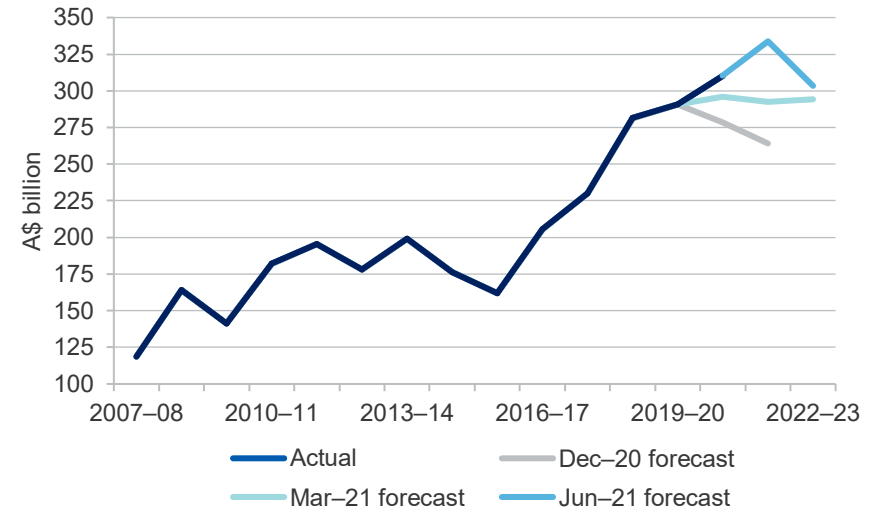
Source: ABS (2021) Private Capital Expenditure Survey, Chain Volume measure, 5625.0

1.7 Revisions to the outlook

At \$334 billion in 2021–22 and \$304 billion in 2022–23, Australia’s resources and energy exports are up in nominal terms by \$41 billion and \$9 billion, respectively, from those contained in the March quarter 2021 *Resources and Energy Quarterly*.

Stronger metal (mainly iron ore) exports have driven the upward revisions.

Figure 1.12: Resource and energy exports, by forecast release



Source: Department of Industry, Science, Energy and Resources (2021)

Figure 1.13: Australia's major resources and energy commodity exports, nominal

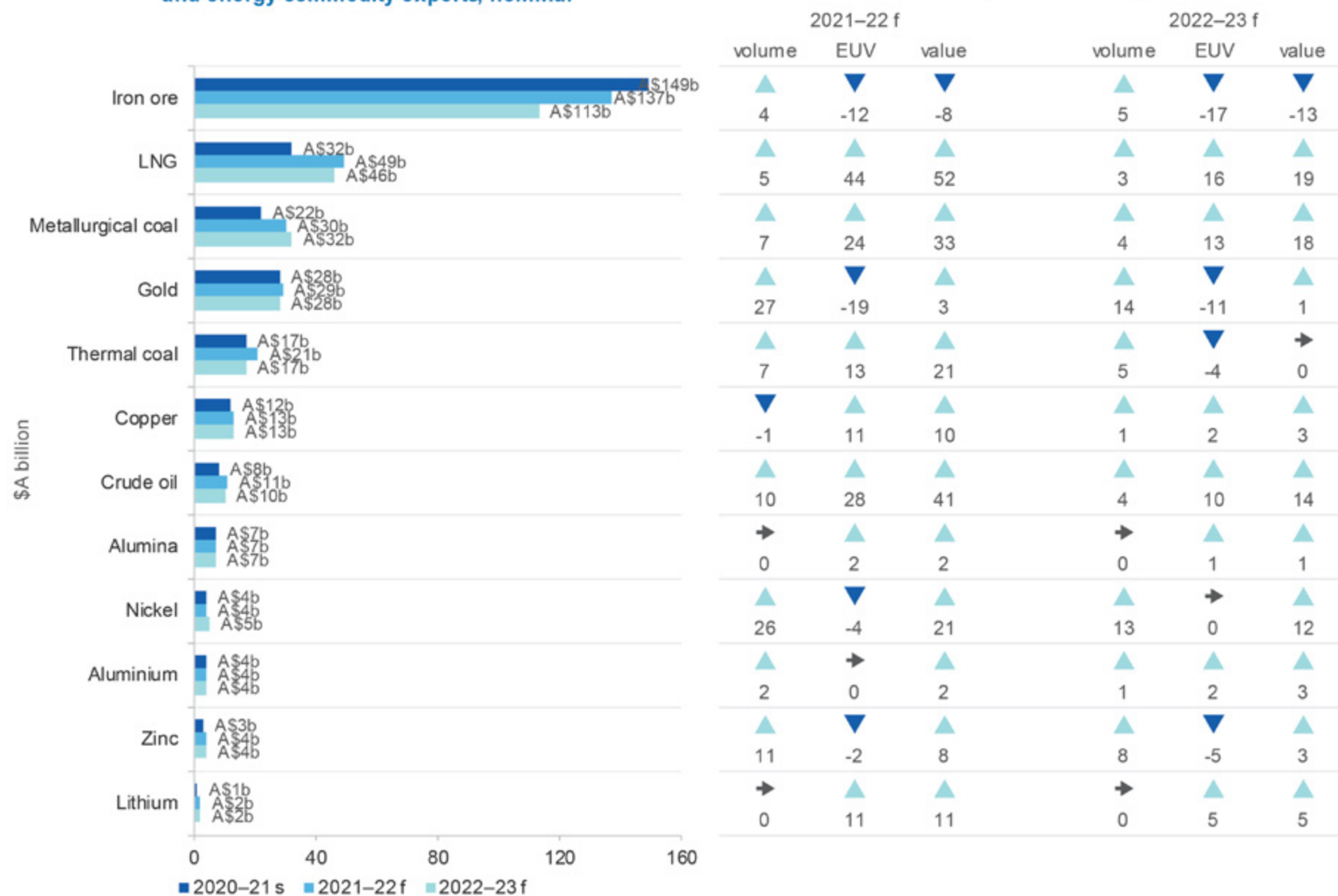


Table 1.1: Outlook for Australia's resources and energy exports in nominal and real terms

Exports (A\$m)	2019–20	2020–21 ^s	2021–22 ^f	2022–23 ^f	Annual percent change			
					2019–20	2020–21 ^s	2021–22 ^f	2022–23 ^f
Resources and energy	290,778	310,222	333,803	303,526	3.3	6.7	7.6	–9.1
– real ^b	293,973	310,222	328,266	293,396	1.9	5.5	5.8	–10.6
Energy	115,532	83,831	115,080	108,644	–12.9	–27.4	37.3	–5.6
– real ^b	116,802	83,831	113,171	105,018	–14.1	–28.2	35.0	–7.2
Resources	175,245	226,391	218,723	194,882	17.7	29.2	–3.4	–10.9
– real ^b	177,171	226,391	215,095	188,378	16.2	27.8	–5.0	–12.4

Notes: **b** In 2020–21 Australian dollars; **f** forecast; **r** Compound annual growth rate; **z** projection.

Source: ABS (2021) International Trade in Goods and Services, 5368.0; Department of Industry, Science, Energy and Resources (2021)

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

	Unit	Prices			Unit	Export volumes			Export values, A\$b		
		2020–21 ^s	2021–22 ^f	2022–23 ^f		2020–21 ^s	2021–22 ^f	2022–23 ^f	2020–21 ^s	2021–22 ^f	2022–23 ^f
Iron ore	US\$/t	137	129	100	Mt	871	904	954	149	137	113
LNG	A\$/GJ	7.8	11.2	10.4	Mt	79	83	83	32	49	46
Metallurgical coal	US\$/t	119	163	162	Mt	171	183	186	22	30	32
Gold	US\$/oz	1,841	1,736	1,667	Mt	323	409	417	28	29	28
Thermal coal	US\$/t	74	82	69	Mt	194	208	212	17	21	17
Copper	US\$/t	7,882	8,579	7,994	Kt	896	885	909	12	13	13
Crude oil	US\$/bbl	54	69	64	Kb/d	18,263	18,299	18,336	7.7	10.9	10.1
Alumina	US\$/t	284	282	310	Kt	286	314	310	7.0	7.1	7.2
Nickel	US\$/t	16,257	17,048	17,260	Kt	197	248	251	3.6	4.4	4.6
Aluminium	US\$/t	1,982	2,121	2,202	Kt	1,366	1,387	1,388	3.7	3.7	3.9
Zinc	US\$/t	2,666	2,611	2,421	Kt	1,427	1,579	1,651	3.3	3.6	3.5
Lithium	US\$/t	482	773	752	Kt	1,440	1,951	2,209	0.9	2.0	2.5
Uranium	US\$/lb	30	31	34	t	6,157	5,800	5,800	0.6	0.4	0.5

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; Nickel LME cash; Lithium spodumene ore.

Source: ABS (2021) 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, Energy and Resources (2021)