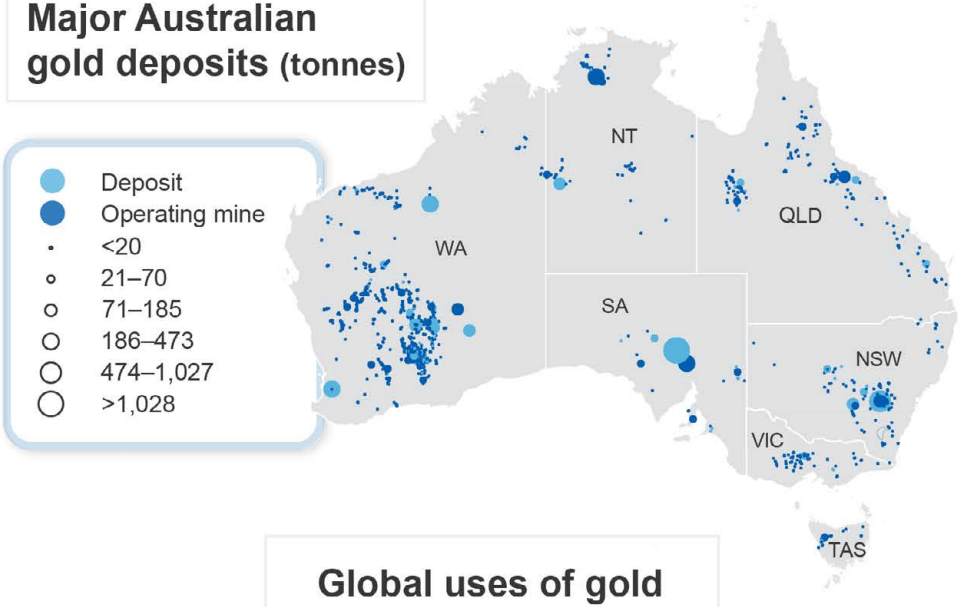
79
Au
196.967

Gold

Major Australian gold deposits (tonnes)



Gold

- Each person consumed an average of **3.7 grams** of gold jewellery in 2019
- Aprox 187,200 tonnes of gold mined since the **beginning of civilisation**
- The US Federal Reserve holds **6,700 tonnes of gold**
- Gold makes up **3 parts per billion** of the Earth's outer layer

Global uses of gold

48% Jewellery

20% Coins and bars

15% Central bank reserves

9% Global backed exchange traded funds

8% Electronics, industrial, dental and medical

Australia's gold

World's no. 1 producer of gold forcasted **for 2021**

World's largest economic demonstrated **resource** of gold

World record holder for **largest gold nugget** 72kg

10.1 Summary

- The gold price is forecast to reach a 7-year high of US$1,475 an ounce (in real terms) in 2020, due to uncertainties over the COVID-19 outbreak and its impacts on the world economy, particularly China. A global rebound is projected to see the price slide to US$1,220 an ounce by 2025.
- Australia is expected to overtake China as the world's largest gold producing country in 2021, with high prices encouraging an expansion in production.
- The real value of Australia's gold exports is forecast to set a record of $26 billion in 2019–20, driven by higher prices and export volumes, before declining to $21 billion in 2024–25 as gold prices ease back.

10.2 Prices

Gold prices rose strongly in 2019

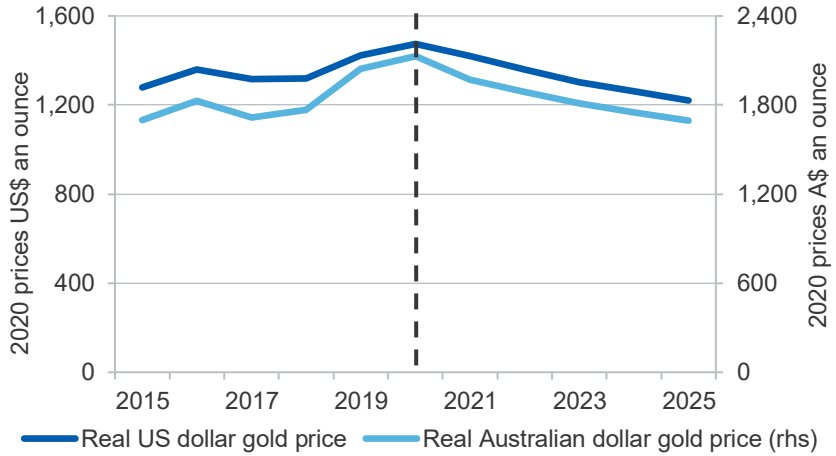
The London Bullion Market Association (LBMA) gold price averaged US$1,420 an ounce in 2019 (in 2020 price terms), a rise of 7.7 per cent from 2018. The price was largely propelled by the impact of trade tensions between the US and China. The same trade tensions helped push the Australian dollar to an 11-year low of US$0.6756 on 5 August 2019. The lower Australian dollar, in combination with a higher US dollar gold price, pushed the Australian dollar gold price to a new annual average record of A$2,045 an ounce in 2019 (Figure 10.1).

Gold prices to rise in 2020, then fall in the medium term

Gold prices are forecast to average US$1,475 an ounce in 2020. This represents a rise of 3.7 per cent (in real terms) on 2019, driven by higher investor demand for gold as a safe haven asset. The COVID-19 outbreak is likely to have an impact on Chinese and global economic growth. Geopolitical tensions in the Middle East and the Korean peninsula are unlikely to be resolved in the short term. The low interest rate environment is likely to continue be a major factor driving institutional investment demand for gold. With (real) interest rates remaining low in historical terms, the opportunity cost of holding gold is low, raising its attractiveness as an investment asset in times of uncertainty.

The gold price could exceed expectations in the short term if the —19 outbreak turns out to have a larger than expected adverse impact on the world economy.

Figure 10.1: US and Australian dollar real gold prices



Source: LBMA (2020) Gold price PM; Department of Industry, Science, Energy and Resources (2020)

After 2020, gold prices are projected to fall by around 3.7 per cent a year, to US$1,220 an ounce in 2025 (real terms), due to the recovery of the global economy and a higher interest rate environment. These factors are expected to undermine some of gold's appeal to institutional investors. Funds are expected to move out of safe haven assets like gold into riskier assets. The pace of central bank gold buying is expected to decrease at an annual rate of 4.0 per cent over the outlook period, amidst a modestly lower appetite for gold reserves (Figure 10.2).

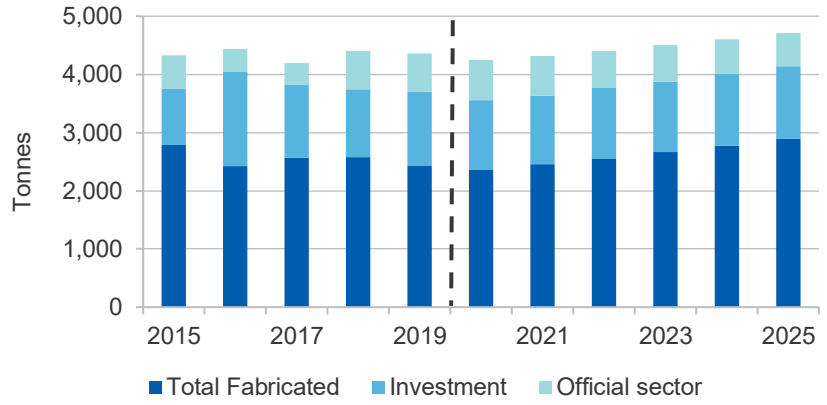
The lower US dollar gold price, in combination with higher Australian dollar, is expected to push the Australian dollar gold price lower over the outlook period, to average A$1,695 an ounce (real terms) in 2025.

10.3 Consumption

World gold consumption fell in 2019

World gold consumption declined by 1.0 per cent in 2019, to 4,356 tonnes (Figure 10.2), as higher gold prices reduced the demand for gold jewellery (which accounts for 48 per cent of global gold consumption) by 5.9 per cent in 2019 to 2,107 tonnes. Jewellery consumption in China and India — the world's two largest jewellery consuming nations — decreased by 7 and 9 per cent over this period, to 637 and 545 tonnes, respectively. In China, the trade tensions with the US, slowing economic growth, and higher gold prices all contributed to weaker consumer sentiment and reduced demand for jewellery. In India, high Rupee gold prices, higher import duties, and concerns about the country's economic slowdown all impacted negatively on the country's demand for jewellery.

Figure 10.2: World gold consumption by sector



Source: World Gold Council (2020) Gold Demand Trends; Department of Industry, Science, Energy and Resources (2020)

Central banks and other government institutions (the "official sector") continued to purchase gold in 2019, but net official sector purchases fell by 0.9 per cent to 650 tonnes. Economic uncertainty, and a desire to diversify out of the US dollar, appear to have been the main driving factors for continued strong central bank gold buying.

Gold used in industrial fabrication fell by 2.4 per cent in 2019, to 327 tonnes, as US-China trade tensions impacted on the sale of consumer electronics. Over this period, gold used in electronics decreased by 1.9 per cent to 263 tonnes. Higher gold prices also affected the demand for gold used in the dental sector, which was down by 6.7 per cent in 2019, as consumers substituted ceramics for gold for their dental requirements.

Offsetting falling jewellery consumption, gold-backed exchange traded funds (ETF) holdings rose by 428 per cent in 2019 to 401 tonnes — the largest inflows since 2016. Lower interest rates, and rising US–China trade tensions drove investment flows into ETFs.

Gold consumption expected to rise after 2020

Global gold consumption is forecast to fall by 2.3 per cent in 2020 to 4,255 tonnes (Figure 10.2), as higher gold prices and the outbreak of COVID–19 weigh on the sale of gold jewellery. As a result, global jewellery demand is expected to fall by 3.0 per cent in 2020 to 2,044 tonnes.

Central bank gold buying is forecast to increase by 8.0 per cent in 2020 to 702 tonnes, as some central banks are expected to continue adding to their gold reserves in 2020. It is estimated that China will need to purchase over 1,000 tonnes of gold in order to have gold comprise 5 per cent of total reserves. The US–Iran tensions are expected to encourage gold buying from central banks in the Middle East region.

After 2020, world gold consumption is projected to rise at an annual rate of 2.1 per cent, to 4,712 tonnes in 2025 (Figure 10.2), as lower gold prices boost jewellery demand and retail investment.

Global jewellery consumption is projected to rise at an annual rate of 5.0 per cent over the 5-year outlook. Consumption should reach 2,608 tonnes by 2025, driven by lower gold prices and stronger economic growth. Demand from China is expected to pick up, as price-sensitive Chinese consumers react to price falls. Economic growth, ongoing urbanisation, and rising incomes are all expected to contribute to higher jewellery demand in India. In addition, compulsory branding by Indian jewellery

retailers in 2020 could support consumer confidence and stimulate demand for gold.

In the US and Europe, an improvement in consumer confidence is also likely to support the demand for gold jewellery in those markets.

Gold retail investment is expected to grow at an annual rate of 2.2 per cent over the outlook period, to reach 990 tonnes by 2025. The forecast decline in gold prices will likely attract retail and institutional investors back to the gold bar and coin markets.

After reaching a peak of 702 tonnes in 2020, the pace of central bank gold buying is expected to decrease by 4.0 per cent a year, falling to 573 tonnes in 2025. Both Russia and Turkey aim to have their gold reserves reach 20 per cent of total reserves. However, it is highly unlikely these two countries will actively increase gold's share of their total reserves over the outlook period, as an improvement in world trade and a recovery in the global economy are expected to reduce central banks' desire to diversify their reserves.

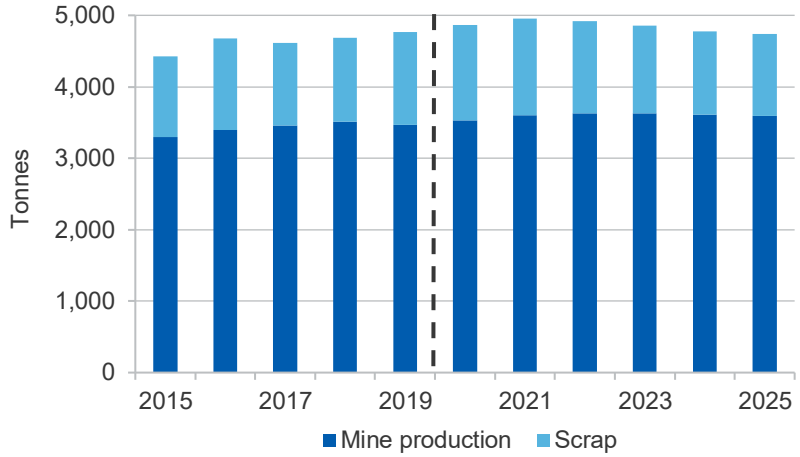
10.4 Production

World gold supply increased in 2019

World gold supply grew by 2.2 per cent in 2019 to 4,776 tonnes (Figure 10.3), propelled by an 11 per cent rise in gold scrap. Higher gold prices encouraged consumers to sell gold to recyclers. China was the main driver of the growth, as low cost and convenient online gold recycling platforms boosted gold buy backs.

World gold mine production fell by 1.3 per cent in 2019 to 3,464 tonnes. Production in China — the world's largest gold producer — declined by 5.9 per cent, to 380 tonnes, with stricter environmental regulation leading to some modest production cuts. The shift of Indonesia's Grasberg gold mine from open cut to underground reduced global supply by 42 tonnes in 2019. However, production in Australia and Canada increased by 4.1 and 7.9 per cent in 2019, to 326 and 208 tonnes, respectively, with output in both nations benefiting from production from new mines.

Figure 10.3: World gold supply



Source: World Gold Council (2020) Gold Demand Trends; Department of Industry, Science, Energy and Resources (2020)

World gold supply expected to peak in 2021

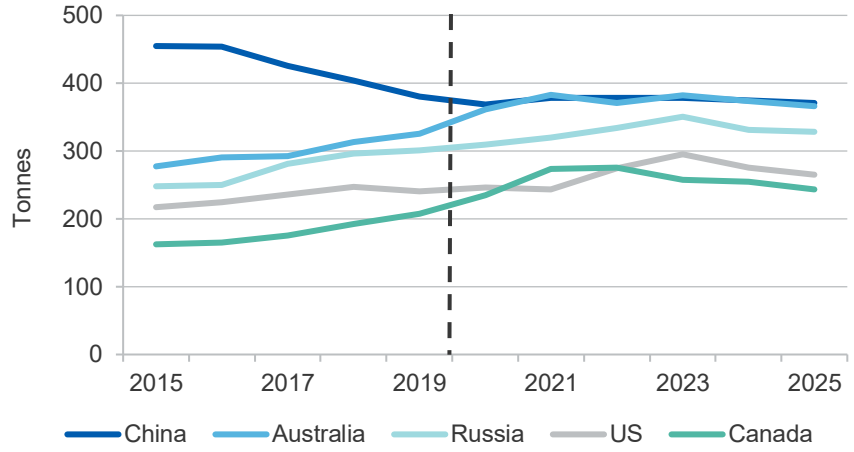
World gold supply is forecast to reach a peak of 4,962 tonnes in 2021, and then decline moderately to 4,736 tonnes in 2025 (Figure 10.3). In the short term, increasing total gold supply will be propelled by higher mine production and scrap output.

Global mine production is forecast to increase by 2.0 per cent (to 3,533 tonnes) in 2020 and by 1.9 per cent (to 3,600 tonnes) in 2021. An expected upward movement in gold prices in 2020 — in both US dollar and other major currency terms — and a solid pipeline of projects in Australia, Russia and Canada — are all likely to drive higher global gold mine output, with miners focusing on expansions and extending the life of existing mines.

Australia is expected to overtake China as the world's largest gold producing country in 2021, producing 383 tonnes, as miners respond to record prices (see *Section 10.5 Australia's exports and production)*. In China, the COVID–19 outbreak and stricter environmental regulation are

likely to reduce Chinese gold mine production by 2.9 per cent in 2020 to 369 tonnes. After 2020, China's gold mine production is forecast to rebound modestly and then steady at around 2019 levels (Figure 10.4).

Figure 10.4: Top 5 global gold producing countries



Source: China Gold Association (2020); Refinitiv (2020); Department of Industry, Science, Energy and Resources (2020).

Gold scrap supply is forecast to rise at an average annual rate of 2.0 per cent over the next two years, to 1,357 tonnes in 2021, as high gold prices — both in US dollar and local currency terms — encourage gold selling in major jewellery consuming markets such as China and India.

World gold supply is set to decline over latter half of the outlook period

After 2021, world gold supply is projected to fall at an average annual rate of 1.1 per cent, due to lower scrap supply. World recycled gold supply is projected to fall from 1,357 tonnes in 2021 to 1,140 tonnes in 2025. An expected downward movement in gold prices is likely to discourage gold selling.

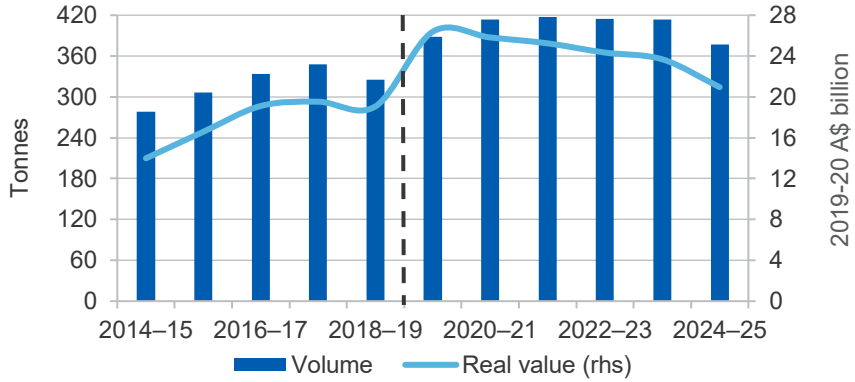
World mine production is expected to grow until 2022, and is then projected to decline at an annual rate of 0.5 per cent between 2023 and 2025, to 3,596 tonnes in 2025, as ore grades decline.

10.5 Australia's exports and production

Export values expected to peak in 2019–20

The value of Australia's gold exports is forecast to set a record peak of $26 billion (in real terms) in 2019–20, driven by higher prices and export volumes. Export volumes are forecast to rise by 19 per cent in 2019–20, reaching 389 tonnes (Figure 10.5). Rising export volumes will be driven by higher local mine production, up 7.1 per cent year-on-year, to 344 tonnes. Export values are projected to decline after 2019–20, falling at an average annual rate of 4.4 per cent over the outlook period to $21 billion (2019–20 dollars) in 2024–25. The steady decline will be driven by lower US and Australian dollar gold prices (see *Section 10.2 Prices*) and, to a lesser extent, lower export volumes.

Figure 10.5: Australia's gold exports



Source: ABS (2020) International Trade, 5464.0; Department of Industry, Science, Energy and Resources (2020)

Higher production in the short term

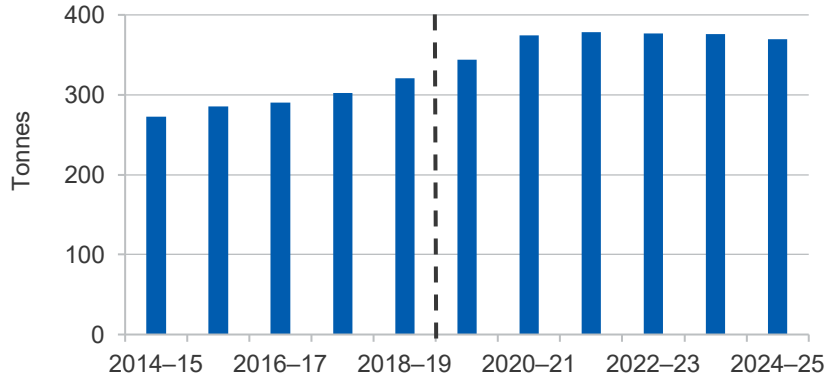
Australian gold mine production is forecast to increase by 7.1 per cent in 2019–20 and 9.0 per cent in 2020–21, reaching a peak of 378 tonnes in 2021–22 (Figure 10.6). Growth is expected to be driven by both mine expansions and production from new mines. Five gold projects reached final investment decision stage in 2019, including Newcrest's $685 million Cadia Stage 1 Expansion project in New South Wales (NSW), Regis

Regis Resources' $200 million McPhillamys gold project in NSW, Resolute Mining's $134 million Ravenswood expansion project in Queensland, Capricorn Metals' $132 million Karlawinda gold project in Western Australia (WA), and St Barbara's $100 million Gwalia extension project in WA. These five projects are expected to add around 37 tonnes of new production per year over the outlook period.

Lower production in the medium term

After reaching a peak in 2021–22, Australian mine output is projected to decline by 0.8 per cent annually to 370 tonnes in 2024–25 (Figure 10.6). Production will be weighed down by lower grade ores, reserve exhaustion and closures, as prices fall back. Ramelius' 1.9 tonne per year Edna May gold operation in WA is expected to cease operations in 2022. Production at Northern Star's Jundee gold operation in WA is expected to decline from 12 tonnes in 2019 to about 9 tonnes in 2025.

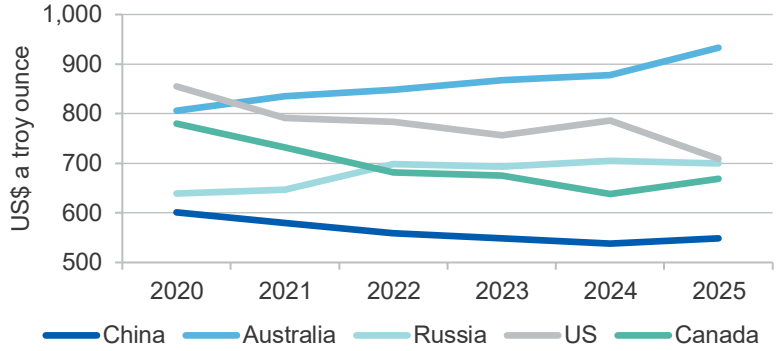
Figure 10.6: Australia's gold production



Source: Department of Industry, Science, Energy and Resources (2020)

Figure 10.7 shows gold production all-in sustaining costs (AISC) — a measure of all direct and recurring costs required to mine a unit of ore — of select major gold producing countries between 2020 and 2025. Australian gold producers are less competitive (have a higher AISC) than Chinese, Russian, the US and Canadian gold producers.

Figure 10.7: Gold mine AISC costs by country

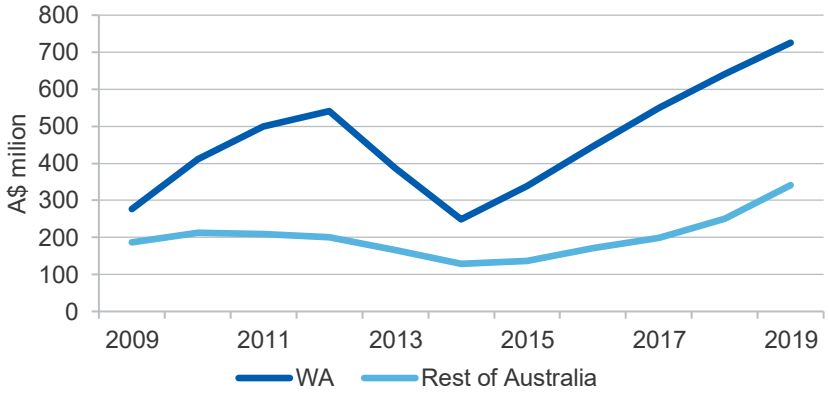


Source: AME (2020)

Exploration expenditure continued to increase

Australia's gold exploration expenditure increased by nearly 20 per cent in 2019 to nearly $1.1 billion — accounting for 40 per cent of Australia's total minerals exploration expenditure during the year — driven by a seven-year high US dollar gold prices and record high Australian dollar gold prices. Western Australia remained the centre of gold exploration activity in Australia, accounting for 68 per cent (or $726 million) of total gold exploration expenditure (Figure 10.8).

Figure 10.8: Australian gold exploration expenditure



Source: ABS (2020) Mineral and Petroleum Exploration, Australia, 8412.0

Table 10.1: Gold outlook

World	Unit	2019	2020[f]	2021[f]	2022[f]	2023[z]	2024[z]	2025[z]	CAGR[r]
Total demand	t	4,356	4,255	4,313	4,408	4,502	4,603	4,712	1.3
Fabrication consumption[b]	t	2,434	2,361	2,457	2,559	2,665	2,777	2,896	2.9
Mine production	t	3,464	3,533	3,600	3,625	3,633	3,614	3,596	0.6
Price[c]									
Nominal	US$/oz	1,392	1,474	1,450	1,421	1,392	1,378	1,365	-0.3
Real[d]	US$/oz	1,422	1,474	1,420	1,360	1,303	1,261	1,220	-2.5
Australia	**Unit**	**2018–19**	**2019–20[f]**	**2020–21[f]**	**2021–22[f]**	**2022–23[z]**	**2023–24[z]**	**2024–25[z]**	**CAGR[r]**
Mine production	t	321	344	374	378	376	376	370	2.4
Export volume	t	326	389	413	417	415	414	377	2.5
– nominal value	A$m	18,722	26,388	26,329	26,294	25,963	25,890	23,495	3.9
– real value[e]	A$m	19,074	26,388	25,819	25,242	24,340	23,678	20,955	1.6
Price									
– nominal	A$/oz	1,754	2,108	1,982	1,962	1,949	1,945	1,934	1.6
– real[e]	A$/oz	1,786	2,108	1,944	1,883	1,827	1,779	1,725	-0.6

Notes: **b** includes jewellery consumption and industrial applications; **c** London Bullion Market Association PM price; **d** In 2020 calendar year US dollars; **e** In 2019–20 financial year Australian dollars; **f** Forecast; **z** Projection; **r** Compound annual growth rate for the period from 2019 to 2025, or from 2018–19 to 2024–25.

Source: ABS (2020) International Trade, 5465.0; London Bullion Market Association (2020) Gold Price PM; World Gold Council (2020); Department of Industry, Science, Energy and Resources (2020)