Gold
Resources and Energy Quarterly June 2019

315 tonnes
of gold produced by Australia in 2018

9%
of world mine gold supplied by Australia in 2018

Major Australian gold deposits (tonnes)
- <20
- 21–70
- 71–165
- 166–473
- 474–1,027
- >1,028

Deposit
Operating mine

World record find
Australia holds the record for the world’s largest gold nugget weighing 72 kg, found in Victoria in 1869

Key jewellery consumer markets (tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>Jewellery</th>
<th>Gold Coins and Bars</th>
<th>Central Bank Reserves</th>
<th>Electronics and Industrial</th>
<th>Global Backed Exchange</th>
<th>Dental and Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>686</td>
<td>42</td>
<td>128</td>
<td>51</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>China</td>
<td>598</td>
<td>51</td>
<td>51</td>
<td>128</td>
<td>7%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Global uses of gold (tonnes)

51%
Jewellery

25%
Gold coins and bars

15%
Central Bank Reserves

7%
Electronics and Industrial

1%
Global Backed Exchange

1%
Dental and medical
10.1 Market summary

- Trade and geopolitical risks are likely to support gold prices, which are forecast to rise to an average US$1,440 an ounce in 2021.
- Australian export volumes are forecast to increase by 12 per cent in 2020–21, reaching a peak of 370 tonnes of gold.
- Australia’s gold exports are forecast to grow through the outlook period, to a peak of over $22 billion in 2020–21, reflecting expected rises in gold prices, local gold production, and export volumes.
- The Australian gold industry is examined in more detail in one of this edition’s special topics.

10.2 Prices

**Gold prices rose in the first half of 2019**

The gold price increased by 6.1 per cent in the first quarter of 2019, averaging US$1,304 an ounce (Figure 10.1), due to trade tensions between the US and China. However, hopes of a breakthrough in the US and China trade talks, and easing geopolitical tensions between the US and North Korea put downward pressures on gold prices, dropping below US$1,300 an ounce between April and early May 2019.

The gold price rose sharply to above US$1,300 an ounce in mid-May 2019, following the US Administration’s decision to lift tariffs from 10 per cent to 25 per cent on US$200 billion of Chinese imported goods, effective from Friday 10 May 2019. In June 2019, fears of a US slowdown saw markets price out further US interest rate hikes, and some weakness in US equities drove investors to safe havens such as gold.

**Gold continues to perform well in the short-term**

Gold is expected to perform well over the outlook period, driven by trade and geopolitical uncertainties. Trade tensions between the world’s two largest economies — the US and China — are expected to continue and have the potential to derail global economic growth, with flow-on impacts to consumer and business confidence. Geopolitical tensions on the Korean peninsular — linked to sanctions on North Korea and tensions over denuclearisation — and the Middle East — linked to the Gaza conflict, Syria’s civil war, and the US and Iran tensions — are sources of upside risk for the gold price. At times of uncertainty, the demand for safe haven assets such as gold typically rises. The gold price is expected to rise at an average annual rate of 4.2 per cent between 2019 and 2021, averaging US$1,440 an ounce in 2021.

![Figure 10.1: Gold price and US dollar](image-url)


10.3 Consumption

**World gold consumption increased in the March quarter 2019**

World gold demand increased by 7.0 per cent year-on-year in the March quarter 2019, to 1,053 tonnes, driven by central bank buying and inflows into gold-backed exchange traded funds (ETFs). Over this period, demand from the official sector rose by 68 per cent year-on-year to 145 tonnes — the highest volume of March quarter net purchases since 2013. Economic uncertainties, such as trade tensions and sluggish economic growth, and a desire to diversify out of the US dollar, were the catalyst for central banks’ growing appetite towards gold. Gold-backed ETF holdings increased by 48 per cent year-on-year in the first quarter of 2019, with over 40 tonnes (or US$1.9 billion) of global inflows. The shifting stance of the US Federal
Reserve — which is adopting a more dovish monetary policy approach — supported demand for gold-backed ETFs.

Gold jewellery demand increased by just 0.6 per cent year-on-year in the March quarter 2019, to 530 tonnes, driven by a 5.2 per cent year-on-year rise in demand from India. Indian consumers took advantage of lower gold prices in the first three months of 2019 by rushing to make wedding-related purchases. The rise in India’s jewellery demand was offset by a 1.8 per cent year-on-year fall in China’s jewellery demand, as trade tensions with the US and a slowing economy affected consumer sentiment.

Gold used in the technology sector dropped by 3.1 per cent year-on-year in the March quarter 2019, to 79 tonnes, due to a weaker electronics sector in the US and the trade tensions between the US and China. During the quarter, Apple — the world’s largest tech company — issued its first profit warning in 17 years.

World consumption to rise in 2019 to 2020, before falling in 2021

World gold consumption is forecast to grow at an average annual rate of 3.7 per cent in 2019 and 2020 — reaching a peak of 4,728 tonnes in 2020 — and then decrease by 4.9 per cent in 2021, to 4,497 tonnes (Figure 10.2). The growth is expected to be largely driven by central banks’ gold buying, with a forecast increase of 4.3 per cent a year in 2019 and 2020, to over 700 tonnes by 2020. The official sector is expected to remain a net buyer throughout the forecast period. The need to diversify central bank reserves is the key driver of many central banks’ growing appetite towards gold. After reaching a peak of 711 tonnes in 2020, the pace of central bank purchases is expected to decrease by 10 per cent in 2021, to 640 tonnes, as geopolitical risks moderate.

Retail investment is expected to drive up global gold consumption, as the demand for gold bars and coins rises in 2019 and 2020. We expect retail investment to rise by 13 and 12 per cent in 2019 and 2020, to 1,244 and 1,392 tonnes, respectively. This is being supported by trade tensions, the economic slowdown across advanced and developing economies, and political uncertainty in Europe, Venezuela and the Middle East. In China, ongoing trade tensions with the US are likely to boost gold demand, as retail investors seek to buy gold as a hedge against the depreciation of the Renminbi. However, gold retail investment is expected to slow down after 2020, as global economic slowdown and trade tensions are expected to ease.

Global jewellery consumption is also expected to drive up global gold consumption. Jewellery demand is forecast to rise by 5.7 per cent in 2020 and 4.6 per cent (to 2,357 tonnes) in 2021. Demand from China — the world’s largest jewellery consumer — is expected to remain strong, supported by the Chinese Government’s monetary and fiscal stimulus. In addition, jewellery production innovation — which has resulted in a widening product offering — is likely to provide consumers with greater choices and support higher demand for gold.

In India — the world’s second largest gold jewellery consumer — a strong demand growth forecast is propelled by robust economic growth, ongoing urbanisation, rising farm incomes, and improved consumer sentiment.
10.4 Production

World gold production declined in the March quarter 2019

World gold supply fell by 0.3 per cent year-on-year in the March quarter 2019, to 1,150 tonnes, due to a decline in net hedging, which decreased by 72 per cent year-on-year, to 10 tonnes, as gold producers took advantage of rising gold prices to sell their future gold production.

The Australian dollar gold price hit a record high during the quarter, averaging AUD$1,811 a troy ounce. As a result, some Australian gold producers opted to secure cash flow for portions of their output. Goldfields — a major Australian gold producer — locked in the price on the entirety of the company’s 2019 production.

Lower net producer hedging was offset by a 1.1 per cent year-on-year rise in global gold mine production in the March quarter 2019, to 852 tonnes. The continued ramp-up of production in some gold mines in Australia and Russia drove the production growth.

In Australia, the ramp-up of Mount Morgans and increased output at Cadia Valley boosted Australia’s gold output by 6.2 per cent year-on-year in the March quarter. Over this period, Russia’s gold production increased by 4.0 per cent year-on-year, driven by the ramp-up of the Natalka open pit mine.

Higher gold prices encouraged gold recycling activities, particularly in India, with global gold scrap supply increasing by 4.7 per cent year-on-year in the March quarter 2019, to 288 tonnes.

World gold production expected to fall over the outlook period

World gold supply is forecast to fall at an average annual rate of 1.6 per cent between 2019 and 2021, reaching 4,437 tonnes by the end of the outlook period (Figure 10.3). This reflects long established projects reaching end of life, with few new projects and expansions to take their place. World gold mine production is expected to decline from 3,399 tonnes in 2019 to 3,202 tonnes by 2021. Declining world mine production is expected across most major gold producing countries, and will be particularly evident in Australia — which is expected to account for the closure of over 51 tonnes of mine capacity between 2019 and 2021.

China’s gold output is expected to fall over the outlook period, as the country’s gold miners continue to adapt to stricter environmental regulation. The shift of Indonesia’s Grasberg gold mine’s operations from open mine to underground is likely to reduce its annual output by 58 tonnes between 2019 and 2021.

Offsetting the fall in world gold mine production is an expected rise in global gold scrap supply. Recycled gold supply is expected to rise by 2.6 per cent a year in 2019 and 2020, to 1,210 and 1,230 tonnes, respectively, driven by higher gold prices. However, after 2020, recycled supply is forecast to decline slightly, to 1,225 tonnes, due to an expected drop in scrap gold stocks. Scrap supply in the Middle East is also expected to fall as the political climate normalises in Egypt and Turkey.

Figure 10.3: World gold production

10.5 Australia

Exploration expenditure continues to increase in trend terms

Australia’s gold exploration expenditure rose by 17 per cent year-on-year in the March quarter 2019, to $220 million, driven by higher Australian gold prices (Figure 10.4). Western Australia remained the centre of gold exploration activity in Australia, accounting for 71 per cent (or $156 million) of total gold exploration expenditure.

Figure 10.4: Australia’s gold exploration


Australian gold production increased in the March quarter 2019

Australia’s gold production rose by 6.2 per cent year-on-year in the March quarter 2019 to reach 77 tonnes. Output was driven by improved output from several large gold mines in New South Wales and Western Australia. Newcrest’s Cadia Valley and Telfer production increased by 53 and 36 per cent year-on-year, to 6.8 and 3.8 tonnes, respectively, driven by increased mill throughput and recovery. Kirkland Lake’s Fosterville production rose by 101 per cent year-on-year, to 4.0 tonnes, driven by higher levels of mill throughput and high ore grades. Newmont’s Tanami production increased by 13 per cent, to 4.1 tonnes, driven by an improvement in ore grades.

However, production at Newmont’s Boddington mine decreased by 4.9 per cent year-on-year in the March quarter 2019, to 4.8 tonnes, due to lower ore grades. Newmont and Barrick’s joint-venture Superpit gold mine saw its production decrease by 38 per cent year-on-year in the March quarter 2019, to 3.4 tonnes, and a rock fall incident in mid-May 2018 has led to increased processing of lower grade stockpiles.

Australian gold production forecast to grow in the short term

Australia’s gold production is estimated to have grown by 4.7 per cent in 2018–19, to 317 tonnes. Production is forecast to peak at 339 tonnes in 2019–20, but then fall to 332 tonnes in 2020–21 (Figure 10.5). The near term growth is expected to be driven by a number of new mines coming online over the forecast period. Gold Roads’ Gruyere gold mine (with an annual production of 8.4 tonnes) is expected to commence in the second half of 2019. Capricorn Metals’ Karlawinda gold mine project (annual production of 4.0 tonnes) is expected to be commissioned in 2020. Regis Resources’ Rosemont mine (annual production of 3.7 tonnes) is expected to commence production in 2020.

Figure 10.5: Australia’s gold production

Source: Department of Industry, Innovation and Science (2019)
Australian gold exports remained unchanged in the March quarter 2019

Australia exported 92 tonnes of refined and unrefined gold in the March quarter 2019, valued at $5.4 billion. Despite a drop in export volumes of 7.0 tonnes year-on-year, export earnings were largely stable, supported by a lower exchange rate. Over this period, gold exports to Hong Kong and China decreased by 30 and 29 per cent year-on-year, to 31 and 15 tonnes, respectively, as China’s economic growth slowed. However, gold exports to Singapore rose by 116 per cent year-on-year, to 9.5 tonnes, as the south-east Asian precious metals hub increased physical gold trading activities with its neighbours.

Exports forecast to continue to grow until 2020–21

Australia’s gold exports are forecast to grow through the outlook period, to a peak of over $22 billion in 2020–21 (Figure 10.6). This growth reflects expected rises in Australian gold prices, gold production and export volumes.

The risk to this assessment is an upward movement in gold prices, due to increased demand for safe haven assets, given trade tensions between the US and its trading partners, geopolitical tensions in the Korean peninsula and the Middle East, and political uncertainty in Europe.

**Figure 10.6: Australia’s gold exports**

<table>
<thead>
<tr>
<th>World</th>
<th>Unit</th>
<th>2018</th>
<th>2019&lt;sup&gt;s&lt;/sup&gt;</th>
<th>2020&lt;sup&gt;f&lt;/sup&gt;</th>
<th>2021&lt;sup&gt;f&lt;/sup&gt;</th>
<th>2019&lt;sup&gt;s&lt;/sup&gt;</th>
<th>2020&lt;sup&gt;f&lt;/sup&gt;</th>
<th>2021&lt;sup&gt;f&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total demand</td>
<td>t</td>
<td>4,399</td>
<td>4,641</td>
<td>4,728</td>
<td>4,497</td>
<td>5.5</td>
<td>1.9</td>
<td>-4.9</td>
</tr>
<tr>
<td>Fabrication consumption&lt;sup&gt;b&lt;/sup&gt;</td>
<td>t</td>
<td>2,577</td>
<td>2,451</td>
<td>2,562</td>
<td>2,661</td>
<td>-4.9</td>
<td>4.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Mine production</td>
<td>t</td>
<td>3,503</td>
<td>3,399</td>
<td>3,254</td>
<td>3,202</td>
<td>-3.0</td>
<td>-4.3</td>
<td>-1.6</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal</td>
<td>US$/oz</td>
<td>1,269</td>
<td>1,326</td>
<td>1,388</td>
<td>1,437</td>
<td>4.5</td>
<td>4.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Real&lt;sup&gt;d&lt;/sup&gt;</td>
<td>US$/oz</td>
<td>1,298</td>
<td>1,326</td>
<td>1,357</td>
<td>1,375</td>
<td>2.2</td>
<td>2.3</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mine production</td>
<td>T</td>
<td>303</td>
<td>317</td>
<td>339</td>
<td>332</td>
<td>4.7</td>
<td>7.2</td>
<td>-2.2</td>
</tr>
<tr>
<td>Export volume</td>
<td>T</td>
<td>348</td>
<td>329</td>
<td>370</td>
<td>363</td>
<td>-5.4</td>
<td>12.4</td>
<td>-1.9</td>
</tr>
<tr>
<td>Nominal value</td>
<td>A$m</td>
<td>18,888</td>
<td>18,853</td>
<td>22,048</td>
<td>22,133</td>
<td>-0.2</td>
<td>16.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Real&lt;sup&gt;e&lt;/sup&gt;</td>
<td>A$m</td>
<td>19,264</td>
<td>18,853</td>
<td>21,532</td>
<td>21,095</td>
<td>-2.1</td>
<td>14.2</td>
<td>-2.0</td>
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<tr>
<td><strong>Price</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal</td>
<td>A$/oz</td>
<td>1,674</td>
<td>1,754</td>
<td>1,852</td>
<td>1,896</td>
<td>4.7</td>
<td>5.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Real&lt;sup&gt;e&lt;/sup&gt;</td>
<td>A$/oz</td>
<td>1,708</td>
<td>1,754</td>
<td>1,809</td>
<td>1,807</td>
<td>2.7</td>
<td>3.1</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

Notes: b includes jewellery consumption and industrial applications; c London Bullion Market Association PM price; d In 2019 calendar year US dollars; e In 2018–19 financial year Australian dollars; f Forecast; s Estimate.