Gold

Resources and Energy Quarterly September 2017

Australia is the **2nd largest** producer of gold in the world

288 tonnes

of gold produced by Australia in 2016–17

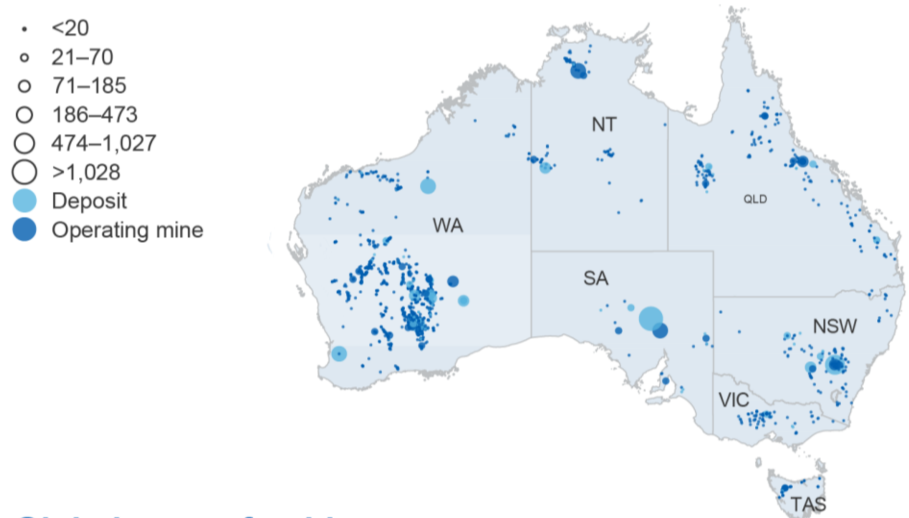
8.9%

of world mine gold supplied by Australia in 2016–17

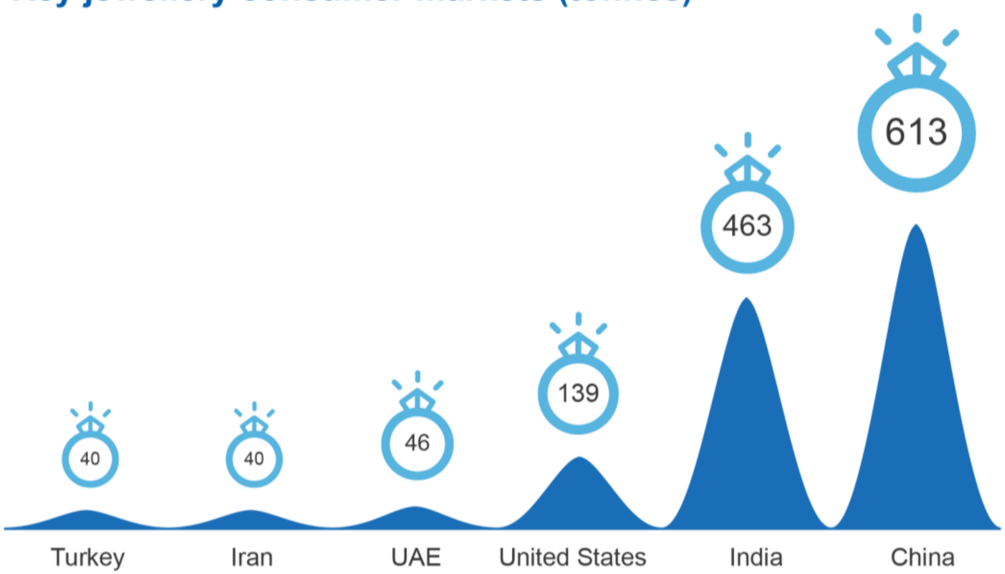
world record find

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

Major Australian gold deposits (t)



Key jewellery consumer markets (tonnes)



Global uses of gold

47% Jewellery

24% Gold coins and bars

12% Gold backed Exchange Traded Funds

8.7% Central Bank Reserves

7.1% Electronics and Industrial

0.4% Dental and medical

Summary

- The gold price is expected to average US$1,260 a troy ounce in 2017, supported by lower real US treasury bond yields, safe haven demand and a weaker than expected US dollar over the rest of 2017. The gold price is expected to decline to US$1,190 a troy ounce in 2019, driven by higher real yields.
- The value of Australia’s gold exports is forecast to decrease from $18 billion in 2016–17 to $17 billion in 2018–19. Lower export earnings will be weighed down by lower gold prices while export volumes are expected to remain relatively flat.
- Australia’s gold exports are forecast to be little change over the forecast period, rising from 334 tonnes in 2016–17 to 335 tonnes in 2018–19.

Prices

Gold prices continued to rise in September quarter of 2017

The London Bullion Market Association (LBMA) gold price averaged US$1,280 in the September quarter, up from US$1,260 in the June quarter. Driving the gold price in the September quarter was a weaker than expected US dollar, falling US treasury bond yields and increased investor demand for safe haven assets, as tensions rose over North Korea’s missile program.

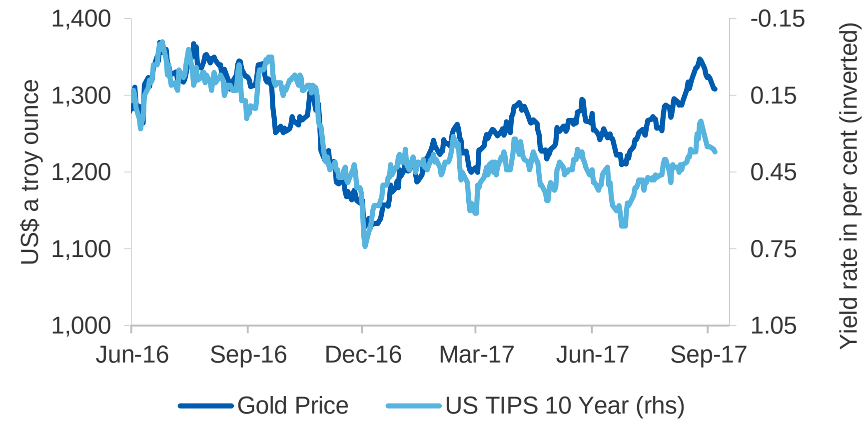
Gold prices expected to decline over the outlook

The LBMA gold price is forecast to decrease to US$1,190 a troy ounce in 2019. Increased safe haven demand and higher jewellery consumption will be more than offset by the impact of lower investment demand, as investors react to rising real yields on US Treasury bonds — which offer a higher near default-free risk return. The opportunity cost of holding Treasuries rises, causing investors to switch away from gold.

Real Treasury yields are expected to rise as the US Federal Reserve raises Fed Funds to as high as 2 per cent by end 2018, and begins to shrink its balance sheet. US inflation declined in the June quarter, and is expected to remain low over the next three quarters, thus supporting higher real yields.

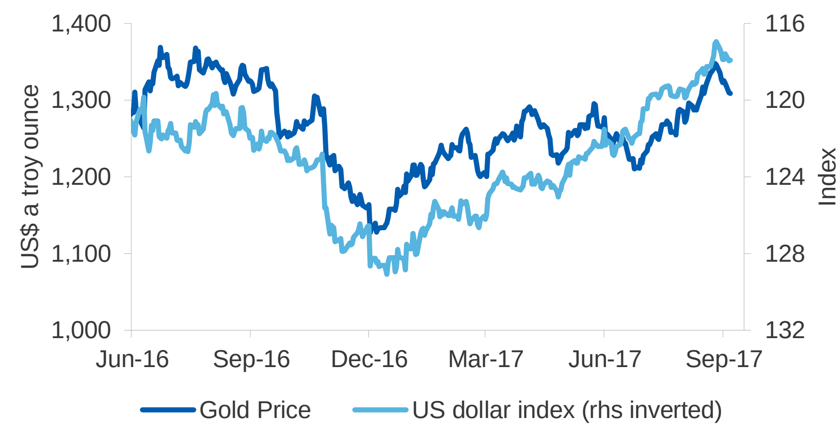
Another factor putting downward pressure on gold prices is likely to be the rising US dollar. The US dollar is expected to rise in line with higher US interest rates. However, better safe haven demand — underpinned by ongoing geo-political uncertainty and rising tensions on the North Korean peninsula — will provide some support to gold prices over the near term.

Figure 10.1: Gold prices and US Treasury bond yields



Source: LBMA (2017) Gold Price PM; Thompson Reuters (2017) US 10 year Treasury Income Protected Securities constant maturity middle rate

Figure 10.2: Gold prices and the US dollar



Source: LBMA (2017) Gold Price PM; Thompson Reuters (2017) US dollar index

Notes: The US dollar index is a weighted average of the foreign exchange value of the US dollar against the currencies of a broad group of major US trading partners

World consumption

Global gold consumption is forecast to rise by 1.5 per cent annually to 4,270 tonnes in 2019. Higher gold consumption will be supported by increased jewellery purchases and higher use in industrial fabrication, while the outlook for investment demand is likely to be somewhat more subdued.

Jewellery consumption improves led by Indian demand

Gold jewellery consumption increased by 6.7 per cent year-on-year in the June quarter, led by a strong turnaround in India — where consumption increased by 166 per cent year-on-year. Indian gold jewellery consumption increased as customers brought forward purchases to beat the introduction of a Goods and Services Tax (GST). Jewellery consumption in India was also supported by a higher number of auspicious wedding days in 2017.

Gold jewellery consumption is forecast to increase by 4 per cent a year over the outlook period, from around 2,150 tonnes in 2017 to 2,323 in 2019. Rising incomes in India and China — the world's two major jewellery markets — will support higher discretionary spending on gold throughout 2018 and 2019.

Industrial consumption continues to rise

Gold used in electronics increased by 1.5 per cent year-on-year in the June quarter — the third consecutive quarter of growth. Gold consumption in industrial applications is forecast to increase by 2 per cent annually, from 328 tonnes in 2017 to 342 tonnes in 2019.

Higher industrial demand will be underpinned by growth in demand for gold bonding wire and gold used in memory chips, particularly for producing smartphones. Increased industrial consumption will also be supported by the use of gold in production and sensor technology and LED lighting in the automotive industry.

Central bank purchases grow in the June quarter 2017

Central bank buying increased by 21 per cent year-on-year in the June quarter, lifted by Russia — who added 36 tonnes mostly from domestic supply. Central bank purchases are forecast to be 370 tonnes in 2017.

Central bank demand for gold is forecast to taper over the outlook period, declining to 360 tonnes in 2019.

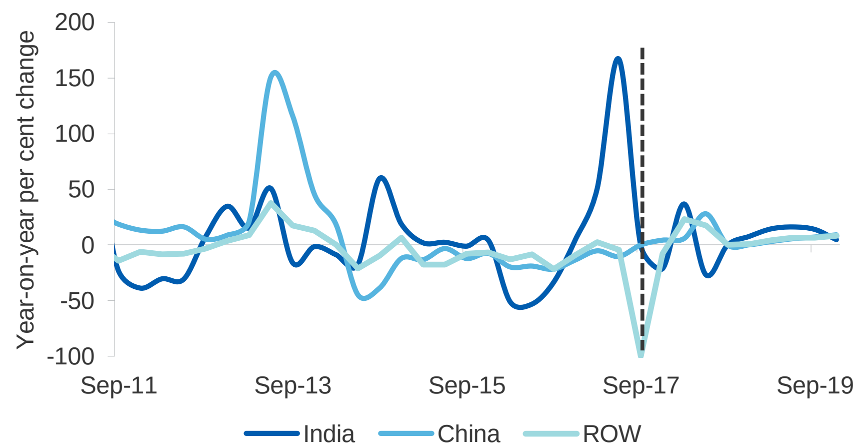
EFT holdings rise and retail investment improves in June quarter

Investors increased ETF holdings by 56 tonnes in the June quarter, representing a 76 per cent annual decline, largely due to an exceptional June quarter in 2016. Investor demand for gold ETFs is expected to improve in the September quarter 2017 but decline thereafter, as rising real bond yields put downward pressure on gold prices.

Retail demand for gold bars and coins increased by 13 per cent year-on-year in the June quarter, reaching 241 tonnes. Higher retail demand was supported by a strong rebound in the Indian gold market, where cultural festivals and the introduction of the GST encouraged increased purchases.

Total investment in gold — including gold bars, coins and bullion-backed Exchange Traded Funds (ETFs) — is forecast to decrease by 7.7 per cent annually from 1,580 tonnes in 2016 to 1,240 tonnes in 2019. Lower world gold prices will discourage, rather than stimulate investor demand over the outlook.

Figure 10.3: Gold jewellery consumption



Source: Thompson Reuters (2017) quarterly jewellery consumption; Department of Industry, Innovation and Science (2017) Note: ROW Rest of World

World production

Total world gold supply is forecast to increase by 0.3 per cent annually in the outlook period, from 4,590 tonnes in 2016 to 4,630 tonnes in 2019. Higher total gold supply will be supported by higher mine production, with scrap production forecast to remain steady over the outlook.

Mine production expected to rise

World mine production decreased by 0.3 per cent year-on-year in the June quarter to 791 tonnes. Lower production was weighed down by forced closures at several gold mines in China, for environmental breaches. China's production declined by 4.7 tonnes (or 4 per cent year-on-year) in the June quarter. Production was also lower in South Africa — down 2.9 tonnes year-on-year — and Tanzania which declined 0.8 tonnes in the June quarter, due to a government-imposed ban on exports from Acacia Mining, which last year supplied 45 per cent of Tanzania's gold production. Mine production in the United States increased by 4.6 tonnes year-on-year, while production in Argentina and Ghana both increased by 3.6 tonnes each.

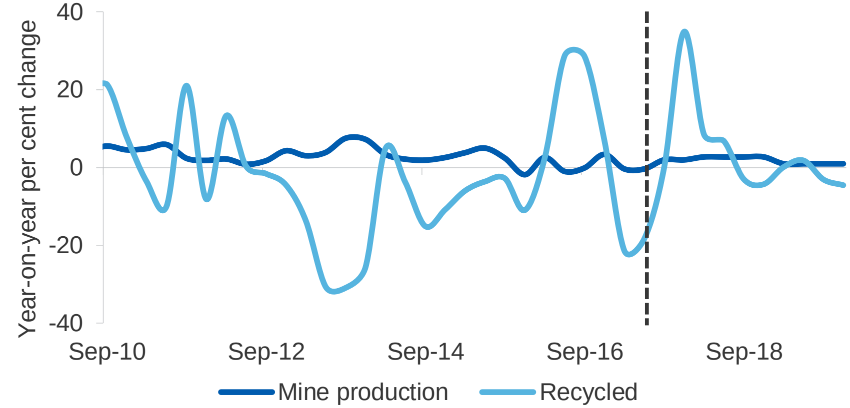
World mine production is forecast to increase by 1.5 per cent annually in the forecast period from 3,260 tonnes in 2016 to 3,413 tonnes in 2019. Higher production will be supported by new projects and mine expansions.

Several new projects are expected to add up to 65 tonnes to world mine supply this year — mostly in Canada. Looking further out, an additional 100 tonnes is expected to be added to world mine supply in 2018, and a further 30 tonnes in 2019. Much of the expected additional supply comes from new projects, with only a small number of expansion projects in the pipeline.

Recycled supply falls in the first half 2017

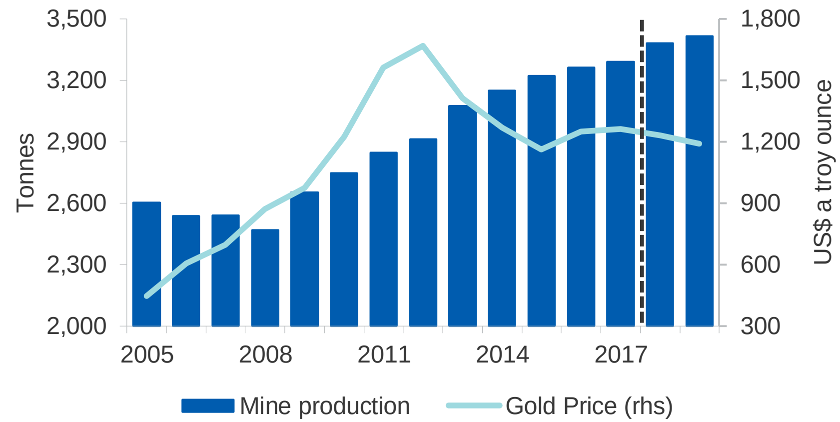
World recycled supply declined by 18 per cent year–on–year in the June quarter of 2017, to 280 tonnes. The decline is largely due to the exceptional start to 2016, when rising gold prices encouraged greater recycled supply. Recycled gold is expected to contribute 1,247 tonnes to world supply in 2017, and remain around 1,250 tonnes until 2019, due to the subdued outlook for world prices.

Figure 10.4: Growth in world gold supply (quarterly)



Source: World Gold Council (2017) Gold Demand Trends Q2 2017; Department of Industry, Innovation and Science (2017)

Figure 10.5: World mine supply and gold price



Source: World Gold Council (2017) Gold Demand Trends Q2 2017; Department of Industry, Innovation and Science (2017)

Australia's production and exports

Export values expected to taper in 2018–19

The value of Australia's gold exports is forecast to decrease from $18 billion in 2016–17 to $17 billion in 2018–19. The modest fall in export values will be driven by lower gold prices offsetting higher local mine production.

Export volumes are forecast to reach 335 tonnes in 2018–19, up from an estimated 334 tonnes in 2016–17. Export volumes will be underpinned by higher local mine production in Western Australia and the Northern Territory. Export volumes will also be supported by imports of gold doré for refining, as production ramps up in Papua New Guinea.

The Australian gold price is forecast to decrease from an average of A$1,720 a troy ounce in 2016–17 to A$1,570 a troy ounce in 2018–19. The lower domestic price will be weighed down by lower world gold prices, with the AUD/USD exchange rate forecast to remain around A$0.77 over the outlook.

Improved outlook for Australian gold mine production

Australian gold mine production declined by 0.5 per cent year-on-year in the June quarter to 72.4 tonnes. Production was led lower by declines at Newcrest's Cadia Valley and Telfer gold mines, which fell by 57 and 18 per cent, respectively, year-on-year in the June quarter. Operations at Cadia were impacted by a seismic event on the 14 April 2017, while operations at Telfer continue to recover from heavy rainfall in the March quarter. Newcrest expects production in September quarter to be higher than June but below pre-seismic levels.

Australia's gold mine production is forecast to increase by 5.5 per cent annually, from an estimated 288 in 2016–17 to 319 in 2018–19. Higher mine production will be driven by the addition of several new gold projects and mine expansions.

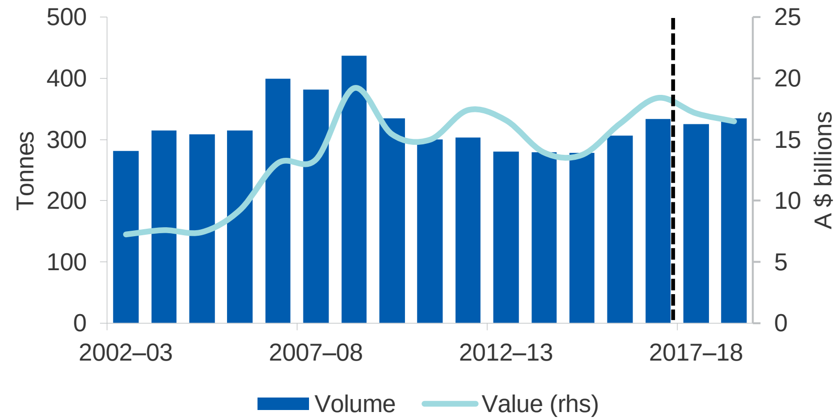
Mount Todd, owned by Vista Gold, is the largest new gold project under development, and is expected to commence production in 2018. Mount Todd is expected to become the largest gold mine in the Northern Territory, producing over 13 tonnes annually from 2018–19. Other new additions include Dacian Gold's Mount Morgans project in Western Australia, which is expected to commence production in 2018 and produce 5 tonnes annually.

Several mines are expected to ramp up production over the outlook period, including Newmont's Tanami in Western Australia and Fosterville, operated by Kirkland Lake Gold in Victoria. Fosterville increased production to over 2.4 tonnes of gold in the June quarter, and revised their production guidance higher for the rest of 2017, due to higher mill grades. Fosterville is expected to ramp up production over 2017–18 and produce 8 tonnes.

Exploration expenditure continues to increase

Australia's gold exploration expenditure increased by 26 per cent to $689 million in 2016–17, accounting for 44 per cent of Australia's total minerals exploration expenditure during the financial year. Gold exploration expenditure was supported by higher world gold prices. Western Australia remains the largest centre of gold exploration activity in Australia, accounting for $510 million of exploration expenditure. Expenditure increased in most States, reaching $51 million in Queensland and $46 million in New South Wales.

Figure 10.6: Australia's gold exports



Source: ABS (2017) International Trade, 5464.0; Department of Industry, Innovation and Science (2017)

Table 10.1 Gold outlook

						Annual percentage change		
World	**Unit**	**2016**	**2017 f**	**2018 f**	**2019 f**	**2017 f**	**2018 f**	**2019 f**
Total demand	t	4,337	4,139	4,129	4,265	-4.6	-0.3	3.3
Fabrication Consumption b	t	2,370	2,476	2,569	2,665	4.5	3.7	3.7
Mine production	t	3,260	3,289	3,380	3,413	0.9	2.8	1.0
Price c								
Nominal	US$/oz	1,248	1,260	1,232	1,190	1.0	-2.3	-3.4
Real d	US$/oz	1,274	1,260	1,206	1,141	-1.1	-4.3	-5.4
Australia	**Unit**	**2015–16**	**2016–17 s**	**2017–18 f**	**2018–19 f**	**2016–17 s**	**2017–18 f**	**2018–19 f**
Mine Production	t	285	288	302	319	1.1	4.8	5.6
Export volume	t	306	334	326	335	8.9	-2.4	2.9
Nominal value	A$m	15,687	18,013	17,145	16,879	14.8	-4.8	-1.6
Real value e	A$m	16,302	18,405	17,145	16,486	12.9	-6.8	-3.8
Price								
Nominal	A$/oz	1,602	1,720	1,638	1,567	7.4	-4.8	-4.3
Real e	A$/oz	1,664	1,757	1,638	1,530	5.6	-6.8	-6.6

Notes: ***b*** *Includes jewellery consumption and industrial applications;* ***c*** *London Bullion Market Association PM price;* ***d*** *In 2017 calendar year US dollars;* ***e*** *In 2017–18 financial year Australian dollars;* ***f*** *Forecast;* ***s*** *Estimate*

Source: ABS (2017) International Trade, 5465.0; London Bullion Market Association (2017) gold price PM; World Gold Council (2017); Department of Industry, Innovation and Science.