

'Gold! Gold to Australia! Gold!'¹ Australian gold statistics²

Following a sustained upward trend since early 2001, the price of gold reached US\$500 an ounce on 29 November 2005 and appears headed for its highest level for nearly twenty years.

This research note puts the current peak in its historical and current perspective.

Price of gold

The world official gold price was fixed at US\$35 an ounce between 1934 and 1971 during which time it was illegal for private citizens to own or trade gold. Following an International Monetary Fund (IMF) meeting in August 1971, the price of gold was floated. Thereafter gold rapidly increased in price reaching a peak of nearly US\$200 an ounce during the recession and period of inflation following the 1973 oil price shock. The price of gold then declined as the IMF and the United States Treasury sold gold down from their stocks, with the price declining towards US\$100 an ounce by the end of 1976.³

From then the price of gold was pushed higher by the uncertainty accompanying a series of events including the second oil price shock, the Iranian revolution and the Iran–Iraq war, and the Russian invasion of Afghanistan. Finally, gold peaked briefly at US\$835 an ounce on 18 January 1980.

The price remained above US\$500 an ounce during most of 1980 before falling, to trade within a range around US\$400 an ounce until almost the end of the twentieth century.⁴

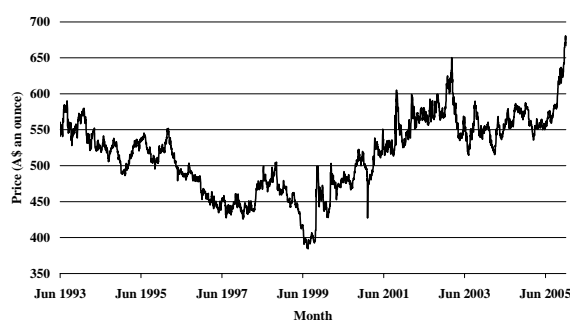
Figure 1 shows the monthly US dollar price of gold since 1968.⁵

For comparison purposes, Figure 2 shows the Australian dollar price of gold monthly since June 1993. It is the Australian dollar price which ultimately determines the profitability of the Australian industry.⁶

Figure 1. US dollar price of gold from 1968



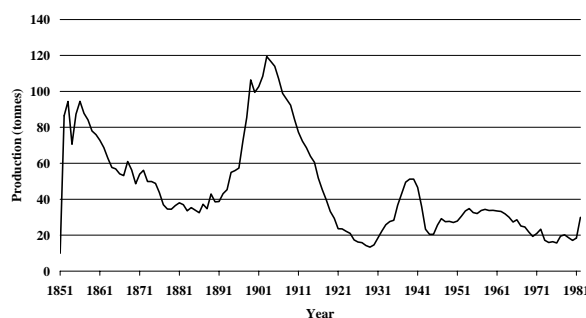
Figure 2. Australian dollar price of gold



Australian production

Since gold was first discovered in Australia in 1851, first in New South Wales then later the same year in Victoria, there have been several peaks in gold production. Figure 3 shows the production of gold in Australia from 1851 to 1982.⁷

Figure 3. Australian gold production 1851 to 1982



From nothing, the gold rush in Australia in the 1850s rapidly led to gold outputs of around 90 tonnes per year from easily-won alluvial gold,

peaking at 95 tonnes in 1856. From this time, output slowly declined as alluvial reserves were depleted and miners turned to more difficult underground deposits. Despite discoveries at Charters Towers in Queensland, by the mid-1880s gold production was down to around 30 tonnes per year.

The next surge in production of gold began during the early 1890s, with the discovery and development of the goldfields of Western Australia—the Golden Mile of Kalgoorlie—Boulder and Coolgardie—and the introduction of new technologies which allowed gold to be profitably extracted from lower grades of ore. Output rose relatively rapidly to just short of 120 tonnes in the year 1903 before slowly declining again to a low of just 13 tonnes in 1929. This decline was exacerbated by the Kalgoorlie mines chasing deeper more inaccessible gold and the manpower losses of the first world war period and after.

The third rise in production began in the 1930s depression and rose to a peak of just over 50 tonnes by 1939 and 1940. This ‘mini-boom’, was fuelled by several factors, including the increase in the price of gold, the introduction of the flotation process to treat gold ores, and the subsidised occupation of many of the unemployed in seeking gold.⁸ New deposits also were discovered in Western Australia and the Northern Territory in this period.

Production declined during the second world war to a low of just 20 tonnes per year, before a revival to around 35 tonnes per year by the late 1950s. After that time gold output declined to around the 20 tonnes per annum by the late 1970s.

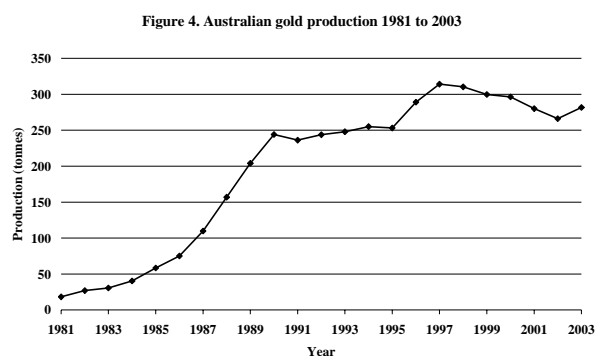
The most recent boom in gold production began in the early 1980s. There were two reasons for the increase in production at this time. One was the floating of the gold price in 1971 which led to an increase in world gold prices; the other was the application of the then new carbon-in-pulp (CIP) and carbon-in-leach (CIL) gold ore processing techniques.

Exploration for, and production of, gold did not begin immediately the gold price was floated in 1971 because the mining industry was focused at that time on other minerals. There was also the perception in the industry that gold investments were risky. However, the increase in world gold prices to more than US\$500 an ounce by the early 1980s and the widespread acceptance of

the CIP and CIL techniques, led to a rapid increase in gold production.⁹ In addition, the sometimes long lead times in bringing exploration to discovery and then to production meant the impetus given by rising gold prices did not yield increased production until the 1980s.

The next change in the production of gold in Australia came in 1991 following a decision announced by the then Treasurer Paul Keating in a Ministerial Statement on 25 May 1988, that the status of the gold mining industry as the only industry in Australia not paying income tax would be phased out, beginning on 1 January 1991. Production had reached 244 tonnes a year in 1990 and had been increasing at over 40 tonnes a year towards the end of the 1980s. From 1990 until 1996, production stalled at around 250 tonnes a year. Then, despite lower world prices, the momentum gained from higher margins and fresh exploration, and a combination of the opening of new mines and the expansion of operation of others, led to an increase in production from 1996, reaching a peak of 314 tonnes in 1997.¹⁰ After 1997, production declined partly due to the reduction in exploration and the consequent lack of new discoveries. Nonetheless, Australia has recently replaced South Africa, after the United States of America, as the second largest world producer of gold.¹¹

Figure 4 shows Australian gold production from 1981 to 2003.¹²

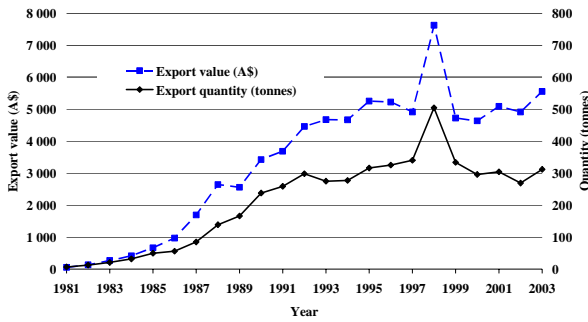


Exports

After coal, iron ore, and crude petroleum, gold currently ranks fourth in value of all Australia's merchandise exports; exports of (non-monetary) gold amounted to \$5 642 million in 2004–05.¹³

Figure 5 shows the value and quantity of Australia's exports of gold for the period 1981 to 2003.¹⁴

Figure 5. Value and quantity of gold exports 1981 to 2003



In 2004–05, the main destinations for Australia’s gold were India, Thailand, the United Kingdom, the Republic of Korea, and Singapore; India alone imported \$2 773 million worth of Australia’s gold in that year.

Ten years ago, in 1994–95, the export of \$4 820 million worth of gold held second place in value, after coal, in Australia’s exports. At that time, the main export destinations for gold were Singapore, Japan, and the Republic of Korea, followed by Malaysia, Thailand, and Hong Kong. Exports to Singapore, Japan, and the Republic of Korea together amounted to 81 per cent of the total.¹⁵

The quantity of gold exported annually from Australia has been running at around 300 tonnes for the past ten years. Note that the abnormally large amount of gold exported in 1998 was due, not to increased production, but to several other factors at that time. These factors were: (i) ‘a sharp increase in the imports of gold scrap (mainly jewellery, arising from the Asian economic turndown) which was subsequently refined, melted into bars and exported’, (ii) ‘the one-off export’ of gold doré (crude gold containing silver and other impurities) for overseas processing, re-import and then re-export due to a refinery fire in Melbourne, and (iii) some gold ‘round-tripped’ through the Republic of Korea, i.e. gold exported for rolling into plate, re-imported for casting, then exported again.¹⁶

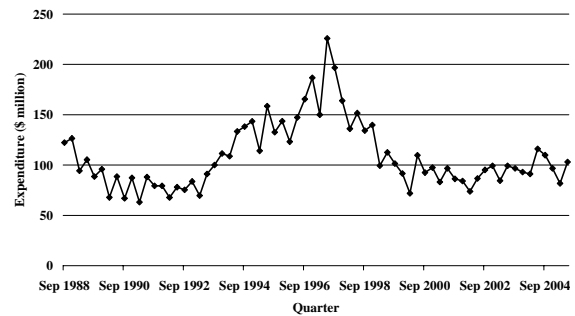
Exploration

From amounts of around \$70 million per annum in the early 1990s, the expenditure on gold exploration in Australia began to increase with the turnaround in world gold prices in 1993. It reached a peak of \$226 million in the June quarter 1997, some time after the world gold price had come off its 1990s peak of US\$411 an ounce in February 1996. By the beginning of the twenty-first century expenditures on the exploration for gold had returned to the levels of

the early 1990s, around \$70 million per annum. There are many reasons for the downturn in exploration at this time which affected gold as well as other minerals. In part it was driven by the imperatives of a more globalised industry, in part by the changes brought by the application of native title legislation, and in part by the lower gold price driven by central bank sales and threats of sales worldwide.

Figure 6 shows the expenditure on gold exploration quarterly since the September quarter 1988.¹⁷

Figure 6. Expenditure on exploration for gold



Recent activity in the gold market

Since the beginning of 2001 when the price of gold was around US\$250 an ounce, it has moved upwards as the value of the US dollar has slipped. For example, in the period ‘between mid-2001 and mid-2005, a 45 per cent increase in the gold price was accompanied by a 40 per cent depreciation of the US dollar against the Euro’.¹⁸

The correlation between the depreciation of the US dollar against the Euro and the increase in the gold price has however weakened over the past six months. The gold price upward trend during this time has been propelled more by rising oil prices (and the consequent fear of inflation), increasing demand from jewellery manufacturers in India, China, and the Middle East, and disruptions to mining operations in South Africa.¹⁹

In addition, central banks which had been selling gold to reduce their holdings have reduced sales, adding impetus to the upward movement in gold prices. Also, nations of the Middle East are buying more gold with their revenues from higher world oil prices; this too has added to gold price pressures.^{20,21}

Finally, ‘world-class gold discoveries have been few and far between over the past decade, so new supply [of gold] is not readily available’.²²

Thus from a point as low as US\$456 an ounce at the beginning of November 2005, the gold bullion price climbed over US\$500 an ounce on 29 November 2005 and according to technical analysts is headed towards the US\$525 an ounce mark, a price it has not seen for over twenty years.²³

1. Norman May, ABC radio, <abc.net.au/news/olympics/features/may.htm>, accessed 2 December 2005.
2. My thanks to Sandra Close and Jim Pollock from Surbiton Associates, and Fred Cook from the Parliamentary Library, who read earlier drafts of this paper. Sandra Close's book, referenced in full in footnote 4 below, has been very useful in the preparation of this paper. Any errors of course remain my own.
3. In this paper, the mass of gold is referred to in either ounces or tonnes. The ounce used for gold is the troy ounce which is approximately equal to 31.1 grams. There are 32 151 troy ounces in a tonne. Thus, Australia's current output of about 280 tonnes per year is equivalent to nine million ounces of gold. Prices are widely quoted in US dollars and that practice is followed here. The Australian dollar equivalent of US\$500 an ounce is around A\$675 at current exchange rates.
4. S. E. Close, *The great gold renaissance—the untold story of the modern Australian gold boom 1982–2002*, Surbiton Associates, Melbourne, 2002, pp. 20–21.
5. Datastream—US gold bullion price. Data are for the first calendar day of each month. Note that this means the graph does not show the peak which occurred on 18 January 1980.
6. Datastream—Perth mint selling price. Data are for the first calendar day of each month.
7. Hugh Saddler, 'Minerals and energy', *Australians: historical statistics*, ed. Wray Vamplew, Fairfax, Syme & Weldon Associates, p. 88.
8. S. E. Close, op. cit., p. 6.
9. S. E. Close, op. cit., [discussed](#) at <www.surbiton.com.au/bookreview.htm>, accessed 24 November 2005.
10. ABARE, *Australian commodities*, Australian Bureau of Agricultural and Resource Economics, December 1996, p. 509.
11. Surbiton Associates, 'Australia's gold output subdued despite new projects', [Media release](#), 29 May 2005.
12. ABARE, *Australian commodity statistics 2004*, Australian Bureau of Agricultural and Resource Economics, Canberra, 2005, p. 277.
13. Non-monetary gold: gold that is traded like any other commodity. Non-monetary gold is regarded as a commodity, rather than as a financial item, as its worth is principally derived from either its gold content or its value as a collector's piece. ABS, *International merchandise trade, Australia—Concepts, sources and methods*, Australian Bureau of Statistics, 2001, Catalogue 5489.0, p. 131.
14. ABARE, *Australian commodity statistics 2004*, op. cit., p. 275.
15. DFAT, *Composition of trade, Australia*, Department of Foreign Affairs and Trade, 1994–95 and 2004–05 editions.
16. ABARE, *Australian Commodities*, Australian Bureau of Agricultural and Resource Economics, March 1999, p. 180.
17. ABS, *Mineral and petroleum exploration*, Australian Bureau of Statistics, Catalogue 8412.0, electronic time series.
18. ABARE, *Australian commodities*, Australian Bureau of Agricultural and Resource Economics, September 2005, p. 514.
19. *ibid.*
20. Ian Howarth, 'Golden daze for bullion investors', [Australian Financial Review](#), 19 November 2005, p. 6.
21. Alan Kohler, 'Something's gotta give', [Sydney Morning Herald](#), 23 November 2005, p. 25.
22. Allan Trench, 'Gold rush: Inside bullion's bull run', [Shares](#), November 2005, p. 28.
23. AFR staff, 'Gold tops \$US500 as buyers hunt alternative', [Australian Financial Review](#), 29 November 2005 available at <afr.com/articles/2005/11/29/1133026444462.html>, accessed 29 November 2005.

Greg Baker
Statistics Section
Information and Research Service

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