

COMMODITY INSIGHT EAST TO EL DORADO

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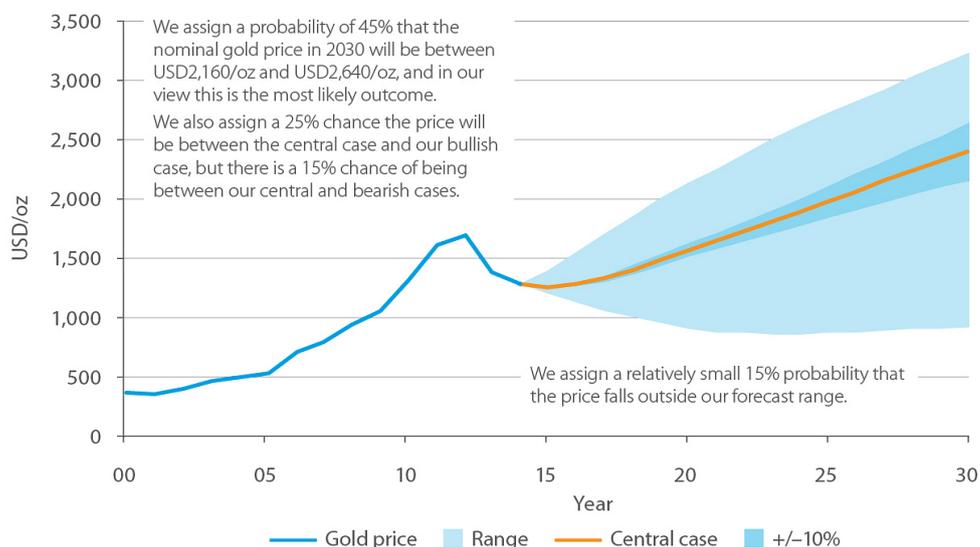
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EAST TO EL DORADO: ASIA AND THE FUTURE OF GOLD

- Today, ANZ releases a thought leadership piece on the future of the gold market. This report, *East to El Dorado: Asia and the Future of Gold*, is the third in the **ANZ Research In-Depth** series. This report expands on our findings from *ANZ Insight - Caged Tiger: The Transformation of the Asian Financial System* and explores the key role that Asia will play in driving the dynamics of the global gold market in coming decades.
- As Asia will comprise over half of the global economy by 2050, the rise in regional incomes will support the demand for gold investments. China and India are already the world’s largest gold consumers and incomes still have a long way to rise before reaching developed-world levels.
- Central banks are likely to increase gold holdings over the long-term. Most of the buying will come from emerging market central banks as they move closer to the level of developed world holdings. The supply side is also supportive of prices as gold mines are unable to expand rapidly. Prices too far below USD1,000/oz are unsustainable in the long-term.
- Gold has a unique role as an investment and a defensive asset. We believe it will remain an important part of investment portfolios for both the private sector and central banks. Gold is a store of wealth in unstable times, and while the global financial system has successfully weathered a major storm in the past decade, the future is far from certain.
- The gold price is likely to rise above USD2,000/oz by 2025. This is our central-case for the gold price. While the near-term could see prices trade only marginally higher over the next few years, we believe the combined effect of greater demand from investors and central banks will see gold prices rise materially over the long-term.
- Beyond its role as the world’s largest producer and consumer of physical gold, we believe China will eventually dominate the price discovery process too, as Asia’s financial centres gradually open up. There is no reason why Shanghai should not become a major centre for gold trading provided the appropriate institutional and legal reforms take place.

FIGURE 1. GOLD PRICE FORECAST RANGE (NOMINAL)



Source: Bloomberg, ANZ Research

COMMODITY INSIGHT

Gold plays an important role as a 'safe-haven' against financial market risks and buffering portfolios from volatility

GOLD AS AN INVESTMENT

Throughout history, gold has played an important role in ensuring the stability of financial systems, as a form of currency, and as a store of value. Additionally, gold holds cultural and religious significance for a number of countries, particularly in the Middle East and Asia. Because these influences have made gold an expensive commodity, the use of gold for industrial purposes has been limited.

We believe gold will be an important part of investment portfolios for both the private sector and central banks. Gold is a protector of wealth in uncertain and unstable times. While the global financial system has successfully weathered a major storm in the past decade, there were times when it looked precarious. Furthermore, geopolitical instability could add to the allure of gold in the future.

There is an ongoing debate about the role of gold as an investment and its value as a defensive asset. The purists say that gold is of no investment value in a world where central banks no longer back their currencies with gold. It holds no intrinsic value beyond some industrial use and generates no cash flow. Others will highlight the importance of gold as a defensive asset in times of financial instability and distress, citing the strong performance of gold during the GFC as evidence. Still others say that gold is only of value when there are fundamental concerns about the functioning of the global financial system or in times of hyper-inflation.

Our analysis and numerous other studies suggest gold can increase risk-adjusted returns for investment portfolios. In fact, during most market crises over the past 25 years, gold has consistently increased portfolio gains or reduced losses.¹

A World Gold Council study found that, depending upon investors risk appetite, gold should have an allocation of between 2.5-11% in a large, well-diversified portfolio, and that gold's value as a diversifying asset for institutional investors in developed countries is comparable to small-capitalisation companies or emerging markets.²

In an era of rising public debt and extraordinarily low long-term interest rates, gold could play an important role in portfolios as a defensive asset. Government bonds have historically been the main defensive asset in investor portfolios. Low credit risk and high liquidity have been key characteristics. Gold, along with cash holdings, also fit into the defensive allocation of investment portfolios.

With government credit under pressure in the wake of the financial crisis and yields on government securities at multi-generational, if not multi-century, lows, the appeal and effectiveness of gold as a long-term defensive asset is enhanced.

Another factor worth considering is the ageing populations in the major economies. There are strong arguments to suggest that as people enter retirement, the proportion of defensive assets in their portfolios should increase. This should lift interest in gold among both retail and institutional investors over the decades ahead.

¹ World Gold Council, July 2012, *Gold as a strategic asset for UK investors: Portfolio risk management and capital preservation*.

² Michaud, R & Pulvermacher, K September 2006, *Gold as a strategic asset*, New Frontier Advisors for the World Gold Council.

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TEN FACTS ABOUT GOLD

Fact 1. Just about all the gold that has ever been mined remains in use. Gold is durable. At present there are about 176,000 tonnes of gold sitting above the Earth's surface. About half of that exists as jewellery, and then one sixth each in private investments, central bank vaults, and commercial/industrial use. A small amount (3,600 tonnes) is unaccounted for.³

Fact 2. India and China are now the world's two biggest consumers of gold. In recent years almost 75% of the world's gold was sent to the Middle East and Asia.

Fact 3. The single largest holder of gold is the US government. The US Federal Reserve holds 8,133 tonnes of gold, most of which are held at the United States Bullion Depository at Fort Knox, Kentucky (which also happens to be one of the largest military bases in the world).

Fact 4. Total central bank (official) holdings of gold amount to approximately 32,000 tonnes, of which the five largest holders (USA, Germany, the IMF, Italy, France) hold almost 20,000 tonnes. According to the latest official statistics, China's gold reserves are just 1,054.1 tonnes.

Fact 5. Gold is being mined at a record pace, but growth has been gradual. In 2013 mine production amounted to 3,019 tonnes, up from 2,500 tonnes in 2005 and 2,100 tonnes in 1995. In the past 20 years 50,000 tonnes of gold has been mined, equivalent to the amount mined from 1960 to 1995.

Fact 6. In 2013 China was the world's biggest gold producer, mining 438 tonnes. Australia was second with 266 tonnes followed by Russia, USA, Peru, and South Africa.

Fact 7. Australia has the world's largest known unmined gold reserves, with Russia and South Africa the next most significant.

Fact 8. Jewellery has long been the most important use for gold, but it is less dominant than it once was. At the turn of the century jewellery use accounted for almost 80% of gold demand. It is now about half.

Fact 9. Scrap or recycled gold is becoming an increasingly important part of global supply. Prior to 2005, when gold prices increased sharply, scrap averaged less than 20% of total supply. In recent years, scrap has been as much as 1/3 of global supply.

Fact 10. Gold investment demand has surged in the past ten years, largely through Exchange Traded Funds (ETFs). The first gold ETF, the SpiDeR fund, was established in 2004. ETF holdings peaked in 2012 at 2,600 tonnes and have since fallen back to 1,600 tonnes.

FIGURE 2. WORLD GOLD RESERVES



Source: US Geological Survey, ANZ Research

³ Thomson Reuters GFMS database.

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ASIA'S FINANCIAL TRANSFORMATION

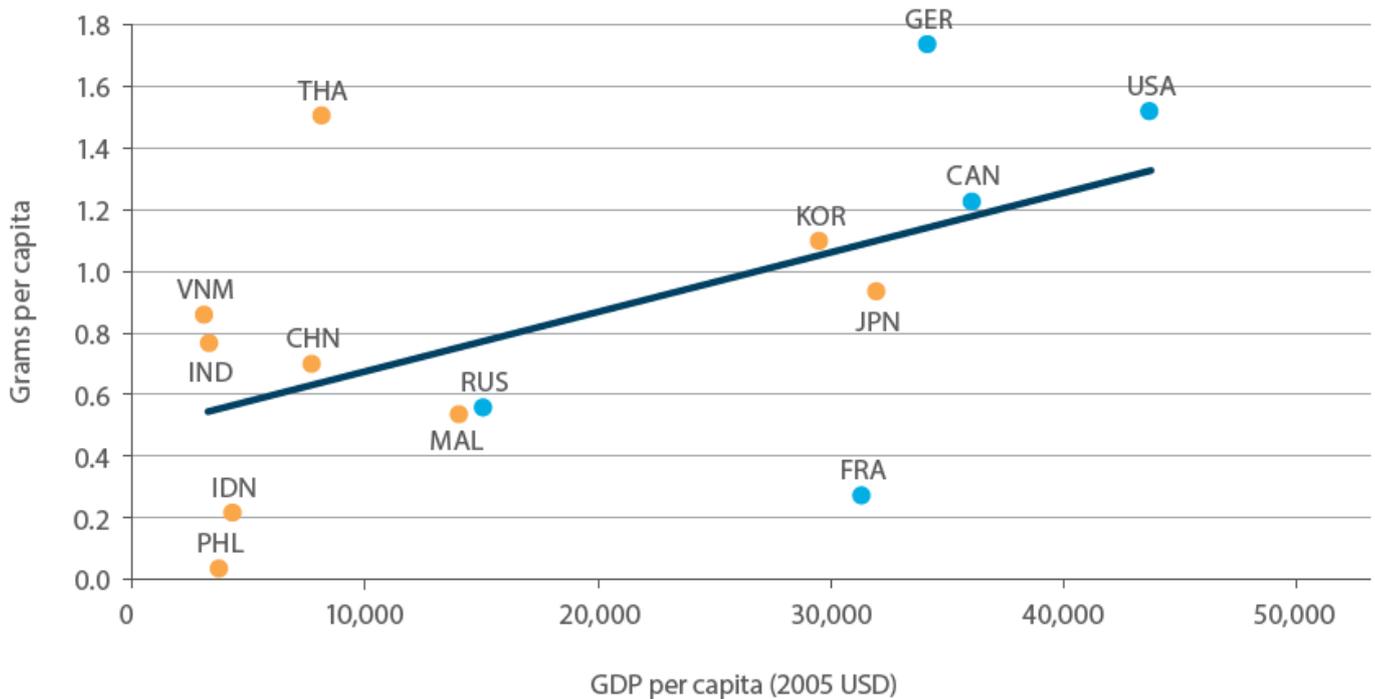
Rising incomes in Asia will drive long term gold consumption higher

The income effect implies that consumer purchasing power increases as real wages rise, and as such, the demand for gold will increase as more people can afford to buy it. In Asia over the past few decades, the income effect has been dominant. The Asian economies (particularly China and India) have enjoyed strong growth, but still have a relatively tightly regulated and narrow financial system. Gold has been a beneficiary of these challenges as it is largely not subject to the same regulations as the wider financial system. Given that gold has also played a strong role in Asian cultures, the demand is even higher than purely financial factors would suggest.

Over the next five to ten years, the fundamentals of substantial economic growth and a constrained financial system will continue to provide support for gold.

Among the emerging countries within the Asia 10, average gold demand amounts to just 0.70 grams per person. This is roughly half the per capita consumption levels of more developed countries with higher incomes (eg Germany, USA, Canada, South Korea, and Japan as shown in Figure 3). Per capita gold demand in the emerging economies of the Asia 10 has the potential to double as these countries become richer and more industrialised.

FIGURE 3. GLOBAL GOLD DEMAND INTENSITY (2012)



Source: Thomson Reuters GFMS, ANZ Research

This dynamic could have a profound effect on Asian demand for physical gold. Developed country investors currently hold around 2% of their portfolios in commodities, although some studies suggest an optimal allocation should be closer to 5%.⁴ Given its relative liquidity, gold may comprise around half of these holdings. We estimate that total retail and institutional gold demand for the Asia 10 region could amount to almost 5,000 tonnes per annum by 2030, up from 2,500 tonnes currently. Continued central bank purchases could add significantly to Asia's overall demand.

⁴ Di Bartolomeo, D 2013, *Incorporating Commodities into a Multi-Asset Class Risk Model*, Northfield.

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CENTRAL BANKS AND GOLD

Central banks will likely remain net buyers of gold over the long-term

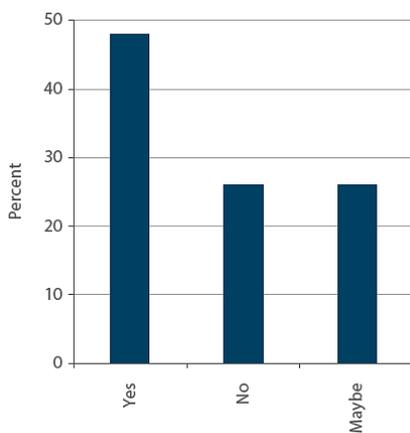
Over the next decade, emerging market central banks will need to hold a larger stock of physical gold in their vaults to shore up confidence in the newly floating exchange rates. Many of these central banks already have large FX reserves, which have been building since the Asian currency crisis of the late 1990s. Advanced economy central banks will likely maintain existing gold holdings, implying continued net buying from the official sector over the years ahead.

Central banks have become aware of the risks inherent in their reserve portfolios, particularly given the financial market volatility experienced since the GFC, and have been diversifying their portfolios away from US dollars and Euro-denominated assets. A surge in public sector indebtedness since the crisis adds to the case for diversification. Some of this diversification has been into peripheral government bond markets, but we have also seen central banks buying gold, most noticeably those in emerging markets.

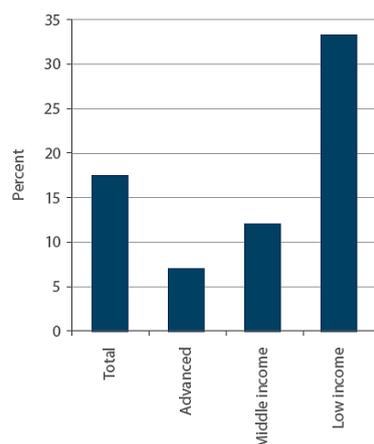
A recent IMF paper⁵ showed that gold was viewed by central banks as an asset that could be used to reduce risk. These results are consistent with a survey ANZ conducted with central banks and sovereign wealth fund managers in early 2014 which found that almost half of the respondents believed that gold was a safe haven asset over the long-term.⁶ Additionally, over 60% of respondents believed that gold would constitute a larger proportion of central bank reserves over the next two years, with just over 20% expecting a decline. Further, around half of the respondents thought holding more gold could mitigate portfolio risks, most of which were central bankers from 'low-middle income' countries (see Figure 4).

FIGURE 4. ANZ GOLD SURVEY

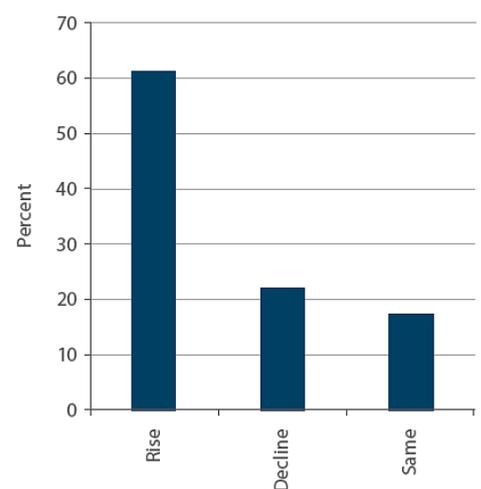
Is gold a safe haven asset?



% of central banks that think holding more gold could mitigate portfolio risks



What will happen to gold allocations in central bank reserves?



Source: ANZ Research

If all central banks in the world were to hold at least 5% of their foreign exchange reserves as gold (equivalent to the current median holding), this would require the purchase of almost 8,000 tonnes of gold, a difficult proposition if central banks did not want to influence prices.

⁵ Morahan, A, Mulder, C, 2013, *Survey of Reserve managers: Lessons from the crisis*, IMF Working Paper W/P/13/99.

⁶ Survey of representatives of central banks from around the world at ANZ's Sovereign Wealth Fund and Central Bank conference, Sydney, Australia, March 2014.

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THE LONG TERM OUTLOOK FOR THE GOLD PRICE

Our central case calls for a gold price above USD2,000/oz by 2025

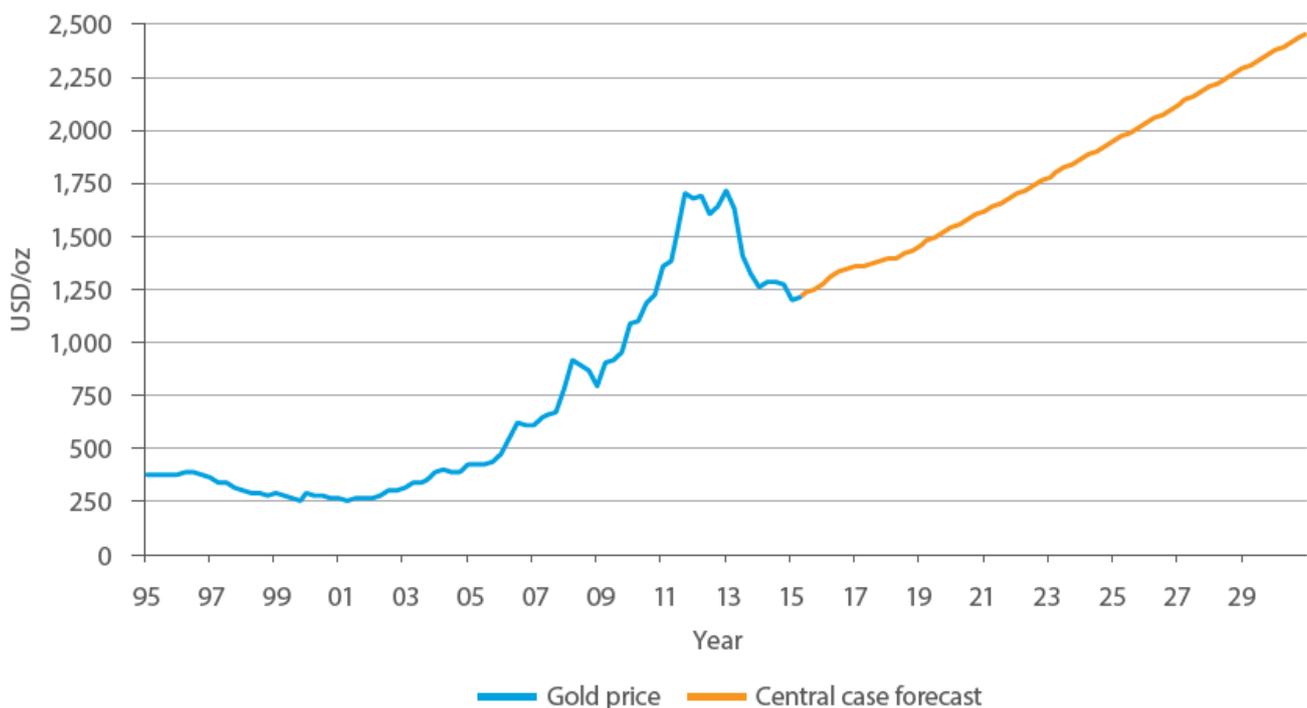
The world economy and financial sector face a number of challenges over the coming decade. Some of these challenges include the completion of developed world deleveraging, the normalisation of interest rates, and the evolution and integration of the Chinese (and Asian) economic model into the global system. As a result, we think it is unlikely that interest rates or investment returns will hit the levels seen in recent decades. That said, our core views remain constructive on the world economy.

Our central case forecast calls for a 2030 nominal gold price of USD2,400/oz as prices are kept high enough to encourage new supply and rising incomes support demand. More bullish and bearish scenarios for gold could see prices rise as high as USD3,000/oz by 2030 or trough just below USD1,000/oz respectively, over the decade ahead.

Under our central case, gold prices are likely to rise gradually, eventually breaking through the USD2,000/oz level within the next decade. This is the most likely outcome, to which we assign a 45% probability. This expectation reflects our core economic and financial views for the broader global economy. We expect the global economy to experience moderate growth over the next decade of around 3% to 4% annually which will lead to rising real interest rates. This should provide positive, though modest, returns to equity and fixed income markets, creating a headwind for gold prices.

Over the next few years however, price gains are likely to be muted as continued selling by physically-backed ETFs adds to global gold supplies. The reaction of central banks, a key driver of the physical gold market, will be crucial to the long-term outlook. Under our central case, emerging market central banks will continue to accumulate physical gold, bringing their allocations more in line with developed markets. This should see central banks remain net buyers of gold at an average of 75 tonnes per year.

FIGURE 5. CENTRAL CASE PRICE FORECAST



Source: Bloomberg, ANZ Research

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GOLD SUPPLY IS PRICE SENSITIVE

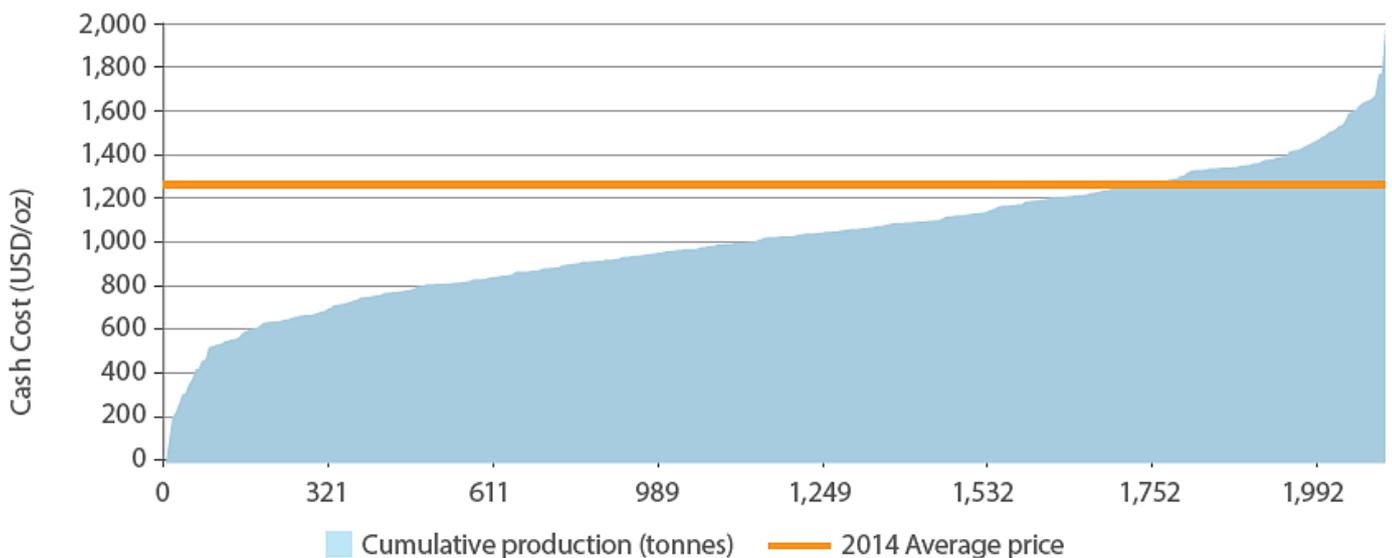
Rising costs of extracting gold and the industry cost curve will keep a high floor under the gold price

The supply of gold is critical in determining not just its price but its useability. One of the main concerns about the use of gold as a monetary unit by central banks was the need for adequate supply. At the same time, supply cannot be too abundant either, as this would effectively increase the money supply, and have an inflationary effect. As the world's population continues to grow and become richer, constraints on the ability of gold supply to keep up with this potential demand has significant implications for its price.

Primary production from mining is the world's most significant source of physical gold. In 2013, gold mine production reached a record high of 3,019 metric tonnes, the first year where production exceeded 3,000 tonnes. One of the prominent changes over the last few decades has been the decline of South Africa as a major gold producer. In 1970, South Africa produced 62% of the world's gold. But as the shallow, low-cost mines were depleted, East Asia (particularly China), Latin America, and Oceania have picked up the slack. Today, China is the world's top gold producer at just over 400 tonnes per year. Despite this, China is also the world's largest importer of physical gold. After China, the fastest growing countries in terms of gold output in recent years have been Indonesia and Peru, while gold production in Australia, the US, and Canada have been relatively stable.

Around 20% of the world's gold mines require a price above USD1,200/oz to be profitable. While new low-cost mines may become operational in the future, it is a general trend that new supply is becoming more costly. A significant expansion of supply from current levels would most likely require a rise in the price of gold in the years ahead. Given the rising cost of extraction, scrap is expected to become an increasingly important part of new gold supply. But encouraging scrap onto the market will also require high prices. In any event, we see the cost curve operating to place an effective floor under the gold price of around USD1,000/oz.

FIGURE 6. GLOBAL GOLD COST CURVE



Source: Bloomberg, ANZ Research

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With China as the world's largest producer and consumer of physical gold, there is no reason why Shanghai should not become a major centre for gold trading

THE EASTERN MIGRATION OF PRICE DISCOVERY

Currently, the bulk of commodity trading on organised exchanges takes place in the US and Europe. Gold is no exception. The vast majority of the world's gold is traded through the London OTC (Over the Counter) market, with an estimated turnover in 2013 of over 500,000 tonnes.⁷ This is equivalent to around 170 times the global annual mine supply, accounting for 75% of gold traded. While this market dominates price discovery, gold futures traded on the US-based Comex amounted to around 147,000 tonnes, making up 20% of global turnover in traded gold. Meanwhile, China's onshore gold market accounted for around 40,000 tonnes or 4% of turnover in 2013.⁸

China's rapid industrialisation over the past two decades has seen it become an increasingly important trading hub for physical commodities. This reflects its status as the world's largest consumer of bulk commodities, base metals, precious metals, and numerous other agricultural commodities.

This has led to a natural rise in China's role as a centre for price discovery in relation to some commodities, which will be further enhanced as the Chinese financial markets grow to be the largest in the world. The development of onshore exchange contracts for commodities in China have supported this trend, and have witnessed a significant increase in traded volumes over the past decade. For example, Chinese onshore markets now set the global prices of coal and iron ore.

Despite China's position as both the largest consumer and producer of gold, its share of global gold trading is currently relatively modest. Two factors which explain China's present gold-trading position are that gold contracts are a relatively recent addition to the Chinese exchanges, and regulations presently constrain international participation in the Chinese financial markets. Despite this, the Chinese gold futures market has grown in size, and we are likely to see the further development of a market for options and other derivatives in the near future.

There are good reasons to believe that over time China (as well as other Asian regions) will account for a larger portion of the global gold trade. The SHFE gold futures contract is relatively young, and though it only launched in 2008, it already accounts for an estimated 3% of global turnover. While some distance away from its sister copper contract (21% of global turnover) in market share, SHFE copper has traded for 15 years.

China's government is also actively pursuing greater participation in the gold market. The SGE is working to open up the Chinese gold market to international investors by establishing the SGE International Board in the Shanghai Free Trade Zone (FTZ). The opening up of China's gold market to international investors could provide a sharp boost to trading volumes on the exchange. The tendency of the Chinese market to trade at a discount or premium to the global spot price could also attract investors to the exchange, with the pricing of the contracts in RMB being another attractive aspect.

⁷ The London Bullion Market Association (LBMA) publishes only 'net' volumes traded in London. The actual daily volume traded is estimated by the World Gold Council to be at least 3 times (and up to 10 times) the size of the reported daily clearing volumes.

⁸ Comex and Shanghai Futures Exchange volumes sourced from the Futures Industry Association Annual Volume Survey 2013. LBMA turnover sourced from the World Gold Council and the London Bullion Market Association.

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