Goldex

# The physical gold guide: from mine to vault.

Gold is the ultimate insurance policy, safe-haven asset and an essential part of any investor's portfolio.

In this guide, we'll cover important aspects of the ancient metal, including its history, price drivers, different ways to invest, and how future trends could affect demand for the world's oldest - and rarest - form of currency.

# How much gold is in the world?

There is no precise figure of how much gold exists - after all, the precious metal has been used by humans for almost 6,000 years. However, there are several different estimates that give us a good idea of entirety of the gold in circulation around the world and how much is left to be discovered.

The World Gold Council estimates 197,576[1] tonnes of gold have been mined, and that 50,000 tonnes remain in reserves underground. The US Geological Survey says 187,000 tonnes have been mined with reserves estimated at 57,000.

In the last few years, gold production has slowed but remains above 3,000 tonnes per year. Some analysts believe "peak gold" occurred in 2018 - though this is disputed, with the S&P Global Intelligence arguing that 2019 was actually a record year of production.

But one thing is clear: if 3,000 tonnes are mined annually and there are only between 50,000-60,000 tonnes in reserves, then it won't be long until these existing reserves run dry.

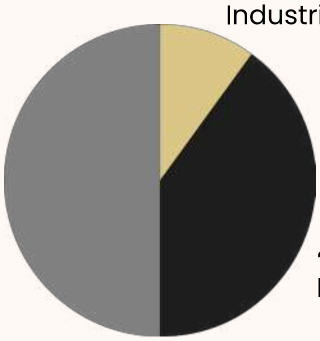
1 All data from World Gold Council 2019, https://bit.ly/3yh3DGC

# The history of gold.

Throughout history, gold has been a physical commodity that has perennially been in short supply and its value over the long term has increased. Gold is considered a stable, secure long-term, safe-haven investment especially in times of uncertainty and remains a key part of culture everywhere.

Over a long-term perspective, gold's popularity has rarely waned. The primary consumer of gold is the jewellery industry, which accounts for close to 50% of all gold produced. A further 40% comes in the form of investments like bullion and gold coins. The remaining 10% is used for industrial purposes.

**% of gold allocated to each industry:**




## *Hedge against inflation*

Gold has an enviable track record of being one of the most popular and reliable inflation hedges. Since gold's discovery, there have been thousands of human-made currencies. Gold has outlasted them all.

Why? Because of the repeated tendency by governments, empires and central banks to debase their currencies in order to finance spending, pay back debt or to inflate their way out of debt.

Such actions increase the money supply, thereby increasing the price of gold. As more money is printed, the value of that money relative to non-cash assets goes down. Investors flock to something real, tangible and that holds universal appeal. If inflation gets out of control, hyperinflation can occur, rendering the currency almost worthless and thus useless as a medium of exchange or store of value.

**61%** of respondants trust gold more than fiat currencies.

**48%** of potential investors lack trust in gold dealers and the quality of the gold they sell.[1]

Gold is an asset that appreciates in value when there is inflation. Holders and buyers of gold have more faith in the precious metal than they do in governments, who almost always end up debasing their own currencies. This is especially true in our present time. A recent study by the World Gold Council stated that 61% of respondents trust gold more than fiat currencies and thus we see the gold price making new recent highs.

1 Source: "Retail Market Insights", World Gold Council, Nov 2019

# Real gold vs exposure.

Over the past couple of decades, new ways of investing in gold have emerged primarily because purchasing physical gold can be quite difficult for the average investor. The buyer faces issues of dealer trust, gold-quality assurance, lack of easy price comparison, and more.

Given these issues, other forms of gold have emerged to give people exposure to gold price movements. However, they're not actual gold - they're known as 'gold derivative' products. They include:

## *Exchange-traded Funds (ETFs) and echange-traded commodities (ETCs)*

An ETF or an ETC is an instrument that tracks the price of an underlying product but does not actually provide ownership. In the case of gold, there's no need to store the physical metal, which also reduces the chances of theft.

**Unallocated gold:** 95% of the world's gold businesses - especially banks - will automatically sell you unallocated gold. When buying unallocated gold, you become the creditor, i.e. the bank then owes you gold that you do not own. Again, there's no need to store the physical gold (because you don't own it).

**Cryptocurrency tokens:** a gold-backed cryptocurrency is a type of crypto where each token is backed by physical gold. With the token price pegged to the current gold price, you can exchange tokens with other users, knowing that its value is tied to the price of gold. Again, however, you don't own actual physical gold.

## And nothing beats allocated gold.

ETFs and others are just sweetener - allocated gold is sugar.

| | UNALLOCATED GOLD | ETF | ETC | CRYPTO GOLD | ALLOCATED GOLD |
|---|---|---|---|---|---|
| **Is it physical gold?** | No | No | No | No | Yes |
| **What is it?** | Notional gold that sits on a balance sheet | Piece of paper that tracks gold prices | Certificate for collateralised gold | Token prices pegged against gold | Physical gold with full legal title |
| **Do you own it?** | No | No | No | No | Yes, full legal title |
| **Where is it stored?** | Balance sheet | Register | Register | Register | Secure vaulting with insurance |
| **Risks** | Counterparty risk<br>It's not gold | Counterparty risk<br>It's not gold | Counterparty risk<br>It's not gold | Counterparty risk<br>It's not gold<br>Volatility | None |

# *The risks of gold products*

The trade-off for investing in most gold derivatives, such as ETFs, is increased risk. The risks of gold ETFs can be broken down into two: product risk and counterparty risk.

**Product risk:** There are hundreds of gold ETFs available. Some are leveraged, some only trade in physical gold, some only trade in gold futures and some only buy gold mining companies.

In turn, they are sold by a multitude of fund managers in different jurisdictions with varying degrees of protections. But they all have one thing in common: the client buying the product is not buying actual physical gold. Rather, in the case of a physical gold ETF, they are buying shares in a fund that then buys gold.

Most investors don't hold enough shares to request physical gold. Instead, most ETFs are currently set up to settle in cash, which means that, even if an investor owns enough shares to buy gold, many funds reserve the right to pay out in cash instead.

So, what are you really buying? Not gold. In essence and in a hyperinflationary example, by the time your money is returned the value of that money has already decreased. Surely the whole point of buying gold is to actually own it, rather than merely having exposure to it.

**Counterparty risk:** In the vast interconnected and interdependent web that is the modern financial system, any financial crises can bring down financial institutions very quickly. What if the issuer of the ETF is no longer solvent? What if the counterparty of the issuer who provides financing is no longer solvent?

These are not hypothetical questions. During the 2008 financial crisis, many ETFs were not able to be traded for weeks because a distant counterparty had become bankrupt and its assets were frozen. Investors who thought they were buying gold were in fact buying just exposure to gold plus an unknown counterparty risk that they were not aware of.

Without financial crises the system works just fine. However, as we've seen time and time again, when it doesn't work, the complex chain of interdependence collapses leaving investors, once again, unable to access their money.

### *Allocated physical gold is the best to own. Period.*

Buying gold via an ETF in order to hedge against a financial crisis makes little sense when the ETF is dependent on the same financial system for its existence. It is especially true of ETFs that do not even own the gold they track and instead use futures contracts.

As we've pointed out already, many gold investors don't own gold. They only own exposure to gold that comes with risks. In times of crisis, pure exposure cannot be truly relied on to protect wealth.

If you want to own gold, then own it. Only allocated physical gold provides ownership.


# Gold price drivers.

Gold is different from almost any other asset because it appeals to both investors and consumers. While investors turn to gold as a long-term savings tool and a diversifier, consumers see gold as a sign of wealth. There are several factors that can have an influence on the price of gold. Let's take a look at what they are.

### *Supply and demand*

Since 2001, gold demand has grown on average at 15% per year[1], driven by factors such as:

- Accessibility to the gold market via technology, both mobile and web
- The emergence of derivative products such as gold ETFs (exchange-traded funds)
- A change in focus from central banks buying gold instead of selling it
- The explosion of the middle class in Asian regions, where gold is held in the highest regard in the form of both investment and jewellery
- Expansive monetary policy by central banks
- Increased geopolitical and political risks

1 World Gold Council, Jun 2019 https://bit.ly/3rrmj3V

Just like any other commodity, the principle of supply and demand is a major influence on the price of gold:

- When gold demand is high and supplies are low, old prices will rise
- When gold demand is low and supplies are high, gold prices will fall

**15%** annual growth in demand for gold since 2001.

Gold demand is normally analysed on a yearly basis and then divided into different sectors:

- Jewellery demand
- Technology and Industrial demand
- Central bank demand
- Investment purposes

In terms of demand, historically gold has been dominated by the jewellery industry: in 2002, jewellery businesses accounted for 80%[2] of the market share. By 2015, that had declined to approximately 50%.

The shift was largely due to the popularisation of gold as a means of investment: demand for gold bars, coins, and ETFs surged between 2003 and 2013, which contributed greatly to the high gold prices that were seen at the beginning of the decade. Investment demand has now stabilised at around 40% of the market.

2 Ibid

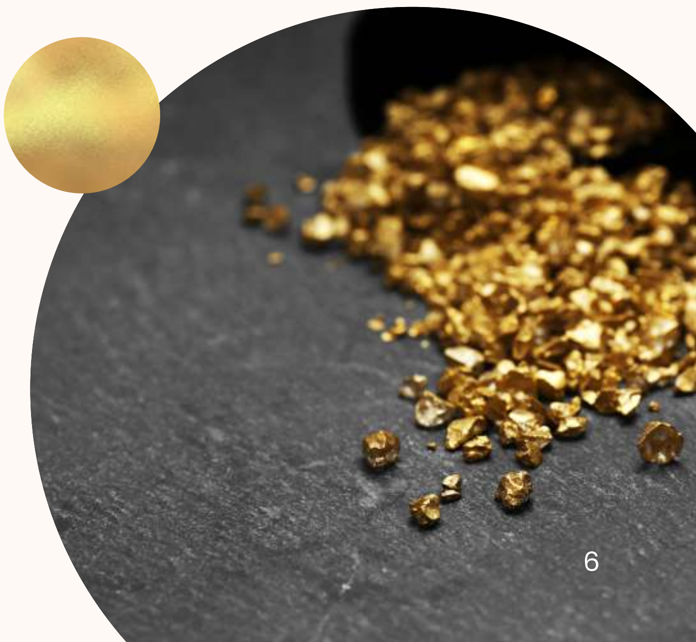
## Economic expansion

Periods of growth in the economy are very supportive of demand for technology, long-term savings, and jewellery. It is particularly the case in developing economies, where gold is used as a luxury item and a means to preserve wealth.

In turn, economic expansion is tied closely to interest rates and inflation. When interest rates rise, it signals there is an increase of economic confidence. Businesses expand and the population with disposable income are able to borrow more.

Central banks and financial institutions can also make higher returns on their loans when the cost of borrowing money increases.

During such buoyant economic times, there is less demand for safe-haven investments, such as gold, and the domestic currency is strengthened. The shift can cause the price of gold to decrease.



Conversely, when interest rates fall or remain unchanged, it signals that there is a lack of confidence in the economy, and growth has halted. The impact can normally be felt in everyday expenditure (wages and the rate of employment) and a weakening in the domestic currency.

In such economic conditions, the demand for gold increases as it acts as a store of wealth and value.

Research shows that interest rates have a greater impact on the price of gold when there is a shift in stance regarding monetary policy - for example, from neutral to tightening or vice versa.

- Traditionally, gold and interest rates have a negative correlation, which means that when interest rates go down, the price of gold goes up.
- Rising interest rates mean that investors look to stocks, government bonds, and other investments.
- Lower interest rates make these same instruments less attractive and, thus, gold is more appealing.

Higher inflation increases the value of gold as a means of wealth accumulation while higher interest rates increase the costs of storing gold.

It's not uncommon to see inflation and interest rates falling in tandem. Hence, the key thing to remember is that inflation rates tend to affect gold prices over the longer term, while there is a clearly negative correlation between

1 The Word Gold Council, 'Gold vs Stocks', 2021: gold.co.uk/info/gold-vs-stocks/

**15%** annual average increase in gold demand since 2001.

**80%** of market share was made up by jewellery businesses in 2002.

All data from Word Gold Council 2019, https://bit.ly/3yh3DGC

## Market risk & uncertainty

The key to successful investing is balancing your risk. It is especially true in times of market risk, uncertainty or recession.

While stocks pay dividends and bonds pay interest, gold doesn't provide a return unless the price rises. That said, gold's performance in the 10 years between 2006 and 2016 outperformed the FTSE 100, 10 & 20 government bonds, UK property, savings accounts, and inflation[1].

It's clear to see that when uncertainty hit its highest point in 2008 – when the markets crashed sending equities and properties plummeting – gold increased in value significantly.

2008 wasn't a one-off occurrence. In August 2018, the FTSE 100 lost £36bn in value in one day, about 2% of its total value in its largest fall since 2008. In that same period, gold increased by 3%. Investors removed their exposure to equities and instead purchased physical gold.

## *Geopolitics*

From the end of The Cold War in the early 1990s until the financial crisis of 2008, the prevailing view of academics and policymakers was that the US-led global economic and political system was almost infallible. Globalisation and the spread of global trade in goods and services, and greatly increased travel, had improved living standards for many.

It was thought that this configuration would last indefinitely. The faith in this system was exceptionally high and optimism abounded.

Learn more about the **global political system** at The Goldex Academy.

The financial crisis planted, slowly at first, the initial seeds of doubt in this system. Such doubts were two-fold: faith in American-led capitalism took a knock, though not a body blow. The US Federal Reserve and Federal Government came to the rescue with unprecedented intervention in the economy with expansive monetary and fiscal policy.

At the same time, China examined policies that showed it wasn't happy just being a part of a US system and that it wanted to carve its own path.

Suddenly the system and, thus, the future didn't look so certain. Throughout this period, gold continued to slowly appreciate in price.

Fast forward to today and the two decades following The Cold War looked very benign: no currency wars, nor trade wars.

There was lower inequality and reasonably civil discourse between political rivals, both domestic and international. As a result, more markets opened up and trade barriers falling.

All of this is taking place under the watchful eye and guidance of US-led international institutions such as The IMF, World Bank, and United Nations. The system, born out of the carnage of WWII, looked ready to stand the test of time.

And now it is creaking.

When there is uncertainty in the global economy, gold is the go-to safe haven.

# The future: boosts and barriers.

With advancements in technology and the emergence of gold-backed products like ETFs or cryptocurrencies, the landscape for the gold market – especially as a finite resource with depletion of natural reserves – has the potential to change and shift in both the near and far future.

But what factors should be considered when thinking about how the gold market could evolve? Let's look at a few of the areas that are either driving change or represent barriers that need busting.

## *Gold needs innovation*

The gold industry has not experienced the same kind of innovation as other commodities have experienced in recent times. It's primed for disruption:

- The way we buy and sell the precious metal has not changed much over the past few decades.
- Other asset classes, such as equities, have been transformed by the development of electronic trading, meaning that 'best execution' processes are standardised.
- Technology in gold is typically outdated, and innovation is just starting to be seen.

**48%** cite lack of trust as a barrier to buying gold [1]

Turning to gold investors, one of the principal issues in the gold industry is trust: 48% cite a lack of trust when buying it. The main reasons include:

- Doubts about dealer trustworthiness and the quality of the gold they sell.
- Price consolidation: buyers have to manually compare prices. There's no "Compare The Market" for gold.
- Lack of knowledge and accessibility.

1 World Gold Council, Nov 2020 https://bit.ly/3BsYPjt

On the institutional side, companies that want to offer allocated gold to their customers face additional and significant challenges.

- Dealer technology is poor, meaning integrations are impossible.
- Liquidity is an issue when dealing with individual dealers.
- There's no harmonisation of pricing or quantities among dealers.

**3x** demand for gold in China 2002-17.

**50%** of global demand comes from China and India.

All data from World Gold Council 2019, https://bit.ly/2WxMryJ

## Growing Asian demand

It's also worth noting that India is the second-largest consumer of gold in the world, and has the potential to become the fastest-growing economy in the world over the next three decades, which means that its middle class could play an important role in the price of gold.

Its neighbour - both geographically and in terms of population size - China, has had a significant effect on the gold market as it was responsible for shoring up the aforementioned dip in demand for gold jewellery. China saw a three-fold increase in demand between 2002 and 2017 that partly absorbed lower demand from developed economies.

Together with India, China makes up over 50% of the current global gold demand. The process of wealth accumulation in these countries, and other emerging economies, plays an important role in the gold industry from a long-term perspective.

## Better technology

Financial markets have changed dramatically in the past 30 years, and there's no reason to suggest they won't continue doing so. Developments in technology will – and have already – facilitated access to more asset classes and investment strategies, with execution and purchasing becoming easier and cheaper than ever before. In conjunction with increased urbanisation and better education, we can reasonably expect that improvements in technology will also expand the investment universe – and this of course will apply to gold investing as well.

# Basel III

The Basel III rules came into effect in June 2021 and affect many financial companies trading in the gold industry. It has major implications for how the industry trades in gold, with the winner looking like allocated physical gold.

**What is the Bank of International Settlements (BUS)?:** Basel III was launched in 2009, partly in response to the financial crisis. It aims to ensure banks have sufficient capital, liquidity, and less leverage in order to be able to withstand economic shocks.

There are three main parts:

1. Banks must hold increased capital.

2. Banks must maintain a minimum leverage ratio above 3%.

3. They face higher liquidity requirements.

For gold, banks must now hold sufficient capital that exceeds stable funding requirements for one year in a stressed scenario.

**Gold is now a "Tier 1" asset:** Basel III's reclassification of gold as a "tier 1" asset means it is now defined as zero-risk and, thus, a cash equivalent. Now central banks can value their physical gold at 100% of its value. However, their gold must be physical and provable.

The physical-gold requirement of Basel III impacts commercial banks, bullion dealers, and others who use unallocated gold. Now, Basel III requires them to put up 85% of the value of the unallocated gold in cash. Before Basel III, it was 0%.

The impact is huge and means that the entire trading, clearing, financing, and settlement infrastructure becomes exponentially more expensive. Some bullion banks and other institutions may have to potentially close down these parts of their businesses.

**The future - ownership, not exposure:** The direction of travel is towards the ownership of real gold. Hence, our view is that the potential winding-up of operations in the unallocated markets will necessarily cause liquidity issues.

The high cost of operations forces bullion banks out of the market and, as a result, supply suddenly drops.

Liquidity issues will also spill over into the physical markets. Increased competition for allocated physical gold will force up prices - you can't just invent real gold like you can issue paper. The pressure on pricing means that financial companies that wish to offer allocated physical gold will need to find solutions that both enable price discovery and also offer multiple sources of significant liquidity.

1. Financial companies must find solutions that enable price discovery.

2. The solutions they seek must also offer multiple sources of significant liquidity.

Companies seeking access to allocated gold will need a partner that provides:

**1** Price discovery: real-time price comparison.

**2** Liquidity: multiple sources of gold supply.

# Unlocking allocated gold for financial companies.

How can financial companies offer allocated physical gold quickly to their customers?

Allow us to raise our hand.

Goldex is the only multi-dealer marketplace for allocated physical gold that offers integration for financial companies. Through a plug-and-play connection over API or FIX, financial institutions can offer their customers 24/7 access to the best pricing on physical gold. Buyers enjoy full legal title over their gold, secure in the knowledge that vaulting has been taken care of.

As we've touched upon throughout this guide, allocated gold is gold owned outright by an investor and is stored, under a safekeeping or custody arrangement, in a professional bullion vault. It is the property of the investor.

Allocated gold differs profoundly from unallocated gold which is the property of the bank. When buying unallocated gold, you become the creditor - the bank owes you gold you do not own.

Although this removes the need to pay for insurance of physical storage, you're still investing in gold under the assumption that the bank will honour their side of the agreement in the event of a catastrophe - like a financial collapse or crash, bankruptcy or insolvency.

So if gold investment is a way to truly preserve wealth, no matter the status of the financial system - then it makes sense to actually physically own it.

Eventually, unallocated gold will disappear; and in the event of another global crisis, the investors and companies who have purchased physical gold will be the ones to benefit the most.

**Find out more about Goldex:**

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**Contact us:** Partnerships@goldexapp.com

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The end of crypto versus gold

Basel III has huge implications for allocated physical gold

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