

beaten the US treasuries, US equities, developed market equities and emerging markets, even after accounting for dividends. \$100 invested at the turn of the century has turned into \$591.

many believe that gold can't be valued. I disagree and would attribute gold's great leap forward to the fall in US real interest rates (104%), realised inflation (52%),

starting discount (55%) and, finally, the recent move to a 24% premium. I'll address these points in turn and then look at the decade ahead.

HAS RECENTLY

TURNED NEGATIVE





Source Bloomberg: Gold (yellow), US TIPS (green), MSCI Emerging Markets (orange), S&P 500 (dark blue), MSCI EAFE (light blue), total return rebased to 100 since 1 January 2000

FALLING REAL RATES

The main driver has been falling real rates, that is, the US Treasury yield less the expected rate of inflation. This was over 4% in 2000 and has recently turned negative. It is wholly unsurprising that gold is deemed to be more attractive when cash on deposit receives a negative real return, compared to those glorious days when you could earn a 4% real rate without taking any risk. Little wonder gold was trading so cheaply in 2000.



Source Bloomberg: US 10-year bond yield % (yellow), US 10-year breakeven rate % (orange), US real rate (green) since 1 January 2000

CHART 3: GOLD BEHAVING RATIONALLY



Source Bloomberg: Gold (yellow) and fair value (green) in US dollars since 1 January 2000

CHART 4: GOLD SMELLS INFLATION WITHIN 18 MONTHS



Source Bloomberg: Gold premium/discount from fair value (yellow) %, EM 30 day moving average (blue), since 1 January 2000

MODELLING THE GOLD PRICE

In 2014, I first modelled gold as a bond with the following characteristics:

- It is zero-coupon because it pays no interest
- It has a long duration because it lasts forever
- It is inflation linked, as historic purchasing power has demonstrated
- It has zero credit risk, assuming it is held in physical form
- It was issued by God.

This describes a zero-coupon, risk-free, inflation-linked bond – something that resembles a 20-year TIPS. Last year, I wrote a more detailed piece, 'How I Value Gold', for the World Gold Council. https://www.gold.org/goldhub/research/gold-investor/how-i-value-gold

The link between gold and the fair value model is strong. Gold started the period below fair value and crossed above in 2008. It then got ahead of itself at the 2011 peak,

only to fall back into line for the next few years. Recently a premium has begun to re-emerge.

I like the way the model declined in 2008, 2013 and recently during the COVID-19 crisis. Many believe gold to be a safe haven. Indeed, it is, but only when real rates are falling. If the system freezes up, and there is a fear of deflation, then cash is king. Yet, gold has

typically been quick to recover once the threat of deflation passes – a sign of asset quality.

Another observation is that, at the time of gold's 2011 high, the US consumer price index brushed 3.9%. While gold soared, asset prices retreated and the euro crisis was set in motion. Gold has a unique ability to sniff out inflation, and as soon as the threat passed, gold retreated, while general asset prices rallied.

THE GOLD PREMIUM

In the run-up to the 2013 taper tantrum, the gold price sensed the impending spike in real interest rates. The premium peaked at nearly 50% (the gold price was 50% above fair value) in 2011 and started to decline 18 months ahead of the talk of rising interest rates. By the time of the taper tantrum, the premium was zero. It begs the question that if gold built a premium into a rising inflationary environment back then, and then anticipated its demise, it could be doing it again.

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The gold premium seems to be a trending affair. The price rose from 2000 to 2005, yet the valuation gap failed to close. It was an era of a weak dollar – while gold was rising in US dollars, it was flat in most other currencies. It was only when gold started to show strength in the likes of the euro and the yen that the global buyers arrived and the discount started to close.

The premium carried on rising into 2011, before narrowing ahead of the taper tantrum. Five years of inactivity followed, while gold patiently waited for general asset prices to trip. By late 2018, a new premium started to build, which brings us to the present day.

Given the trending nature of the premium, it is more likely to rise from here than reverse. That's because gold is in a bull market and

the forces driving it higher far outweigh the forces holding it back.

I suspect that gold sees inflation coming in 2021. It would make sense because central bank balance sheets are bursting at the seams. QE was only mildly inflationary because the money never escaped from the banking system.



GOLD PRICE FORECAST UNDER DIFFERENT RATE SCENARIOS

20 YEAR BOND YIELD

		0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
20 YEAR INFLATION EXPECTATIONS	5.00	7,576	6,821	6,145	5,538	4,994	4,506	4,068	3,674	3,321	3,002	2,716
	4.50	6,200	5,585	5,034	4,540	4,096	3,698	3,340	3,018	2,729	2,469	2,234
	4.00	5,074	4,574	4,124	3,721	3,360	3,034	2,742	2,479	2,243	2,030	1,838
	3.50	4,153	3,745	3,379	3,051	2,756	2,490	2,252	2,037	1,843	1,669	1,512
	3.00	3,400	3,068	2,769	2,501	2,260	2,044	1,849	1,673	1,515	1,373	1,244
	2.50	2,783	2,512	2,269	2,051	1,854	1,677	1,518	1,375	1,245	1,129	1,024
	2.00	2,278	2,058	1,860	1,681	1,521	1,377	1,247	1,129	1,024	928	842
	1.50	1,865	1,686	1,524	1,379	1,248	1,130	1,024	928	841	763	693
	1.00	1,527	1,381	1,249	1,130	1,024	927	841	762	692	628	570
	0.50	1,250	1,131	1,024	927	840	761	690	626	568	516	469
	0.00	1,024	926	839	760	689	625	567	514	467	424	386

Source: Atlantic House Investments

What we are seeing today is a surge in the money supply, which is being sent straight to the real economy. Prices are still falling because there has been a demand shock. The combination of closed businesses and high unemployment, much of which is hopefully temporary, has seen prices fall. But as the world economy re-emerges from the ashes, we could find ourselves facing a supply shock, with too much money chasing too few goods. It's fair to assume that gold is, once again, a step ahead.

Gold compensates for realised inflation that has already happened. Yet, it also responds to real rates that reflect the cost of money. Those two inputs help us to anchor the price. However, as experienced investors are only too aware, the price will do what it wants to and the deviation from that price can differ significantly. The point of fair value is not to trade off, but to measure risk and reward. If gold is trading at a discount, it is possible to lose money, but hard to lose a lot of money, and vice versa.

GOLD FORECAST FOR 2030

In trying to determine where gold might find itself at the end of the decade, we need to make assumptions. It goes without saying that the future is unpredictable, but I'm not afraid to give it a go. The simple idea is that inflation will return and that alone is enough to consider a plausible scenario. In order to predict the gold price in 2030, we need to forecast three things:

- 1 Realised inflation 2020 to 2030
- 2 Real rates in 2030
- 3 The premium to fair value

REALISED INFLATION IN 2030

This is the hardest question to answer, so I'll keep it simple and forecast 4% as an average for the decade. Over the past 70 years, the average rate has been 3.5%, so I'm going slightly higher. 4% compounded over ten years is 48%.

REAL RATES IN 2030

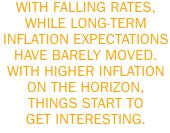
This is more scientific because we can use the valuation methodology and allow different inputs. What soon becomes clear is that real rates aren't equal. That is, a 0% real yield can have 0% bond yield and 0% inflation, or it can have a 5% bond yield and 5% inflation. The former puts gold at \$1,024, whereas the latter puts it at \$2,716 - a huge difference. This means that there's more to it than real rates, because gold is more sensitive to inflation than the bond yield.

Then the penny drops. The huge gains in the $21^{\rm st}$ century have occurred in an environment with falling rates, while long-term inflation expectations have barely moved. With higher inflation on the horizon, things start to get interesting.

The box above highlights the current situation, with 20-year inflation expectations of 1.3% and a 20-year Treasury yield of 1%. The current fair value is around \$1,400. If inflation expectations shift to 4%, as clever tricks at the Federal Reserve keep the yield down at current levels, you get a fair value of \$4,124, which is 194% above the current level.

THE GOLD PREMIUM IN 2020

The gold premium touched 50% in 2011 – the last time the animal spirits were raging wild. I don't know what the gold premium was in 1980, but it was probably similar or higher. Assuming gold is in a bull market, it is fair to assume a similar premium will be seen at some point. I'll stick with 50%. Given the current premium is 24%, there is 21% of upside to reach a 50% premium.



THE HUGE GAINS IN THE

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2030 GOLD PRICE FORECAST

Putting these together, the price impact from the current fair value of \$1,400 is:

Realised inflation 48%

Real rates 194%

Premium 21%

Implied gold price in 2030 **\$7,370**

SUMMARY

If inflation exceeds 4%, then expect a higher price and vice versa. If the bond yield blows out, then expect a lower price and vice versa. Finally, the premium could surge in 2025 and come back to zero or even below zero by 2030, should the Volcker moment come early. The point is that there is a rational framework from which you can

understand the dynamics of the gold market. Owning gold does not mean you have to fly blind.

The current gold premium is telling us that higher inflation is coming. The implications for asset classes are immense. Higher inflation implies a weaker dollar, which implies higher commodity prices and a surge in emerging market equities. It will make

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bonds unattractive and potentially drive down equity valuations in the developed world. The last time we saw this was in the 1970s. Those that thrived owned gold.

Charlie Morris is the Head of Multi Asset at Atlantic House Fund Management, where he manages the Total Return Fund. He has 22 years' experience in fund management, where he has built a reputation for managing active portfolios with an emphasis on efficient diversification and risk management. In previous roles, Charlie was the Chief Investment Officer at Newscape until 2018 and the Head of Absolute Return at HSBC Global Asset Management until 2015.

His interest in gold dates to the late 1990s, when it was a forgotten and widely ridiculed asset. While at HSBC, he became an active market participant and was frequently quoted in the media. He has developed a gold regime model and a gold valuation model, which were first published in his occasional blog, Altas Pulse.

In other roles, Charlie is the editor of the leading UK investment newsletter, The Fleet Street Letter (est 1938). Prior to a career in finance, Charlie was an officer in the Grenadier Guards, British Army.