

Market Insight

Gold outlook to Q1 2023: Is gold returning from the alternate universe?

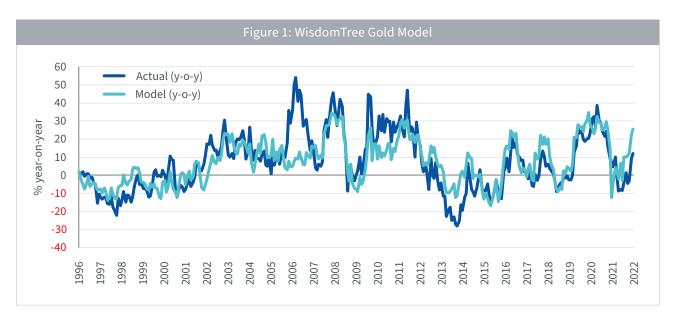
April 2022



For most of the past year, gold has been ignoring the red-hot inflation that we have been living in. Our internal forecasts model indicates that gold, when factoring in a US inflation rate of 7.9% in February 2022, should be trading at closer to US\$2150/oz rather than US\$1920/oz where it is currently trading (7 April 2022). It's as if gold has been living in an alternate universe. However, gold has been picking up recently, catalysed by safe-haven demand driven by the war in Ukraine. We have periodically observed such instances of geopolitical shocks bringing gold back to life. If sustained, gold could be on an upward trajectory, despite bond yields rising and the US Dollar remaining quite firm.

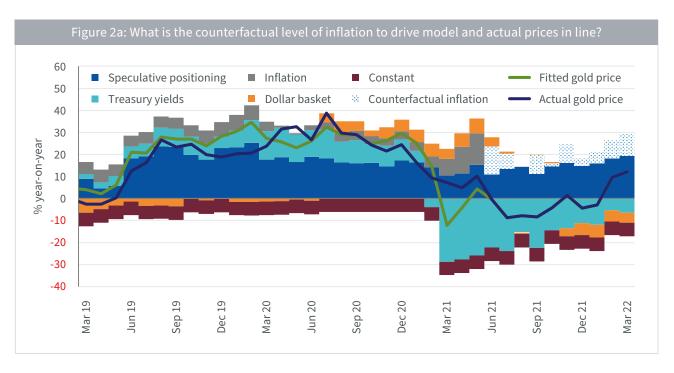
Gold in the alternate universe

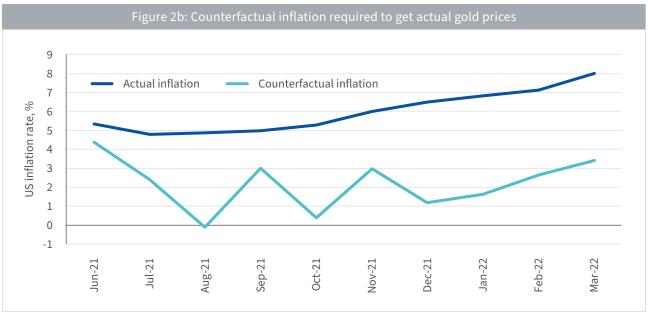
Using the model described in <u>Gold: how we value the precious metal</u>, we observe that actual gold price growth has been significantly below what our forecasts model predicts since the middle of 2021 (Figure 1). It appears that gold has become less sensitive to inflation than we previously thought. In fact, we have recalibrated our model to incorporate the last few years of data to factor in this lower sensitivity.



Source: Bloomberg, WisdomTree price model, data available as of 31 March 2022. Model calibration: April 1996 to February 2022. Note previous versions of this slide showed a shorter calibration period and an out-of-sample. More recent observations indicate that gold has been less sensitive to inflation than before and so we use all available data for calibration now. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

Despite our recalibration, actual gold prices are still below what the model predicts. We have undertaken an exercise to imagine what the inflation rate would have needed to be to drive the model results to be in line with actual gold prices. We describe this as the 'counterfactual inflation rate'. This counterfactual inflation rate was not only below the actual inflation rate, but it was negative in August 2021.





Source: Bloomberg, WisdomTree price model, data as of March 2022. The fitted gold price is the price the model would have forecast. The constant does not have economic meaning, but is used in econometric modeling to capture other terms. It can be thought of as how much gold prices would change if all other variables are set to zero (although that would be unrealistic). Counterfactual inflation is the inflation rate we have reverse-engineered to drive the model results to something similar to actual gold prices movements. Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.

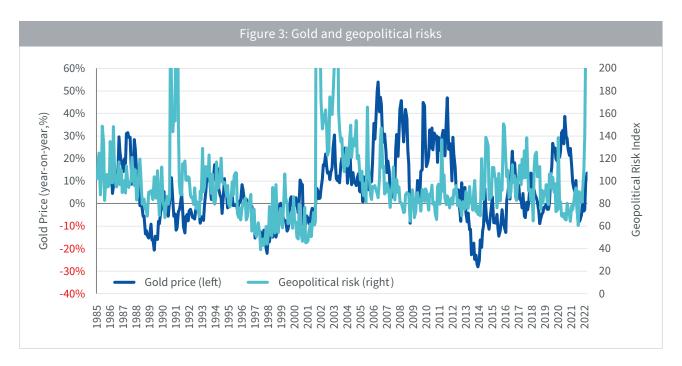
Geopolitical risks driving gold's recent turnaround

On 24 February 2022, gold was awoken from its slumber as Russia invaded Ukraine. Net speculative positioning in gold futures has risen to levels last seen in March 2020, that is, when markets were worried about the impact of broadbased lockdowns amid the COVID-19 pandemic. This time, the worry is about the political fall-out from the war.

Notwithstanding the difficulty in quantifying geopolitical risk, we use a Geopolitical Risk Index developed by Dario Caldara and Matteo Iacoviello at the Federal Reserve Board based on automated text-search results of the electronic archives of 10 newspapers. Plotting their series against gold (Figure 3) yields some interesting results.

- + Immediately before the build-up to the Gulf War (1990), gold prices were quite depressed. The build-up to the war seemed to have ignited gold prices.
- + Immediately before the 9/11 terrorist attacks in the US (2001) gold was depressed. The attacks seemed to have ignited gold prices. The Iraq War soon after (2002) kept gold well supported.

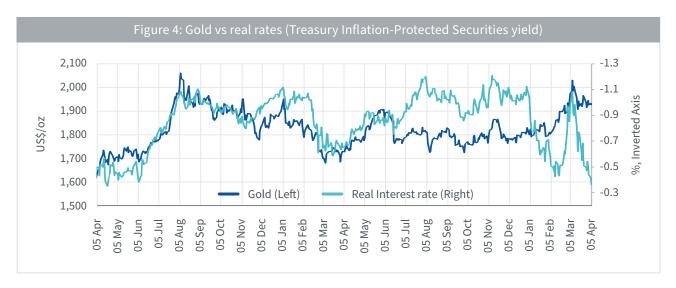
Currently, we may be in another situation where geopolitical risks nudge the gold market back to where it should be operating. We are certainly living in a period of elevated geopolitical risk (as measured by the Geopolitical Risk Index) not last seen since 2001.



Source: WisdomTree, Bloomberg, Economic Policy Uncertainty (Geopolitical Risk Index by Dario Caldara and Matteo Iacoviello), January 1985 to March 2022. Scale on right axis capped at 200 to allow for better visualisation of the gold trend. **Historical performance is not an indication of future performance and any investments may go down in value.**

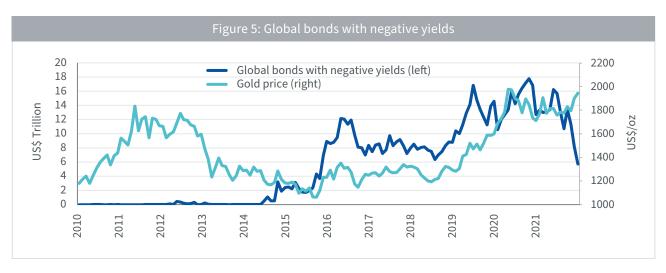
Will the bond sell-off be gold price negative?

Gold and US Treasuries are competing anti-fragile assets. We usually expect to see their prices moving in the same direction. That is, gold and bond yields are inversely related. In 2021, gold was trading relatively below the bond market. Today, following the recent bond sell-off, gold appears to be trading above where the bond market would indicate. Figure 4 highlights the relatively strong relationship between gold and US Inflation-Protected Securities that started to break down in the latter half of 2021. The relationship started to re-establish in early March 2022 but, following the bond sell-off (that has driven bond yields higher), gold has not yet fallen. Could gold withstand the pressure from the bond market for longer?



Source: Bloomberg, WisdomTree. 5 April 2020 to 5 April 2022. Historical performance is not an indication of future performance and any investments may go down in value.

Another way of looking at the same issue is that gold seems to have maintained strength in recent years because there has been so much negatively yielding debt out there (Figure 5). Now that negatively yielding debt is declining, should gold prices fall?



Source: WisdomTree, Bloomberg. Period: January 2010 to March 2022. Historical performance is not an indication of future performance and any investments may go down in value.

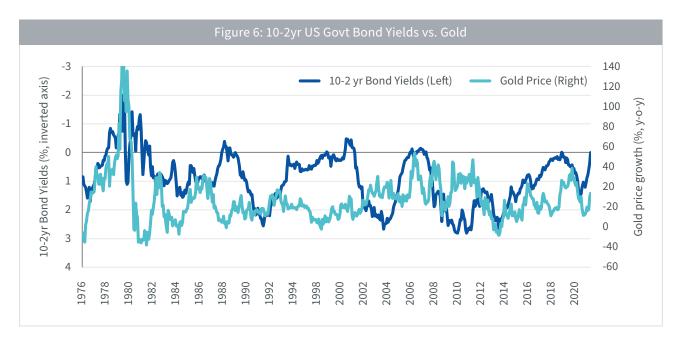
A bear-flattening yield curve could be gold price positive

When looking at gold and bond market relationships it is worth observing what is happening at both ends of the yield curve. 10-year US Government bond yields are rising, which we normally associate with negative gold price moves. But 2-year US Government bond yields are rising at a sharper rate, driving a yield curve inversion. The historical evidence for a recession following a yield curve inversion is fairly strong¹. Gold as a defensive asset could do well in such environments.

Looking back at the relatively few occasions we have had yield curve inversions (10-year minus 2-year yields being negative, that is, above the 0 line in the inverted axis in Figure 6), there is mixed evidence of gold behaving positively. But curve inversion can happen for two reasons:

- 1. A bear flattening inversion: when 2-year yields are rising faster than 10-year yields
- 2. A bull flattening inversion: when 10-year yields are falling faster than 2-year yields

We find that bear flattening inversions have often been gold price positive. This is true between the 1978 to 1981 period and in 2006. However, in 1989 and 2000, when the yield curve inverted in a bull flattening fashion, gold prices failed to gain support. Today, the yield curve is flattening due to 2-year rates rising faster than 10-year rates, that is, a bear-flattening. The yield curve briefly inverted at the beginning of April 2022, based on the 10 minus 2-year yield². On a 30 minus 5-year basis, the curve is still inverted³.



Source: WisdomTree, Bloomberg. Period: June 1976 to March 2022. We define yield curve inversion as the 10-2yr US Government Bond Yield being negative. When the 2yr is rising faster than the 10yr we define it as a bear flattening. When 10yr is falling faster than 2yr we define it as a bull flattening. 10-2yr yield on 1 April 2022 was -0.074%. **Historical performance is not an indication of future performance and any investments may go down in value.**

¹ An inverted yield curve in U.S. Treasuries has predicted every recession since 1955, with only one false signal during that time – Source: https://www.investopedia.com/articles/basics/06/invertedyieldcurve.asp

² 10 minus 2-year yield went negative on 1 April 2022 and 4 April 2022 but is positive at the time of writing (7 April 2022)

³ 30 minus 5-year yield went negative on 28 March 2022 and remained negative at the time of writing (7 April 2022)

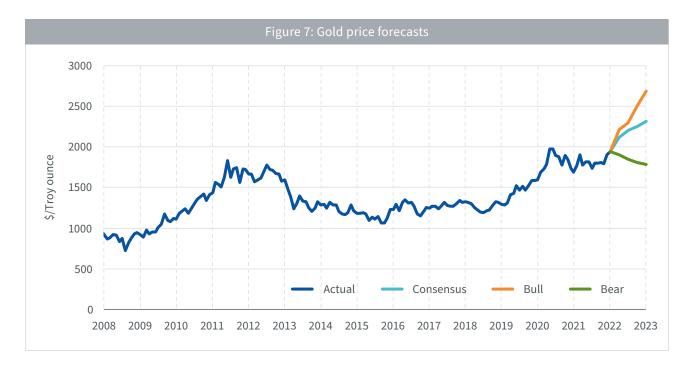
Gold outlook using WisdomTree's forecasts model

Geopolitical risks and yield curve inversion risks appear to be pulling gold back from the alternate universe it has been residing in during the second half of 2021. Assuming gold can snap back to its historic relationships with bonds, US Dollar, inflation, and investor sentiment, we can turn to our model for guidance on where gold could go next. We have recalibrated the model presented in Gold: how we value the precious metal to utilise the most recent data. In part, that helps redefine the model's sensitivity to inflation (although it doesn't fully bring the model and actual gold prices in line in the most recent period, as discussed earlier).

We present several scenarios:

- 1. Consensus scenario: based on consensus economic forecasts gathered by Bloomberg in March 2022. Consensus is assuming inflation rates to remain elevated for the forecast horizon, but to decline from the February 2022 reading of 7.9% in the US. Bond yields are expected to rise relative to when the survey was taken. Although we note that the absolute level of bond yields is already higher at 2.57% on 7 April 2022 than the peak expected in the survey. Consensus also expects US Dollar depreciation. We assume that the relatively high speculative positioning in gold futures (reflecting the geopolitical hedge) will subside during the year.
- 2. Bull scenario: we assume that inflation will remain significantly higher than in the consensus scenario, as the supply shocks we are currently experiencing maintain a longer lasting effect on price formation. We assume the conflict in Ukraine continues, preventing prices from normalising to pre-war levels. In this scenario, we cap bond yields at 2%. Our assumption in this scenario is that the Federal Reserve (Fed) becomes less hawkish, acknowledging the demand-destruction that could result from the external price shocks. These price shocks may not be something monetary policy can address, and the Fed may be averse to pushing the economy into a recession by inflicting further economic pain elsewhere. Less Fed hawkishness could help the US Dollar decline further, relative to the consensus view. Sentiment towards gold could remain high with the prolonged war in Ukraine.
- 3. Bear scenario: In this scenario, the Fed is successful in driving inflation lower to target with an aggressive tightening policy that will see bond yields rise to 3.50%. Assuming the Fed is more aggressive than other central banks, the US Dollar will appreciate. An end to the Ukrainian conflict could also remove the geopolitical premium in gold, driving speculative positioning lower.

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Source: WisdomTree Model Forecasts, Bloomberg Historical Data, data available as of close 31 March 2022. **Forecasts** are not an indicator of future performance and any investments are subject to risks and uncertainties.

	Consensus				
	Q2 2022	Q3 2022	Q4 2022	Q1 2023	
Inflation forecast	6.9%	5.9%	4.5%	3.3%	
Nominal 10-year yields forecast	2.11%	2.20%	2.30%	2.37%	
US\$ exchange rate forecast (DXY)	97	96	95	93	
Speculative positioning forecast	250k	200k	180k	180k	
Gold price forecast	US\$2110/oz	US\$2200/oz	US\$2250/oz	US\$2315/oz	

Source: WisdomTree, *Bloomberg consensus forecasts taken in March 2022. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

	Bull				
	Q2 2022	Q3 2022	Q4 2022	Q1 2023	
Inflation forecast	8.0%	7.0%	6.0%	5.0%	
Nominal 10-year yields forecast	2.00%	2.00%	2.00%	2.00%	
US\$ exchange rate forecast (DXY)	95	93	90	89	
Speculative positioning forecast	300k	300k	300k	300k	
Gold price forecast	US\$2210/oz	US\$2300/oz	US\$2500/oz	US\$2680/oz	

Source: WisdomTree. Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.

	Bear				
	Q2 2022	Q3 2022	Q4 2022	Q1 2023	
Inflation forecast	3.0%	2.0%	2.0%	2.0%	
Nominal 10-year yields forecast	3.40%	3.07%	3.20%	3.50%	
US\$ exchange rate forecast (DXY)	100	101	102	103	
Speculative positioning forecast	50k	50k	50k	50k	
Gold price forecast	US\$1900/oz	US\$1850/oz	US\$1810/oz	US\$1790/oz	

Source: WisdomTree. Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.

Conclusions

We believe that gold has reached a turning point after being relatively subdued in the second half of 2021. The metal has been catalysed by rising geopolitical risks and it will become increasingly difficult for the metal to keep ignoring the elevated inflation environment we live in. While rising bond yields could present a headwind, the yield curve could invert in bear flattening fashion, which could be positive for gold if history is any guide.

Our model-driven forecasts point to gold continuing to rise if consensus economic forecasts are correct. Although, if gold's sensitivity to inflation continues to weaken, we may see gold fail to meet these targets. If geopolitical events and the risk of curve inversion have helped gold return to our universe, then the model could be a good guide for the coming year.

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