



Gold and Silver: the dynamic duo and the uncertain recovery

10th September 2020

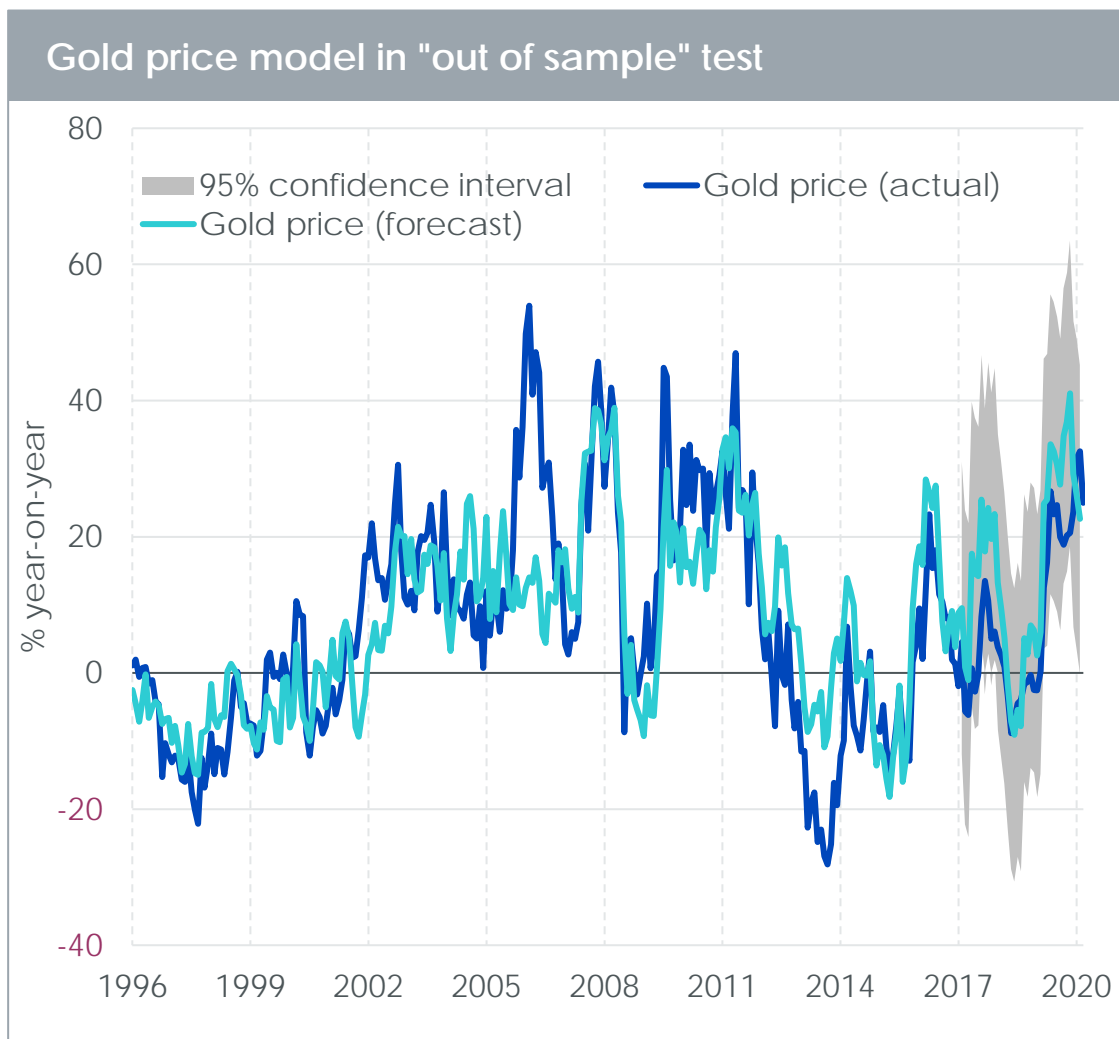
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Gold outlook

Gold model

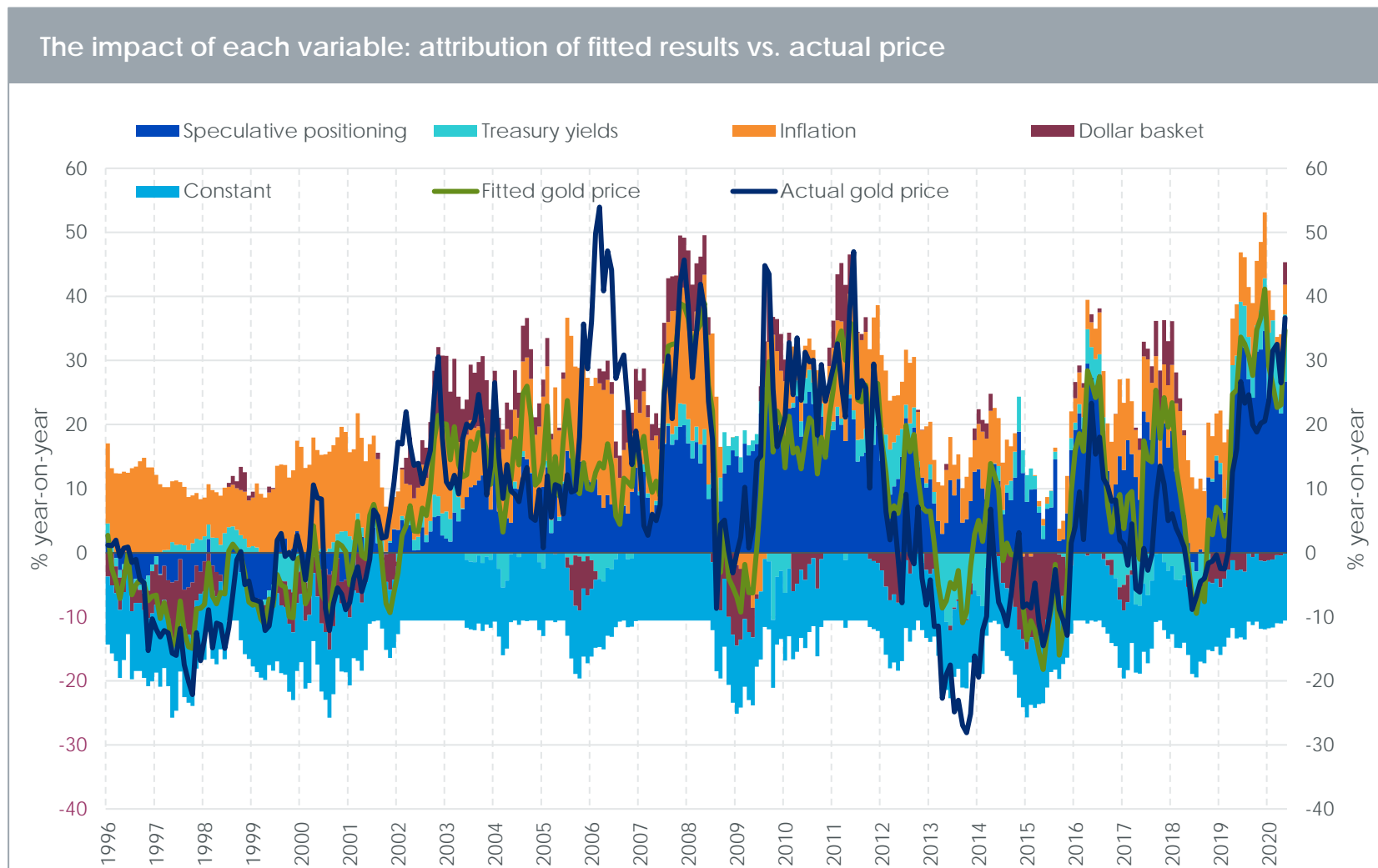


We have built a model that demonstrates that changes in gold price (in US Dollars) are driven by (direction in parenthesis):

- + Changes in the trade weighted US Dollar (-)
- + Consumer Price Index (CPI) inflation (+)
- + Changes in nominal yields on 10-year US Treasuries (-)
- + Investor sentiment (measured by speculative positioning in the futures market) (+)

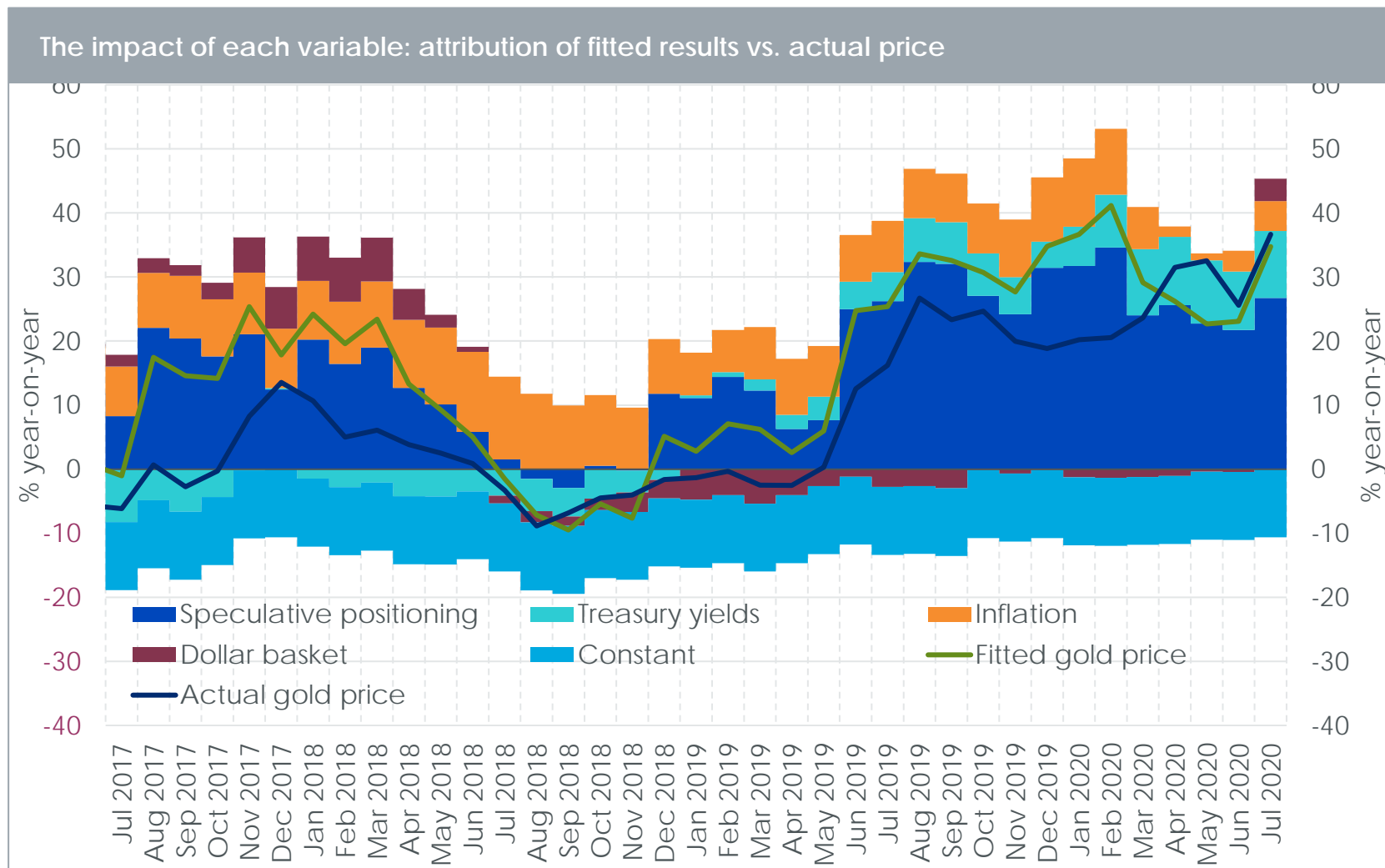
Source: Bloomberg, WisdomTree price model, data available as of 29 June 2020. Model calibration: April 1996 to April 2017. "Out of sample" period: May 2017 to June 2020

What has driven gold prices in the past?



Source: Bloomberg, WisdomTree price model, data as of 30 July 2020. July 2020 inflation assumed to be 1%. 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).

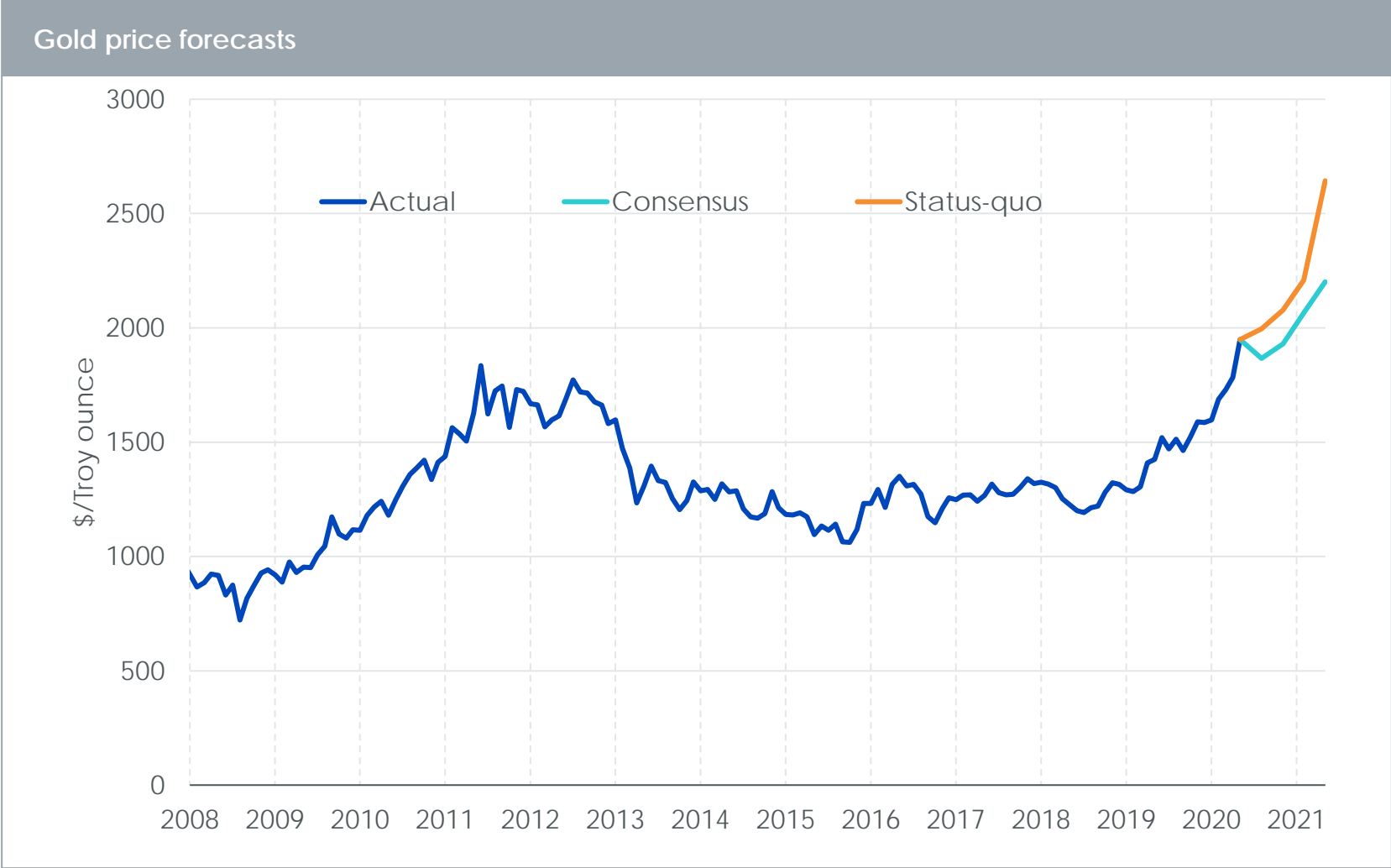
Focus on past three years



Source: Bloomberg, WisdomTree price model, data as of 30 July 2020. July 2020 inflation assumed to be 1%.

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Gold forecast July 2021



Source: WisdomTree Model Forecasts, Bloomberg Historical Data, data available as of close 30 July 2020

Consensus

| | Consensus | | | |
|---|-------------|-------------|-------------|-------------|
| | Q3 2020 | Q4 2020 | Q1 2021 | Q2 2021 |
| Inflation forecast* | 0.7% | 0.6% | 0.8% | 2.0% |
| Nominal 10-year yields forecast* | 0.78% | 0.87% | 0.96% | 1.05% |
| US\$ exchange rate forecast (DXY)* | 95.8 | 95.6 | 94.6 | 93.8 |
| Speculative positioning forecast | 250k | 250k | 250k | 250k |
| Gold price forecast | US\$1870/oz | US\$1930/oz | US\$2065/oz | US\$2200/oz |

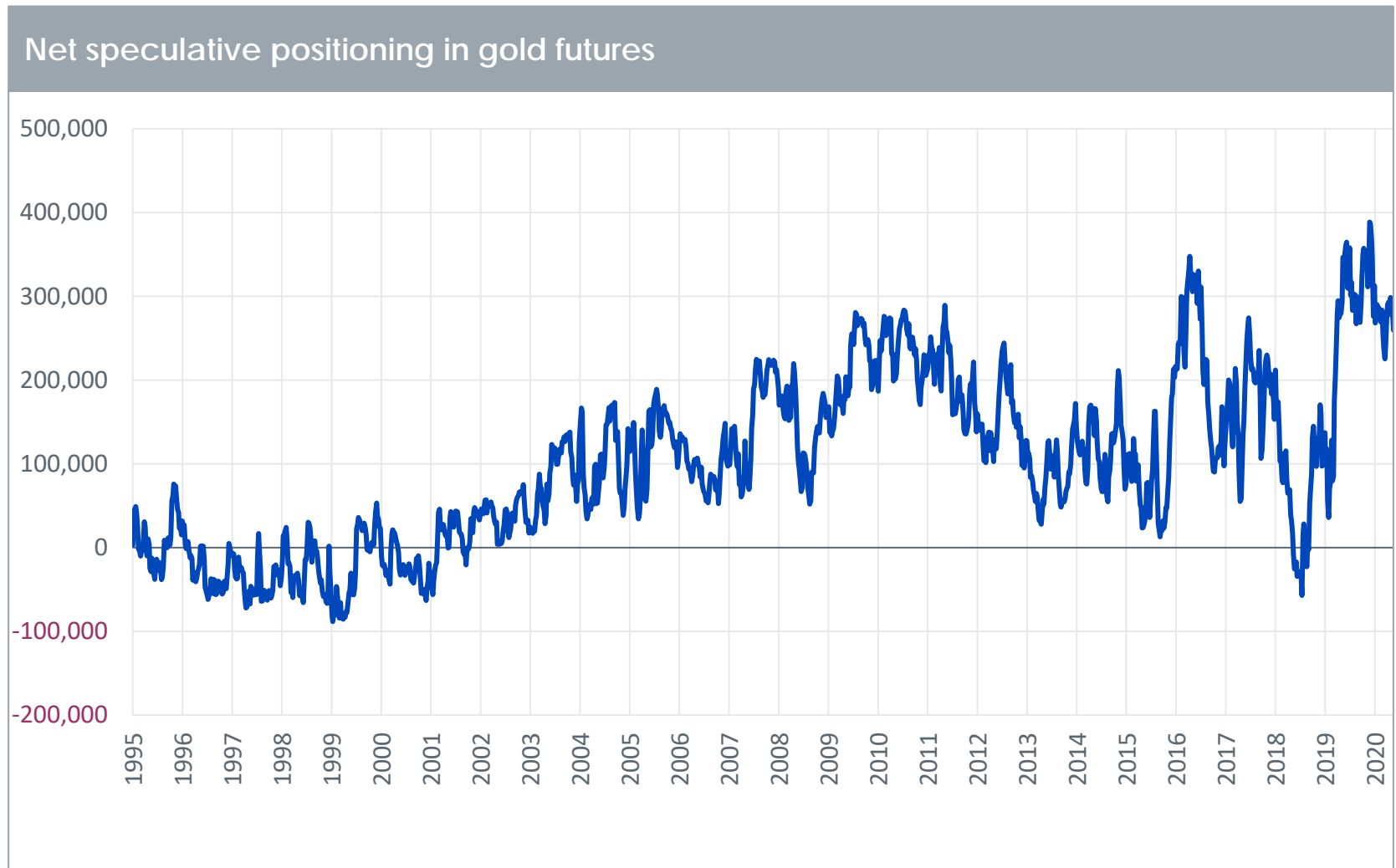
Source: WisdomTree, *Bloomberg consensus forecasts taken in July 2020

Status-quo on Treasury yields and Dollar

| | Status-quo | | | |
|--|-------------|-------------|-------------|-------------|
| | Q3 2020 | Q4 2020 | Q1 2021 | Q2 2021 |
| Inflation forecast | 0.8% | 0.8% | 1.5% | 2.5% |
| Nominal 10-year yields forecast | 0.55% | 0.55% | 0.55% | 0.55% |
| US\$ exchange rate forecast (DXY) | 93 | 93 | 93 | 93 |
| Speculative positioning forecast | 300k | 300k | 350k | 350k |
| Gold price forecast | US\$1995/oz | US\$2080/oz | US\$2210/oz | US\$2640/oz |

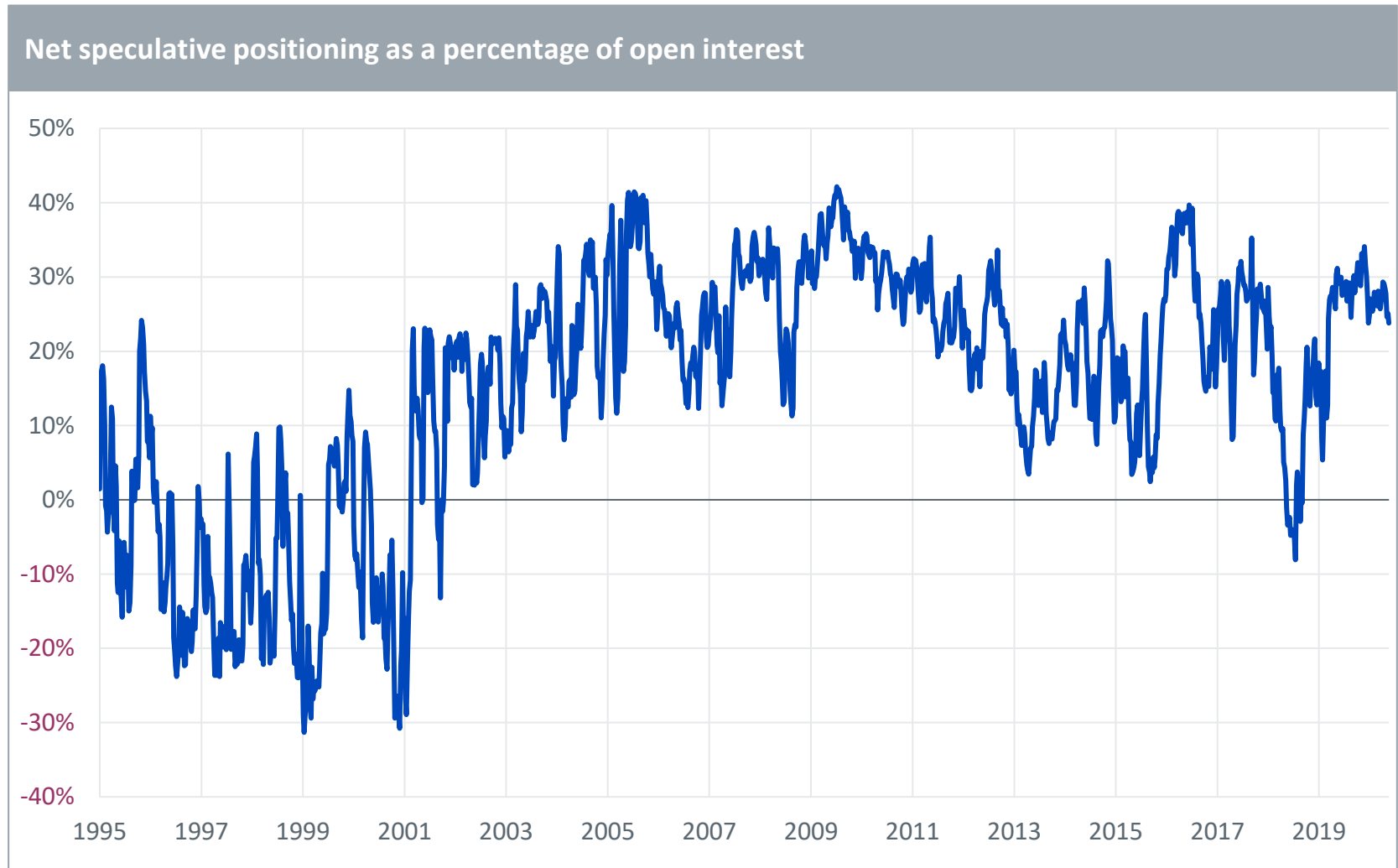
Source: WisdomTree

Net gold speculative positioning rebuilding



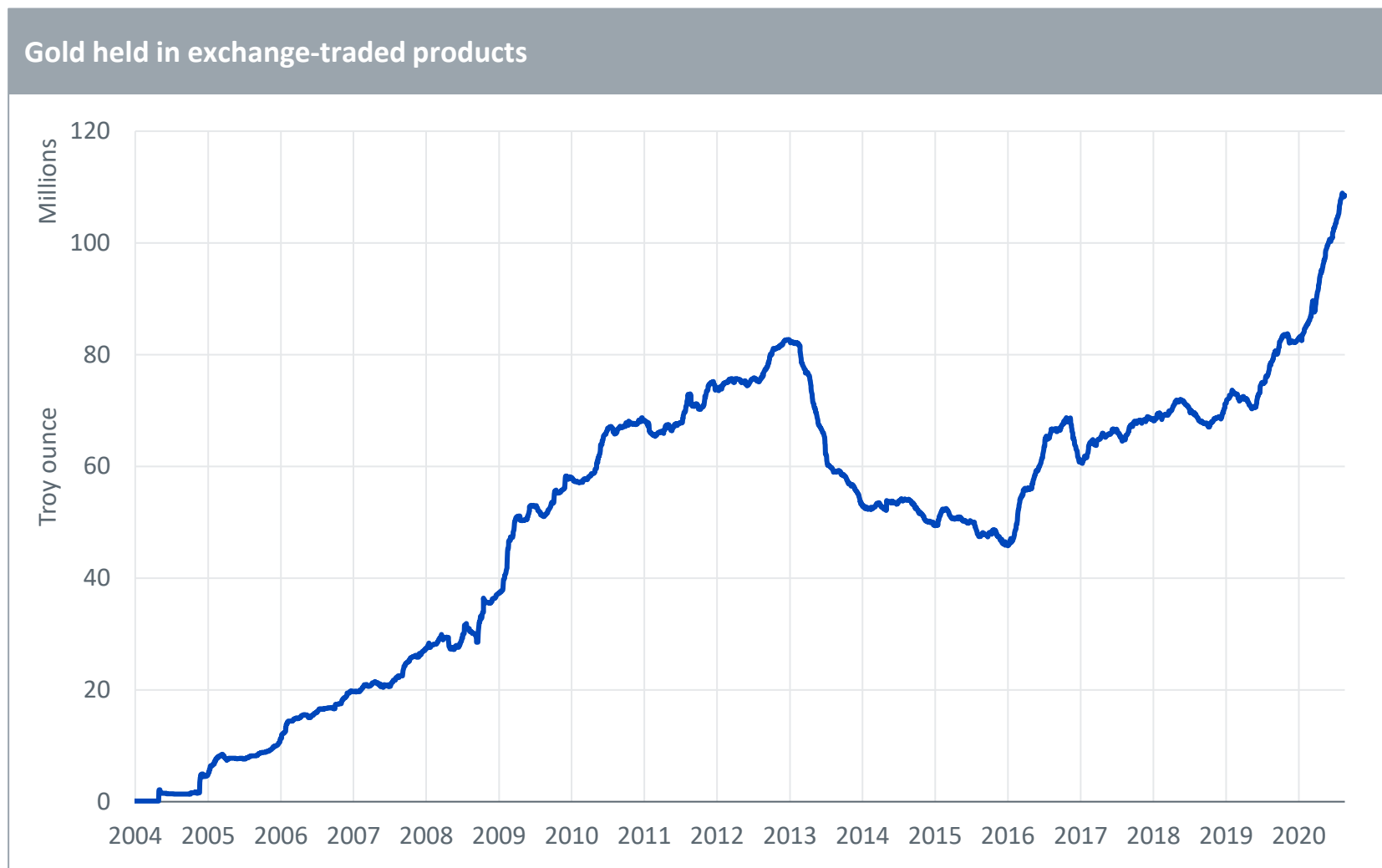
Source: Bloomberg, WisdomTree, data as of 20 August 2020

As a percentage of open interest, positioning is far from the 2009 peak, but the drop since February 2020 is also less pronounced



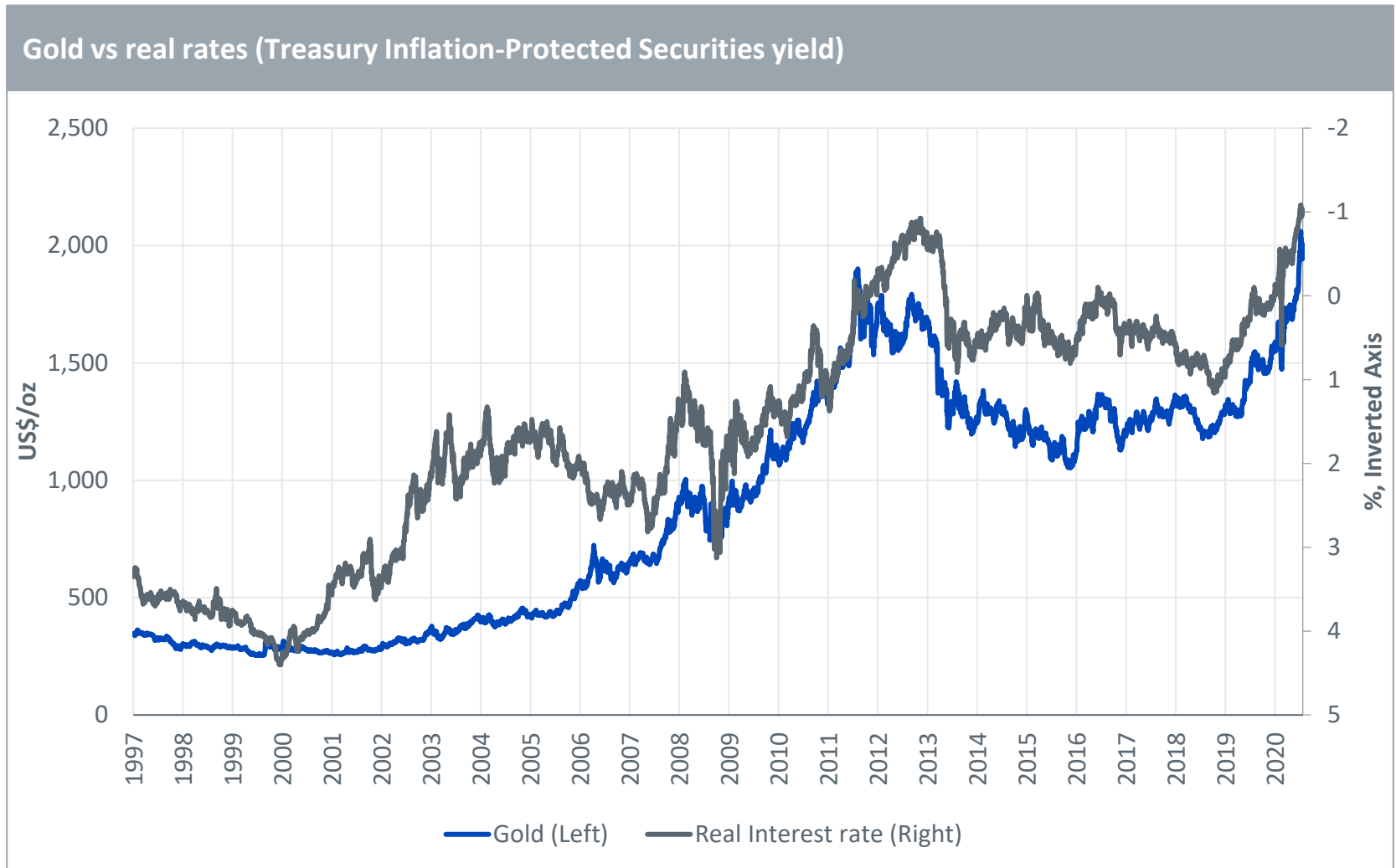
Source: Bloomberg, WisdomTree, data as 20 August 2020

Gold in exchange traded products rises over 100 million ounces



Source: Bloomberg, WisdomTree, data as of 20 August 2020

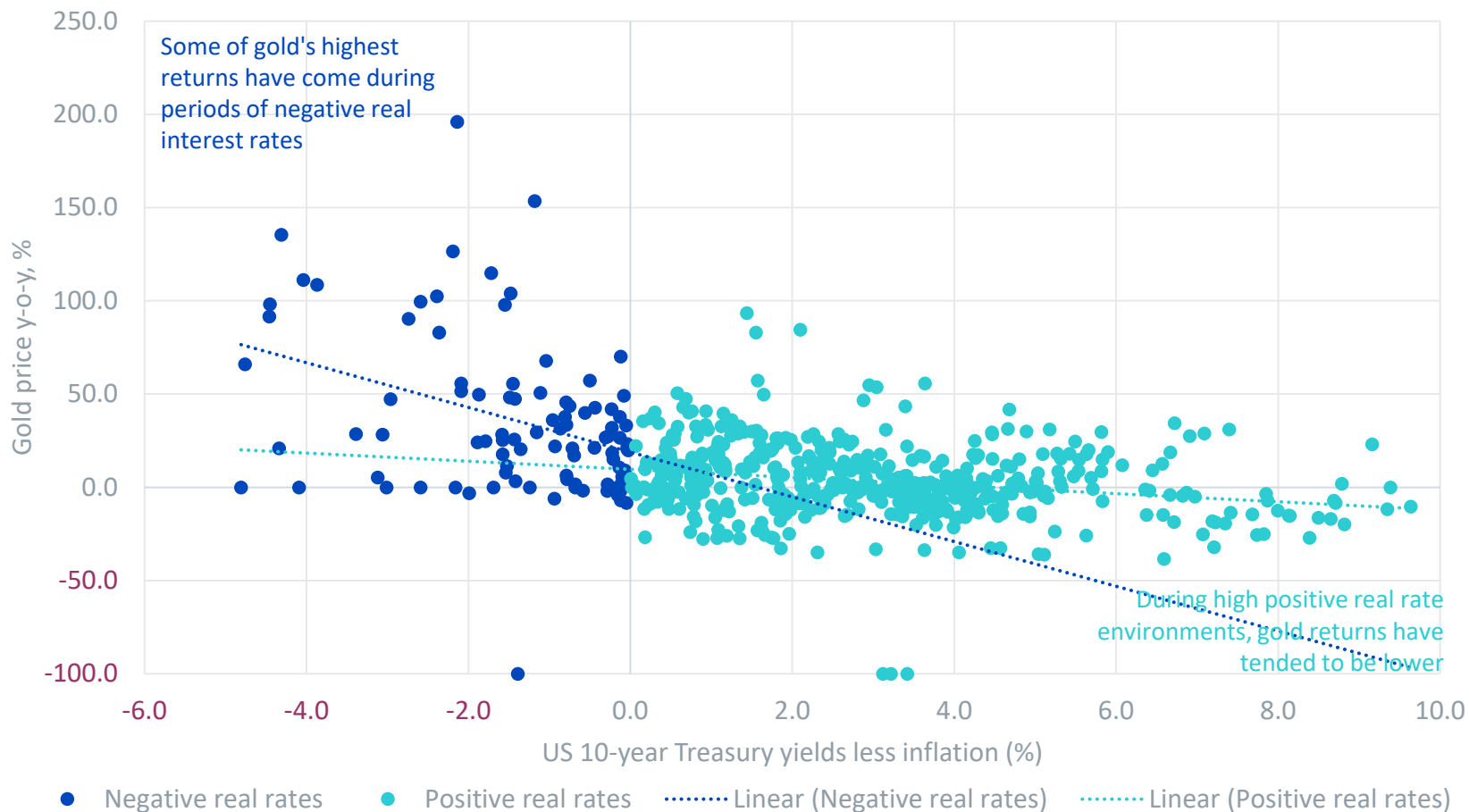
Gold price dips have been in line with Treasuries



Source: Bloomberg, WisdomTree, data available as of close 20 August 2020

Gold does not earn negative real yields

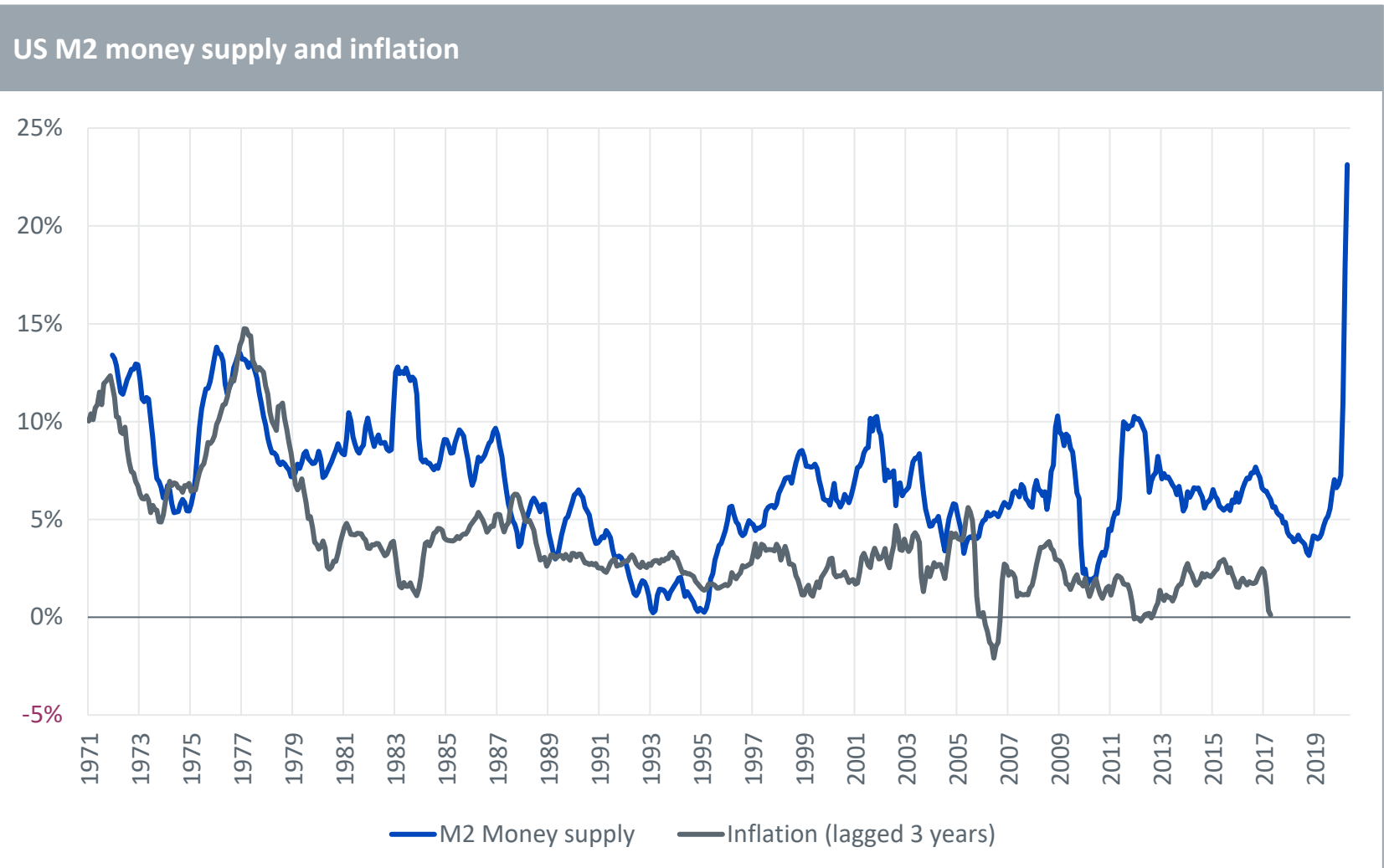
Relationship between Real Rates (US 10 year yield less inflation) and gold (1972-2019)



Source: WisdomTree, Bloomberg. Period: January 1972 to January 2020.

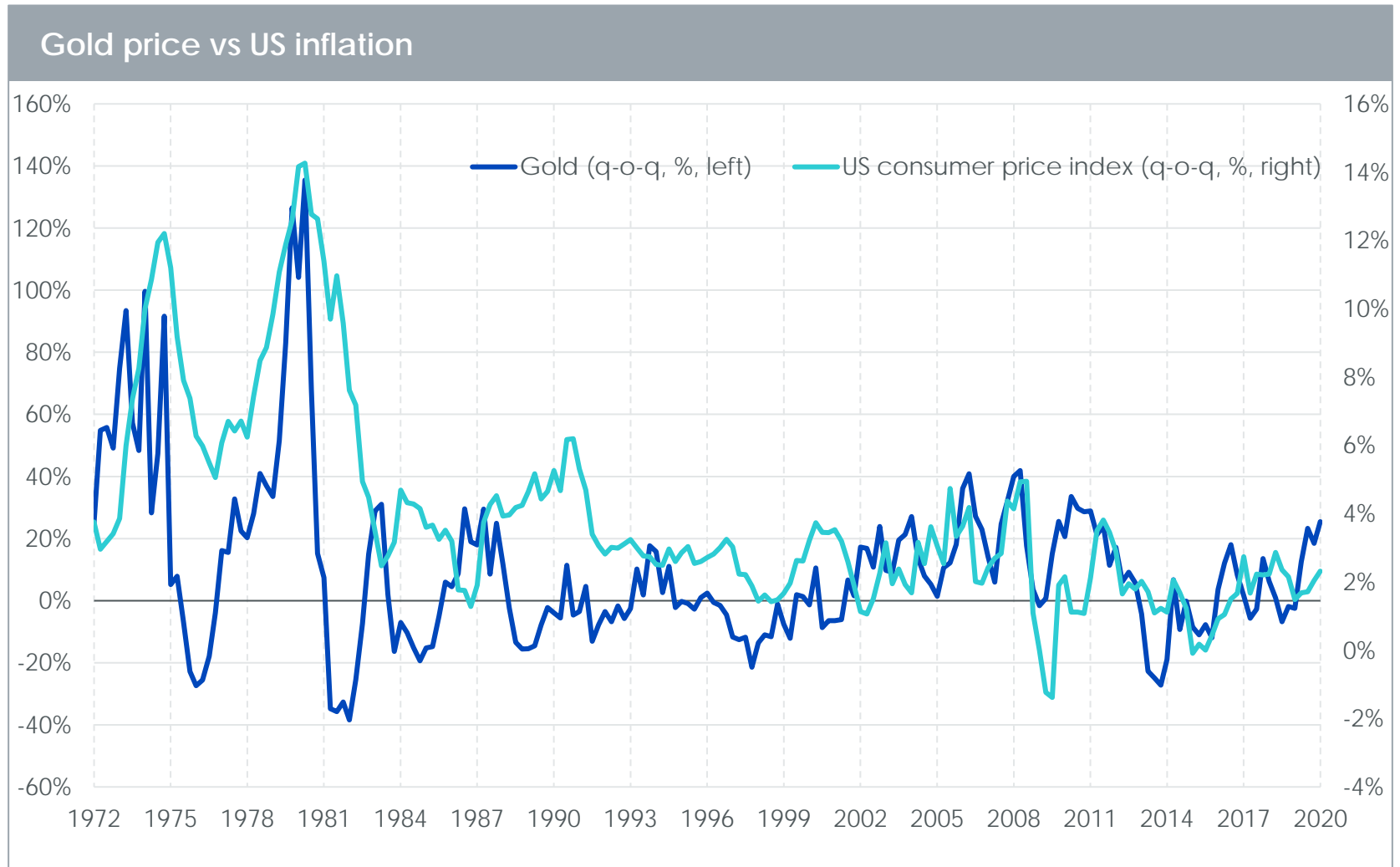
Lines of best fit shown on chart are calculated via Excel function (labelled linear in key above). We use a separate line of best fit for the positive real yield observations and negative real yield observations.

The sharp rise in M2 monetary aggregates could unhinge inflation expectations



Source: Bloomberg, WisdomTree, data available as of close 29 June 2020

Gold has historically been a strong inflation hedge

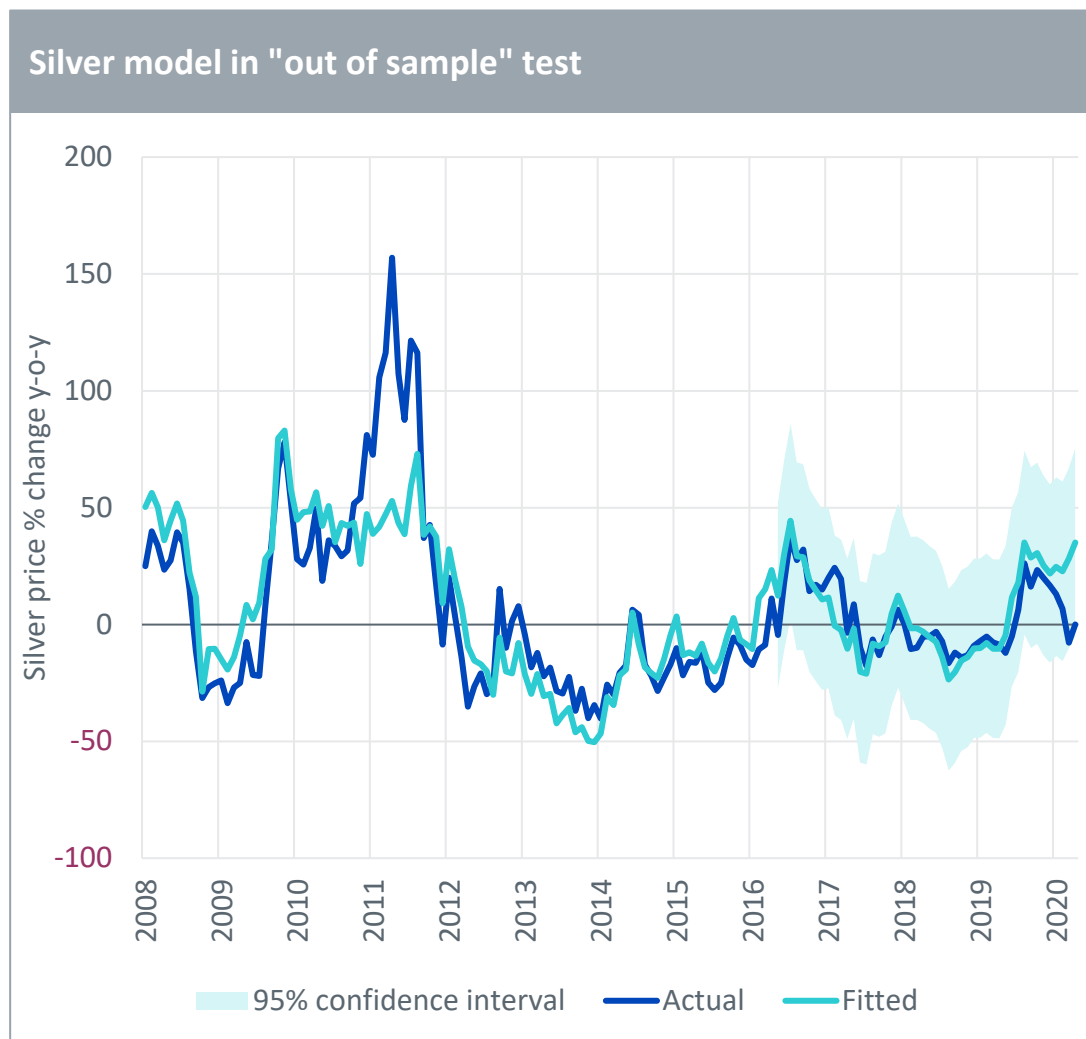


Source: Bloomberg, WisdomTree, data available as of close 29 June 2020



Silver outlook

Silver model



- + Silver and gold historically 80% correlated
- + Best way to model silver is to look at gold *plus* a number of supply and demand variables
- + While physical supply and demand matter for silver, they matter less for gold

Source: Bloomberg, WisdomTree price model, Model calibration: June 1998 to April 2016. "Out of sample" period: May 2016 to June 2020

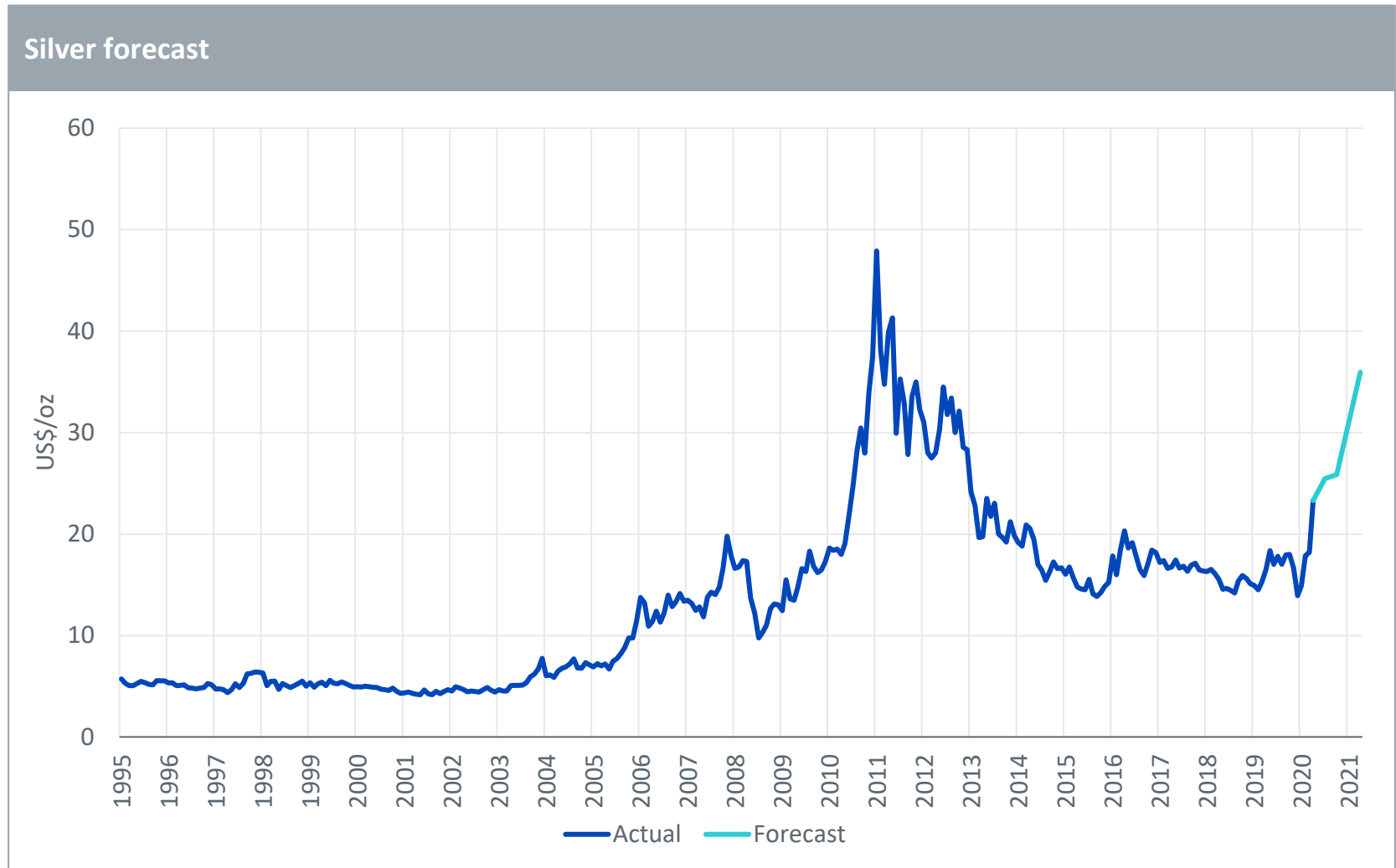
Framework for silver

| Variable | Direction |
|------------------------------|-----------|
| %Δ gold price | +ve |
| %Δ global manufacturing PMI | +ve |
| %Δ exchange inventory | -ve |
| 18 month lag %Δ mining capex | -ve |

- + Manufacturing purchasing managers index: a proxy for industrial demand
- + Exchange inventory: a measure of available supply
- + Mining capex: factors in delay in investment change and output

Source: WisdomTree

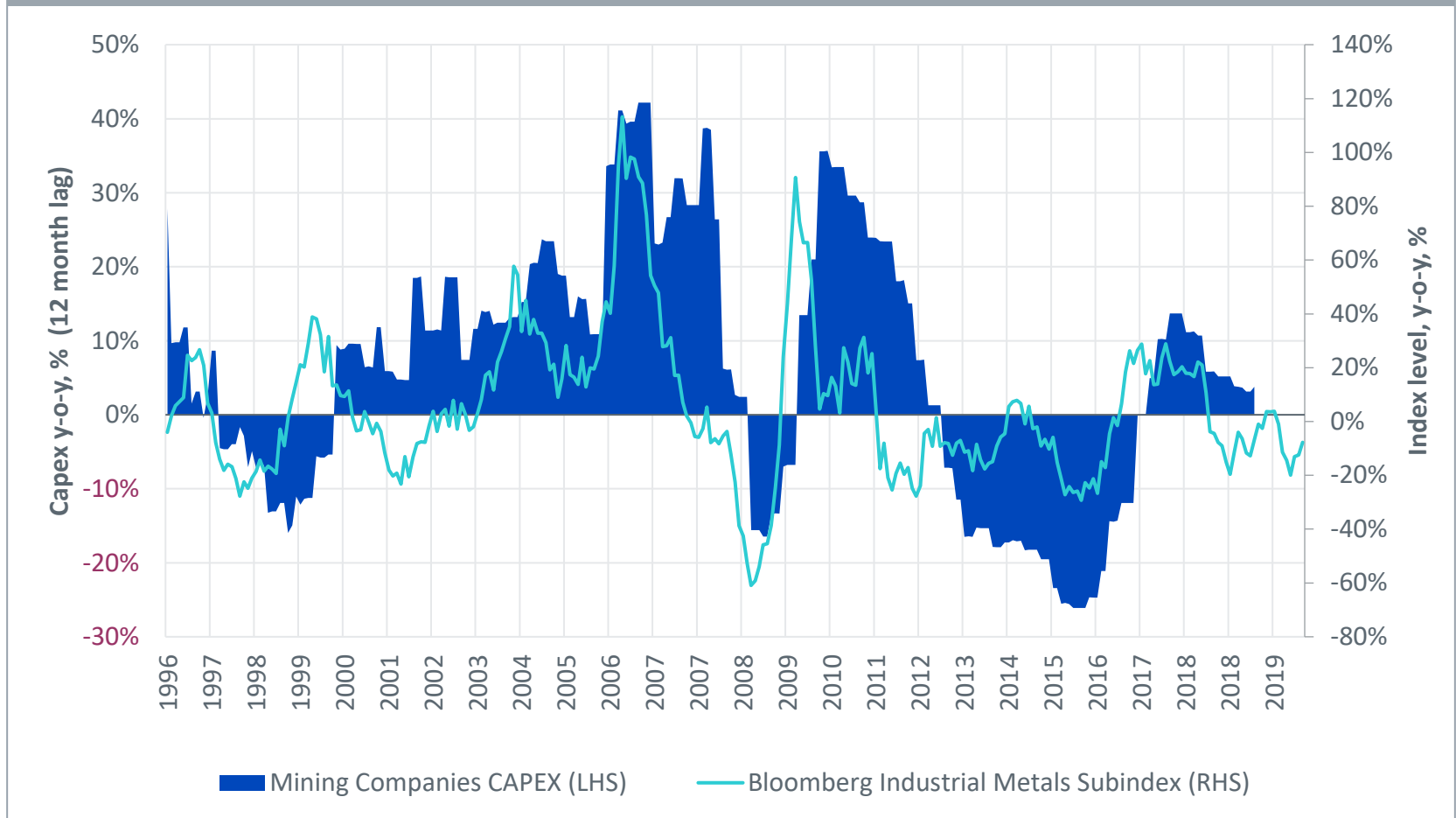
Our model indicates 50% upside for silver prices by July 2021 when using the Status-quo gold scenario



Source: WisdomTree (forecasts: 31/07/2020 – 31/07/2021), Bloomberg (historic data: 30/04/1995 – 30/07/2020)

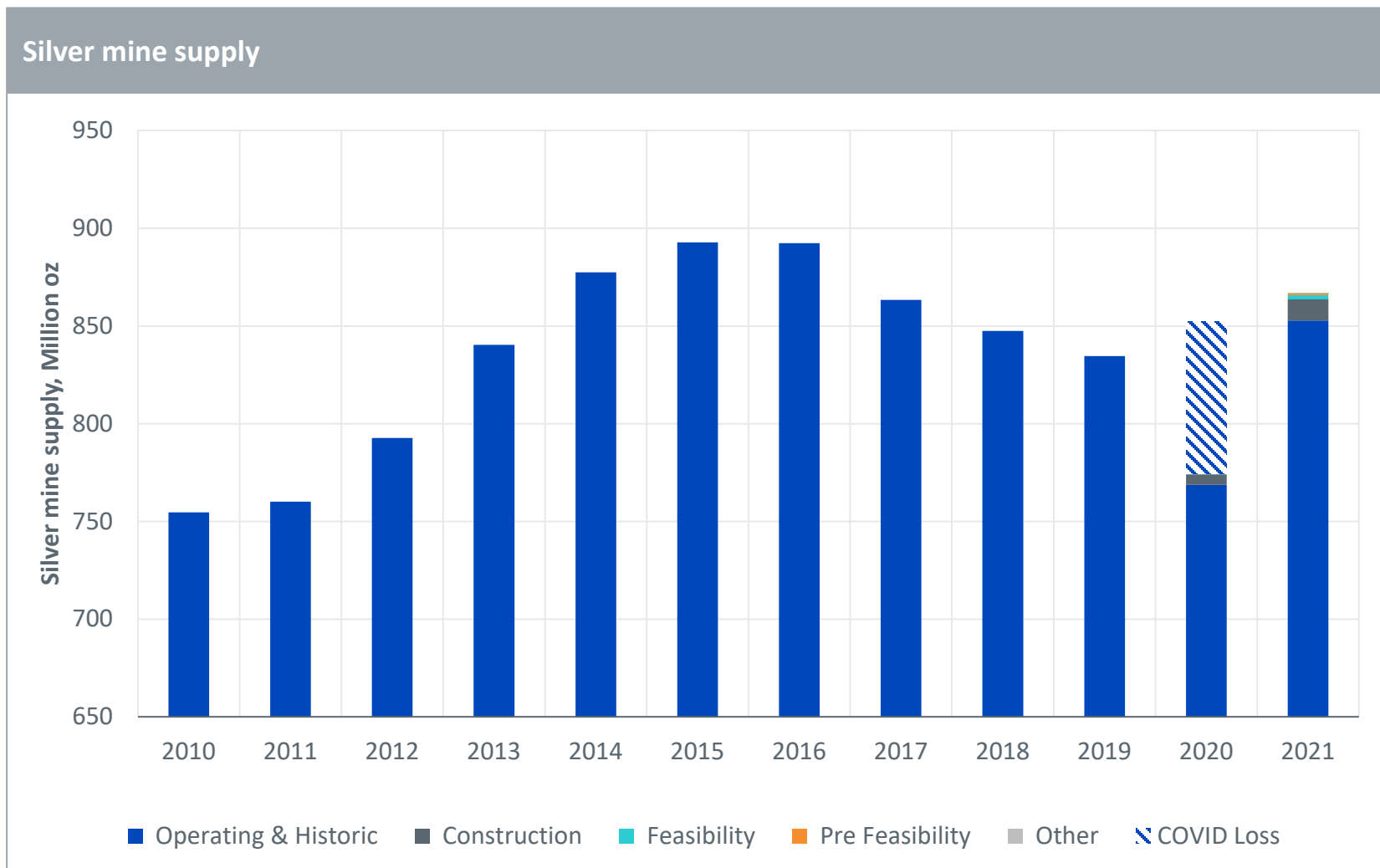
Capex growth slowed but still positive

Miners capital expenditure (capex) growth



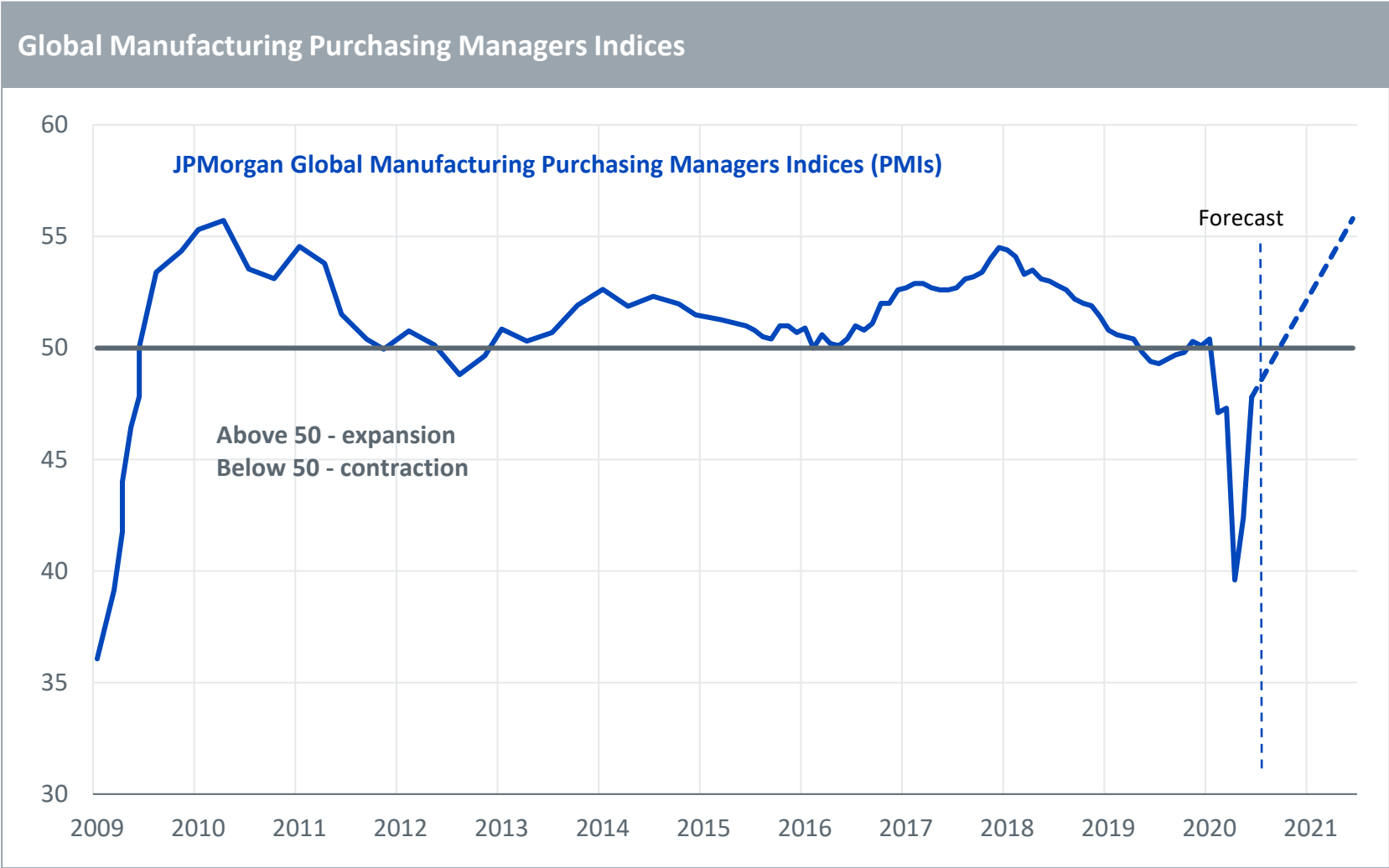
Source: WisdomTree, Bloomberg. Q1 1996 - Q2 2020

COVID-19 disruptions to silver mine supply



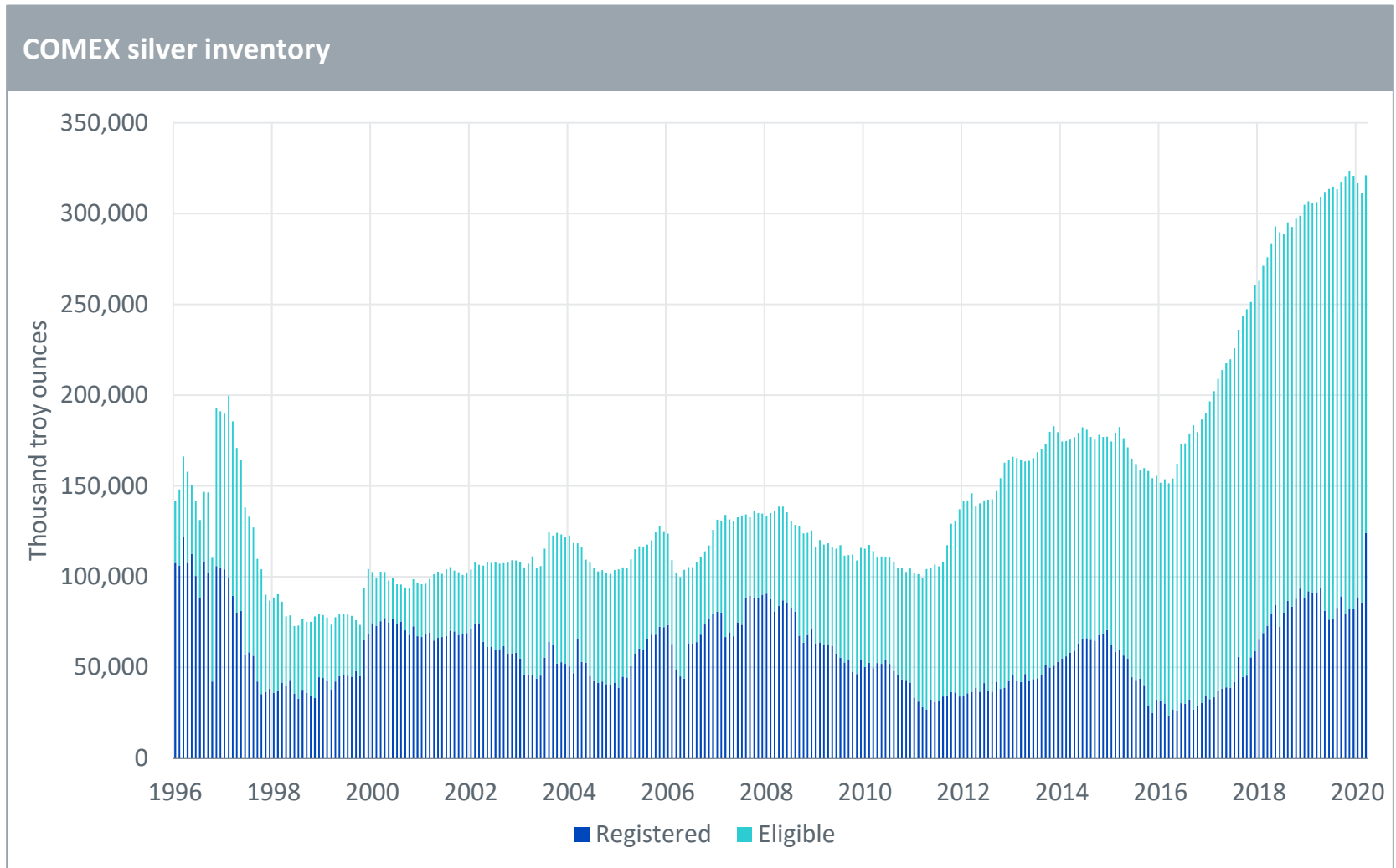
Operating – mines that are currently operating, Construction – mine is being constructed, Feasibility – a detailed feasibility study has taken place, Pre Feasibility – a preliminary feasibility study has taken place, COVID Loss – estimated loss of production due to virus
 Source: Metals Focus. Forecasts from 2020

PMIs have staged a vigorous recovery.... Is it sustainable?



Source: WisdomTree, Bloomberg. 05/02/2009 to 14/07/2020

Inventory growth has slowed in the COVID-19 crisis, but is still plentiful



Source: Bloomberg, WisdomTree. April 1996 – June 2020
COMEX is a futures and options trading market, now owned by Chicago Mercantile Exchange

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