

June 2026



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## Key takeaways

- Gold market disruption during Covid-19 exposed trading frictions, but gold Exchange Traded Commodities (ETCs) still provided investors with access and liquidity.
- Fixed income ETFs helped investors trade efficiently during market stress, even when the underlying bond market was hard to access.
- Overall, the ETF structure proved resilient during Covid-19 by helping absorb volatility and support price discovery across stressed markets.

## Precious metals: Dislocation in the gold market

In April 2020, the gold market experienced an unprecedented dislocation, with gold futures prices diverging significantly from spot prices. Starting from 24 March 2020, the premium of New York futures over the London spot price exceeded \$70 per ounce — the highest level observed in the past four decades.<sup>1</sup> This dislocation between futures and spot markets persisted throughout April, although the spread narrowed to around \$15 per ounce in the final week of the month.<sup>2</sup> Under normal market conditions, this spread typically remains only a few dollars. Several factors likely contributed to this disruption, including:

### 1. Supply of gold

The dislocation was partly driven by Covid-19 disruptions to gold refining and transportation. Under normal conditions, gold futures and spot markets are closely linked through efficient arbitrage: traders can move physical gold between markets and convert bullion into different delivery standards (for example, refining 400-ounce London Good Delivery bars into 100-ounce bars eligible for delivery in New York). However, pandemic-related shutdowns of refining facilities and disruptions to global logistics significantly impaired this process, making physical arbitrage far less efficient.

### 2. Funding costs

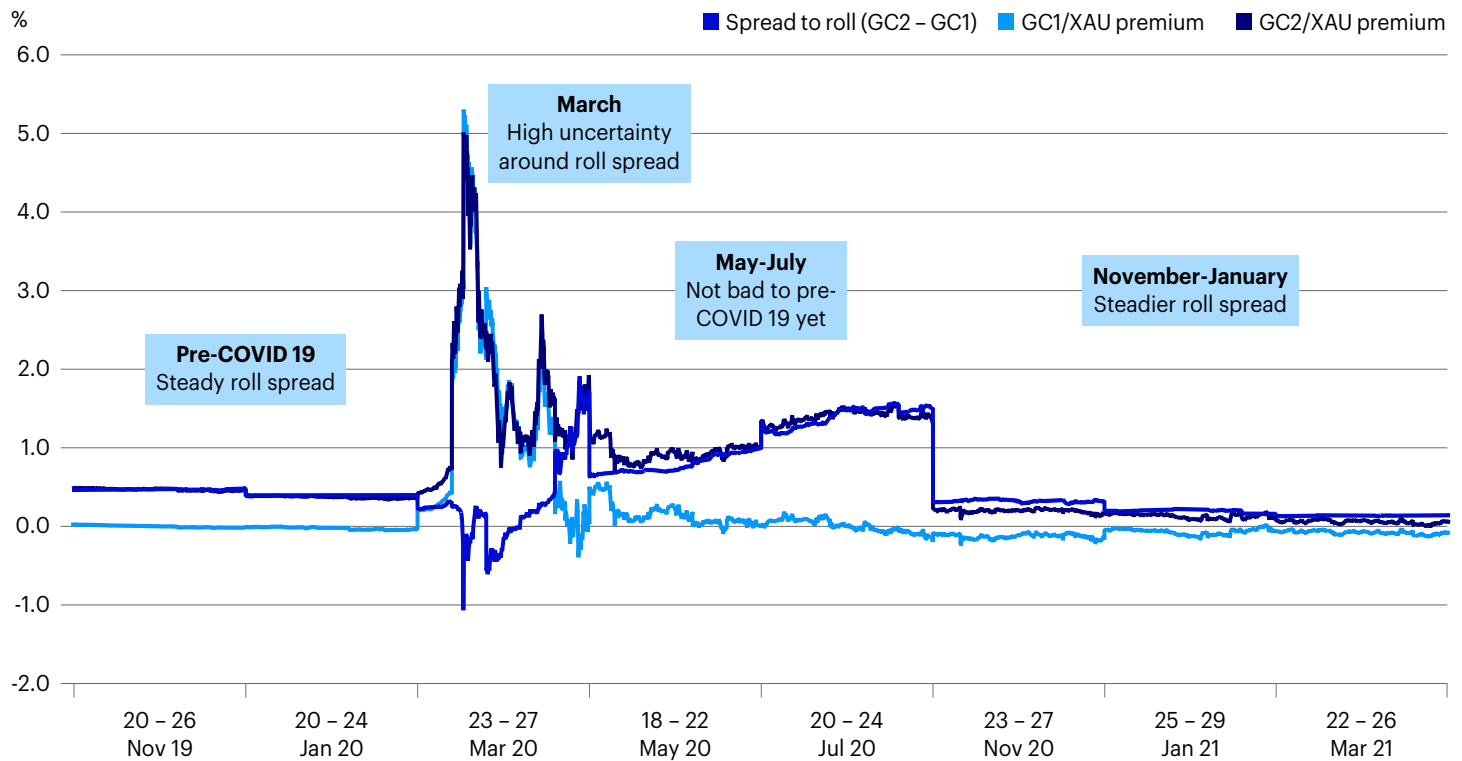
US dollar funding costs increased significantly during the crisis, raising the cost of holding and financing futures positions. As a result, banks charged higher prices for providing futures exposure, contributing to the widening gap.

At the same time, liquidity in the gold spot market deteriorated sharply during the pandemic period and bid-ask spreads widened to over 100 basis points, compared to just 2–3 basis points under normal conditions. Disruptions were even more pronounced in the Exchange for Physical (EFP) market, where participants convert futures exposure into physical gold. We saw elevated volatility when rolling gold futures contracts (Figure 1) and EFP spreads became highly volatile, fluctuating between \$10 and \$70 per ounce—around 50 to 100 times wider than historical norms.

1. Source: Bloomberg.

2. Ibid

**Figure 1: Gold Futures roll cost**



Source: Bloomberg. Data from November 2019 to March 2021. Rolling window over London trading hours, from 8:00 till 16:30 GMT. Premium/Discount has been calculated as a % over the USD gold spot price (XAU). Rolls spread is the difference GC2 - GC1. **Past performance is not indicative of future results.** For illustrative purposes only. The information shown should not be considered recommendations to buy or sell a particular asset.

Whilst, one year on, roll spreads normalized and logistical concerns abated as illustrated above, liquidity in gold futures had yet to recover to levels seen prior to the pandemic (Figure 2).

**Figure 2: Gold Futures Liquidity: +/- 6bps from mid old Futures roll cost**

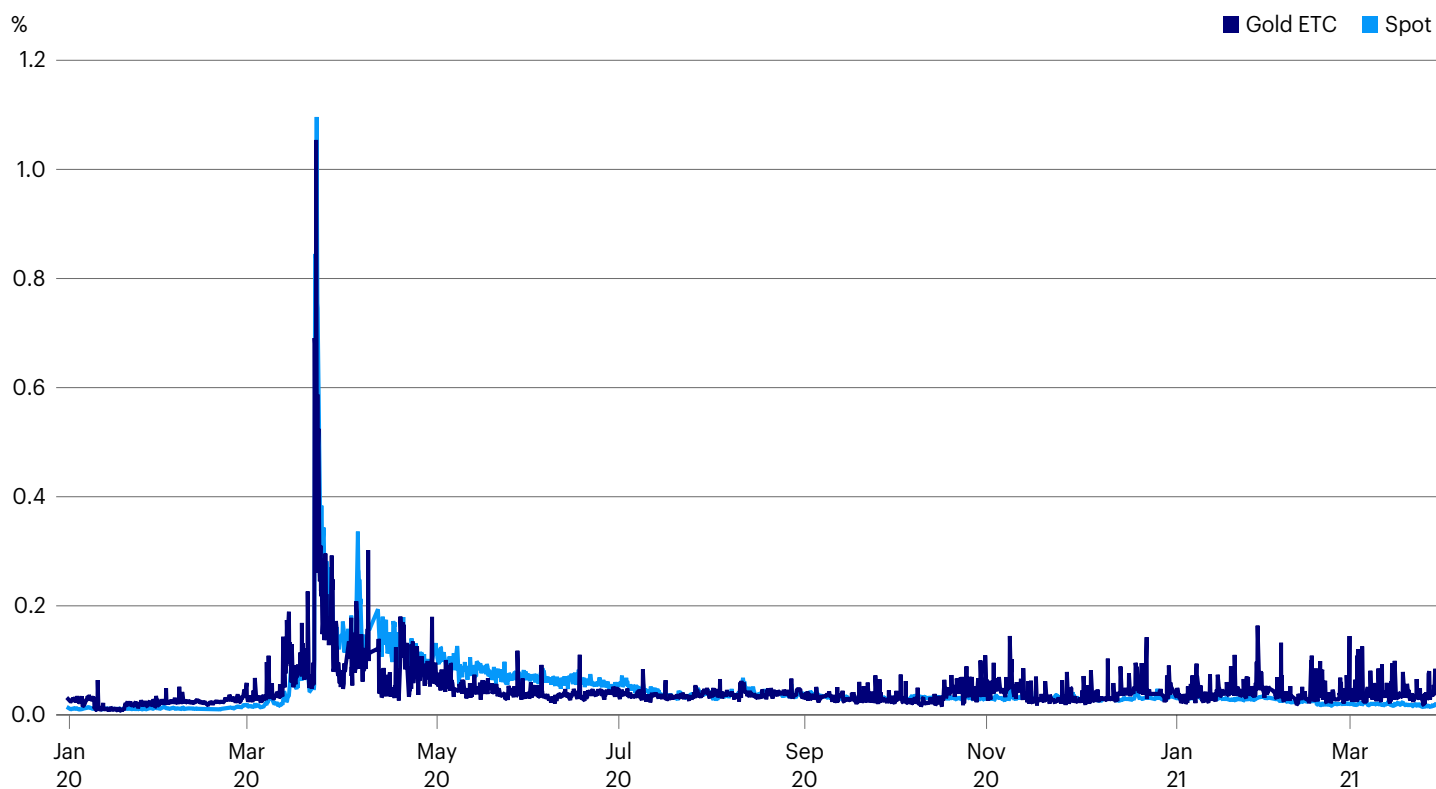


Source: Bloomberg, Jane Street, as at November 2020. Data in USD.

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However, certain gold ETCs performed relatively well during the pandemic, maintaining consistently tighter spreads. By the final week of April 2020—approximately one month after the onset of the dislocation—the spreads of gold ETCs had already tightened to around 6–8 basis points.

**Figure 3: Gold ETP Spreads**



Source: Bloomberg, Invesco, as at 25 Nov 2019 through 29 Jan 2021. Chart shows intraday average spreads.

### Fixed income ETFs

Following the Global Financial Crisis, stricter regulatory requirements significantly constrained the balance sheets of large banks and fixed income dealers. This led to a notable decline in dealer inventories of corporate bonds and mortgage-backed securities (MBS). At the same time, findings from US FINRA (Financial Industry Regulatory Authority) and the SEC (Securities and Exchange Commission) indicated that bond market liquidity had deteriorated, with only around 35% of US corporate bonds receiving a quoted price on any given day.<sup>3</sup>

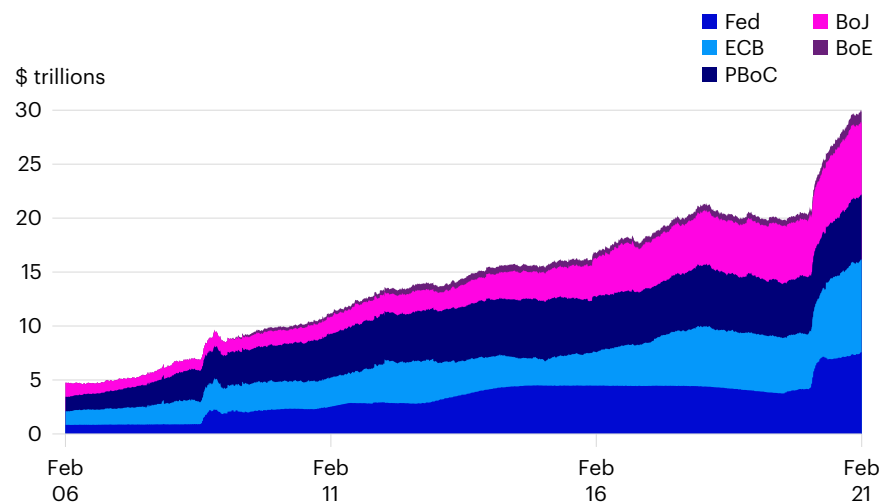
These structural liquidity challenges—combined with the inherently over-the-counter nature of fixed income markets—contributed to the severe market stress observed when the Covid-19 pandemic hit in 2020. In response, the US Federal Reserve, along with other major central banks, introduced a wide range of programs aimed at injecting liquidity and stabilizing markets. These measures complemented existing quantitative easing programs, which included large-scale purchases of US Treasuries and mortgage-backed securities.

3. Ibid

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For context, the US corporate bond market and municipal bond market totaled approximately \$9.6 trillion and \$3.8 trillion, respectively, at the end of 2019.<sup>4</sup> Notably, the Federal Reserve's Secondary Market Corporate Credit Facility (SMCCF) was expanded to allow purchases of US-listed investment grade and high yield corporate bond ETFs. As a result of these interventions, the Federal Reserve's balance sheet increased significantly.

**Figure 4: Total assets held by central banks**



Source: Invesco, Bloomberg, as at March 2021.

ETFs, as listed instruments, are well positioned to handle two-way flows more efficiently than the underlying cash bonds they track. Authorized Participants and market makers can offset opposing buy and sell orders in the secondary market, allowing ETF shares to be traded without triggering creation or redemption in the primary market. This mechanism helps reduce direct buying or selling pressure on the underlying bonds.

Figure 5 illustrates the scale of these offsetting flows during 2020. At the height of the Covid-19-driven market turmoil, high yield ETFs experienced outflows of more than \$7 billion in a single week. Over the same period, secondary market trading volumes for the five largest US-listed high yield ETFs surged more than 5.7 times, reaching an average of \$9.3 billion per day. Primary market activity also increased, with creations and redemptions rising 5.2 times to approximately \$1.2 billion per day. In contrast, trading volumes in the underlying bond market increased only modestly, from around \$7 billion to \$10 billion per day.<sup>5</sup>

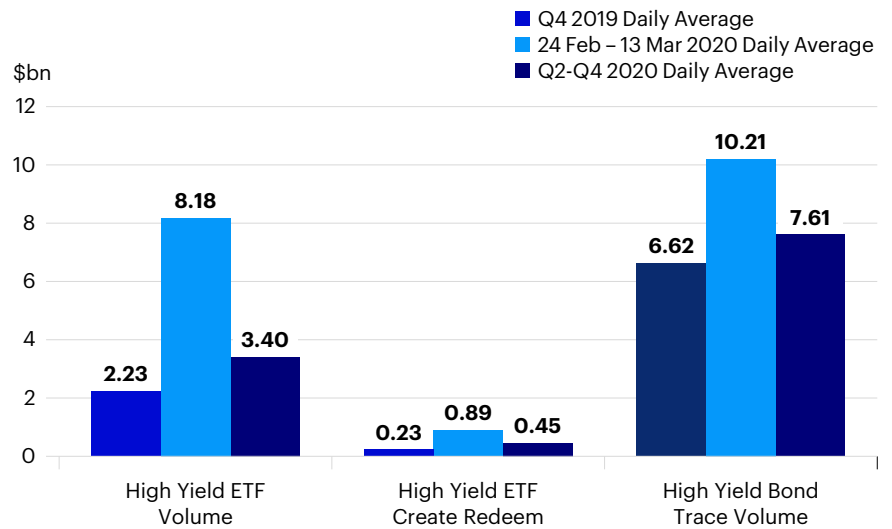
4. Source: SIFMA, Fixed income outstanding, April 2021.

5. Source: Bloomberg.

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Importantly, despite significant outflows, secondary market trading remained largely balanced. On average, around 87.5% of ETF trading volume consisted of natural buyers and sellers matching on exchange, without requiring creation or redemption in the underlying high yield bond market.<sup>6</sup> This highlights how, during periods of stress, investors increasingly rely on ETFs as an efficient source of liquidity—even when the underlying credit markets are relatively illiquid.

**Figure 5: High Yield ETF vs. Underlying Market Volume**



Source: Invesco, Bloomberg, as at December 2020.

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# How the ETF market structure holds up during extreme volatility: Part 2

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