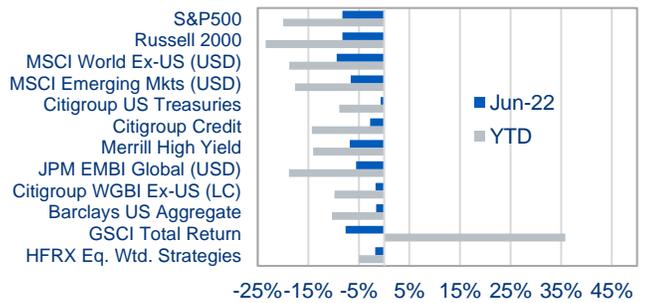


Global Market Review

Soaring inflation and fears that increasingly hawkish global central banks will throttle growth sent global equity and bond markets tumbling in June, compounding an already dismal start to the year. In the first six months of 2022, the S&P 500 suffered its largest half-year drop since 1970, with most market segments sinking. Bond markets provided no refuge, with the U.S. aggregate bond index experiencing its biggest six-month fall in over 30 years. The combination of steep losses in equity and bond markets has hit balanced portfolios hard. Widely vacillating views on the direction of the global economy have been most evidenced by commodity prices, which plunged in June on fears of a significant global growth slowdown, but nevertheless remain up 36% so far this year. The U.S. dollar continues to climb against major currencies. Cryptocurrencies in contrast have plummeted 72% from their peak, revealing structural flaws and devastating many retail investors.

Performance of Major Market Indices

Sources: S&P, MSCI, FTSE Russell, Barclays, Citigroup, Bank of America Merrill Lynch, J.P. Morgan, HFR, Bloomberg.



Record six-month declines of stocks and bonds.

Turbulent Transition from Easy to Tight Money

The passage from loose to tight financial conditions continues to be rough. Uncertainty about the persistence of inflation, the severity of the Fed's response, and its ultimate impact on economic output has kept measures of expected equity and bond market volatility high. The U.S. equity market has had its worst first half year in over half a century, with the S&P500 falling 20%. It lost 8.2% in June alone. While most market segments have fallen heavily so far this year, cyclicals have been especially hard hit (Exhibit 1). Growth stocks have underperformed value by a wide margin, falling 28.2% so far in 2022 versus the 13.2% decline in value. Across sectors, only energy is up so far this year (+28.6%) notwithstanding a 6.4% decline in June, largely reflecting fluctuating oil prices.

Exhibit 1. Cyclical Stocks Hard Hit by Recession Fears

Source: Bloomberg. Index January 1, 2022 = 100.



Global Equities Hit by Inflation and Slowing Growth

As in the U.S., central banks across advanced and emerging economies are fumbling for the right policy response to quell inflation rates running at multi-decade highs at the same time as growth is decelerating. The combination of volatile commodity prices, high inflation, a belated shift to tighter policies by central banks, and geopolitical strife increases the uncertainty of the outlook and the volatility of global equity and bond markets.

Against this backdrop, the MSCI World ex-U.S. index of advanced non-U.S. equity markets fell 9.4% in June to bring its decline in the first half of 2022 to 18.8%. Equity markets across Europe and Japan are down about 21% so far this year. While

the decline in European bourses reflects the difficult cross currents of rising inflation and falling growth, the fall in Japanese equity markets largely reflects yen weakness in the face of the Bank of Japan's continued monetary ease. The ECB faces an especially difficult policy challenge. In addition to calibrating policies so as to tame inflation without triggering a deep recession, it must also manage the widely divergent levels of sovereign debt of euro area countries. There are fears that higher policy rates and an end to asset purchases by the ECB will lead to sharply wider credit spreads on the bonds of heavily indebted euro area members, like Italy, thus triggering a renewed euro area debt crisis.

Emerging equity markets also fell sharply in June (-6.7%) and are down 17.6% in 2022. Emerging equities across all regions are now lower for the year (Exhibit 2). Chinese equities, which had constituted the main drag on the broad emerging market index recovered in June, rising 5.7%, but remain down 11.7% in 2022. Latin American bourses, which had previously enjoyed a boost from buoyant commodity prices, fell sharply in June, losing 17.1%, as the outlook for global growth darkened. They are now down 4.2% so far in 2022. Emerging markets in Europe, the Middle East and Africa are the laggards, falling 29.6% so far this year.

Exhibit 2. Emerging Equities Decline Across Regions

Source: Bloomberg. Index January 1, 2021 = 100.



Rates Rise, Inflation Expectations Moderate

The Fed raised its policy rate by 75 basis points in June, the largest increase since 1994, and promised a continued robust response to persistent high inflation. June also marked the beginning of the Fed's phased contraction of its balance sheet, which targets a reduction in holdings of \$1 trillion in U.S. Treasury and mortgage-backed securities over the next year. So far this year, inflation expectations across the maturity spectrum have held steady (Exhibit 3). The steep increase in U.S. Treasury yields this year has been largely driven by rising real yields, which have moved from negative to positive across all maturities. With inflation high and the Fed hawkish, U.S. Treasury prices suffered steep declines, with the broad index losing 8.9% in the first half of the year and the 10+ segment falling 20%. Credit markets were also hard hit. The investment grade and high yield sectors are down 10.6% and 13.8%, respectively so far in 2022.

Exhibit 3. Real Yields Rise, Inflation Expectations Fall

Source: Bloomberg. Yield in percent.



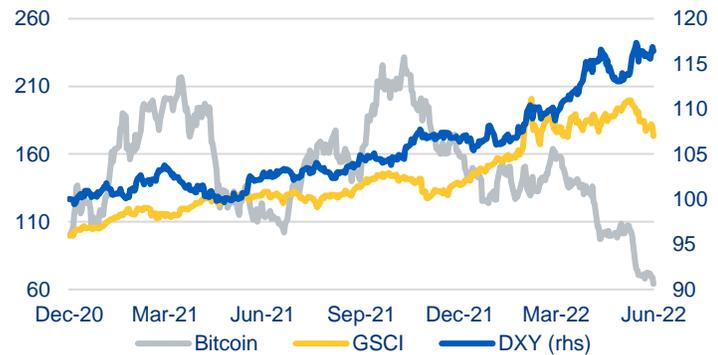
Outside of the U.S., the WGBI ex-U.S. index of advanced sovereign bonds and the emerging bond market index have both lost nearly 19% this year.

Falling Prices Open Fissures in Crypto Markets

Crypto markets are down 72% from their peak in November 2021, laying bare structural flaws and decimating the savings of retail investors (Exhibit 4). Although the recent turmoil has remained largely contained in the crypto market, the growing risk of spillovers into traditional markets has spurred regulators to probe more deeply into a market that is largely unregulated and offers few investor protections. The U.S. dollar in contrast continues to appreciate against other major currencies, buoyed by the prospect of a widening differential between dollar interest rates and those of other currencies.

Exhibit 4. Bitcoin Crashes, Commodities and Dollar Soar

Source: Bloomberg. Index January 1, 2021 = 100.



Performance of Major Market Indices through 06-30-2022

Sources: MSCI, FTSE, Barclays, Citigroup, Bank of America Merrill Lynch, J.P. Morgan, S&P GSCI, HFR, Bloomberg.

	1-Month	QTD	YTD	1-Year	3-Year	5-Year
S&P500	-8.3%	-16.1%	-20.0%	-10.6%	10.6%	11.3%
Russell 2000	-8.2%	-17.2%	-23.4%	-25.2%	4.2%	5.2%
MSCI World Ex-US (USD)	-9.4%	-14.7%	-18.8%	-16.8%	1.7%	2.7%
MSCI Emerging Mkts (USD)	-6.6%	-11.4%	-17.6%	-25.3%	0.6%	2.2%
Citigroup US Treasuries	-0.7%	-3.7%	-8.9%	-8.7%	-0.8%	0.8%
Citigroup Credit	-2.8%	-7.1%	-14.3%	-14.2%	-1.0%	1.2%
Merrill High Yield	-6.8%	-10.0%	-14.0%	-12.7%	0.0%	2.0%
JPM EMBI Global (USD)	-5.5%	-10.5%	-18.8%	-19.2%	-4.3%	-1.0%
Citigroup WGBI Ex-US (LC)	-1.7%	-5.5%	-9.8%	-10.1%	-3.0%	-0.4%
Barclays US Aggregate	-1.6%	-4.7%	-10.3%	-10.3%	-0.9%	0.9%
GSCI Total Return	-7.6%	2.0%	35.8%	45.0%	14.7%	11.7%
HFRX Eq. Wtd. Strategies	-1.8%	-3.8%	-5.0%	-5.4%	2.1%	1.1%