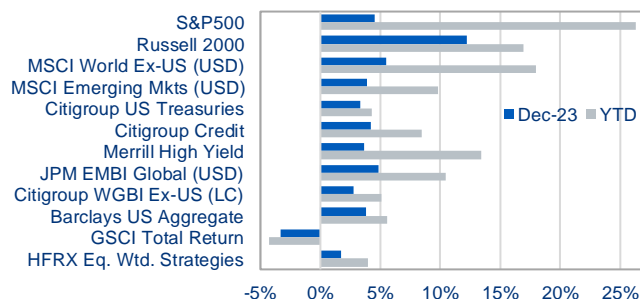


Global Market Review

Last year was full of mostly positive economic and market surprises. In the U.S., the Fed appeared to have achieved the feat of conjuring significant disinflation without destabilizing markets or derailing economic growth. Global equity and bond markets were wowed by the Fed's magic, and registered strong gains. While equity volatility remained quite low, U.S. Treasury yields were especially volatile in 2023, rising rapidly through mid-October, and then plummeting as the Fed's tightening cycle seemed to be nearing an end. The surprises from China were unpleasant. The boost to Chinese growth widely expected to follow the lifting of stringent COVID restrictions never materialized. Instead, a sluggish recovery and deflationary pressures highlighted the fragility of China's property and financial sectors and revealed the structural limits to China's long-term output potential. Commodities fell, led by oil. The U.S. dollar depreciated slightly. Gold prices rose with geopolitical concerns.

Performance of Major Market Indices

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



Global equities and bonds end the year on a high note.

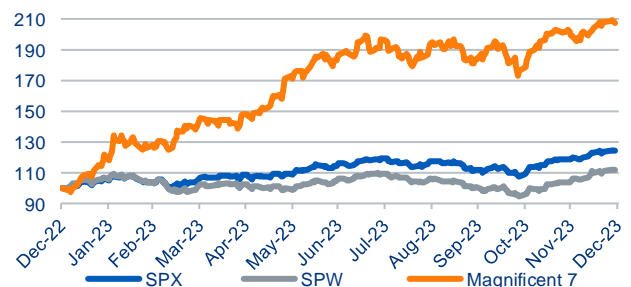
U.S. Equities Soar as Inflation and Yields Ebb

Macro forces dominated broad U.S. equity market movements in 2023. Falling inflation sparked hopes that the Fed would achieve its inflation target without hurting output or employment. Yields plunged and equities soared as markets priced in perfection. After jumping 9.1% in November, the S&P 500 rose a further 4.5% in December, to bring its gain for the year to 26.3% and the index to within 1.5% of its all-time high.

The rally was narrowly based, largely driven by multiples expansion rather than earnings growth, fueled increased market concentration, and led to a further deterioration of valuations both relative to U.S. market history and other major markets. The promise of AI set off a speculative frenzy focused on the Magnificent 7 (Alphabet, Amazon, Apple, Meta Platforms, Microsoft, NVIDIA, and Tesla). These stocks, which together represent about one quarter of the S&P 500 index, rose 107%. NVIDIA, the company whose chip is the brain of AI applications, rose 239%. Given the dominance of a few very large stocks, U.S. equity market concentration rose to multi-decade highs. Moreover, the equal- and cap-weighted S&P 500 indices (SPW and SPX, respectively) diverged significantly, with the former up 11.6% in 2023 year versus the cap-weighted gain of 26.3%, a divergence in performance rivaled only by the 1998 dot com bubble (Exhibit 1).

Exhibit 1. AI Frenzy and Falling Yields Propel Stocks

Source: Bloomberg. Index January 1, 2023 = 100.



Value stocks outperformed growth in December, gaining 5.9% versus growth's 4.8% return. For the year as a whole, however, growth stocks were up 41.2% three and a half times value's return of 11.7%. Sectoral divergences have also been stark. Buoyed by the AI frenzy, tech stocks led all other sectors in 2023, rising 54.1%. Utilities were the chief laggards, losing 9.9%. Small cap stocks surged 12.2% higher in December. For

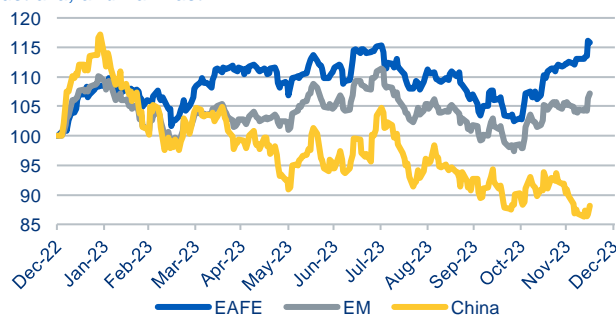
the year as a whole, however, small cap stocks (+16.9%) lagged large (+26.5%).

Emerging Equity Markets Weighed Down by China

As with the U.S. equity market, advanced and emerging markets rose strongly in the last two months of the year, following three successive months of declines. The MSCI World ex-U.S. index of advanced equity markets rose 5.5% in December, adding to November's 9.4% gain, and closed the year up 17.9%. Hopes that easing inflationary pressure would allow the ECB to relax its tight policy stance pushed European bourses 19.9% higher in 2023, despite signs of continued economic contraction. Japanese equities rose 20.3%, driven by a combination of economic resilience, the maintenance of low policy rates, a sizable depreciation of the yen, and the implementation of reforms aimed at revitalizing business dynamism.

Exhibit 2. China Lags Advanced and Emerging Markets

Source: Bloomberg. Index January 1, 2023 = 100. EAFE = Europe, Australia, and Far East.



Emerging equity markets rose 9.8% 2023, lagging advanced economy markets. Disappointing performance in Chinese markets held back the broader index. Chinese equities fell 2.4% in December to close the year down 11.2% (Exhibit 2). A weak post-COVID recovery has drawn attention to a number of cyclical and structural vulnerabilities. The Chinese property market, representing almost one third of GDP and three quarters of total financial assets, is overbuilt, overleveraged, and deeply entwined with the financial sector and the fiscal position of local governments. Consumer and business confidence has been undermined by erratic economic policy decisions and high levels of youth unemployment. Perhaps most worrisome, China's investment-driven growth strategy appears to have hit diminishing returns. The incremental output gain from additional investment has fallen sharply, and the depreciation costs of past capital expenditure are mounting. The decline in growth and the fragility of the property sector also raise political problems given the high level of wealth tied up in the sector and the relatively low level of Chinese per capita GDP.

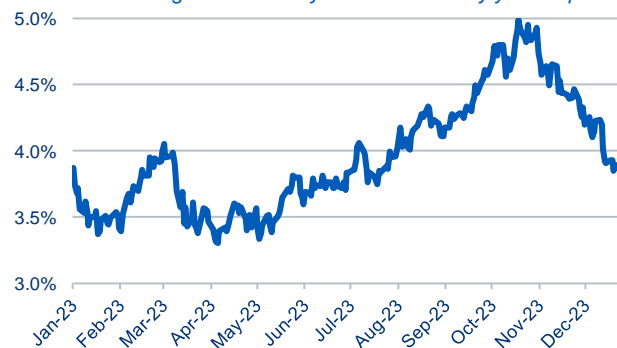
Bond Markets Price in End of Tightening Cycle

Equity and bond price movements have been correlated in 2023 reflecting the impact of changing views on inflation and the direction of policy rates. With inflation appearing to slow, the yield on 10-year U.S. Treasury notes plummeted, falling

110 basis points from a mid-October peak of about 5% (Exhibit 3). Reflecting this sharp drop in yields, the U.S. Treasury market erased earlier losses to gain 4.3% in 2023. Treasuries with maturities of 10+ years jumped 12%. U.S. investment grade and high-yield credit markets also rose, gaining 8.4% and 13.5%, respectively. The sovereign bonds of other advanced economies followed the pattern of the U.S. Treasury market, gaining 5.8% in 2023. With the exception of Japan, which has maintained low policy rates throughout, markets widely anticipate an imminent end of the tightening cycle across advanced economies.

Exhibit 3. Inflation Expectations Drive Yields Up and Down

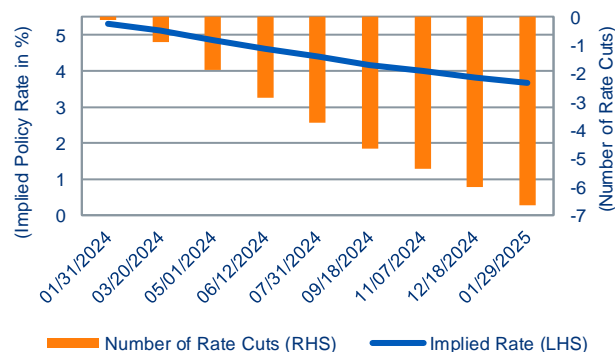
Source: Bloomberg. Nominal 10-year U.S. Treasury yield in percent.



The market is now pricing in six rate cuts by the Fed in 2024 (Exhibit 4). With U.S. equity markets priced to perfection, much hinges on whether the aggressive easing currently discounted is realized.

Exhibit 4. Markets Price In 2024 Fed Rate Cuts

Source: Bloomberg. Implied Fed policy rates and number of rate cuts.



Performance of Major Market Indices through 12-31-2023

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	4.5%	11.7%	26.3%	26.3%	10.0%	15.7%
Russell 2000	12.2%	14.0%	16.9%	16.9%	2.2%	10.0%
MSCI World Ex-US (USD)	5.5%	10.5%	17.9%	17.9%	4.4%	8.5%
MSCI Emerging Mkts (USD)	3.9%	7.9%	9.8%	9.8%	-5.1%	3.7%
Citigroup US Treasuries	3.4%	5.6%	4.3%	4.3%	-3.8%	0.5%
Citigroup Credit	4.2%	8.2%	8.4%	8.4%	-3.3%	2.5%
Merrill High Yield	3.7%	7.1%	13.4%	13.4%	2.0%	5.2%
JPM EMBI Global (USD)	4.8%	9.3%	10.5%	10.5%	-3.1%	1.9%
Citigroup WGBI Ex-US (LC)	2.8%	5.2%	5.1%	5.1%	-4.5%	-1.0%
Barclays US Aggregate	3.8%	6.8%	5.5%	5.5%	-3.3%	1.1%
GSCI Total Return	-3.3%	-10.7%	-4.3%	-4.3%	19.2%	8.7%
HFRX Eq. Wtd. Strategies	1.7%	2.3%	4.0%	4.0%	0.9%	2.7%