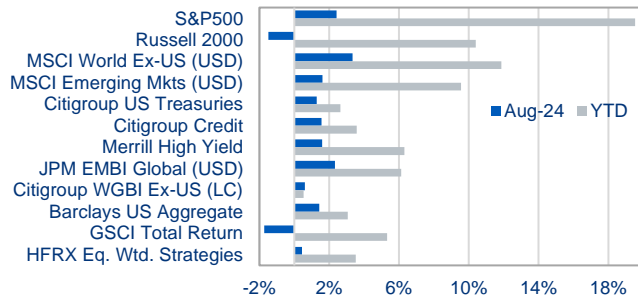


# Global Market Review

Global equity markets plunged, and currency market volatility spiked in early August following a short-lived bout of deleveraging that included the partial unwinding of the iconic yen carry trade (see Special Topic). Equity markets soon rallied, however, more than recouping their early losses to close the month with solid gains. The outlook for monetary policy helped buoy sentiment. Powell’s Jackson Hole speech was, by the normally understated pronouncements of central bankers, virtually triumphant, raising expectations that inflation was set to continue to decline and interest rates to fall. The prospect of easing prices and policies underpinned a rally in the bond markets. U.S. bond prices rose across the maturity and credit spectrums. With optimism growing that the ECB would also cut rates in September, non-U.S. fixed income markets rose. The yen index surged in August. Gold reached an all-time high. The dollar fell against most major currencies. Oil prices slid 5.6%.

### Performance of Major Market Indices

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



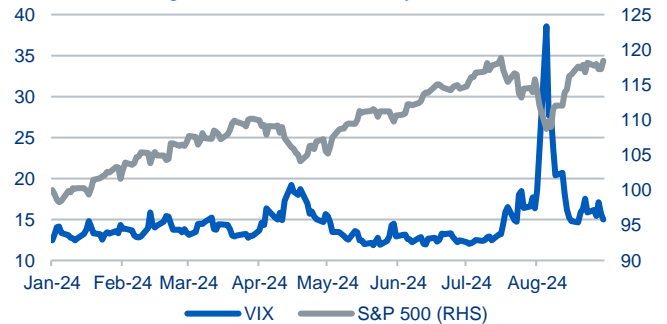
Global equities recoup early losses. Extend strong gains.

### U.S. Equities Quickly Recover from Volatility Spike

The sudden partial unwinding of the yen carry trade contributed to a bout of volatility across global equity and currency markets in early August. In the case of the U.S., the S&P 500 lost 6.1% in the first three trading days of the month. The index promptly rebounded, however, to close the month up 2.4%. So far this year, it has gained 19.5%. Although the deleveraging of early August was partial and its impact fleeting, the episode serves as an unsettling reminder of the potential instability of leveraged positions built up over a long period of low yields and relative market calm. (See this month’s Special Topic.)

#### Exhibit 1. Equities Rebound after Volatility Spike

Source: Bloomberg. S&P 500 Index January 1, 2024 = 100. VIX index.



August’s U.S. equity gains were widespread across most market segments. Growth and value stocks rose 1.9% and 2.4%, respectively. With the exception of the consumer discretionary and the energy sectors, all industry sectors had positive returns. The consumer staples and healthcare sectors enjoyed particularly strong gains. Following their 10.2% jump in July, small cap stocks retreated in August, falling 1.5%. Large cap stocks rose 2.4%.

NVIDIA’s August stock price movements highlight the delicate balancing act of high valuations and lofty earnings projections underlying its recent stock price trajectory and those of other large, tech firms. On August 28, NVIDIA reported a record 122% year-on-year gain in revenue in the three months through July, handily beating analyst’s average forecasts. Despite this performance, its share price fell by about 7% in the following two trading days of the month. Even with this decline, NVIDIA gained 2% in August and is up 141% so far in 2024.

## Non-U.S. Equities Extend Gains in August

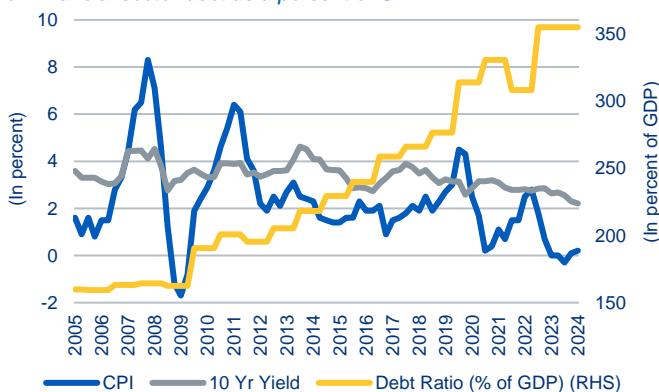
Equity markets outside of the U.S. extended their gains in August. The MSCI World ex-U.S. index of advanced economy stocks rose 3.3% to bring its gain for the year to 11.9%. Japanese equities were buffeted by the unraveling of the yen carry trade. The TOPIX index fell 20.3% in the first three trading days of the month and volatility in the Japanese equity market temporarily reached crisis levels. By the end of the month, however, the market had calmed. Japanese equity market returns expressed in U.S. dollar terms managed a small gain of 0.5%, thanks wholly to the appreciation of the yen. Emerging equity markets also rose in August, rising 1.6%, to bring their gain so far this year to 9.6%.

## China's Macroeconomic Challenges

The Chinese economy faces a number of potentially destabilizing economic challenges. Debt levels are high. Years of poorly targeted, investment-led growth have resulted in excess capacity, the misallocation of resources, and declining capital output ratios. Excessive investment and speculation in the real estate sector has resulted in overbuilding and a large overhang of pre-sold but uncompleted properties. Over half of Chinese property developers are facing insolvency. The financial sector is heavily exposed to the property sector, as are local governments dependent on rising property prices as a source of revenue. The backlog of presold but unfinished properties also weighs on households who face the debt burden of owning a property they cannot occupy or sell. The ongoing contraction in the property sector, previously a prime engine of growth, is thus undermining consumer sentiment and contributing to an economic slowdown. The combination of excess capacity and slowing economic activity is contributing to disinflation, compounding the difficulty of managing high levels of debt (Exhibit 2). Although bond yields have declined as inflation has fallen, real yields have risen. Efforts by the Chinese authorities to address these challenges have so far met with mixed results. These growing challenges have created an uncertain backdrop for Chinese equities. Although posting positive gains so far this year, Chinese equities are lagging other emerging equity markets and are down over the past five years.

### Exhibit 2. Debt Deflation Following Property Bubble

Sources: BIS and Bloomberg. CPI and 10-year yield in percent. Total non-financial sector debt as a percent of GDP.

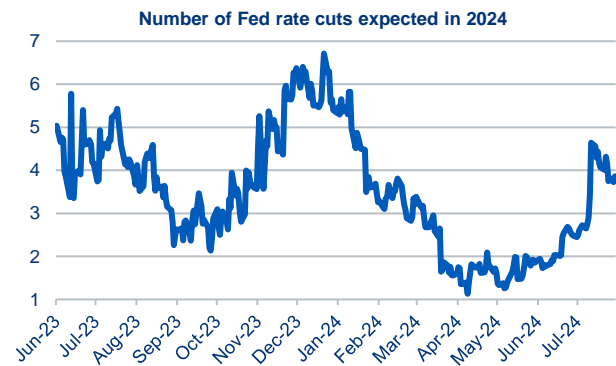


## Markets Counting on September Rate Cut

Although not at the high levels anticipated at the beginning of the year, the number of rate cuts expected by the market jumped in August (Exhibit 3). Powell took a victory lap in his speech to the annual Jackson Hole Economic Symposium on monetary policy, declaring that “Our restrictive monetary policy helped restore the balance between aggregate supply and demand, easing inflationary pressure and ensuring that inflation expectations remained well anchored.” In Powell’s view, the FOMC’s forceful 525 basis point increase in the federal funds rate was key to keeping inflation expectations anchored, thus facilitating a relatively painless disinflation. According to Powell, “disinflation while preserving labor market strength is only possible with anchored inflation expectations, which reflect the public’s confidence that the central bank will bring about 2% inflation over time.”

### Exhibit 3. Upbeat Powell Boosts Rate Cut Optimism

Source: Bloomberg. Number of rate cuts priced into the market.



U.S. Treasury yields declined across the maturity spectrum in August. The yield curve flattened between 2- and 10-year maturities, although the 3-month to 10-year segment remains inverted. The broad U.S. Treasury index rose 1.3% in August. In the credit markets, investment grade and high yield bonds were up 1.5% and 1.6%, respectively in August. For the year as a whole, their respective gains are 3.8% and 3.6%, respectively.

Non-U.S. bond markets also rose. The WGBI ex-U.S. index of investment grade sovereign government bonds rose 3.0% in August, driven in part by expectations that the ECB would further ease policy in September.

### Performance of Major Market Indices through 08-30-2024

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	2.4%	3.7%	19.5%	27.1%	9.4%	15.9%
Russell 2000	-1.5%	8.5%	10.4%	18.5%	0.6%	9.7%
MSCI World Ex-US (USD)	3.3%	6.6%	11.9%	19.4%	4.2%	8.7%
MSCI Emerging Mkts (USD)	1.6%	1.9%	9.5%	15.1%	-3.1%	4.8%
Citigroup US Treasuries	1.3%	3.5%	2.6%	6.0%	-2.5%	-0.6%
Citigroup Credit	1.6%	4.0%	3.6%	9.2%	-2.1%	0.6%
Merrill High Yield	1.6%	3.6%	6.3%	12.5%	2.5%	4.3%
JPM EMBI Global (USD)	2.3%	4.2%	6.1%	12.7%	-1.3%	0.8%
Citigroup WGBI Ex-US (LC)	0.6%	2.2%	0.5%	3.8%	-3.9%	-2.5%
Barclays US Aggregate	1.4%	3.8%	3.1%	7.3%	-2.1%	0.0%
GSCI Total Return	-1.7%	-5.2%	5.3%	-2.1%	11.0%	8.4%
HFRX Eq. Wtd. Strategies	0.4%	1.3%	3.5%	5.9%	1.0%	2.9%

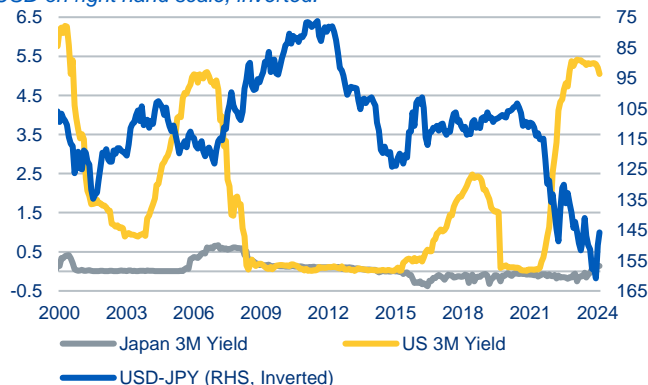
# Special Topic

## The Yen Carry Trade

A currency carry trade involves borrowing in a currency with a low interest rate to fund the purchase of a higher yielding currency, thus profiting from the yield spread. Because of its long history of zero and at times negative short-term yields, the yen has been for decades a key source of funding for carry trades (Exhibit 1).

### Exhibit 1 Yen Spikes as Carry Trade Unravels

Source: Bloomberg. U.S. and Japanese 3M Yield in percent. Yen per USD on right hand scale, inverted.



The fundamental premise of a currency carry trade is that exchange rate movements will not offset the yield spread between the funding and destination currencies. This attempt at arbitrage is highly risky. A narrowing of the expected yield differential or an appreciation of the funding currency can derail the trade, often violently. Currency carry trades prosper only if uncovered interest rate parity does not hold, i.e., only if the gain from the yield differential is not offset by exchange rate movements.

The size of the yen carry trade ebbs and flows with the width of the yield spread as well as overall market volatility and risk appetite. Like most buildups of leverage in the financial system, carry trades feed on relative market calm. Their unraveling is triggered by, and contributes to, periodic bouts of market volatility. Carry trades are inherently procyclical.

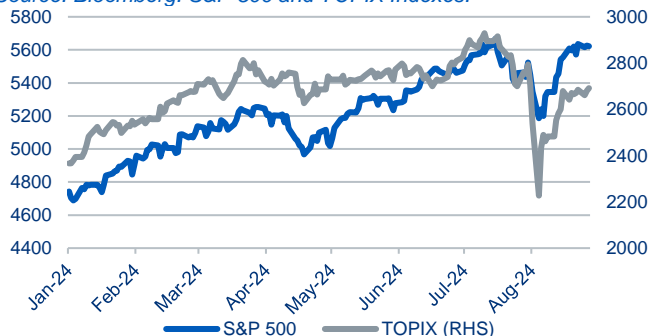
Carry trades are not limited to currency pairs. Funds are often raised in currencies with low interest rates for speculative investments in equities, bonds, asset-backed securities, and derivatives. The yen carry trade, for example, was a significant source of funding fueling the credit bubble in mortgage-backed securities prior to the 2007 Great Financial Crisis. It has more recently been a source of funds fueling the rapid rise of NVIDIA and other tech stocks. Seen from this broader perspective, the yen carry trade is but one element of a vast and interconnected network of leverage across financial intermediaries and markets. Its periodic unraveling is thus symptomatic of a broader market deleveraging.

## August's Yen Carry Trade Unwind

Early August saw a sharp, but fleeting, increase in volatility across equity and currency markets (Exhibit 2). The severity of the market movements reflected the unravelling of leveraged positions, funded in part by the yen carry trade. The proximate catalyst for the unwinding was the fear that rising yen interest rates and falling U.S. dollar interest rates would erode the yield differential between the currency pair. These fears were compounded by indicators suggesting slowing U.S. economic activity.

### Exhibit 2 Markets Recover from Early August Equity Plunge

Source: Bloomberg. S&P 500 and TOPIX Indexes.



Reflecting these concerns, the S&P 500 lost 6.1% in the first three trading days of August. Tech stocks were particularly hard hit with the NASDAQ down 8% over the same period. The VIX index spiked but remained well below crisis levels. In Japan, the TOPIX equity index fell 20.3% in the first three trading days of the month and, unlike the VIX, volatility in Japan touched crisis levels. Other advanced and emerging equity markets also declined in the early days of August. By month-end, however, market volatility had subsided, and most major equity markets had more than recouped their early losses. The TOPIX index, however, closed the month down 2.9% in yen terms but was up marginally in dollar terms thanks to the yen's 3.2% appreciation.

## Picking Up Nickels in Front of Steamrollers

Carry trades are ubiquitous across financial markets because they are profitable most of the time. Carry trades seek to exploit market inefficiencies through arbitrage. However, the anomalies being exploited are unstable and in an efficient market should not persist. Moreover, the profits from these trades are slight and must be levered to generate significant gains. While profitable for long periods, the anomalies can and do suddenly disappear. Because of these features, carry trades have a risk and reward profile similar to picking up nickels in front of steam rollers.

The events of early August were yet another manifestation of a sudden procyclical unravelling of leveraged positions built up over a long period of relative market calm. The increase in market volatility of early August forced the unwinding of these highly levered positions. Fortunately, the unwinding this time was partial and short-lived. Nevertheless, the risks inherent to levered strategies predicated on relative market stability remain lurking below the surface.