Principal Morley

Economic and market review

Principal Asset Allocation Viewpoints

As of December 31, 2023

Q1 2024 key themes

- **Global growth is coming off the boil.**
  Economic growth appears to now be cooling as global monetary tightening gradually takes its toll. U.S. recession risk has diminished, although consumer headwinds have risen. China and Europe are likely to see another year of tepid growth.

- **Global disinflation continues unabated.**
  Price pressures have eased significantly, largely due to resolved supply chains. The last mile of disinflation toward central bank targets will require some economic slowdown and job market weakness.

- **A central bank pivot is upon us.**
  Most central bankers have now adopted a more dovish stance and rate cuts are likely in 2024. Yet, they may come slightly later than markets anticipate and will likely be gradual—unless economic growth surprises to the downside.

- **Fixed income credit spreads are very tight going into an economic slowdown.**
  Rate cuts failing to materialize may drive extended U.S. Treasury disappointment in the first quarter (1Q). Higher-quality credit should perform better than lower-quality credit as the economy slows, and as the maturity wall becomes more pressing.

Falling interest rates during the quarter boosted both fixed income and equity markets

Commodities and the U.S. Dollar Index were the only indexes to end the year with a negative return.

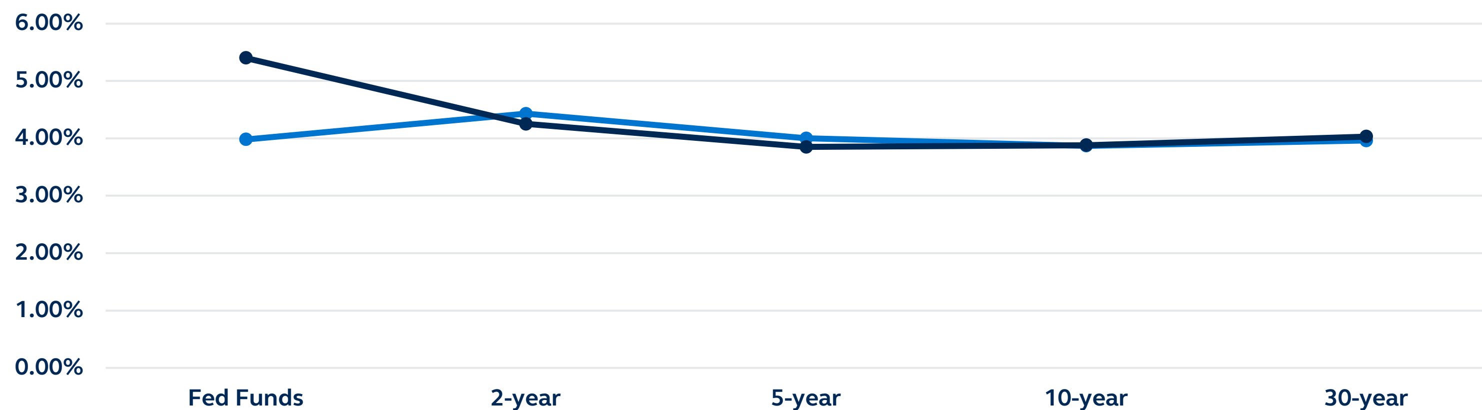
	3-month	1-year	3-year	5-year	10-year
Fixed Income					
ICE BofA U.S. Treasury Bill 3-month Index	1.37%	5.01%	2.15%	1.88%	1.25%
Bloomberg Aggregate Bond Index	6.82%	5.53%	-3.31%	1.10%	1.81%
Bloomberg U.S. Corp High Yld 2% Issuer Capped Index	7.15%	13.44%	1.98%	5.35%	4.59%
Bloomberg Long-Term Govt/Credit Index	13.24%	7.13%	-8.68%	1.12%	3.22%
U.S. Equities					
Russell 1000 Value Index	9.50%	11.46%	8.86%	10.91%	8.40%
S&P 500 Index	11.69%	26.29%	10.00%	15.69%	12.03%
Russell 1000 Growth Index	14.16%	42.68%	8.86%	19.50%	14.86%
Russell Midcap Index	12.82%	17.23%	5.92%	12.68%	9.42%
Russell 2000 Index	14.03%	16.93%	2.22%	9.97%	7.16%
Non-U.S. Equities					
MSCI EAFE NTR Index	10.42%	18.24%	4.02%	8.16%	4.28%
MSCI ACWI ex-USA Index	9.75%	15.62%	1.55%	7.08%	3.83%
MSCI Emerging Markets Index	7.86%	9.83%	-5.08%	3.68%	2.66%
Other					
MSCI U.S. REIT Index	15.60%	12.27%	5.89%	6.15%	6.29%
S&P GSCI® Index	-10.73%	-4.27%	19.18%	8.72%	-3.60%
U.S. Dollar Index	-4.19%	-2.70%	2.68%	0.28%	1.75%

As of December 31, 2023.
Source: FactSet Global. Benchmark Review-Ned Davis Research 4Q2022, Jan. 3, 2023. Returns are annualized. **Past performance does not guarantee future results**. Index performance information reflects no deduction for fees, expenses, or taxes. Indices are unmanaged and individuals cannot invest directly in an index. See Important Information for index descriptions.

The history of interest rates

How have interest rates changed in recent years?

	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2022	Sept. 30, 2023	Dec. 31, 2023
Fed Funds	0.03	0.02	3.98	5.34	5.40
2-year	0.12	0.73	4.43	5.04	4.25
5-year	0.36	1.26	4.00	4.61	3.85
10-year	0.91	1.51	3.87	4.57	3.88
2- to 10-year spread	0.79	0.78	-0.55	-0.47	-0.37
30-year	1.64	1.90	3.96	4.70	4.03



	Fed Funds	2-year	5-year	10-year	30-year
December 31, 2023	5.40%	4.25%	3.85%	3.88%	4.03%
December 31, 2022	3.98%	4.43%	4.00%	3.87%	3.96%

Source: FactSet. **Past performance does not guarantee future results.**

ASSET CLASS RETURNS AS OF DECEMBER 31, 2023

Best

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Small Cap 38.82%	Real Estate 31.78%	Real Estate 4.23%	Small Cap 21.31%	Emerging Markets 37.28%	Cash 1.86%	Large Cap 31.49%	Small Cap 19.96%	Real Estate 46.18%	Commodities 16.09%	Large Cap 26.29%	Large Cap 26.29%
Mid Cap 33.50%	Government Treasury 25.07%	Large Cap 1.38%	Mid Cap 20.74%	Intl Stocks 25.03%	Intermediate Bond 0.01%	Mid Cap 26.20%	Large Cap 18.40%	Large Cap 28.71%	Cash 1.50%	Intl Stocks 18.24%	Intl Stocks 18.24%
Large Cap 32.39%	Large Cap 13.69%	Asset Allocation 1.28%	High Yield 17.34%	Large Cap 21.83%	Government Treasury -1.84%	Real Estate 25.76%	Emerging Markets 18.31%	Commodities 27.11%	High Yield -11.11%	Asset Allocation 17.67%	Asset Allocation 17.67%
Intl Stocks 22.78%	Asset Allocation 10.62%	Intermediate Bond 0.55%	Large Cap 11.96%	Mid Cap 16.24%	Intl Bonds -2.15%	Small Cap 25.53%	Government Treasury 17.70%	Mid Cap 24.76%	Intermediate Bond -13.01%	Small Cap 16.93%	Small Cap 16.93%
Asset Allocation 17.56%	Mid Cap 9.77%	Cash 0.03%	Commodities 11.77%	Small Cap 14.65%	High Yield -2.26%	Asset Allocation 22.18%	Asset Allocation 14.73%	Asset Allocation 15.86%	Mid Cap -13.06%	Mid Cap 16.44%	Mid Cap 16.44%
High Yield 7.38%	Intermediate Bond 5.97%	Intl Stocks -0.81%	Emerging Markets 11.19%	Asset Allocation 14.21%	Asset Allocation -2.35%	Intl Stocks 22.01%	Mid Cap 13.66%	Small Cap 14.82%	Intl Stocks -14.45%	Real Estate 16.10%	Real Estate 16.10%
Real Estate 1.86%	Small Cap 4.89%	Government Treasury -1.21%	Asset Allocation 8.31%	Intl Bonds 10.51%	Large Cap -4.38%	Emerging Markets 18.44%	Intl Bonds 10.11%	Intl Stocks 11.26%	Asset Allocation -15.79%	High Yield 13.40%	High Yield 13.40%
Cash 0.06%	High Yield 2.44%	Mid Cap -2.18%	Real Estate 7.24%	Government Treasury 8.53%	Real Estate -4.84%	Government Treasury 14.83%	Intl Stocks 7.82%	High Yield 5.29%	Large Cap -18.11%	Emerging Markets 9.83%	Emerging Markets 9.83%
Intermediate Bond -2.02%	Cash 0.02%	Small Cap -4.41%	Intermediate Bond 2.65%	High Yield 7.48%	Small Cap -11.01%	High Yield 14.40%	Intermediate Bond 7.51%	Cash 0.05%	Intl Bonds -18.70%	Intermediate Bond 5.53%	Intermediate Bond 5.53%
Emerging Markets -2.60%	Emerging Markets -2.19%	High Yield -4.55%	Intl Bonds 1.49%	Real Estate 4.18%	Mid Cap -11.08%	Intermediate Bond 8.72%	High Yield 6.20%	Intermediate Bond -1.54%	Emerging Markets -20.09%	Cash 5.26%	Cash 5.26%
Intl Bonds -3.08%	Intl Bonds -3.08%	Intl Bonds -6.02%	Government Treasury 1.33%	Intermediate Bond 3.54%	Commodities -11.25%	Commodities 7.69%	Cash 0.58%	Emerging Markets -2.54%	Small Cap -20.44%	Intl Bonds 3.99%	Intl Bonds 3.99%
Commodities -9.52%	Intl Stocks -4.90%	Emerging Markets -14.92%	Intl Stocks 1.00%	Commodities 1.70%	Intl Stocks -13.79%	Intl Bonds 5.09%	Commodities -3.12%	Government Treasury -4.65%	Real Estate -26.81%	Government Treasury 3.06%	Government Treasury 3.06%
Government Treasury -12.66%	Commodities -17.01%	Commodities -24.66%	Cash 0.27%	Cash 0.84%	Emerging Markets -14.58%	Cash 2.25%	Real Estate -7.90%	Intl Bonds -7.05%	Government Treasury -29.26%	Commodities -7.91%	Commodities -7.91%

Worst

The returns reflect performance of certain indexes as defined below. This information is general in nature and is not intended to be reflective of any specific plan.

Cash- FTSE 3-month T-bill ,Government Treasury-BBgBarc Long Treasury, Commodities-Bloomberg Commodity Idx, Intermediate Bond-BBgBarc US Agg Bond Idx, High Yield Bond-ICE BofAML High Yield Idx, Intl Bonds-JPMorgan GBI Global ex U.S., Asset Allocation-portfolio assumes the following weights: 60% S&P 500 and 40% BBgBarc US Agg, Large Cap-S&P 500, Mid Cap-S&P Midcap 400, Small Cap-Russell 2000, Intl Stocks-MSCI EAFE (net), Emerging Markets-MSCI EM (net), Real Estate-Wilshire U.S. REIT.

Past performance does not guarantee future results.

Global economic growth comes off the boil

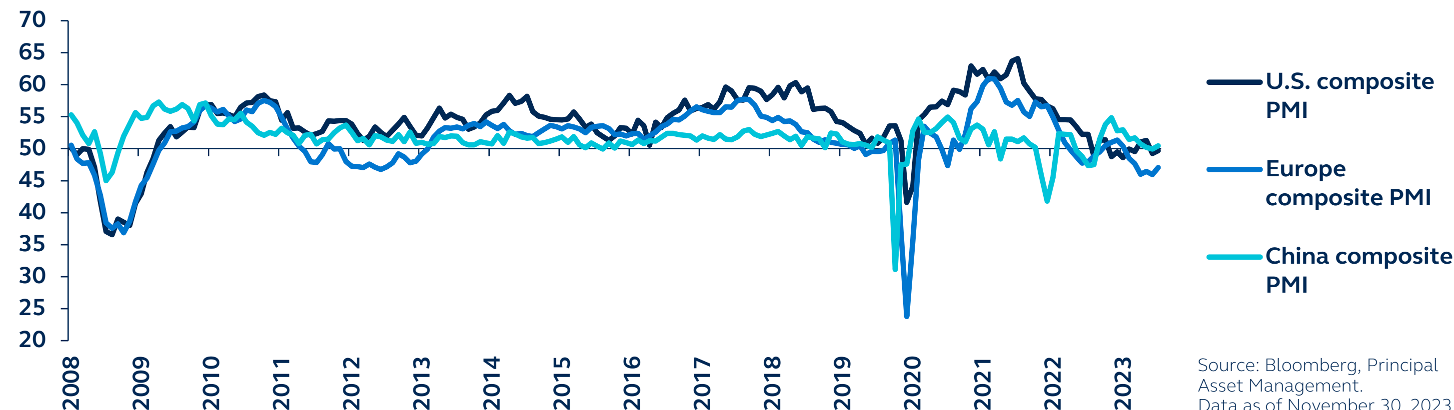
Investors were almost universally surprised by global growth last year—by the extent of U.S. resilience, the depth of China weakness, and the extent of global disinflation. Economic growth appears to be cooling in most parts of the world as monetary tightening gradually takes its toll, although timely data suggest a continuous U.S. weakness as opposed to other regions experiencing more pronounced setbacks. Indeed, strong support from consumer spending and the labor market has significantly reduced the risk of recession, although rising credit card delinquencies and reduced job postings suggest headwinds are building. Europe remains a weak link, with soft economic data suggesting that it is flirting with stagnation. In China, policy stimulus is likely insufficient to drive a significant economic recovery in 2024.

There will likely be strong contributions from other economies such as India and Japan. Yet, slowing growth in the U.S., China, and Europe implies a slowdown in overall global economic momentum. While it's likely to be more of a gentle downward slope, it does render the global economy vulnerable to additional shocks. The good news is that the slowing growth environment should drain out the most stubborn of inflationary pressures, opening the door to gradual global policy easing in mid-2024.

The global economy appears to be cooling now as monetary tightening gradually takes its toll. This will likely drain out the most stubborn of price pressures, opening the door to global policy easing.

Developed market and China Purchasing Managers' Index (PMI)

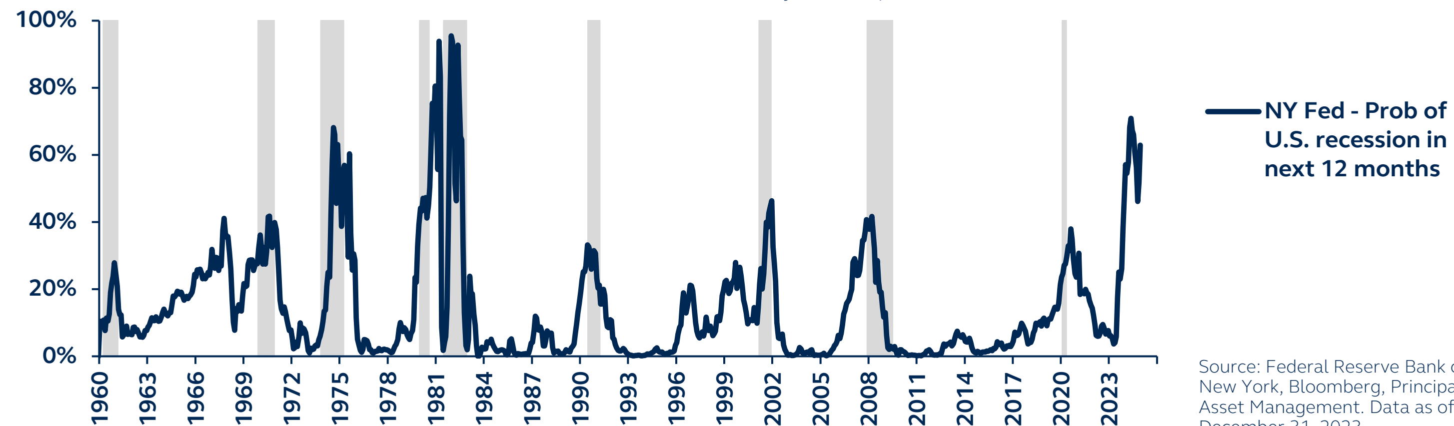
May 2008–November 2023



Source: Bloomberg, Principal Asset Management. Data as of November 30, 2023.

U.S. recession probability in the next 12 months

Federal Reserve Bank of New York, Recessions are shaded, January 1960–present



Source: Federal Reserve Bank of New York, Bloomberg, Principal Asset Management. Data as of December 31, 2023

Powell pillow: Insulating the economy from his rate hikes

The U.S. economy's resilience can be largely attributed to pandemic stimulus measures, which created an economy with unique defences against central bank tightening.

On the corporate side, the 2020 Fed lending program permitted corporations to take full advantage of record-low rates, issuing debt at record levels and locking in low rates. As a result, even as Fed rates have risen to 22-year highs, corporate interest payments have dropped to the lowest levels seen in more than 50 years.

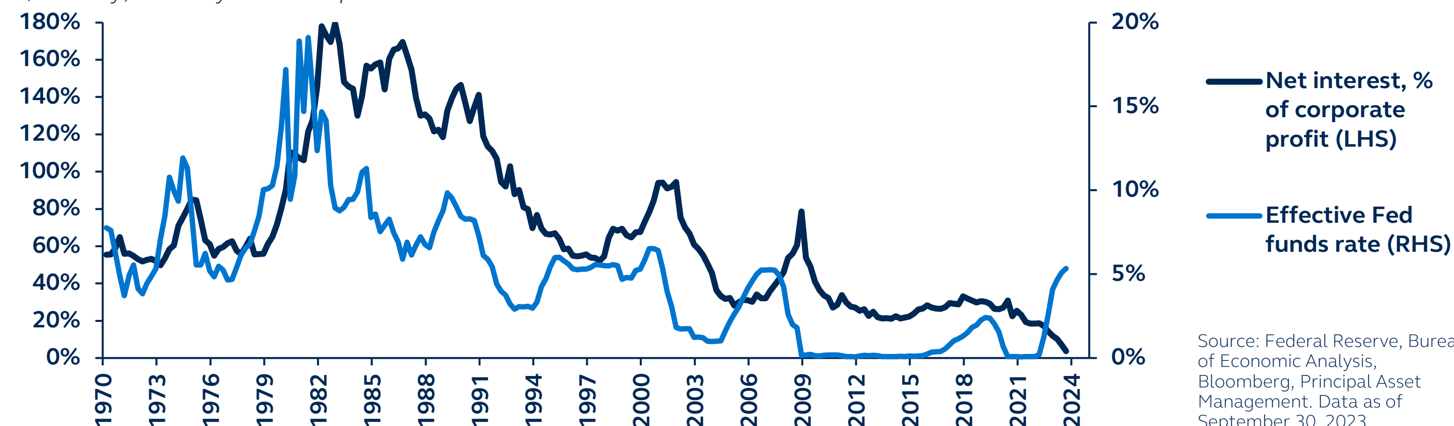
U.S. households also took advantage of the 2020 drop in interest rates to lock in record-low mortgage rates. So even as a 30-year mortgage rate has soared to above 7.5%, the effective rate on the outstanding stock of mortgage debt is only sitting at around 3%.

These buffers have effectively insulated the U.S. economy from higher policy rates. Next year, however, a significant number of corporate bonds will mature, particularly for the most leveraged issues, requiring refinancing and at significantly higher rates than their existing loans. Growing numbers of mortgages will also come due for refinancing, but the numbers are not expected to be very onerous. The U.S. economy should finally face the reality of higher rates.

Pandemic-era buffers will likely fade slightly in the year ahead, particularly on the corporate side. The U.S. economy's defences against monetary tightening appear to be fading.

Corporate interest payments versus Federal funds rate

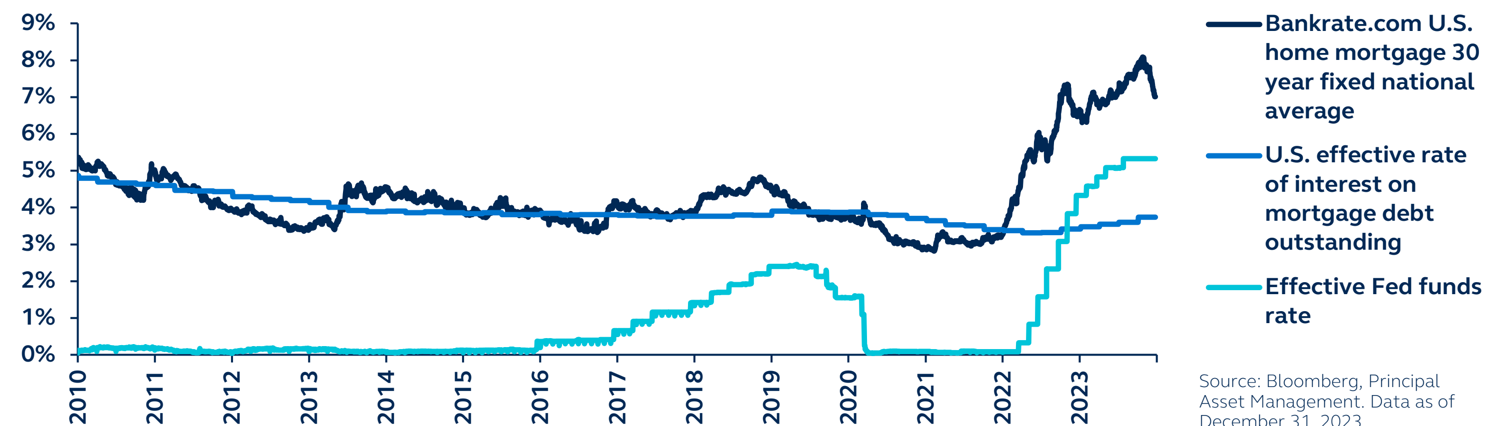
Quarterly, January 1970–September 2023



Source: Federal Reserve, Bureau of Economic Analysis, Bloomberg, Principal Asset Management. Data as of September 30, 2023.

U.S. 30yr fixed mortgage rate, effective mortgage rate, and effective Fed funds rate

2010–present



Source: Bloomberg, Principal Asset Management. Data as of December 31, 2023

2024 weakness: Good things never last forever

Consumers have continued to be a key backstop of the U.S. economy. While aggregate excess savings are getting consumed at a rapid pace, particularly for lower income groups, the build-up of such a significant cushion in earlier years has prevented household balance sheets from deteriorating significantly.

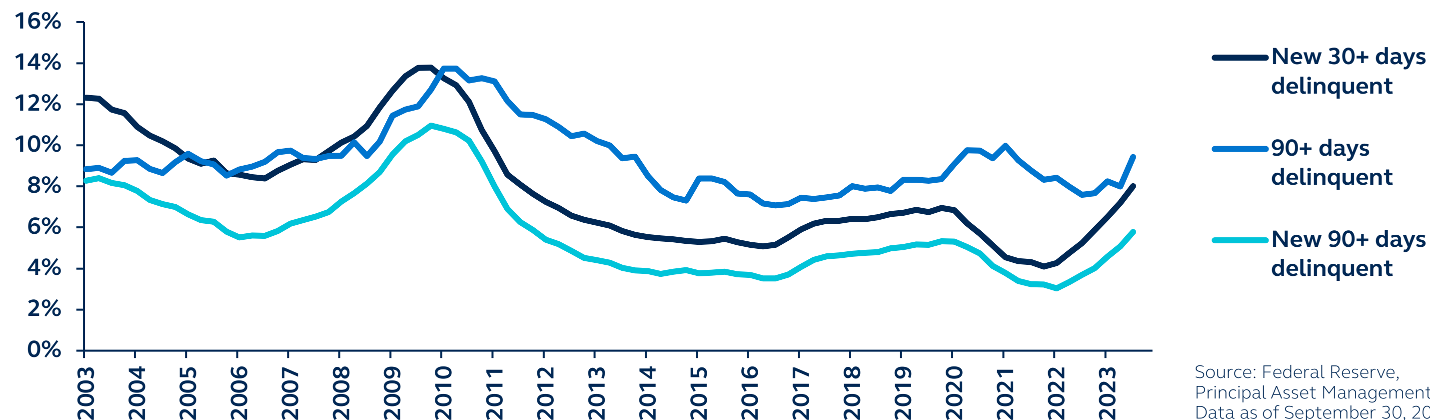
As a result, consumers enter 2024 in fairly good shape and better able to withstand headwinds from expiring mortgage terms, the resumption of student loan interest payments, and waning fiscal support. However, they are not entirely immune. Credit card lending has been steadily rising, as have delinquencies, suggesting a consumer slowdown ahead.

The labor market has remained robust, but it too is showing signs of softening which will weigh on households. As well as weaker payroll growth, there are reduced job listings, growing numbers of firms announcing headcount reductions, and fewer people quitting jobs to take on others. Indeed, for those moving jobs, the associated pay jump for switching jobs has almost halved versus a year ago. The likely rise in unemployment should fall well short of previous downturns but should be sufficient to drive an economic slowdown around mid-2024.

Consumers generally enter 2024 in strong shape. Yet, credit card delinquencies are rising, and the labor market is softening, suggestive of a modest slowdown ahead.

Credit card delinquency rates

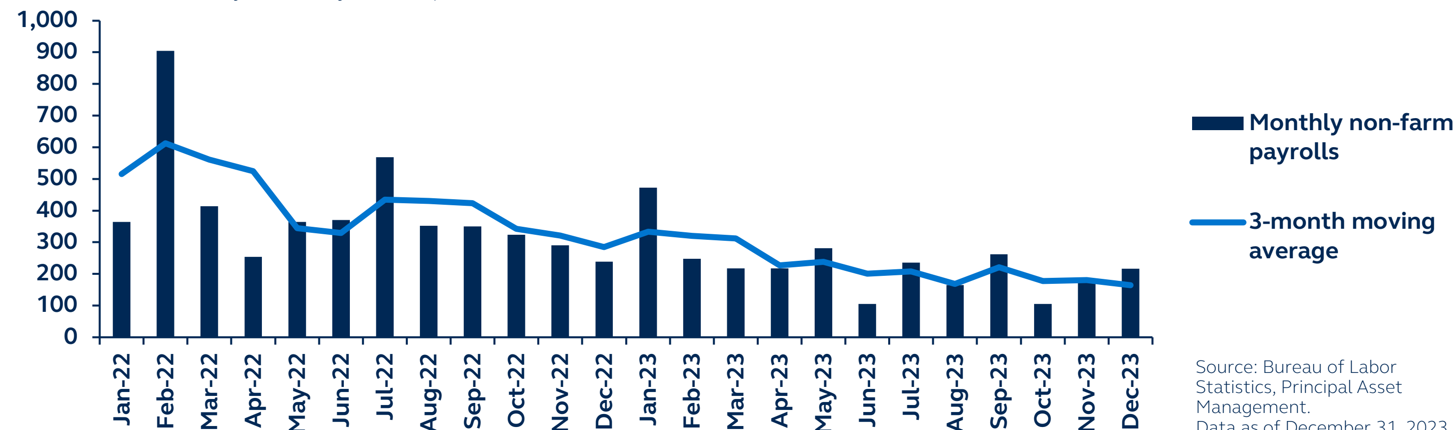
Percent of current outstanding balance, quarterly, January 2003–September 2023



Source: Federal Reserve, Principal Asset Management. Data as of September 30, 2023.

U.S. non-farm payrolls

Thousands, monthly, January 2022–present



Source: Bureau of Labor Statistics, Principal Asset Management. Data as of December 31, 2023.

Global disinflation: Turns out inflation was a bit transitory

Global disinflation has made significant headway. In many countries, including the U.S., inflation has more than halved from its peak levels and continues to trend lower, despite continued economic resilience. In Europe, where the economy has already taken a more negative turn, inflation has actually fallen faster than it initially rose. There are a few notable exceptions: In Japan, inflation has been rising at a healthy and welcome pace, and China, where inflation continued to fall short of the central bank's target and, in fact, deflation remains a threat.

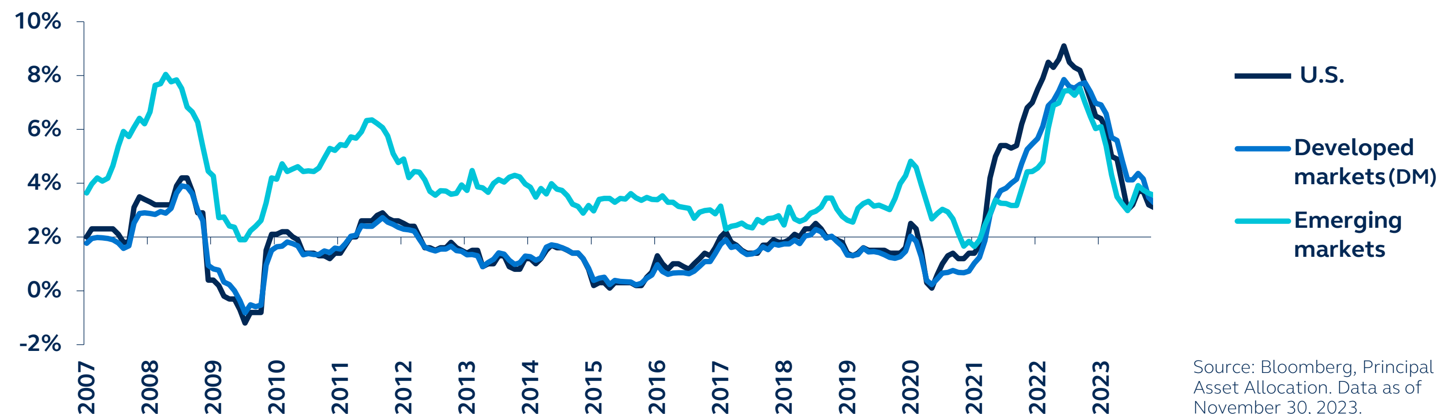
Supply chain normalization has been a major driver of global disinflation. Yet, with core commodities inflation now back to pre-pandemic levels, the last mile of inflation deceleration to target levels will require a rebalancing of labor market and an economic slowdown.

Note that inflation does not need to fall all the way to the 2% central bank targets. Policy easing will likely commence once there is sufficient confidence that inflation will sustainably settle near the 2% target. For now, however, with U.S. economic growth still firmly above trend, the threat of re-emerging price pressures cannot be ignored.

DM central banks have made encouraging disinflation progress. Yet, the final shift lower towards central bank targets would require a meaningful economic slowdown.

Principal Asset Allocation GDP-weighted inflation

January 2007–November 2023



Source: Bloomberg, Principal Asset Allocation. Data as of November 30, 2023.

Shipping costs and U.S. core PCE inflation

2011–present

Source: Bureau of Economic Analysis, Shanghai Shipping Exchange, Bloomberg, Principal Asset Management. Data as of December 31, 2023.

Central banks: pivot, *pivot*, *PIVOT*

Inflation is approaching central bank target levels, opening the door for a global policy pivot in 2024. Indeed, as slowing economic activity will put further downward pressure on price pressures over the coming quarters, the Fed will likely need to cut policy rates just to maintain the same level of monetary restriction in real terms.

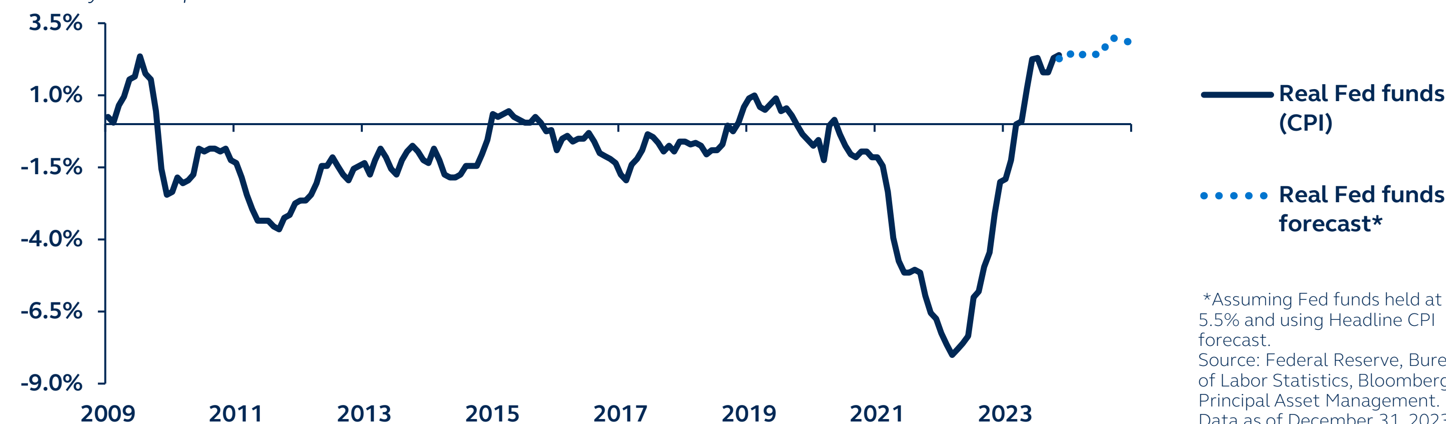
The Fed and markets agree that rate cuts are coming, but less so on exactly when and by how much. The Fed will likely require the U.S. economy to show distinct signs of slowing before they can feel confident that inflation is on a sustainable path to target, and before turning to rate cuts. As such, the market's expectation for policy easing to begin in March is likely a little optimistic. Yet, the more important message is that a path to rate cuts is emerging.

The European Central Bank (ECB) and Bank of England (BOE) are also set to cut rates. For the ECB, as the economy is already stagnating and disinflation is rapid, rate cuts will likely be more aggressive than for the Fed. The UK economy is struggling, but higher structural inflation suggests the BOE could be more hesitant. The Bank of Japan is the outlier: It is set to shift away from yield curve control, albeit cautiously and only if it has sufficient evidence of wage growth.

Fed policy rates are set to likely fall in 2024. Clear evidence of an economic slowdown likely needs to emerge before cuts can commence, likely around mid-year.

Real Fed funds rate

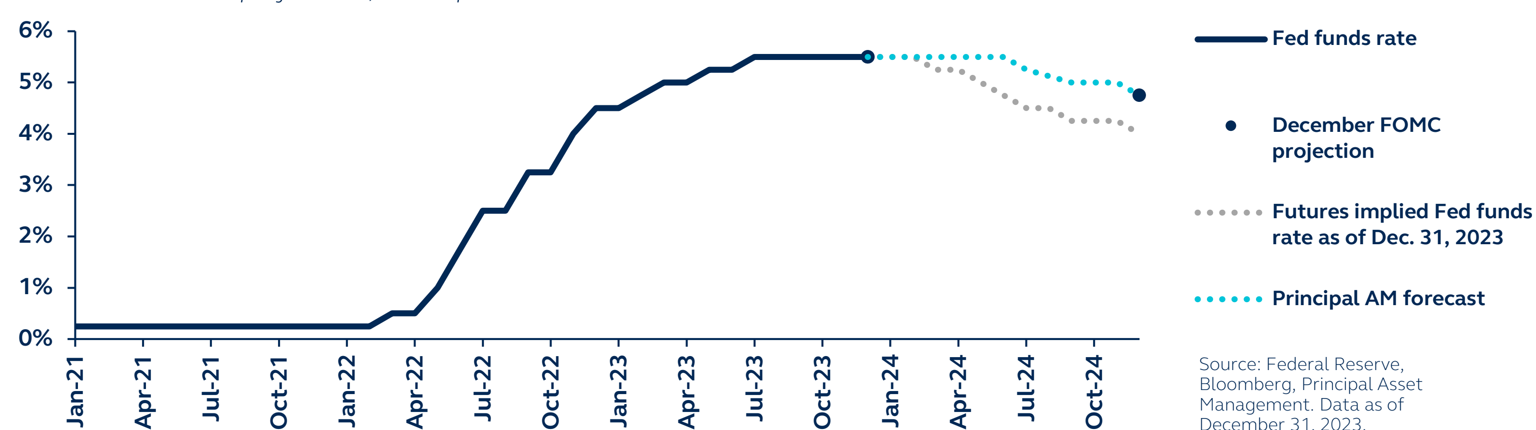
January 2009–present



*Assuming Fed funds held at 5.5% and using Headline CPI forecast.
Source: Federal Reserve, Bureau of Labor Statistics, Bloomberg, Principal Asset Management. Data as of December 31, 2023.

Federal Reserve policy rates path

Fed funds rate and projections, 2021–present



Source: Federal Reserve, Bloomberg, Principal Asset Management. Data as of December 31, 2023.

A shift in financial conditions sets up a constructive 2024

Global financial conditions initially tightened further in 4Q as global bonds sold off sharply, taking 10-year U.S. Treasury yields momentarily above 5% for the first time since 2007. However, a slight shift to more dovish language from the Fed in late October opened the door to an easing in financial conditions. This was further reinforced by a very clear signal from the Fed that rates have peaked, and the next move will be a cut, driving Treasury yields back below 4%. Such a significant drop in bond yields permitted U.S. equities to rally sharply and regain their previous record highs.

The sharp easing of financial conditions in 4Q is unlikely to continue at the same pace. Near-term volatility as rate cut expectations are repriced may trigger a slight tightening in early 2024. But, provided core inflation continues to trend downwards, financial conditions should eventually re-ease.

Such a backdrop is typically conducive for risk assets. Yet, as falling rates will likely be accompanied by slowing economic growth and considering that valuations across both equities and credit are expensive, investors will need to carefully seek out opportunities. Quality, earnings potential, and attractive valuations will be king.

Financial conditions may be volatile in early 2024 amidst market repricing of rate cut expectations. Even so, the general trend for 2024 will be easier financial conditions, suggestive of a generally constructive backdrop for risk assets.

Developed market and emerging market financial conditions

Principal Asset Allocation Financial Conditions Index (FCI), Z-score, 2005–present

Source: Bloomberg, Principal Asset Allocation. Data as of December 31, 2023.

Fixed income: Tight credit spreads will be challenged

The U.S. fixed income market experienced a very volatile 2023. The U.S. Agg struggled for much of the year before a sharp rebound in 4Q delivered a strong quarterly return and, ultimately, the first positive annual return since 2020.

U.S. Treasurys exhibited strong performance during 4Q, benefiting significantly from aggressive Fed cut expectations and reduced term premia. Within the credit space, longer duration assets, such as investment grade, outperformed shorter duration assets, such as high yield and leveraged loans, despite greater spread tightening in the low-quality space.

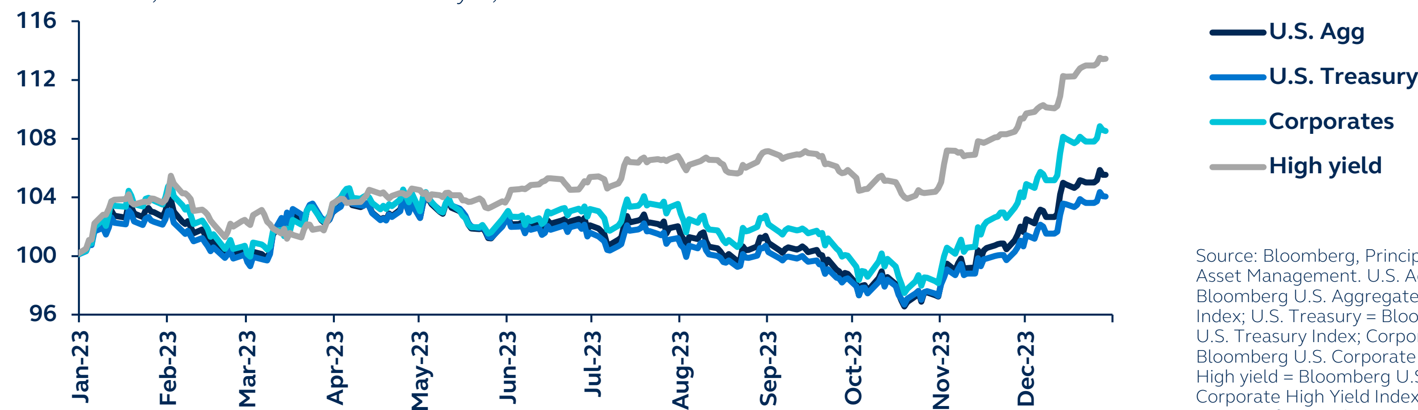
Global fixed income followed the U.S. Agg higher as the ECB also shifted to a more dovish tone and the BOJ pursued policy normalization less aggressively than expected. The weaker U.S. dollar provided an additional boost to unhedged global bonds.

Looking to 2024, Treasury yields may have some near-term upside pressure if aggressive rate cut expectations fail to materialize, although slowing growth and inflation suggest that rates are unlikely to rise significantly from current levels. Credit faces some headwinds given that spreads are at their tightest levels since early 2022, pricing in a goldilocks scenario of a soft landing and a dovish Fed. The unfolding economic slowdown through 2024 will likely challenge these valuations.

Global bonds rallied in 4Q on Fed and ECB pivot hopes and a less aggressive BOJ. Yet with credit spreads historically tight, an economic slowdown in 2024 will challenge valuations.

Fixed income asset class performance

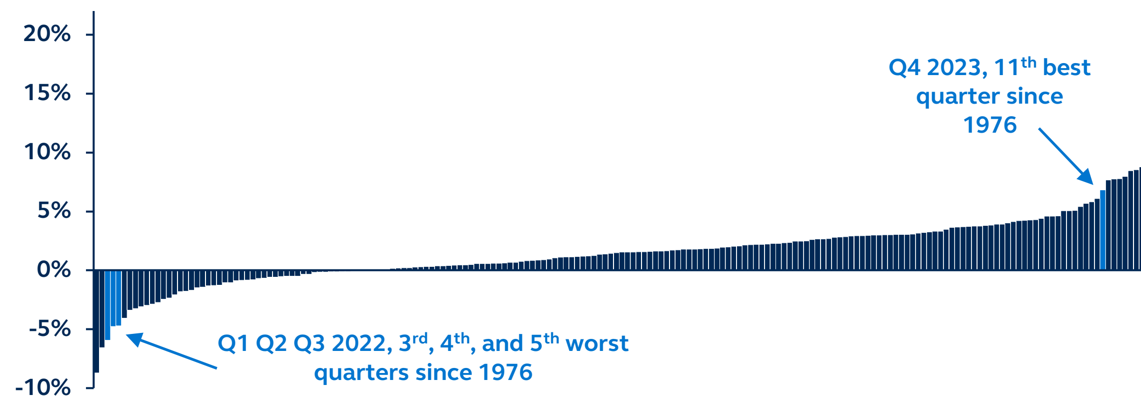
Total return, rebased to 100 at January 1, 2023



Source: Bloomberg, Principal Asset Management. U.S. Agg = Bloomberg U.S. Aggregate Bond Index; U.S. Treasury = Bloomberg U.S. Treasury Index; Corporates = Bloomberg U.S. Corporate Index; High yield = Bloomberg U.S. Corporate High Yield Index. Data as of December 31, 2023.

Bloomberg U.S. Aggregate Index ranked quarterly performance

1976–present



Source: Bloomberg, Principal Asset Management. Data as of December 31, 2023.

U.S. Treasurys: Playing the Fed pivot game

U.S. Treasury volatility remained elevated for most of 2023, with 10-year U.S. Treasury yields hitting a 16-year high at 4.99% before a perceived Fed pivot in 4Q drove yields significantly lower, closing the year at 3.88%. The Treasury market will likely remain volatile as the debate around the rates outlook rages on and investors continue to focus on fiscal stimulus and Treasury issuance plans in an election year.

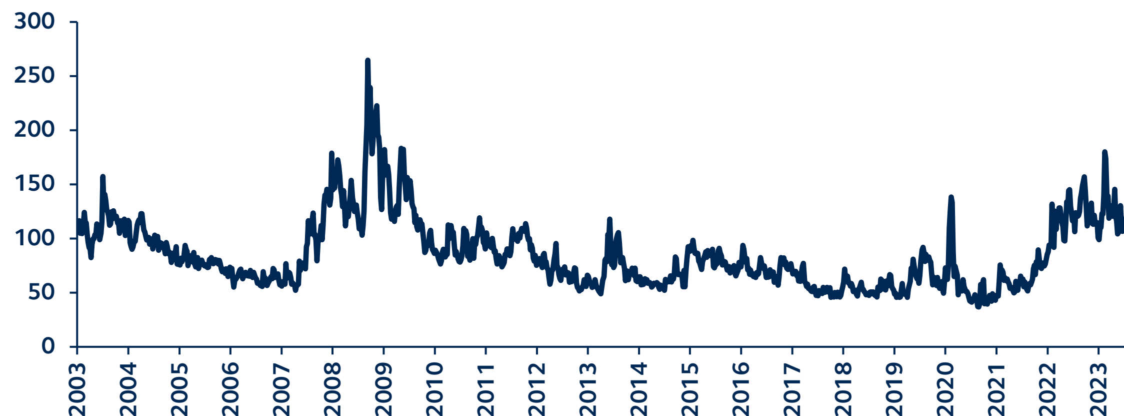
Bond markets have priced in considerably more aggressive cuts than the latest Fed dot plot implied for 2024. If Fed cuts take a little longer to materialize than expected, some upward correction in yields is likely in the near term—inflation signals will be a key focus point for investors. Once the Fed does start cutting, likely around mid-2024, Treasury yields should resume a slight downward trend, weighed down by the cooling economy and more muted inflation.

However, it is worth noting that in the absence of a severe recession. Treasury yields are unlikely to revert to the ultra-low levels of recent years. Indeed, the Fed is keen to avoid taking rates near zero again, while structural inflation dynamics likely imply that global central banks will need to remain more alert to price pressures. In addition, shifting supply/demand dynamics in the Treasury space imply higher term premia.

Treasury volatility is likely to remain elevated as the Fed rate debate rages on. From a longer-term perspective, U.S. Treasury yields are likely to settle at a higher level than the last 10 years.

ICE BofA MOVE Index

2003–present



Source: Bloomberg, Principal Asset Management. Data as of December 31, 2023.

Fed funds rate and U.S. 10y Treasury bond yield

Recessions are shaded, 1985–present

Source: Federal Reserve, Bloomberg, Principal Asset Management. Data as of December 31, 2023.

High-quality credit remains favorable ahead of slowdown

Investment grade credit performed strongly in 4Q as Fed pivot expectations drove down yields while soft-landing hopes compressed spreads. The fundamental outlook for core fixed income remains robust, supported by an upgrade cycle as well as diminished risks of a hard landing. However, IG credit spreads are historically tight and unlikely to compress much further given the broad market's expectation for a soft landing.

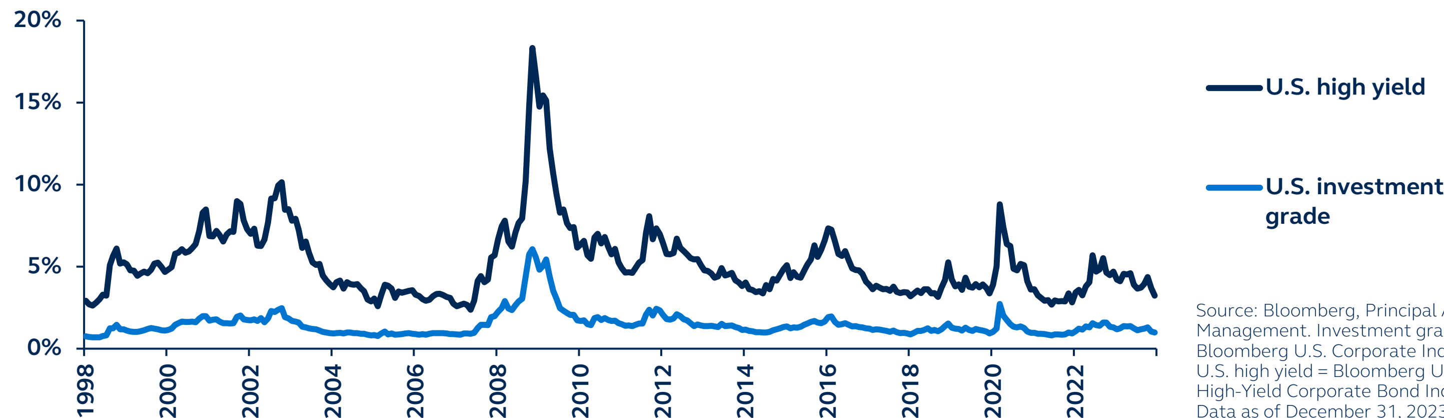
There is a strong income argument for IG credit. Despite the recent bond rally, IG yields are still much higher than the average of recent decades and, with rates unlikely to fall all the way to the previous decade's lows, the income segment should continue to attract investors. Agency MBS yields also offer attractive income compared to Treasurys yet, with prepayment risks now starting to rise as investors tentatively take advantage of the drop in yields, IG credit is more attractive.

Across the credit spectrum, high-quality bonds outperformed low-quality bonds during 4Q mainly due to duration impact. While credit markets currently appear to be inattentive to the risks of an economic downturn, historically, high-quality credit outperforms during even milder economic downturns, with relative total returns favoring U.S. investment grade over high yield issues.

Higher-quality spreads are historically tight, yet fundamentals continue to look robust. In even a mild economic slowdown, higher quality should outperform lower quality credit.

U.S. investment grade and high yield spreads

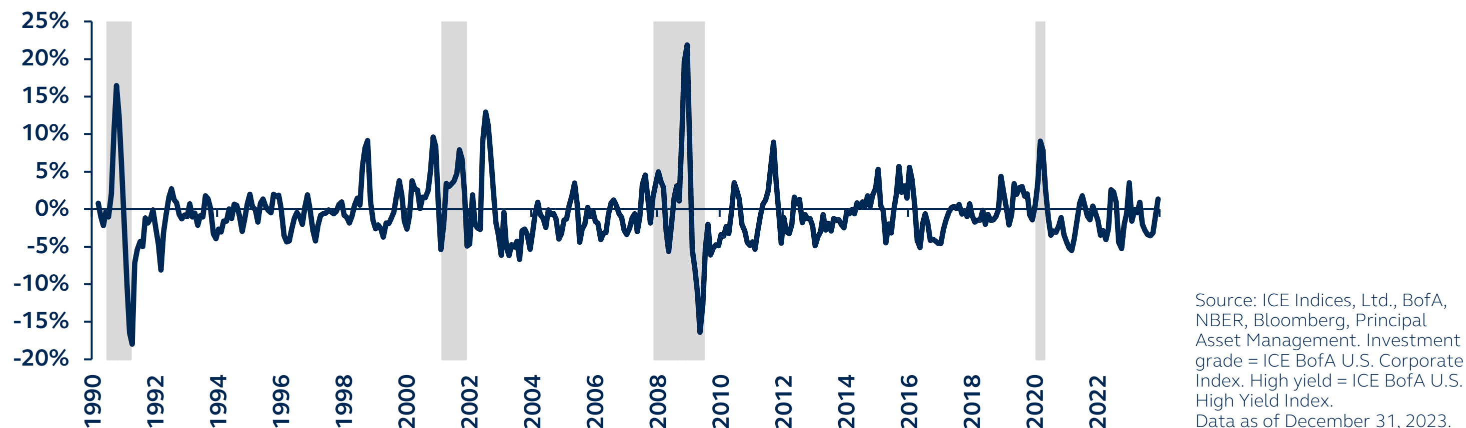
Option-adjusted spread, 1998–present



Source: Bloomberg, Principal Asset Management. Investment grade = Bloomberg U.S. Corporate Index. U.S. high yield = Bloomberg US High-Yield Corporate Bond Index. Data as of December 31, 2023.

U.S. investment grade vs. high yield performance

3-month relative total return performance, recessions are shaded, 1990–present



Source: ICE Indices, Ltd., BofA, NBER, Bloomberg, Principal Asset Management. Investment grade = ICE BofA U.S. Corporate Index. High yield = ICE BofA U.S. High Yield Index.
Data as of December 31, 2023.

INDEX DESCRIPTIONS

Bloomberg Commodity Total Return index is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13-week (3 Month) U.S. Treasury Bills.

Bloomberg Global Aggregate Bond Index comprises global investment grade debt including treasuries, government-related, corporate, and securitized fixed-rate bonds from developed and emerging market issuers. There are four regional aggregate benchmarks that largely comprise the Global Aggregate Index: the US Aggregate, the Pan-European Aggregate, the Asian-Pacific Aggregate, and the Canadian Aggregate Indices. The Index also includes Eurodollar, Euro-Yen, and 144A Index-eligible securities and debt from other local currency markets not tracked by regional aggregate benchmarks.

Bloomberg U.S. Agency Bond Index is composed of agency securities that are publicly issued by U.S. government agencies, and corporate and non-U.S. debt guaranteed by the U.S. government.

Bloomberg U.S. Aggregate Bond Index is the most widely followed broad market U.S. bond index. It measures the investment grade, US dollar-denominated, fixed-rate taxable bond market.

Bloomberg U.S. High-Yield Corporate Bond Index is a rules-based, market-value-weighted index engineered to measure publicly issued non-investment grade USD fixed-rate, taxable and corporate bonds.

Bloomberg U.S. Corp High Yield 2% Issuer Capped Index is an unmanaged index comprised of fixed rate, non-investment grade debt securities that are dollar denominated. The index limits the maximum exposure to any one issuer to 2%.

Bloomberg U.S. Corporate Investment Grade Index includes publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity and quality requirements. To qualify, bonds must be SEC-registered. The corporate sectors are industrial, utility and finance, which include both U.S. and non-U.S. corporations.

Bloomberg U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint. STRIPS are excluded from the index because their inclusion would result in double-counting.

FTSE Global Core Infrastructure 50/50 Total Return Index comprises securities in developed countries which provide exposure to core infrastructure businesses, namely transportation, energy and telecommunications, as defined by FTSE's International Benchmark Classification.

The FTSE Nareit All Equity REITs Index is a free-float adjusted, market capitalization-weighted index of U.S. equity REITs.
HFRI 500 Fund Weighted Composite Index is a global, equal-weighted index of the largest hedge funds that report to the HFR Database which are open to new investments and offer quarterly liquidity or better.

ICE BofA Emerging Markets Corporate Plus Index, which tracks the performance of US dollar (USD) and Euro denominated emerging markets non-sovereign debt publicly issued within the major domestic and Eurobond markets.

ICE BofA MOVE index, or Merrill Lynch Option Volatility Estimate Index, is a crucial gauge of interest rate volatility in the U.S. Treasury market.

ICE BofA U.S. High Yield Index tracks the performance of US dollar denominated below investment grade rated corporate debt publicly issued in the US domestic market.

ICE BofA U.S. Investment Grade Institutional Capital Securities Index tracks the performance of US dollar denominated investment grade hybrid capital corporate and preferred securities publicly issued in the US domestic market.

ICE BofA U.S. Corporate Index consists of investment-grade corporate bonds that have a remaining maturity of greater than or equal to one year and have $250 million or more of outstanding face value.

J.P. Morgan Emerging Markets Bond Index Global Core tracks liquid, U.S. dollar emerging market fixed and floating-rate debt instruments issued by sovereign and quasi sovereign entities.

ISM manufacturing index is a leading economic indicator that measures the growth in the manufacturing sector in the United States.

MSCI ACWI Index includes large and mid cap stocks across developed and emerging market countries.

MSCI ACWI Utilities Index captures large and mid cap representation across 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries*. All securities in the index are classified in the Utilities sector as per the Global Industry Classification Standard (GICS®).

Market indices have been provided for comparison purposes only. They are unmanaged and do not reflect any fees or expenses. Individuals cannot invest directly in an index.

INDEX DESCRIPTIONS

MSCI Brazil Index is designed to measure the performance of the large and mid cap segments of the Brazilian market.

MSCI China Index captures large and mid cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs).

MSCI EAFE Index is listed for foreign stock funds (EAFE refers to Europe, Australasia, and Far East). Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes.

MSCI Emerging Markets Index consists of large and mid cap companies across 24 countries and represents 10% of the world market capitalization. The index covers approximately 85% of the free float-adjusted market capitalization in each country in each of the 24 countries.

MSCI Europe Index captures large and mid cap representation across 15 Developed Markets (DM) countries in Europe.

MSCI Europe Banks Index is composed of large and mid cap stocks across 15 Developed Markets countries in Europe. All securities in the index are classified in the Banks industry group (within the Financials sector) according to the Global Industry Classification Standard (GICS®).

MSCI Germany Index is designed to measure the performance of the large and mid cap segments of the German market.

MSCI India Index is designed to measure the performance of the large and mid cap segments of the Indian market.

MSCI Japan Index is designed to measure the performance of the large and mid cap segments of the Japanese market.

MSCI United Kingdom Index is designed to measure the performance of the large and mid cap segments of the UK market.

MSCI USA Growth Index captures large and mid cap securities exhibiting overall growth style characteristics in the U.S. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

MSCI USA Index is a market capitalization weighted index designed to measure the performance of equity securities in the top 85% by market capitalization of equity securities listed on stock exchanges in the United States.

MSCI USA Large Cap Index is designed to measure the performance of the large cap segments of the U.S. market.

MSCI USA Mid Cap Index is designed to measure the performance of the mid cap segments of the U.S. market.

MSCI USA Quality Index aims to capture the performance of quality growth stocks by identifying stocks with high quality scores based on three main fundamental variables: high return on equity (ROE), stable year-over-year earnings growth and low financial leverage. The MSCI Quality Indexes complement existing MSCI Factor Indexes and can provide an effective diversification role in a portfolio of factor strategies.

MSCI USA Small Cap Index is designed to measure the performance of the small cap segment of the U.S. equity market.

MSCI USA Value Index captures large and mid cap U.S. securities exhibiting overall value style characteristics. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

Russell 2000 Index is a small-cap U.S. stock market index that makes up the smallest 2,000 stocks in the Russell 3000 Index.

Standard & Poor's 500 Index is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market.

U.S. dollar index (USDX) is a measure of the value of the U.S. dollar relative to a basket of foreign currencies.

Market indices have been provided for comparison purposes only. They are unmanaged and do not reflect any fees or expenses. Individuals cannot invest directly in an index.

Risk considerations

Investing involves risk, including possible loss of principal. Past performance is no guarantee of future results. Asset allocation and diversification do not ensure a profit or protect against a loss. Equity investments involve greater risk, including higher volatility, than fixed-income investments. Fixed-income investments are subject to interest rate risk; as interest rates rise their value will decline. International and global investing involves greater risks such as currency fluctuations, political/social instability and differing accounting standards. Potential investors should be aware of the risks inherent to owning and investing in real estate, including value fluctuations, capital market pricing volatility, liquidity risks, leverage, credit risk, occupancy risk and legal risk. Non-investment grade securities offer a potentially higher yield but carry a greater degree of risk. Risks of preferred securities differ from risks inherent in other investments. In particular, in a bankruptcy preferred securities are senior to common stock but subordinate to other corporate debt. Emerging market debt may be subject to heightened default and liquidity risk. Risk is magnified in emerging markets, which may lack established legal, political, business, or social structures to support securities markets. Small and mid-cap stocks may have additional risks including greater price volatility. Treasury inflation-protected securities (TIPS) are a type of Treasury security issued by the U.S. government. TIPS are indexed to inflation in order to help investors from a decline in the purchasing power of their money. As inflation rises, rather than their yield increasing, TIPS instead adjust in price (principal amount) in order to maintain their real value. Inflation and other economic cycles and conditions are difficult to predict and there Is no guarantee that any inflation mitigation/protection strategy will be successful. Contingent Capitals Securities may have substantially greater risk than other securities in times of financial stress. An issuer or regulator's decision to write down, write off or convert a CoCo may result in complete loss on an investment. Real assets include but not limited to precious metals, commodities, real estate, land, equipment, infrastructure, and natural resources. Each real asset is subject to its own unique investment risk and should be independently evaluated before investing. As an asset class, real assets are less developed, more illiquid, and less transparent compared to traditional asset classes.

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