Principal Asset Management℠

Economic and market review

Principal Asset Allocation Viewpoints

As of Sept. 30, 2022

Morley
CAPITAL MANAGEMENT

Morley Capital Management (Morley), an investment management team within Principal Global Fixed Income.

Key themes for Q4 2022

- **A synchronized global economic downturn is underway.**
  The global economy has been hit by several headwinds, almost all of them leading back to higher inflation. Europe is likely already in recession, the U.S. will likely enter recession in Q2 2023, while China struggles to make recovery headway.

- **Global inflation will only decline at a painfully slow pace.**
  Global inflation appears to have peaked, but price pressures are proving very broad-based and sticky, particularly in the United States. Deliberate central bank action to create labor market slack and weaken demand is needed to lower inflation.

- **Global central bank tightening has further to go.**
  Federal Reserve (Fed) policy rates are set to hit 4.75%–5% in 2023 and likely stay at that level for most of the year. Other central banks are also tightening but the Fed is relatively more hawkish, putting upward pressure on the U.S. dollar.

- **Fixed income investors should seek safety and high quality.**
  Rising recession risk will put downward pressure on U.S. Treasury yields and spur further spread widening, thereby taking the shine off short duration, low quality assets.

Both bonds and equities delivered negative returns year to date

September was the largest one-month loss for the S&P 500 Index since March of 2020

	3-months	YTD	1-year	3-year	5-year	10-year
Fixed Income						
ICE BofA U.S. Treasury Bill 3-month Index	0.46%	0.61%	0.62%	0.59%	1.15%	0.68%
Bloomberg Aggregate Bond Index	-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%
Bloomberg U.S. Corp High Yld 2% Issuer Capped Index	-0.64%	-14.73%	-14.15%	-0.47%	1.56%	3.94%
Bloomberg Long-Term Govt/Credit Index	-9.03%	-28.94%	-27.41%	-7.35%	-1.17%	1.35%
U.S. Equities						
Russell 1000 Value Index	-5.62%	-17.75%	-11.36%	4.36%	5.29%	9.17%
S&P 500 Index	-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%
Russell 1000 Growth Index	-3.60%	-30.66%	-22.59%	10.67%	12.17%	13.70%
Russell Midcap Index	-3.44%	-24.27%	-19.39%	5.19%	6.48%	10.30%
Russell 2000 Index	-2.19%	-25.10%	-23.50%	4.29%	3.55%	8.55%
Non-U.S. Equities						
MSCI EAFE NTR Index	-9.36%	-27.09%	-25.13%	-1.83%	-0.84%	3.67%
MSCI ACWI ex-USA Index	-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	3.01%
MSCI Emerging Markets Index	-11.57%	-27.16%	-28.11%	-2.07%	-1.81%	1.05%
Other						
MSCI U.S. REIT Index	-10.28%	-28.86%	-17.46%	-3.08%	1.72%	4.92%
S&P GSCI® Index	-10.31%	21.80%	23.64%	12.19%	7.75%	-3.95%
U.S. Dollar Index	6.13%	13.98%	14.79%	3.14%	2.88%	3.15%

As of 09/30/2022
Source: FactSet. 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.

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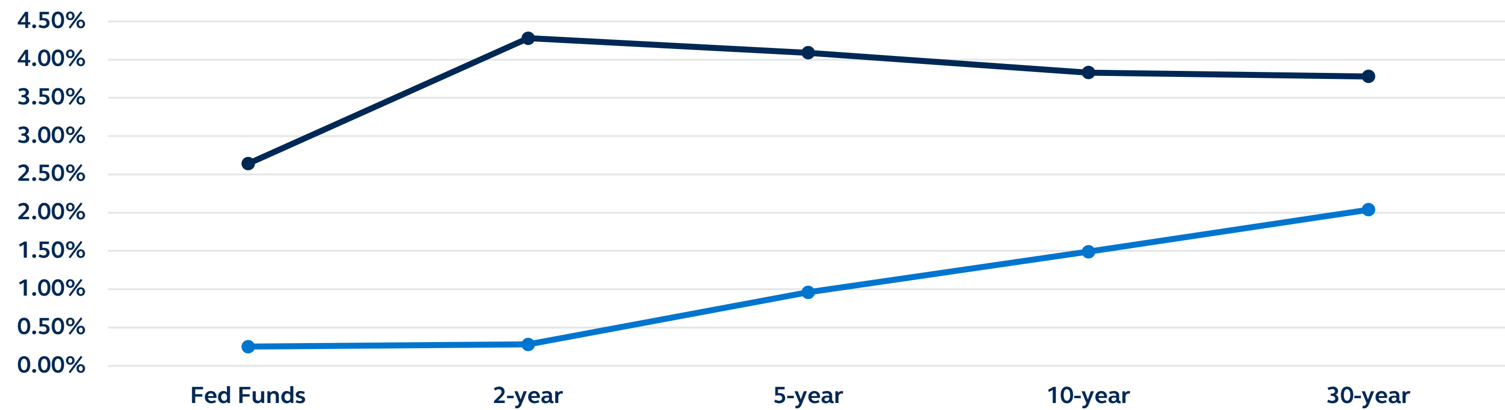
The history of interest rates

How have interest rates changed in recent years?

	Sept. 30, 2019	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
2-year	1.62	0.13	0.28	4.28
5-year	1.54	0.28	0.96	4.09
10-year	1.66	0.68	1.49	3.83
2- to 10-year spread	0.04	0.56	1.21	-0.45
30-year	2.11	1.46	2.04	3.78



	Fed Funds	2-year	5-year	10-year	30-year
Sept. 30, 2022	2.64%	4.28%	4.09%	3.83%	3.78%
Sept. 30, 2021	0.25%	0.28%	0.96%	1.49%	2.04%

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

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ASSET CLASS RETURNS AS OF SEPT. 30, 2022

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Best	Government Treasury 29.93%	Emerging Markets 18.23%	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 13.57%
	Real Estate 9.24%	Mid Cap 17.88%	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 0.62%
	Intermediate Bond 7.84%	Real Estate 17.59%	Large Cap 32.39%	Large Cap 13.69%	Asset Allocation 1.28%	High Yield 17.34%	Large Cap 21.83%	Intl Bonds -1.66%	Real Estate 25.76%	Emerging Markets 18.31 %	Commodities 27.11%	High Yield -14.58%
	Intl Bonds 5.93%	Intl Stocks 17.32%	Intl Stocks 22.78%	Asset Allocation 10.62%	Intermediate Bond 0.55%	Large Cap 11.96%	Mid Cap 16.24%	Government Treasury -1.84%	Small Cap 25.53%	Government Treasury 17.70%	Mid Cap 24.76%	Intermediate Bond -14.61%
	Asset Allocation 4.69%	Small Cap 16.35%	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%	Asset Allocation -20.10%
	High Yield 4.50%	Large Cap 16.00%	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%	Mid Cap -21.52%
	Large Cap 2.11%	High Yield 15.44%	Real Estate 1.86%	Small Cap 4.89%	Government Treasury -1.21%	Asset Allocation 8.31%	Intl Bonds 9.92%	Large Cap -4.38%	Emerging Markets 18.44 %	Intl Bonds 10.52%	Intl Stocks 11.26%	Large Cap -23.87%
	Cash 0.06%	Asset Allocation 11.31%	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%	Small Cap -25.10%
	Mid Cap -1.73%	Intermediate Bond 4.21%	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 -27.01%
	Small Cap -4.18%	Government Treasury 3.56%	Emerging Markets -2.60%	Emerging Markets -2.19%	High Yield -4.55%	Intl Bonds 1.86%	Real Estate 4.18%	Mid Cap -11.08%	Intermediate Bond 8.72%	High Yield 6.20%	Intermediate Bond -1.54%	Intl Stocks -27.09%
	Intl Stocks -12.14%	Intl Bonds 0.85%	Intl Bonds -5.06%	Intl Bonds -2.53%	Intl Bonds -4.84%	Government Treasury 1.33%	Intermediate Bond 3.54%	Commodities -11.25%	Commodities 7.69%	Cash 0.58%	Emerging Markets -2.54%	Emerging Markets -27.16%
	Commodities -13.32%	Cash 0.09%	Commodities -9.52%	Intl Stocks -4.90%	Emerging Markets -14.92%	Intl Stocks 1.00%	Commodities 1.70%	Intl Stocks -13.79%	Intl Bonds 5.23%	Commodities -3.12%	Government Treasury -4.65%	Government Treasury -28.84%
Worst	Emerging Markets -18.42%	Commodities -1.06%	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 -9.51%	Real Estate -29.66%

The returns reflect performance of certain indexes as defined. 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-Bloomberg Long Treasury, Commodities-Bloomberg Commodity Idx, Intermediate Bond-Bloomberg 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% Bloomberg 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**

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A synchronized global economic downturn

The global economy has been buffeted by a multitude of headwinds and is now in a synchronised downturn. While this is a considerably less urgent state of distress than during the 2020 COVID-19 outbreak, the post-pandemic inflationary world has brought significant challenges.

The U.S. economy is decelerating under tighter financial conditions as the Federal Reserve raises policy rates aggressively to contain inflation—but it is not yet in recession. By contrast, the Euro area economy is likely already contracting as soaring natural gas prices create the most severe economic conditions in several decades. Since early-2021, European natural gas prices have risen almost 760%. By contrast, they have risen "just" 240% in the U.S.

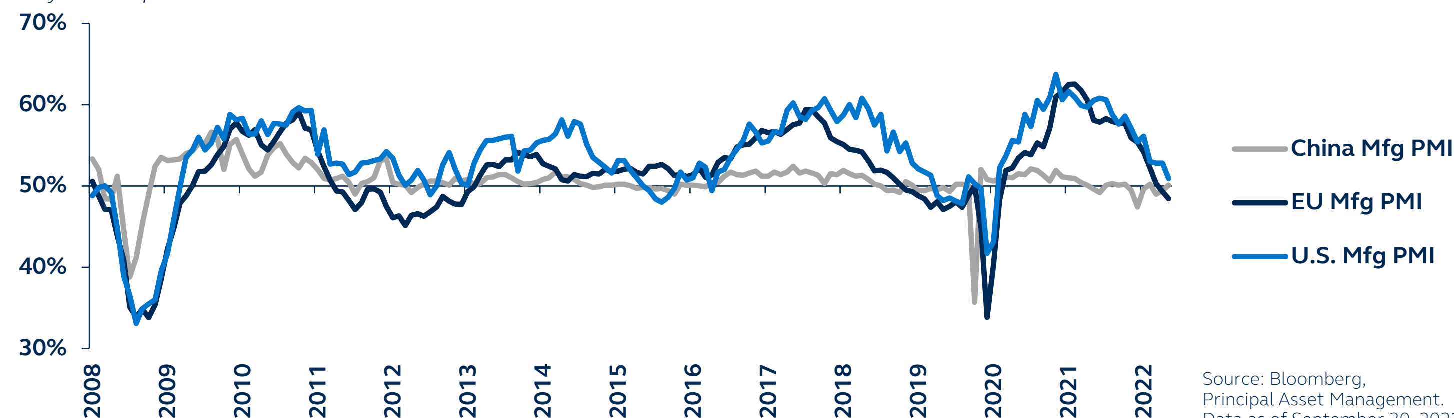
China, typically the largest contributor to global growth, continues to struggle against COVID-19 lockdowns and real estate sector weakness. Emerging market economies are being confronted by multi-decade highs in the U.S. dollar.

A global recession may be skirted, but not without a few key economic regions falling victim to the severe headwinds confronting the global economy.

Global growth is struggling under the pressure of tighter financial conditions and elevated energy costs, and no economic region is immune to these challenges.

Global manufacturing PMIs

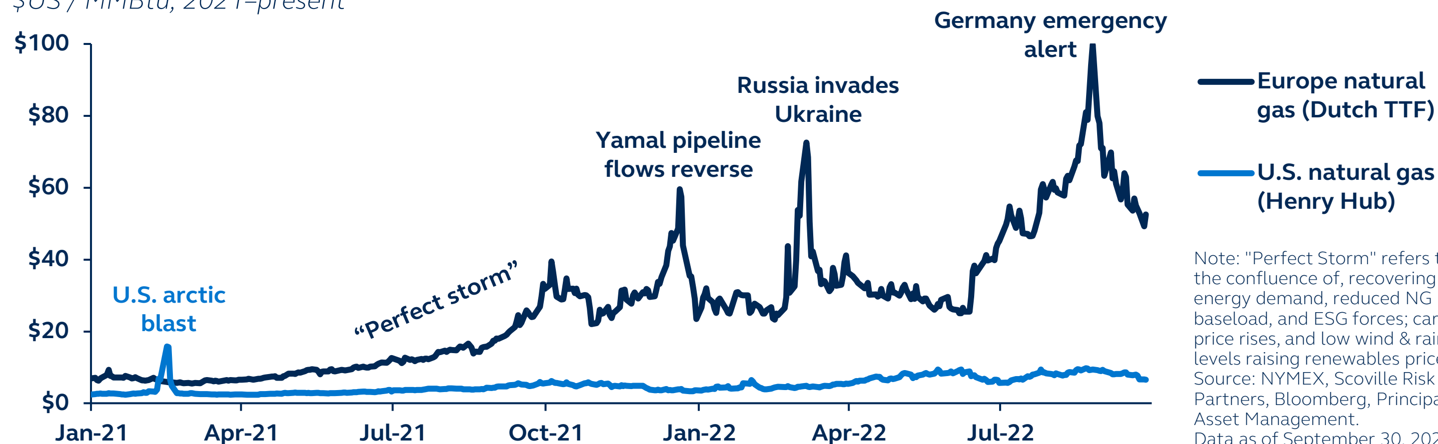
May 2008–present



Source: Bloomberg, Principal Asset Management. Data as of September 30, 2022.

Europe and U.S. natural gas prices

$US / MMBtu, 2021–present



Note: "Perfect Storm" refers to the confluence of, recovering energy demand, reduced NG baseload, and ESG forces; carbon price rises, and low wind & rain levels raising renewables prices. Source: NYMEX, Scoville Risk Partners, Bloomberg, Principal Asset Management. Data as of September 30, 2022.

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High inflation is sneaky hard to beat

Inflation continues to be at the heart of almost all headwinds confronting the global economy. In Europe, the threat of further energy price rises implies that the inflation peak may still be several months away. Emerging market price pressures have eased, but U.S. dollar strength renders their inflation challenges particularly difficult to conquer.

U.S. inflation appears to have peaked, but continues to sit near multi-decade highs, with price pressures proving to be very broad-based and, in many segments, extremely persistent. In particular, shelter will be an ongoing headache for the Fed for several more months. Worth a third of the headline CPI index and about 40% of core CPI, shelter is a sticky and lagging component.

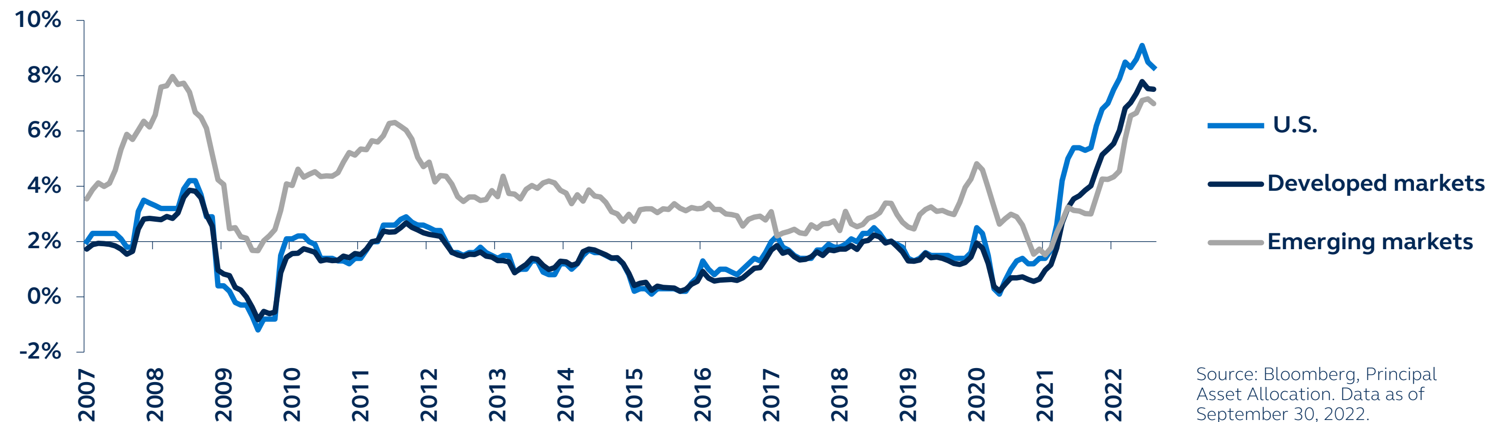
While supply bottlenecks and higher energy prices initially drove the surge in inflation, those pressures have now shifted to the demand and services side of the economy. This needs deliberate attention from the Fed if inflation is to move back towards more reasonable levels and avoid high wage expectations becoming embedded.

With other economies sharing a similar inflation picture, further global monetary tightening is highly likely.

Global inflation has likely peaked, but price pressures have broadened into stickier segments of the economy and will only fade with determined central bank action.

PAA GDP-weighted inflation

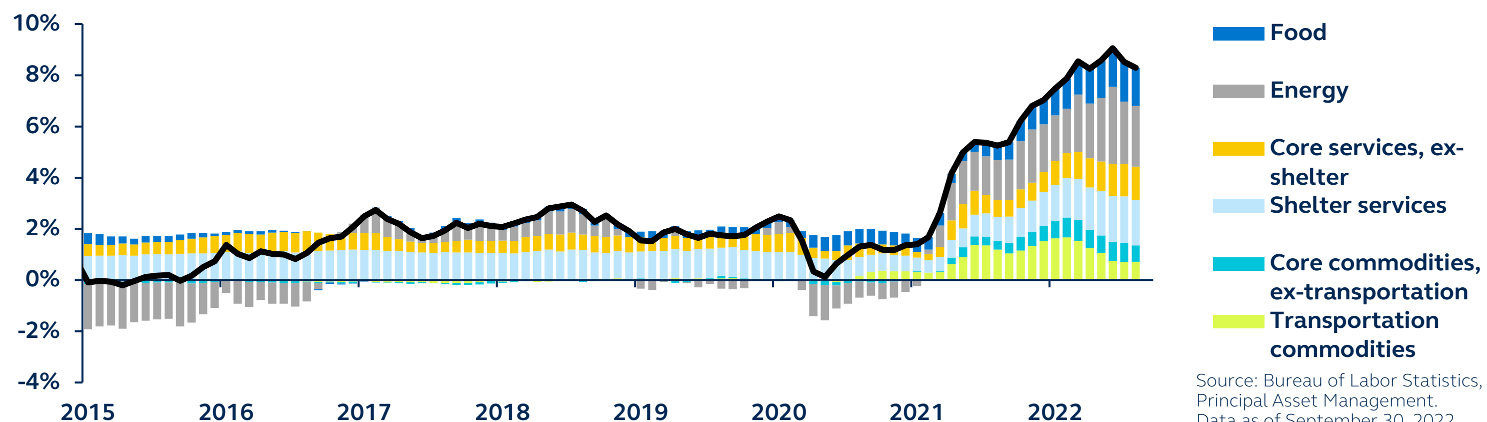
January 2007 – present



Source: Bloomberg, Principal Asset Allocation. Data as of September 30, 2022.

Contribution to headline U.S. inflation

Year-over-year, 2015–present



Source: Bureau of Labor Statistics, Principal Asset Management. Data as of September 30, 2022.

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U.S. labor market's strength will be its downfall

Alongside strong inflation numbers, U.S. economic data has proven to be fairly resilient. Nowhere is this more evident than in the labor market. While there has been some cooling, monthly jobs growth continues to sit at levels historically consistent with extremely strong economic growth and falling unemployment.

Employers report considerable difficulty in filling available positions. Job openings have only fallen modestly, and quit rates, a measure of employee confidence, remains very elevated. Unfortunately, this strength is also synonymous with wage pressures. The employment cost index, the Fed's preferred measures of wages, is at a series high.

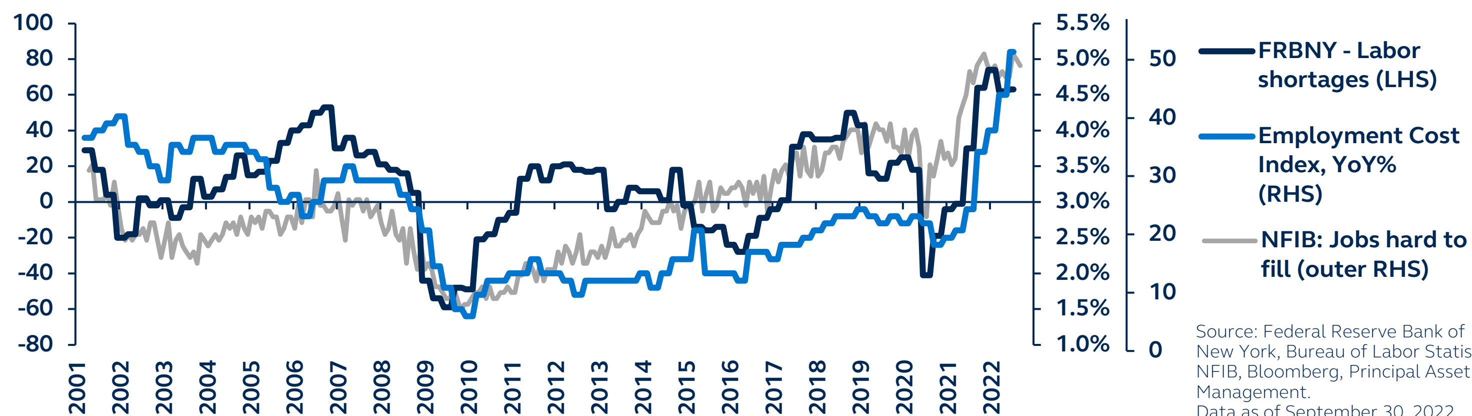
In order to force a meaningful loosening in labor market conditions, the Fed will need to engineer a slowdown, delivering further sizeable rate hikes. Doing so will result in a decline in job vacancies and a cooling in wage pressures.

The reality, however, is that a substantial decline in job vacancies has never occurred without a sharp increase in unemployment. And, in U.S. economic history, every time there has been a 0.5% increase in the unemployment rate in a 12-month period, it has been accompanied by recession.

The U.S. labor market remains very strong, but this is adding to wage pressures. The Fed needs to engineer an economic slowdown to loosen conditions and relieve pressures.

Labor shortages and wage costs

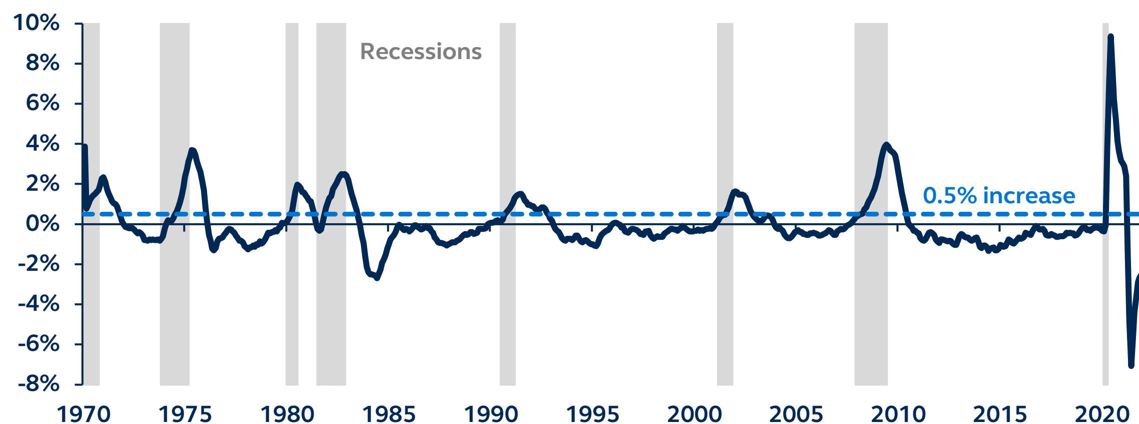
2001–present



Source: Federal Reserve Bank of New York, Bureau of Labor Statistics, NFIB, Bloomberg, Principal Asset Management.
Data as of September 30, 2022.

Sahm rule: Unemployment and recession

12-month change in 3-month rolling average of U.S. unemployment rate, recessions are shaded, 1970–present



Note: The Sahm Rule (created by former Fed economist Claudia Sahm) stipulates that recession occurs when the three-month moving average of the unemployment rate rises by at least 0.5% relative to its low during the previous 12-month period.
Source: Bureau of Labor Statistics, National Bureau of Economic Research, Principal Asset Management.
Data as of September 30, 2022.

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Policy rates: Higher for longer

The Fed's current tightening cycle is the most aggressive since the early 1980s and, with rate increases yielding few results thus far, investors need to brace for additional intensified hiking. Market pricing for Fed policy has soared, expecting rates to peak at 4.5%—almost 120 basis points (bps) higher than what they were anticipating at the end of July. Our own forecasts are more hawkish still, with rates peaking at 4.75% in Q1 2023.

The Fed has acknowledged—and accepted—that further hikes will bring economic pain. As such, it will not pivot in response to rising recession risk, and policy rates are unlikely to be cut until end-2023 at the earliest.

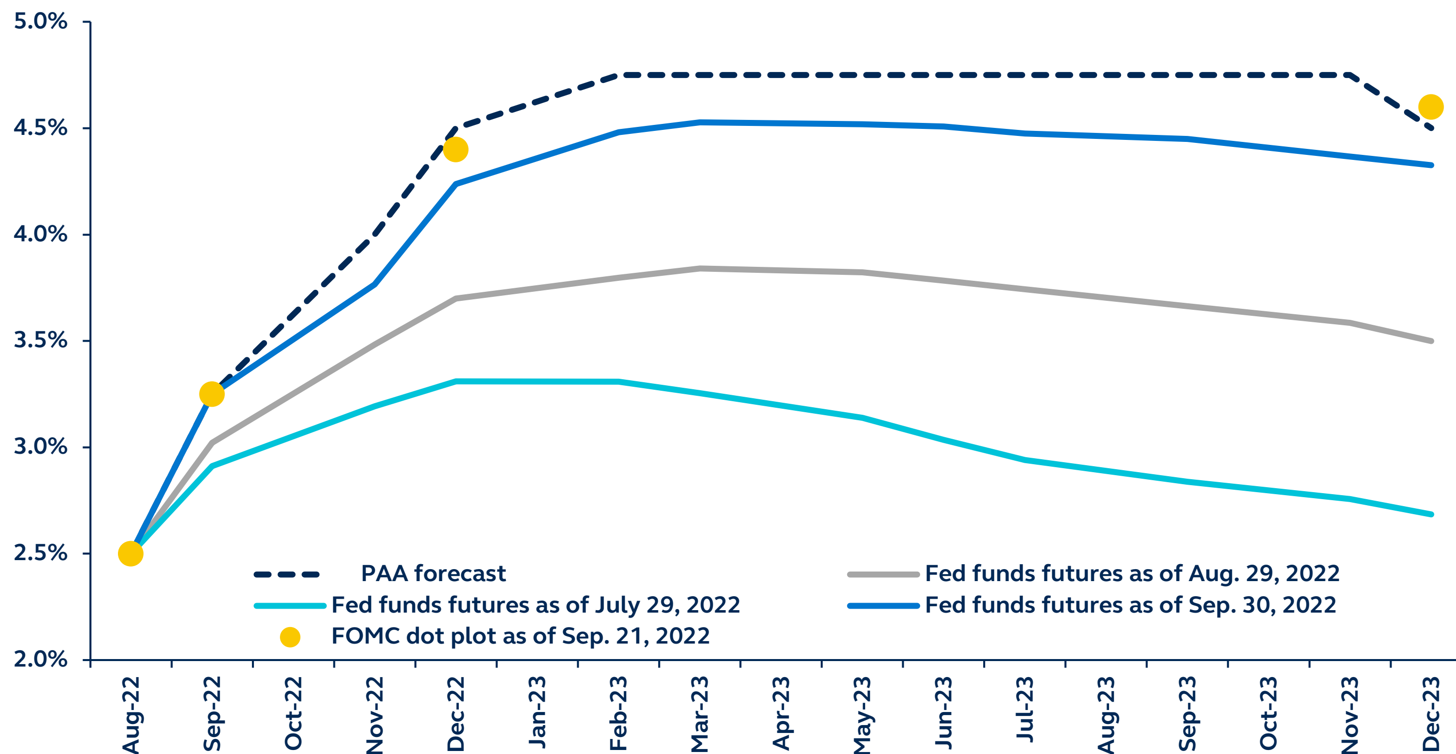
This is also one of the most aggressive global tightening episodes in history, with 85% of global central banks in tightening mode. Many developed market central banks have resorted to 75bps hikes despite oncoming slowdowns—a testament to the enormity of their inflation challenges.

By contrast, the Bank of Japan continues to keep policy rates on hold, while the People's Bank of China is stepping up its policy stimulus actions. However, U.S. dollar strength is making it increasingly difficult for these central banks to continue defending their more dovish policies.

The Fed tightening cycle is the most aggressive since the early 1980s. Policy rates are set to approach 4.75% next year and are unlikely to be cut until end-2023 at the earliest.

Implied fed funds target rate and market expectations

FOMC member projections & fed funds futures



Source: Bloomberg, Federal Reserve, Principal Asset Allocation. Data as of September 30, 2022.

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U.S. dollar: My currency, your problem

The uber-hawkish Fed is supercharging the U.S. dollar, pushing it to a 20-year high. This is transmitting significant negative pressures to the rest of the world, and prompting global central action which is designed to resist currency depreciation and imported inflation—in turn increasing the risk of overtightening on a global scale.

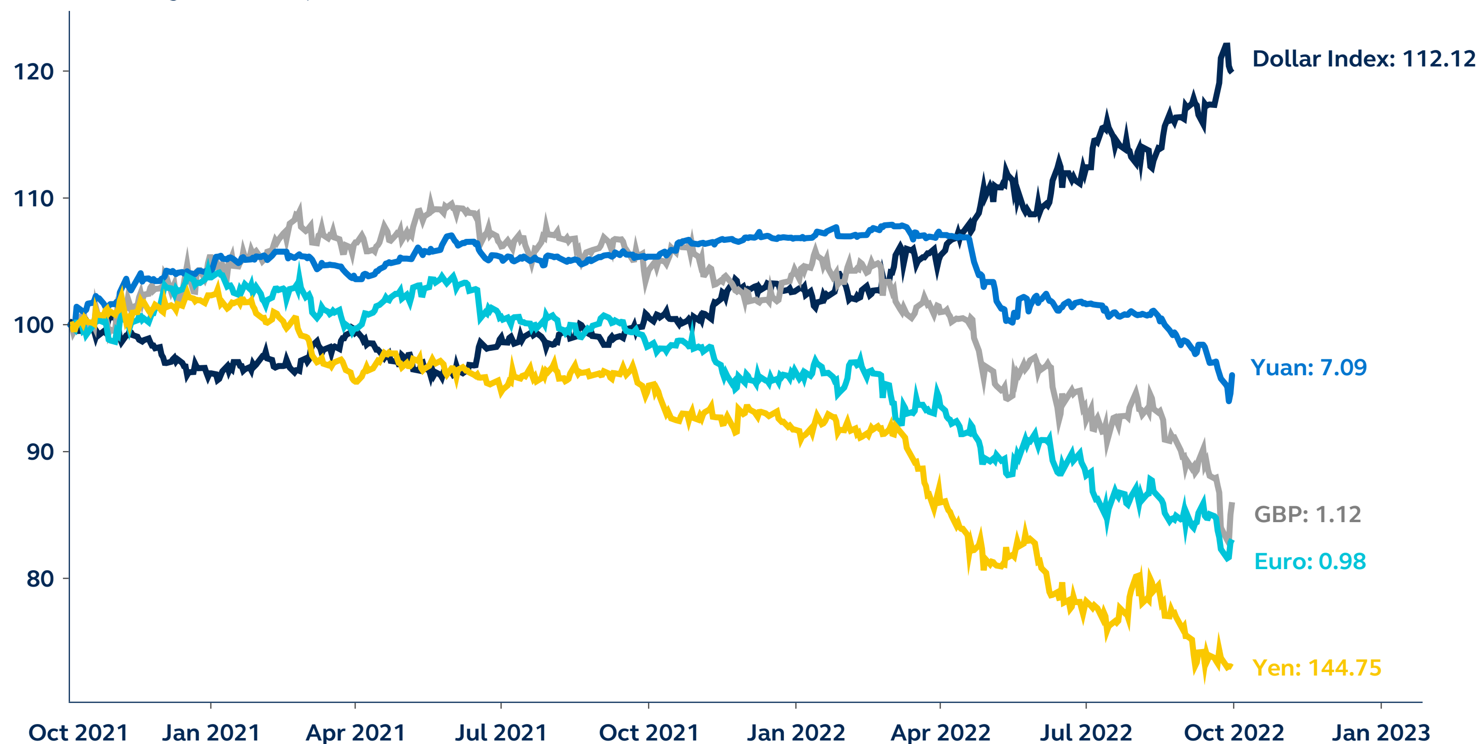
For central banks such as the Bank of Japan and People's Bank of China, dollar strength is potentially compromising their intentions to keep monetary policy loose. For EM central banks with high dollar denominated debt, the greenback rally presents a difficult challenge, while for commodity importers, dollar strength translates into even higher prices. For the UK, bad domestic policy is colliding with the strong dollar to create an environment which will severely test the British economy.

The dollar's valuation now looks stretched—but the drivers of its strength are not yet exhausted. Once U.S. growth eventually rolls over and Fed policy rates finally peak, the U.S. dollar will likely weaken, alleviating pressures on global currencies. Yet, this process may take several more months, severely straining the global economy.

The U.S. dollar's strength is beginning to cause real stress across the global economy, but U.S. dollar weakness may only come once the Fed stops hiking.

Major currencies

Relative change over the past 24-months, Rebased to 100 on October 1, 2020



Source: Clearnomics, Refinitiv, Principal Asset Management. Data as of September 30, 2022.

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Financial conditions: Still further to tighten

With global central banks hiking rates almost en masse this year, global financial conditions have already tightened considerably, creating a hostile backdrop for risk assets. In the U.S., September marked the third steepest monthly tightening in financial conditions since the early 2000s—outdone only by conditions during COVID and the GFC.

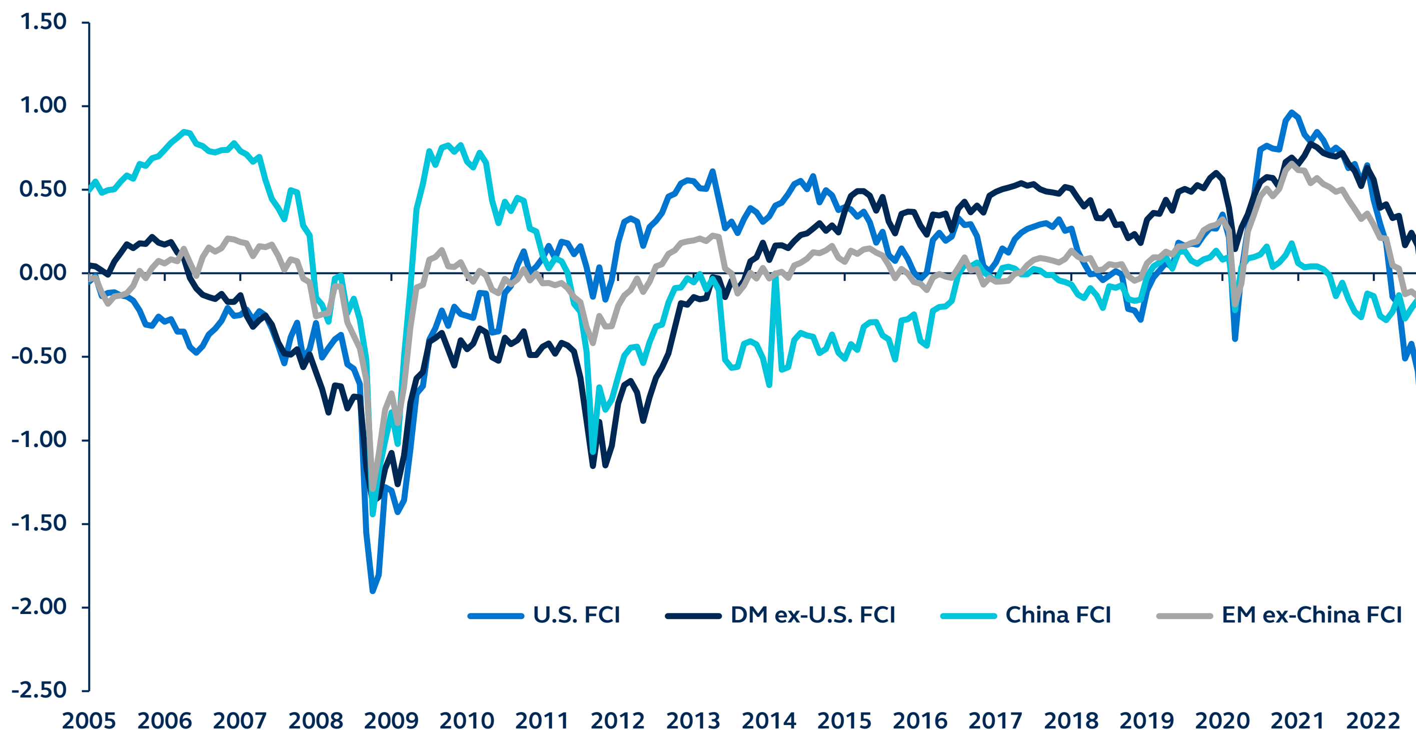
The environment will only become even more unhospitable as we move into Q4 and additional aggressive rate hikes are introduced in a bid to control inflation.

Furthermore, as the full cumulative effects of rate hikes only seep into the real economy with a lag, there is already a lot of tightening in the pipeline that will weaken growth in 2023. We expect the U.S. economy to enter recession in Q2 2023 as consumer and corporate sentiment deteriorate further and business investment turns negative. In Europe, the European Central Bank's (ECB) hawkish resolve, coupled with a cost of living crisis, creates the perfect breeding ground for an imminent recession. In China, stimulus measures should help ensure a stabilization of growth, but at a depressed level that will test its key trading partners. Emerging markets will struggle through the U.S. dollar strength, with inflation and rising interest rates challenging their economies.

Tightening financial conditions have created a hostile backdrop for risk assets, which only become more inhospitable as recessionary conditions become widespread.

Developing market and emerging market financial conditions

PGA Financial Conditions Index (FCI), Z-score, January 2005–present



Source: Bloomberg, Principal Asset Allocation. Data as of September 30, 2022.

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Bond markets bear the brunt of Fed hawkishness

Bond markets are alert to the Fed's increasingly hawkish tune and suffered a very sharp rout during September. 10-year Treasury yields almost hit 4% in September—the highest since 2010—before dropping back to around 3.8% at the end of the quarter. Two-year Treasury yields, which are particularly sensitive to the Fed policy outlook, rose above 4% for the first time since 2007. Not only does this mean that the 2s10s curve is deeply inverted and therefore signalling recession, the spike in yields has upended the TINA dynamic ("there is no alternative" to equities).

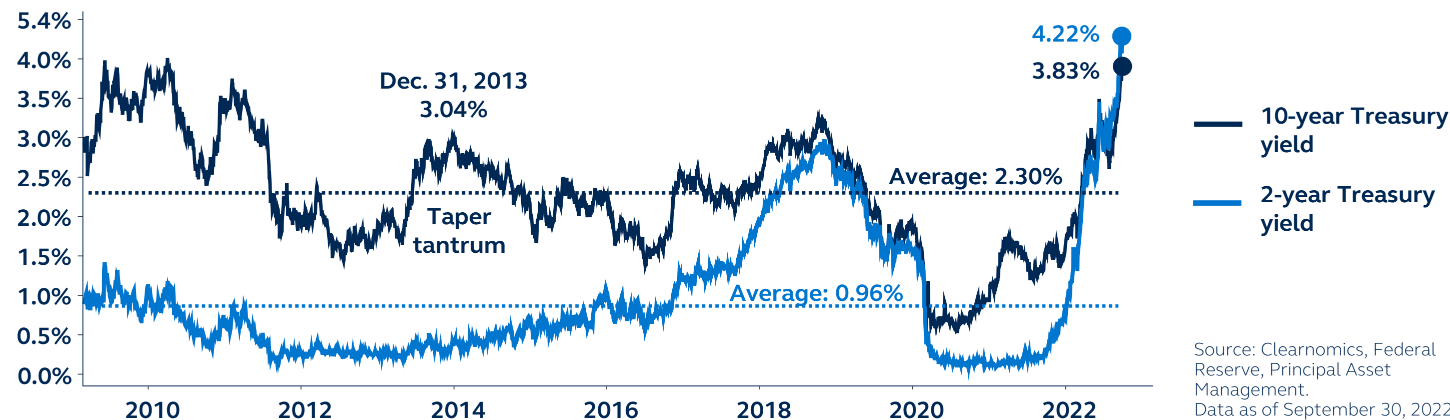
Indeed, when interest rates were sitting below 1%, as they were after the Great Financial Crisis and after the 2020 pandemic, it made perfect sense for investors to allocate to equity markets. Dividend yields significantly exceeded Treasury yields.

But this year, after several Fed interest-rate increases, Treasury yields have soared above equity dividend yields. With the market narrative now shifting from inflation to recession, and post the sharp repricing higher in yields, bonds look relatively more attractive. The TINA argument to own equities is increasingly challenged.

Bond yields have soared to their highest levels since before the GFC as markets re-priced Fed expectations, upending the TINA argument.

Interest rates

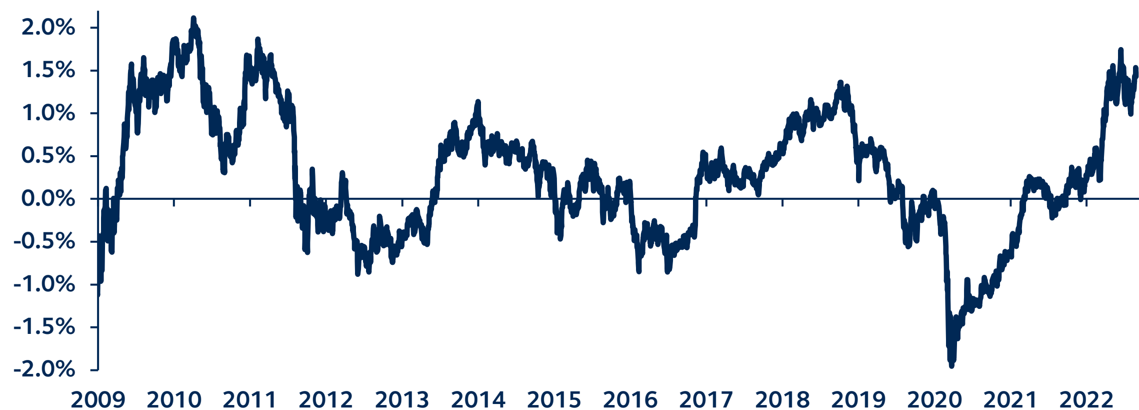
10-year and 2-year U.S. Treasury yields, 2010–present



Source: Clearnomics, Federal Reserve, Principal Asset Management.
Data as of September 30, 2022.

U.S. 10-year Treasury yield minus S&P 500 estimated dividend yield

Spread percentage, 2009–present



Source: Federal Reserve, S&P Dow Jones Indices, Bloomberg, Principal Asset Management.
Data as of September 30, 2022.

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Searching for a good hiding place

For now, with the market still digesting the reality of the Fed's policy intentions, and economic growth broadly resilient, U.S Treasury yields may remain elevated.

Looking forward, however, rising recession risk, coupled with expectations for eventual Fed policy rate cuts as inflation pressures fade, should push the overall Treasury yield curve lower, but particularly the long-end. U.S. Treasurys are usually a good place to hide out while economic risks increase.

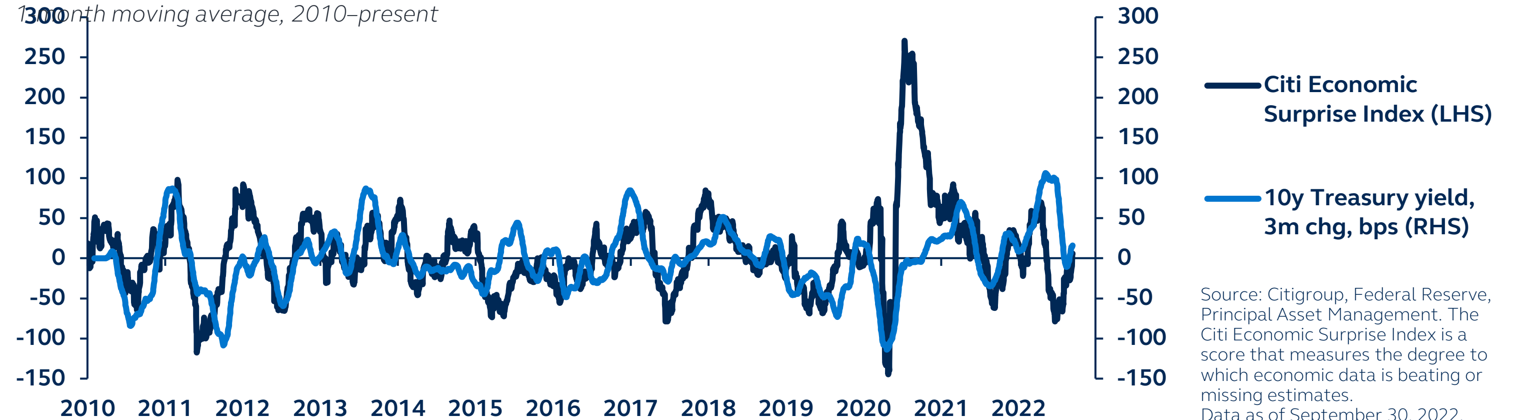
Also within core fixed income, agency securitized debt presents a compelling opportunity for investors that are seeking risk mitigation. It is true that the MBS market has underperformed so far this year, but this was largely due to a challenging technical landscape and concerns that the Fed's quantitative tightening would imply active MBS sales.

This underperformance now means that agency MBS valuations are particularly attractive, while the possibility of active Fed sales have been all but dismissed by Chair Powell, unwinding some of the risks. Crucially too, agency MBS has historically shown a greater ability to withstand deteriorating growth than other credit segments.

Treasurys should perform well as recession approaches. Securitized debt typically show a greater ability to withstand weakening growth than other credit segments

U.S. economic backdrop and Treasury yields

1 month moving average, 2010–present



Source: Citigroup, Federal Reserve, Principal Asset Management. The Citi Economic Surprise Index is a score that measures the degree to which economic data is beating or missing estimates.
Data as of September 30, 2022.

Investment grade minus agency mortgage-backed securities spread

Option-adjusted-spread, 2003–present

Source: Bloomberg, Principal Asset Management.
Data as of September 30, 2022.

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Credit spreads are still bracing for a full unwind

Investment grade credit spreads likely face significant further widening as economic growth weakens.

Banks are raising credit standards, suggesting increased vigilance by credit underwriters as the economic outlook deteriorates. This is a signal of rising risk aversion which will likely flow through to wider credit spreads. At the same time, higher policy rates and real yields have bolstered the investment proposition of U.S. Treasurys, reducing the attractiveness of IG.

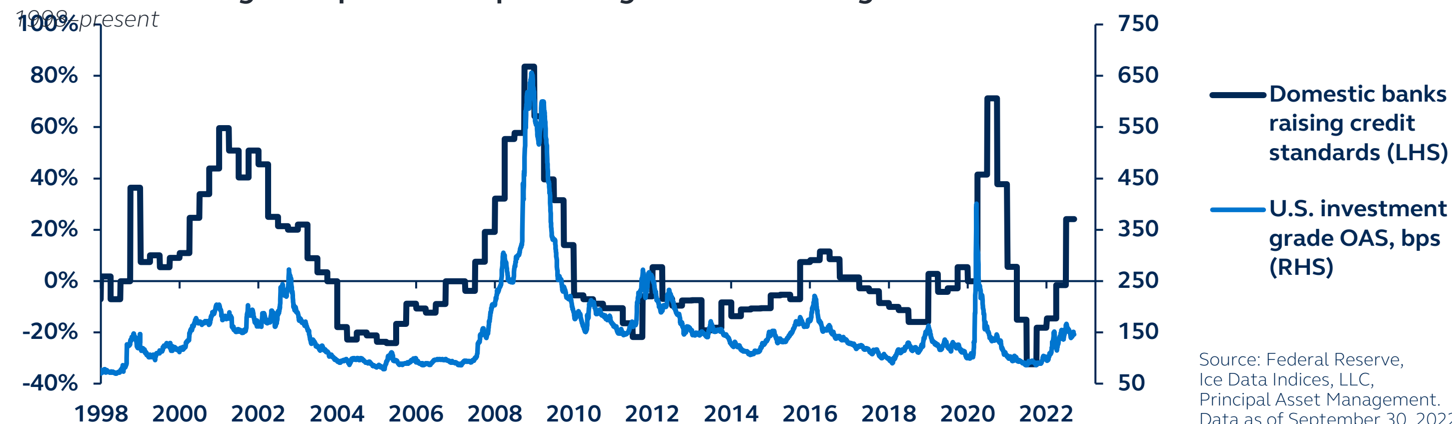
High yield has been relatively resilient, likely supported by its exposure to the energy sector. However, with recession approaching, and quantitative tightening now underway, high yield spreads are not sufficiently compensating for the growth and liquidity risks.

As the Fed withdraws liquidity from the bond markets, it will likely become increasingly challenging for corporates to roll-over debts. Tightening financial conditions will not only impact the real economy, leading to higher defaults, but market liquidity will also be challenged. With both credit and liquidity risk rising, HY spreads are likely to widen further.

Both IG and HY face widening spreads as the economic outlook and market liquidity deteriorate. We are underweight both credit segments.

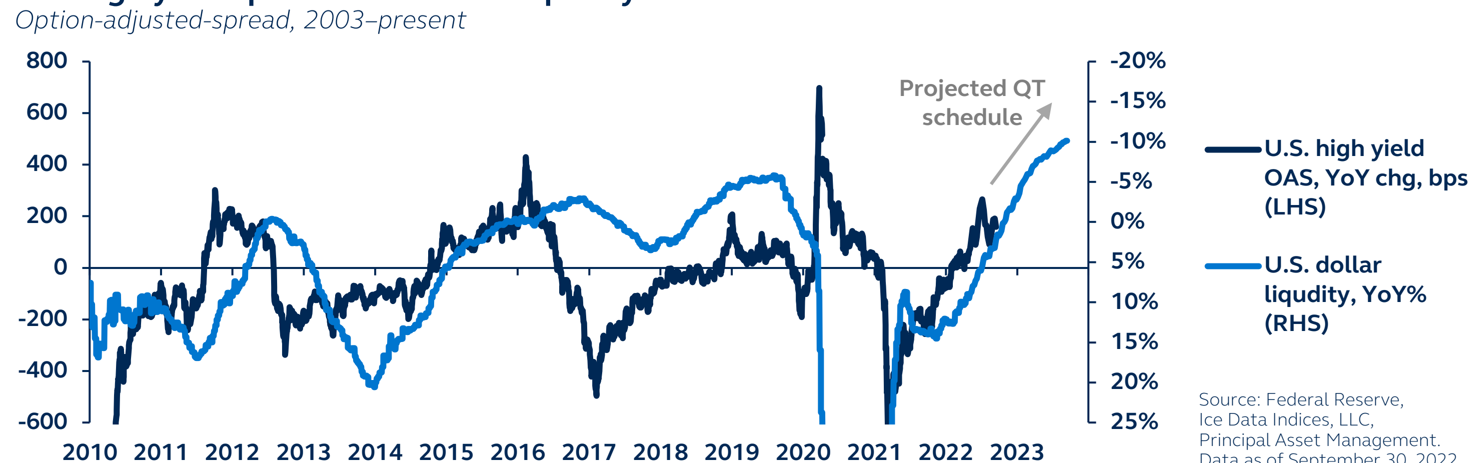
U.S. investment grade spreads and percentage of banks raising credit standards

1998–present



U.S. high yield spreads and dollar liquidity

Option-adjusted-spread, 2003–present



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INDEX DESCRIPTIONS

Bloomberg Commodity Spot Index measures the price movements of commodities included in the Bloomberg CI and select subindexes. It does not account for the effects of rolling futures contracts or the costs associated with holding physical commodities and is quoted in USD.

Bloomberg EM Hard Currency Aggregate Index is a hard currency Emerging Markets debt benchmark that includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

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. 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. 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. Floating Rate Note < 5 Years Index consists of debt instruments that pay a variable coupon rate, a majority of which are based on the 3-month SOFR, with a fixed spread.

Bloomberg U.S. Mortgage Backed Securities (MBS) Index tracks fixed-rate agency mortgage backed pass- through securities guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

Bloomberg U.S. Municipal Index covers the USD-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and prerefunded bonds.

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.

Bloomberg U.S. Treasury Inflation Protected Securities (TIPS) Index is composed of inflation-protected U.S. Treasury bonds, commonly known as "TIPS". TIPS are securities issued by the U.S. Treasury that are designed to provide inflation protection to investors.

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.

ICE BofA Contingent Capital Index tracks the performance of all contingent capital debt publicly issued in the major domestic and eurobond markets, including investment grade and sub investment grade issues.

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 U.S. All Capital Securities (i0cs) index of preferred securities represents investment grade and below investment grade instruments in both the retail $25par market and the institutional $1,000par market.

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

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

JP Morgan EMBI Global Diversified Index is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

MSCI AC Asia ex Japan Index captures large and mid cap representation across 2 of 3 Developed Markets (DM) countries (excluding Japan) and 9 Emerging Markets (EM) countries in Asia.

MSCI AC Asia Pacific Index captures large and mid cap representation across 5 Developed Markets countries and 9 Emerging Markets countries in the Asia Pacific region.

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

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 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.

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.

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.

IMPORTANT INFORMATION

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.

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