J.P.Morgan

PRIVATE BANK

INVESTMENT INSIGHTS

The Global Investment Strategy View

We explore the outlook for economies and markets and provide year-ahead views across asset classes.

June 2023

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KEY TAKEAWAYS

- As recession approaches - and as we continue to see potential across asset classes - we are defensive but not fearful. Our high-conviction investment ideas include: long-duration fixed income, preferreds for systemically important final institutions (SIFI) , mid-cap equities, European equities and private credit.

- Investors have priced in a late-cycle U.S. economy. One clear sign of that sentiment: an inverted yield curve, with cash rates higher than 10-year U.S. Treasury yields.

- We expect the U.S. recession to begin in the fourth quarter, not the third quarter, a revision of our outlook of a month ago. The global picture is mixed. China's reopening began strongly in Q1, and while the recovery's momentum has faltered, we think it will prove durable. The euro area economy has been remarkably resilient, although inflation remains sticky.

- We strongly prefer core duration to cash. Historically, duration outperforms cash in the two years after the Federal Reserve reaches the end of its hiking cycle.[1]

- A small group of mega-cap tech stocks account for all of the year-to date rally in the S&P 500. Their valuations rose and the rest of S&P 500 declined, in aggregate. That disparity gives active managers a wide range of stocks with lower multiples from which to pick winners (and avoid losers). On a sector basis, we continue to favor healthcare, industrials, technology and parts of real estate.

- We are bullish on the European equity market, where many sectors enjoy valuation discounts versus U.S. peers – even as we note the persistence of investors' "home bias."

Our Global Investment Strategy View integrates the knowledge and analysis of our economists, investment strategists and asset class strategists. The View takes shape at a monthly Forum where the team debates and hones its views and outlooks.

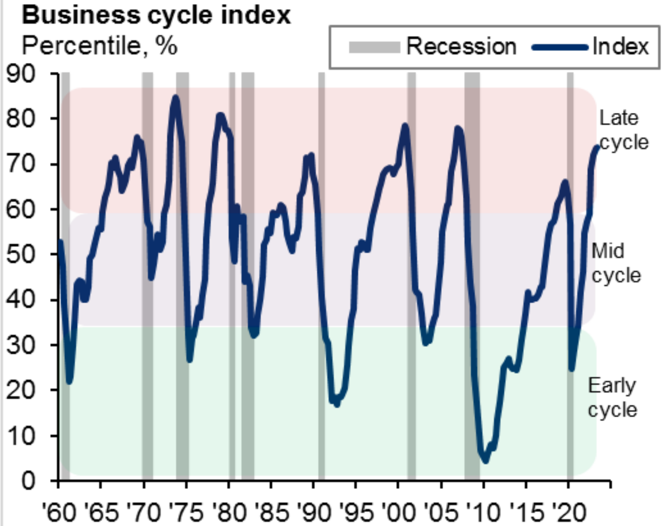
[1] Bloomberg Finance L.P.

THE VIEW

What's in the market price for investors? A late-cycle U.S. economy. Financial conditions have tightened over the past month, with U.S. Treasury (UST) yields higher across the curve and the S&P 500 slightly lower. The yield curve continues to be inverted (cash rates are higher than 10-year UST yields). Market pricing is consistent with about a 5% federal fed funds rate, which is well above consensus estimates of where interest rates will likely be in a normal business environment (neutral rates). Put differently, market pricing looks like standard fare for the late stages of a business cycle.

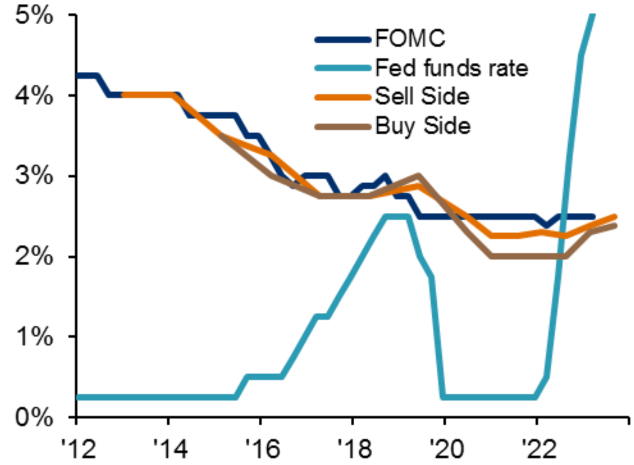
The U.S. equity risk premium (ERP) suggests bonds continue to offer the most value, relative to the equity earnings yield of the S&P 500 Index, since the global financial crisis (GFC). But look what happens if we exclude "mega-cap stocks" (Meta, Microsoft, Apple, Amazon, Nvidia and Google, which together represent about 25% of S&P 500 market capitalization). When we compare the earnings yield of the remaining 494 names in the index to 10-year UST yield, bonds continue to offer value relative to equities but the premium is less dramatic.

Business cycle index
Percentile, %



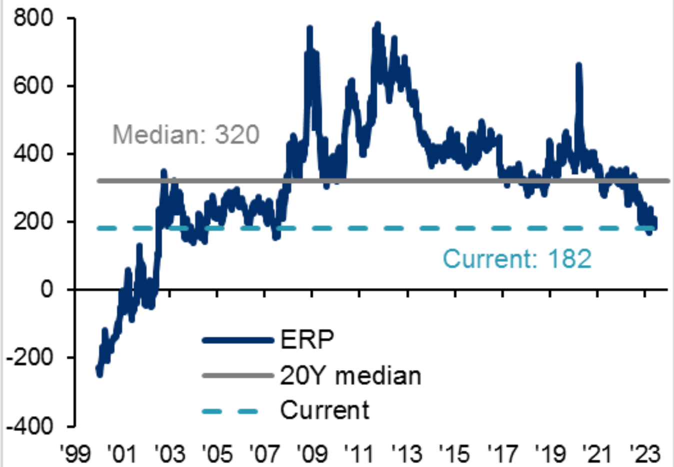
Note: Business cycle index consists of 9 business cycle indicators, percentiled back to the 1960s and averaged to create the aggregate.
Sources: Bloomberg Finance L.P., Haver Analytics, J.P. Morgan Private Bank. Data as of Q2 2023.

A 5% federal funds rate is well above consensus estimates of where interest rates will likely be in normal times
Federal funds rate



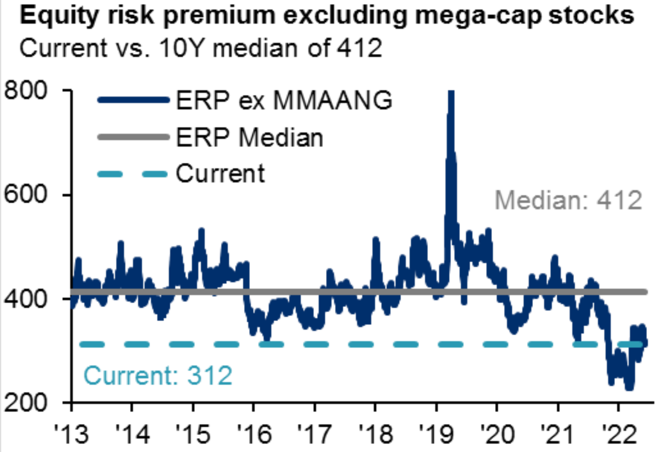
Sources: Federal Reserve, J.P. Morgan Private Bank. Data as of May 26, 2023.

The U.S. equity risk premium
Current vs. 20Y median of 320



Note: Higher ERP equals more relative value of stocks. Lower ERP equals more relative value of bonds.
Sources: Bloomberg Finance L.P., FactSet. Data as of May 26, 2023.

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided**. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to "Definition of Indices and Terms" for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.



Note: Higher ERP equals more relative value of stocks. Lower ERP equals more relative value of bonds.
We chose 10-yr median horizon to capture the timeframe we would consider these stocks "mega cap." Mega-cap = Meta, Microsoft, Apple, Amazon, Nvidia, Google.
Sources: FactSet, Bloomberg Finance L.P. Data as of May 23, 2023.

The recession obsession: We expect a U.S. economic contraction in Q4 2023 (versus our month ago outlook of Q3 2023). We expect the U.S. economy to enter a recession in Q4 after proving more resilient to Fed tightening than we had anticipated. Over the last three months, payroll gains have averaged 225,000 jobs per month, pushing the unemployment rate to 3.4%, (a 50-year low)[2]. What's more, trend inflation is running at 4%-4.5%, and wage data suggest inflation is unlikely to fall much further without job losses.

While it has taken longer than expected, growth is now below trend, and we see evidence that restrictive rates will likely slow growth further.

1) Banks have failed. It's easy to suggest failed banks were "poorly run" or "not sustainable business models," but in a lower rate environment it is less likely that those vulnerabilities would have been exposed.
2) Equipment capex spending is slightly negative year-over-year, with further weakness likely ahead. One firm's capital investment is another's revenue. As capital investment slows, so too, does overall revenue. Stresses in the banking sector and tight credit conditions are likely to accelerate the slowdown.
3) Consumer credit card delinquencies are inflecting higher, albeit from a low level. With spending growth outpacing nominal income growth, consumers increasingly turn to debt to keep spending. With rates at these levels and nominal income growth slowing, spending will likely cool.
4) Construction activity is set to slow. Completions of new single-family homes are outpacing new home starts, a historical rarity and generally consistent with economic contractions.

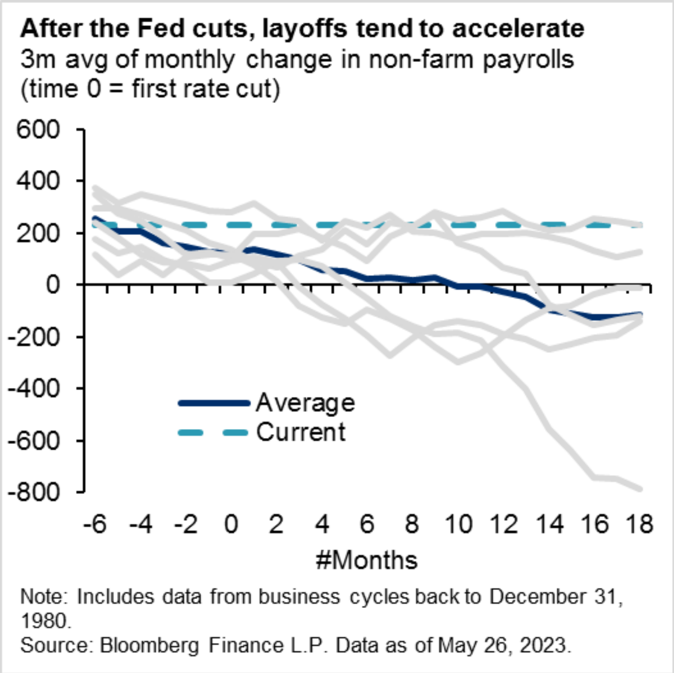
The U.S. recession roadmap (while delayed) seems on track. There are four key steps along the way. **Step 1:** Financial conditions tighten. That's done. **Step 2:** Interest rate sensitive sectors deteriorate. That's done as well. **Step 3:** Corporate fundamentals deteriorate. That's happening now. Average S&P 500 earnings fell around 2.5% year-over-year in Q1 2023. It marked the second consecutive quarter in which the average S&P 500 stock reported negative earnings growth, while the median company managed to deliver some earnings growth. Most of that differential reflects performance in the technology sector, which will likely show negative earnings growth for a fourth consecutive quarter in Q2 2023.

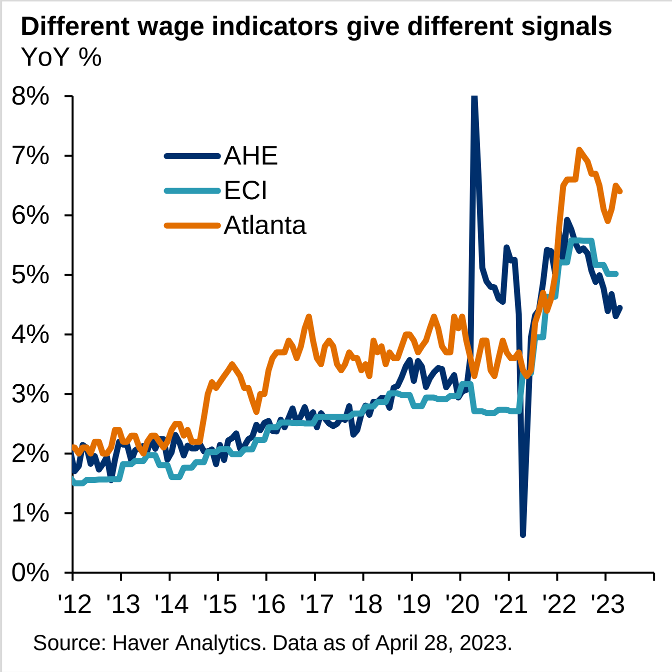
Step 4: Companies lay off workers to defend profits and cash flow. That's in Q4 2023. **Step 5:** Defaults rise and inflation slows to reach the Fed's mandate. We see this happening sometime in 2024.

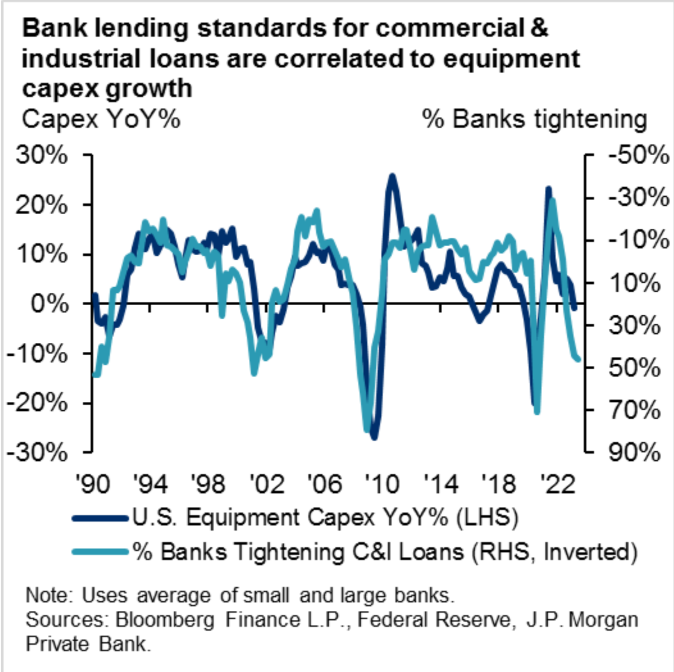
We now look for another Fed rate hike in June and/or July, at which point we think the Fed will pause. Beyond restrictive rates, an erosion in banking sector confidence is helping to slow the U.S. economy via higher borrowing costs.

Borrowing costs will likely be pressured higher still when the U.S. Treasury issues more debt. We expect more than $1 trillion of Treasury borrowing in the wake of the agreement to raise the debt ceiling. That borrowing surge is likely to raise money market rates and crowd out private sector borrowing. We expect the Fed to start cutting rates around year-end 2023 in response to a deteriorating growth and employment picture. We continue to see little evidence of a pending financial crisis; rather, we expect a monetary policy driven slowdown.

[2] Bloomberg Finance L.P. Data as of May 26, 2023.







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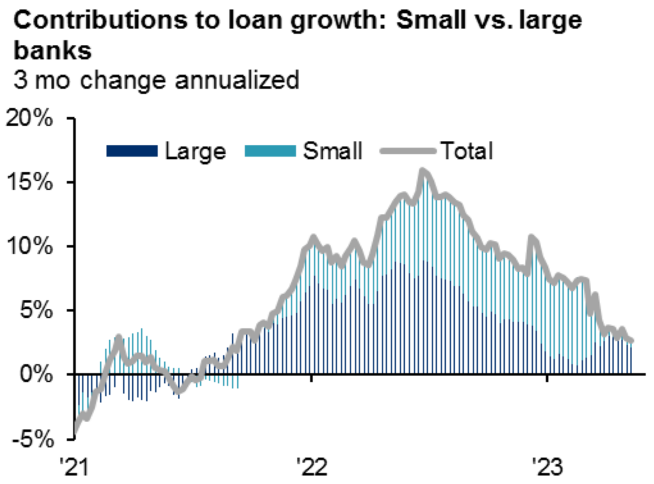
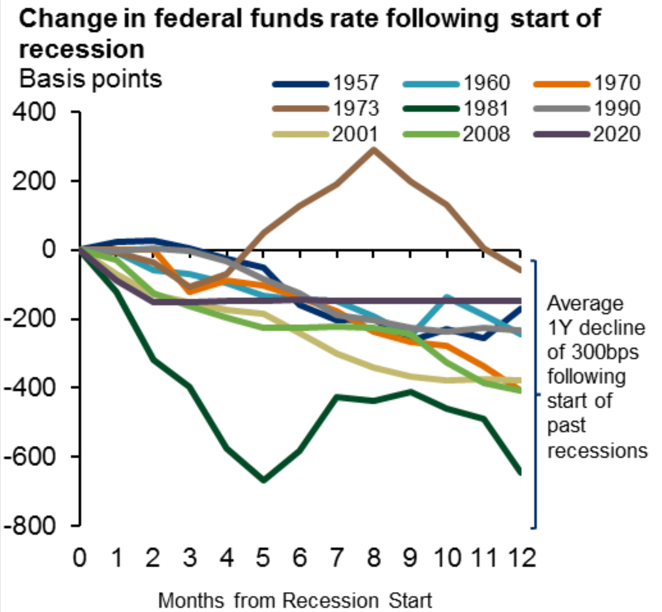


Note: Large domestically chartered commercial banks are defined as the top 25 domestically chartered commercial banks, ranked by Call Report to which the H.8 release data have been benchmarked. Small domestically chartered commercial banks are defined as all domestically chartered commercial banks not included in the top 25.
Source: Haver Analytics. Data as of May 26, 2023.



Source: Bloomberg Finance L.P. Data as of May 26, 2023.

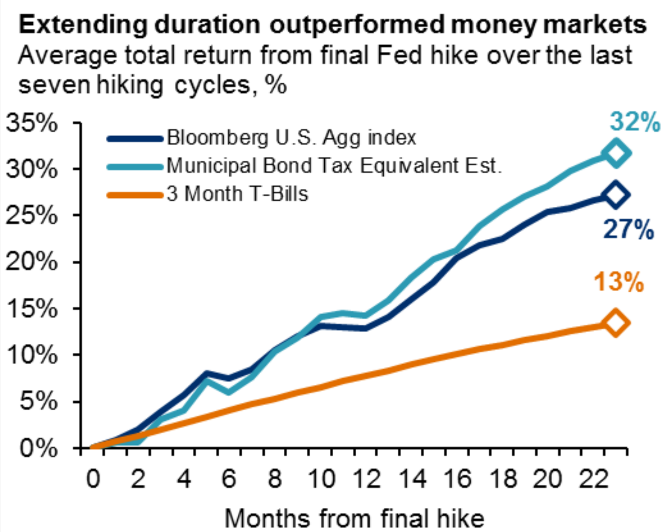
Core duration > cash

We make a simple argument for choosing core duration over cash: If you like 5% yields on your money market account, consider locking it in for a longer tenor. The Fed is nearing the end of its hiking cycle. This means cash investors will be reinvesting in what is likely to be a lower rate environment. We note that the Fed usually cuts rates by about 300 basis points (bps) in the 12 months following the onset of a recession.

In making the case for duration we highlight two points:

- History suggests the more duration the better. Over the past seven hiking cycles, extending duration outperformed money markets by an average of 14% in the 24 months after the last rate hike. For municipal bonds, the outperformance was even greater, on an estimated tax equivalent basis.

- The insurance characteristics of bonds are back – fixed income can once again provide portfolio protection. Over the last 20 years, hiking cycles have generally caused the negative correlation between stocks and bonds to temporarily turn positive (so stocks and bonds lost value at the same time). However, around the end of the hiking cycle, the negative correlation between stocks and bonds has historically reasserted itself.



Sources: J.P. Morgan, Bloomberg Finance L.P. Data as of May 26, 2023. Cumulative returns for the U.S. Aggregate Index and 3M T-bill Index in 1981, 1984, 1989, 1995, 2000, 2006, 2018. Muni tax equivalent return adjusts coupon income for the current top federal tax rate.

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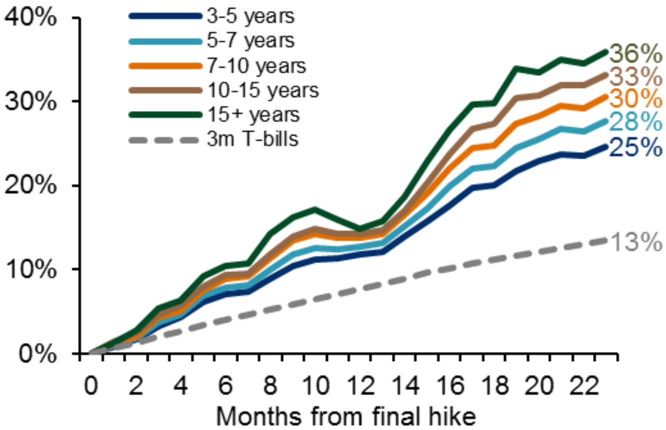
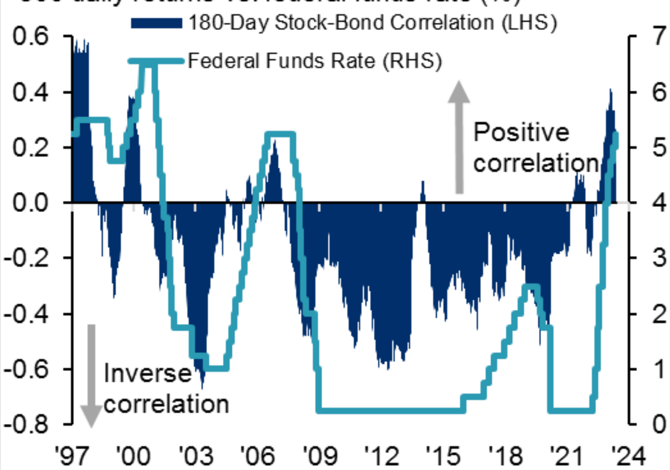
History suggests the more duration the better
Average total return of Treasuries by duration from final Fed hike over the last seven hiking cycles (since 1981)



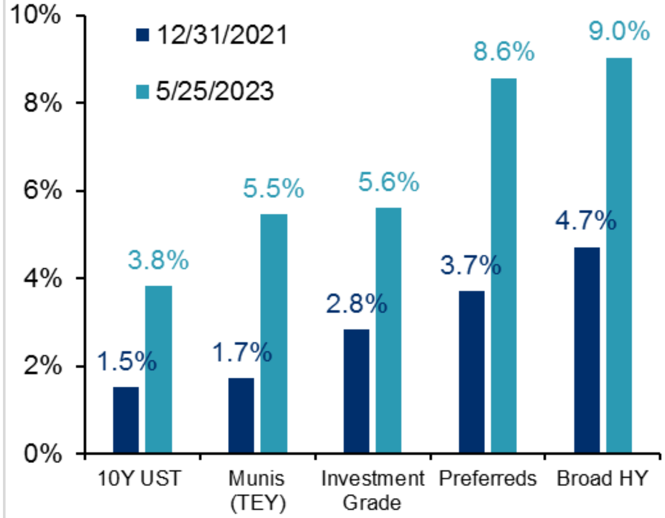
Sources: J.P. Morgan Private Bank, Bloomberg Finance L.P. Data as of May 2023. Cumulative returns from 1981, 1984, 1989, 1995, 2000, 2006, 2018.

Inverse stock-bond correlation returns when the hiking cycle is over
180-day rolling correlation: U.S. Agg Index & S&P 500 daily returns vs. federal funds rate (%)



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 9, 2023.

"Equity-like" current fixed income yields
Yields, %



Source: Bloomberg Finance L.P. Data as of May 25, 2023.

U.S. equities: Alpha > beta. Year-to-date, the S&P 500 is up 9%, but it's a tale of two markets. A small group of mega cap tech stocks accounted for all of the rally in the overall S&P 500 Index. They've rallied, on average, 70%. Less than 30% of S&P 500 companies are beating the index year-to-date, a narrowness last seen in 1999.

Over the past year, mega cap stock valuations rose and the rest of S&P 500 declined. The valuation gap persists. The consensus next 12-month S&P 500 price to earnings (P/E) ratio for the information technology sector (majority mega-cap stocks) is two standard deviations above its 10-year median (26x versus 18x). Meanwhile, the S&P 500 P/E ratio excluding mega-cap stocks trades below its 10-year median (14x versus 16x).

This wide divergence gives active managers the opportunity to choose among lower multiple stocks across a wide range of sectors. As always, the opportunity to pick market winners is twinned with the need to avoid market losers. (Some stocks are attractive for a good reason.)

As we assess the outlook for the U.S. market overall, we expect the S&P 500 to trade at about 4,500 by mid-year 2024 despite our base case view that the economy will have gone into a recession. Relative to 2021 (the year of the post-COVID S&P 500 earnings rebound), we are expecting a more middling 3% average annualized earnings growth rate for 2022–2024. This sets up what could be a multi-year slog back to year-end 2021 highs. By mid-2024, corporate earnings will likely be on the rebound, and valuations for the 494 S&P 500 stocks that

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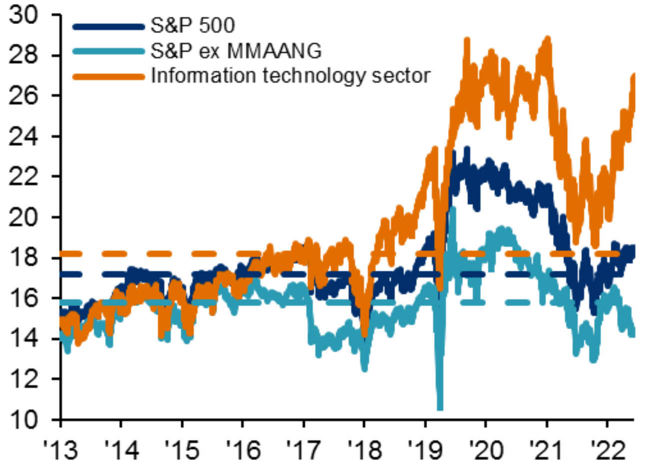
are not mega-cap powerhouses should be able to expand from currently subdued levels.

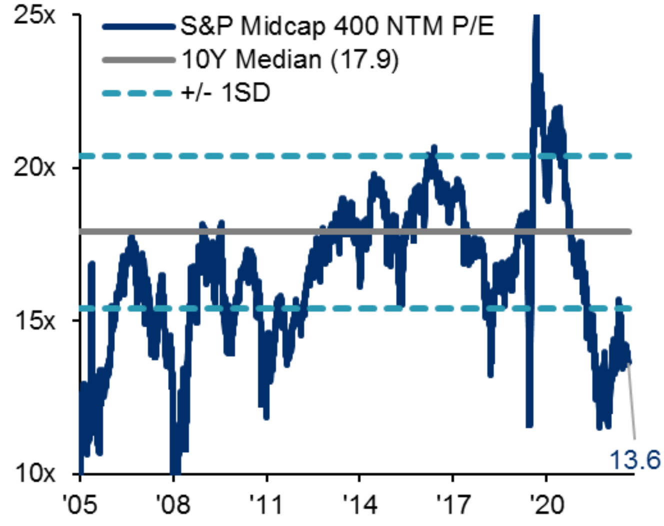
We favor mid-cap stocks over their large cap counterparts. Both traditionally offer earnings resiliency, but mid-cap stocks offer valuation support. On a sector basis, we continue to favor healthcare, industrials, technology and parts of real estate. Our recession base case means the path to 4,500 is likely to be volatile (another element in the case for active management and structured investments). Realized S&P 500 volatility usually increases when markets move from late cycle to end cycle.

Next 12-month S&P 500 P/E
Price to earnings (P/E) ratio



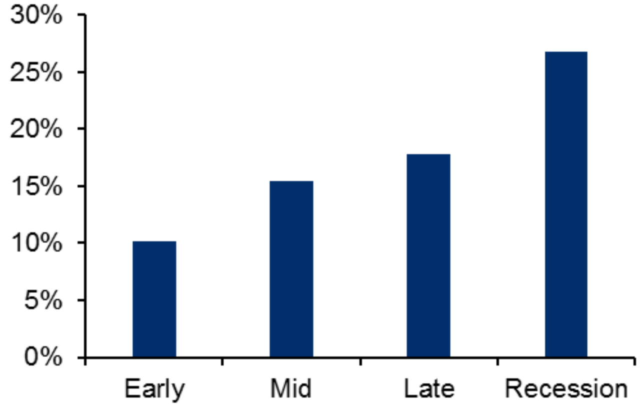
Note: Dashed lines represent 10-yr median P/E ratio.
MMANG = Meta, Microsoft, Amazon, Apple, Nvidia, Google.
Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Mid-cap stocks offer valuation support
S&P Midcap 400 NTM P/E



Source: Bloomberg Finance L.P. Data as of May 26, 2023.

Realized S&P 500 volatility by stage of the business
Run on 1-year forward SPX returns



Note: Run on business cycles back to 1970. Business cycle stage determined by our proprietary index where each non-recession phase represents ~1/3 of periods and recession determined by NBER.
Source: Bloomberg Finance L.P. Data as of May 26, 2023.

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Fight home bias – add European equites. Year-to-date, European equities have outperformed the United States in euro and USD terms; we expect continued modest outperformance. Unfortunately, around half of our U.S. clients are materially underweight Europe. We make a case for continued European outperformance (and note the interesting discussion from Michael Cembalest, Chairman of Market and Investment Strategy, in "Too Long at the Fair," *Eye on the Market*, May 23, 2023):

1) **Earnings resiliency.** Europe avoided an energy-led recession over the winter. Since then, energy prices have declined markedly; lower energy prices and pent-up savings will likely serve as a tailwind to consumption. As a result, we have raised our 2023 and 2024 European earnings expectations, and now see positive earnings growth in both years. Aggressive European Central Bank (ECB) tightening would present an obvious headwind, but it is not our base case.

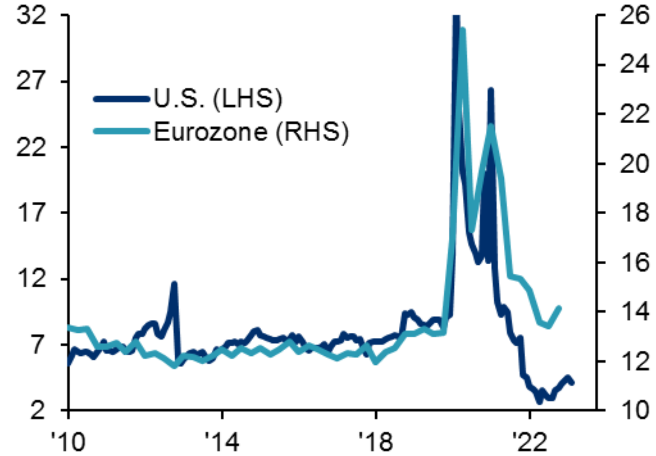
2) **Valuations are attractive.** European equities trade at a 13x P/E, one standard deviation below the 10-year median (14.5x). Relative to the S&P 500, European equities trade at a 30% discount to the S&P 500 and a 12% discount to the S&P 500 ex U.S. mega-cap stocks (which is arguably a better comparison).

3) **Consistent dividends.** Investors can access a 3% annual dividend yield in Europe versus about 1.5% in the rest of the world. [3]

4) **A currency kicker for USD based investors.** We expect USD weakness as U.S. and European interest rate differentials converge. Our base case is EURUSD of 1.15 by mid- 2024.

Europeans have continued to save while American savings rate is below pre-pandemic trend

Savings rate (%)



Sources: Statistical Office of the European Communities, Bureau of Economic Analysis. Data as of Q1 2023.

[3] Bloomberg Finance L.P. Data as of May 26, 2023.

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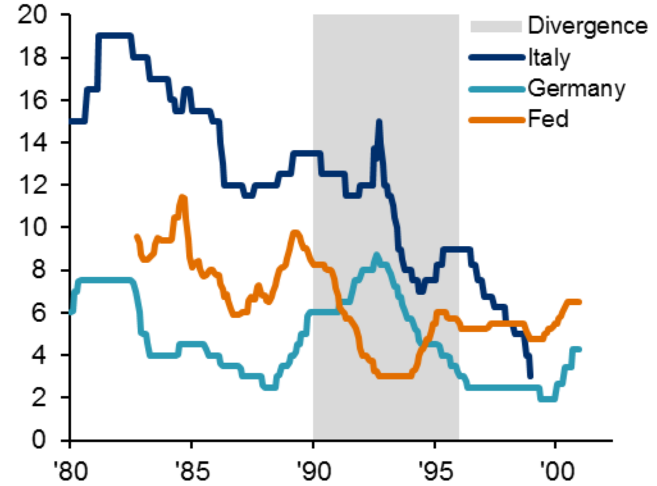
European monetary policy has diverged from the Fed before

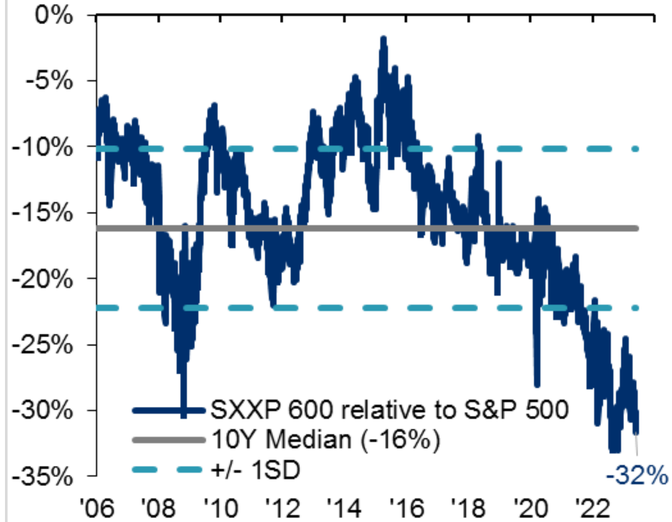
Central bank policy rate (%)



Sources: Bundesbank, Federal Reserve Bank, Bank of Italy. Data as of May 26, 2023.

Relative to the S&P 500, European equities trade with a 30% discount

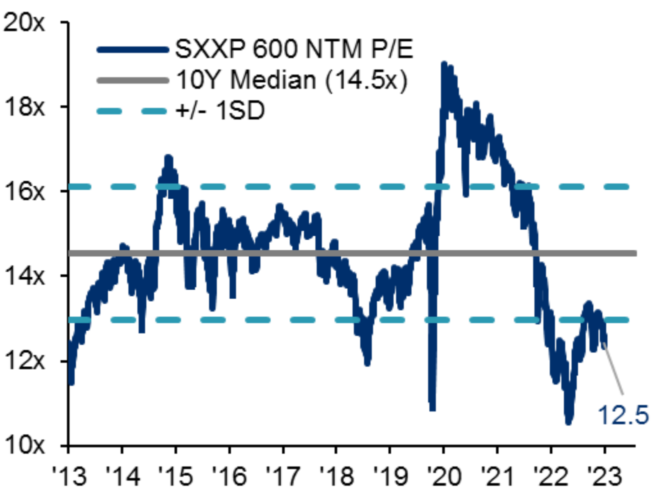
NTM P/E, Stoxx 600 rel. S&P 500



Source: Bloomberg Finance L.P. Data as of May 26, 2023.

European equities trade one standard deviation below the 10-year median

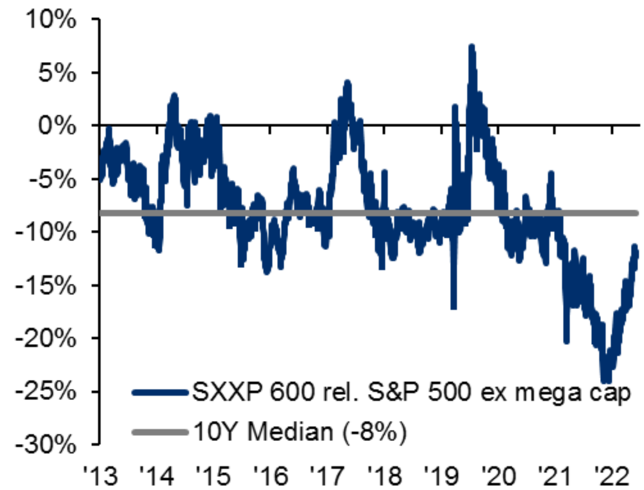
NTM P/E



Source: Bloomberg Finance L.P. Data as of May 26, 2023.

European equities trade with a 12% discount to the S&P 500 ex U.S. mega-cap stocks

NTM PE, Stoxx 600 rel. S&P 500 ex mega-cap



Note: Mega-cap = Meta, Microsoft, Apple, Amazon, Nvidia, Google
Source: Bloomberg Finance L.P. Data as of May 26, 2023.

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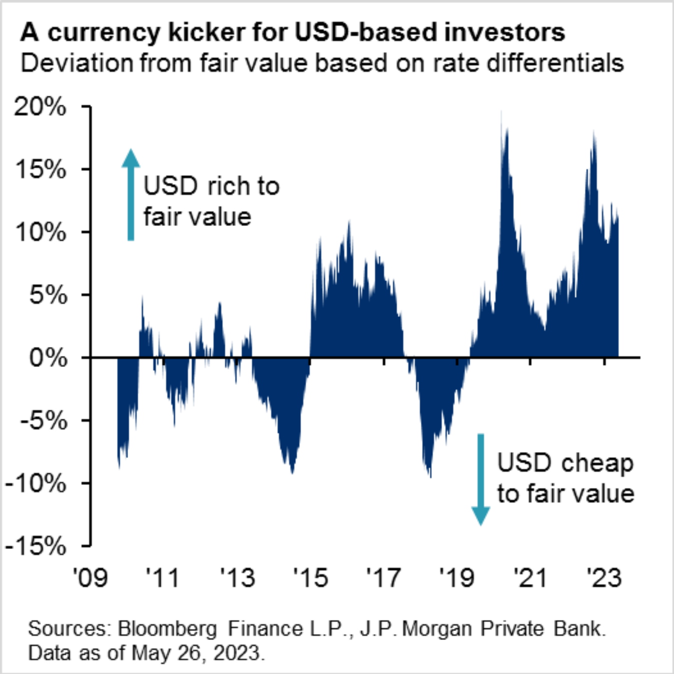

Defensive, not fearful. Our high conviction investment ideas:

- Long-duration core fixed income.
- SIFI Subordinated bank capital.
- Mid-cap U.S. equities.
- European equites.
- Private credit.

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YEAR-END 2023 & Q2 2024 OUTLOOK NUMBERS

June 2023

Macro^		
Inflation	**2023 YE**	**2024 YE**
United States	3.3%*	2.2%
Eurozone	4.0%	2.1%
China	1.7%	2.1%
Real GDP Growth		
United States	0.4%*	0.5%*
Eurozone	0.6%*	0.7%
China	4.3%	4.7%

Equities		
S&P 500	**2023 YE**	**Mid-2024**
Price	4,250-4,350*	4,450-4,550*
P/E forward multiple	18.5x	18.25x*
Stoxx Europe 600		
Price	480-495	495-505*
P/E forward multiple	13.5x*	13.5x*
TOPIX		
Price	2,020-2,060*	2,060-2,100*
P/E forward multiple	13.5x*	13.5x*
MSCI Asia ex-Japan		
Price	660-715	690-760*
P/E forward multiple	12.0x	12.0x*
MSCI China		
Price	75-78*	78-82*
P/E forward multiple	11.0x*	11.0x*

Currencies		
	2023 YE	**Mid-2024**
U.S. Dollar Index (DXY)	99 (97-101)*	97 (95-99)*
EUR/USD	1.13 (1.11-1.15)*	1.15(1.13-1.17)*
USD/JPY	125 (123-127)*	120(118-122)*
GBP/USD	1.25 (1.23-1.27)	1.27(1.25-1.29)*
USD/CNY	7.10 (7.0-7.2)*	7.00(6.9-7.1)*

^GDP and core inflation estimates represent Q4 year-over-year growth rates. Core inflation in the United States is core PCE.

Rates & Credit Spreads		
United States	**2023 YE**	**Mid-2024**
Eff. fed funds rate	5.00%-5.25%*	3.25%-3.50%*
ON SOFR	5.15%*	3.40%*
2-year UST	3.75%*	2.75%*
5-year UST	3.50%*	2.85%*
10-year UST	3.25%*	2.95%*
30-year UST	3.65%*	3.30%*
2s/10s spread	-0.50%*	0.20%*
JPM U.S. Investment Grade	175*	185*
JPM U.S. High Yield	650*	700*
Europe		
ECB deposit rate	3.75%	3.75%*
5-year German yield	2.50%	2.20%*
10-year German yield	2.25%*	2.00%*
BoE Bank Rate	5.50%*	5.50%*
10-year UK Gilt	3.50%	3.25%*
EUR IG	170	185*
EUR HY	595	625*
EM		
EMBI Global	425*	450*
CEMBI Broad	385*	400*
JACI IG	160*	175*
JACI HY	1100*	1135*

Commodities		
	2023 YE	**Mid-2024**
Gold ($ / oz)	$2,000-$2,100	$2,000-$2,100*
Brent ($ / barrel)	$88-$93	$88-$93*
BCOM Index	110-115*	110-115*
Natural gas ($/MMBtu)	$3.50-$4.50	$3.50-$4.50*

*Outlook change as of June 2023.

Indices are not investment products and may not be considered for investments.

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MACRO VIEWS

U.S. Growth

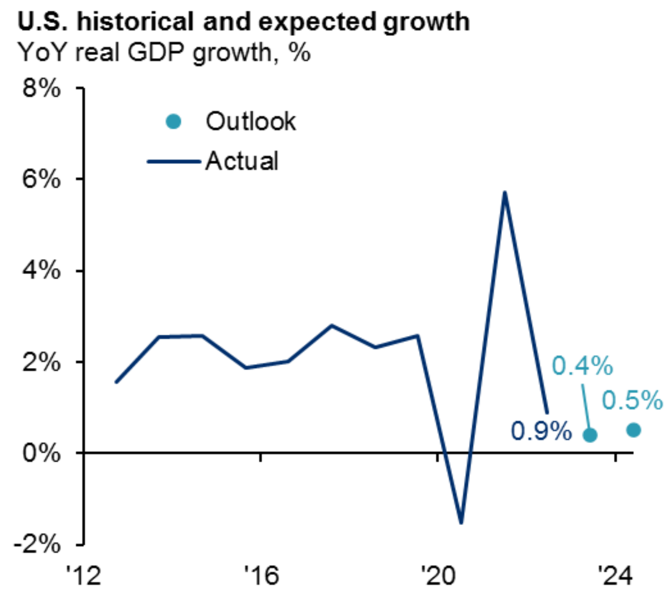
A monetary-policy-induced U.S. recession beginning in the fourth quarter of 2023 and lasting for three quarters is now our base case. (A month ago, we anticipated a Q3 start.) Despite the change in timing, we see the same 1.5% peak to trough decline in GDP.

The economy has been resilient, but there are signs of underlying vulnerability. Today, the labor market is fairly tight, roughly similar to past labor markets about six months prior to a recession, but it may have begun to soften. Temporary employment, a leading indicator, has been declining in recent months. Moreover, a higher unemployment rate will likely be needed to bring the labor market back into balance. Unemployment claims remain stable, but they are higher than they were at the end of 2022.

What we're watching: Payrolls, unemployment claims and indicators of capex trends, such as PMIs and cap goods orders.

Our view: 0.4% (Q4 YoY) real GDP growth in 2023

0.5% (Q4 YoY) in 2024



Sources: Haver Analytics, Bureau of Economic Analysis, J.P. Morgan Private Bank. Data as of June 02, 2023.

U.S. Inflation

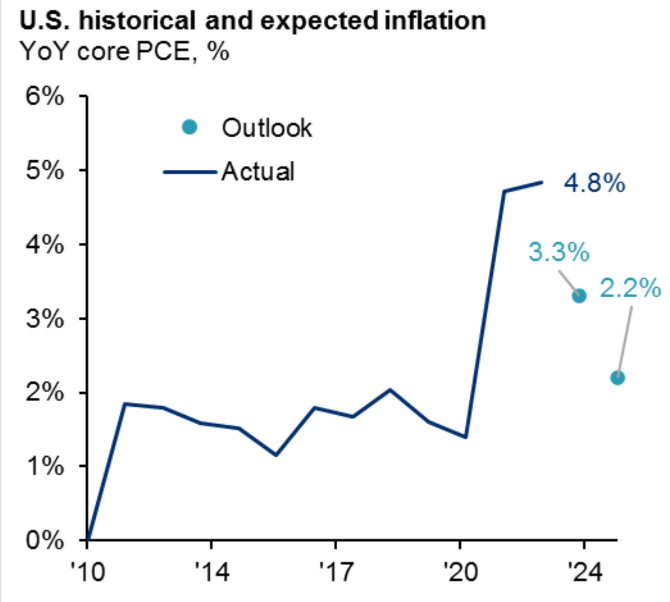
Recent firm inflation prints and higher than expected historical revisions signal that inflation is running ahead of prior expectations. The Fed must now fight approximately 4.5% inflation versus prior expectations of a 3%–3.5% range. While we think inflation has likely peaked, it remains some distance from the Fed's 2% mandate.

Goods inflation continues to be soft, while services inflation remains somewhat sticky in labor-intensive industries. Wages are still rising at around a 4.5%–5% pace. Owners' equivalent rent and rent inflation rates appear to have fallen from their highs, and further declines are expected.

What we're watching: Wage growth, real-time measures of rent, and services ex-rental inflation.

Our view: 3.3% (Q4 YoY) core PCE in 2023

2.2% (Q4 YoY) in 2024



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Eurozone Growth

We maintain our outlook for no recession in the eurozone, but risks have risen. Rates continue to be restrictive, and the ECB has not signaled any intention of pulling back on its tightening efforts. Recession or no recession, eurozone growth will likely be slower due to higher energy prices and tighter credit conditions. But the economy will likely be buttressed by a healthy consumer and services spending.

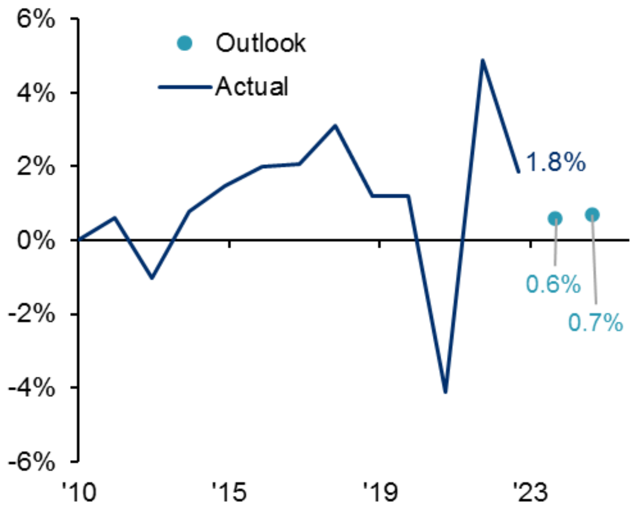
In the United Kingdom, falling energy prices and strength in the consumer have similarly lifted activity so far this year. However, some softening in PMI data in May suggests that restrictive rates are still feeding through to the economy, and we expect that to continue to slow growth this year.

What we're watching: Consumer spending, credit conditions, energy prices

Our view: 0.6% (Q4 YoY) real GDP growth in 2023

0.7% (Q4 YoY) in 2024

Eurozone historical and expected growth
YoY real GDP growth, %



Sources: Statistical Office of European Communities, J.P. Morgan Private Bank. Data as of May 26, 2023.

Eurozone Inflation

While headline inflation has declined with lower energy prices, core inflation remains too high and seems increasingly sticky as the services sector heats up and wage growth continues to be strong. Headline inflation may be close to 2% by the end of this year, but we do not expect core inflation to converge to the ECB's target until 2024. Lower energy prices will likely eventually feed through to core inflation measures, but strong wage growth will continue to be a risk. As financial instability risks fade and inflation risks skew to the upside, we now expect the ECB to hike policy rates another 50bps to 3.75%.

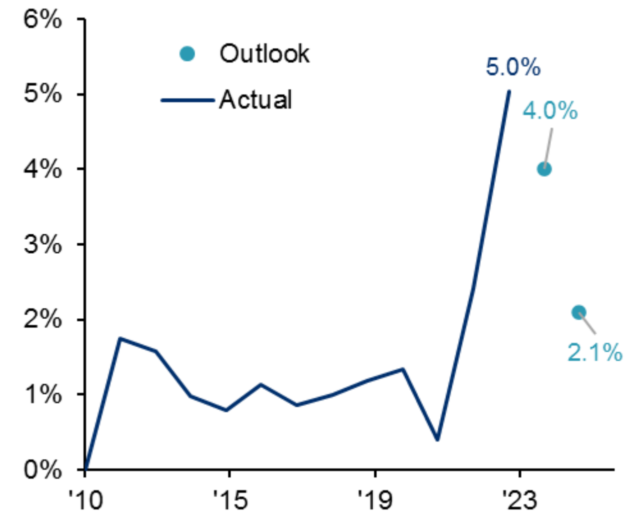
In the United Kingdom, April CPI came in much higher than consensus expectations, a cause for concern particularly as the sources of inflationary pressure have broadened out. Wage growth that is still running at approximately 6% is a notable risk for U.K. inflation. Still, we expect prices to moderate for the remainder of the year.

What we're watching: Wages, services inflation, energy prices

Our view: 4.0% (Q4 YoY) core HICP in 2023

2.1% (Q4 YoY) in 2024

Eurozone historical and expected inflation
YoY core HICP, %



Sources: Statistical Office of the European Communities, J.P. Morgan Private Bank. Data as of May 26, 2023.

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China : Growth and Inflation

Recent economic data proved disappointing relative to consensus expectations. Investors had also hoped Chinese policymakers would show a greater bias toward easing. As a result, analysts are scaling back what now look to have been overly optimistic outlooks. Market sentiment will likely present a challenge over the near term.

We have consistently said that China's economy will likely not be firing on all cylinders this year, and that it could take time for the recovery to become more broad based. We maintain this view, and expect a moderate recovery for the Chinese economy.

The recovery in consumer spending looks to be in its early stages. The overall unemployment rate is falling, and income growth expectations are bottoming out. These should eventually support consumption. The youth unemployment rate is elevated, but that mainly reflects a skill mismatch. (It also has a declining impact on the overall labor market due to an aging population.) On the other hand, exports and manufacturing have shown resilience even in a developed market downturn. We are more cautious on the housing sector, which is stabilizing, but at low levels.

China is experiencing only minimal inflation. Reopening price hikes have been more than offset by falling commodity prices. But unlike the market consensus, we do not expect a surge in policy support to stimulate growth.

What we're watching: How consensus expectations evolve, signs of improving labor demand, resilience of exports and manufacturing sector.

Our view:

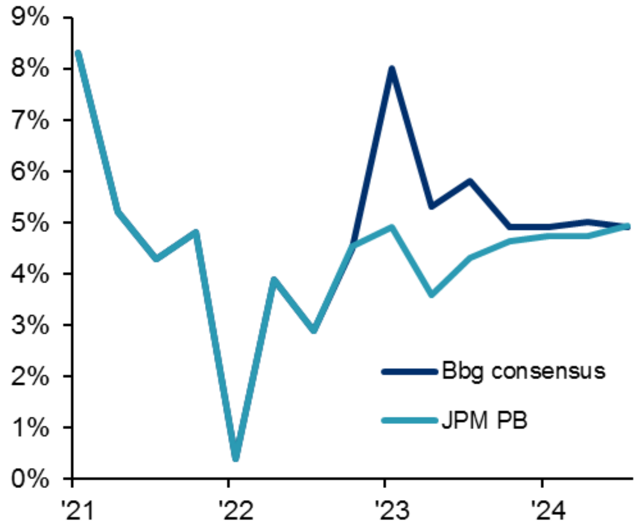
4.3% (Q4 YoY) real GDP growth in 2023

4.7% (Q4 YoY) in 2024

1.7% (Q4 YoY) inflation growth in 2023

2.1%(Q4 YoY) in 2024

Our outlook is below consensus
% YoY Real GDP



Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Income and employment are expected to grow
Urban depositors survey, diffusion index

Sources: WIND, J.P. Morgan Private Bank. Data as of May 25, 2023.

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EQUITY VIEWS

U.S. Equities

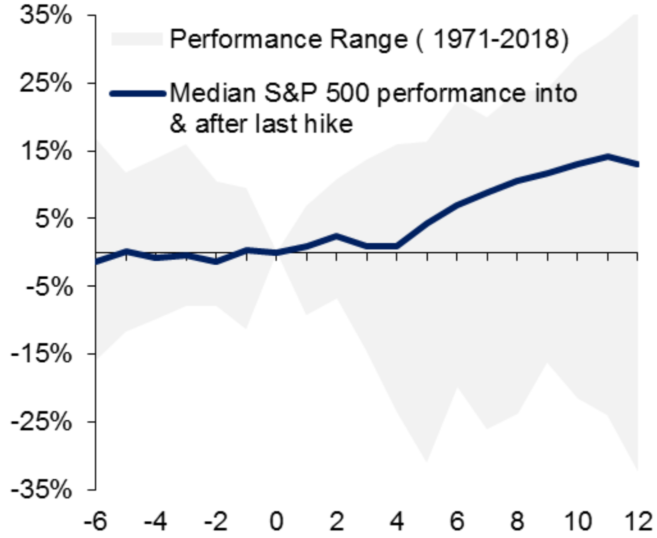
We raised our U.S. corporate earnings estimates by $8 (3.8%) for 2023 and $2 for 2024. That decision reflects our assessment of the Q1 earnings season and our view that a U.S. recession will begin in Q4 instead of Q3. Our estimates fall slightly below consensus for 2023 and 6% below consensus for 2024.

We maintained our optimistic earnings view despite fears of a U.S. banking crisis or further tightening in lending standards. Defying some expectations, financial conditions have remained steady, and corporate managements expressed a "less pessimistic view" of their businesses heading into the conference season and the U.S. debt ceiling negotiation. Given still-bearish investor positioning, we are hopeful that markets can exceed the upper end of the range established over the past 13 months.

What we're watching: Artificial intelligence, mid-cap tech, the equal-weighted S&P 500, mid-caps on relative valuation and quality metrics. And given current risks, volatility, and modest return potential to history, we're keeping an eye on structured notes.

Our view: S&P 500 $4,250-$4,350 by year-end 2023

$4,450-$4,550 by mid-2024



Source: Bloomberg Finance L.P. Data as of May 23, 2023.

Historical Valuations				
	S&P 500	S&P 500 Eq Wtd	S&P 400 Midcap	Russell 2000
Current	**18.4x**	**15.6x**	**13.9x**	**23.2x**
5 Year Avg.	18.7x	17.2x	16.9x	26.1x
10 Year Avg.	17.6x	17.0x	17.7x	24.7x
25 Year Avg.	16.5x	16.2x	16.5x	21.7x

Source: Bloomberg Finance L.P. Data as of May 23, 2023.

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Europe Equities

European companies delivered another quarter of positive y/y growth during the first-quarter earnings season. We are increasing our earnings by €1.8 (5%) for 2023 and €2.1 (6%) for 2024. This leaves us slightly below consensus for 2023 and 4% below consensus for 2024. We lower – slightly - our next 12 months (NTM) P/E from 14x-14.5x to 13.5x due to better earnings growth and stickier inflation. The market is currently trading at around 12.5x NTM P/E. That represents a more than 30% discount to the U.S. market, which we expect to narrow closer to 26%-27%.

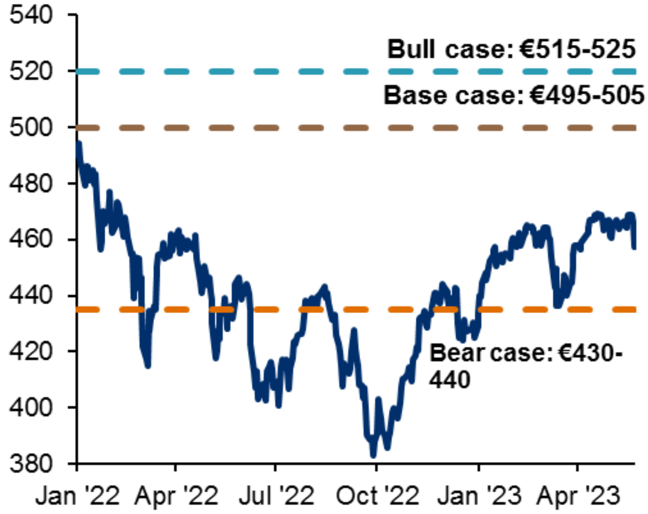
What we're watching: Industrials, energy, technology and luxury, France and the United Kingdom, European national champions

Our view: SXXP €480-495 by year-end 2023

€495-505 by mid-2024

SXXP 2024 price outlooks

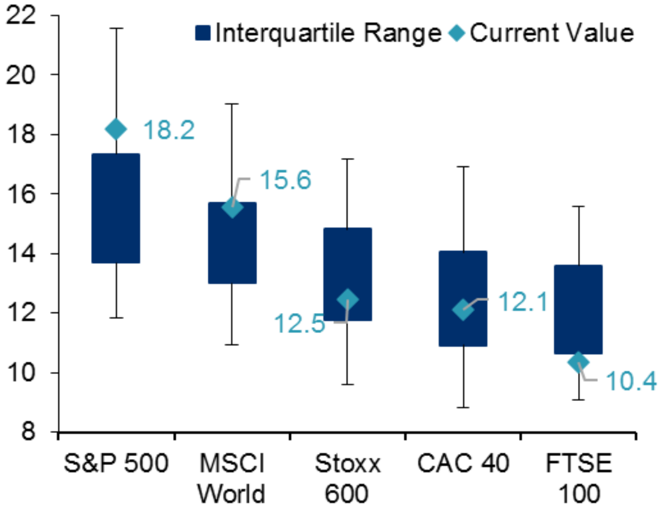
Stoxx 600 vs. JPM PB Base, Bull and Bear cases



Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Valuation: NTM PE across markets

NTM P/E distribution since 2006, tails denote 5th and 95th percentiles



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Asia Equities

Japanese equity indices reached 30-year highs over the past month. Stocks found support in a U.S. economy more resilient than expectations, a stronger U.S. dollar, inexpensive valuations, and catch-up versus European equities (historically highly correlated). We continue to expect a U.S. recession to take place toward the end of 2023, and for USDJPY to weaken to 118-122 by June 2024. With earnings revisions remaining firmly negative, we view the Topix as fully valued.

The economic recovery in China remains bumpy, and while earnings for the larger internet platforms in China during 1Q23 were slightly better than expectations, this was not yet enough to drive earnings upgrades. We remain confident that earnings growth is achievable, but patience is required. This has led us to roll our MSCI China and CSI300 YE23 outlooks of 78-82 and 4,700-4,900 to June 2024, still offering attractive upside potential on a 12-month basis.

Risk/reward for the Indian market is improving as valuations for the Indian equity market are no longer elevated, but 2023 earnings growth estimates of 24%-25% could have some downside risk.

What we're watching: Korean equities are likely benefiting from improving fundamentals in the memory market. Taiwan equities could see accelerating earnings growth as semiconductor demand recovers in 3Q23. Chinese equities may remain inexpensive and have the potential to offer above-average returns on a 12-month basis as the economic recovery progresses.

Our view:

Topix: 2,020-2,060 by year-end 2023

2,060-2,100 by mid-2024

MSCI AxJ**:** 660-715 by year-end 2023

690-760 by mid-2024

MSCI China: 75-78 by year-end 2023

78-82 by mid-2024

CSI 300: 4,500-4,700 by year-end 2023

4,700-4,900 by mid-2024

MSCI India: 2,010-2,120 by year-end 2023

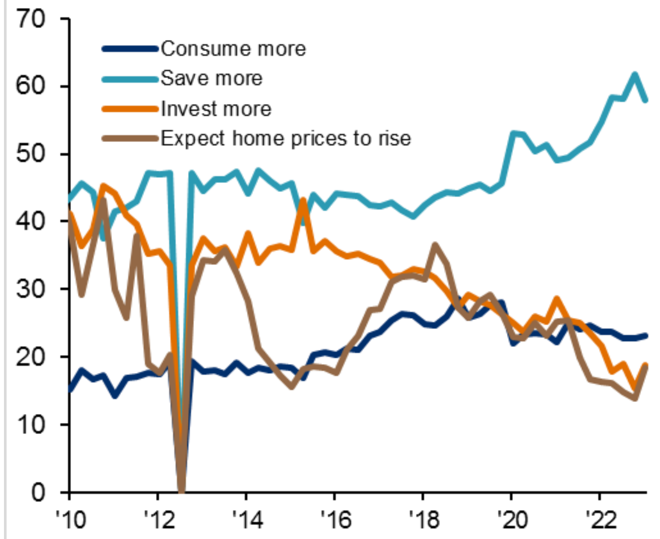
2,170-2,310 by mid-2024

MSCI ASEAN: 665-700 by year-end 2023

690-740 by mid-2024

Savings rate looks to have peaked

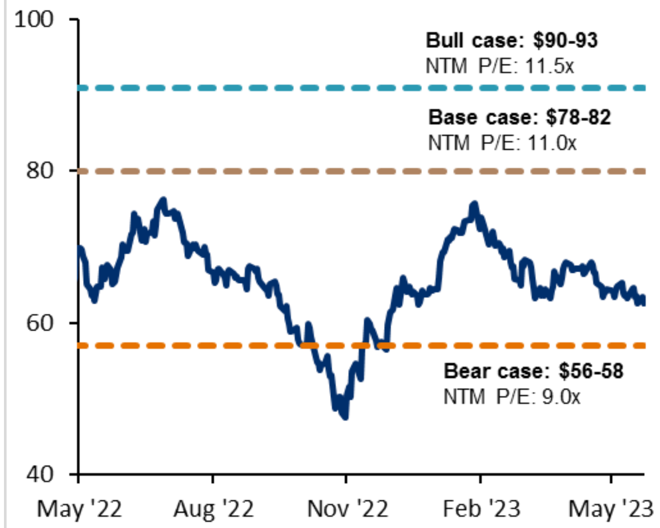
Expectations for home prices to rise started to pick up



Source: Haver Analytics. Data as of May 24, 2023.

MSCI China June 2024 Scenarios

MSCI China Price Range



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 24, 2023.

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RATES VIEWS

U.S. Rates

The U.S. economy is proving to be more resilient than expected. Payroll growth is trending at 225,000 jobs, wages are elevated (keeping nominal income growth high), and core inflation is running around 4%-4.5%. Concerns about banking sector stresses have eased, but we do expect tighter lending conditions. The surge in Treasury issuance that we expect will follow the debt limit agreement could crowd out investment elsewhere and thus help slow the economy. As investors are well aware, the Fed is looking to slow the pace of economic growth.

We expect another hike from the Fed in either June or July. Before the central bank decides to pause, payroll growth likely needs to slow below 200,000 jobs (as we expect will occur over the short term). Given our view that a recession will begin in the fourth quarter, we expect rate cuts near the end of 2023. We note that the Treasury curve embeds little expectation of cuts in 2023 and rates across the curve have risen over the last month. Market pricing seems to assume that the Fed will keep the fed funds rate above 3.35% for 10 years. We break with that consensus and expect rates to decline across the curve.

What we're watching: The labor market and signs that tight financial conditions will likely restore supply and demand balance.

Our view: 3.25% (+/- 25bps) by year-end 2023
2.95% (+/- 25bps) by mid-2024

Source: Bloomberg Finance L.P. Data as of May 26, 2023.

Europe Rates

Eurozone economic activity has slowed, yet inflation is proving to be even stickier than in the United States. We expect the ECB to reach its peak policy rate of 3.75% in Q3 2023; with risks skewed to more hikes. We anticipate no ECB rate cuts through mid-year 2024. German yields have increased, but continue to trade in their year-to-date range. Curve inversion will likely become more pronounced as the terminal rate approaches.

In the United Kingdom, the Bank of England (BoE) is eager to end its hiking cycle, which has played out as the U.K. economy has lagged its peers since the start of the pandemic. However, persistent inflationary pressures and a robust labor market will likely keep the central bank hiking for a while longer. We expect a terminal rate of 5.5%.

What we're watching: Whether the war in Ukraine or a commodity shock send markets on a more bearish turn. We're also considering if central banks have the luxury to pivot toward focusing on the growth outlook.

Our view:
10Y Bund: 2.25% (+/- 25bps) by year-end 2023
2.0% (+/- 25bps) by mid-2024

10Y Gilt: 3.50% (+/- 25bps) by year-end 2023
3.25% (+/- 25bps) by mid-2024

Source: Bloomberg Finance L.P. Data as of May 26, 2023.

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CREDIT VIEWS

U.S. Credit

Investors have chosen not to price recession risks despite several bank failures and a material tightening in bank lending standards. However, business fundamentals are deteriorating under the surface, and we think these problems will become more acute this summer as the Fed makes what we expect will be its last rate hike for the cycle. We came into the year expecting a recession in 2023, with its effects hitting credit markets toward the 2H of the year. As mentioned, we now think a downturn will begin in 4Q.

U.S. banks seem to be well capitalized, but duration mismatch issues in securities portfolios have called attention to some capital deficiencies. We expect to see more differentiation among banks on this issue.

As the credit cycle rolls through corporate credit, it will expose weak issuers and likely lead to increasing defaults into 2024.

What is our view on portfolio positioning? We prefer to add core fixed income, both investment grade (IG) and municipals. In our view, adding duration to diminish reinvestment risk is attractive, as the Fed tends to cut 6-7 months after pausing. Maintaining ample liquidity can allow us to take advantage of market dislocations. We generally favor owning credits with cash flow generation that allows the issuer to self-finance.

What we're watching: Persistent U.S. inflation, the credit cycle, and investment grade's correlation to U.S. Treasuries.

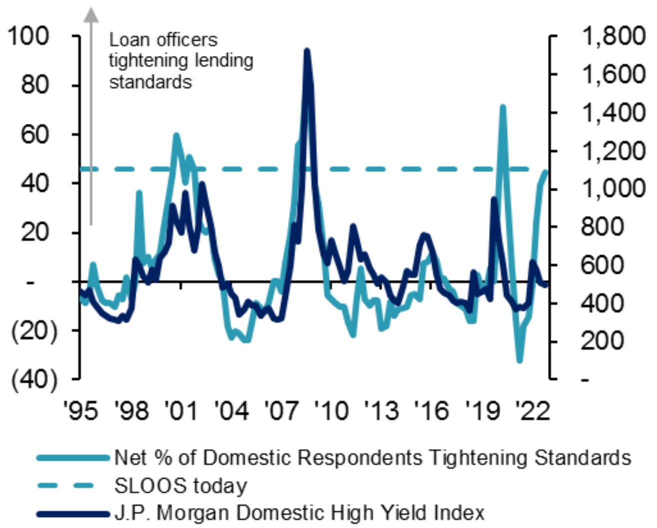
Our view:

US IG (spread) 175bps (+/- 25bps) by year-end 2023

185bps (+/- 25bps) by mid-2024

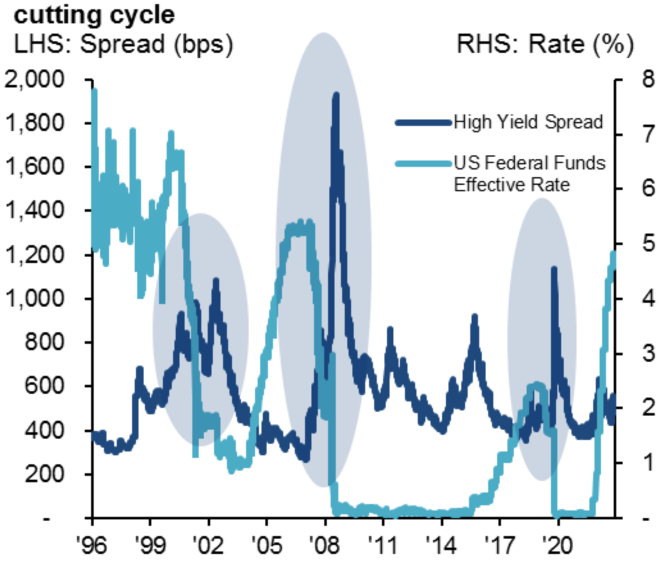
US HY (spread) 650bps (+/- 25bps) by year-end 2023
700bps (+/- 25bps) by mid-2024

SLOOS indicates HY spreads should be wider



Source: Bloomberg Finance L.P. Data as of May 26, 2023

Historically credit spreads peak well into a cutting cycle



Source: Bloomberg FInance L.P. Data as of May 26, 2023

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Europe Credit

We favor defensive positioning and up-in-quality trades, preferring investment grade over high yield (HY). IG and HY markets currently trade toward the tighter end of their recent ranges, and we expect to see wider spreads a year from now, particularly in HY.

The ECB will soon likely pause its rate increases as it nears the end of its hiking cycle. Credit spreads tend to peak well after the last rate hike as growth weakens and the economy softens after a period of swift monetary tightening.

Why have HY spreads so far remained relatively tight? We think market technicals - the lack of primary supply - are the main reason. Going forward, we believe supply issues could be a cause of concern for HY investors.

Net issuance YTD stands at just €1 billion. Cash balances have eroded and access to capital markets for European HY credits remains limited. As the maturity wall is steepening, low-credit-quality B/CCC maturities will move from 4% of total outstanding debt in 2024 to 12% in 2025.[4] Default rates have already started to rise, reaching 1.2% in April after prior months of negligible rates.

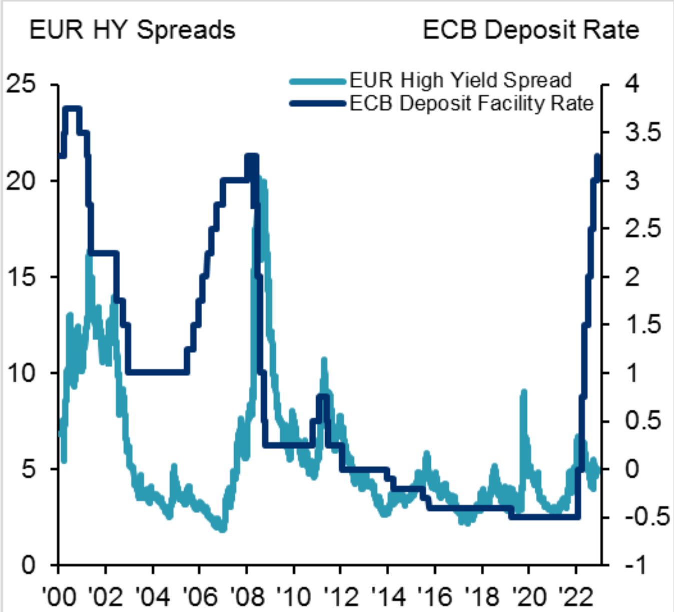
We expect HY default rates to continue to creep higher, hitting an estimated 3.5% in the year ahead. While leverage has been stable among HY issuers overall, we have clearly seen more fragility among HY issuers in the first quarter. In problem sectors such as real estate, pricing for certain credits reflects the potential for serious problems.

What we're watching: We believe short-dated IG offers attractive value in both EUR and GBP, with very limited credit or rates risk. In IG financials, fundamentals are sound for well known European banks, which continue to trade wide to corporates. Corporate hybrids are a fundamentally defensive asset class, where credit risk is low.

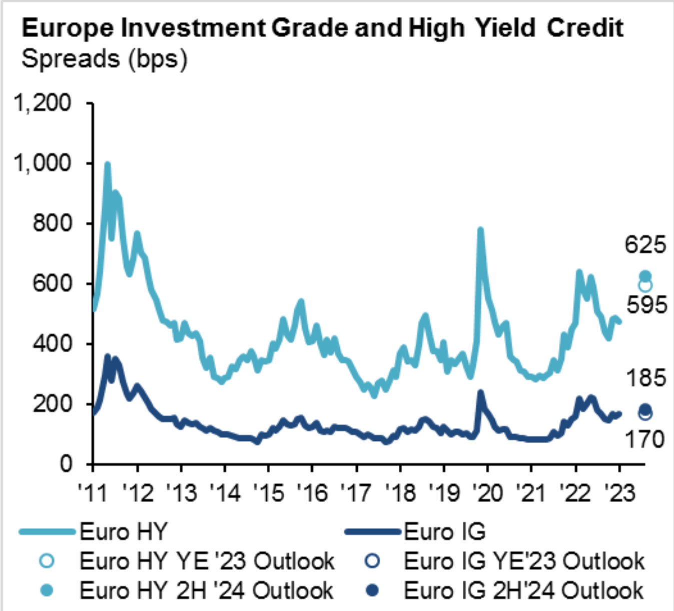
Our view:

EU IG (spread) 170bps (+/- 25bps) by year-end 2023
185bps (+/- 25bps) by mid-2024

EU HY (spread) 595bps (+/- 25bps) by year-end 2023
625bps (+/- 25bps) by mid-2024



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 19, 2023.



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 26, 2023.

[4] Bloomberg Finance L.P. Data as of May 26, 2023.

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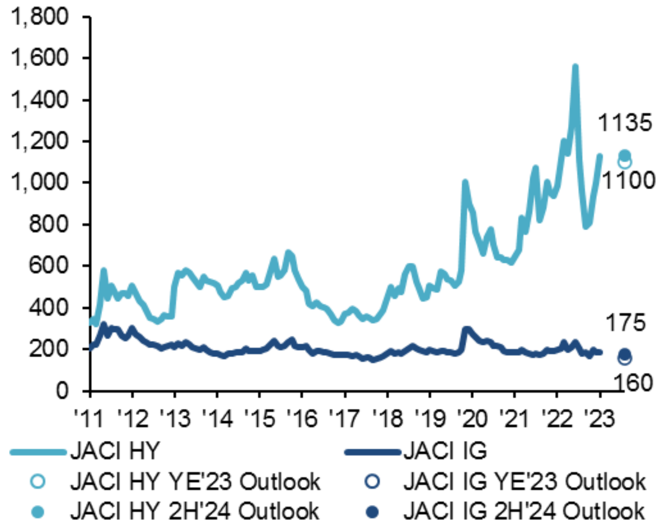
Asia Credit

Asia IG benefited from better risk sentiment globally with spreads tightening by 7bps in April, recovering half of the widening that had occurred March. While spreads in Asia IG are fair at ~148bps versus our year-end outlook of 185bps, a high absolute yield of 5.21% and short duration of 4.8 years is likely to generate decent return (YTD return 3.2%).

In Asia HY, spreads have widened by 45bps, dragged down by problems in China's property sector, which have hurt overall investor sentiment. Contracted sales proved the sector's bright spot, rising 31% on a year-over-year basis. Under the hood, market divergence persists. China's state-owned enterprises (SOEs) rose 76% on a y/y basis, while non-distress private names fell 8% and distress names declined 39% y/y[5]. We expect 2023 would be the year for recovery and restructuring. The Asia HY index spread of >1,000bps still implies high default risk. In short, credit selection is important.

What we're watching: We're keeping an eye on China reopening baskets, including China TMT, Hong Kong Credits and Macau Gaming. Outside of China, we like the commodity story of Indonesia and the long-term growth opportunity for India.

Asia Investment Grade and High Yield Credit
Spreads (bps)



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 26, 2023.

Our View:

Asia IG (spread) 160bps (+/- 25bps) by year-end 2023
175bps (+/- 25bps) by mid-2024

Asia HY (spread) 1,100bps (+/- 25bps) by year-end 2023
1,135bps (+/- 25bps) by mid-2024

[5] Bloomberg Finance L.P. Data as of May 26, 2023.

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EM Credit

Unusually, in this cycle, emerging market (EM) credit is not at the epicenter of the risk spectrum, as it is impacted mainly by the headwinds surrounding stresses in the developed world banking sector. EM banks are less levered than they have been in the past, and generally they face less potential for deposit shifting than many of their DM counterparts.

Nevertheless, the EM credit complex, sovereign and corporate, has suffered in recent months, as it usually does in a global risk-off scenario. EMBI spreads widened around 50bps (current level: 404bps) and CEMBI moved ~60bps (current level: 346bps) wider since their lows in February 2023. We expect some modest further widening in both EMBI and CEMBI, but we believe investors will be able to identify a fair amount of value in the EM credit space.

Chinese policy will likely help EM countries on the margin, as the government's commitment to stimulus has removed some tail risk. But China is unlikely to once again allocate 25%+ of GDP to real estate activity, given the country's broad home ownership (over 90% versus OECD average of 70%) and China's negative demographics (aging populations).

Turning to FX (the subject of the following section), EM currencies will likely benefit as the U.S. dollar weakens. We think a weakening USD should support EM credit spreads in the latter half of the year.

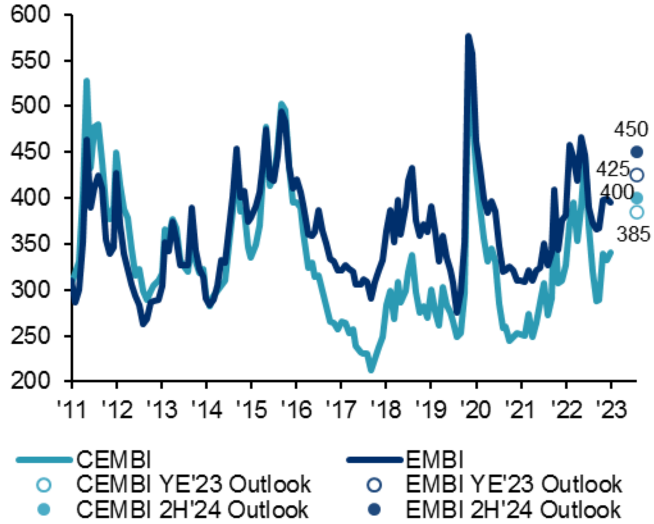
What we're watching: EM energy credits, as they offer very attractive spreads, given the overall aversion to the region in a financial conditions tightening cycle. Also: corporate hybrids, and contrarian trades.

Our view:

EMBI (spread) 425bps (+/- 25bps) by year-end 2023
450bps (+/- 25bps) by mid-2024

CEMBI (spread) 385bps (+/- 25bps) by year-end 2023.
400bps (+/- 25bps) by mid-2024

EM Corporate and Sovereign credit
Spreads (bps)



Sources: Bloomberg Finance L.P., J.P. Morgan Private Bank. Data as of May 26, 2023.

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided**. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to "Definition of Indices and Terms" for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.

FX VIEWS

US Dollar

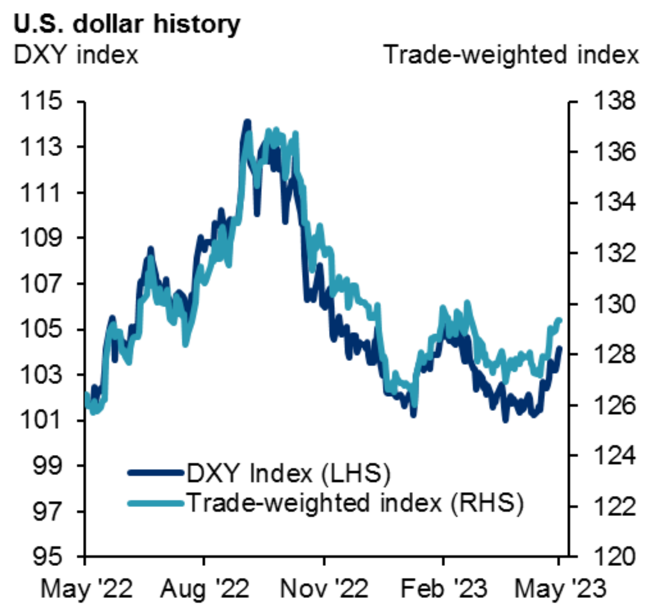
The U.S. dollar found support in May as rates markets priced out prior expectations of near-term rate cuts and forecasters tapered their upward revisions for growth in Europe and China. As investors lean further into the late-cycle playbook and U.S. rates and growth "catch down" to rest of the world, we believe the dollar should continue to unwind its excessive overvaluation over the medium term. The dollar still screens ~10% overvalued against interest rate differentials and historical averages.

We acknowledge that it could be a gradual and choppy path forward, given the complexity in global growth dynamics. In addition, recession risks and weaker risk sentiment limit where investors can express a short dollar view. We continue to see the risk/reward calculus favors trading USD weaker against alternative reserve currencies (EUR, JPY and CHF). At the same time, we take a cautious view of trading the dollar weaker against high beta currencies and EM FX.

What we're watching: U.S. growth momentum, ROW (Europe & China) economic surprise indices

Our view: DXY: 99 (97-101) by year-end 2023

97 (95-99) by mid-2024



Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Euro

In May, the euro retreated from its highs amid broad dollar strength. After a few months of upside surprises in euro area growth and inflation, rates markets have priced in a hawkish path for the ECB that includes ongoing hikes into September. More recently, the Economic Surprise Index looks to have stabilized, and market narratives shifted on the margin, given a rebound in U.S. rates.

At current levels, EURUSD still looks 10% undervalued against interest rate differentials over the longer term. We continue to expect medium-term EUR appreciation, albeit at a slower pace, as U.S. data moves lower and global investors rebalance long-held U.S. overweights.

What we're watching: Europe growth momentum, ECB hiking expectations, portfolio flows/positioning (closing underweights in European fixed income)

Our view: 1.13 (1.11 - 1.15) by year-end 2023

1.15 (1.13 - 1.17) by mid-2024

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

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British Pound

Sterling stabilized over the past month amid broad USD strength. From here, the BoE may stay relatively hawkish, as it recently revised up its growth and inflation outlook, lending some support to the currency. That said, U.K. fundamentals are among the most vulnerable in the G10, characterized by high inflation, weak growth and a large current account deficit. Our FX model, which is based on interest rate differentials, global equities, and the broadly defined value of the U.S. dollar, now implies modest upside for GBP. We would consider underweighting GBP exposure relative to other ex-USD core G10 currencies, and see EURGBP ultimately breaching 0.90.

What we're watching: BOE hiking expectations, global risk sentiment, energy prices.

Our view: 1.25 (1.23-1.27) by year-end 2023

1.27 (1.25-1.29) by mid-2024

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Swiss Franc

We stay bullish on CHF, given its strong fundamentals and safe-haven nature. In Switzerland, inflation remains sticky and broad-based. We continue to focus on the fact that any retreat from policy accommodation the Swiss National Bank (SNB) takes (such as its ongoing rate hikes and outright FX selling/CHF buying) means a tolerance –or even a pursuit of FX appreciation.

Taking into account this market backdrop, as well as Switzerland's current account surplus (one of the largest in the G10), we see CHF outperforming high-beta G10 peers. In our view, CHF looks to be one of the prime candidates for diversifying overweight USD exposures. However, given the eurozone's better than expected economic outlook, we would focus long CHF exposure elsewhere rather than versus EUR.

What we're watching: Global growth revisions, SNB intervention.

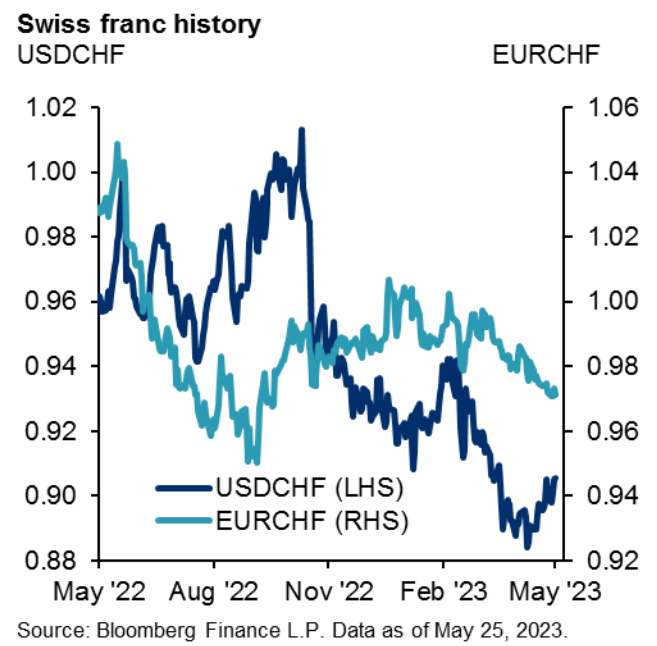
Our view:

USDCHF: 0.88 (0.86-0.90) by year-end 2023

0.86 (0.84 - 0.88) by mid-2024

EURCHF: 1.00 (0.98-1.02) by year-end 2023

1.00 (0.98-1.02) by mid-2024



Source: Bloomberg Finance L.P. Data as of May 25, 2023.

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Japanese Yen

The yen weakened in May, given the rebound in rate differentials against the dollar. Over the past two years, the 10-year UST-JGB rate differential explains over 90% of the movement in USDJPY. We continue to expect USDJPY to decline meaningfully. That move would reflect narrower rate differentials amid diminished Fed hawkishness, along with the possibility that the Bank of Japan (BoJ) changes its yield curve control policy at some point this year.

While BoJ policy normalization will likely be a long and gradual process, any adjustment to the current policies could bring upside to JGB yields, further narrowing rate differentials. We favor long JPY positions against USD and higher-beta, risk-sensitive currencies with 6-12 month tenor via loss-limited options structures.

What we're watching: Japan inflation, BoJ policy guidance, USD yields.

Our view: 125 (123-127) by year-end 2023

120 (118-122) by mid-2024

Japanese yen history
USDJPY

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Chinese Yuan

We revised up our USDCNH outlook in the wake of slowing growth momenturn in China. April activity data came in broadly below expectations. While we don't foresee a major easing from the People's Bank of China (PBOC), markets could continue to price in rate cuts if the recovery stays lukewarm, That would make long CNH a negative carry trade and discourage exporters from converting foreign currency back to the yuan.

From a capital flow perspective, we haven't seen a significant pick-up in capital inflows so far this year despite the economic reopening. In addition, it is difficult to see a clear path ahead for FX pricing, as geopolitical concerns remain front and center for market participants. This backdrop, together with the balance of payment challenges that prevented us from becoming bullish on CNH at the start of the year (i.e., export slowdown, resumption of outbound tourism), prompted us to turn less contructive on the currency in May.

What we're watching: Domestic recovery, capital flows, PBoC policy moves.

Our view: 7.10 (7.00 – 7.20) by year-end 2023

7.00 (6.90 – 7.10) by mid-2024

Chinese yuan history
USDCNY

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

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G10 Commodity FX

As we embrace the late-cycle FX playbook, we generally see commodity FX as currencies to trade from the short side:

CAD: In our view, growth headwinds from tightening U.S. credit conditions could disproportionately impact Canada and leave the Bank of Canada (BoC) on hold. That would likely translate into less supportive carry.

AUD: As the Australian economy remains resilient and inflation moves lower, we are neutral on AUD. We keep an eye out for a potential boost to the currency from a comeback in China tourism. But we think weaker global risk sentiment would constrain any potential gains.

NZD: We remain bearish on NZD, as domestic growth challenges outweigh support from expectations of tightening from the Reserve Bank of New Zealand (RBNZ).

What we're watching: Commodity prices, global growth outlook, central bank divergence

Our view:*

CAD: 1.38 (1.36-1.40) by year-end 2023

AUD: 0.70 (0.68-0.72) by year-end 2023

NZD: 0.62 (0.60–0.64) by year-end 2023

Broad commodity history
Bloomberg Commodity Index (BCOM)

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Scandi FX

The high-beta nature of Scandinavian currencies leaves them vulnerable in today's late-cycle environment. We favor shorting Scandi FX against non-USD low-yielders.

NOK: In the case of the Norwegian krone, declining natural gas prices, soft domestic growth data amid tighter policy and more restrictive global financial conditions are not a recipe for currency appreciation.

SEK: Sweden's Riksbank has turned decidedly hawkish of late, explicitly aiming to strengthen the krone to help cool inflation. However, we note a less than favorable outlook on the growth and housing market front (In the G10, Swedish households have among the highest level of debt service relative to disposable income). This leaves us skeptical that SEK can strengthen on a sustainable basis.

What we're watching: Commodity prices, global growth outlook, housing activity in both countries.

Our view:*

EURNOK: 11.00 (10.80–11.20) by year-end 2023

EURSEK: 11.20 (11.00–11.40) by year-end 2023

Scandi FX history
NOK, SEK per EUR

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

*JPM Investment Bank Outlook

All outlook estimates represent the midpoint of our range. GDP and inflation numbers have a +/-10bps range, rates have a +/-25bps range, and all other outlooks are within the range that is provided**. Estimates, forecasts and comparisons are for illustrative purposes and are as of the dates stated in the material.** Please refer to "Definition of Indices and Terms" for important information. **Past performance is no guarantee of future results and investors may get back less than the amount invested.** It is not possible to invest directly in an index.

Emerging Market FX

A late-cycle environment does not generally favor EMFX, though pockets of the bloc could find resilience with attractive carry. As we have explained, our weaker USD view focuses on underweighting USD against alternative reserve currencies. The more growth-sensitive of that group would remain vulnerable to weakening risk sentiment.

As we assess the terrain:

Latam: Robust carry and falling global yields make for a resilient environment for Latin American local assets. We prefer monetizing volatility to directional FX exposure, as politics never strays far from center stage.

BRL: Manageable external imbalances relative to history and a robust banking sector provide support to the Brazilian real. Still, investors cannot overlook the potential impact of a looming U.S. recession. We see limited downside from here but our conviction is low.

MXN: The Mexican currency offers the best risk/reward in the region, in our view, given a persistent carry advantage (we see cuts in other jurisdictions), relatively firm external and fiscal balances, and quieter politics.

EMEA: We are neutral on this part of the complex, and would instead focus attention on Latin American markets. **ILS**: The Israeli shekel finds fundamental support from the country's balance of payments, but that will likely prove a secondary driver so long as equity volatility is high. Finally, USD/ILS remains highly correlated to U.S. financial conditions.

Asia: In the Asia complex, we are incrementally more positive than we were a month ago. We favor countries with a greater exposure to China demand/tourism (i.e., the Thai Baht (THB), and Indonesian Rupiah (IDR) over the Indian rupee (INR) and Philippine peso (PHP). **TWD**: We see a stable outlook for the Taiwan dollar in light of improved exports with China, but the currency remains vulnerable to the global manufacturing downturn. A geopolitical premium will likely persist. **SGD**: We are neutral on the Singapore dollar against the U.S. dollar. But we still favor long SGD versus its trade-weighted basket given SGD's attractive carry. The Monetary Authority of Singapore (MAS) is expected to remain on hold through 2023 as core CPI has likely peaked.

What we're watching: Overall risk sentiment, global trade outlook, central bank divergence.

Our view:*

BRL: 5.35 (5.15–5.55) by year-end 2023

MXN: 19.35 (19.15–19.55) by year-end 2023

ILS: 3.40 (3.30–3.50) by year-end 2023

TWD: 31.25 (31.00–31.50) by year-end 2023

SGD: 1.32 (1.30–1.34) by year-end 2023

EM currency history

JPMorgan EM Currency Index

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

*JPM Investment Bank Outlook

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COMMODITY VIEWS

BCOM Index

Commodities overall have continued to underperform. After losing 4.5% on the month-to-date, they are down 13% YTD. Markets have unwound all of last year's gains, but it feels difficult to call a bottom as long as Chinese data remain weak. Once again, natural gas, diesel and nickel rank as the sector's biggest losers. Sugar, coffee and gold are the few commodities that have managed a gain on the year.

Negative carry has been a persistent feature of the index since late January as sellers lower prices in exchange for immediate delivery . The negative carry amounts to 1.3%, a significant drop from last year's 13% positive carry.

Stepping back, the big picture is clear: Commodity investors are pricing in a recession and expressing disappointment in the pace of China's reopening.

What we're watching: China industrial production, and stimulus from the Chinese government.

Our view: 110-115 by year-end 2023

110-115 by mid-2024

Source: Bloomberg Finance L.P. Data as of May 25, 2023.

Gold

Gold failed to make new highs after retreating twice at the $2,063 level, and it has slid lower on the month, losing 1.5%. It is still up 7.6% on the year, and we think it is worth considering buying on dips towards $1,925.

As a hedge against debt ceiling stress, gold did not shine. For now, higher interest rates and a stronger dollar have halted the metal's advance. However, if markets look toward a Fed rate cut scenario and the dollar resumes its downward drift, it would likely be supportive for gold prices. As always, a resurgence of geopolitical stress could provide a further boost.

Finally, as we track investor positioning, we note that retail investors have added to positions in May. Still, they remain below last year's extended highs and by no means suggest an over-owned risk asset.

What we're watching: Fed rate cuts, U.S. recession.

Our view: $2,000-$2,100 by year-end 2023

$2,000 -$2,100 by mid-2024

Source: Bloomberg Finance L.P. Data as of May 30, 2023.

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Crude Oil

Oil markets struggled last month, losing 5.6% across the Texas Intermediate (WTI) and Brent benchmarks. What explains the price decline? Quite simply, the market remains in surplus, and as long as that holds, oil will likely languish.

Producers are focusing on rising costs pressuring margins and a drop in production in the Permian. They fail to consider important recent developments impacting pricing. These include: new production from Brazil, Ghana and Norway, continued releases from the U.S. Strategic Petroleum Reserve (SPR) and the pause before OPEC cuts took effect.

However, we think markets are approaching the end of the oil surplus. The SPR releases will end in June. OPEC cuts have begun, as evidenced by significant cuts in exports and statements from Texas producers declaring that the break-even price for new production has risen to at least $60–$65 per barrel (bbl). As most producers aim for margins of at least 20%, they need to see the price of WTI oil stable above $72–$77/ bbl.

For hedging purposes, backwardation in the oil price curve (the forward price of a futures contract is below the spot price) means no new U.S. supply is expected for now. However, in May, the U.S. Department of Energy asked for offers on 3 million barrels, to be delivered in August, to resupply the SPR.

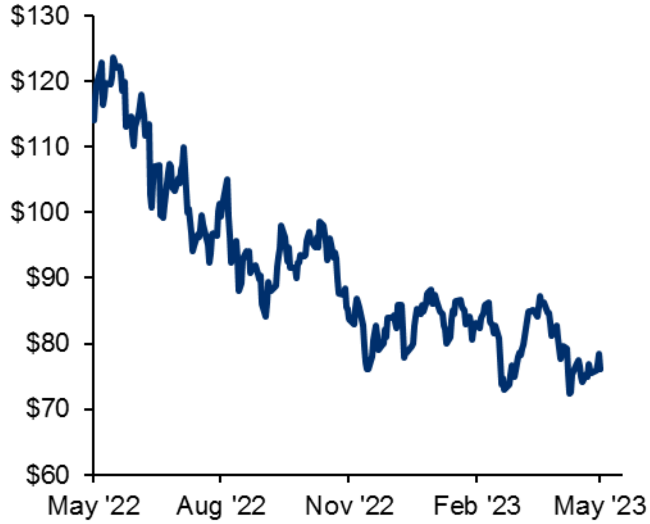
What we're watching: How successful the administration is in tendering for the SPR rebuild, OPEC cuts.

Our view: Brent: $88-$93 by year-end 2023

$88-$93 by mid-2024

Brent crude oil history

$/bbl



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Natural gas

Natural gas prices fell again in May, down 4% for the month. High production levels and benign weather patterns pressured prices lower. We expect production declines to begin after June. Until then, we struggle to see prices recover.

On the demand front, Europe currently has ample supplies to meet its demand, and the lack of robust activity in China means a slowdown in demand for liquefied natural gas (LNG). We remain confident this will change, but it will likely take a little longer than anticipated.

What we're watching: The weather. Extreme heat or cold will drive the price, and we will wait patiently for production to begin to decline.

Our view: $3.50-$4.50 by year-end 2023

$3.50-$4.50 by mid-2024

Henry Hub 1-year price history
$/MMBtu

Source: Bloomberg Finance L.P. Data as of May 30, 2023.

Agricultural commodities

At the last possible minute, Russia agreed to renew the Black Sea Grain Initiative, which enables the safe export of grain from Ukrainian ports. This decision eased pressure on corn and wheat prices, which declined 7% and 2%, respectively. Despite the drop in energy prices, food prices globally remain elevated.

In addition, we note that the market continues to mark down the geopolitical risk that could potentially lead to supply shocks. This could be a misjudgment if export markets prove to be more vulnerable than current prices would suggest. Finally, it appears that U.S. wheat producers faced poor winter conditions, which could put upward pressure on prices. Corn prices could also move higher following a tightening in corn stocks to the lowest levels since 2013-14.

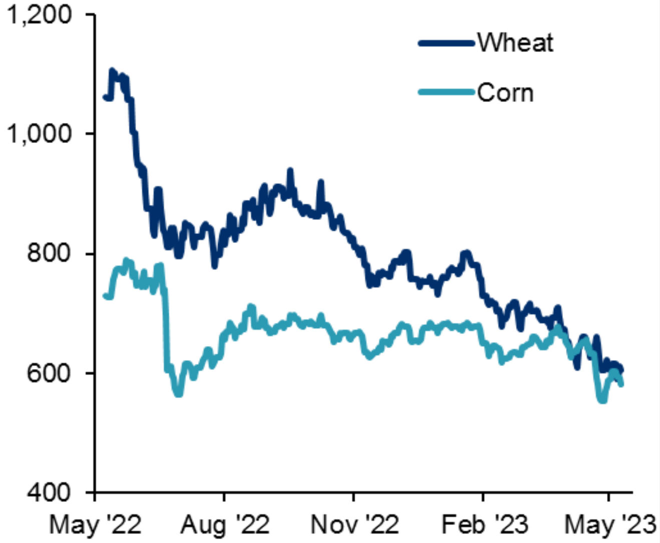
What we're watching: La Niña weather conditions for clues on export production declines and possible new land based options for Ukrainian exports.

Our view:

Corn: 760-860cts by mid-2024

Wheat: 770-820cts by mid-2024

Agricultural prices 1-year history
$/bu



Source: Bloomberg Finance L.P. Data as of June 02, 2023.

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OUR MISSION

The Global Investment Strategy Group provides industry-leading insights and investment advice to help our clients achieve their long-term goals. They draw on the extensive knowledge and experience of the Group's economists, investment strategists and asset-class strategists to provide a unique perspective across the global financial markets.

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DEFINITIONS OF INDICES AND TERMS

Currencies and Central Banks

- USD – US dollar
- DXY – U.S. Dollar Index indicates the general initial value of the USD. The index measures this by averaging the exchange rates between the USD and major world currencies.
- EUR – Euro
- JPY – Japanese yen
- GBP – British pound
- CHF – Swiss franc
- CAD – Canadian dollar
- AUD – Australian dollar
- NOK – Norwegian krone
- MXN – Mexican peso
- BRL – Brazilian real
- CNH – Offshore deliverable renminbi
- CNY– Onshore non-deliverable renminbi
- RMB – Chinese renminbi
- KRW – Korean won
- INR – Indian rupee
- SGD – Singapore dollar
- SEK – Swedish krona
- XAU – Gold
- RUB – Russian ruble
- TRY – Turkish lira
- BCB – Central Bank of Brazil
- BoC – Bank of Canada
- BoE – Bank of England
- BOJ – Bank of Japan
- CBR – Central Bank of Russia
- CBRT – Central Bank of the Republic of Turkey
- CBRA – Central Bank of the Republic of Argentina
- ECB – European Central Bank
- Fed – Federal Reserve
- SNB – Swiss National Bank

Additional abbreviations

- Bbl – Barrel
- Bps – Basis points
- Bcf – Billion cubic feet
- BoP – Balance of Payments
- BTP – Italian government bonds
- Bund – German government bonds
- CFTC – Commodity Futures Trading Commission
- COVID-19 – Coronavirus disease 2019
- DM – Developed Markets
- EM – Emerging Markets
- EMEA – Europe, Middle East and Africa
- FDI – Foreign Direct Investment
- FX – Foreign Exchange
- G10 – The Group of Ten is made up of 11 industrial countries that consult and cooperate on economic, monetary and financial matters
- GDP – Gross Domestic Product
- HY – High yield
- IG – Investment grade
- JGB – Japan government bond
- LATAM – Latin America
- OPEC – Organisation of the Petroleum Exporting Countries
- Oz. – Ounce
- REER – Real Effective Exchange Rate
- UK – United Kingdom
- UST – U.S. Treasury note
- WTI – Western Texas Intermediate
- YTD – Year-to-date

Note: Indices are for illustrative purposes only, are not investment products, and may not be considered for direct investment. Indices are an inherently weak predictive or comparative tool.
All indices denominated in U.S. dollars unless noted otherwise.

The **Bloomberg Commodity Index (BCOM)** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

The **Bloomberg USAgg Index** is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).

The Citi **Economic Surprise Indices** measure data surprises relative to market expectations. A positive reading means that data releases have been stronger than expected and a negative reading means that data releases have been worse than expected.

The **J.P. Morgan Asia Credit Index (JACI)** aids in evaluating investment opportunities in fixed rate USD denominated bonds issued in Asia ex Japan region. It follows a traditional market capitalization technique similar to the EMBI and the CEMBI Index series.

The **MSCI AC Asia ex Japan Index** captures large and mid-cap representation across two of three Developed Markets countries (excluding Japan) and eight Emerging Markets countries in Asia. With 609 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. Developed Markets countries in the index include: Hong Kong and Singapore. Emerging Markets countries include: China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand.

The **MSCI World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The index consists of 23 developed market country indexes.

The **Standard and Poor's 500 Index** is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941–43 base period.

The **STOXX Europe 600 Index (SXXP Index):** An index tracking 600 publicly traded companies based in one of 18 EU countries. The index includes small cap, medium cap, and large cap companies. The countries represented in the index are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Holland, Iceland, Ireland, Italy, Luxembourg, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

TOPIX, also known as the Tokyo Stock Price Index, is a capitalization-weighted index of all companies listed on the First Section of the Tokyo Stock Exchange.

KEY RISKS

- Investments in commodities may have greater volatility than investments in traditional securities. The value of commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Investing in commodities creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

- Investing in alternative assets involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

- The price of equity securities may rise or fall due to the changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. Equity securities are subject to "stock market risk" meaning that stock prices in general may decline over short or extended periods of time.

- Investing in fixed income products is subject to certain risks, including interest rate, credit, inflation, call, prepayment and reinvestment risk. Any fixed income security sold or redeemed prior to maturity may be subject to substantial gain or loss.

- Preferred securities are typically long dated securities with call protection that fall in between debt and equity in the capital structure. Preferred securities carry various risks and considerations which include: concentration risk; interest rate risk; lower credit ratings than individual bonds; a lower claim to assets than a firm's individual bonds; higher yields due to these risk characteristics; and “callable” implications meaning the issuing company may redeem the stock at a certain price after a certain date.

- Investors should understand the potential tax liabilities surrounding a municipal bond purchase. Certain municipal bonds are federally taxed if the holder is subject to alternative minimum tax. Capital gains, if any, are federally taxable. The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax (AMT).

- Holders of foreign securities can be subject to foreign exchange risk, exchange-rate risk and currency risk, as exchange rates fluctuate between an investment’s foreign currency and the investment holder’s domestic currency. Conversely, it is possible to benefit from favorable foreign exchange fluctuations.

- International investments may not be suitable for all investors. International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Some overseas markets may not be as politically and economically stable as the United States and other nations. International investing can be more volatile.

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