Vantage Point

Chartbook Q3 '24

Measure Twice, Cut Once

BNY Advisors, Inc. (BNY Advisors)

BNY

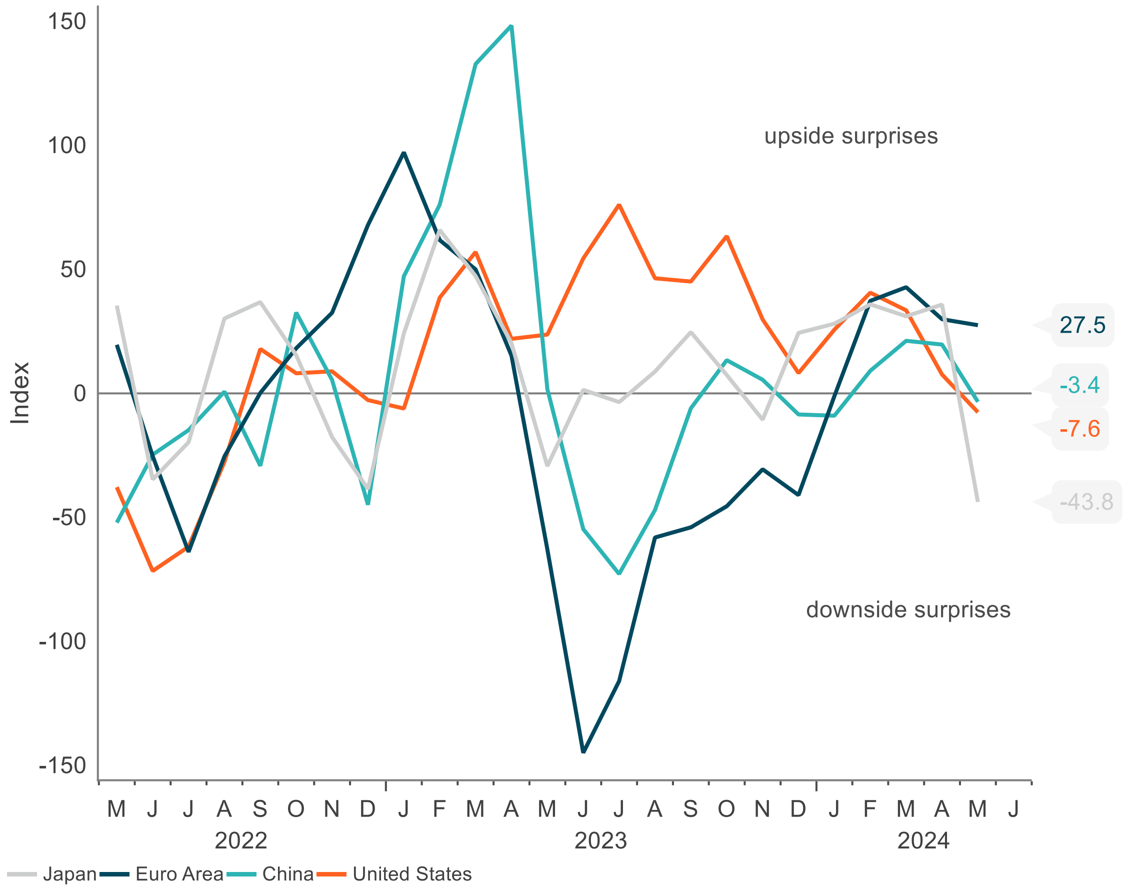
AGENDA

BNY

Global Macro Environment – *Activity*

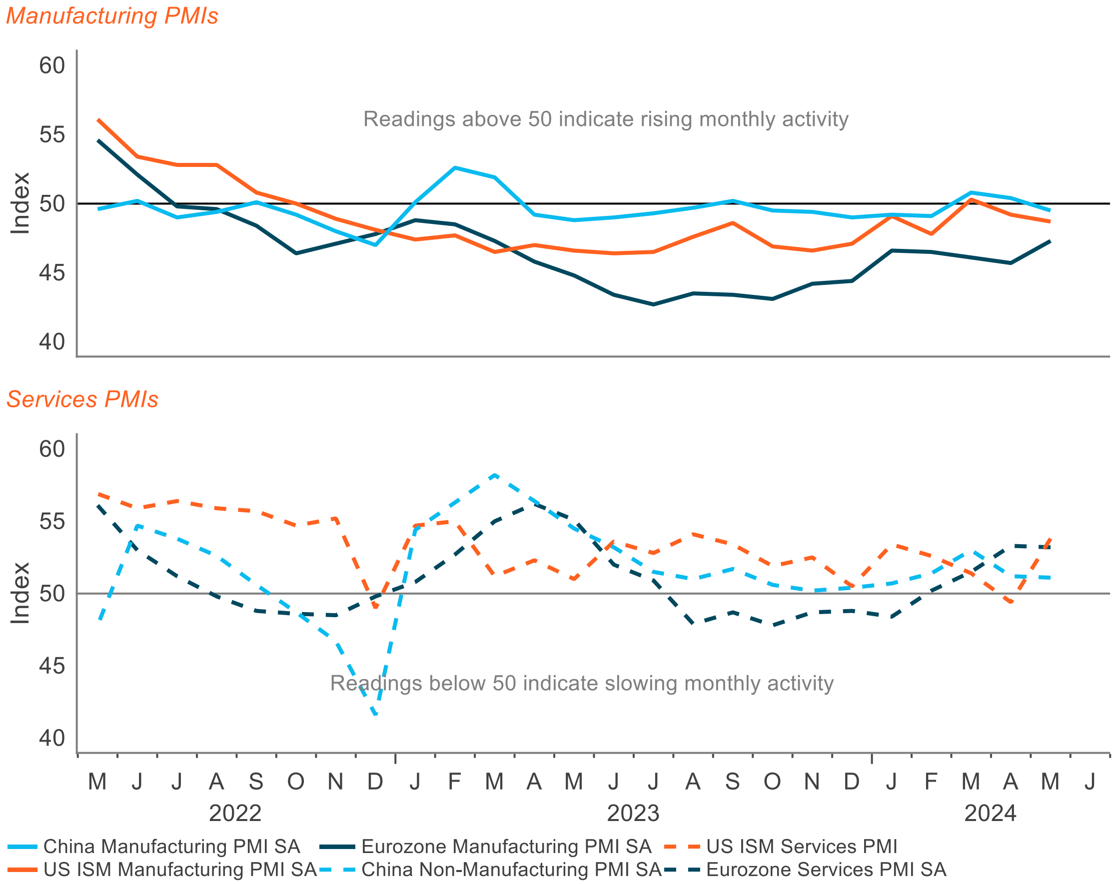
Our Viewpoint: *Economic surprises are holding up in the Euro area but has begun waning at most major economies. Meanwhile, purchasing manager indices (PMIs) are off their lows in manufacturing but not yet in expansionary territory. However, services PMIs remain resilient.*

Economic Surprise Indexes



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Global Purchasing Manager Indexes (PMIs)



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

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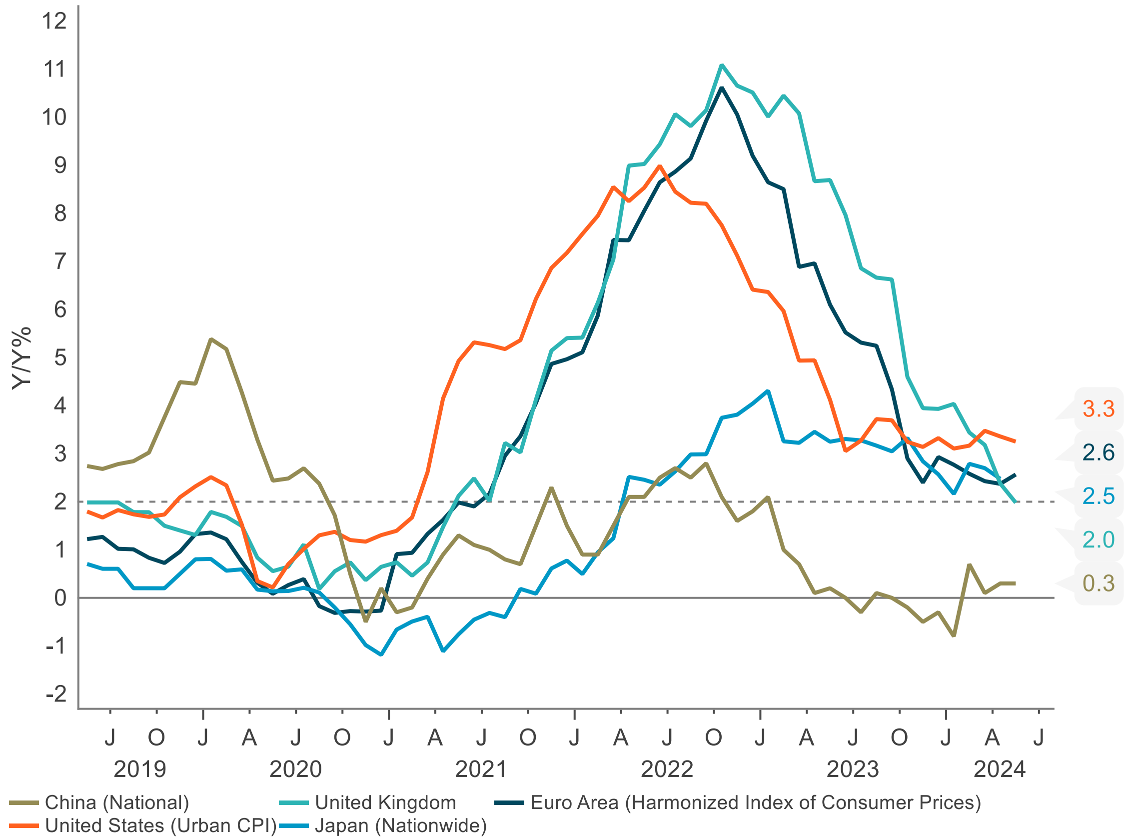
Global Macro Environment - *Inflation*

Our Viewpoint: *Headline disinflation stalled in the second quarter, on firming of core inflation. As observed through US PCE inflation, much of this is attributable to sticky services (housing and rental) inflation, with durable goods remaining in deflation.*

Headline Inflation in G3 Economies + China & the U.K.

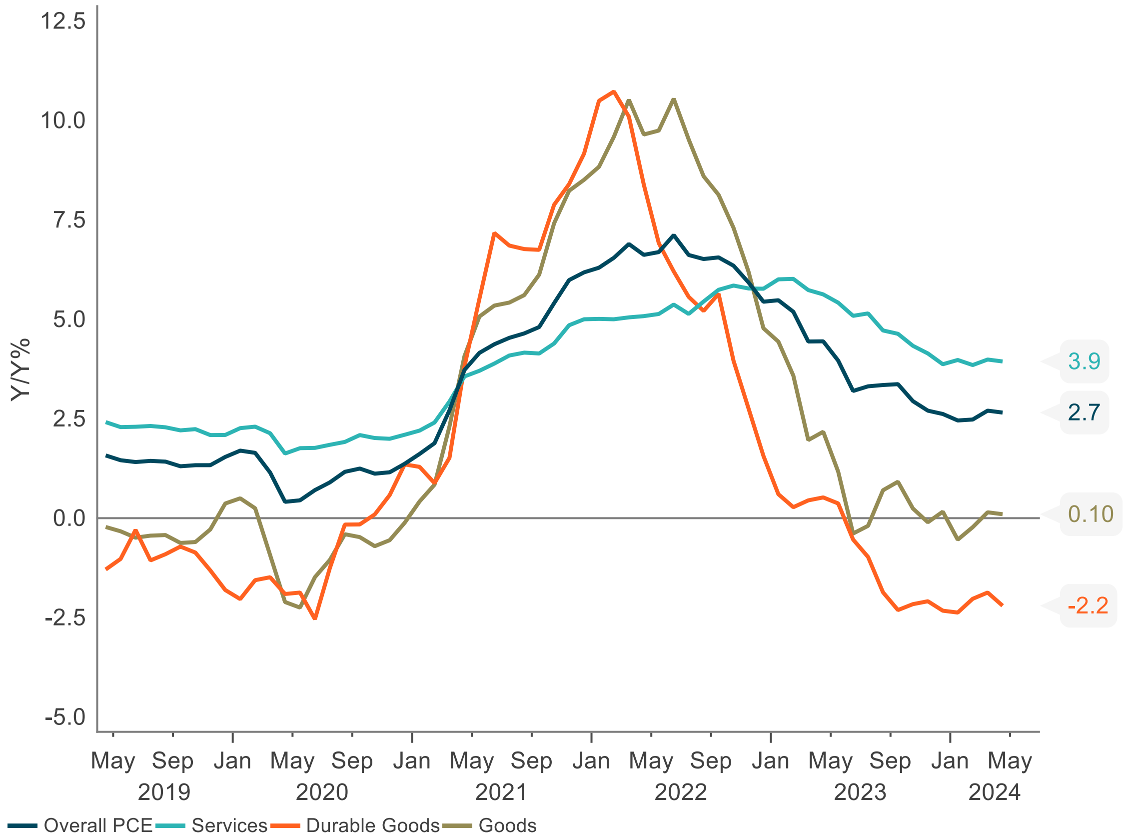
Yearly % change



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

United States, Personal Consumption Expenditure (PCE) Inflation

Seasonally adjusted index, yearly % change

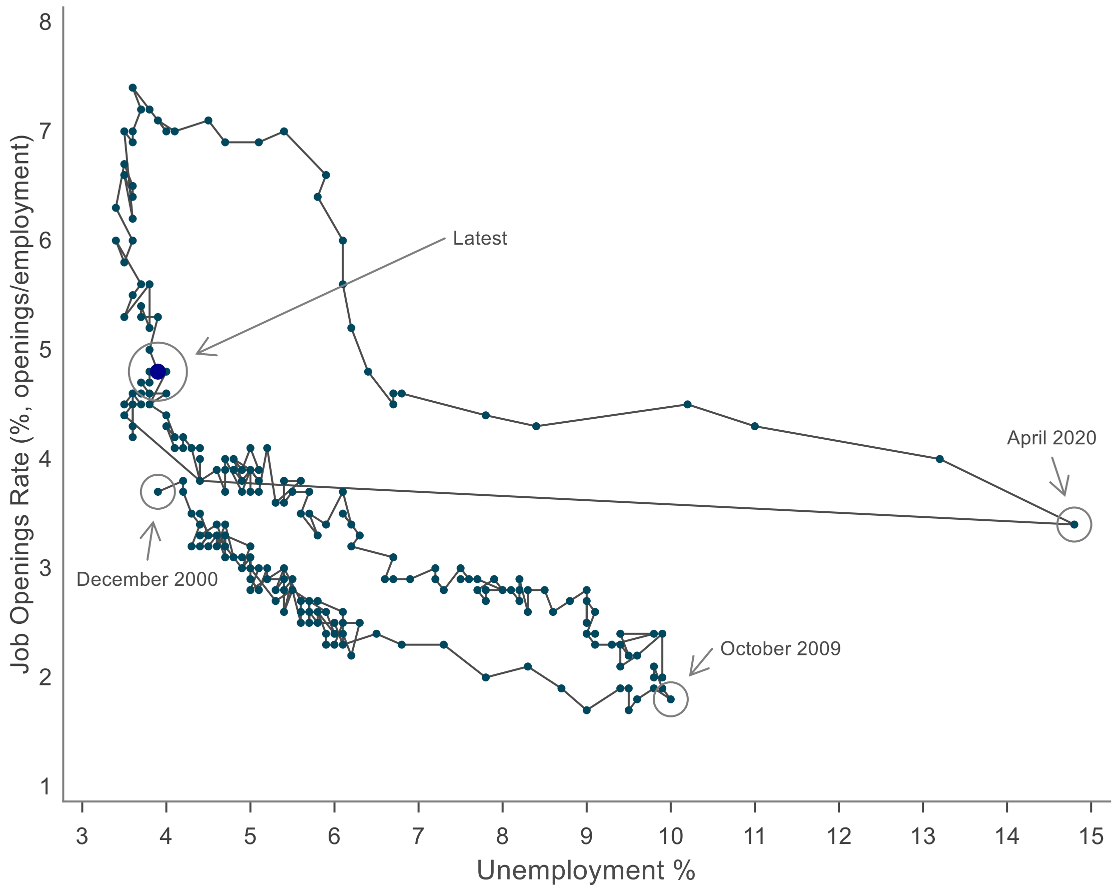


Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Global Macro Environment – *Labor*

Our Viewpoint: *Tight labor markets continue easing – with a decline in the ratio of job availability per unemployed person. But nominal wage growth remains higher than pre-pandemic rates – highlighting odds of strengthening real incomes and also some risk of inflation persistence.*

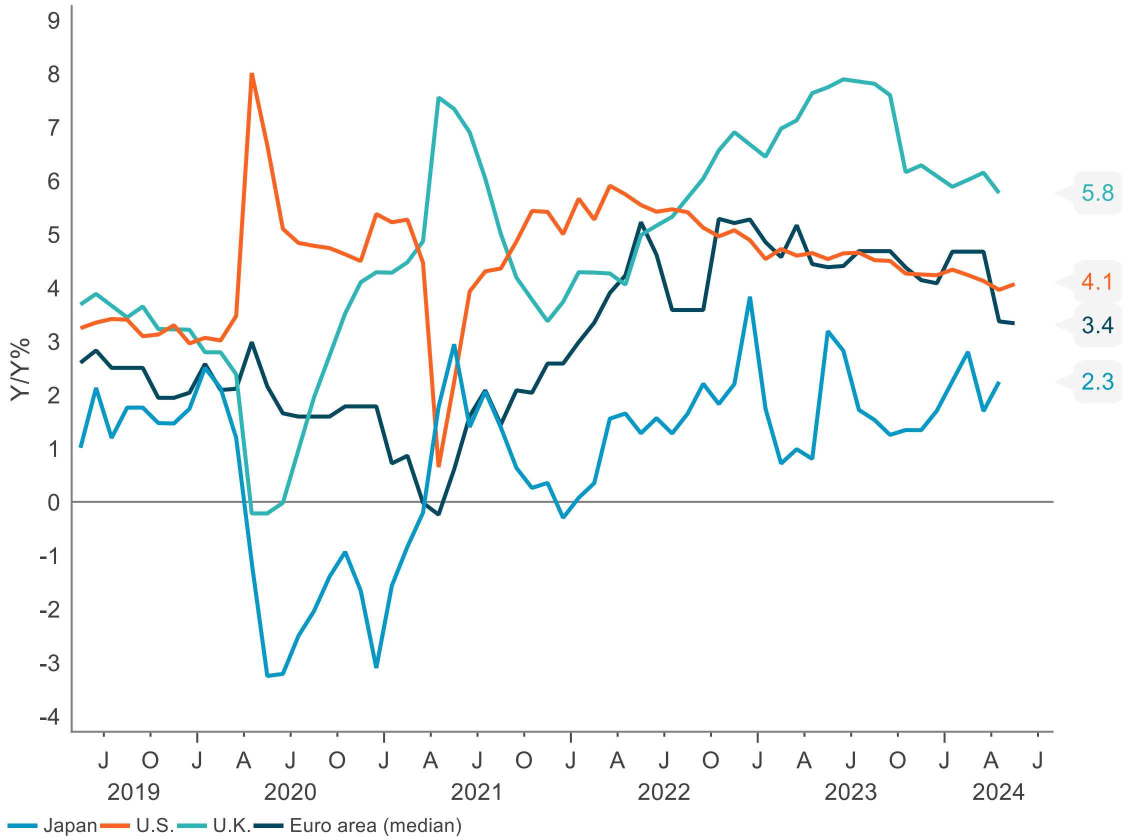
U.S. Beveridge Curve



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Nominal Wage Growth: G3 Economies & U.K.

Seasonally adjusted, yearly percent change



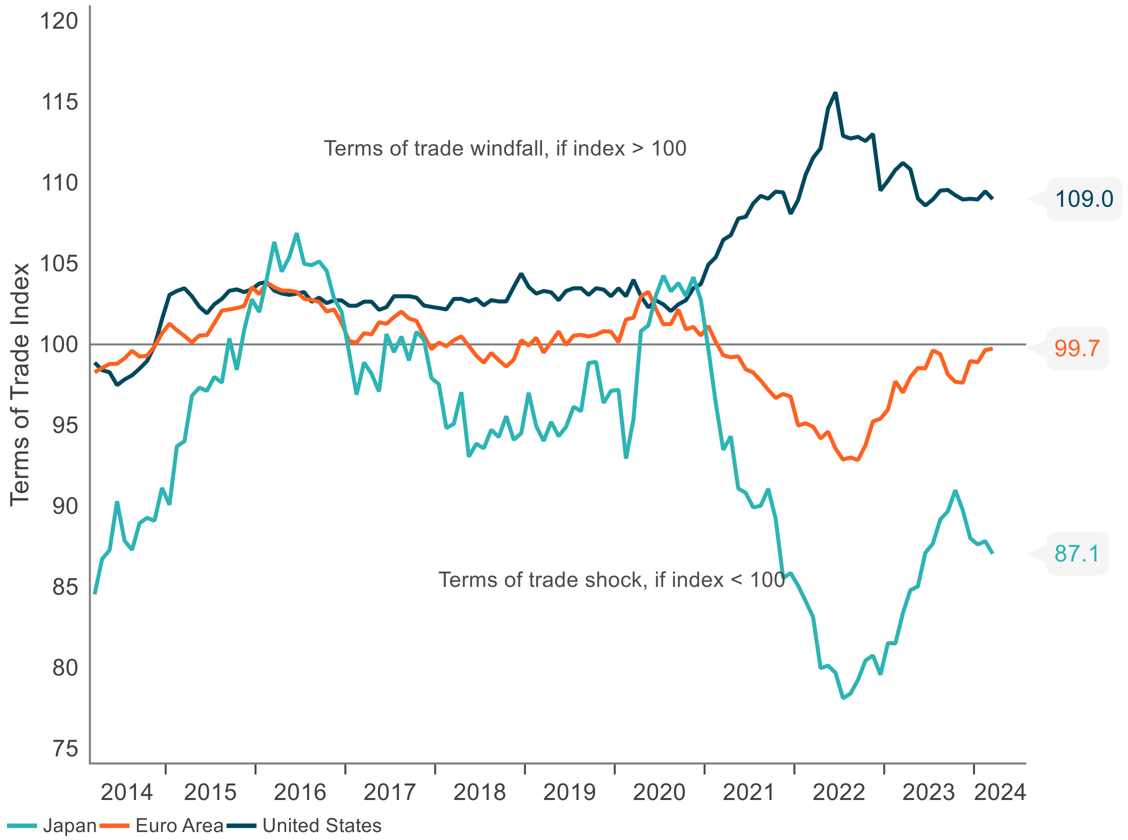
Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Global Macro Environment – *Relative Performance*

Our Viewpoint: *The US economy continues to experience a terms of trade windfall and incur a more supportive fiscal stance – both of which have boosted its relative growth prospects and may have contributed to stickier core inflation.*

Terms of Trade: U.S., Euro Area, Japan

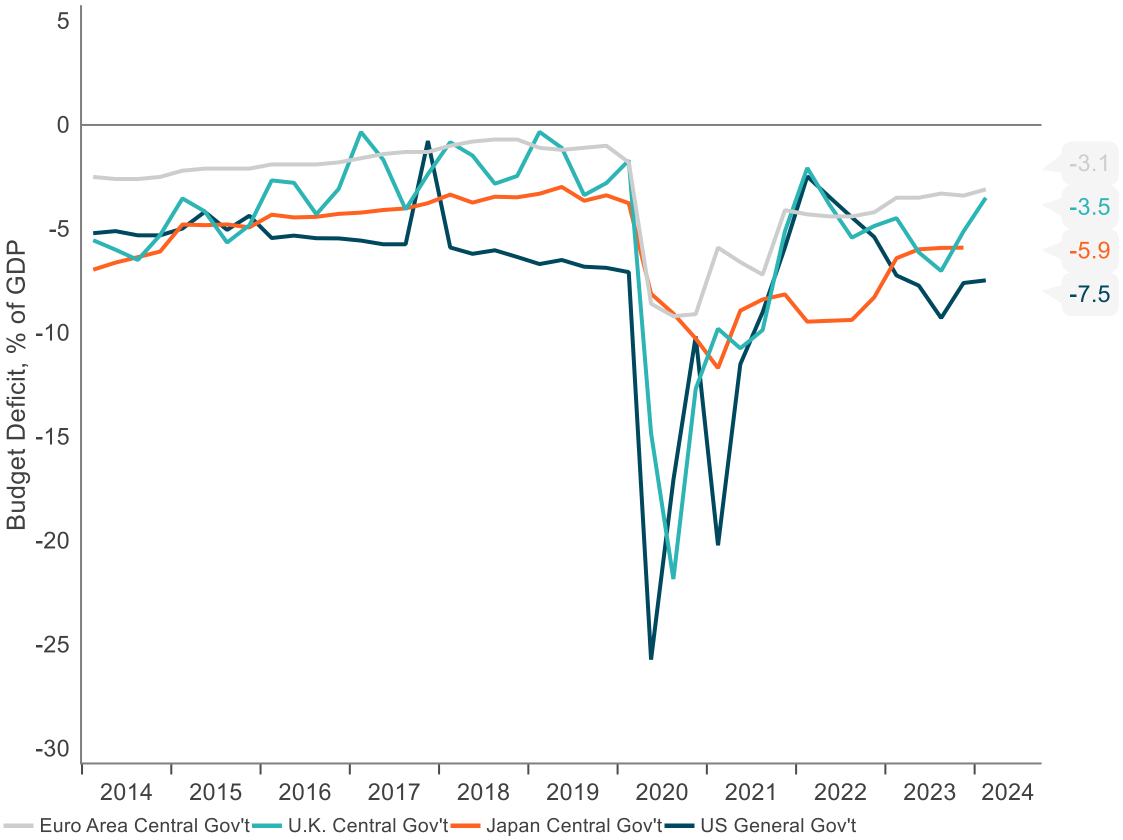
Export prices divided by import prices



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Fiscal Positions at G3 Economies & U.K.

Nominal fiscal balance, percent of nominal GDP



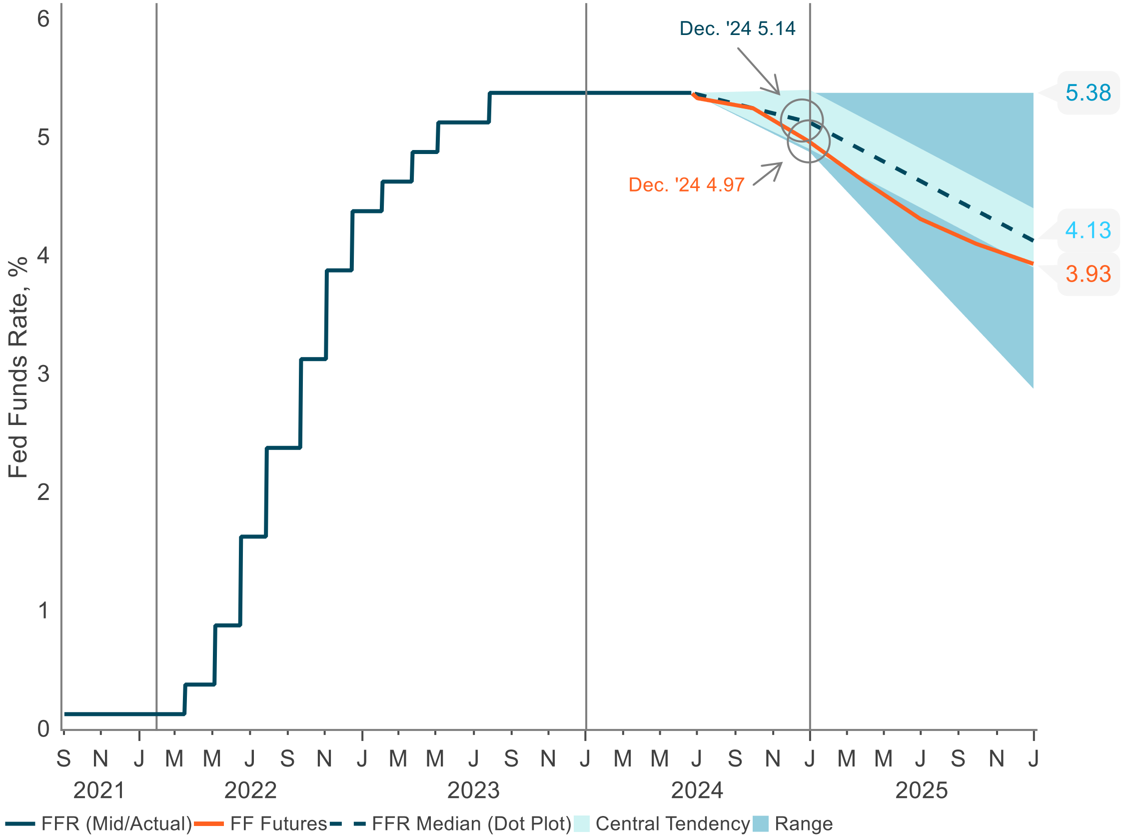
Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Global Macro Environment – *Policy*

Our Viewpoint: *The last mile of inflation, and stickier core, is resulting in "higher for longer" rates at the Fed as well as at other major central banks. But, barring Japan, gradual policy easing is still expected through 2025.*

Fed vs Market

Dot Plot as of June 2024 Meeting



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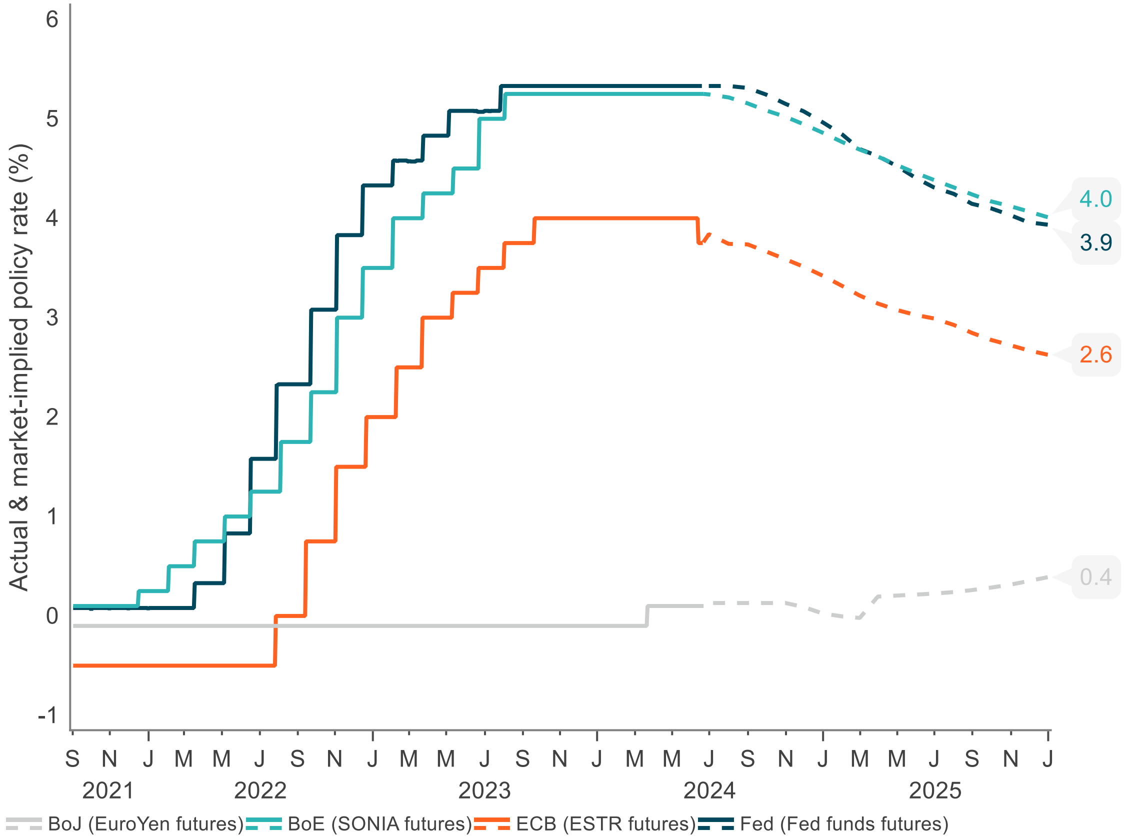
Global Central Bank Policy

Central banks' policy rates and market-implied rate trajectories



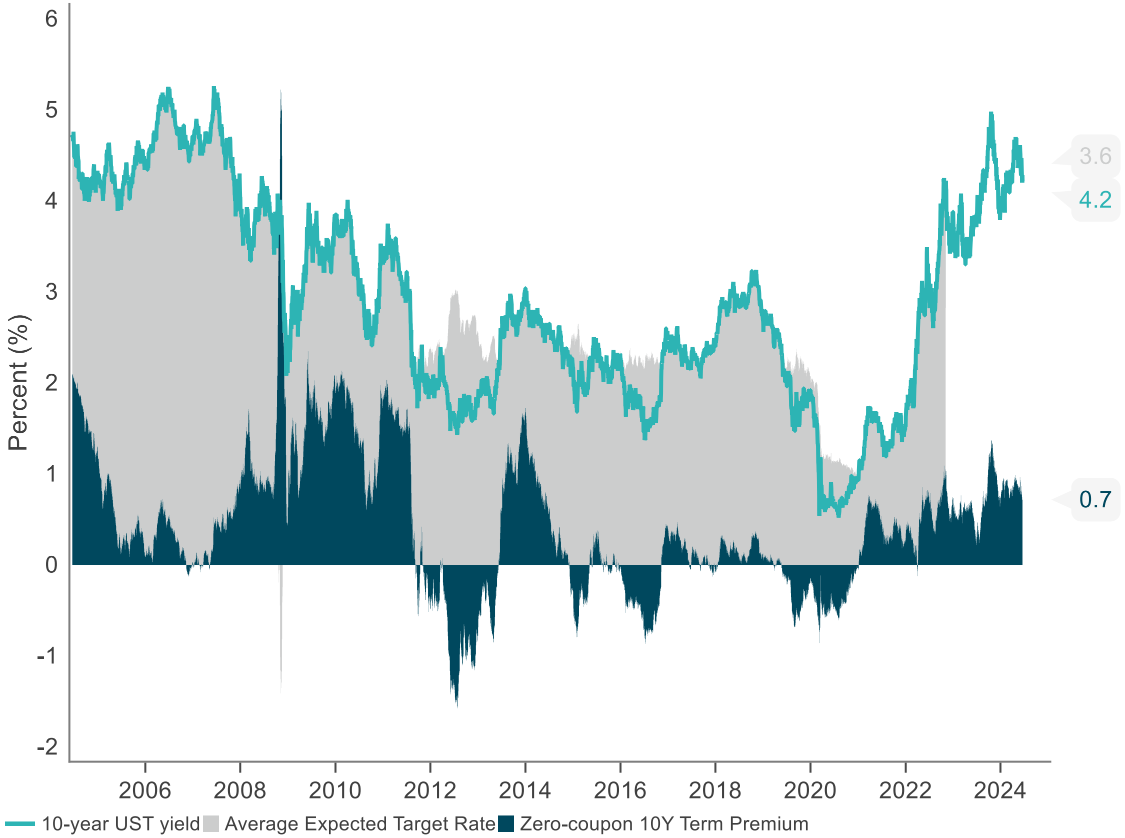
Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Global Macro Environment - *Rates*

Our Viewpoint: *Elevated US yields incorporate 'higher for longer' Fed target rates, and compressed term-premiums (by historical standards). Even after a Fed rate peak, relatively elevated US market rates are likely to place a floor beneath the trade-weighted USD index (DXY).*

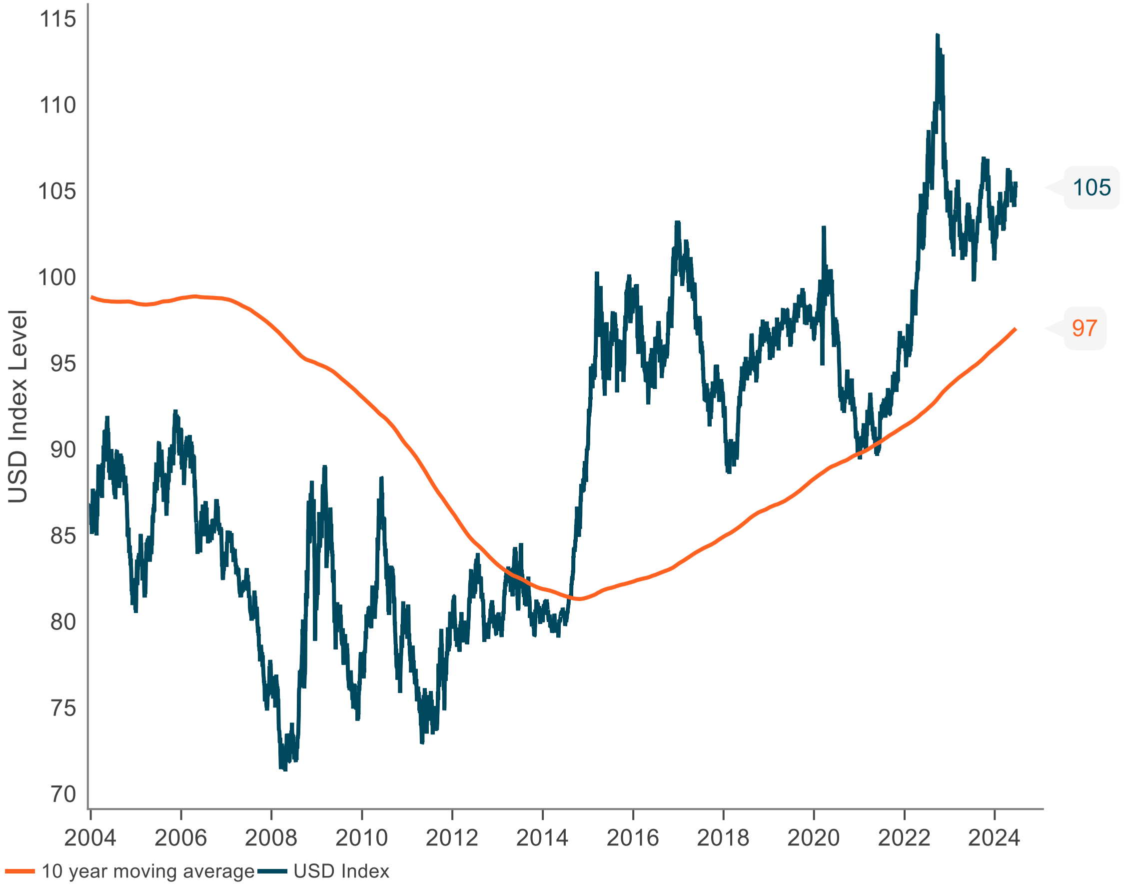
US Treasury Yields, Term Premium Component & Avg Exp Short Rate

Derived from 10-year zero-coupon term premium computed by San Francisco Fed



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

USD (DXY) Index and its Long-term Trend



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Our Scenarios

Our Viewpoint: *Scenarios provide richer analysis and a clearer conceptualization of macro/market uncertainty*

60% Scenario 1 Muddle Through

- U.S. growth slows. Europe emerges from stall-speed to a modest recovery.
- China's stimulus boosts manufacturing rather than domestic consumption.
- As a result, global goods price disinflation and stable-to-weaker energy prices precludes a resurgence of inflation.
- But inflation persistence lingers - led by sticky services prices (healthcare and rentals), and positive real wage growth.
- Policy easing proceeds in a variegated fashion, and hesitantly, at the major economies, except Japan.
- But the extent of easing is considerably limited, and terminal rates are higher than pre-pandemic levels.
- Rising trade and elevated geopolitical tension maintains a bid for the USD.
- Credit spreads widen out to long-term averages.

20% Scenario 2 New Economy

- Global growth surprises to the upside led by productivity gains.
- AI adoption picks up speed, unit labor costs show signs of sustained easing.
- Supply chains adjust with less than expected trade and geopolitical friction.
- Fiscal and sovereign debt concerns at the U.S. and other major developed economies are offset by stable-to-declining trends in overall non-financial debt.
- Other major emerging markets begin to make an increasingly important contribution to global growth, offsetting weakening trend Chinese growth.
- Risk assets learn to live with higher for longer rates and a stable-to-firming trend in the USD.

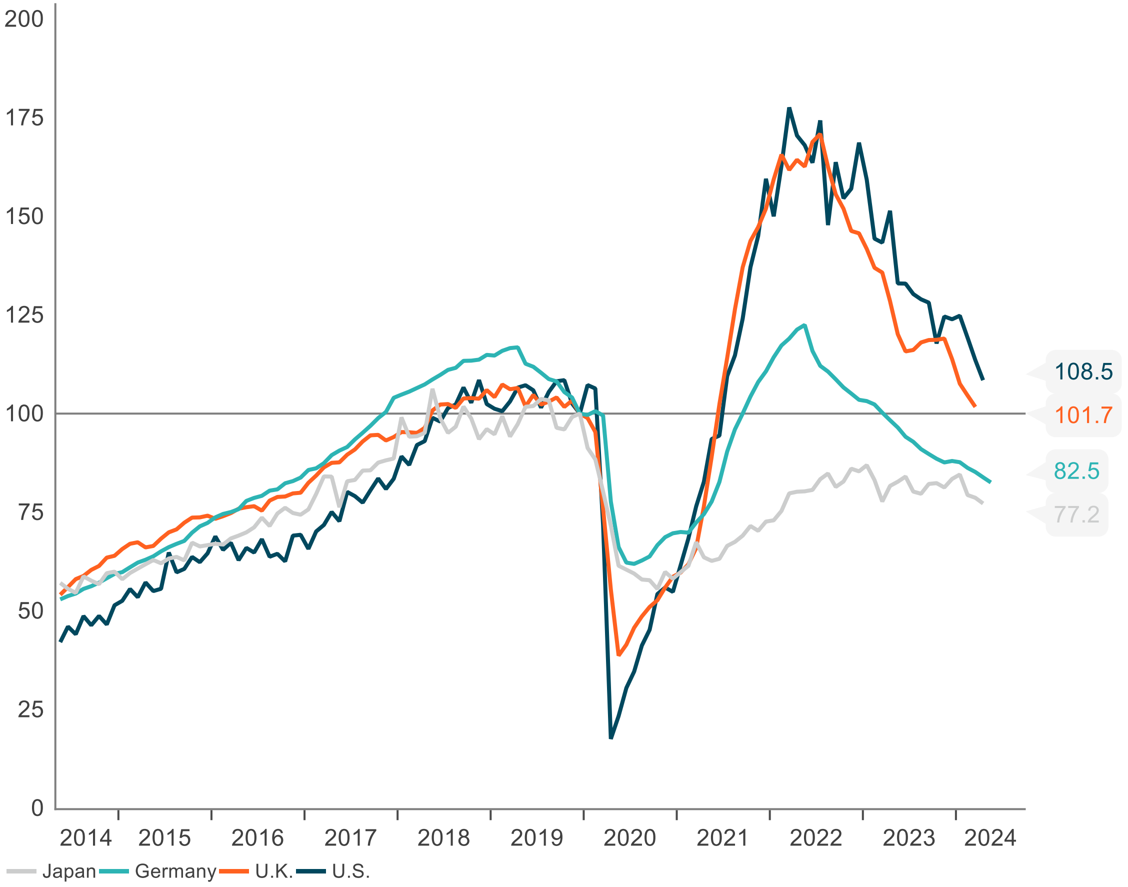
20% Scenario 3 Second Wave

- U.S. growth surprises to the upside on a continuing positive fiscal impulse and terms of trade windfalls.
- Europe and China pick-up speed together, placing more pressure on resources and supply chains.
- Positive shocks to aggregate demand raises inflation expectations and worsens inflation persistence.
- Markets price out further central bank easing at the major economies and are forced to consider a few hikes.
- A reconsideration of the path of monetary policy, and an actual hike or two, raises the odds of a 'monetary recession.'
- Spreads widen beyond historical means and USD gains on rising growth concern.

Muddle Through (60%)

Our Viewpoint: *Recession odds are easing at the major global economies even as labor markets are becoming less tight. Moreover, the improving aggregate global-demand-supply balance to remain conducive to further disinflation, led by lower global goods prices followed by gradually easing core inflation.*

Job Vacancy to Unemployment Ratio - Indexed at 100 on Dec 2019



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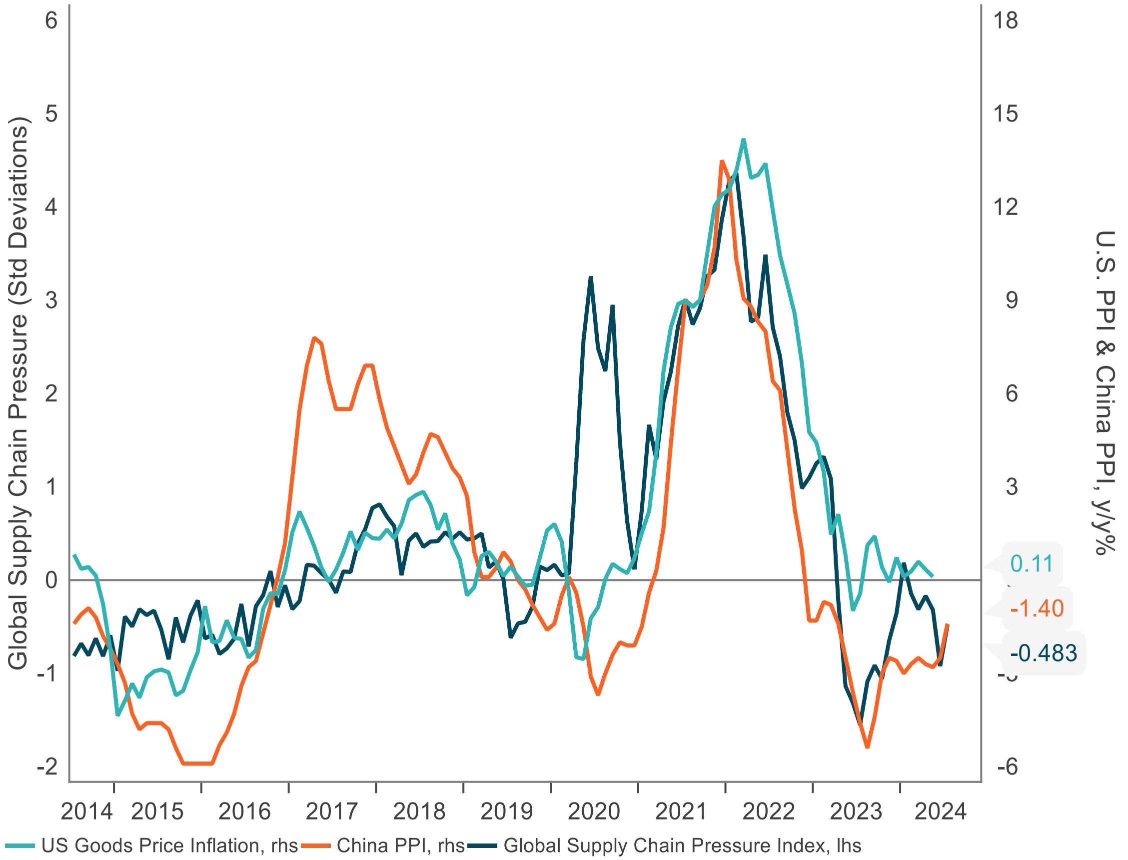
Global aggregate supply conditions, and US goods price inflation

Relationship between Global supply chains, Chinese producer price inflation and US goods price inflation



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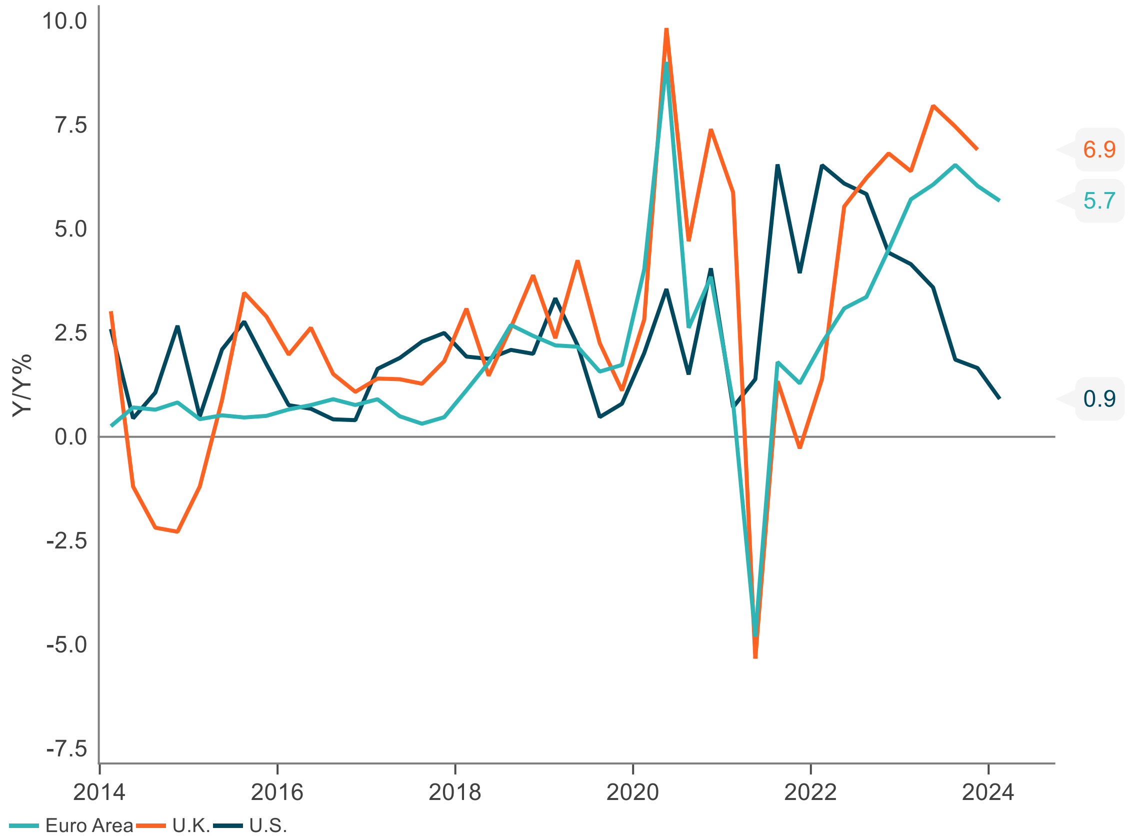
New Economy (20%)

Our Viewpoint: *Unit labor costs are steadily easing in the U.S. and seem to be rolling over in Europe. Ongoing AI adoption could sustain a further run-up in equity market before shoring-up actual improvements in productivity.*

Unit Labor Cost: U.S., Euro Area & U.K.

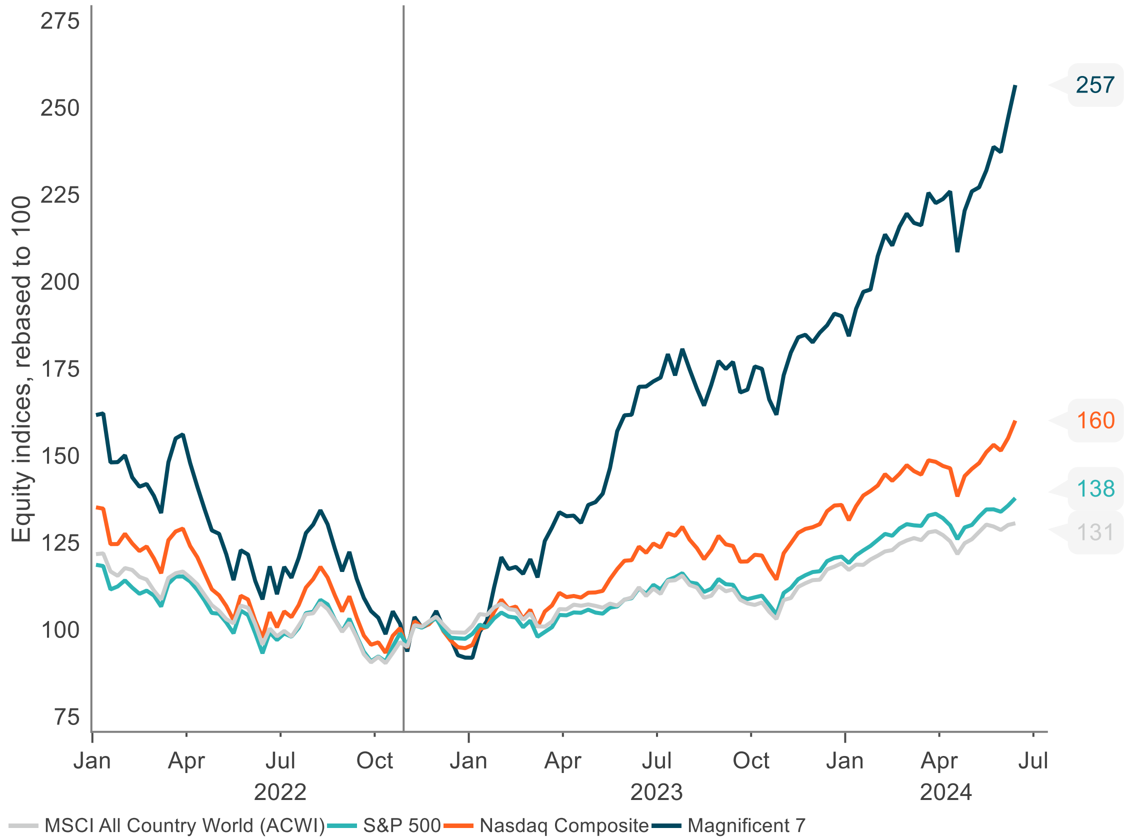
Unit labor cost refers to the average cost of labor required to produce one unit of output, yearly % change



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Magnficient 7 Equities Vs. Nasdaq, S&P and All Country World Indices

Rebased to 100 in November 2022, when Chat GPT version 3 was launched

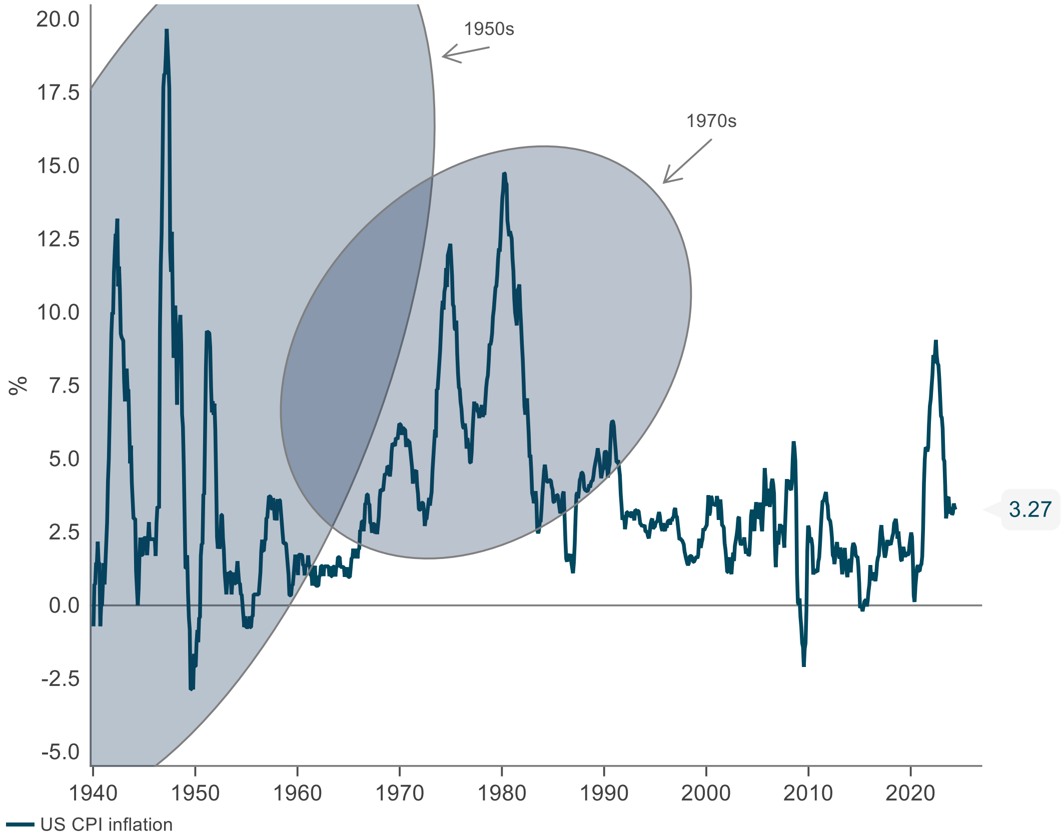


Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Second Wave (20%)

Our Viewpoint: *An aggregate demand shock, perhaps from looser than expected fiscal policies or premature monetary easing, un-anchors inflation expectations –which remain higher than pre-pandemic levels- and worsens core inflation persistence. A negative energy supply shock is also a risk given geopolitical volatility.*

Previous inflationary episodes saw multiple inflation waves



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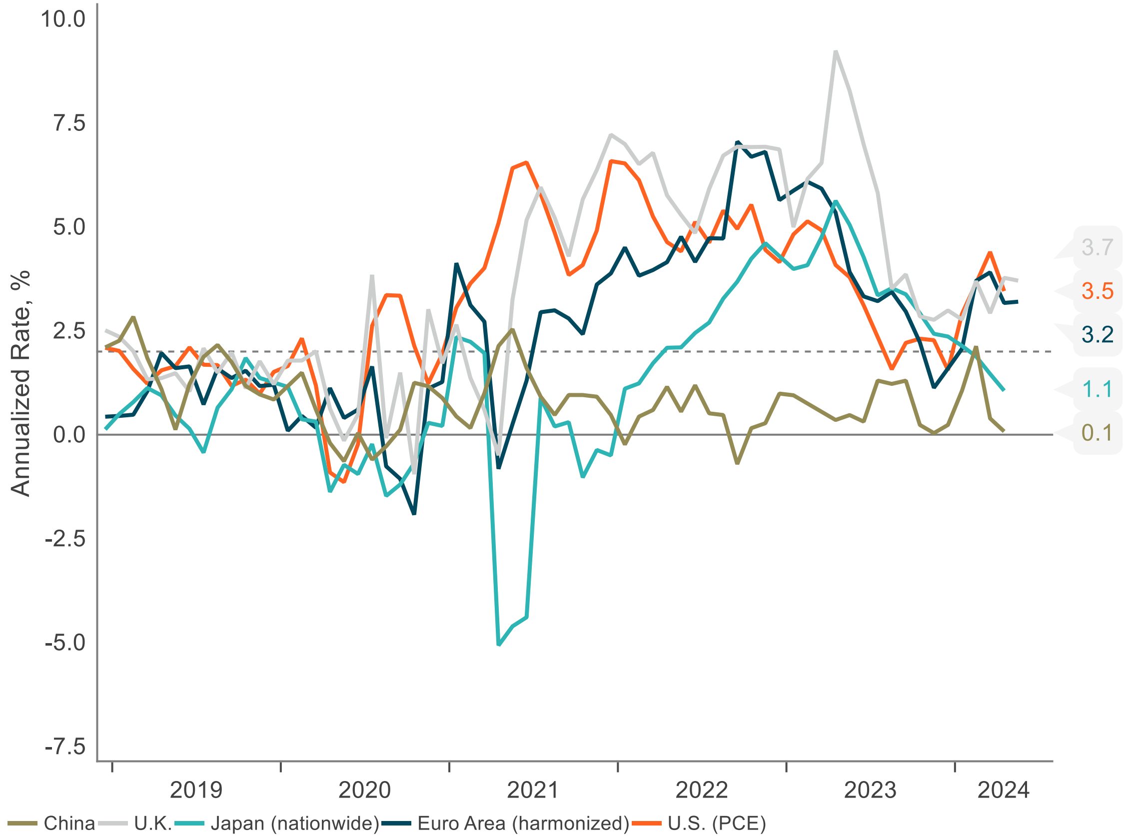
Core Inflation Momentum in G3 Economies + China & U.K.

Excluding food and energy, seasonally adjusted, annualized rate (3m/3m)



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

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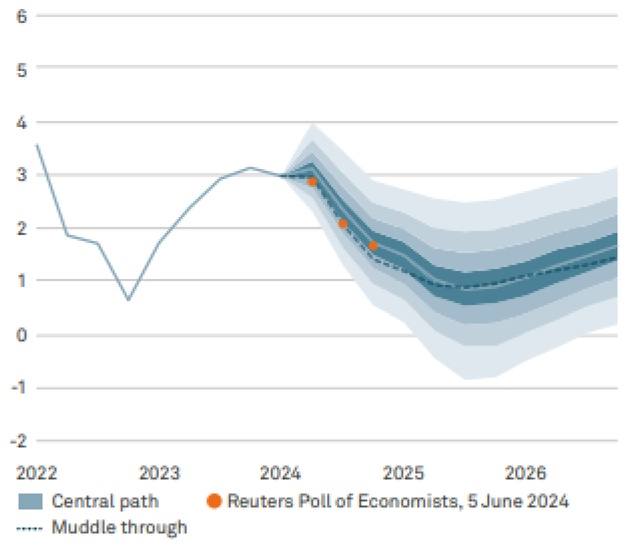
Our Forecasts

Our Viewpoint: *We see U.S. growth slowing broadly in line with consensus in the rest of the year. But the below trend growth rate to persist through 2025, pull down inflation to the Fed's target by end of next year. As a result, Fed Funds rate to ease from late this year and settle around 3% by 2026.*

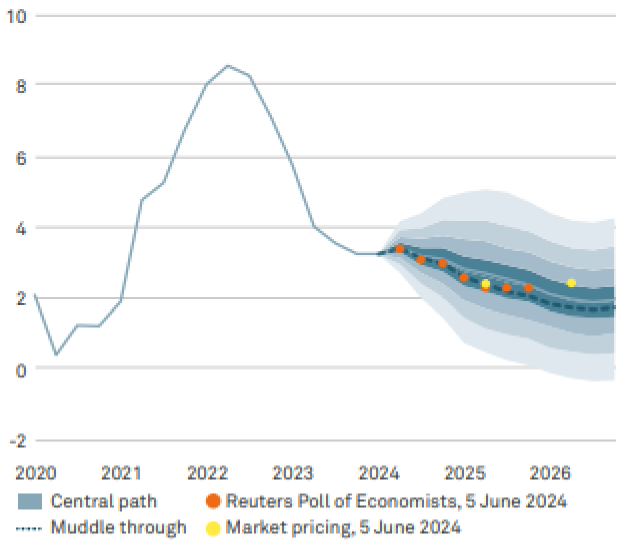
CHART 1: US GDP
FOUR-QUARTER PERCENTAGE CHANGES



Source: Refinitiv Datastream/Fathom Consulting.

Key Takeaway: In common with other forecasters, we expect US growth to slow from here. Recession risks remain, and are a little higher than normal.

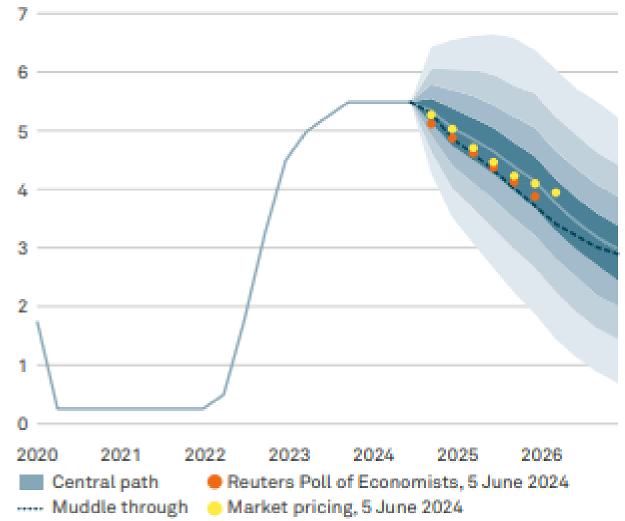
CHART 4: US CPI
FOUR-QUARTER PERCENTAGE CHANGES



Source: LSEG Datastream/Fathom Consulting.

Key Takeaway: It is more likely that US inflation will be above rather than below the 2% target for most of our forecast horizon.

CHART 5: US FEDERAL FUNDS RATE
PER CENT



Source: LSEG Datastream/Fathom Consulting.

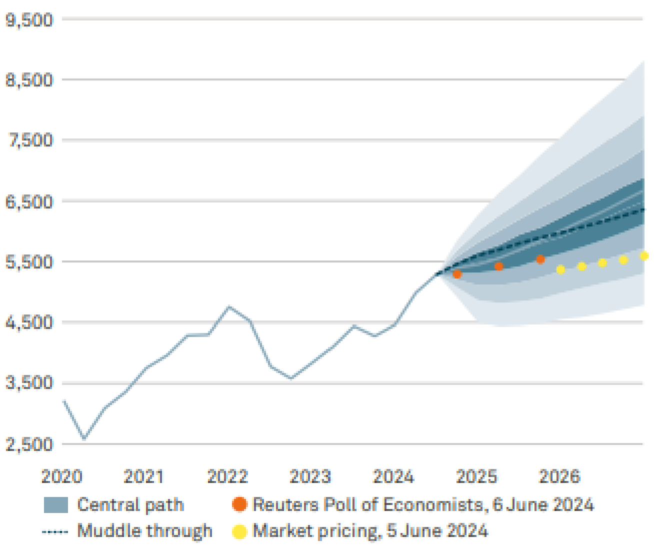
Key takeaway: We are likely to see one or two 25 basis point cuts from the Fed this year. At the same time, the uncertain outlook means that there is nevertheless a 1-in-4 chance of further tightening from here.

Forecasts begin in Q3 2024 and were calculated as of June 7, 2024. Source: BNY Advisors and Fathom Consulting. The "central path" (i.e., blue bands) represents the central 20% of outcomes based on a mean or probability-weighted average forecast across all three scenarios. The light gray bands show progressively less likely outcomes covering a combined 60% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central path are wider than those above, this shows the balance of risks lies to the downside.

Our Forecasts

Our Viewpoint: *Our scenario means imply a stronger US equity pick-up in 2025-26. Long-term rates to remain largely stable in the near-term but poised to come off to 4% or a bit lower by 2026. USD stability to persist, risks are skewed higher.*

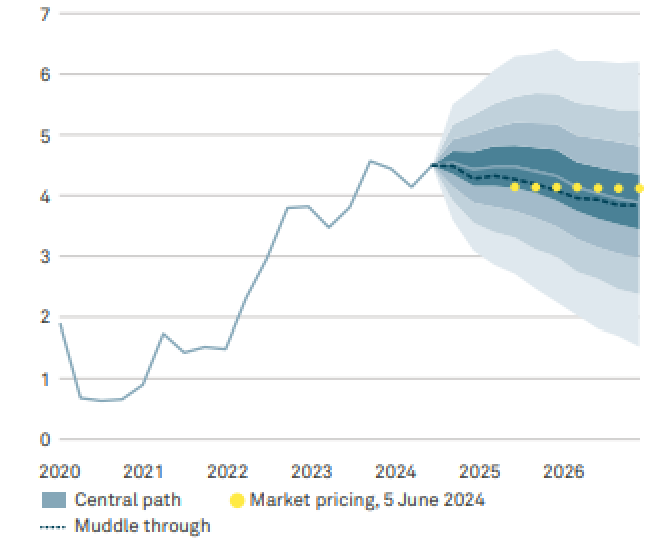
CHART 7: US S&P 500
INDEX



Source: LSEG Datastream/Fathom Consulting.

Key Takeaway: Downside risks to the S&P 500 remain, particularly in the near term. Further ahead, the potential for an improvement in trend productivity growth means that we are a little more optimistic than the consensus.

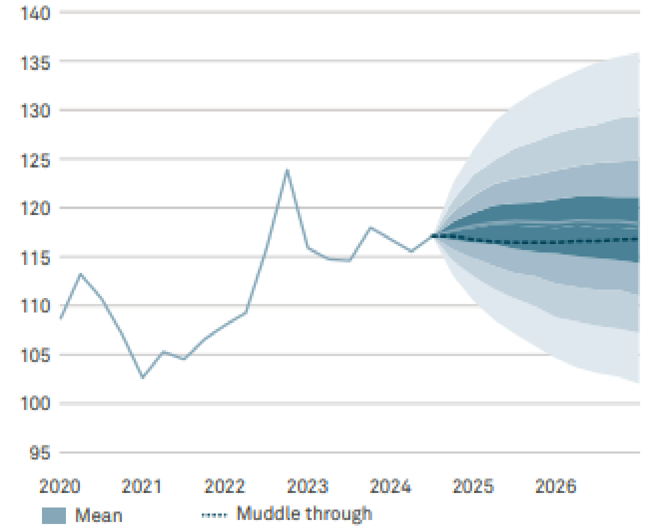
CHART 6: US TEN-YEAR GOVERNMENT BOND YIELDS
PER CENT



Source: LSEG Datastream/Fathom Consulting.

Key takeaway: Long-term US rates are likely to drift a little lower, but there is a greater-than-usual degree of uncertainty embodied in our fan chart reflecting the possibility that there has been an increase in the equilibrium, or neutral real rate of interest.

CHART 8: USD ERI AGAINST MAJOR CURRENCIES
INDEX, JANUARY 2006 = 100



Source: Fathom Consulting.

Key Takeaway: Our central scenario sees the dollar drift sideways thought the forecast, with risks skewed to the upside.

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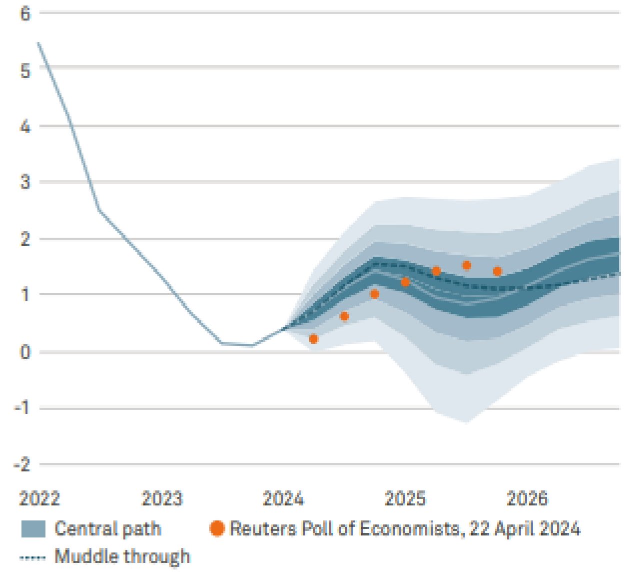
Our Forecasts

Our Viewpoint: *Europe and China to pick-up together on abatement of supply-side shocks (in Europe) and more policy support (in China). But the recoveries to remain shallow and fragile. China's prioritization of manufacturing stimulus implies deficient demand, and high risk of continuing deflation.*

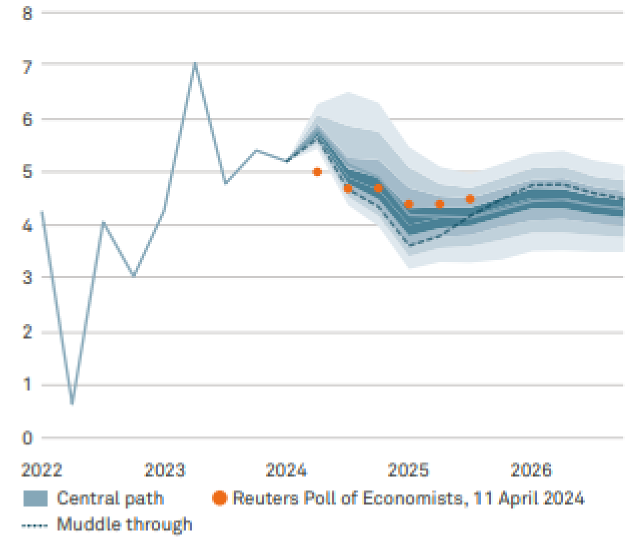
CHART 2: EURO AREA GDP
FOUR-QUARTER PERCENTAGE CHANGES



Source: Refinitiv Datastream/Fathom Consulting.

Key takeaway: The recovery in euro area growth is likely to continue, albeit with the risk of a renewed slowdown next year.

CHART 3: CHINA GDP
FOUR-QUARTER PERCENTAGE CHANGES



Source: Fathom Consulting.

Key Takeaway: China's economy is set to slow from here, and by more than the consensus among other economists in our 'Muddle through' scenario. We see around a 1-in-3 chance that official growth targets for this year are missed.

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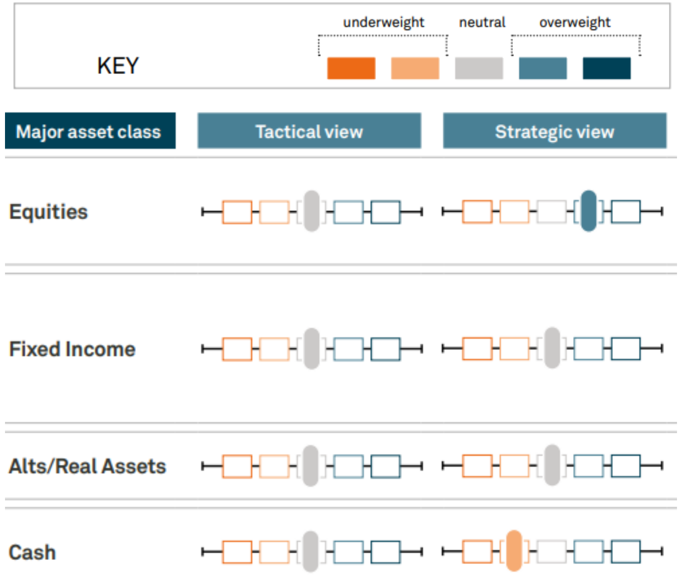
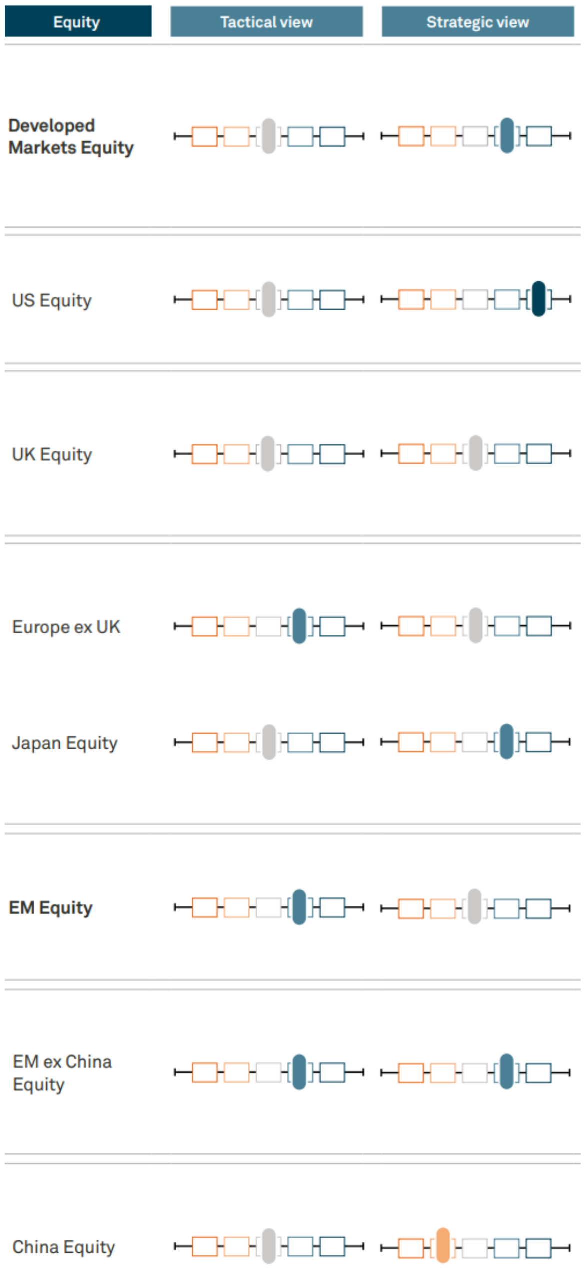
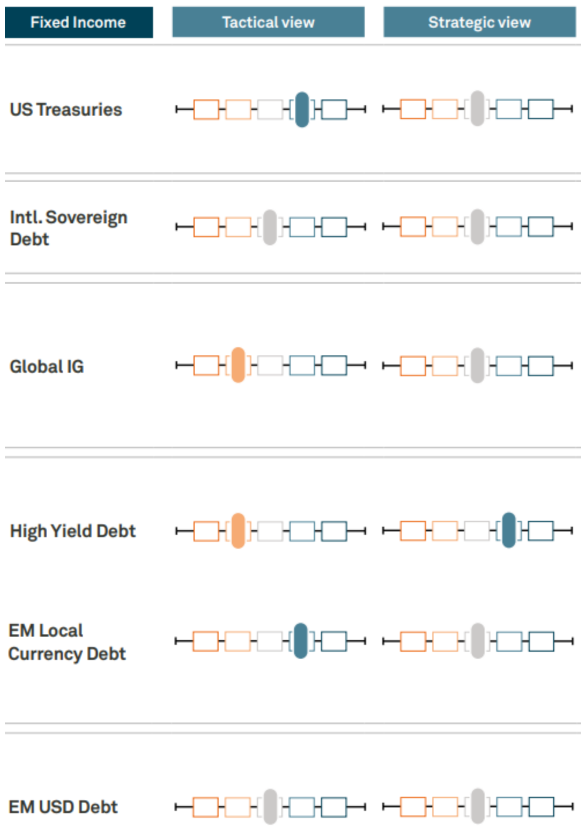
Investment Strategy







Asset allocation recommendations are from June 3, 2024. BNY Advisors; See Vantage Point “Measure Twice, Cut Once” for more detailed asset class views

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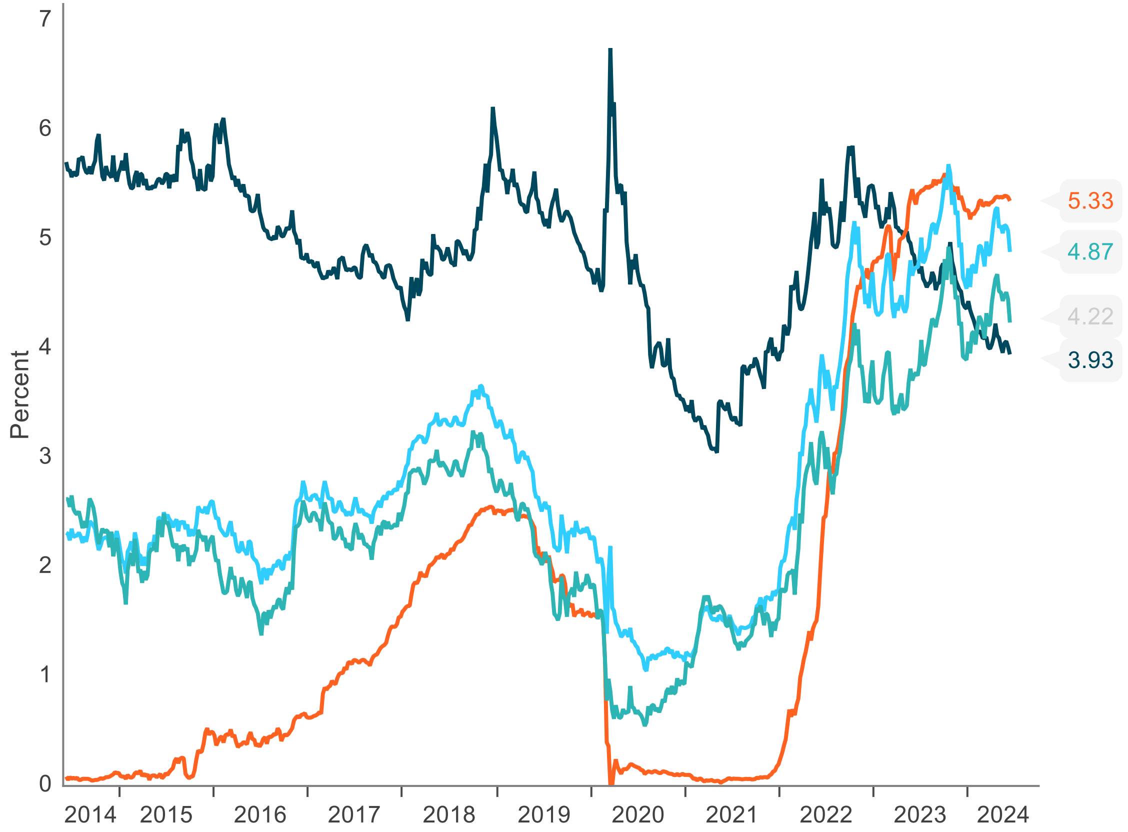
Investment Strategy – *Cross Asset*

Our viewpoint: *Cash and fixed income yields remain at their highest in a decade and provide a hedge against macro risks. But cash confronts increasing re-investment risk and equity returns have outstripped fixed income, even after adjusting for the business cycle.*

Cash, Bonds, and Equity Yields



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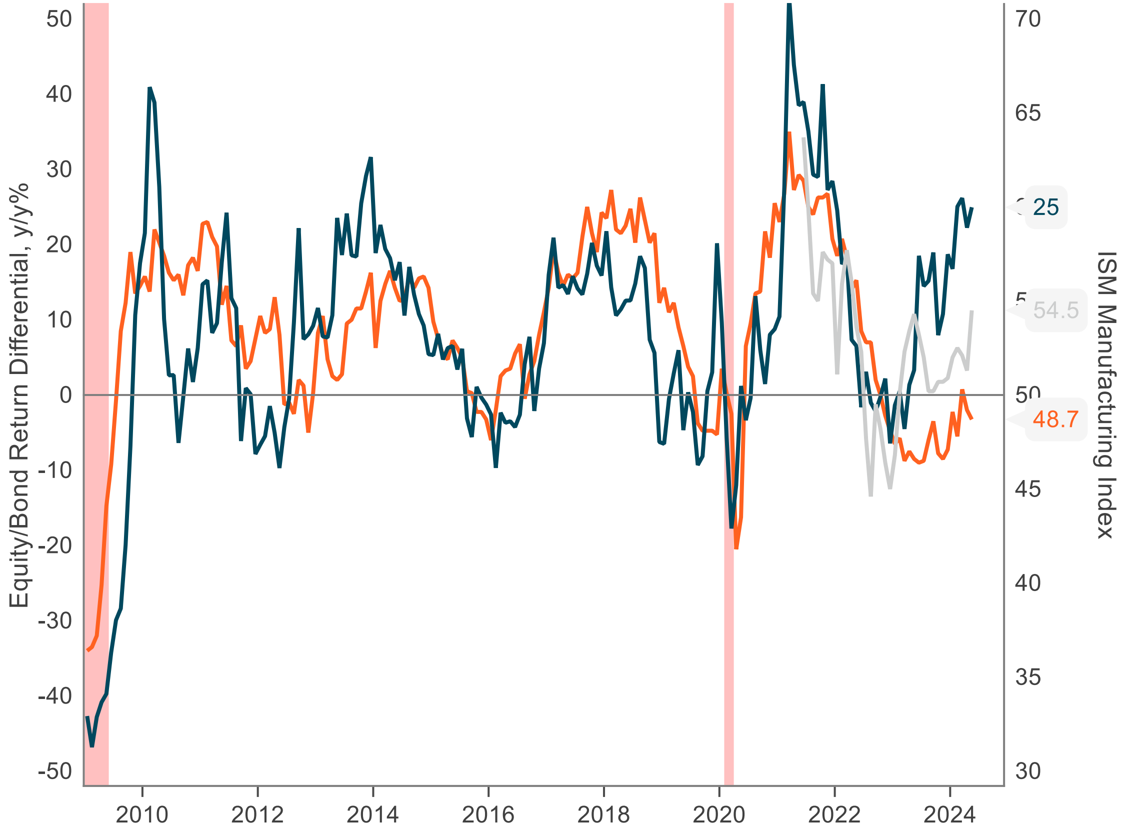
Equity/Bond 1Yr Returns and the Business Cycle



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Investment Strategy – *Global Equity*

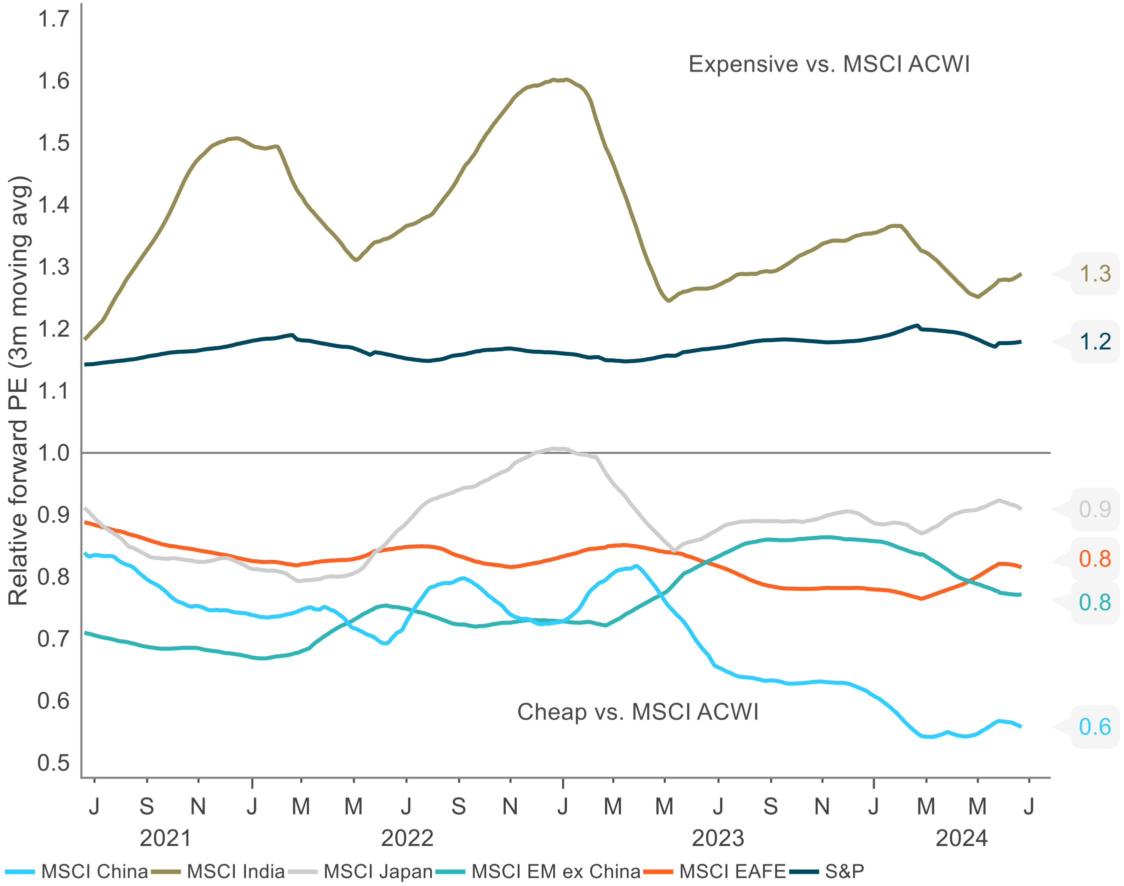
Our Viewpoint: *The global equity market pick-up has continued with US equities leading the way. On a forward price-earnings (PE) basis, EM ex China has decoupled from China, Japan has become a bit pricier, and US valuations are still pushing modestly higher.*

Relative Equity Performance of Key Regions

Rebased to 100 one year ago

Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Forward PE ratios relative to MSCI ACWI Forward PE



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Investment Strategy – *US Equity*

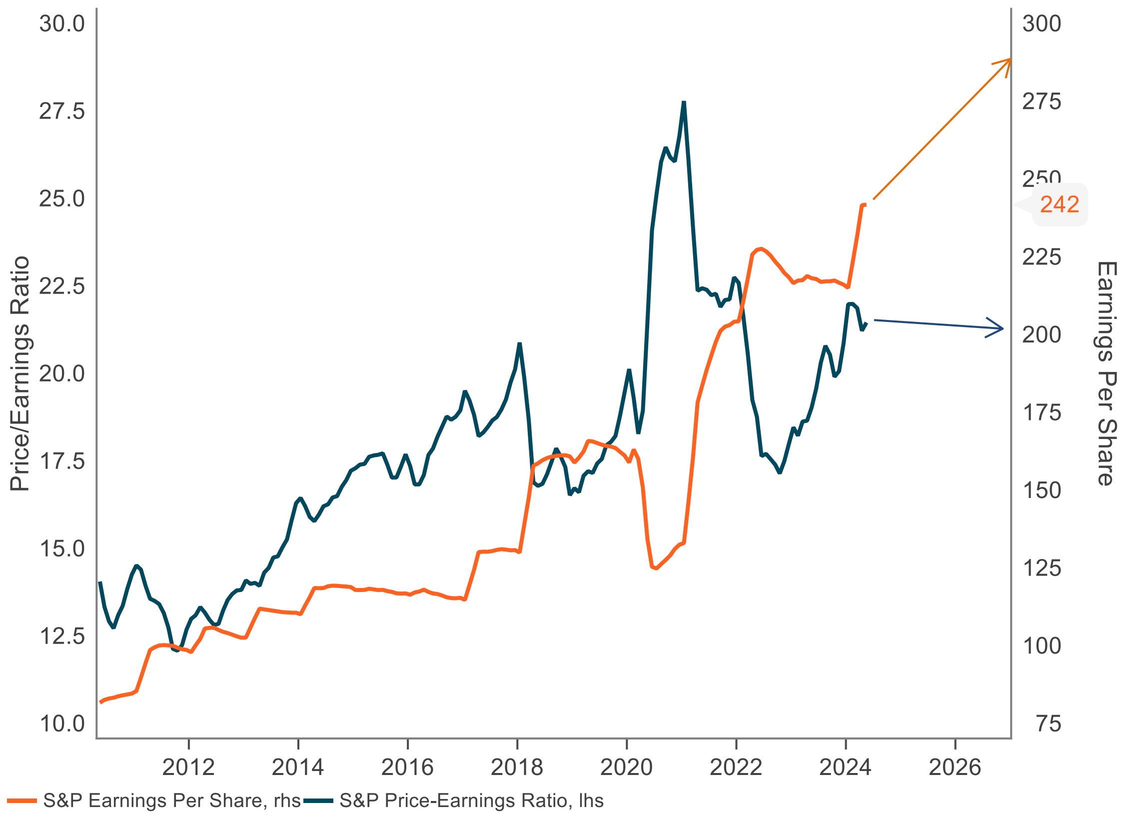
Our Viewpoint: *We now expect low double-digit returns this year and in the next, on a probability-weighted basis, reflecting relatively stable P/E ratios and a pickup in earnings – especially of tech oriented and AI-driven companies.*

Muddle Through	Year End Values		
	2024	2025	2026
EPS Estimate	239	271	295
Earnings Growth	7%	13%	9%
Price/Earnings	23	22	21
Approximate Level	5,503	5,953	6,191
Annual Return Estimate	15%	8%	4%
New Economy	**Year End Values**		
	2024	2025	2026
EPS Estimate	250	275	302
Earnings Growth	12%	10%	10%
Price/Earnings	24	25	25
Approximate Level	5,994	6,868	7,555
Annual Return Estimate	26%	15%	10%
Second Wave	**Year End Values**		
	2024	2025	2026
EPS Estimate	239	251	276
Earnings Growth	7%	15%	10%
Price/Earnings	19	20	20
Approximate Level	4,534	5,011	5,512
Annual Return Estimate	-5%	11%	10%
Prob. Weighted S&P 500	5,408	5,948	6,328
Annual Return Estimate	13%	10%	6%

Forecasts were calculated as of 3 June 2024. BNY Investments.

Long-term Trends in S&P 500 P/E Ratio & Earnings Per Share

3-month moving average. Arrows represent expected level of earnings per share and price-earnings multiples per a "muddle through" scenario



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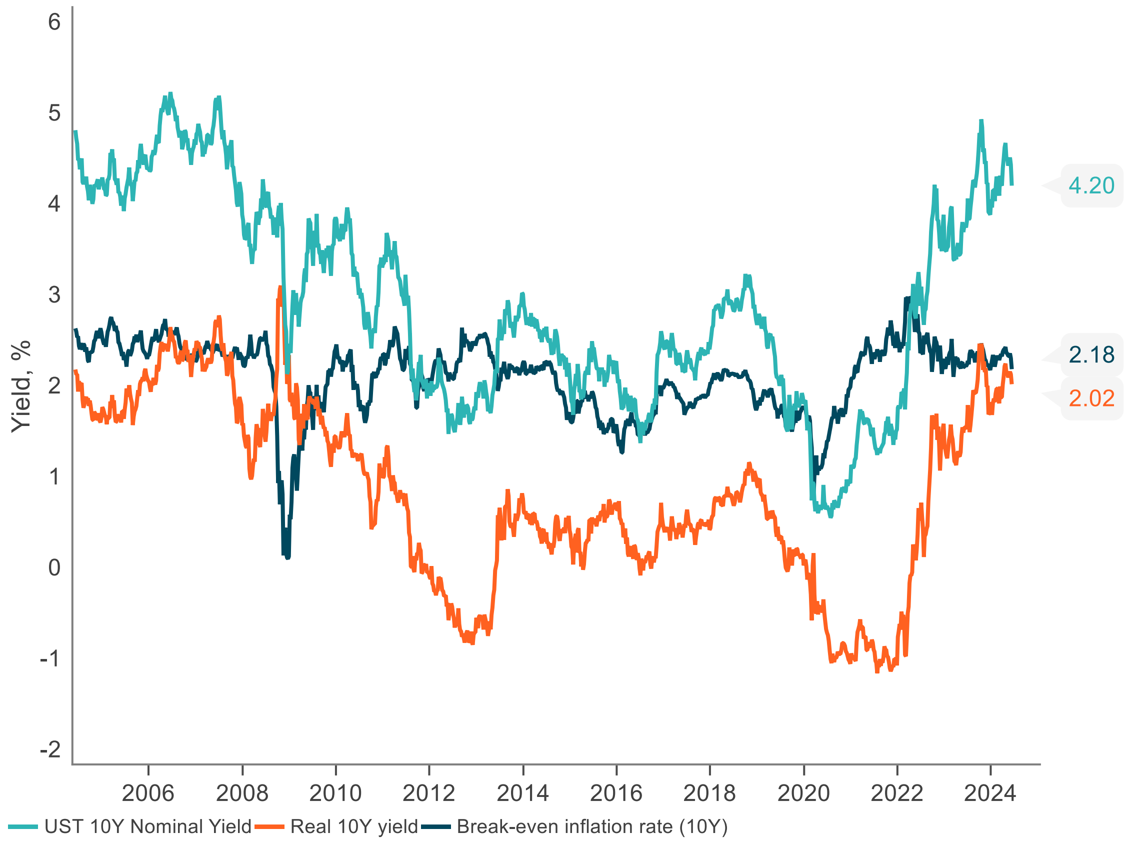
Investment Strategy – *US Rates*

Our Viewpoint: *Higher US nominal and real yields have raised income return prospects, but duration gains have stalled even after Fed policy peak. This could reflect not only slower disinflation but also an expectation of higher equilibrium short-rates (higher r*).*

Decomposition of U.S. 10-Year Treasury Yields

U.S. nominal yield equals the real 10-year (inflation-linked) yield + a 'break-even' inflation rate



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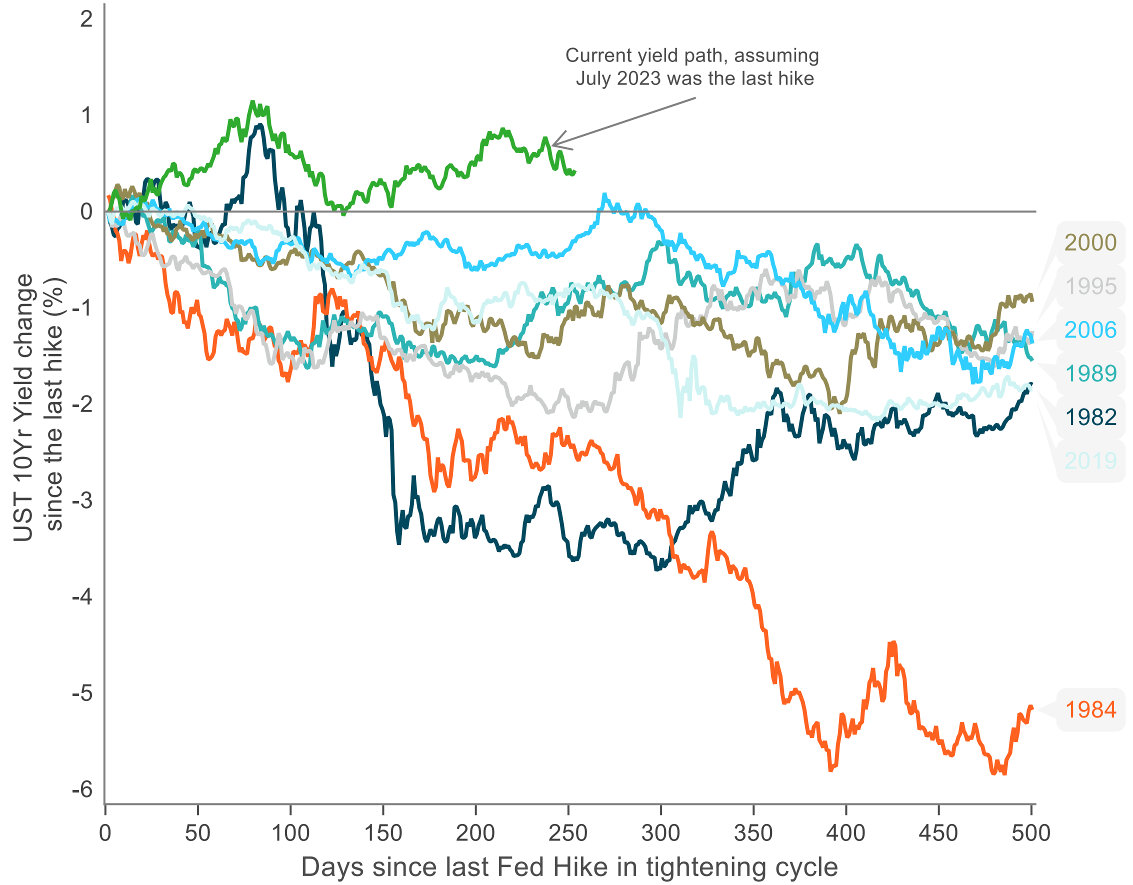
UST 10Yr Yields after last Fed Hike



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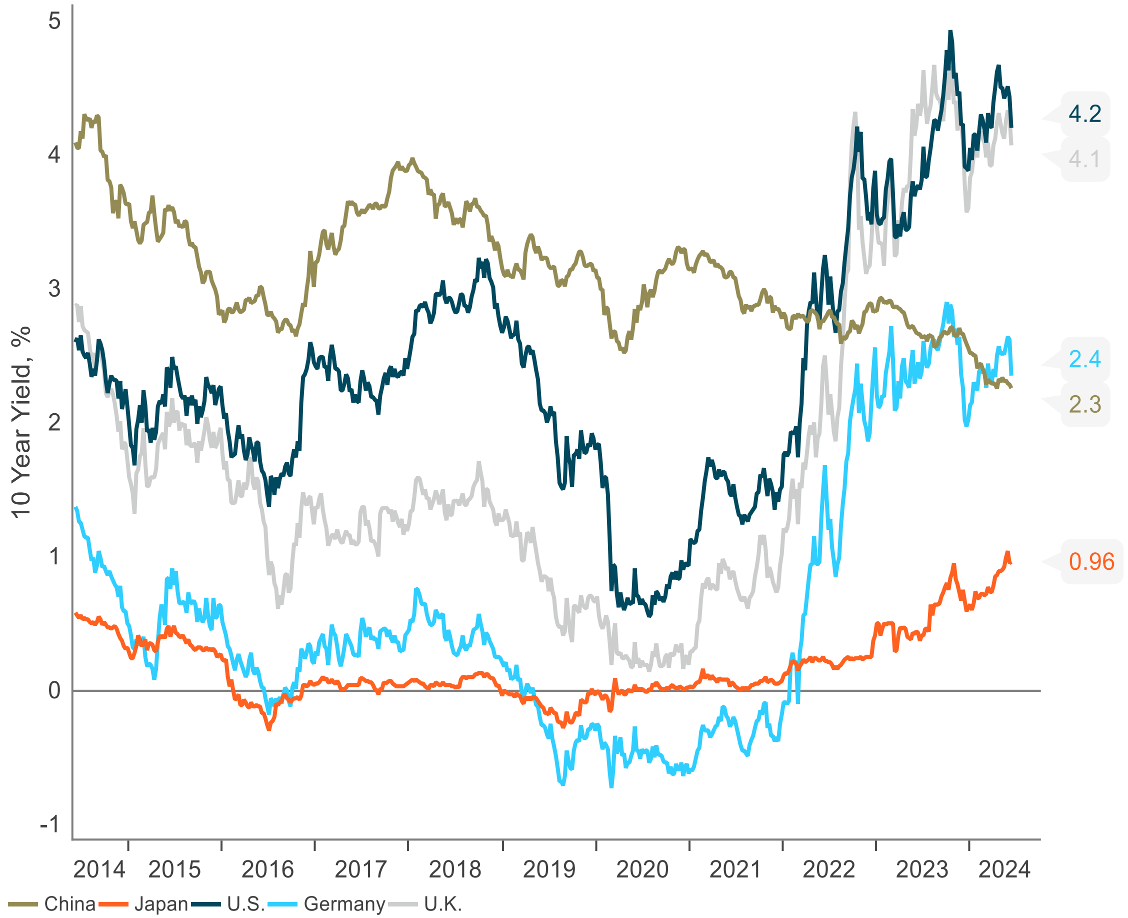
Investment Strategy – *Global Rates*

Our Viewpoint: *A policy peak in most developed economies and economy-wide deflation in China keep us constructive on sovereign debt. A recent correction in European peripheral credit spreads, on election-related financial volatility, opens some value in Europe.*

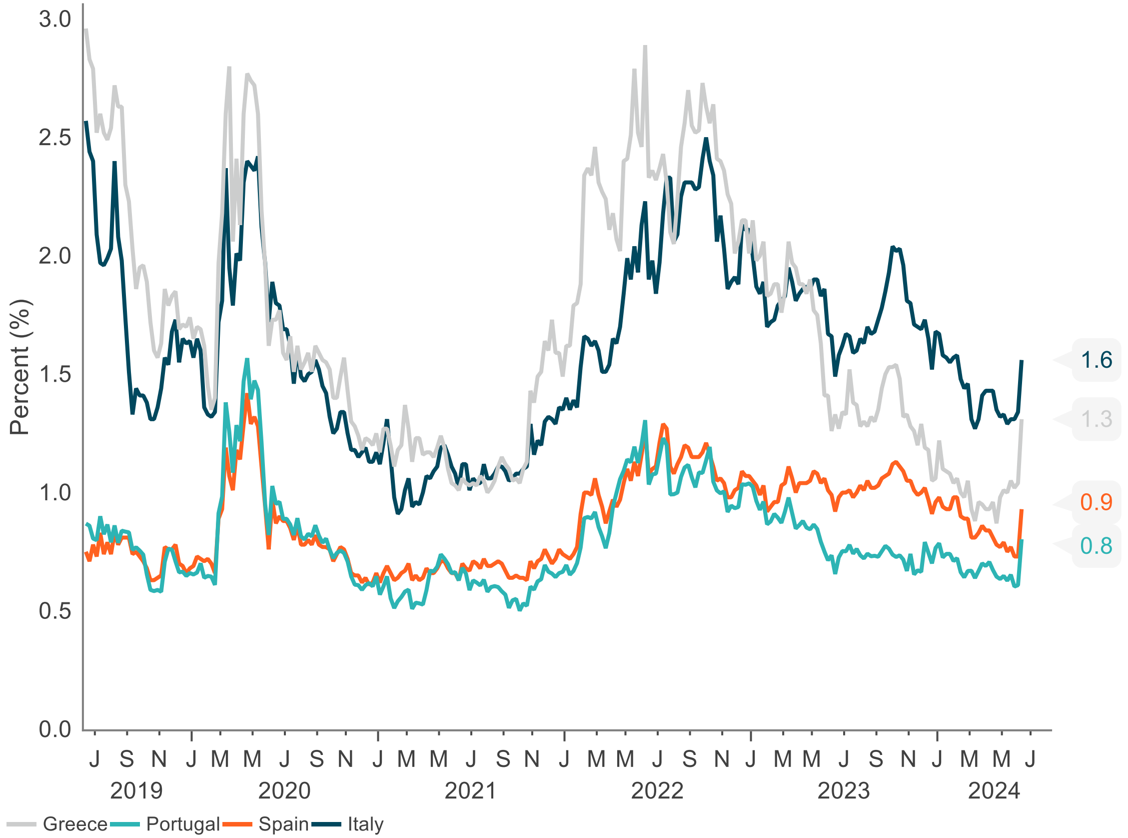
Government Benchmarks, 10 Year, Yield



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

Euro area 10-year Sovereign Spreads to Bunds

10-year governemnt yields spreads

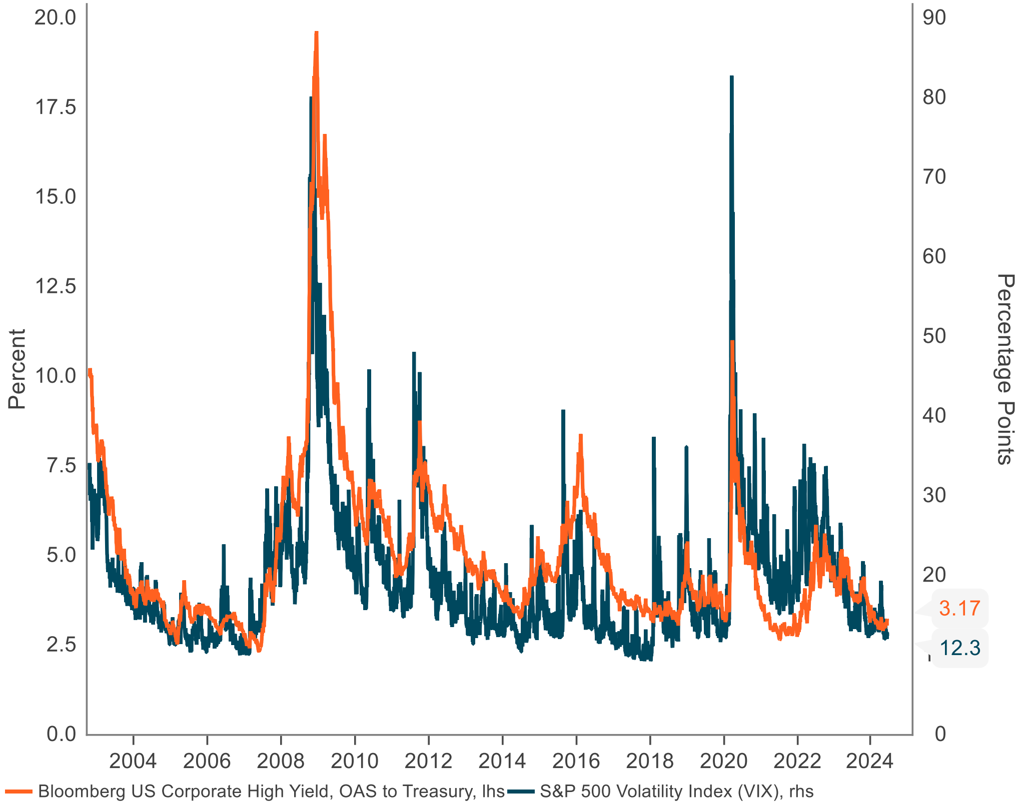


Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024

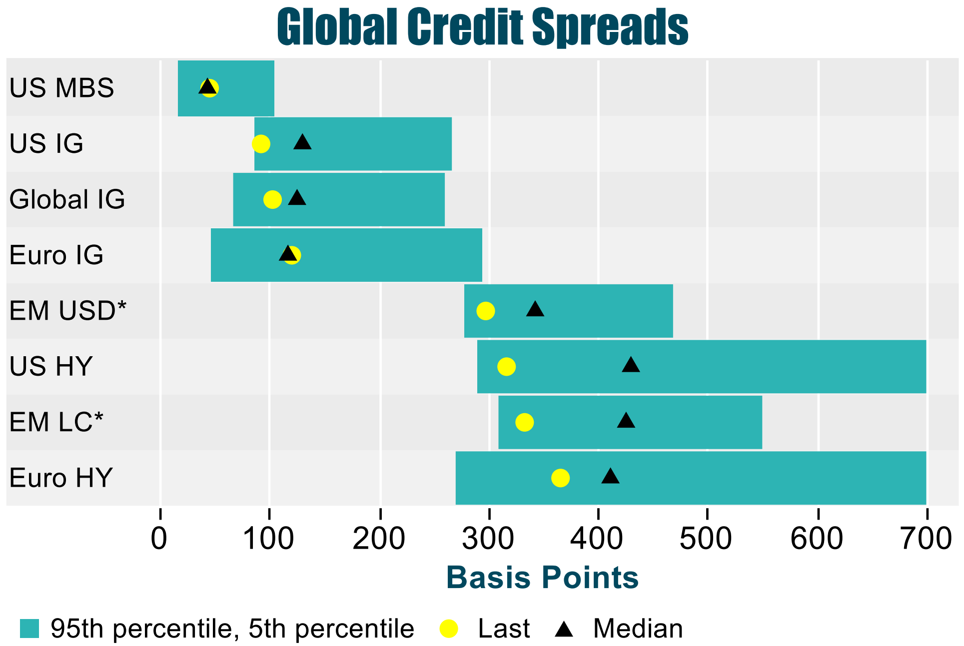
Investment Strategy – *Credit*

Our Viewpoint: *Credit spreads are not extreme relative to equity implied volatility, but by and and large they are too tight to offer much value and are poised to revert to long-term means. That implies sub-par returns versus developed sovereign fixed income. We prefer underweights.*

HY Credit spreads vs equity volatility



Source: Macrobond, BNY Advisors; Data as of Thursday, June 20, 2024



Source: BNY Advisors and Macrobond. Data as of 6/20/2024. 95th percentile of HY spreads is not shown. * EM debt is shown as a spread vs maturity matched US Treasury yields

Past performance is no guarantee of future results.
Charts are provided for illustrative purposes and are not indicative of the past of future performance of any BNY product.

Definitions

Purchasing Manger Indices (PMI)	An economic indicator derived from monthly surveys of private sector companies. A level above 50 indicates expansion compared to the prior month and below 50 contraction.
MSCI All-Country World	The MSCI All-Country World Index is an index that tracks the performance of both Developed and Emerging Market equities
MSCI World - DM	The MSCI World Index is an index that tracks the performance of Developed Market equities
MSCI EAFE	The MSCI EAFE Index is an index that tracks the performance of Developed Market equities across Europe, Australasia and the Far East excluding the US and Canada
MSCI EM	The MSCI EM index tracks the performance of Emerging Market Equities
US (S&P 500)	The S&P 500 is an index designed to track the performance of the largest 500 US companies
US (NASDAQ)	The Nasdaq Composite Index is the market capitalization-weighted index of approximately 3,000 common equities listed on the Nasdaq stock exchange
US (Russell 2000)	The Russell 2000 Index is a small-cap stock market index of the bottom 2,000 stocks in the Russell 3000 Index
Japan (Nikkei 225)	The NIKKEI 225 is an index that tracks the performance of the largest 225 companies traded in the Japanese market
EU (STOXX 50)	The EURO STOXX 50 Index, Europe's leading blue-chip index for the Eurozone, provides a blue-chip representation of supersector leaders in the region
UK (FTSE 100)	The STOXX 600 is an index that represents the performance of 600 large, mid and small capitalization companies across 18 countries in the European Union
France (CAC 40)	The CAC 40 is an index that tracks the performance of the largest 40 companies traded on the Paris Stock Exchange
Germany (DAX 30)	The DAX 30 is an index that tracks the performance of the largest 30 companies traded on the Frankfurt Stock Exchange
China (MSCI China)	The MSCI China Index captures large and mid cap representation across H shares, B shares, Red chips, P chips and foreign listings. With 459 constituents, the index covers about 85% of this China equity universe.
China Caixin Services PMI	In China, the Caixin Services Purchasing Managers' Index measures the performance of the services sector.
Global Treasury ex US	The Bloomberg Global Treasury ex US index tracks fixed-rate local currency government debt of investment grade countries excluding the US and represents the Treasury sector of the Global Aggregate Index
US Treasury	The Bloomberg US Treasury Index is the US Treasury component of the US Aggregate Index and uses public obligations of the US Treasury with a remaining maturity of one year or more
Global Investment Grade - Corp.	This Index reflects the Corporate component of the Bloomberg Global Aggregate Index which is designed to provide a broad-based measure of the global investment-grade fixed income markets
Global High Yield	The Bloomberg Global High Yield Index is a broad-based measure of the global high yield market
US Leveraged Loans	The S&P/LSTA Leveraged Loan Total Return Index is designed to measure the performance of the US leveraged loan market
S&P Municipal Bond IG Intermediate	The S&P Municipal Bond Investment Grade Intermediate Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's or BBB- by Fitch Ratings. All bonds must also have a minimum maturity of three years and a maximum maturity of up to, but not including, fifteen years as measured from the rebalancing date.
EM USD Denominated	The Bloomberg EM USD Aggregate Index includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers
Bloomberg Commodity Index	The Dow Jones UBS Commodity index is designed to provide diversified commodity exposure with weightings based on the commodity's liquidity and economic significance
Oil (WTII, USD / Barrel)	Generic West Texas Intermediate crude oil spot price
Gold (USD / Troy Ounce)	Gold London Bullion Market spot price, quoted in USD per Troy Ounce
US Investment Grade Corporate	Bloomberg US Aggregate - Corporate Index is designed to measure the performance of the investment grade corporate sector in the US
US ISM manufacturing PMI	Based on a survey of purchasing managers at more than 300 manufacturing firms by the Institute for Supply Management (ISM), the index monitors changes in production levels from month to month.
US High Yield	The Bloomberg US High Yield Index covers the universe of fixed-rate, non-investment grade corporate debt in the US
3M US Libor	Average interest rate at which a selection of banks in London lend to one another in USD with a maturity of 3 months
2Y US Treasuries	Average yield of a range of Treasury securities all adjusted to the equivalent of a two-year maturity
10Y US Treasuries	Average yield of a range of Treasury securities all adjusted to the equivalent of a ten-year maturity
10Y UK Gilt	Average yield of a range of UK government bonds all adjusted to the equivalent of a ten-year maturity
10Y German Bund	Average yield of a range of German government bonds all adjusted to the equivalent of a ten-year maturity
10Y Japanese Bond	Average yield of a range of Japanese government bonds all adjusted to the equivalent of a ten-year maturity
CBOE VIX	Indicator of the implied volatility of S&P 500 index as calculated by the Chicago Board Options Exchange (CBOE)
US 30Y Fixed-Rate Mortgage	Bankrate.com 30-year US home mortgage fixed rate national average
S&P CoreLogic Case-Shiller 20-city Composite Home Price Index	Tracks the value of single-family housing within the United States
USD - Majors Dollar Index	A measure of the value of the US dollar relative to a basket of currencies of the US's most significant trading partners including the euro, Japanese yen, Canadian dollar, British pound, Swedish krona, and Swiss franc.
Beveridge Curve	The relationship between the unemployment rate and the job openings rate. It is a measure of the general state of the labor market, highlighting if the market is tight (lots of jobs available, low unemployment), or loose (few jobs available, high unemployment)
Phillips Curve	An economic theory that inflation and unemployment have a stable and inverse relationship.
Citi Economic Surprise Index (and Inflation Surprise Index)	Citi's Economic Surprise Index — which measures the degree to which economic data (and inflation) is either beating or missing expectations.

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