

FOURTH QUARTER 2023

Market Charts

Turning data into knowledge

All data shown in the charts as of third quarter (Q3) 2023 and reflect the most recent information available. Please see disclosures for the risks associated with the asset classes and for the definitions of market-based and economic indexes.

Investment and Insurance Products: ► NOT FDIC Insured ► NO Bank Guarantee ► MAY Lose Value

Macro

- We expect a slowdown in global economic growth to gather momentum around the turn of the year due to a combination of elevated inflation, rising interest rates, and accompanying financial stress.¹
- We anticipate a sustained recovery in economic growth to begin by the second half of 2024, likely following a recession. We expect that eventually slowing inflation and a wind down of central-bank interest rate hikes will lay the groundwork for that recovery in economic growth.
- We believe that China is grappling with unbalanced, but broadly slowing economic growth, limiting its ability to cushion a global slowdown in the coming months and to support a global growth recovery in 2024.

Domestic

- We expect consumer spending to join housing in precipitating a moderate U.S. recession, as a response to rising interest rates, a drawdown of sizable cash balances, and to tightening financial conditions adding to the pressure on household and corporate finances.
- We believe inflation, as measured by the Consumer Price Index (CPI), will slow with the economy as supply shocks continue to unwind. However, tight supplies of food and fuel, elevated rents, and inertia of the CPI's other "sticky" components will likely contribute to a bumpy disinflationary path.

International

- Emerging markets will display stronger growth than in the U.S., in our view, masking a European recession and China's weak growth recovery. Nonetheless, emerging market growth is likely to be subpar due to weak export markets, global financial tightening, high inflation, and a strong U.S. dollar.
- We expect the U.S. will lead the global economic recovery in 2024. Support from China's economic recovery likely will be muted by its tilt toward less export-intensive, consumer-led growth through much of 2024, along with the property slump and excessive debt's restraint on further borrowing.

Global economy scorecard

Economic indicator	World	U.S.	Eurozone	Japan	China
GDP growth (% YOY) as of 6/30/2023	3.0	2.4	0.5	1.6	6.3
Inflation (% YOY) as of 8/31/2023 ¹	3.8	3.7	4.3	3.2	0.1
Manufacturing Index level as of 9/30/2023	49.1	49.0	43.4	48.5	50.6
Central bank rate (%) as of 9/30/2023	–	5.25 – 5.50	4.50	(0.10) – 0.00	3.45
Consumer Confidence Index level as of 9/30/2023 ²	–	103.0 ↓	-17.8 ↓	35.2 ↓	86.5 ↓
Unemployment rate (%) as of 9/30/2023 ³	–	3.8	6.4	2.7	5.2

Sources: Bloomberg, International Monetary Fund, and Wells Fargo Investment Institute. Consumer Confidence Index (CCI) is designed to measure consumer confidence, which is defined as the degree of optimism on the state of the economy that consumers are expressing through their activities of savings and spending. Global consumer confidence is not measured. Consumer confidence scale differs by region or country. Up or down arrow indicates an increasing or decreasing level from the previous quarter. GDP = gross domestic product. YOY = year over year. U.S. Manufacturing Index level is the Institute for Supply Management Manufacturing Index[®], which is a composite index based on the diffusion indexes of five of the indexes with equal weights: new orders, production, employment, supplier deliveries, and inventories. Global, eurozone, Japan, and China Manufacturing Index levels use the Markit Manufacturing PMI Index, which is an index developed from monthly business surveys used to monitor the condition of industries and businesses. An index value over 50 indicates expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

Key takeaways

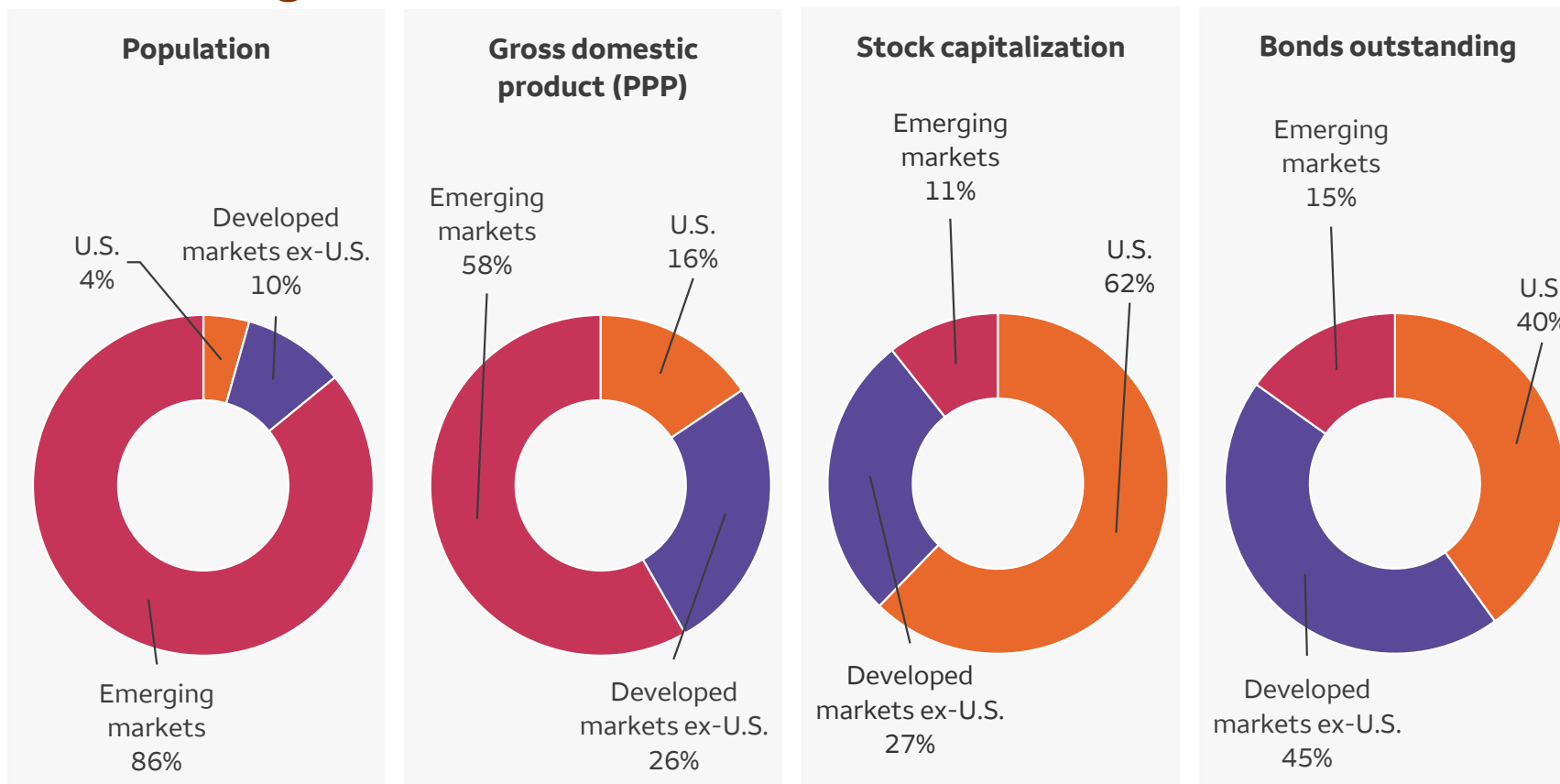
- We expect a global growth slowdown, led by a recession in Europe and China's disappointing growth recovery. A moderate global recovery should gather momentum in the second half of 2024, led by the U.S. and extending to China, Europe, and Japan.
- We expect more noticeable progress against inflation by early 2024, as the recession undercuts demand.

1. World inflation as of June 30, 2023. Eurozone inflation as of September 30, 2023.

2. China consumer confidence as of August 31, 2023.

3. Eurozone, Japan, and China as of August 31, 2023.

The world at a glance



Sources: International Monetary Fund World Economic Outlook database, April 2023; Morgan Stanley Capital International (MSCI), as of September 30, 2023; and Bloomberg, as of September 30, 2023. Emerging markets includes frontier markets. Purchasing power parity (PPP) is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. Stock capitalization is based on country weightings in the MSCI All Country World Index. MSCI All Country World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed and 23 emerging markets. Bonds outstanding is based on market value of bonds issued tracked by the Bloomberg Global Aggregate Index. The Bloomberg Global Aggregate Index measures global investment grade debt including treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers. An index is unmanaged and not available for direct investment. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging and frontier markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates.

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Key takeaways

- Emerging markets' (EM) demographic advantage underscores their growth potential, which is likely to reassert itself once global shocks subside. Their relatively small global stock capitalization creates the potential for capital market growth.
- EM fixed income's poor performance last year highlights its vulnerability to rising interest rates, less ample credit, and to a strengthening U.S. dollar. We expect EM bond issuance to gradually return to pre-pandemic levels as the dollar strength softens, and the Federal Reserve pauses rate hikes or reduces rates in the future.

Factors that affect the global economy

Global economic forces

Tailwinds

- 
- Real income growth supported by renewed disinflation and by elevated wage and job gains
 - Healthy employment growth plus productivity-enhancing investment, including artificial intelligence supports growth potential
 - Still-sizable cash balances among middle- and upper-income groups¹
 - Release of pent-up services demand still supporting growth directly and through its ripple effect on other parts of the economy
 - Supportive infrastructure and other investment from fiscal stimulus
 - Price-supportive supply-demand balance underpins commodity producers' exports and emerging market finances

Headwinds

- 
- Rising debt and increased distressed borrowing, particularly among lower-income households
 - Lagged effect of global central banks' monetary policy tightening and rising real (inflation-adjusted) interest rates
 - Credit quality and financing tested by tightening liquidity conditions
 - Historically low housing "affordability" a threat to home sales and construction
 - Deflationary threat from weakening money supply, sluggish loan growth
 - Global trade and economic growth losing support from China's struggling economy
 - Threatened budget restraint, responding to the latest debt downgrade and market pushback against rising Federal interest expenses, slowing state and local spending

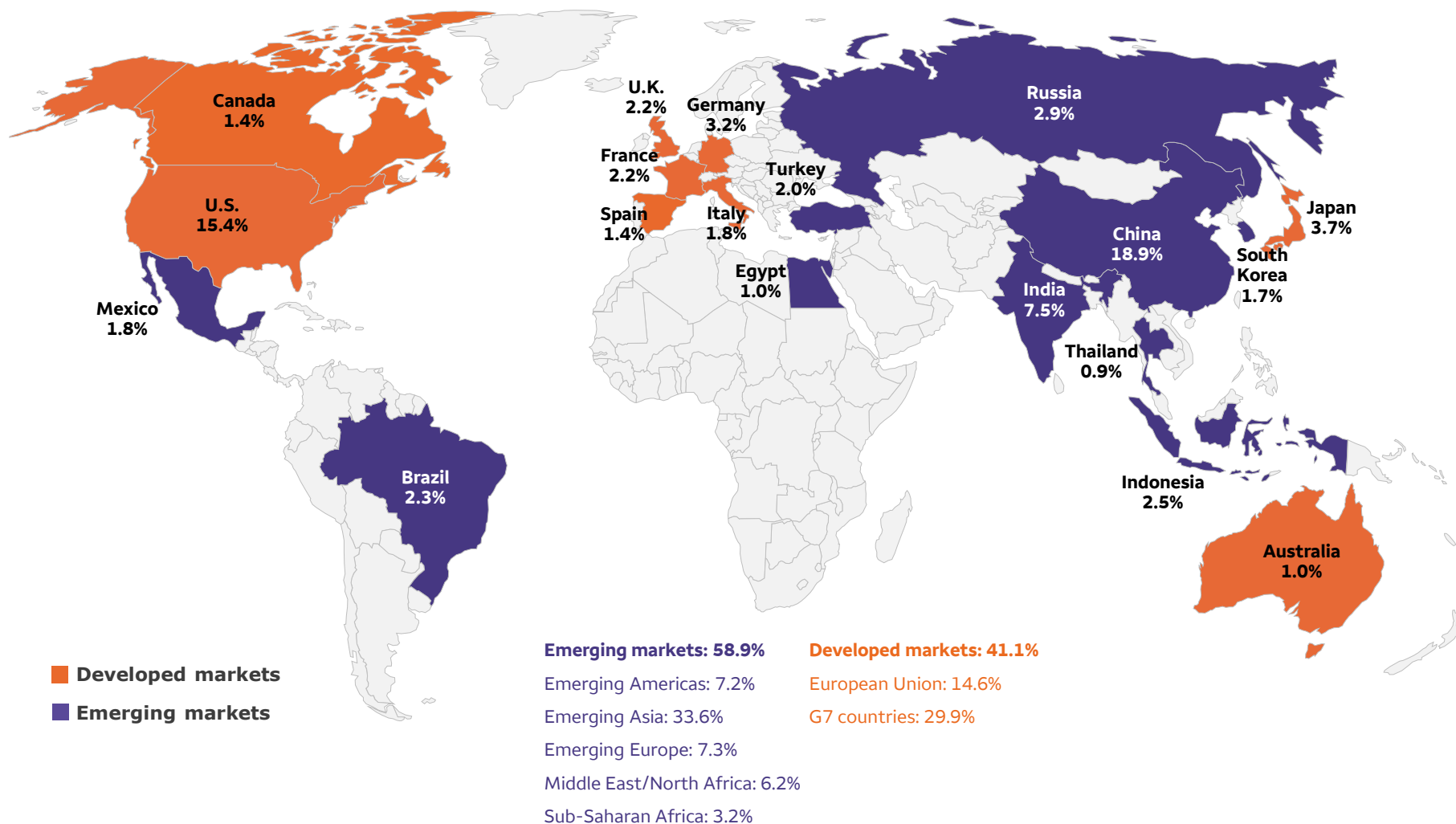
Source: Wells Fargo Investment Institute, as of September 30, 2023. Subject to change.

1. Federal Reserve Board, Financial Accounts of the U.S., as of September 8, 2023.

Key takeaways

- Gathering headwinds are exposing the U.S. economy to greater recession risk. Tightening liquidity in the financial market, slowing job growth, weakness in parts of manufacturing, and a slumping index of leading indicators are all yellow flags in the outlook.
- The most visible risk in our outlook is excessive tightening of credit conditions, leaving leveraged sectors of the global economy exposed to an abrupt pullback.

Contribution to global GDP growth

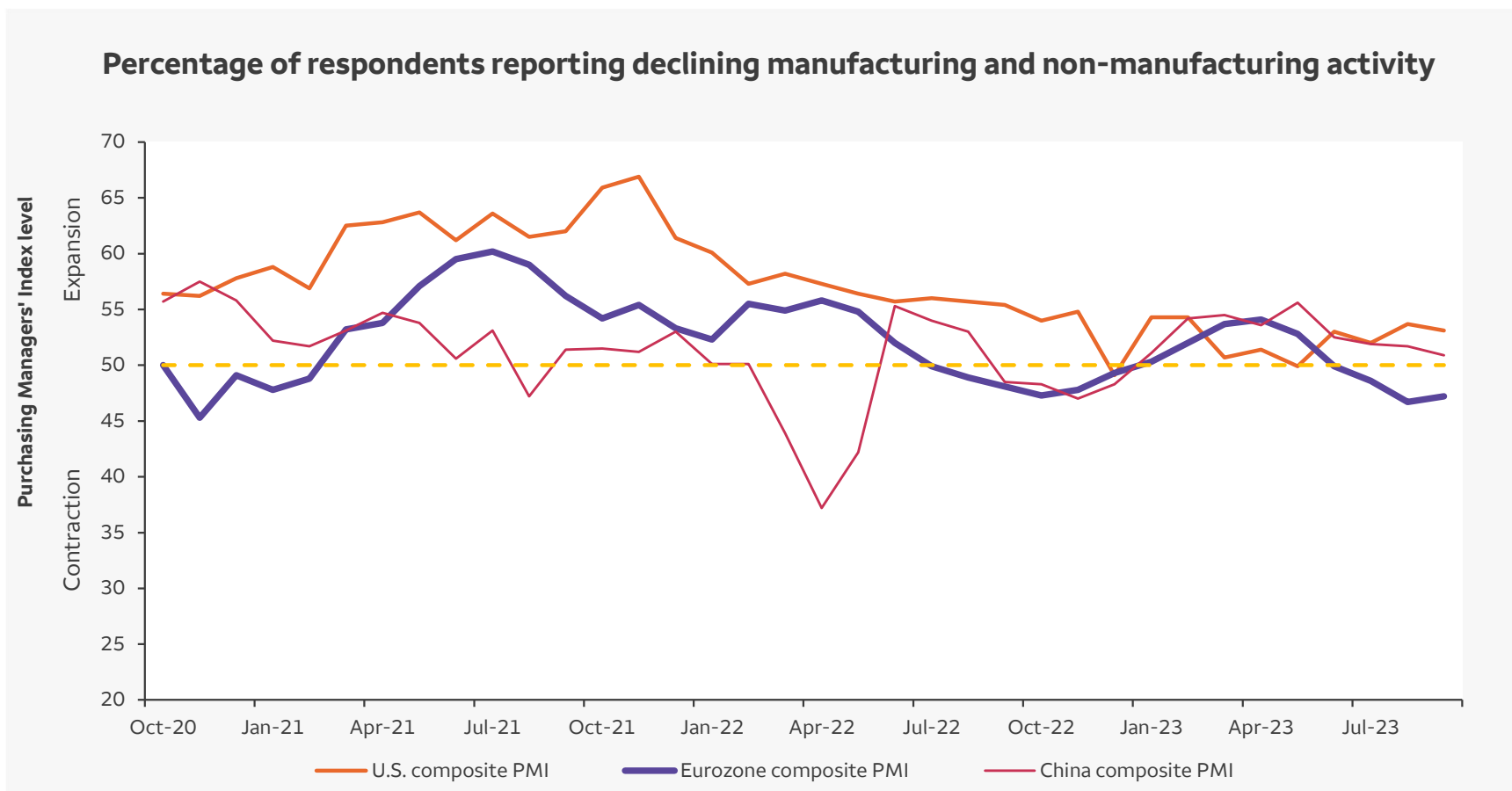


Sources: International Monetary Fund and Wells Fargo Investment Institute. 2023 GDP estimates as of September 30, 2023. G7 countries include Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. GDP = gross domestic product.

Key takeaways

- Rising interest rates, tightening credit, slumping foreign trade, higher fuel costs, dollar strength, and the war in Ukraine are all expected to keep global economic growth below its long-term (3.5%) average through 2023. Europe's economy is most exposed to the Russia-Ukraine war, but all areas are vulnerable to some combination of global headwinds in coming months.
- We still anticipate a global growth recovery in the second half of 2024, responding to slowing inflation and lower interest rates.

International economic activity has hit another soft patch

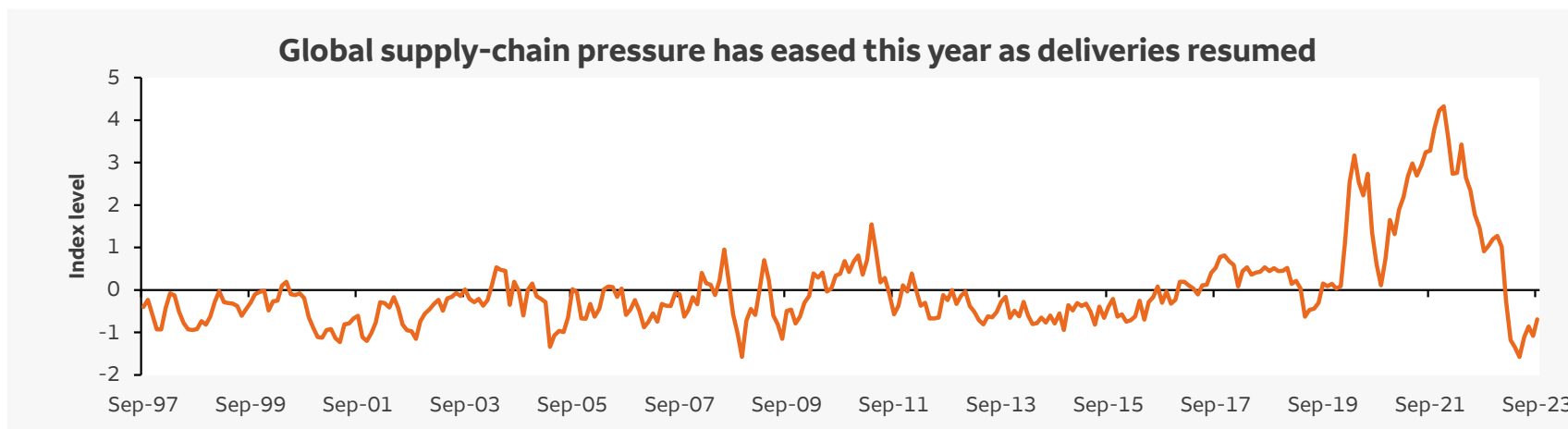
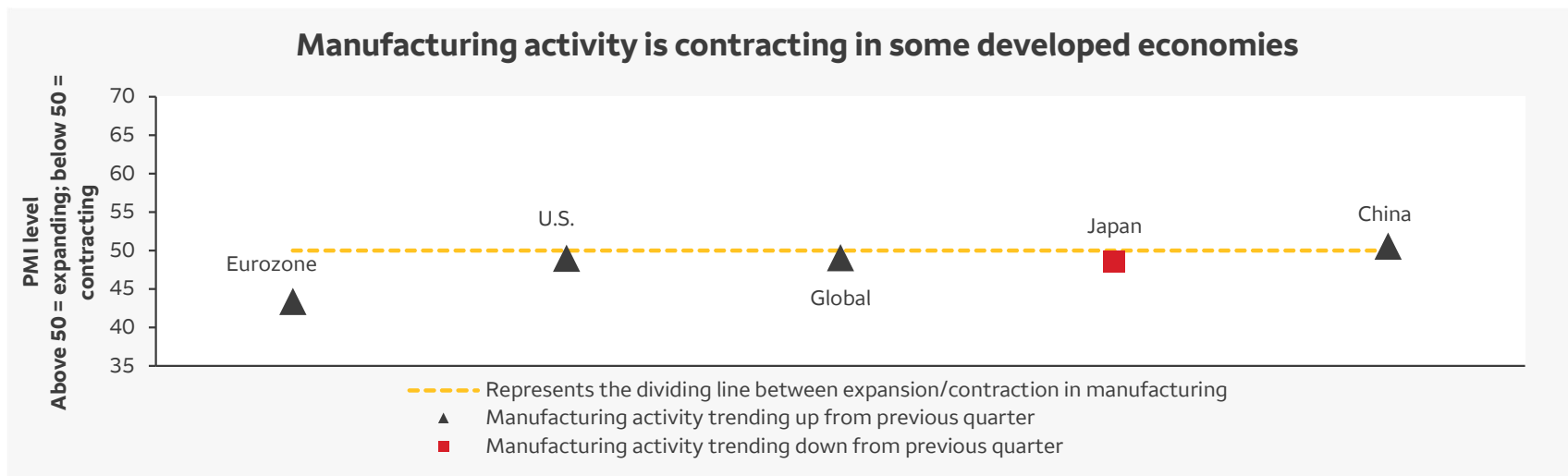


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from October 1, 2020 to September 30, 2023. PMI = Purchasing Managers' Index. U.S. Composite Purchasing Managers' Index level is the Institute for Supply Management Composite Index®, which is a composite index based on the diffusion Indexes of five of the Indexes with equal weights: new orders, production, employment, supplier deliveries, and inventories. Eurozone and China PMI levels use the Markit Manufacturing PMI Index, which is an index developed from monthly business surveys used to monitor the condition of industries and businesses. An index value over 50 indicates expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

Key takeaways

- The U.S. and Europe are in a foot race to a recession that we expect Europe to reach first. That is due to Europe's greater exposure to central-bank credit tightening, weakening foreign trade, and commodity disruptions tied to the war in Ukraine.
- Global manufacturing is already on the leading edge of the recession in developed economies because of its greater exposure to high energy costs, the rotation to services spending, the lingering impacts of COVID-related shutdowns in China, and to a more general slowing of global trade and spending tied to elevated inflation and interest rates.

Manufacturing sentiment is mixed globally

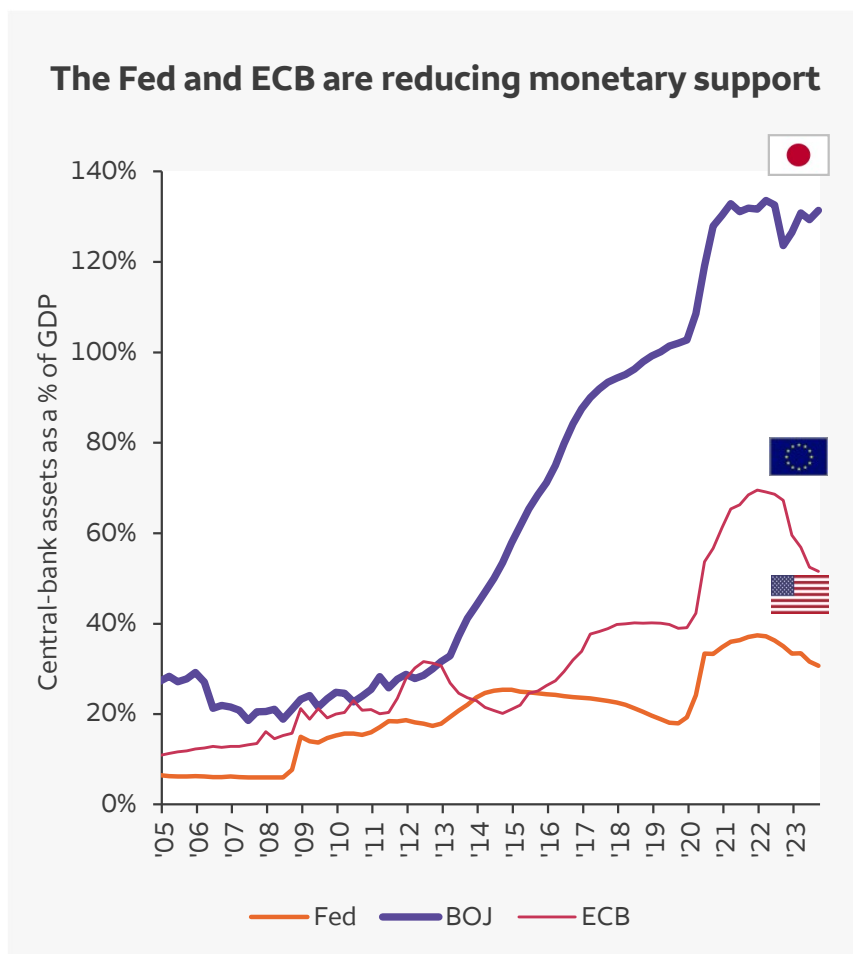


Sources: Top chart: Bloomberg, IHS Markit, and Wells Fargo Investment Institute, as of September 30, 2023. Bottom chart: Bloomberg and Wells Fargo Investment Institute. Monthly data from September 1, 1997 to September 30, 2023. PMI = Purchasing Managers' Index. GDP = gross domestic product. The PMI is an index developed from monthly business surveys used to monitor the condition of industries and businesses. The Global Supply Chain Pressures Index is normalized so a zero indicates the index is at its average value with positive values representing supply chain tightening.

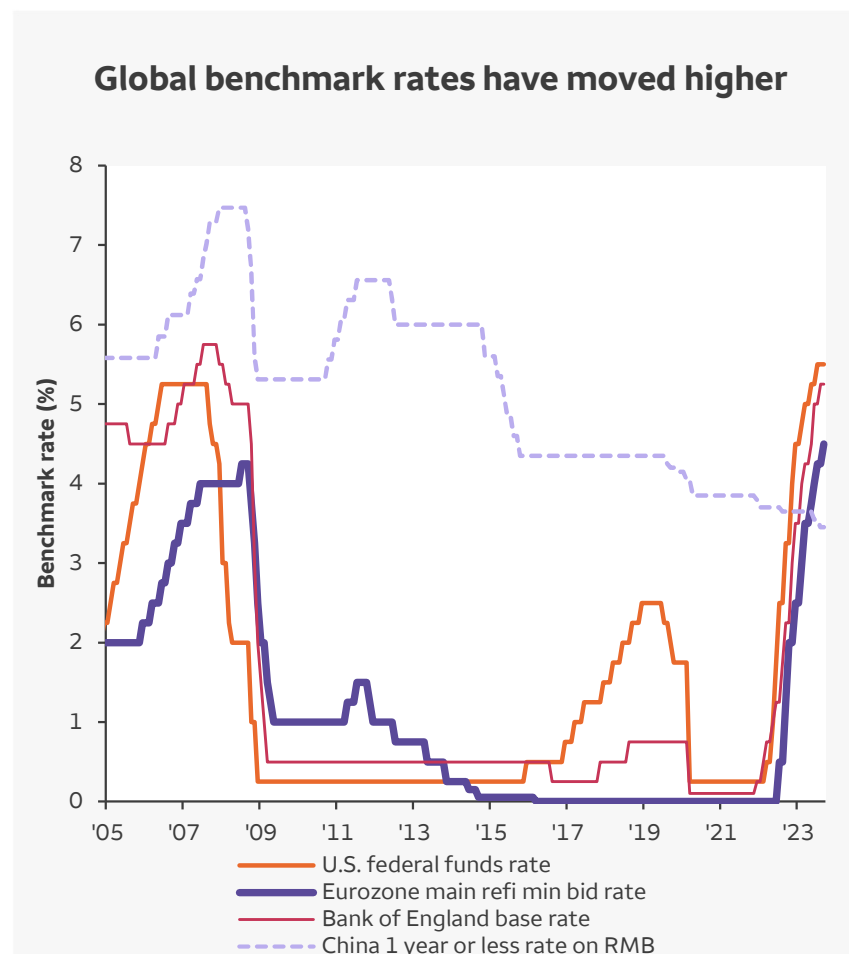
Key takeaways

- Deteriorating conditions in recent months have left manufacturing activity in major developed economies near or in a recession, due to spending's rotation from goods to services, high commodity prices, and to pressure on household finances.
- Supply chains have largely recovered, but financial conditions are considerably tighter than they were before the pandemic. The added pullback of once-ample liquidity likely will create an added headwind for consumer spending, investment, and manufacturing through early 2024.

Global monetary policy in action



Sources: Bloomberg and Wells Fargo Investment Institute. Quarterly data from January 1, 2005 to September 30, 2023. Fed = Federal Reserve. BOJ = Bank of Japan. ECB = European Central Bank. GDP = gross domestic product.



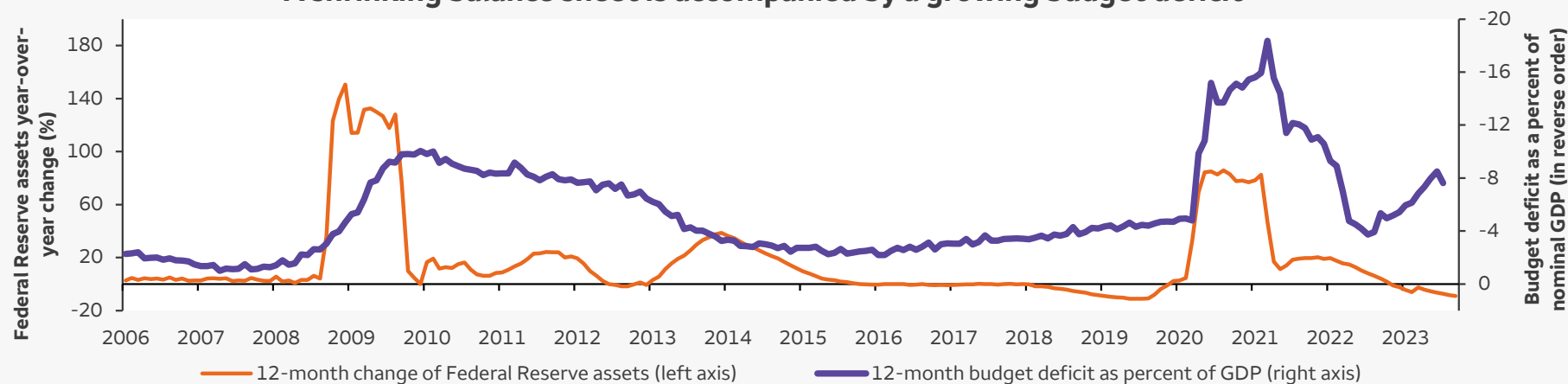
Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2005 to September 30, 2023. Headline central bank policy rates of selected countries. Refi = refinance. Min = minimum. RMB = Chinese Yuan Renminbi.

Key takeaways

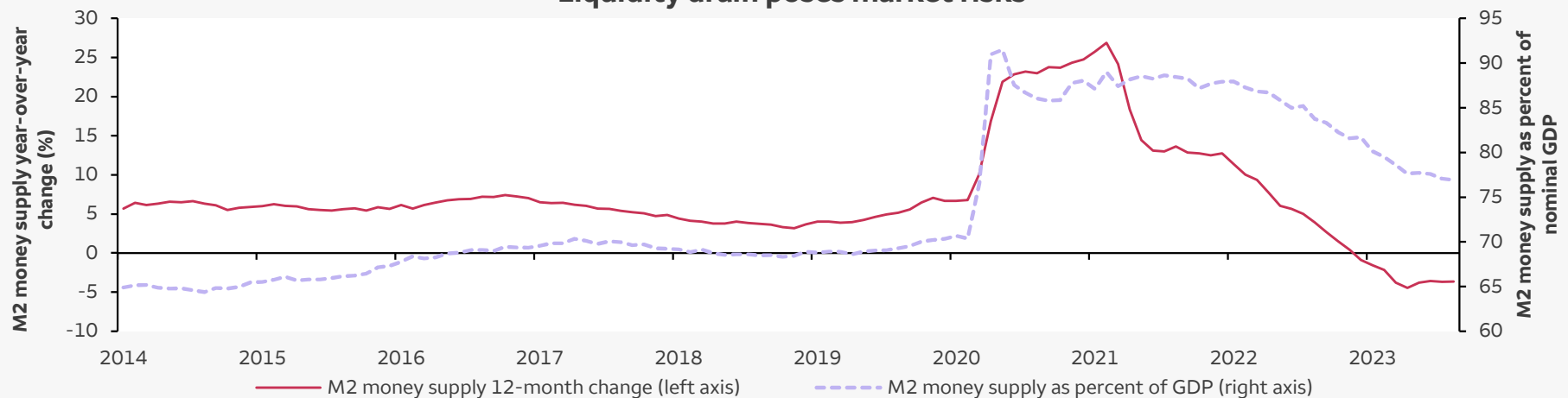
- Global liquidity is diminishing in response to central banks' aggressive monetary tightening to counter still-elevated inflation. Financial stress is set to increase with global central-bank tightening, posing one of the most visible threats to the global economy if the change comes too abruptly.
- Central-bank stimulus during the pandemic outpaced that of the Global Financial Crisis in 2007 – 2009, necessitating an extended period of adjustment to bring central-bank balance sheets back in line with their historical norms.

Liquidity requires close monitoring as Fed tightens

A shrinking balance sheet is accompanied by a growing budget deficit



Liquidity drain poses market risks



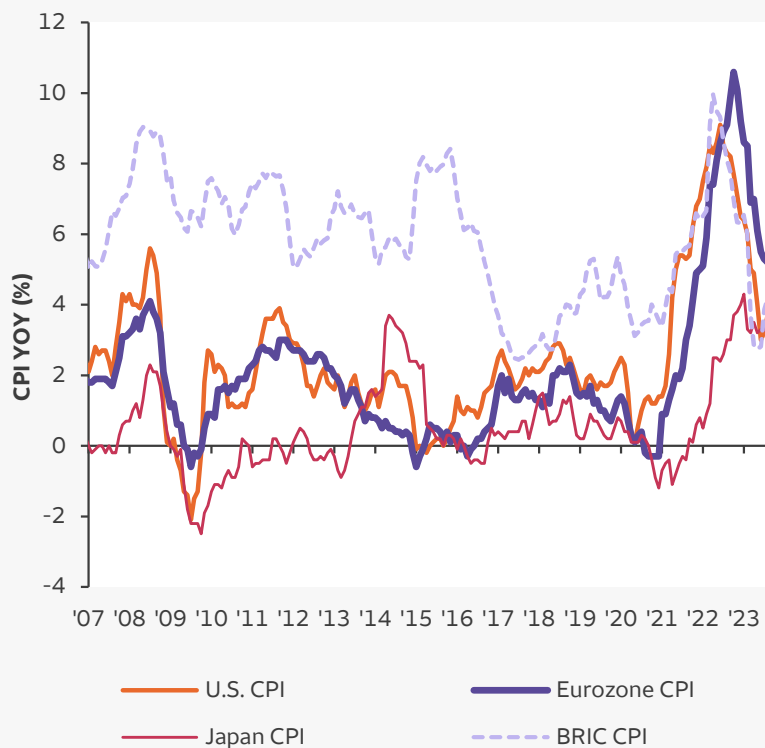
Sources: Top chart: Bloomberg, U.S. Treasury Department, Federal Reserve Board, and Wells Fargo Investment Institute. Monthly data from January 1, 2006 to September 30, 2023. Budget deficit: monthly data from January 1, 2006 to July 31, 2023. Bottom chart: Sources: Bloomberg, Federal Reserve Board, and Wells Fargo Investment Institute. Monthly data from January 1, 2014 to August 31, 2023. M2 money supply = currency, demand, and small-time deposits. Fed = Federal Reserve. GDP = Gross Domestic Product.

Key takeaways

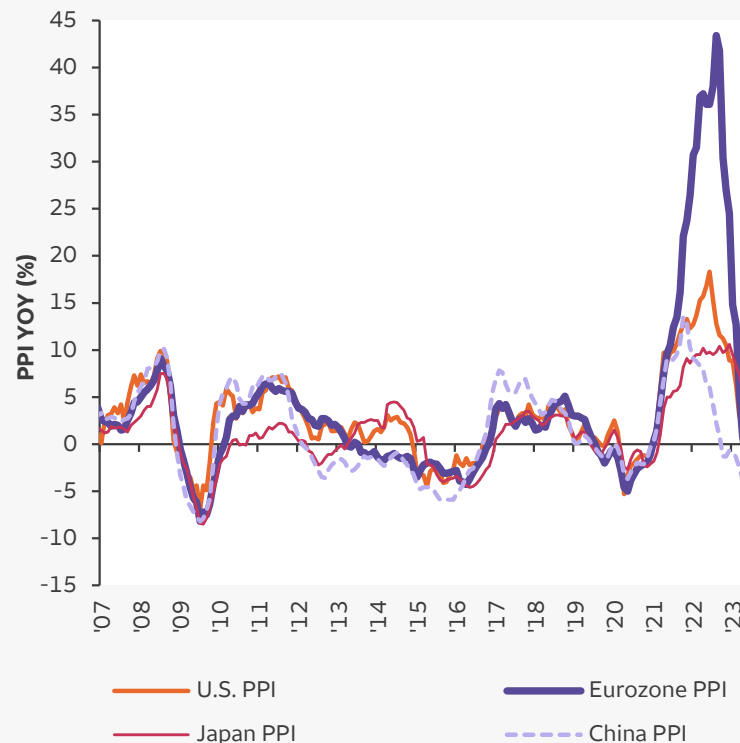
- Added pressure on market liquidity is set to come from increased Treasury borrowing to rebuild cash balances drawn down during the latest debt-ceiling confrontation, reinforcing the Fed's policy of quantitative tightening that has reduced the size of its balance sheet and of the money supply in the past year.
- Still-sizable money supply is combining with a recent increase in money velocity — the speed with which money circulates in financing transactions — to leave the economy exposed to inflation even as funds are drained from the financial market.

Inflation still high as global economies weaken

Inflation across regions remains elevated



Producers' costs continuing to slow

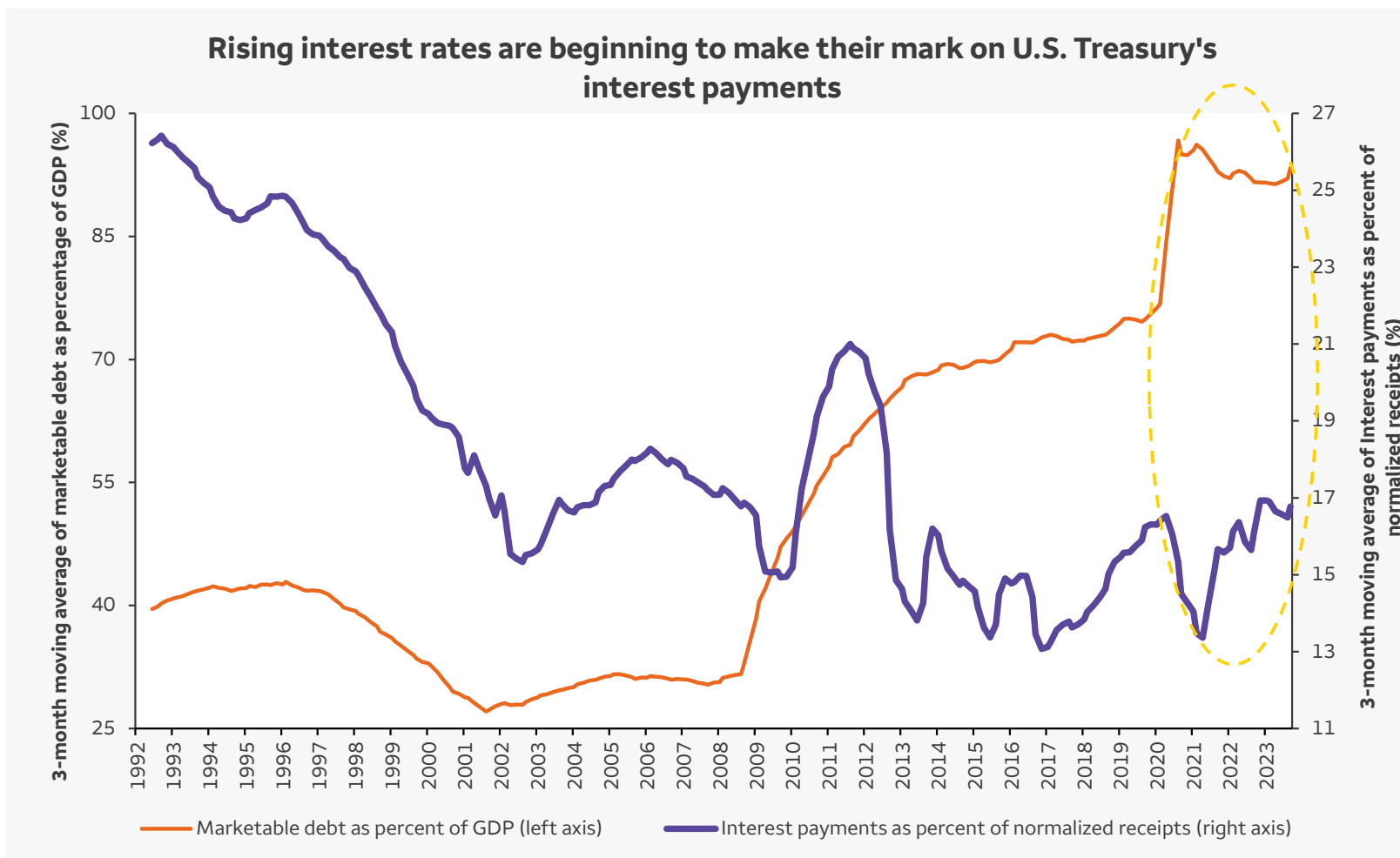


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2007 to August 31, 2023. BRIC is an acronym for the economies of Brazil, Russia, India, and China. CPI is the Consumer Price Index, which measures the price of a fixed basket of goods and services purchased by an average consumer. PPI is the Producer Price Index, which measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services. YOY = year-over-year.

Key takeaways

- Inflation was propelled to a 40-year high last year by aggressive monetary and fiscal stimulus, labor shortages, and supply-chain disruptions tied to the pandemic. A disinflationary trend has since taken hold, but we anticipate a bumpy path ahead as pent-up demand for services persists and certain “sticky” components of the CPI take more time to unwind.
- Capital markets remain exposed to the abrupt reversal of the ultra-low interest rates in place over the past 15 years, that were suppressed by aggressive monetary stimulus in the U.S. and abroad.

Federal interest payments are on the rise



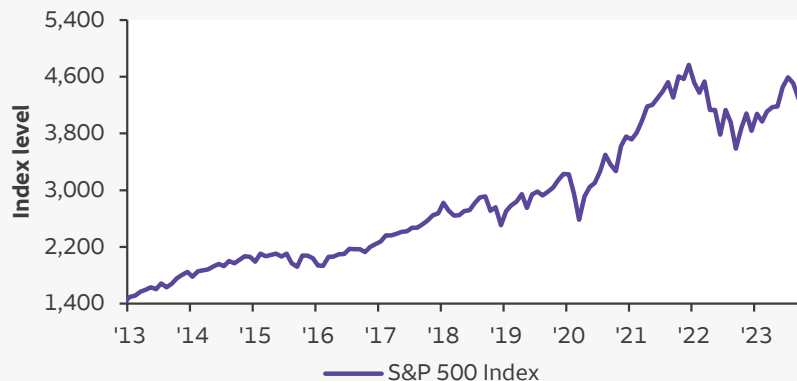
Sources: Bloomberg, U.S. Treasury Department, and Wells Fargo Investment Institute. Monthly data from January 1, 1992 to September 30, 2023. Normalized receipts are based on rolling 10-year moving average. GDP = gross domestic product.

Key takeaways

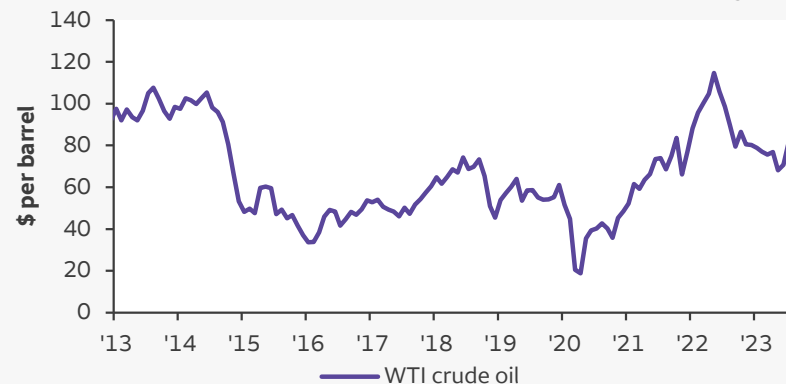
- Interest payments by the federal government as a share of revenues are on the rise again, after trending lower since 2012 — the result of rapid debt expansion and of higher interest rates. The current interest-payment burden has already reached a level associated in the past with pushback by investors and fiscal austerity measures from the government.
- Interest expenses are especially vulnerable to further increases now that higher interest rates are being applied to the highest Treasury debt in relation to GDP since World War II.

Where are we today?

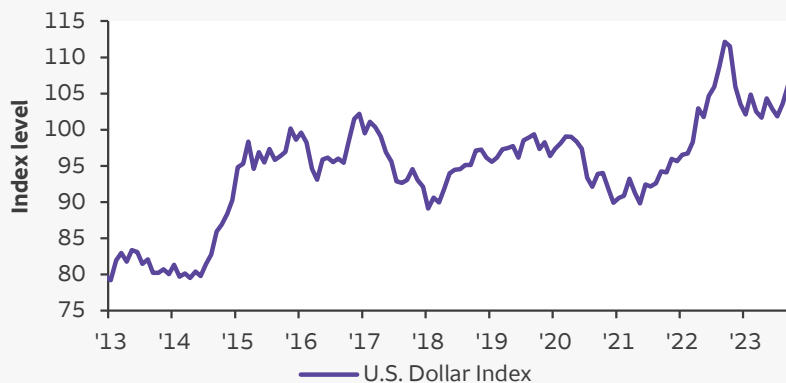
The U.S. stock market rally faltered in Q3



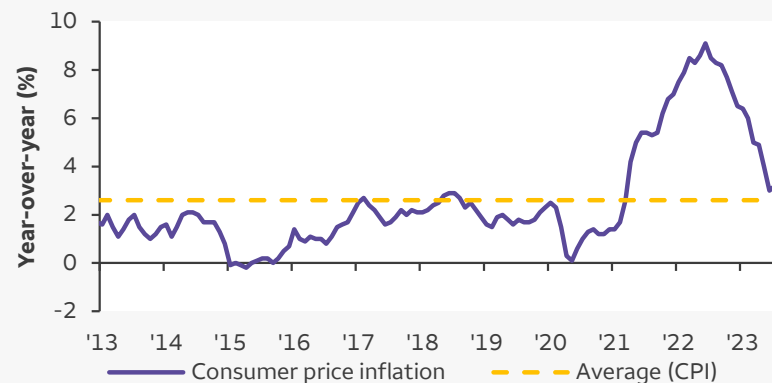
Oil prices have climbed on reduced supply



U.S. dollar headed higher



Inflation remains above the Fed's target



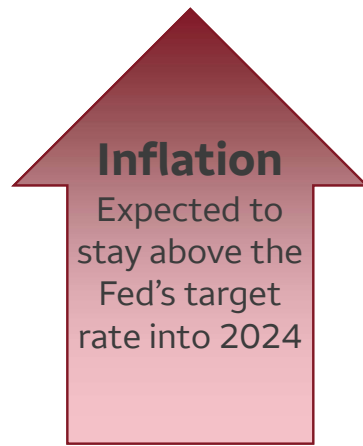
Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2013 to September 30, 2023. Consumer price inflation: monthly data from January 1, 2013 to August 31, 2023. The S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the U.S. stock market. The Consumer Price Index measures the average price of a basket of goods and services. West Texas Intermediate (WTI) is a grade of crude oil used as a benchmark in oil pricing. U.S. Dollar Index (USDIX) measures the value of the U.S. dollar relative to the majority of its most significant trading partners. This index is similar to other trade-weighted indexes, which also use the exchange rates from the same major currencies. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Stocks may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors.

Super-cycle = If you look at commodity prices over the very long term (hundreds of years), it becomes evident that they tend to move in overall bull and bear cycles, some lasting decades. These are super-cycles.

Key takeaways

- We believe the U.S. stock market is vulnerable to further setbacks despite the recovery from its third-quarter 2022 low, as it digests elevated inflation, aggressive Federal Reserve (Fed) monetary policy, and expectations for an economic recession.
- U.S. dollar strength likely will persist for now, helping to suppress commodity prices. However, we believe declines in raw materials prices will be limited by tight supply conditions tied to a commodity super-cycle reacting to years of underinvestment.

Where are we headed?

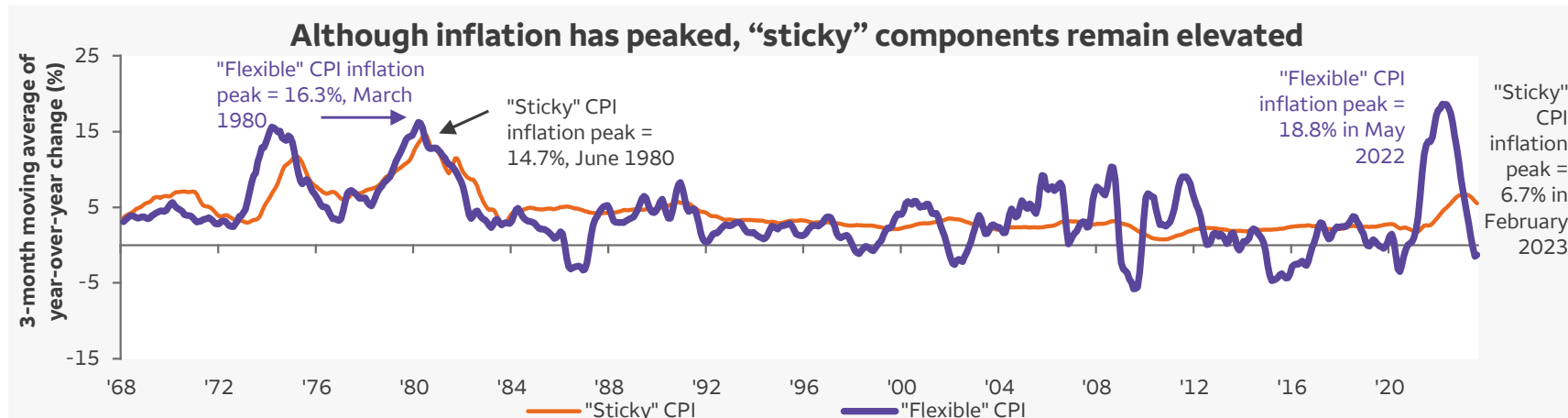
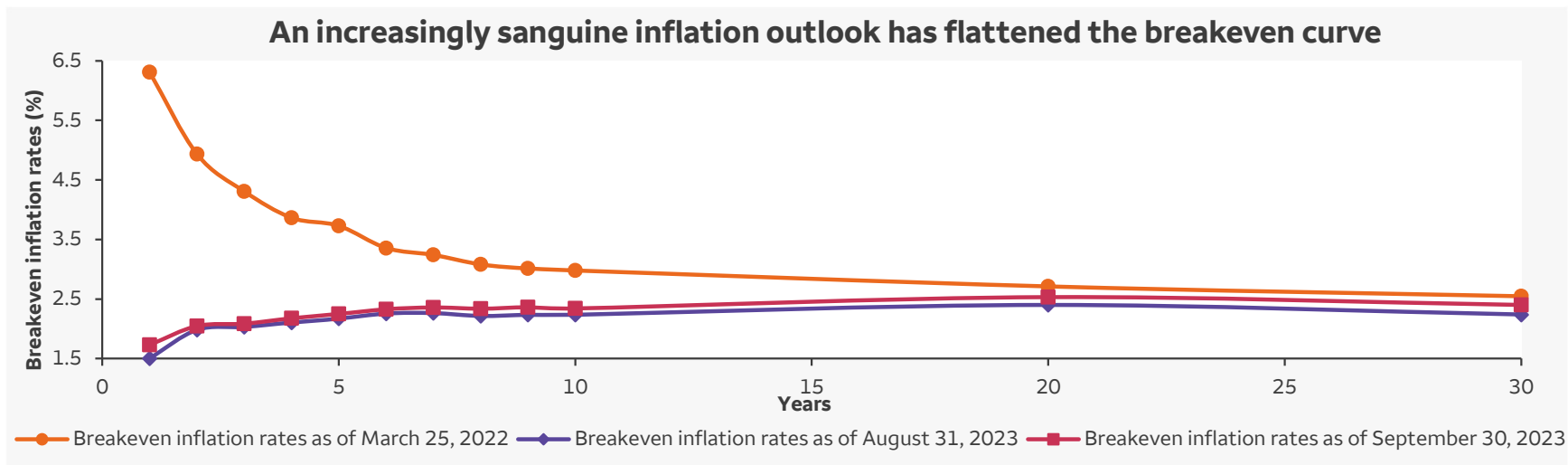


Source: Wells Fargo Investment Institute, as of September 30, 2023. Subject to change. GDP = gross domestic product. Fed = Federal Reserve.

Key takeaways

- The U.S. economy faces the possibility of a recession because of high inflation and rising interest rates propelled, in part, by aggressive Fed tightening, labor shortages, and pent-up services spending.
- Monetary restraint is reinforcing an earlier pullback in fiscal stimulus, curtailing economic growth. Catch-up hiring to counter recent labor shortages is keeping job gains healthy, despite early signs of slowing economic growth.

Fed's patience tested by inflation

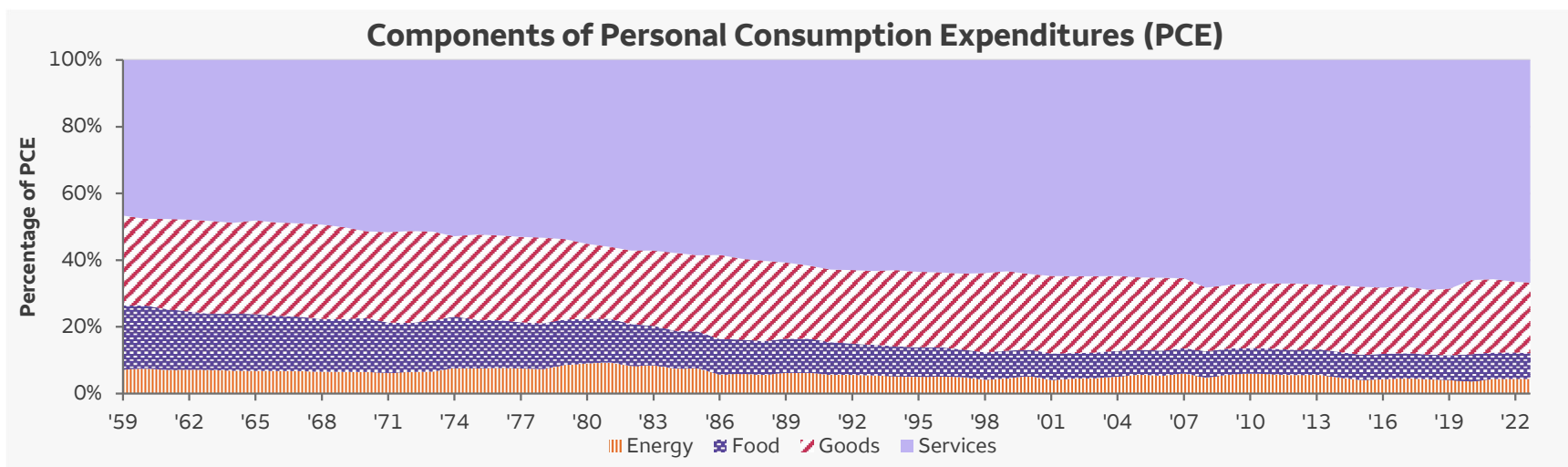
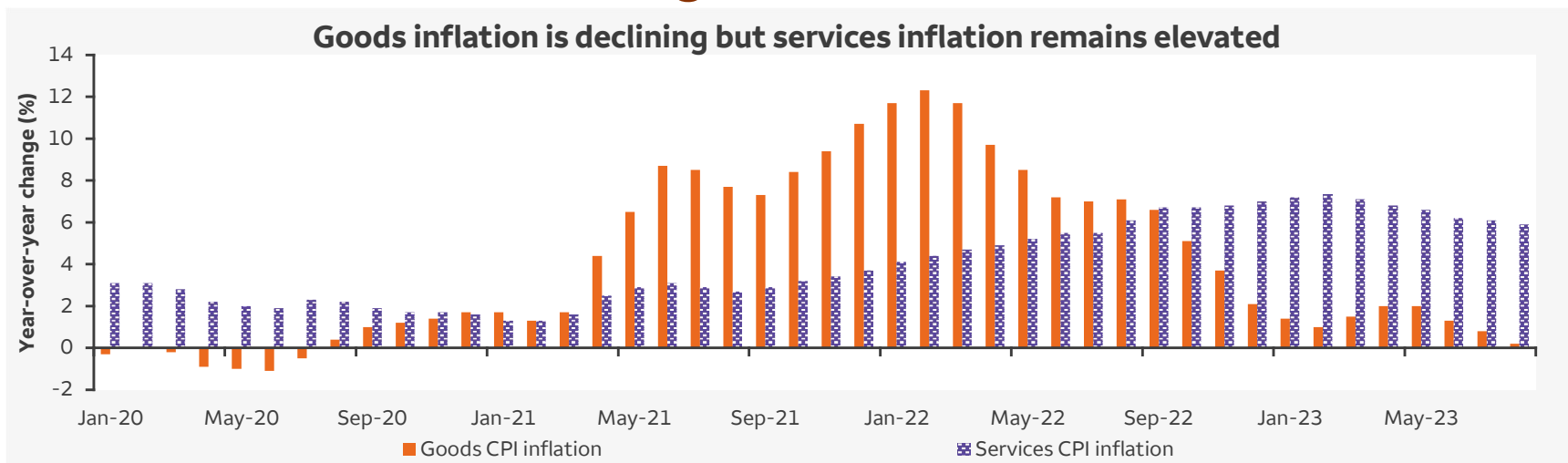


Sources: Top chart: Bloomberg, U.S. Treasury Department, and Wells Fargo Investment Institute, as of September 30, 2023. Bottom chart: Bloomberg, Federal Reserve Bank of Atlanta, U.S. Department of Labor, and Wells Fargo Investment Institute. Sticky-price and flexible-price consumer price index: monthly data from January 1, 1968 to August 31, 2023. Breakeven inflation rates equate nominal, or observed, Treasury interest rates with their inflation-protected counterparts. Fed = Federal Reserve. CPI = consumer price inflation. Sticky inflation is measured by components that change pricing less frequently, such as rents, education and public transportations. Flexible inflation is measured by components that change pricing more frequently, such as car rental, gas and electricity.

Key takeaways

- Shorter-term inflation expectations have come down noticeably from early 2022, responding to recession worries and improving global supply chains. However, inflation’s recent buildup has been mainly due to traditionally “stickier” services inflation, awaiting a reversal of recent rent increases and slowing demand for travel, entertainment, and other services.
- Longer-term inflation expectations remain subdued by comparison, a sign that investors and households view recent price increases largely as the product of shocks likely to dissipate in coming months.

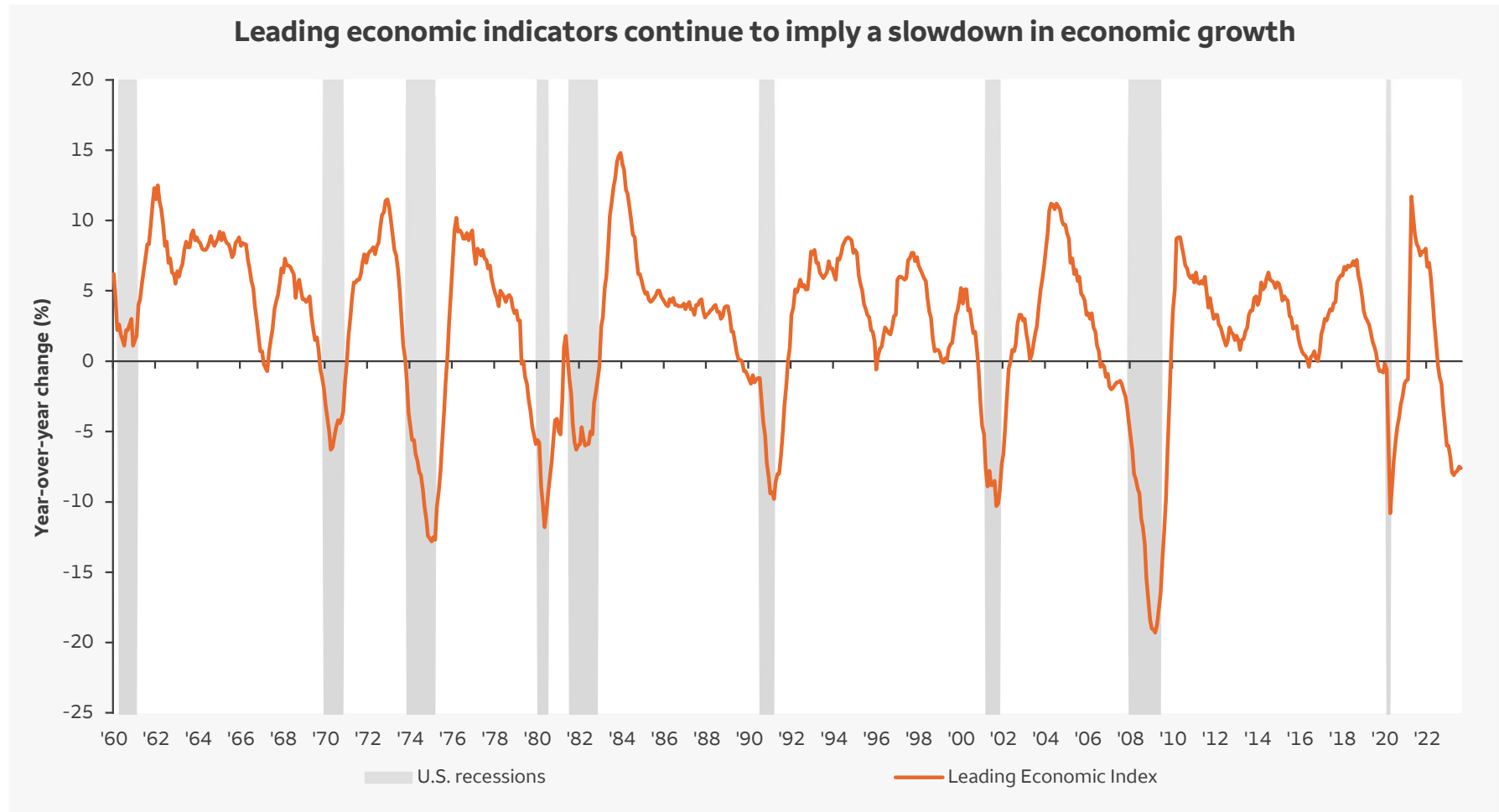
Share of services inflation has grown



Sources: Bloomberg, Bureau of Economic Analysis, U.S. Census Bureau, and Wells Fargo Investment Institute. Goods and Services Consumer Price Index (CPI) inflation: monthly data from January 1, 2020 to August 31, 2023. PCE components: monthly data from January 1, 1959 to August 31, 2023. PCE (personal consumption expenditure) tracks overall price changes for goods and services purchased by consumers. Services and all goods spending data is adjusted for inflation.

Key takeaways

- Over the past four decades, the services component has become an increasingly large portion of U.S. CPI inflation. Spending recently has rotated from goods to services as the economy has recovered from the worst of the pandemic.
- Ongoing labor shortages have combined with increased demand for travel, entertainment, and other economically sensitive services to keep inflation elevated, even as improving supply chains and soft demand have suppressed goods-price increases.

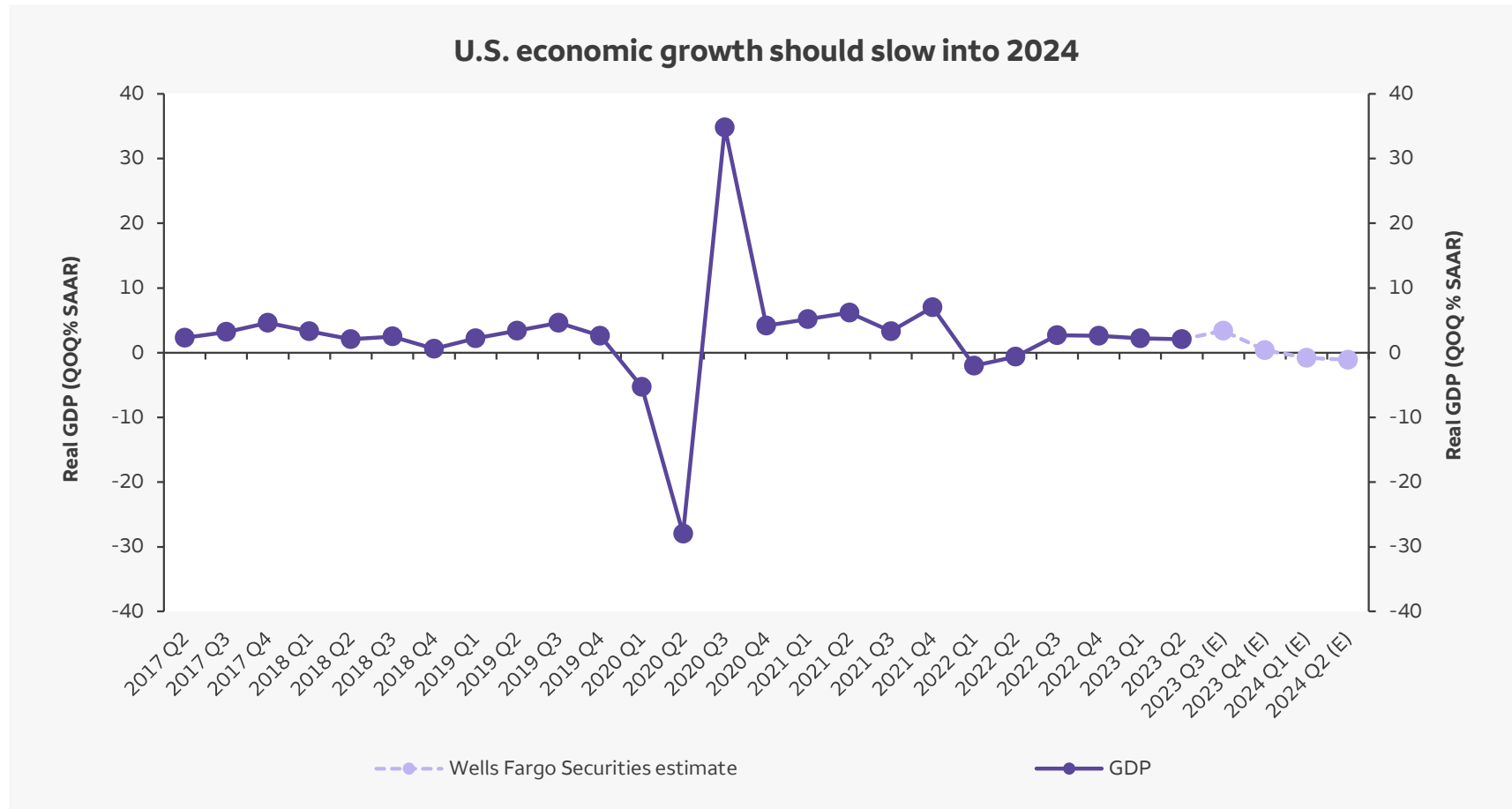


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1960 to August 31, 2023. The Conference Board Leading Economic Index® (LEI) is a composite average of 10 leading indicators in the U.S. It is one of the key elements in the Conference Board's analytic system, which is designed to signal peaks and troughs in the business cycle.

Key takeaways

- Declines in the Index of Leading Economic Indicators (or LEI) have historically preceded recessions.
- Recent increases in the ratio of coincident to lagging indicators, often foreshadowing changes in the LEI, point toward a reversal of 16 straight monthly declines there, but not soon enough to prevent a recession.

U.S. economy may slip into recession

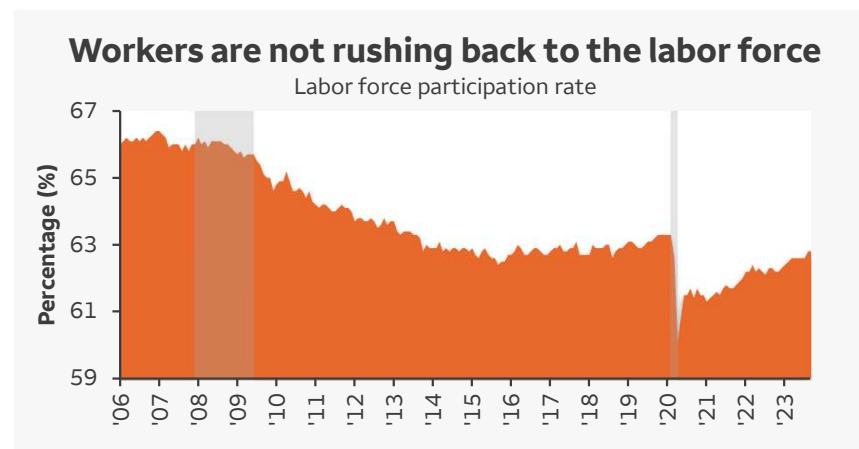
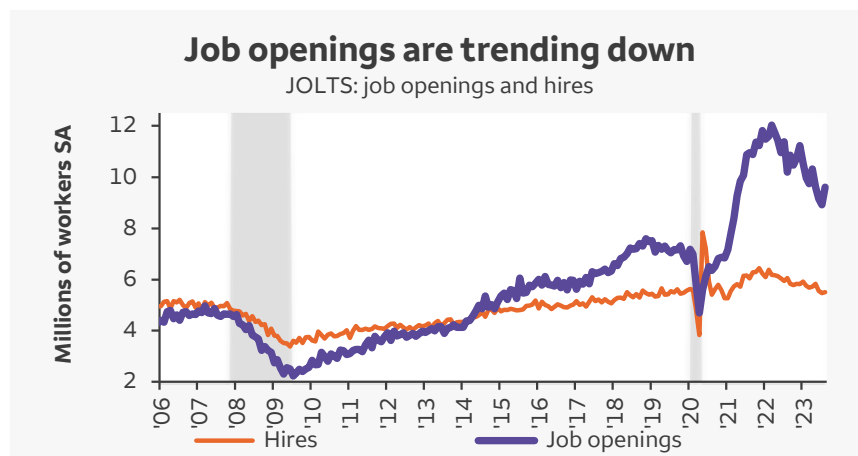
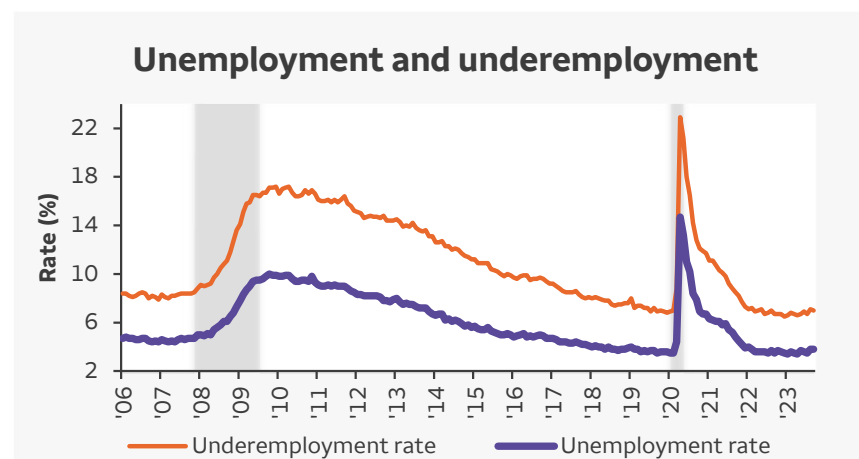
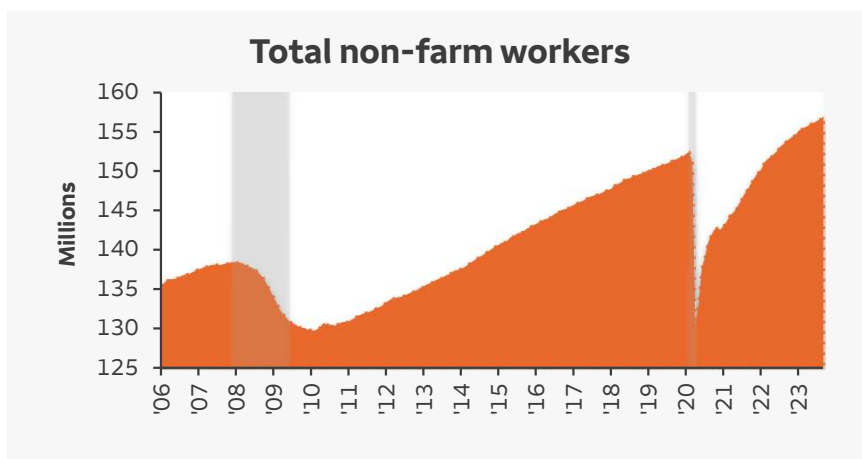


Sources: Bloomberg, Wells Fargo Securities, and Wells Fargo Investment Institute. Quarterly data from April 1, 2017 to June 30, 2023. Q3 2023 – Q2 2024 are Wells Fargo Securities forecasts, as of September 7, 2023. **Forecasts are not guaranteed and are subject to change.** GDP = gross domestic product. QOQ = quarter over quarter. SAAR = seasonally adjusted annual rate. Forecasts are based on certain assumptions and on views of market and economic conditions which are subject to change.

Key takeaways

- Growth has slowed since October 2022 on emerging financial strains, rising interest rates, and tightening liquidity conditions, laying the groundwork for a recession, in our view.
- We expect slowing economic and profits growth, combined with firmer interest rates, unsettling news on a government shutdown, and increased strike activity to contribute to a reversal in the recent stock market rally between now and year-end.

The U.S. job market remains tight

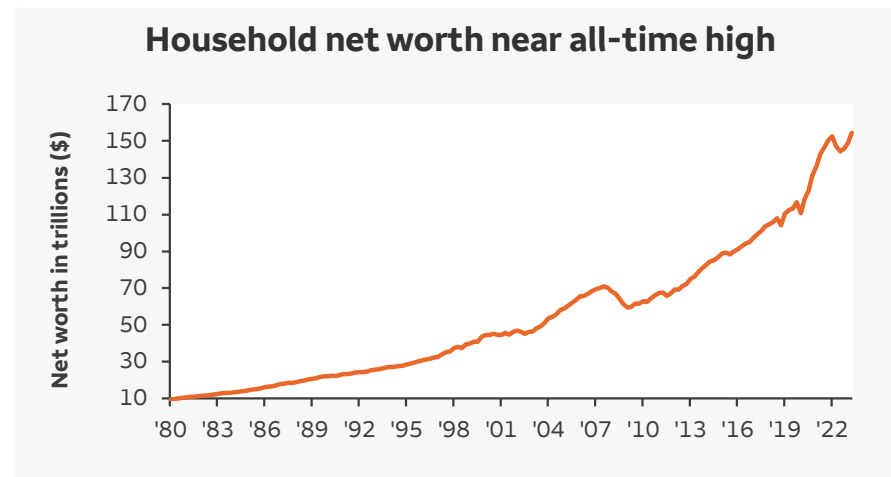
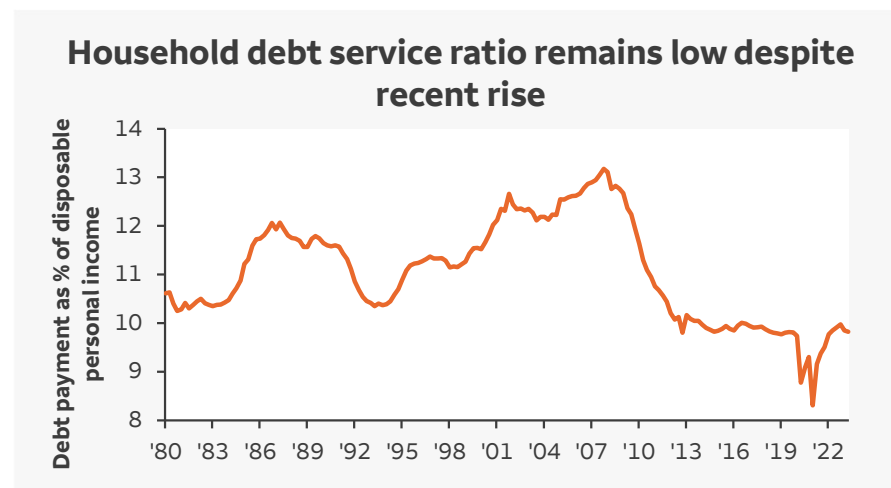
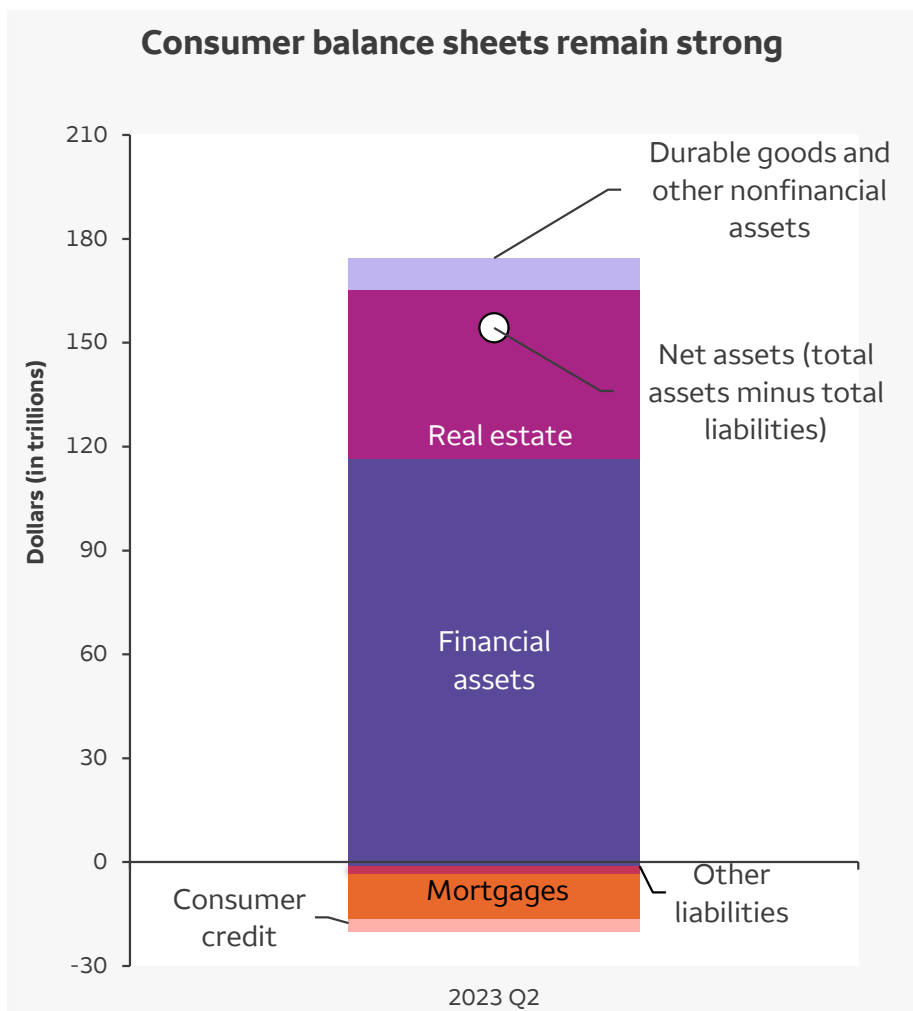


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2006 to September 30, 2023. JOLTS hires and job openings: monthly data from January 1, 2006 to August 31, 2023. JOLTS = Job Openings and Labor Turnover Survey. Shaded area represents a U.S. economic recession. SA = seasonally adjusted.

Key takeaways

- The gap between job openings and unemployment has narrowed, but remains wide, signaling a still tight labor market.
- Our view is that the labor market will slowly soften further in the final months of 2023 and into 2024 as worker shortages subside and businesses reduce the pace of hiring in the face of slowing economic growth.

On average, the U.S. consumer balance sheet is in good shape WELLS FARGO Investment Institute

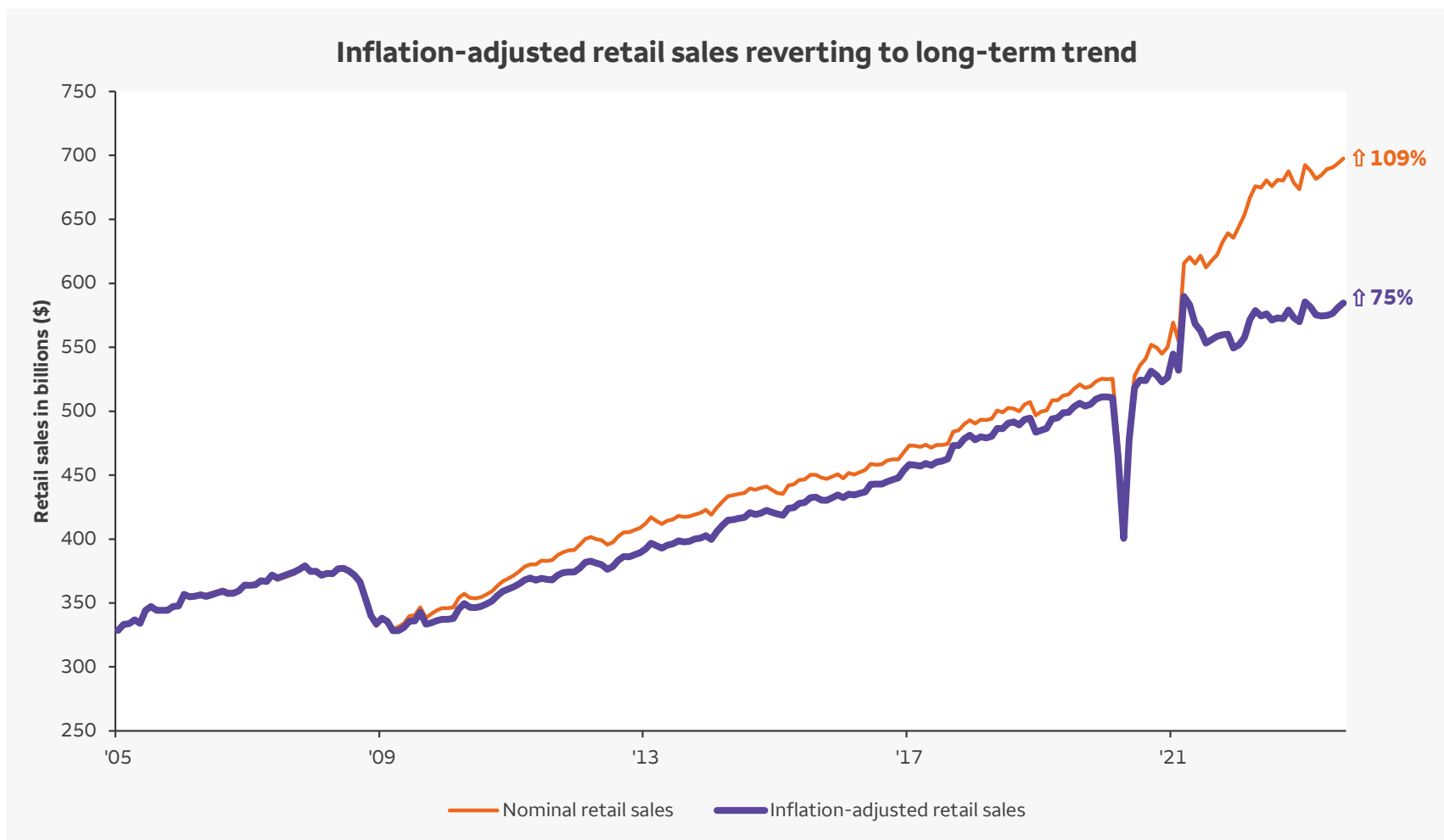


Sources: Bloomberg, Federal Reserve Board, and Wells Fargo Investment Institute. Consumer balance sheet data as of June 30, 2023. Household net worth and household debt service ratio: quarterly data from January 1, 1980 to June 30, 2023.

Key takeaways

- Overall, consumer balance sheets still are healthier than they were during the Global Financial Crisis but are coming under pressure due to dwindling cash balances, aggressive credit-card and auto-related borrowing, and from higher interest rates.
- Overall strength among working households, particularly those with high incomes, has masked financial distress among families in lower income groups pressured by the squeeze on households' inflation-adjusted incomes.

Consumer spending has softened recently

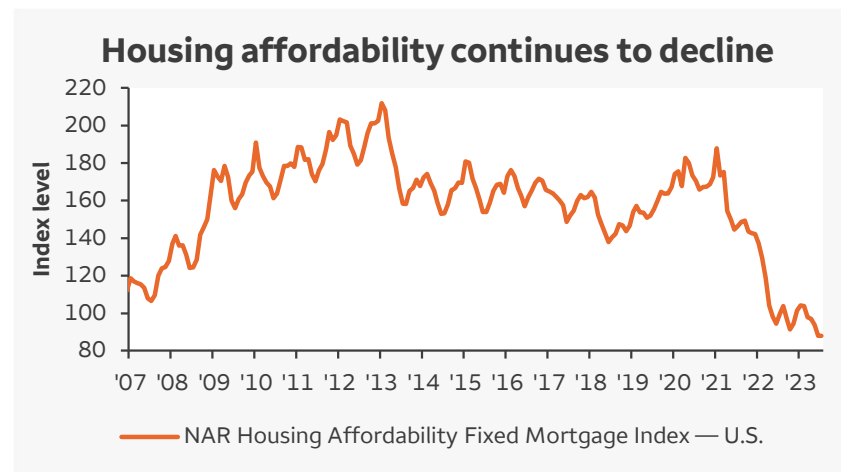
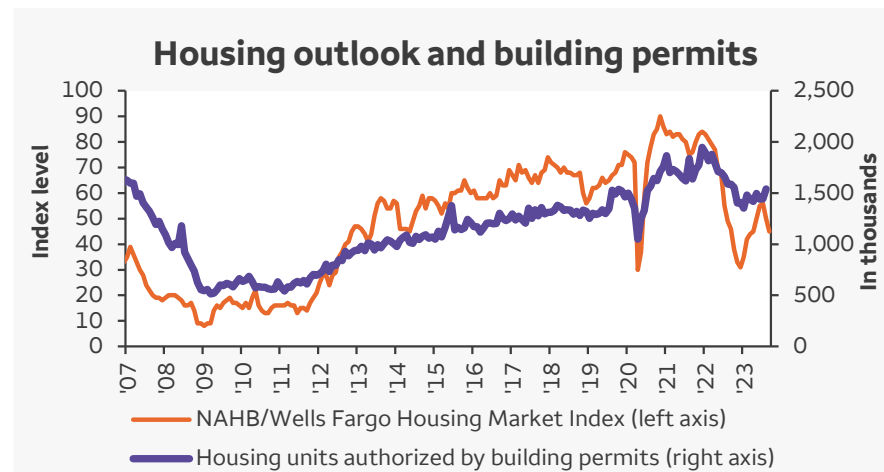
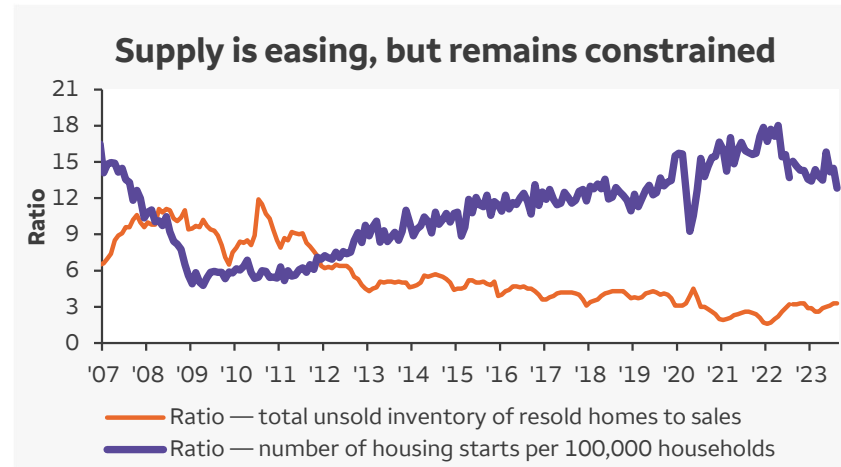
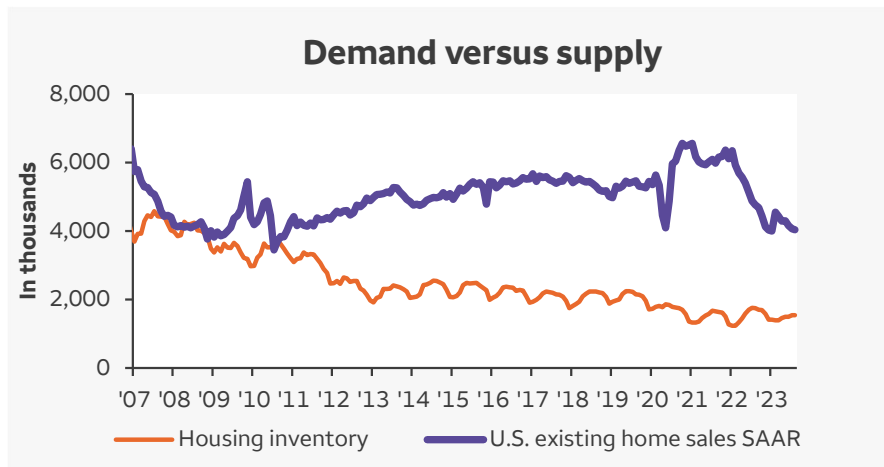


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2005 to August 31, 2023. Inflation-adjusted retail sales are adjusted for inflation using Consumer Price Index goods inflation excluding food and energy.

Key takeaways

- Consumer spending has proven to be resilient in this cycle. However, a declining savings rate combined with households increasingly reliant on credit suggest to us that this critical economic support will falter in the coming quarters.
- Retail sales have grown at a brisk pace since the 2020 recession. However, part of that growth has been attributed to higher prices overall. When adjusted for inflation, retail sales growth has returned to the post-financial-crisis trend.

U.S. housing market has weakened

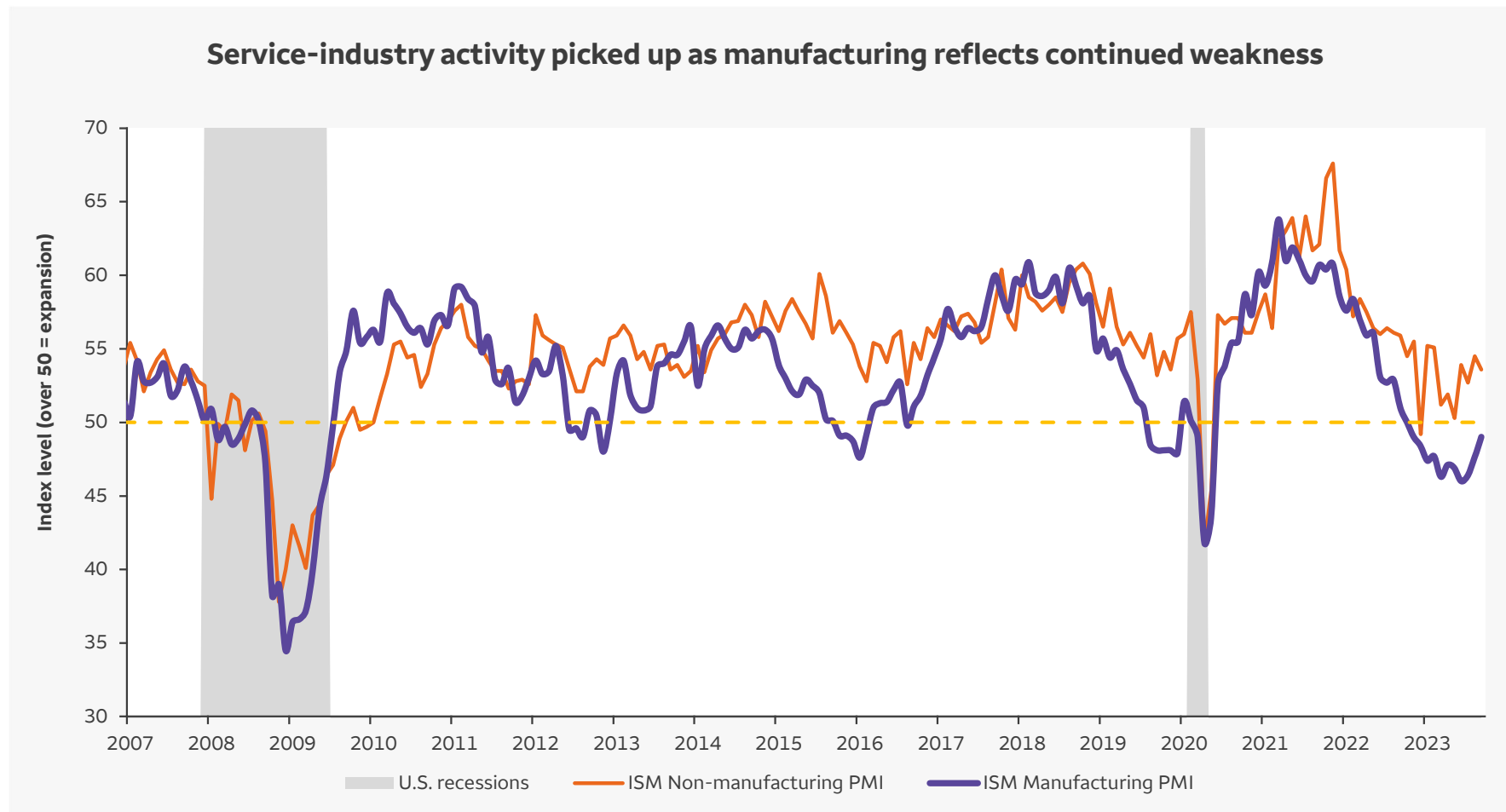


Sources: Bloomberg, U.S. Census Bureau, and Wells Fargo Investment Institute. Monthly data from January 1, 2007 to August 31, 2023. NAHB/Wells Fargo Housing Market Index: monthly data from January 1, 2007 to September 30, 2023. NAR Housing Affordability Index: monthly data from January 1, 2007 to July 31, 2023. SAAR = seasonally adjusted annual rate. NAHB (National Association of Home Builders)/Wells Fargo Housing Market Index is a widely watched gauge of the outlook for the U.S. housing sector. The NAR (National Association of Realtors®) Housing Affordability Index measures whether or not a typical family could qualify for a mortgage loan on a typical home.

Key takeaways

- Housing activity has avoided the usual sustained downturn heading into a recession, due to extremely tight inventory. Recent mortgage-rate increases to a nearly two-decade high are pressuring housing affordability, preventing buyers from trading up.
- A loss of housing momentum is undercutting broader support to economic activity through its large ripple effect on other parts of the economy. Housing construction's sub-5% share of gross domestic product translates to 10% - 15% after including its effect on employment, manufacturing, and big-ticket consumer spending on appliances and home furnishings.

Services industries sensitive to economic fluctuations

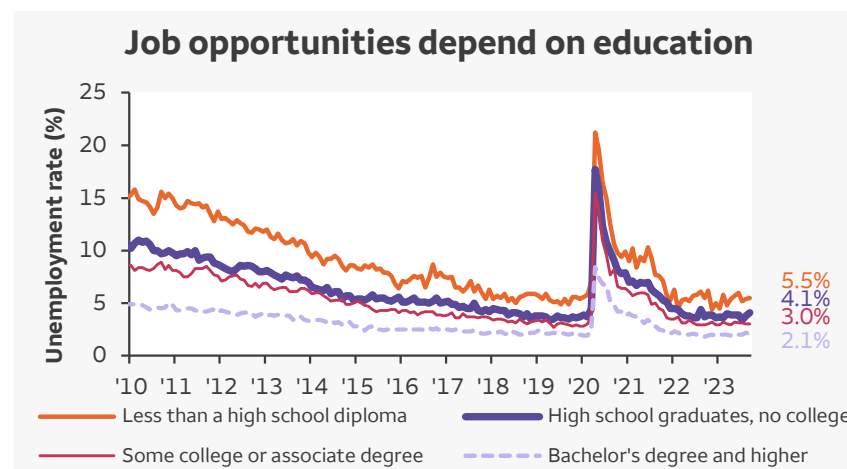
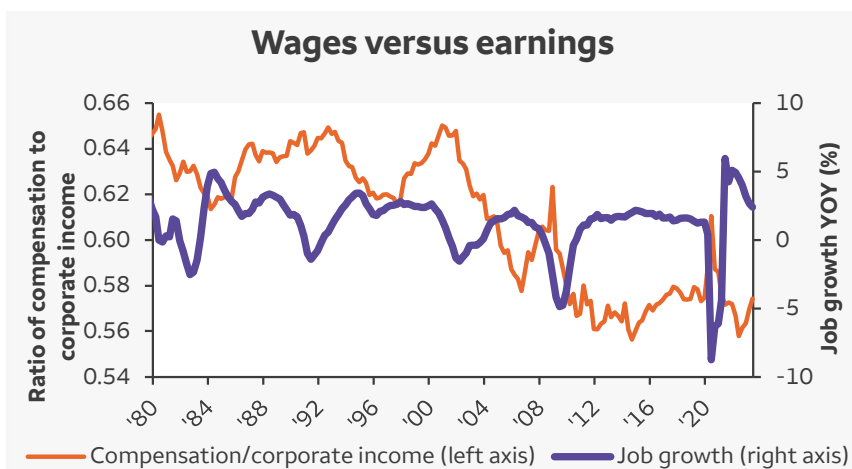
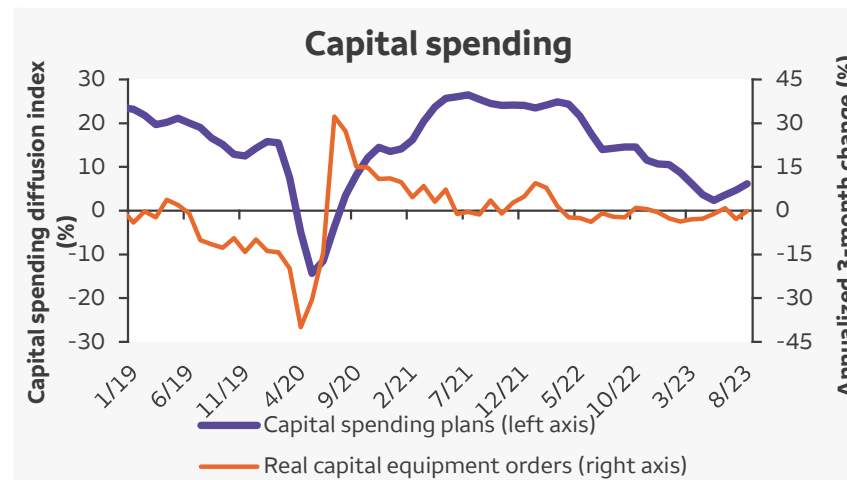
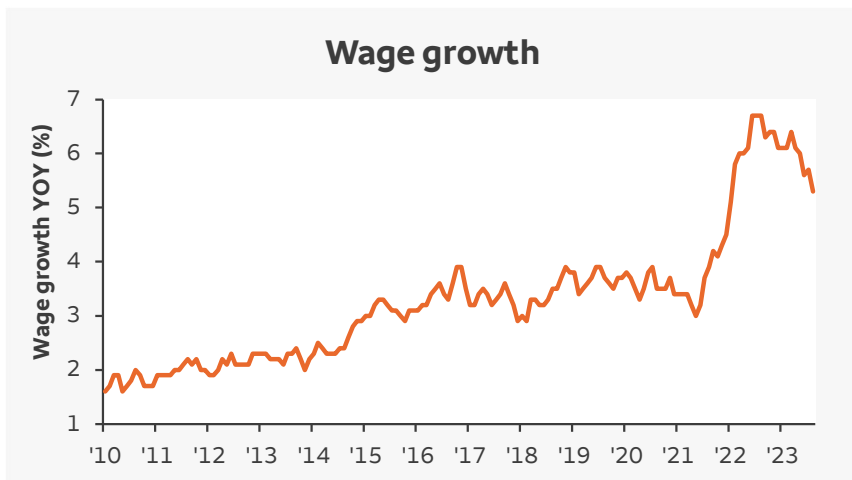


Sources: Bloomberg, Institute for Supply Management, and Wells Fargo Investment Institute. Monthly data from January 1, 2007 to September 30, 2023. The Institute for Supply Management (ISM) Manufacturing Index® is a composite index based on five indicators with equal weights. The ISM Non-Manufacturing Index® is a composite index based on four indicators with equal weights.

Key takeaways

- A revival of service-industry activity in early 2023 has been supported by persistent demand despite concerns over an economic slowdown.
- Service-sector resilience and ongoing weakness in manufacturing have created unbalanced economic growth likely to converge toward weakness, as household spending on travel, entertainment, and other economically sensitive services lose support from pent-up demand and broader spending restraint.

As the job market tightens, wages have risen

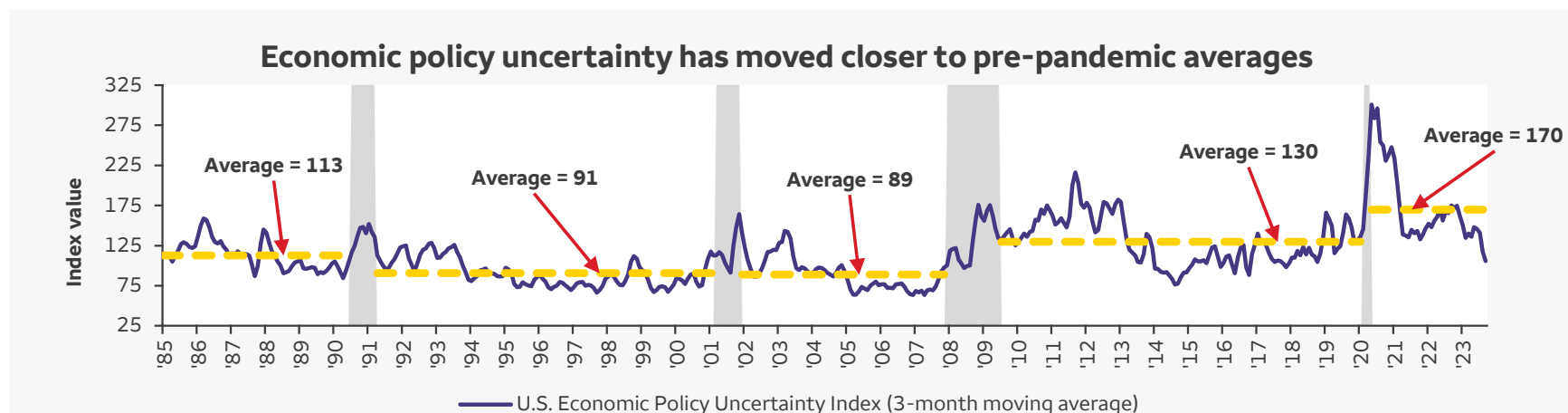
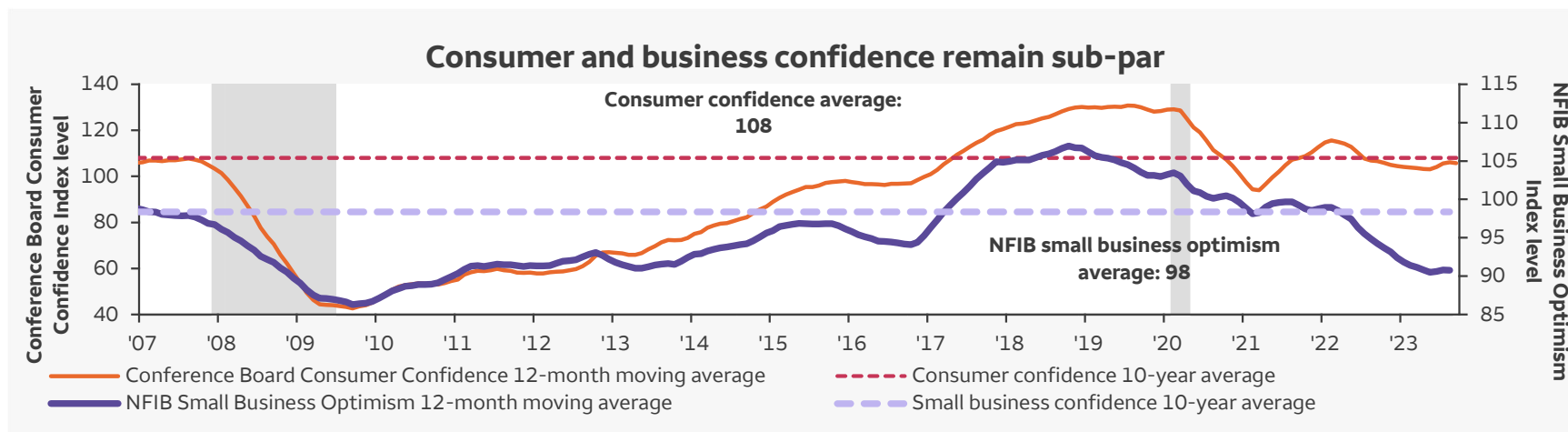


Sources: Bloomberg, Bureau of Economic Analysis, Bureau of Labor Statistics, U.S. Commerce Department, and Wells Fargo Investment Institute. Wage growth: monthly data from January 1, 2010 to August 31, 2023. Capital spending plans and real capital equipment orders: monthly data from January 1, 2019 to August 31, 2023. Compensation/corporate income: quarterly data from January 1, 1980 to June 30, 2023. Job growth: quarterly data from January 1, 1980 to September 30, 2023. Unemployment rate: monthly data from January 1, 2010 to September 30, 2023. YOY = year-over-year. Capital spending plans represented by three month moving average of a diffusion index of Dallas, Kansas City, N.Y., Philadelphia, and Richmond Fed district respondents reporting planned increase. Real capital equipment orders represented by three month moving average of non-defense equipment shipments (for example, aircraft).

Key takeaways

- We believe diminishing capital-spending plans and weakening growth of inflation-adjusted capital-goods orders signal less support from investment spending in coming months, due to higher interest rates and economic outlook uncertainties.
- Labor-market dislocations and low unemployment have pressured wages higher. That is particularly true in lower-paying services industries dominated by less-skilled workers who were most exposed to the pandemic-induced recession in 2020.

Confidence has steadied at lower levels



Sources: The Conference Board, National Federation of Independent Business (NFIB), Economic Policy Uncertainty Index — Baker, Bloom, and Davis; Bloomberg, and Wells Fargo Investment Institute. Consumer confidence: monthly data from January 1, 2007 to September 30, 2023. Small business optimism: monthly data from January 1, 2007 to August 31, 2023. Economic policy uncertainty: monthly data from January 1, 1985 to September 30, 2023. Shaded area represents a U.S. economic recession. The Consumer Confidence Index (CCI) tracks sentiment among households or consumers. The NFIB Small Business Index tracks the general state of the economy as it relates to businesses. The U.S. Economic Policy Uncertainty Index developed by Baker, Bloom, and Davis is based on newspaper coverage frequency as index proxies for movements in policy-related economic uncertainty.

Key takeaways

- Consumer and small business confidence have not regained much momentum due to worries over pressure on household finances from elevated inflation and, for small businesses, concern over wage pressures in a tight labor market.
- Fallout from a mildly restrictive budget deal tied to the debt ceiling has created an added headwind to economic growth weighing on the job market over the next 18 months.

General

- Historically, market shocks — such as a potential government shutdown — have provided reasonable entry points for long-term equity investors.
- As the Federal Reserve maintains a tight monetary policy and the cycle matures, our view is that investors should consider moving up in quality (we favor U.S. Large Cap Equities).
- As we approach a likely upcoming recession, we would look for opportunities to tilt to more economically sensitive segments of the market in anticipation of an eventual recovery.

Domestic

- We anticipate earnings growth will experience challenges as operating margins fall while interest, labor, and input expenses remain elevated.
- Amid the volatile market conditions, we prefer U.S. Large Cap Equities over U.S. Mid Cap Equities and U.S. Small Cap Equities. We also emphasize quality in our sector positioning, and selectivity at the sub-industry level.

International

- Attractive valuations as well as our improved developed market economic outlook and expectations for a flat-to-weaker dollar over the next 12 months prompted our upgrade to Developed Market ex-U.S. Equities in the second quarter.
- We remain unfavorable on Emerging Market equities as geopolitical and regulatory risks in addition to China's lower growth potential keep us on the sideline.

Equity scorecard

Asset class	3Q23 total return (%)	YTD total return (%)	YOY total return (%)	Current trailing 12M P/E	20-year average trailing 12M P/E ¹	20-year median trailing 12M P/E	Dividend yield (%)
U.S. Large Cap Equities	-3.27	13.07	21.62	21.00	18.37	17.94	1.61
U.S. Mid Cap Equities	-4.68	3.91	13.45	20.44	21.69	21.06	1.82
U.S. Small Cap Equities	-5.13	2.54	8.93	27.74	34.10	31.64	1.74
Developed Market ex-U.S. Equities	-4.05	7.59	26.31	13.07	17.12	15.97	3.16
Emerging Market Equities	-2.79	2.16	12.17	13.66	14.05	13.48	3.08
Frontier Market Equities	2.14	7.82	7.01	9.26	–	–	4.28

Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. YTD = year to date. YOY = year over year. P/E = price/earnings. 12M = 12 months. *For illustrative purposes only.* Large cap = S&P 500 Index. Mid cap = Russell Midcap Index. Small cap = Russell 2000 Index. Developed market Ex-U.S. = MSCI EAFE Index. Emerging market = MSCI Emerging Markets Index. Frontier market = MSCI Frontier Markets Index. The **S&P 500 Index** is a market capitalization-weighted index generally considered representative of the U.S. stock market. The **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000 Index. The **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. The **MSCI Frontier Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of frontier markets. Yields and returns represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

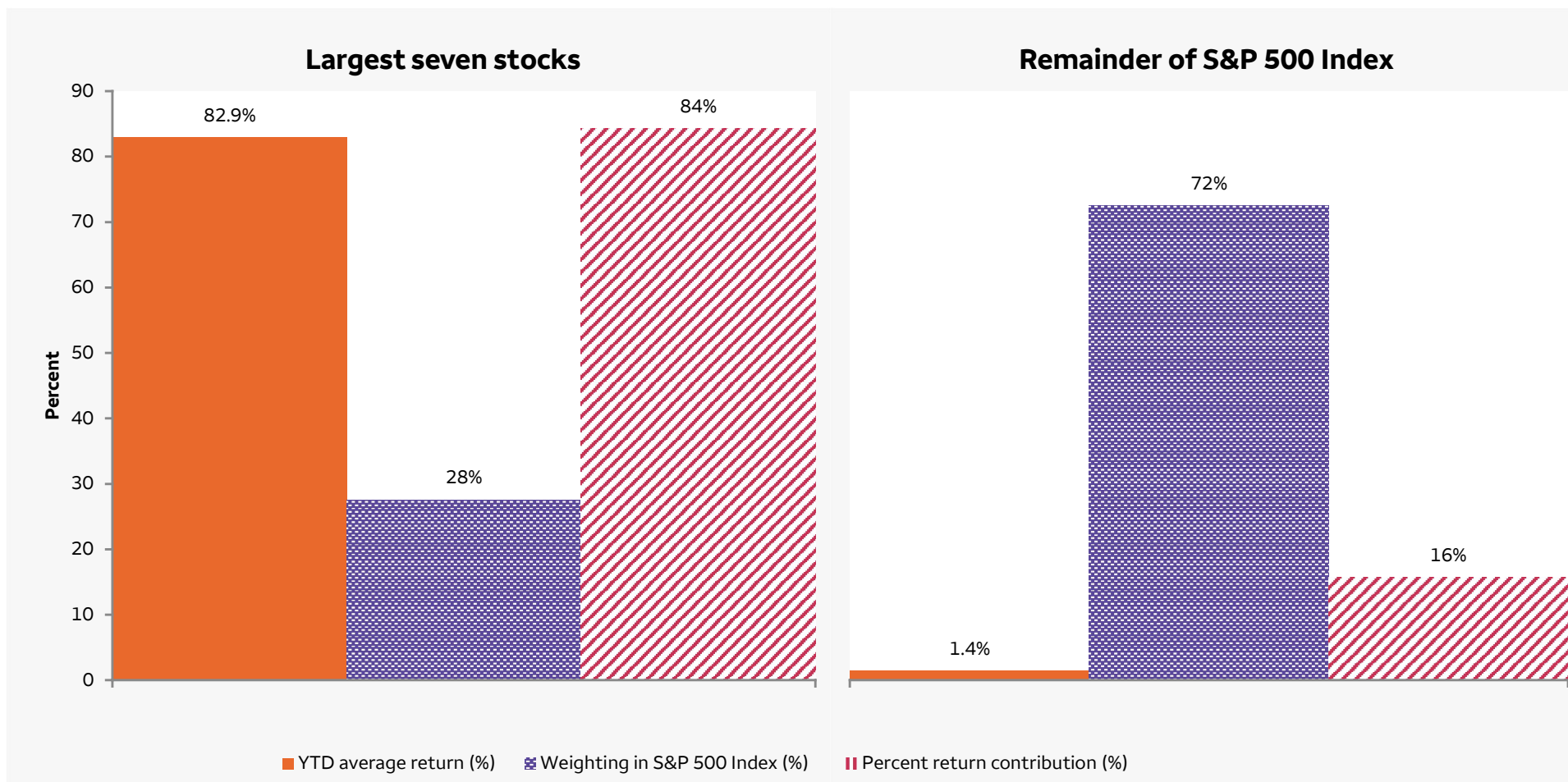
Key takeaways

- Equities have performed well so far in 2023, despite a pullback in the third quarter, as hopes of a soft landing continue to grow and artificial intelligence optimism has driven prices higher.

1. March 2009 to June 2009 and September 2020 to April 2021 P/Es for U.S. Small Cap Equities have been removed due to their outlier condition.

Stock markets, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. Foreign investing has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. These risks are heightened in emerging and frontier markets. Mid- and small-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks.

Seven stocks are driving S&P 500 Index performance

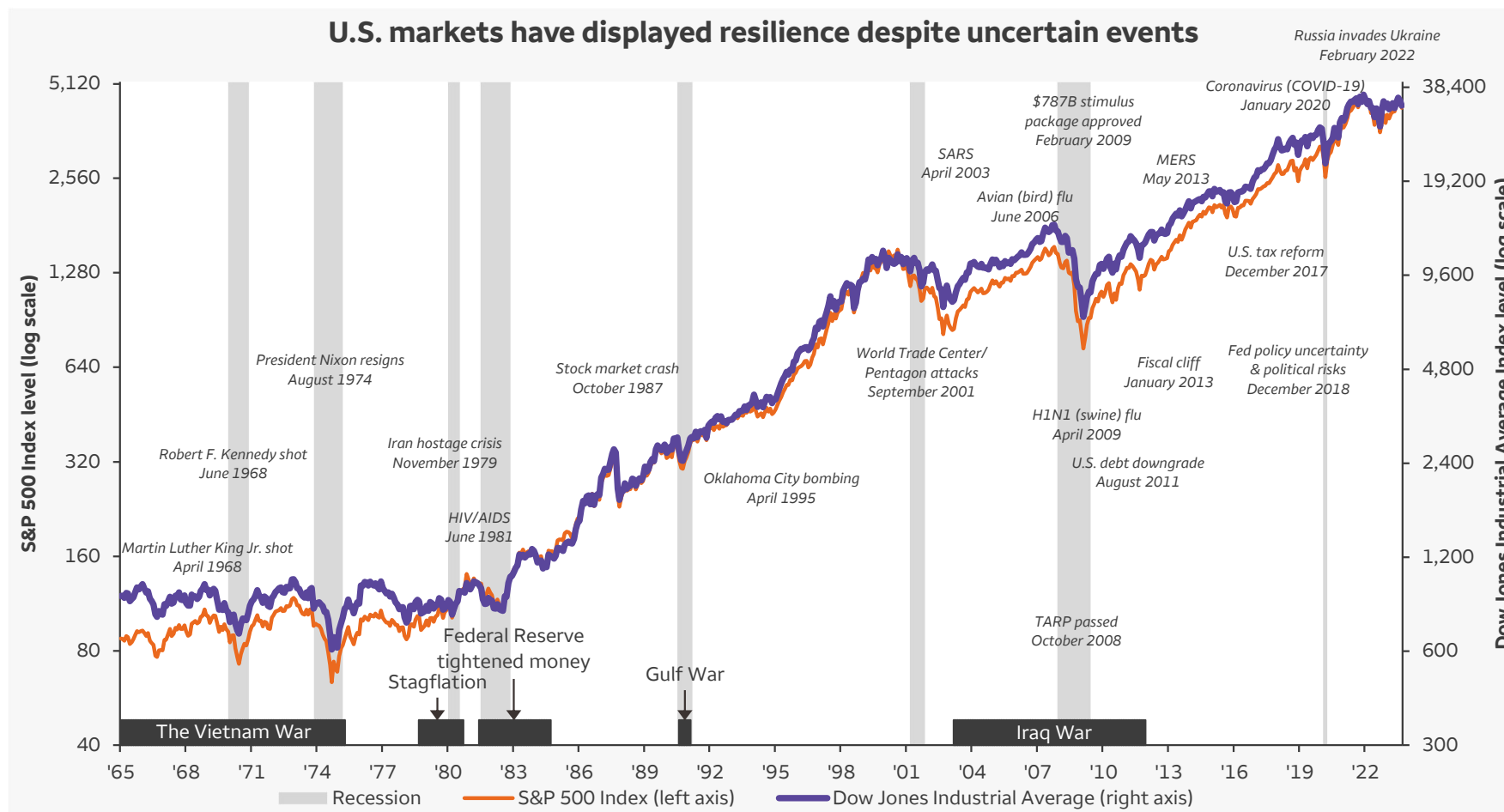


Sources: FactSet and Wells Fargo Investment Institute, as of September 30, 2023. YTD = year to date. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. The largest seven stocks in the S&P 500 Index are based on market capitalization.

Key takeaways

- Market breadth has been narrow this year, with the largest seven stocks in the S&P 500 Index, often dubbed the “Magnificent Seven”, being the major contributors to the index’s positive performance in 2023.

Market resilience

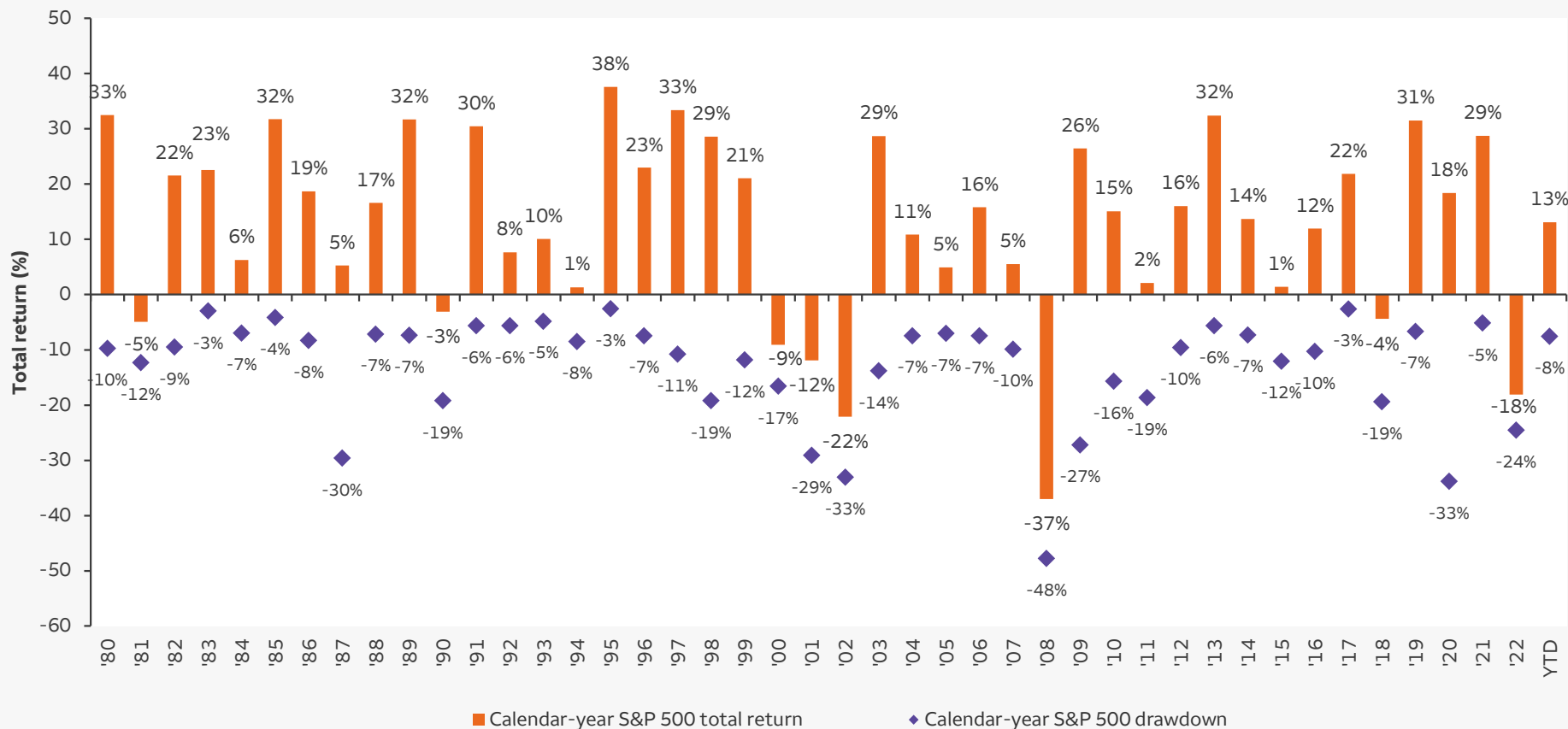


Sources: Wells Fargo Investment Institute and Bloomberg. Monthly data from January 1, 1965 to September 30, 2023. Shaded areas represent recessions. TARP = Troubled Asset Relief Program. Fed = Federal Reserve. SARS = Severe Acute Respiratory Syndrome. MERS = Middle East Respiratory Syndrome. For illustrative purposes only. A price index is not a total return index and does not include the reinvestment of dividends. The **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market. The **Dow Jones Industrial Average** is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** There is no certainty that U.S. markets will continue to show resilience despite crisis events. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. There is no guarantee equity markets will perform similarly during other periods of uncertainty. All investing involves risk including the possible loss of principal.

Key takeaways

- Volatility has been a normal part of market behavior and can present opportunities for long-term investors.
- Geopolitical crises, terrorist attacks, economic recessions, epidemics, or consequential central-bank policies can trigger short-lived yet painful market disruptions.

A downturn is no reason to exit the market



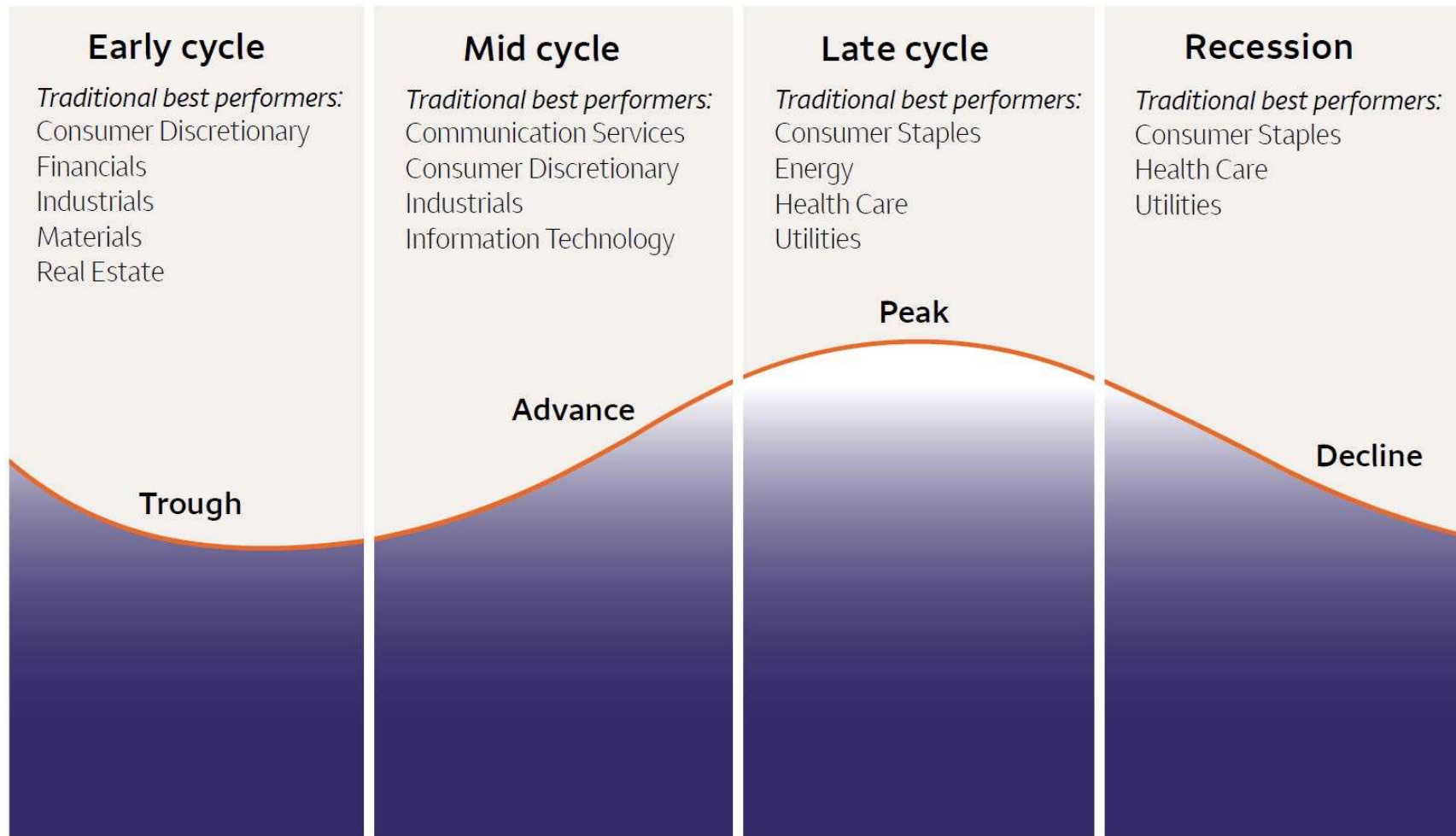
Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from January 1, 1980 to September 30, 2023. For illustrative purposes only. YTD = year to date. Severe intra-year corrections do not necessarily indicate subpar performance for the calendar year. Analysis was compiled using the daily total returns of the S&P 500 Index. The **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market. Calendar year drawdowns represent the largest market drops from peak to trough for each year. Investing in stocks involve risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** All investing involves risk including the possible loss of principal.

Key takeaways

- A market downturn does not necessarily mean that markets will perform poorly for the year. Four of the past seven bear markets have resulted in negative annual returns.
- Market corrections and downturns can be difficult to endure. However, sell-offs can potentially offer opportunities for investors to purchase high-quality stocks at reasonable prices.

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Sector favorability — Position for late cycle/recession



Source: Wells Fargo Investment Institute, as of September 30, 2023. **Past performance is no guarantee of future results.** Traditional best performers are based on the performance of S&P 500 Index sectors during a particular point in the economic cycle (early, mid, late, recession) since September 1989, the inception date for the S&P 500 Index sectors.

Key takeaways

- The business cycle can help inform the investing decision process.
- We have positioned portfolios more defensively in anticipation of recession by year-end. However, as the recession approaches, we will look for opportunities to tilt more cyclically in preparation for an economic recovery we expect in the second half of 2024.

Bear markets and recessions

Bear market start	Bear market length (months)	Overlapping recession?	Bear market return (%)	Return 6 months after bear end (%)	Return 12 months after bear end (%)	Length to recover from bear bottom (months)
May 29, 1946	36.5	Yes	-29.6	22.8	42.1	11.9
August 2, 1956	14.7	Yes	-21.6	9.8	31.0	11.1
December 12, 1961	6.4	No*	-28.0	20.5	32.7	14.3
February 9, 1966	7.9	No	-22.2	22.1	32.9	6.9
November 29, 1968	17.9	Yes	-36.1	22.8	43.7	21.4
January 11, 1973	20.7	Yes	-48.2	30.9	38.0	69.5
November 28, 1980	20.4	Yes	-27.1	44.1	58.3	2.7
August 25, 1987	3.3	No	-33.5	19.0	21.4	19.7
July 16, 1990	2.9	Yes	-19.9	27.8	29.1	4.1
March 24, 2000	30.5	Yes	-49.1	11.5	33.7	55.7
October 9, 2007	17.0	Yes	-56.8	52.7	68.6	48.7
February 19, 2020	1.1	Yes	-33.9	44.7	74.8	4.9
<i>Current: January 3, 2022</i>	<i>20.9</i>	<i>TBD</i>	<i>-25.4</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Average overall	14.9	–	-33.8	27.4	42.2	22.6
Average without recession	5.9	–	-27.9	20.5	29.0	13.6
Average with recession	18.0	–	-35.8	29.7	46.6	25.5

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute, as of September 30, 2023. For illustrative purposes only. TBD = to be determined. Analysis uses price return for the S&P 500 Index. A price index is not a total return index and does not include the reinvestment of dividends. The **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** There is no certainty that U.S. markets will continue to show resilience despite crisis events. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. There is no guarantee equity markets will perform similarly during other periods of uncertainty. All investing involves risk including the possible loss of principal. Current bear market data is as of September 30, 2023, with trough date of October 12, 2022. Averages do not include the current bear market.

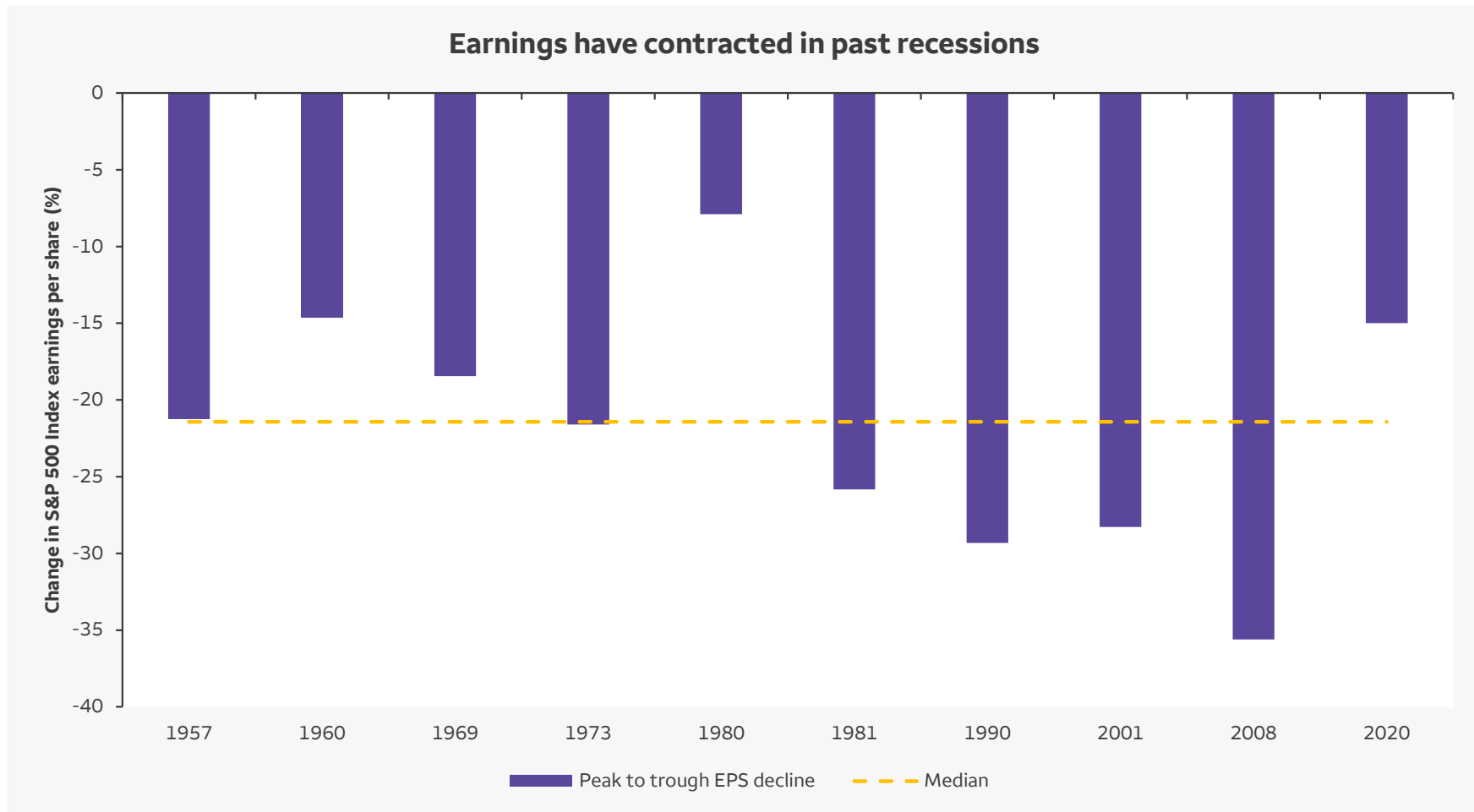
*1961 recession ended in February whereas the S&P 500 index peaked in December 1961.

Key takeaways

- There have been relatively few bear markets since World War II, and not all of them were the result of a recession. Even so, those associated with an overlapping recession have tended to be deeper and have taken longer to recover.
- Unlike the 2020 bear market, which was short-lived and recovered quickly, we believe it likely will take time for the market to recover from the current bear market.

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Earnings unlikely to escape the likely recession unscathed

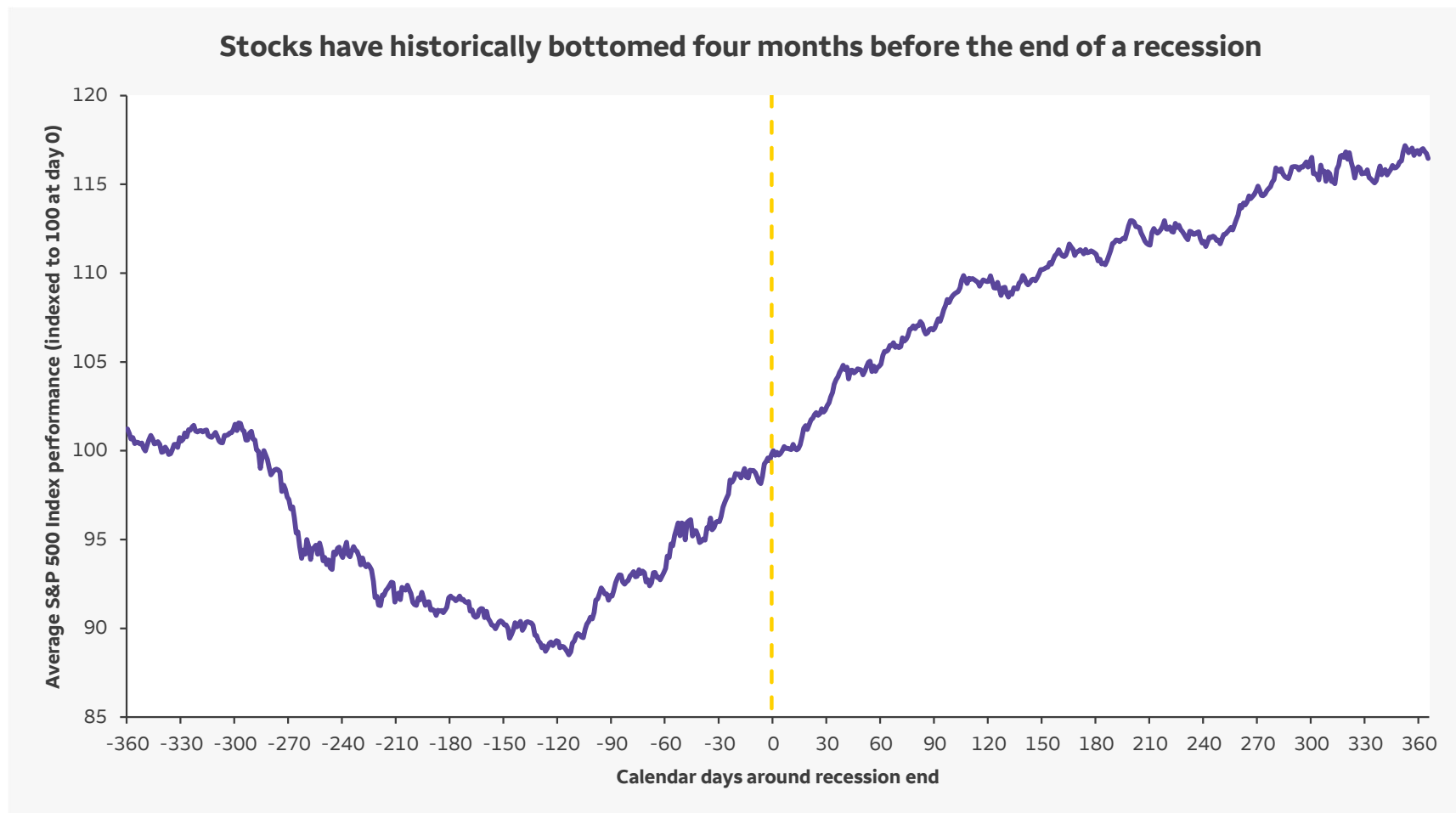


Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. Analysis uses the monthly S&P 500 index trailing 12-month earnings per share (EPS) measured from peak trailing EPS during official recession dates to trough that occurred within 12 months of recession end. The **S&P 500 Index** is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Recession dates are as follows: August 1957 to April 1958, April 1960 to February 1961, December 1969 to November 1970, November 1973 to March 1975, January 1980 to July 1980, July 1981 to November 1982, July 1990 to March 1991, March 2001 to November 2001, December 2007 to June 2009, and February 2020 to April 2020.

Key takeaways

- We expect slowing revenue growth and higher costs to squeeze profit margins in the coming quarters, likely leading to a continued earnings decline.
- Overall, we expect corporate earnings to continue to roll over through year-end 2023, after peaking in 2022, as the economy faces a likely upcoming recession.

Stocks are typically forward-looking

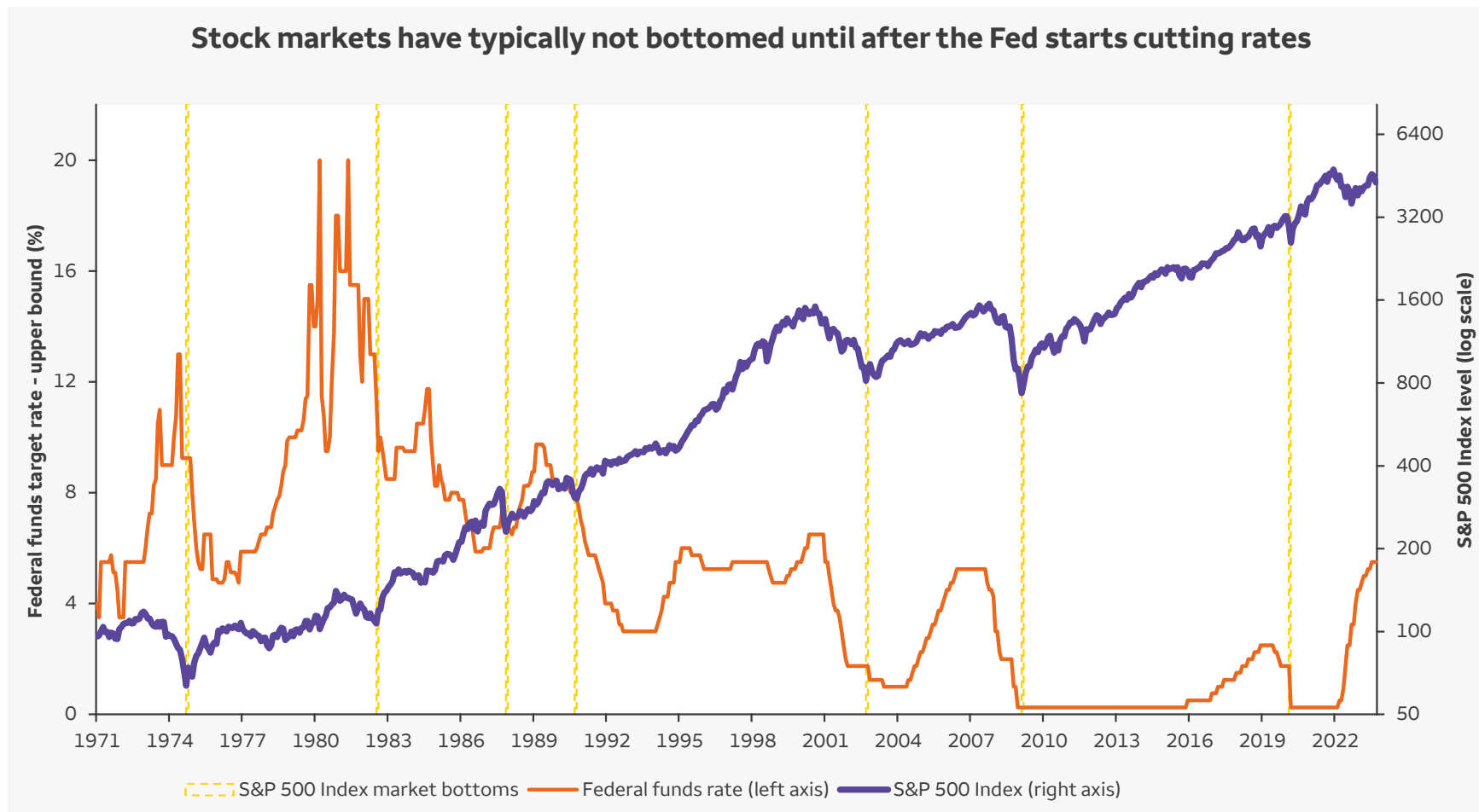


Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. The **S&P 500 Index** is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Recession end dates are as follows: October 1949, May 1954, April 1958, February 1961, November 1970, March 1975, July 1980, March 1991, November 1982, March 1991, November 2001, June 2009, and April 2020.

Key takeaways

- Stocks have tended to anticipate future economic conditions. As such, markets have typically peaked and troughed before the economy.
- Given that the equity market is likely to anticipate the recovery before the recession ends, we will look for opportunities to add risk.

Aggressive Fed tightening is a headwind

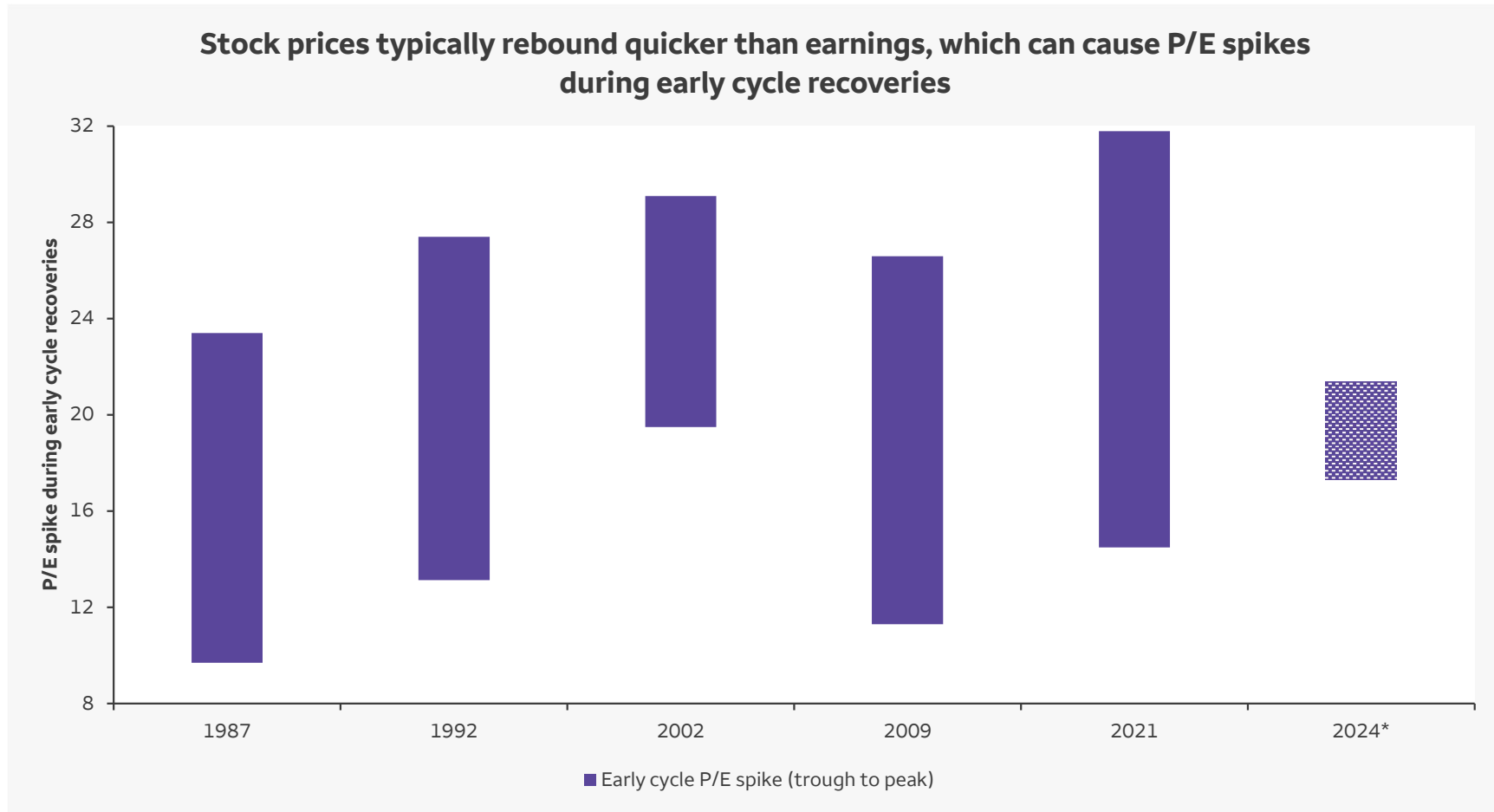


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1971 to September 30, 2023. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Fed = Federal Reserve.

Key takeaways

- Action by the Federal Reserve (Fed) typically has a lagged effect on the economy. The tightening of monetary conditions in 2022 did not accelerate until the back half of 2022, which may not fully impact the economy for some time.
- Tightening cycles have typically been a headwind to stock returns. In fact, historically, stocks have not found a major bottom until after the last Fed rate hike and the Fed starts cutting rates.

Early cycle exhibits P/E spikes to 25x – 30x typically

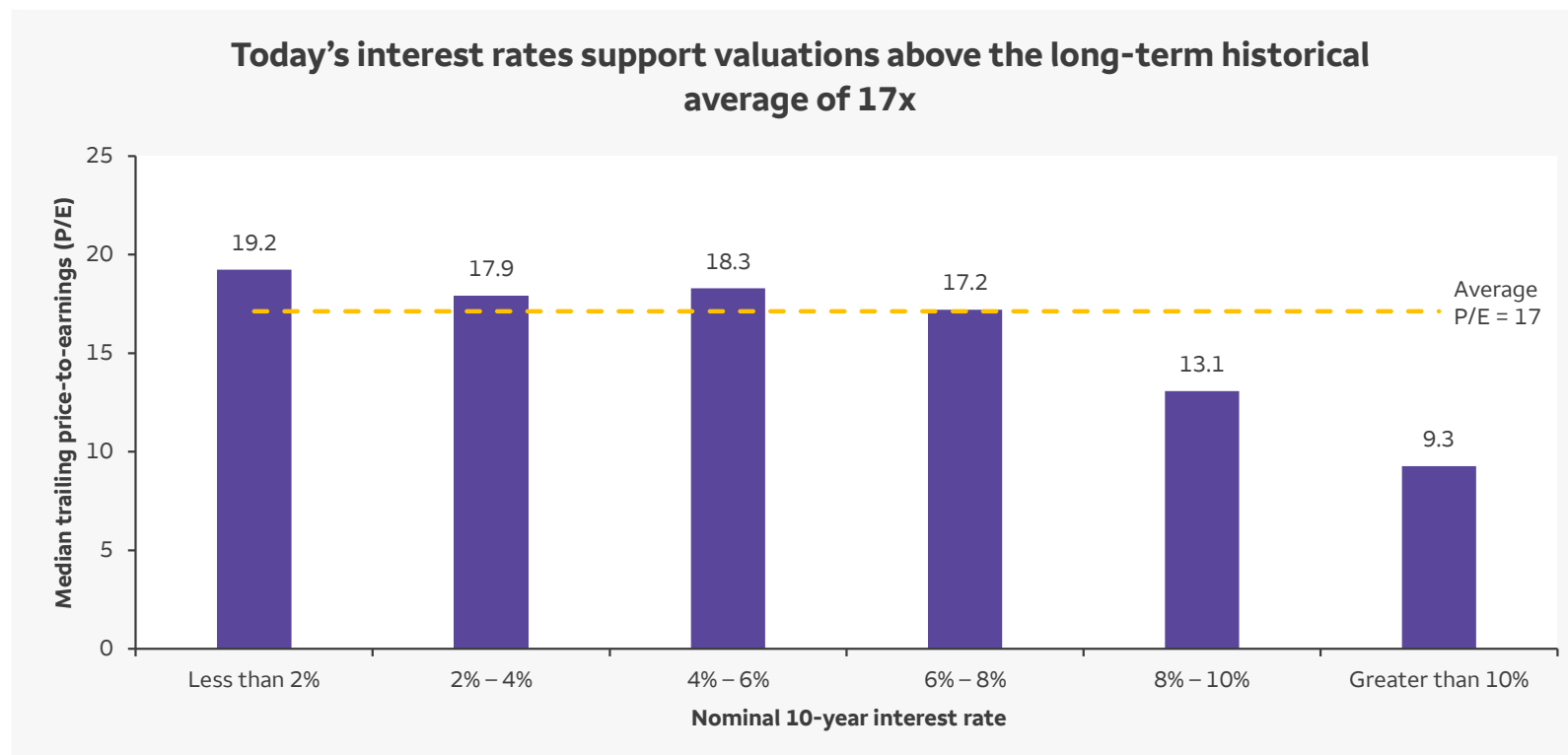


Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. The years on the x-axis represent the years in which the price-to-earnings (P/E) multiple peaked during the early cycle spike. *2024 figures use the P/E low observed in 2022 and our forecasted P/E at year-end 2024. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions.

Key takeaways

- The time frame mismatch between forward-looking prices and backward-looking earnings can cause early cycle P/E spikes.
- This behavior has been consistent throughout history as prices have turned higher well in advance of earnings.

S&P 500 Index valuations under different interest rate regimes



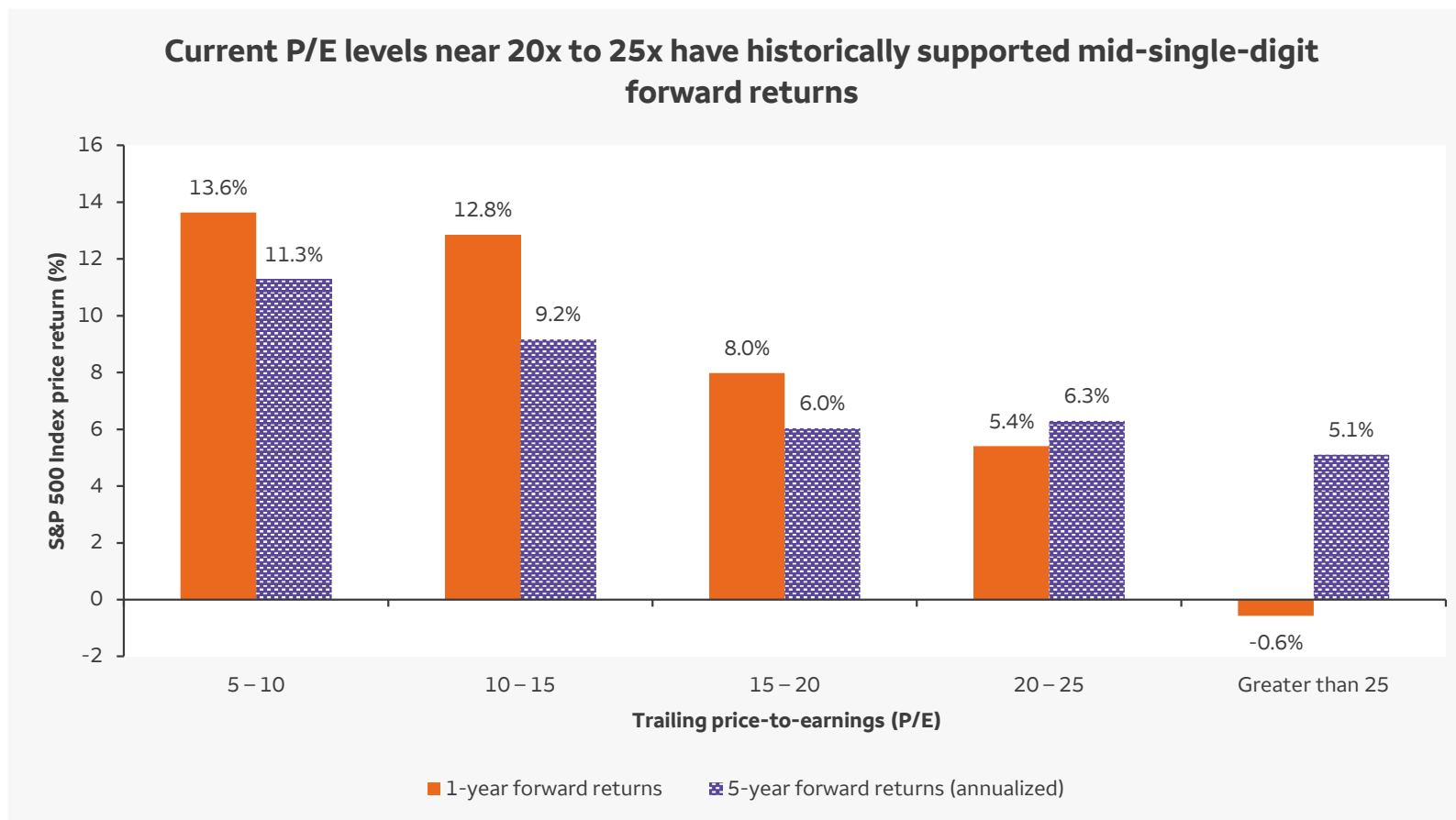
Nominal 10-year interest rate	Less than 2%	2% - 4%	4% - 6%	6% - 8%	8% - 10%	Greater than 10%
Average inflation	2.34%	2.38%	2.58%	4.62%	6.10%	7.24%

Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1963 to September 30, 2023. Inflation data as of August 31, 2023. The average price to earnings was calculated using the S&P 500 index from 1963 - September 2023. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. Inflation represented by the Consumer Price Index. The Consumer Price Index measures the average price of a basket of goods and services. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- High nominal interest rates have tended to contribute to lower price-to-earnings (P/E) multiples.
- We do not expect meaningful long-term declines in P/E multiples. Historically, these have not adjusted lower until interest rates have reached significantly higher levels than current rates.

Trailing S&P 500 Index P/E and subsequent 1- and 5-year forward returns

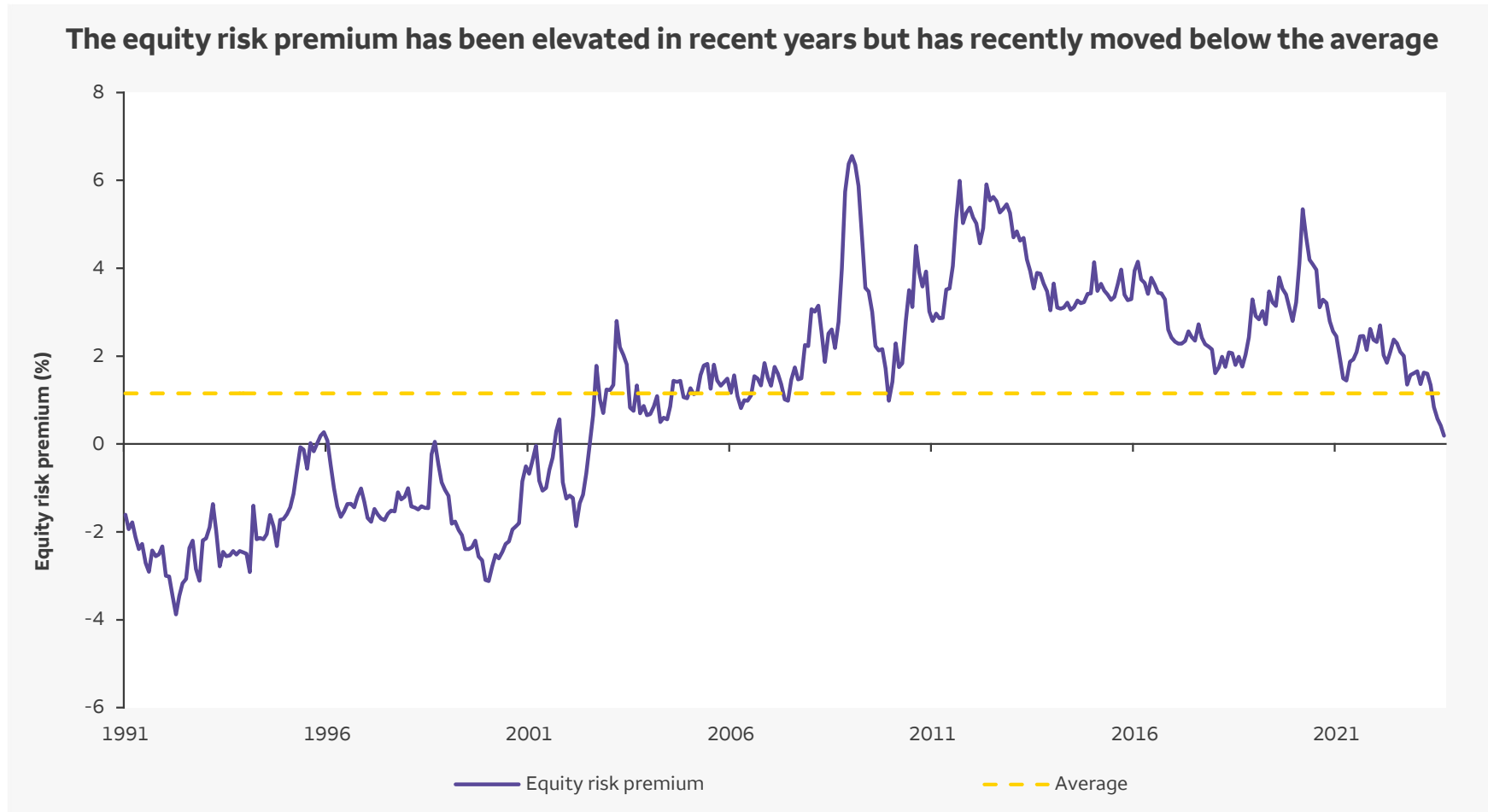


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1954 to September 30, 2023. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. All investing involves risk including the possible loss of principal.

Key takeaways

- The 2023 stock rally has been driven nearly entirely by multiple expansion as earnings have plateaued.
- Although S&P 500 Index P/E multiples are nowhere near the extremes observed at the 2021 peak, at 20x - 25x, they now sit on the full side of fair valuation.

Equity risk premium dipped below historical averages

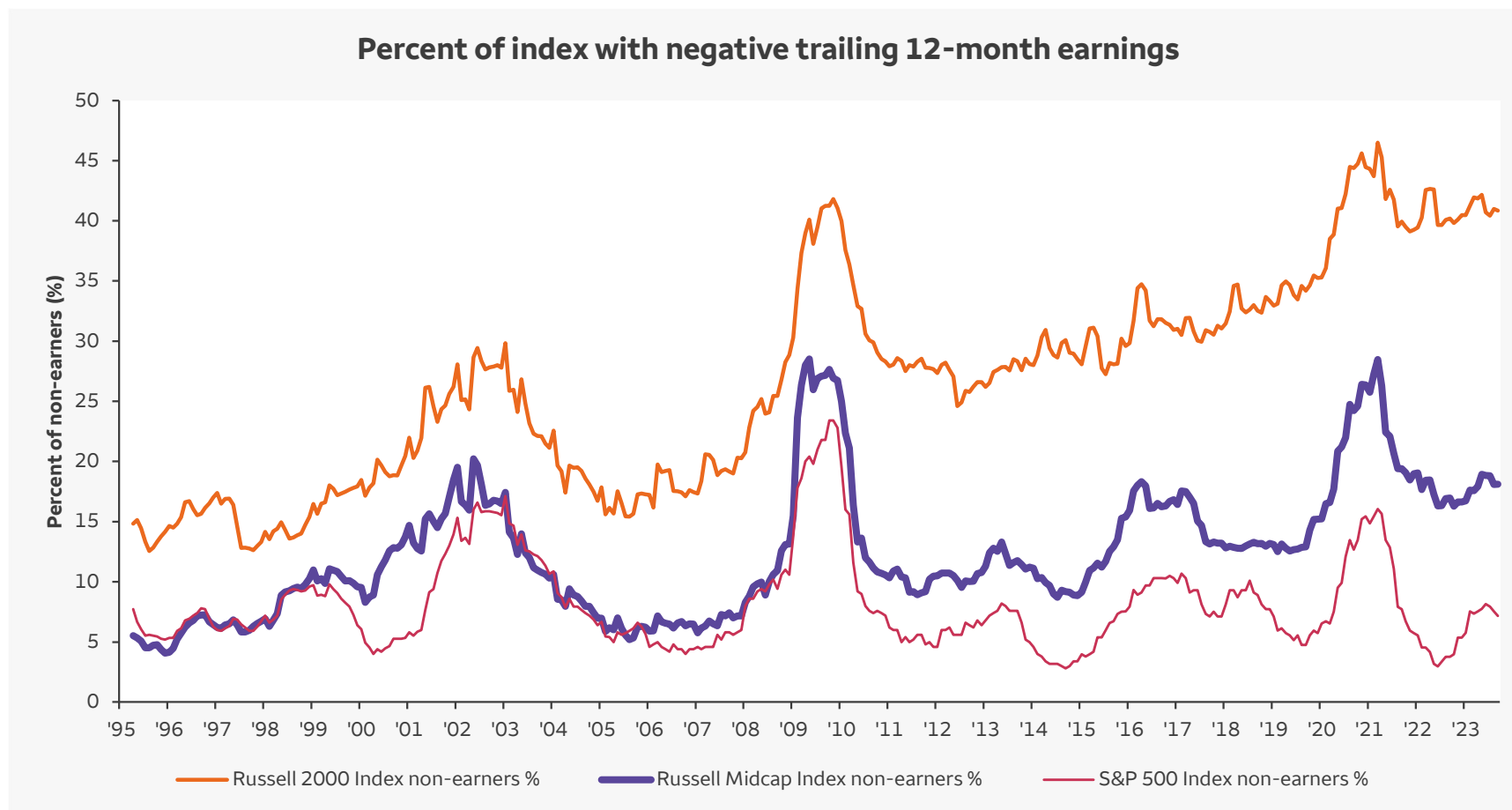


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1991 to September 30, 2023. Equity risk premium calculated by subtracting the 10-year Treasury yield from the S&P 500 Index earnings yield (trailing 12-month earnings/price). The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

Key takeaways

- The equity risk premium has declined and recently reached multi-decade lows as interest rates have increased at a faster pace than the S&P 500 earnings yield.
- At these levels, stocks are not as attractive versus bonds, especially considering the deteriorating macro and earnings environment we forecast.

Small-cap zombies near extremes



Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1995 to September 30, 2023. The S&P 500 Index is a market capitalization-weighted index generally considered representative of the U.S. stock market. The Russell Midcap Index measures the performance of the 800 smallest companies in the Russell 1000 Index. The Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

Key takeaways

- The era of easy money may have passed. This does not bode well for the elevated number of non-earning small-cap companies.
- Mid-cap and large-cap indexes are much less impacted by this potential risk and the majority of these companies are likely to remain well insulated from any potential credit crunch.

Sector compositions differ by index and region

Sector weights	S&P 500 Index	MSCI EAFE Index	MSCI EM Index	MSCI Europe Index	MSCI Asia Pacific Index	MSCI EM Latin America Index
Information Technology	27.46%	7.73%	20.21%	6.36%	17.28%	0.49%
Health Care	13.36%	13.39%	3.77%	16.10%	6.01%	1.87%
Financials	12.81%	19.10%	22.24%	17.73%	19.23%	24.85%
Consumer Discretionary	10.67%	12.04%	13.69%	10.59%	15.16%	1.79%
Communication Services	8.87%	4.14%	9.55%	3.19%	8.02%	4.38%
Industrials	8.30%	15.91%	6.80%	14.84%	12.09%	10.48%
Consumer Staples	6.57%	9.78%	6.18%	12.41%	5.28%	16.63%
Energy	4.72%	4.77%	5.24%	6.94%	2.99%	13.67%
Materials	2.45%	7.47%	7.97%	6.96%	7.02%	18.31%
Utilities	2.41%	3.35%	2.61%	4.08%	1.98%	6.67%
Real Estate	2.37%	2.32%	1.74%	0.80%	4.94%	0.85%

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, Morgan Stanley Capital International (MSCI), and Wells Fargo Investment Institute, as of September 30, 2023. EM = emerging markets. An index is unmanaged and not available for direct investment. See following page for index definitions and equity sector risks.

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Key takeaways

- Sector compositions can help explain relative performance differences.
- A lower weighting to the Information Technology sector in the MSCI EAFE Index may have contributed to its relative underperformance over the past 16 years.

Sector compositions differ by index and region Cont'd

Index definitions

S&P 500 Index is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

MSCI EAFE Index is a free-float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

MSCI Emerging Markets (EM) Index is a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of emerging markets.

MSCI EM Latin America Index captures large and mid cap representation across 6 Emerging Markets countries in Latin America. With 108 constituents, the index covers approximately 85% of the free float-adjusted market capitalization. in each country.

MSCI Europe Index captures large and mid cap representation across 15 Developed Markets (DM) countries in Europe. With 438 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European Developed Markets equity universe.

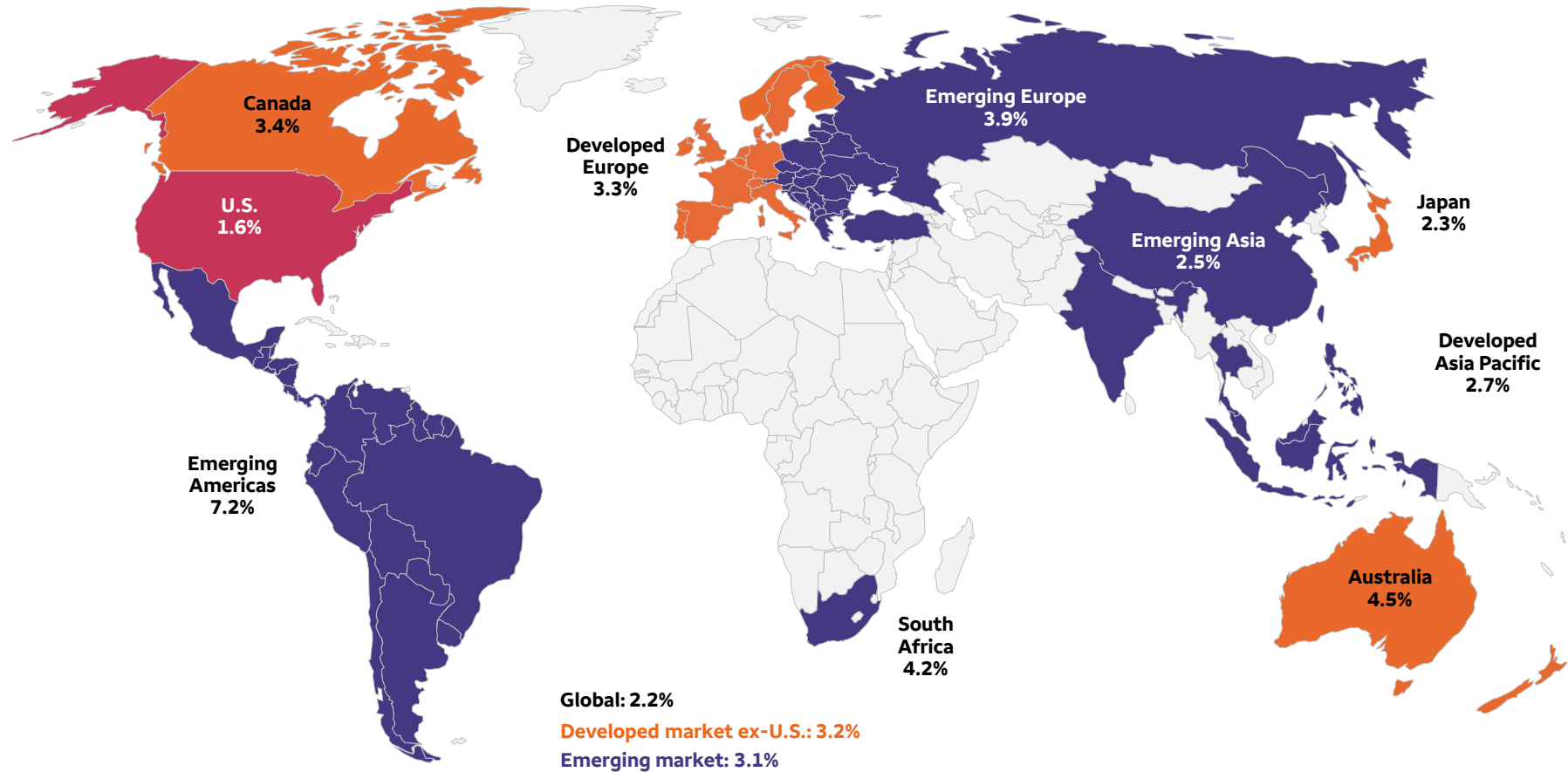
MSCI Asia Pacific Index captures large and mid cap representation across 5 Developed Markets countries and 9 Emerging Markets. countries in the Asia Pacific region. With 1,335 constituents, the index covers approximately 85% of the free float-adjusted market. capitalization in each country.

MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

Equity sector risks

Sector investing can be more volatile than investments that are broadly diversified over numerous sectors of the economy and will increase a portfolio's vulnerability to any single economic, political, or regulatory development affecting the sector. This can result in greater price volatility. *Communication Services* companies are vulnerable to their products and services becoming outdated because of technological advancement and the innovation of competitors. Companies in the communication services sector may also be affected by rapid technology changes; pricing competition, large equipment upgrades, substantial capital requirements and government regulation and approval of products and services. In addition, companies within the industry may invest heavily in research and development which is not guaranteed to lead to successful implementation of the proposed product. Risks associated with the *Consumer Discretionary* sector include, among others, apparel price deflation due to low-cost entries, high inventory levels and pressure from e-commerce players; reduction in traditional advertising dollars; increasing household debt levels that could limit consumer appetite for discretionary purchases. *Consumer Staples* industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, government regulation, the performance of overall economy, interest rates, and consumer confidence. The *Energy* sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources and risks that arise from extreme weather conditions. Investing in *Financial Services* companies will subject a portfolio to adverse economic or regulatory occurrences affecting the sector. Key risks to the *Financials* sector include maturation of the credit cycle resulting in higher credit losses and tighter lending standards, lower interest rates leading to a reduction in profitability, and capital market weakness reducing assets under management as well as constraints around accessing the markets for growth capital. Some of the risks associated with investment in the *Health Care* sector include competition on branded products, sales erosion due to cheaper alternatives, research & development risk, government regulations and government approval of products anticipated to enter the market. Risks associated with investing in the *Industrial* sector include the possibility of a worsening in the global economy, acquisition integration risk, operational issues, failure to introduce to market new and innovative products, further weakening in the oil market, potential price wars due to any excesses industry capacity, and a sustained rise in the dollar relative to other currencies. *Materials* industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement and manufacturing and cost containment issues. *Technology* and Internet-related stocks, especially of smaller, less-seasoned companies, tend to be more volatile than the overall market. *Real estate* has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations and the impact of varied economic condition. *Utilities* are sensitive to changes in interest rates and the securities within the sector can be volatile and may underperform in a slow economy.

Dividend yields outside of the U.S. are attractive



Sources: Morgan Stanley Capital International (MSCI) and Wells Fargo Investment Institute, as of September 30, 2023. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted. **Past performance is no guarantee of future results.** Canada: MSCI Canada Index, U.S.: MSCI U.S. Index, Emerging Americas: MSCI Emerging Markets (EM) Latin America Index, Developed Europe: MSCI Europe Index, Emerging Europe: MSCI EM Europe Index, Emerging Asia: MSCI EM Asia Index; Japan: MSCI Japan Index, Developed Asia Pacific: MSCI Asia Pacific, Australia: MSCI Australia Index, South Africa: MSCI South Africa Index, Global: MSCI ACWI Index, Developed Markets: MSCI World ex USA Index, and Emerging Markets: MSCI Emerging Markets. An index is unmanaged and not available for direct investment. See risks and index definitions on following page. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

Key takeaways

- We view dividend yields in many regions outside of the U.S. as attractive.
- Dividends remain an important source of income for investors.

Dividend yields outside of the U.S. are attractive Cont'd

Risk considerations

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities. Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Index definitions

MSCI Canada Index is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of Canada.

MSCI USA Index is designed to measure the performance of the large and mid cap segments of the U.S. market. With 628 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the U.S.

MSCI EM Latin America Index captures large and mid cap representation across 6 Emerging Markets countries in Latin America. With 108 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Europe Index captures large and mid cap representation across 15 Developed Markets (DM) countries in Europe. With 438 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European Developed Markets equity universe.

MSCI EM Europe Index captures large and mid cap representation across 6 Emerging Markets countries in Europe. With 72 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI EM Asia Index captures large and mid cap representation across 9 Emerging Markets countries in Asia. With 912 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Japan Index is designed to measure the performance of the large and mid cap segments of the Japanese market. With 323 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan.

MSCI Asia Pacific Index captures large and mid cap representation across 5 Developed Markets countries and 9 Emerging Markets countries in the Asia Pacific region. With 1,335 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Australia Index is designed to measure the performance of the large and mid cap segments of the Australia market. With 68 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Australia.

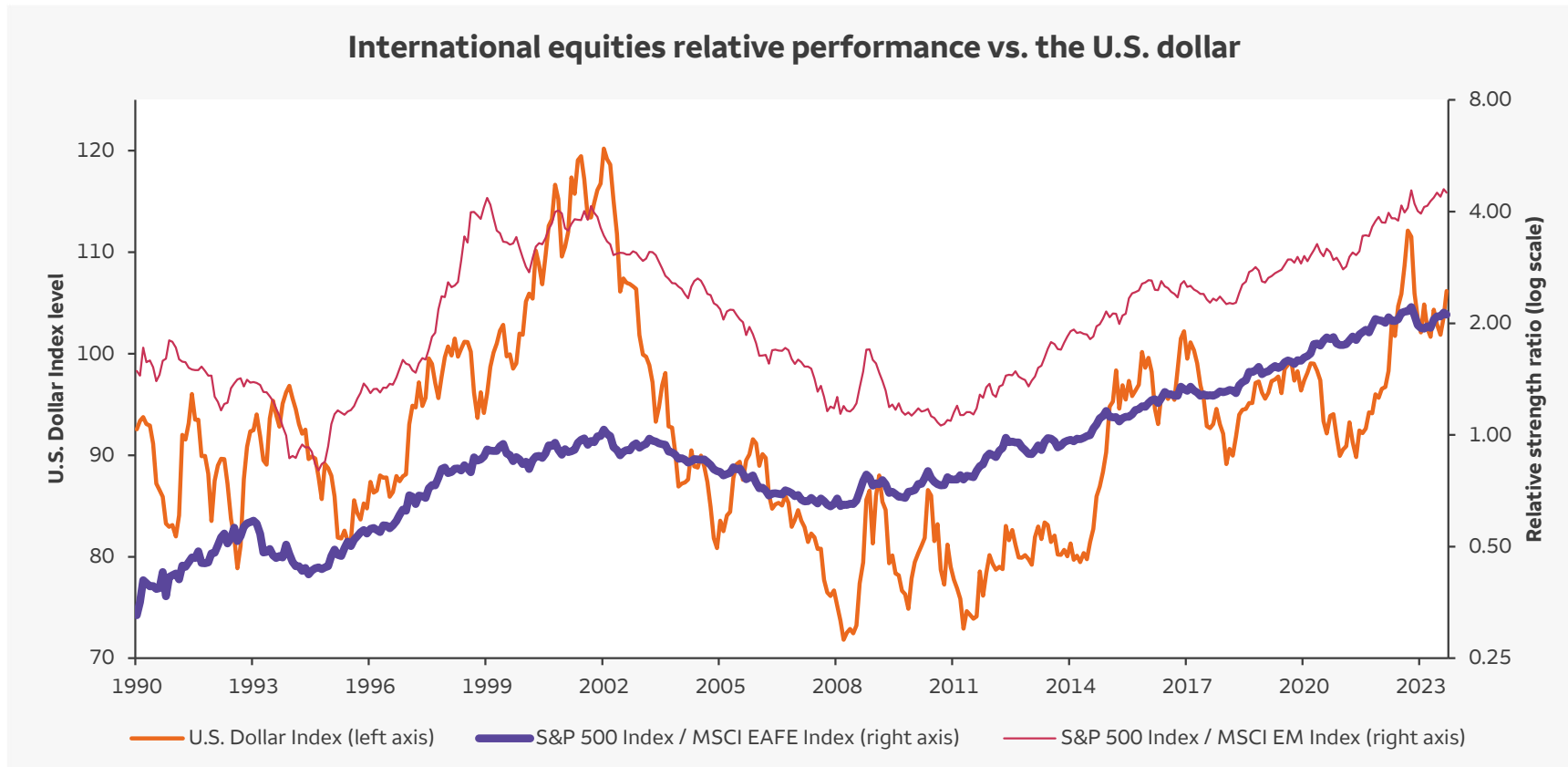
MSCI South Africa Index is designed to measure the performance of the large and mid cap segments of the South African market. With 46 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in South Africa.

MSCI All Country World Index (ACWI) is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of 23 developed and 23 emerging markets.

MSCI World ex USA Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 22 developed markets excluding the United States.

MSCI Emerging Markets (EM) Index is a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of emerging markets.

Dollar strength is a headwind for international equity prices

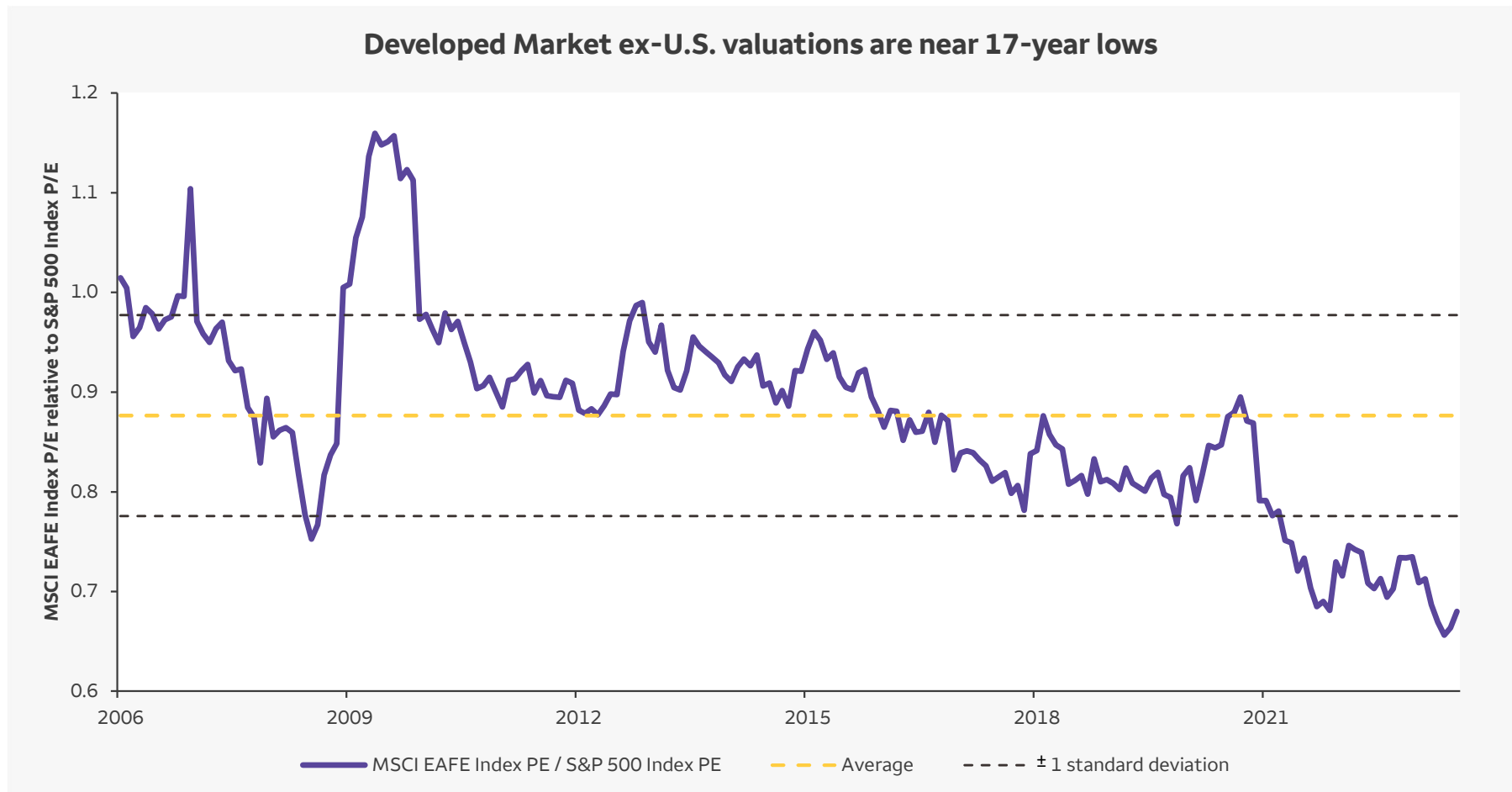


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 1990 to September 30, 2023. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. The U.S. Dollar Index measures the value of the U.S. dollar relative to majority of its most significant trading partners. This index is similar to other trade-weighted indexes, which also use the exchange rates from the same major currencies. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities. Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Key takeaways

- A strengthening U.S. dollar has been a headwind for international equity prices since 2008.
- If the dollar weakens from current levels, it should provide some support to international equities.

Developed Market valuations are quite compelling



Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from March 1, 2006 to September 30, 2023. The MSCI EAFE Index capture large- and mid-cap representation across developed market countries (excluding the U.S. and Canada) around the world. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities. Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Key takeaways

- Developed Market relative valuations have reached historically cheap levels.
- While valuations are typically poor timing vehicles, we believe that the fundamental backdrop has improved for the region and that we have passed peak market pessimism.

General

- Long-term yields have tended to peak before the Federal Reserve (Fed) finishes raising rates. We favor remaining nimble in bond portfolio allocations with a barbell strategy that lengthens maturities but can also take advantage of ultra-short-term yields.
- High-quality bonds have tended to provide support to investment portfolios during periods of equity market volatility, although 2022 was an exception. Year-to-date bonds have managed to recover slightly and add to portfolio returns.

Domestic

- Bond yields moved higher across the yield curve during the third quarter as investors continue to anticipate that interest rates will remain higher for longer. The yield curve has been inverted since July 2022 as short-term rates have remained higher than intermediate- and long-term rates.
- The Fed is committed to its aggressive tightening policies. We expect the Fed will keep interest rates elevated and continue shrinking its balance sheet through year-end and into 2024.
- Credit spreads narrowed slightly during the third quarter of 2023 as credit conditions stabilized. Looking ahead, the risk is for further widening as financial conditions tighten.

International

- Yields traded within a relatively narrow range at higher levels, as markets looked for the end of the rate-hike cycle, constrained by easing inflation expectations but still-hawkish rhetoric from many central banks.
- We expect the European Central Bank to keep policy interest rates on hold near 4.00% in the fourth quarter. Eurozone bond yields may peak before the end of the hiking cycle, as a recession looms.
- Emerging market (JP Morgan EMBI Global Index) spreads also narrowed in the third quarter. Index yields remained elevated driven by the rise in U.S. Treasury rates. Higher relative yields should attract inflows once we see a clearer turn in U.S. interest rates and the dollar.

Fixed-income scorecard

Asset class	3Q23 total return (%)	YTD total return (%)	YOY total return (%)	Duration (years)	Yield to worst (%)
U.S. Short Term Taxable Fixed Income	0.74	1.89	2.80	1.91	5.40
U.S. Intermediate Term Taxable Fixed Income	-2.29	-0.65	1.41	5.32	5.30
U.S. Long Term Taxable Fixed Income	-8.66	-4.96	-2.61	12.03	5.48
High Yield Taxable Fixed Income	0.46	5.86	10.28	3.99	8.88
Developed Market ex-U.S. Fixed Income	-5.50	-5.43	1.23	7.97	2.72
Emerging Market Fixed Income	-2.63	1.09	8.61	6.59	8.36

Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. YTD = year to date. YOY = year over year. For illustrative purposes only. Duration is a measure of a bond's sensitivity to interest rates. Short term taxable = Bloomberg U.S. Aggregate 1-3 Year Bond Index. Intermediate term taxable = Bloomberg U.S. Aggregate 5-7 Year Bond Index. Long term taxable = Bloomberg U.S. Aggregate 10+ Year Bond Index. High Yield taxable = Bloomberg U.S. Corporate High Yield Bond Index. Developed market ex-U.S. = J.P. Morgan GBI Global Ex U.S. Index (Unhedged). Emerging market = J.P. Morgan EMBI Global Index (USD). Yields and returns represent past performance and fluctuate with market conditions. Current performance may be higher or lower than that quoted above. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See following page for index definitions.

Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets.

Key takeaways

- Most strategic fixed-income asset classes struggled in the third quarter as yields moved higher.
- Yields in both developed and emerging markets were more volatile in the third quarter, and both the dollar and U.S. Treasury yields climbed higher amid the expectation for the Fed to keep rates higher for longer.
- We favor credit selectivity and a diversified income approach across fixed-income asset classes.

Fixed-income scorecard Cont'd

Index definitions

Bloomberg U.S. Aggregate 1-3 Year Bond Index is the one to three year component of the Bloomberg U.S. Aggregate Index, which represents fixed-income securities that are SEC-registered, taxable, dollar-denominated, and investment-grade.

Bloomberg U.S. Aggregate 5-7 Year Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 5-7 years.

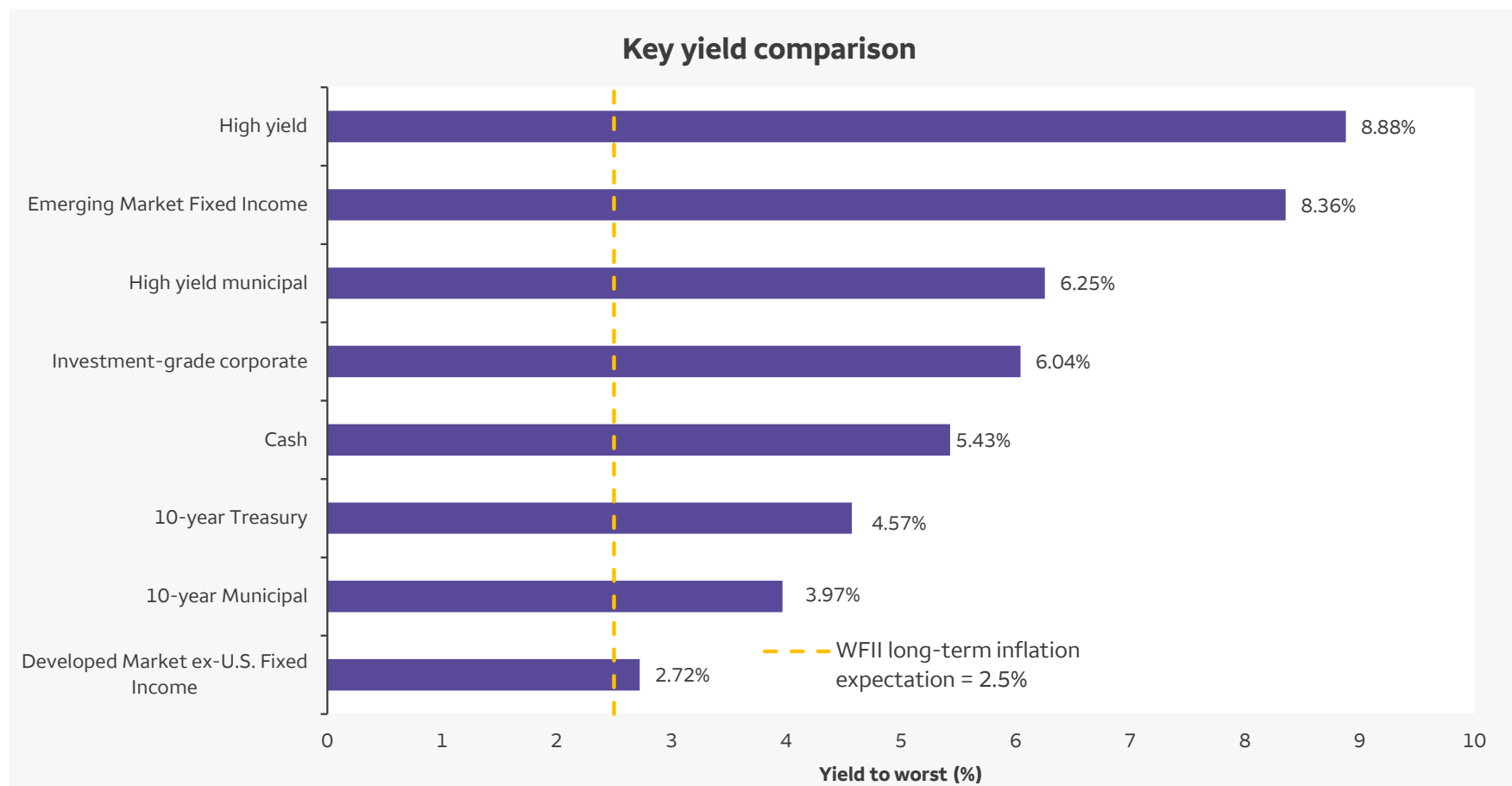
Bloomberg U.S. Aggregate 10+ Year Bond Index is unmanaged and is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 10 years or longer.

Bloomberg U.S. Corporate High Yield Bond Index covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market.

JPMorgan GBI Global ex-U.S. Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

JPMorgan EMBI Global Index (USD) is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt.

Attractive yields available as interest rates have risen



Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. WFII long-term inflation expectation is as of July 18, 2023. For illustrative purposes only. Emerging Market: J.P. Morgan EMBI Global Index, High yield: Bloomberg U.S. Corporate High Yield Bond Index, High yield municipal: Bloomberg U.S. Municipal High Yield Index, Investment-grade corporate: Bloomberg U.S. Corporate Bond Index, Developed Market ex-U.S.: J.P. Morgan GBI Global Ex U.S. Index, and Cash: Bloomberg U.S. Treasury Bills (1-3M) Index. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See index definitions on following page.

Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets.

Key takeaways

- Many fixed-income asset classes, along with cash, are yielding more than our longer-term inflation expectation.
- Diversifying income streams can potentially dampen portfolio volatility and reduce the probability of wide swings in income levels.

Attractive yields available as interest rates rise Cont'd

Index definitions

Bloomberg U.S. Corporate Bond Index measures the performance of the investment-grade corporate bond market.

Bloomberg U.S. Corporate High Yield Bond Index covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market.

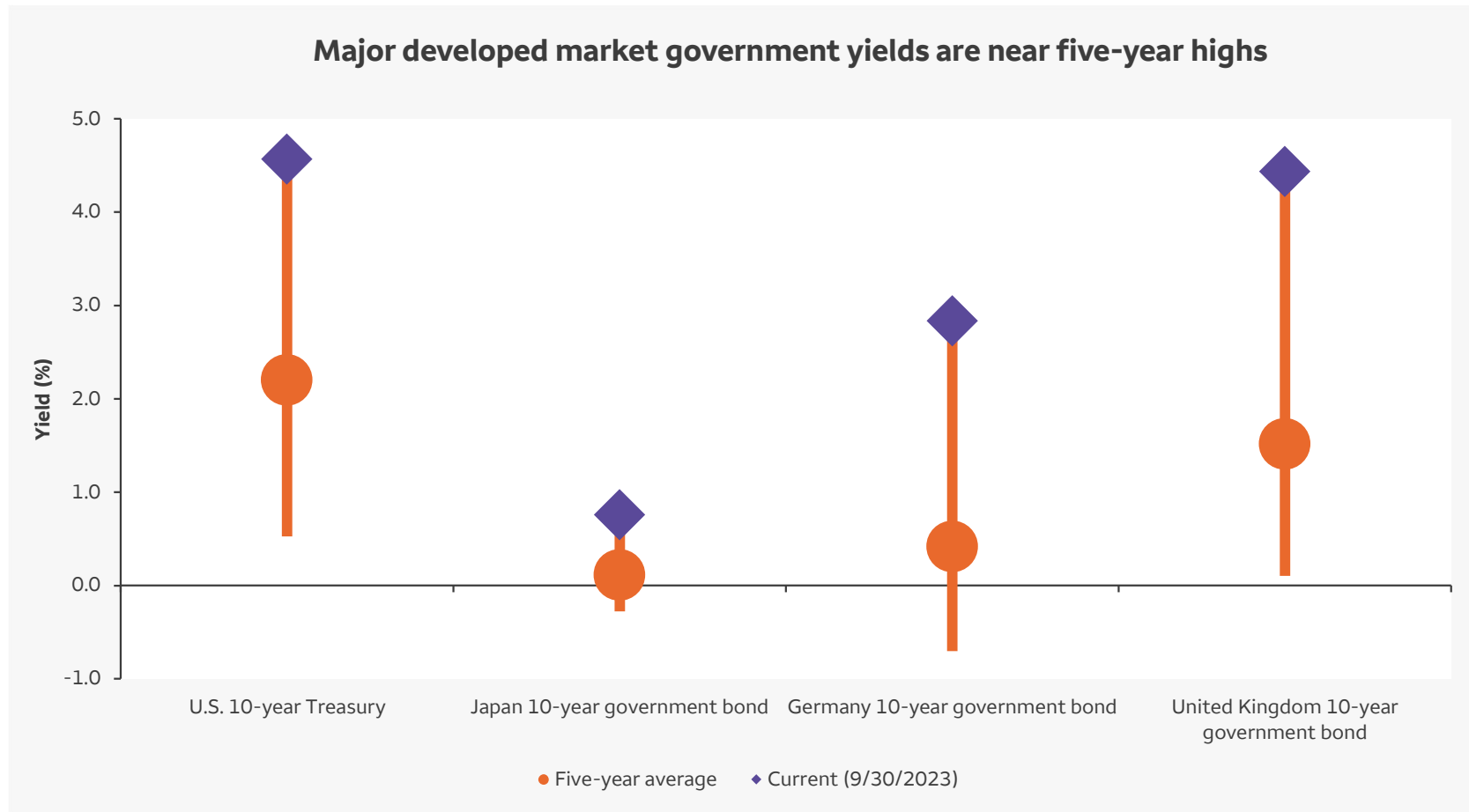
Bloomberg U.S. Municipal High Yield Index measures the non-investment-grade and nonrated U.S.-dollar-denominated, fixed-rate, tax-exempt bond market within the 50 United States and four other qualifying regions (Washington, D.C.; Puerto Rico; Guam; and the Virgin Islands). The index allows state and local general obligation, revenue, insured, and prerefunded bonds; however, historically, the index has been comprised of mostly revenue bonds. The U.S. Municipal High Yield Index is a stand-alone index with no crossover into other Bloomberg taxable Indexes, such as the U.S. High Yield Index.

Bloomberg U.S. Treasury Bills (1–3 Month) Index is representative of money markets.

JPMorgan GBI Global ex-U.S. Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

JPMorgan EMBI Global Index (USD) is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt.

German bunds underperform, U.K. gilts stabilize

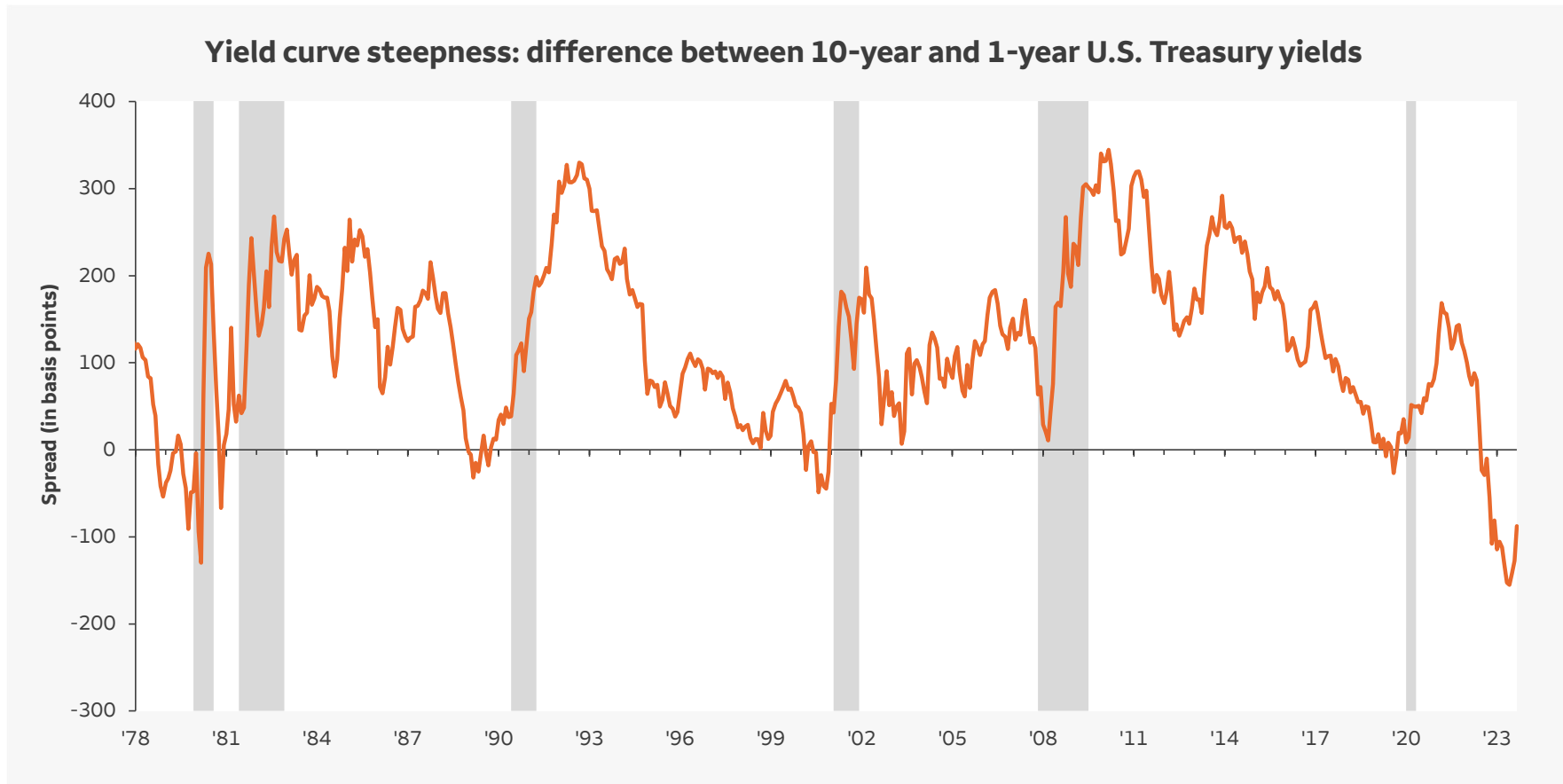


Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. For illustrative purposes only. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** Bonds are subject to interest rate, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate. Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Key takeaways

- 10-year German bunds underperformed in the third quarter. Japanese government bond yields moved slightly higher while 10-year gilt yields stabilized.
- Yields may continue to edge higher in the near term but could start to decline once recession hits and a pause in central-bank rate increases is confirmed.

Yield curve continues signaling a slowdown ahead

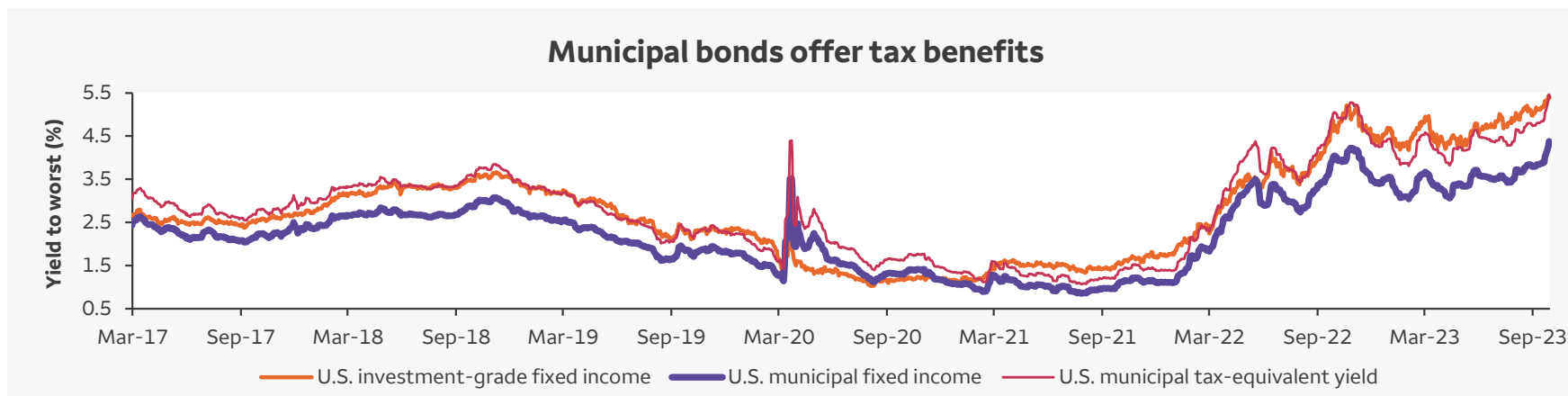


Sources: Bloomberg, and Wells Fargo Investment Institute. Monthly data from January 1, 1978 to September 30, 2023. For illustrative purposes only. Ten-Year Treasury Constant Maturity and the One-Year Constant Maturity Indexes are published by the Federal Reserve Board and are based on the average yield of a range of Treasury securities, all adjusted to the equivalent of a 10-year maturity and the equivalent of a one-year maturity. Shaded area represents time frame of a U.S. economic recession. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** 100 basis points equal 1%. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

Key takeaways

- The U.S. Treasury yield curve has been inverted since July 2022 as short-term rates have remained higher than intermediate- and long-term rates.
- An inverted yield curve has historically pointed to a slowdown in economic growth.

Municipal bond yields and default rates



Municipal bonds have lower historical default rates versus corporates

Credit rating	Municipal bonds (%)	Corporate bonds (%)
Aaa	0.00	0.34
Aa	0.02	0.75
A	0.10	1.90
Baa	1.05	3.64
Ba	3.31	15.82
B	16.65	34.66
Caa-C	23.58	47.92
Investment-grade	0.09	2.23
Speculative-grade	6.84	29.81

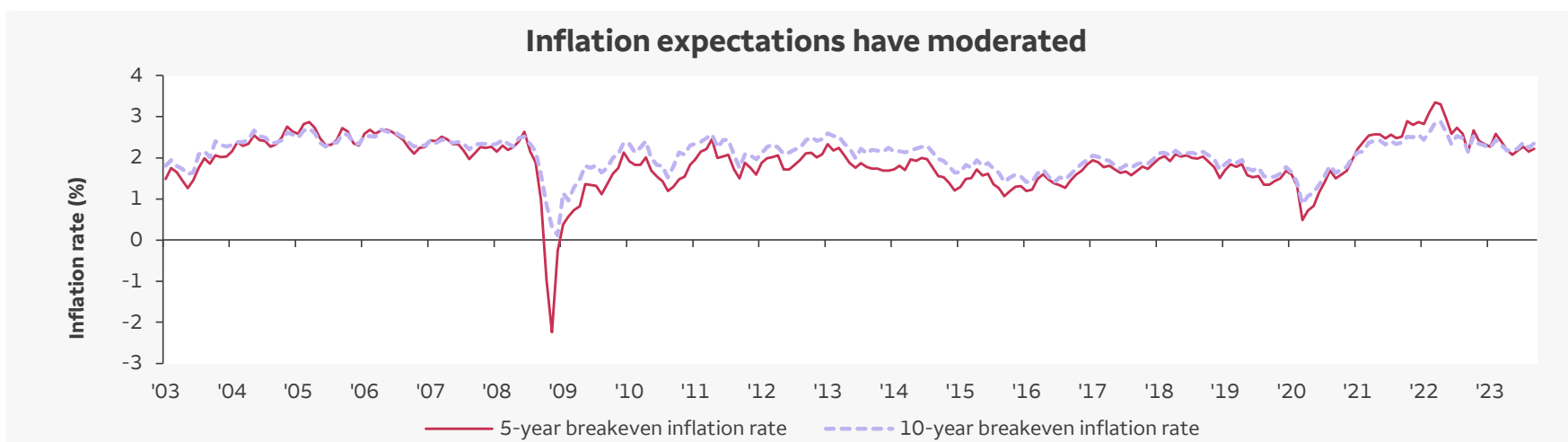
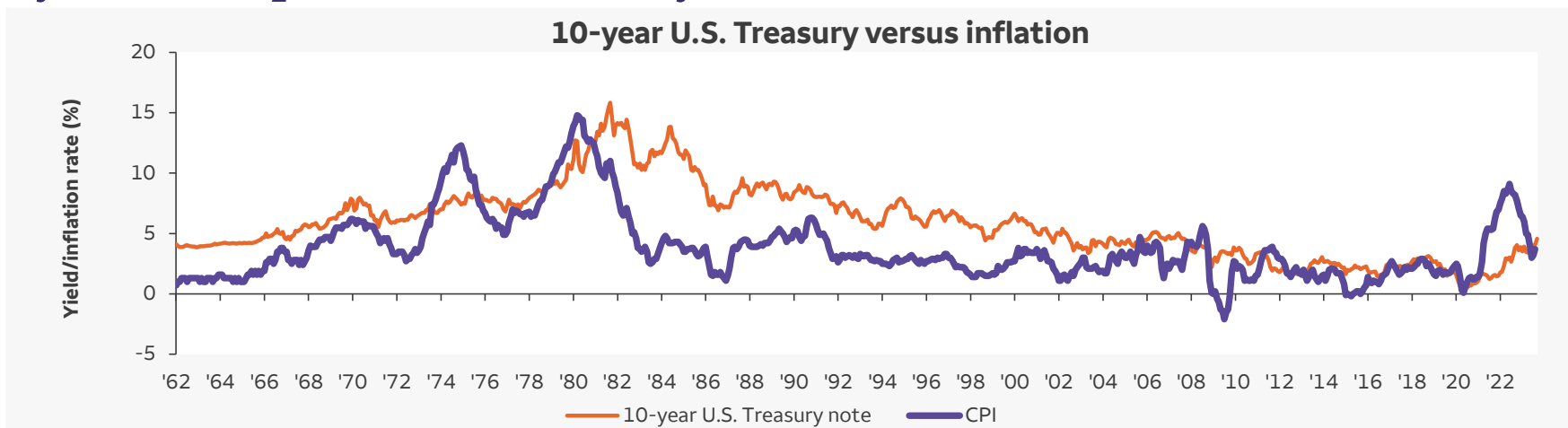
Sources: Top chart: Bloomberg and Wells Fargo Investment Institute. Yield to worst: monthly data from March 1, 2017 to September 30, 2023. Bottom table: Moody's Investor Service, "U.S. municipal bond defaults and recoveries, 1970-2022." Municipal and corporate bond default rates: 10-year average cumulative default rates, yearly data from 1970 to 2022. Investment grade represented by Bloomberg U.S. Aggregate Bond Index. Municipal represented by Bloomberg Municipal Bond Index. For illustrative purposes only. **Bloomberg U.S. Aggregate Bond Index** is a broad-based measure of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. **Bloomberg Municipal Bond Index** is an index of a broad range of investment-grade municipal bonds that measures the performance of the general municipal bond market. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Yields represent past performance and fluctuate with market conditions. An index is unmanaged and not available for direct investment. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.**

Key takeaways

- We expect municipal bond demand to remain strong given the ongoing supply-demand imbalance.
- The pace of municipal defaults has accelerated over the past decade, especially for lower-rated sectors. Still, default rates between municipals and corporates remain divergent in the speculative-grade (high-yield) space.

Tax equivalent yield assumes a 20% effective tax rate. Yield to worst is the lowest potential yield that can be received on a bond without the issuer actually defaulting. The tax equivalent yield is the yield a taxable bond would have to earn to match the yield available on a tax-exempt municipal bond excluding AMT. Yield to Worst is the lowest potential yield that can be received on a bond without the issuer actually defaulting. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes and may be subject to the alternative minimum tax, and legislative and regulatory risk.

Real yields: In positive territory

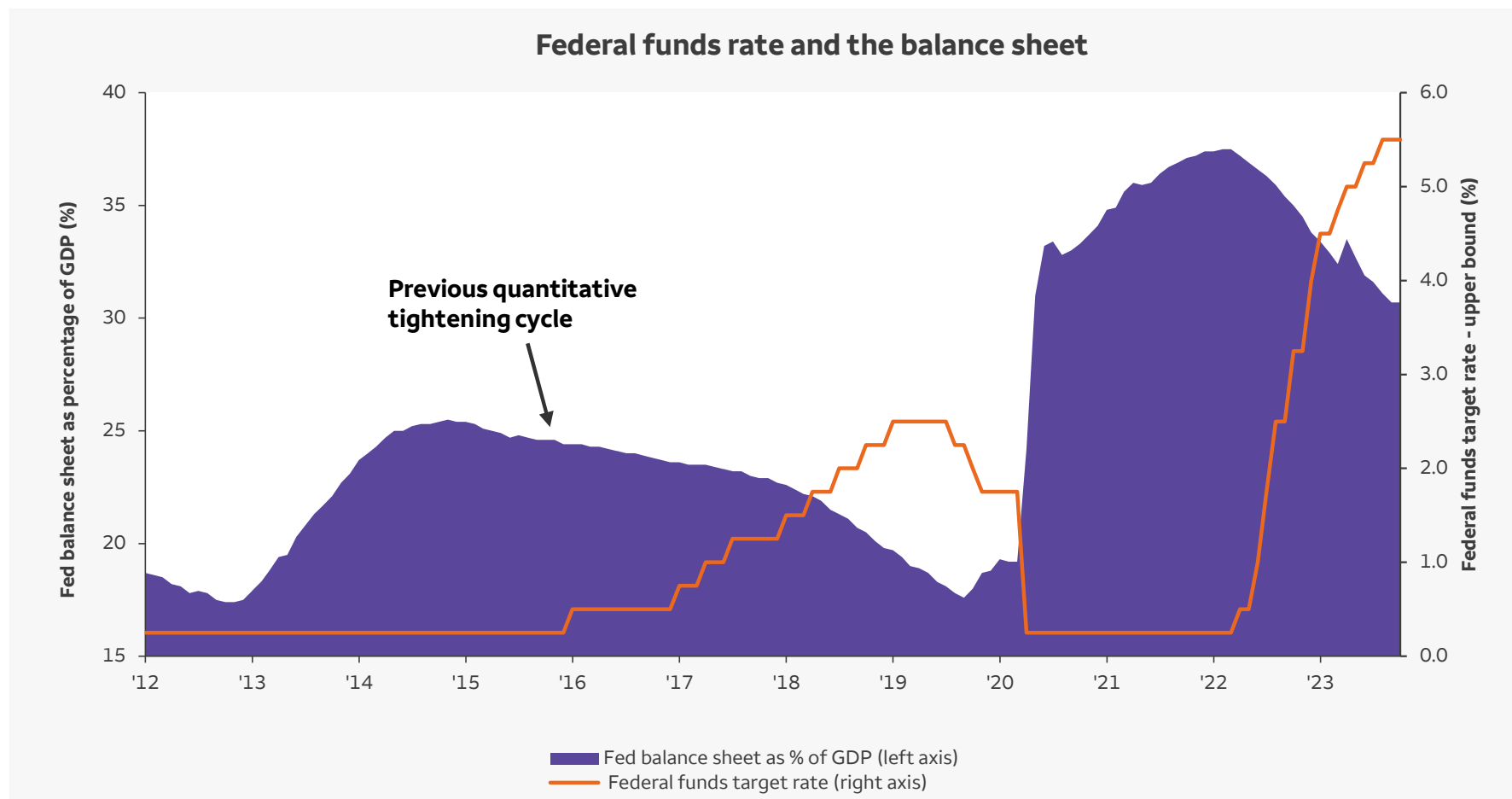


Sources: Bloomberg and Wells Fargo Investment Institute. 10-year U.S. Treasury note: monthly data from January 1, 1962 to September 30, 2023. CPI: monthly data from January 1, 1962 to August 31, 2023. 5 and 10 year breakeven inflation rates: monthly data from January 1, 2003 to September 30, 2023. For illustrative purposes only. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** Consumer Price Inflation (CPI) measures the price of a fixed basket of goods and services purchased by an average consumer. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

Key takeaways

- Real yields on the 10-year U.S. Treasury crossed into positive territory in the third quarter as actual inflation readings came in below nominal yields. We expect real yields to remain positive for some time, especially if inflation expectations continue to move closer to the Federal Reserve's long-term target of 2% or slightly above.
- Now may be a good time to consider locking in higher interest rates on long-term bonds to potentially earn positive yields above the level of inflation (real yield).

The Fed in action — How do tightening cycles work?

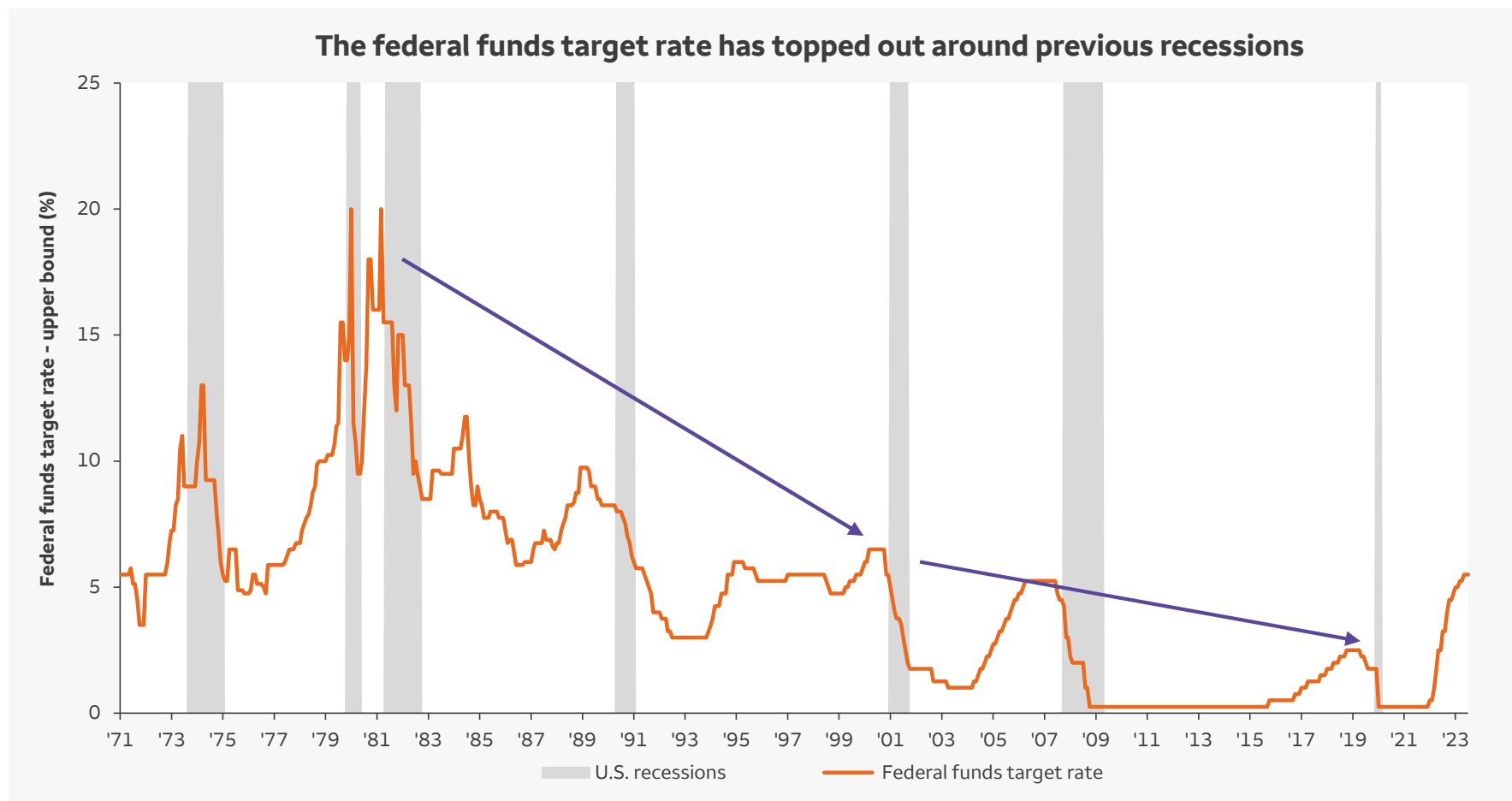


Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2012 to September 30, 2023. For illustrative purposes only. Fed = Federal Reserve. GDP = gross domestic product.

Key takeaways

- A tightening cycle is a period of rising policy rates, and, at times, it can be coupled with a shrinking of the Fed's balance sheet (quantitative tightening).
- The Fed officially began its policy tightening cycle in March 2022. We expect an additional rate hike by year-end and for the Fed to allow its bond holdings to mature without reinvesting the proceeds, resulting in a decline in its balance sheet holdings.

The Fed runs the risk of overshooting



Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from March 1, 1971 to September 30, 2023. For illustrative purposes only. Fed = Federal Reserve.

Key takeaways

- Although we expect one more rate hike in 2023, we believe that the final number remains flexible and dependent on how the economy and inflation levels continue to evolve.
- Over the past four decades, policy interest rates have topped out at progressively lower levels during monetary policy tightening, eventually pushing the economy into a recession. The current rate-hike cycle has already broken the previous downward trend.

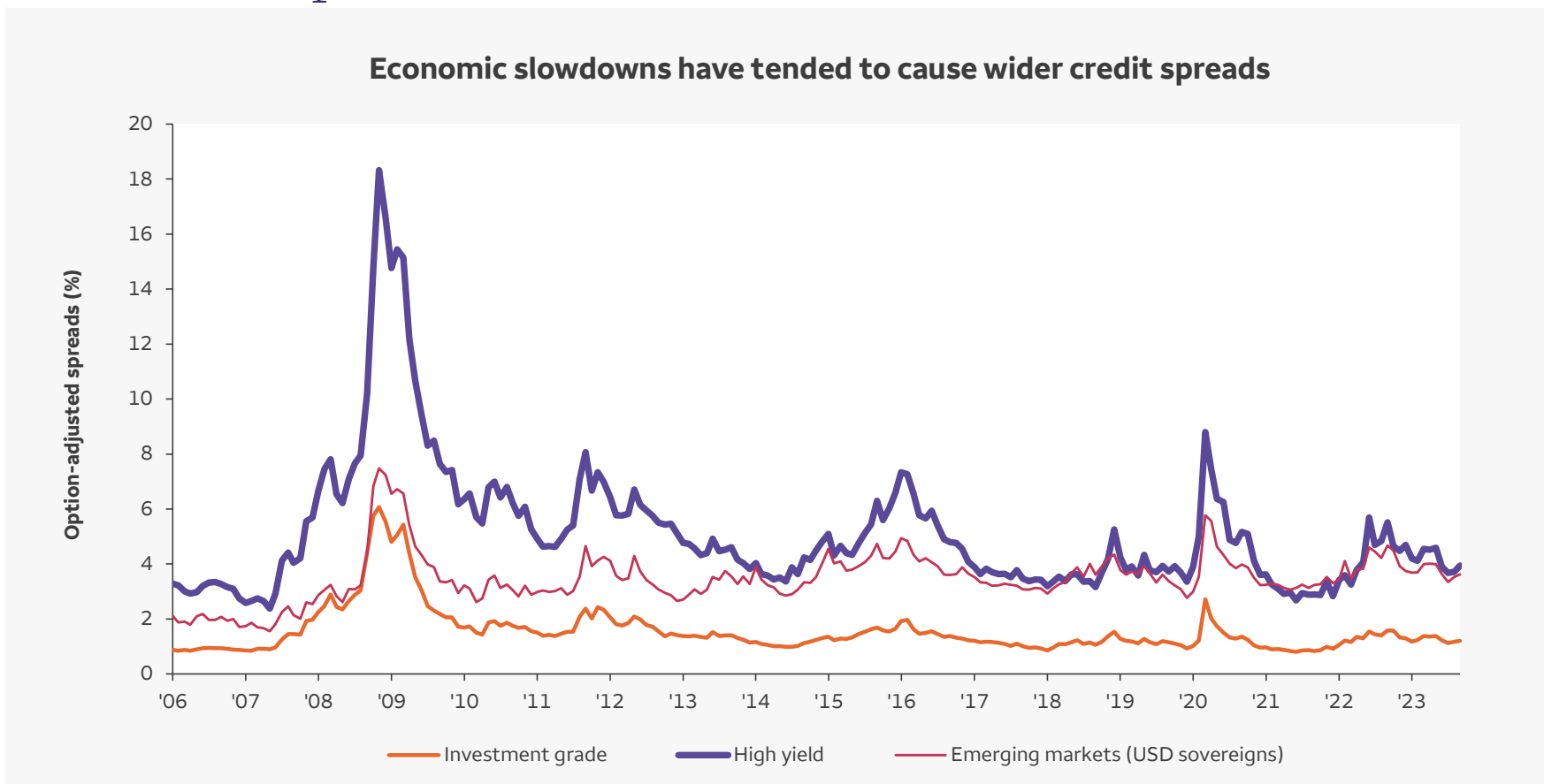
Extending fixed-income maturities



Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from March 2001 to February 2003, December 2007 to November 2009, and February 2020 to January 2022. Long-term Treasury bonds: Bloomberg U.S. Long Treasury Bond Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with 10 years or more to maturity. High-yield corporate bonds: Bloomberg U.S. Corporate High Yield Bond Index covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **Past performance is no guarantee of future results.** Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities.

Key takeaways

- Long-term Treasury bonds provided relatively more stable total returns than high-yield corporate bonds in the 12-month period following the start of the past three U.S. recessions.
- We believe that increasing exposure in long-term fixed income can provide an advantage before opportunities appear in lower-rated corporate bonds.



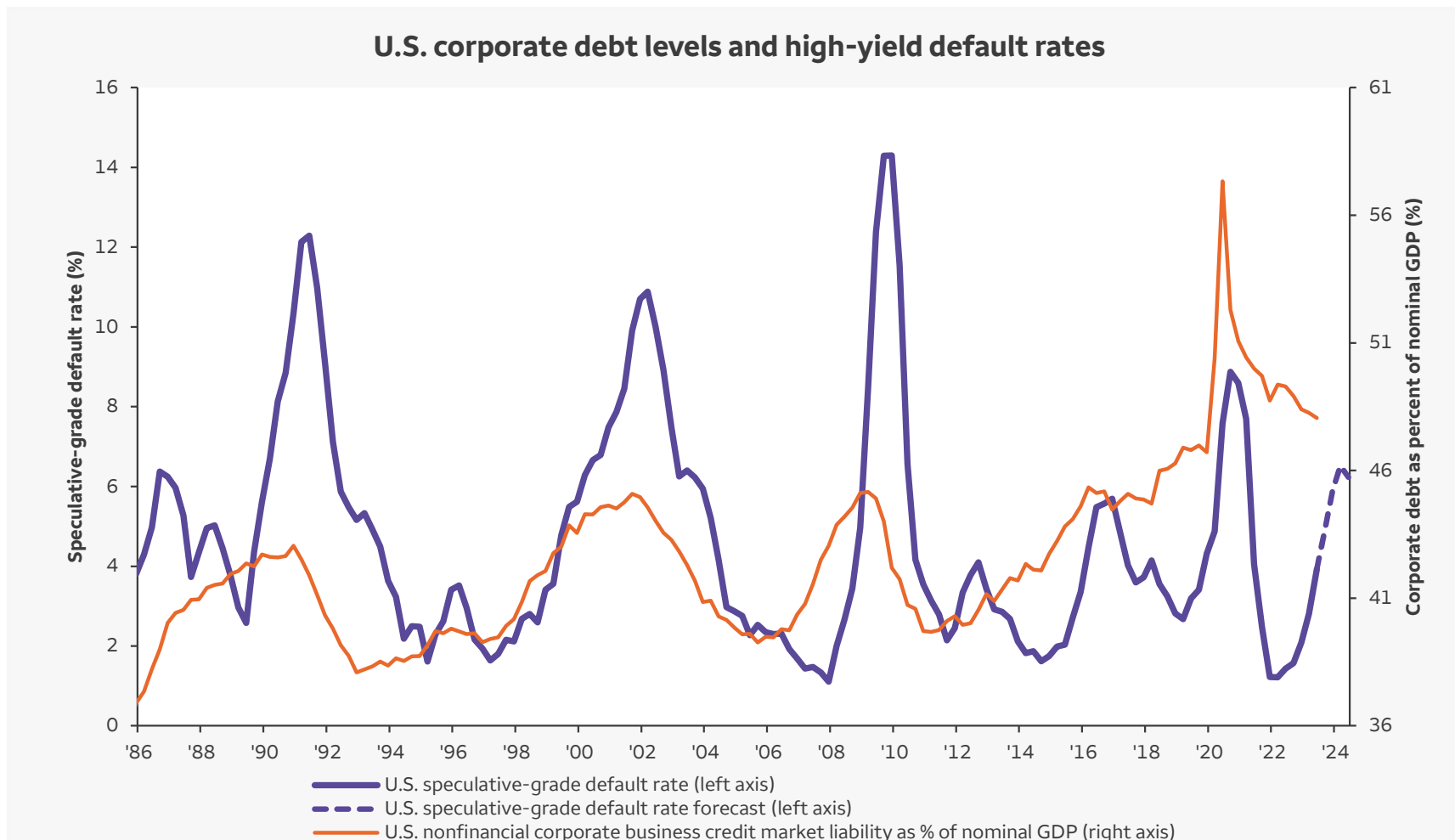
Sources: Bloomberg and Wells Fargo Investment Institute. Monthly data from January 1, 2006 to September 30, 2023. For illustrative purposes only. Option-adjusted spread is the difference in yield over equivalent-duration Treasuries. USD = U.S. dollar. Investment grade represented by Bloomberg U.S. Aggregate Bond Index. High yield represented by Bloomberg U.S. Corporate High Yield Bond Index. Emerging markets represented by J.P. Morgan Emerging Markets Bond Index Global (USD). Bloomberg U.S. Aggregate Bond Index is a broad-based index that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. Bloomberg U.S. Corporate High Yield Bond Index measures the USD-denominated, high yield, fixed-rate corporate bond market. J.P. Morgan EMBI Global Index (USD) is a U.S.-dollar-denominated, investible, market-cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets.

Key takeaways

- Investment-grade and high-yield credit spreads narrowed in the third quarter as credit sentiment improved. A still-resilient global economy also helped emerging market sovereign spreads remain close to historical averages even as China's reopening recovery disappointed.
- We expect spreads of high-quality and low-quality bonds to widen further as the economic slowdown and a potential recession take hold. At this time, we believe credit selectivity is key.

Closing the gap?



Sources: Bloomberg, Moody's, and Wells Fargo Investment Institute. Quarterly data from January 1, 1986 to June 30, 2023. Q3 2023 – Q2 2024 speculative grade default rate forecasts from Moody's forecasts, as of September 30, 2023. The nonfinancial corporate debt data includes both High Yield (HY) and investment-grade (IG) corporate debt. GDP = gross domestic product.

Key takeaways

- Ample liquidity in the recovery period post-pandemic allowed many high-yield issuers to refinance, extend maturities, and lower interest expense.
- Looking ahead, we expect high-yield default rates to climb should the economy weaken into a recession as we forecast.

General

- Individual commodity prices have historically tended to move together over very long bull and bear cycles. These super-cycles have often lasted a decade or longer. We believe a new bull super-cycle began in 2020.
- China is the largest commodity consumer and was the main driver of two of the recent commodity super-cycles (bull: 1999 – 2008, bear: 2008 – 2020).

Oil

- Despite oil prices coming down in the first half of 2023 based largely on global demand concerns and an impending economic recession, oil prices have since moved higher for the year as supply remains a structural problem globally.
- Moving forward, even the slightest amount of demand recovery should be supportive of oil prices.

Gold

- Gold was hampered by U.S. dollar strength and tight Federal Reserve monetary policy early in the year. Both headwinds, however, appear set to lose strength in 2024, which we feel should help gold prices move higher.
- Also likely to support gold prices in the fourth quarter are persistent investor concerns about inflation, the equity market volatility, and concerns surrounding economic growth.

REITs (Real estate investment trusts)

- REITs come in all shapes and sizes — a REIT that specializes in data centers differs wildly from a REIT that specializes in malls or office buildings — and returns can vary widely as a result.
- Monitoring the fundamentals, valuations, trends, and performance of these different REIT subsectors can provide opportunities for investors in REITs.

Real assets scorecard

Asset class	3Q23 return (%)	YTD return (%)	YOY return (%)	Yield (%)
Commodities	4.71	-3.44	-1.30	–
Energy commodities	19.59	-4.27	-12.95	–
Agricultural commodities	-3.19	-4.15	-1.83	–
Precious metals commodities	-3.59	-0.72	12.50	–
Base metals commodities	3.52	-9.28	5.64	–
Global REITs	-5.59	-4.10	2.72	4.54
U.S. REITs	-8.33	-5.61	-1.71	4.51
International REITs	-2.80	-6.94	2.80	4.65

Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. YTD = year to date. YOY = year over year. REIT = real estate investment trust. For illustrative purposes only. Indexes in order represented by Bloomberg Commodity Index, Bloomberg Energy Subindex, Bloomberg Agriculture Subindex, Bloomberg Precious Metals Subindex, Bloomberg Industrial Metals Subindex, FTSE All Equity REITs Index, FTSE EPRA/NAREIT Developed Index, FTSE EPRA NAREIT Developed ex-U.S. REITs Index. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** An index is unmanaged and not available for direct investment. Investing in commodities and REITs are not appropriate for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investments in the energy sector are subject to the adverse economic events that occur within that industry. Investing in precious and base metals carries additional risks and may subject an investment to greater share price volatility. Base metals cannot be held physically and are not easily converted to cash. Real estate has special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. Foreign investing involves risks typically not associated with investing domestically, including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. See following page for index definitions.

Key takeaways

- Commodity prices increased in the third quarter of 2023, led higher by energy prices as supply was cut by major oil producers.
- Precious metal prices have held up better over the past year as concerns surrounding economic growth and the volatile market environment provided support for gold prices.

Real assets scorecard Cont'd

Index definitions

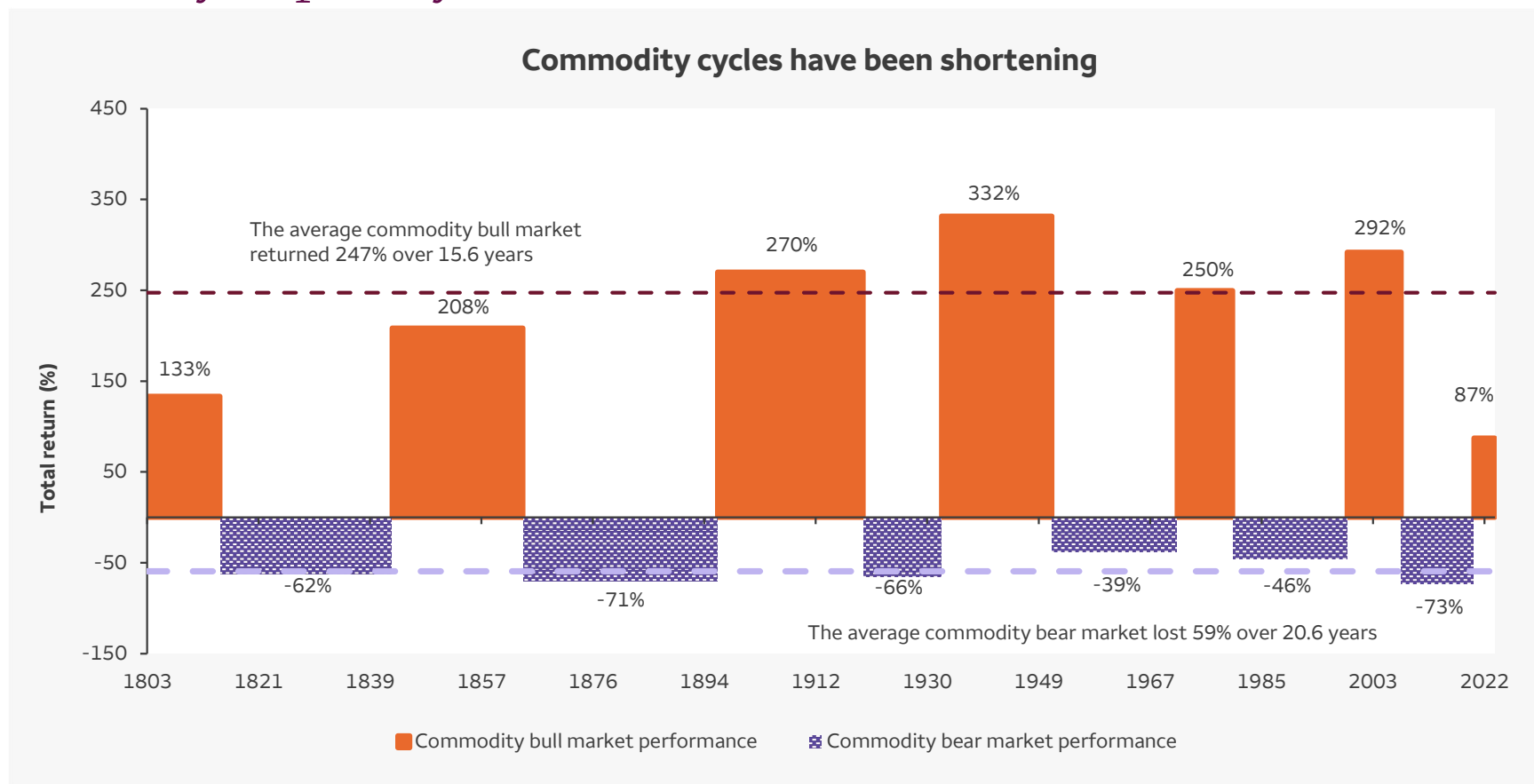
Bloomberg Commodity (BCOM) indexes are a family of financial benchmarks designed to provide liquid and diversified exposure to physical commodities via futures contracts. The index currently represents 20 commodities which are weighted to account for economic significance and market liquidity and 22 exchange-traded futures contracts. The index takes exposure to an equally weighted basket of Underlying indexes (subindexes). The Underlying indexes includes the following: BCOM Energy, BCOM Agriculture, BCOM Precious Metals, and BCOM Industrial Metals.

FTSE NAREIT All Equity REITs Index, a subset of the All REITs Index, is designed to track the performance of REITs representing equity interests in (as opposed to mortgages on) properties. It represents all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets, other than mortgages secured by real property that also meet minimum size and liquidity criteria.

FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real-estate companies and REITs in developed countries worldwide.

FTSE EPRA/NAREIT Developed Index ex-U.S. REITs Index is designed to track the performance of listed real estate companies in developed countries worldwide other than the United States.

Commodity super-cycles



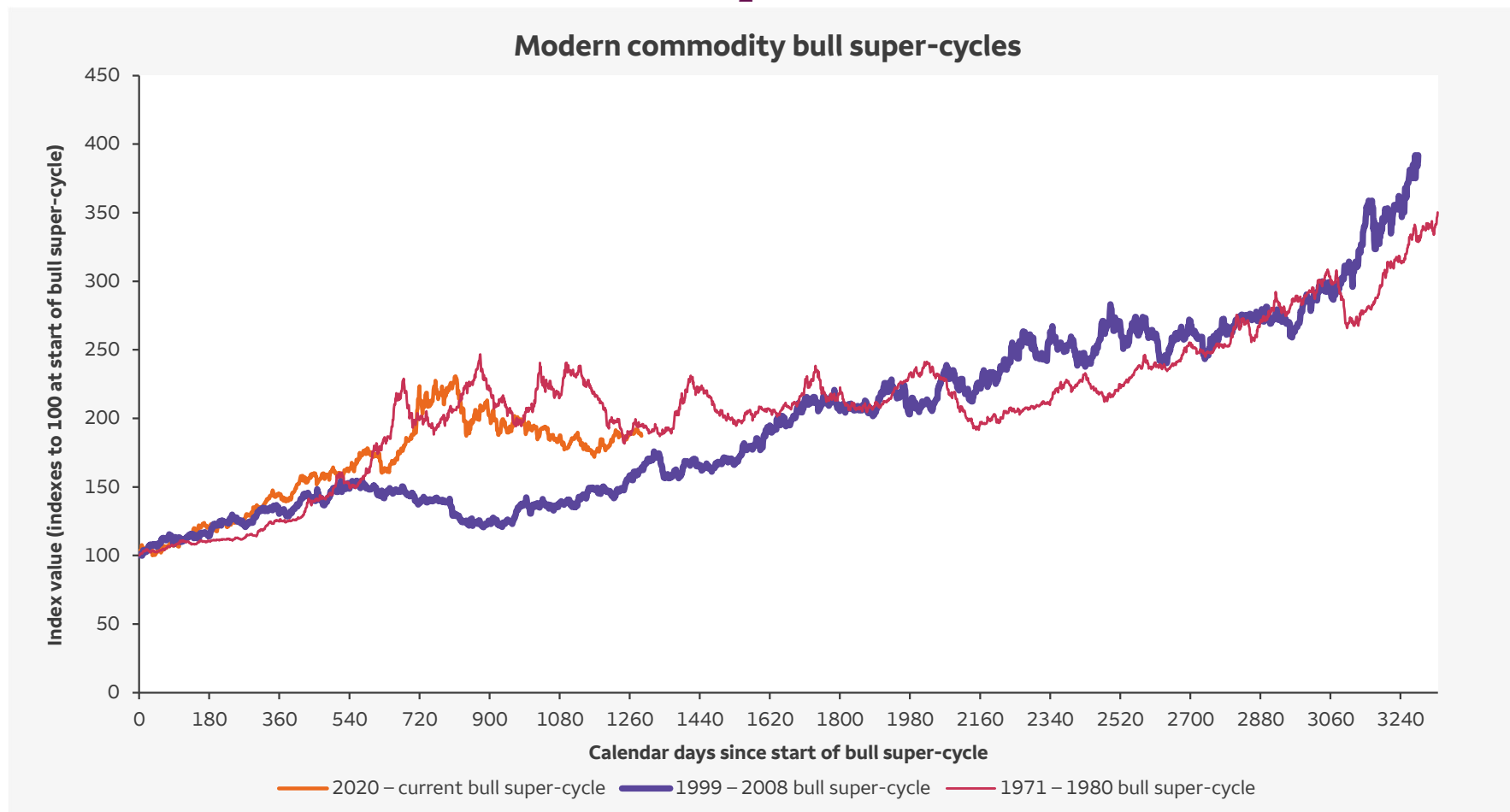
Sources: Bloomberg, Prices by G.F. Warren and F.A. Pearson, Bureau of Labor Statistics, Bureau of Economic Research, and Wells Fargo Investment Institute. Monthly data from January 1, 1803 to September 30, 2023. Commodity return represented by a commodity composite that measures a basket of commodity prices as well as inflation. It blends the historical commodity index introduced by George F. Warren & Frank A. Pearson, former academics at Cornell, collected and published commodity price data in their book, *Prices*, and the producer price index for commodities (PPI-Commodities), and the National Bureau of Economic Research (NBER) Index of Wholesale Prices of 15 Commodities, the Reuters Continuous Commodity Index, and the Bloomberg Commodity Index. The Commodity Composite connects the aforementioned components at the following years: Warren and Pearson - *Prices*: 1803-1932, BLS PPI-Commodities: 1933-1946, NBER: 1946-1956, Reuters Continuous Commodity Index: 1956-1999, Bloomberg Commodity Index: 1999- current. The Reuters Continuous Commodity Index is an equal-weighted geometric average of commodity price levels relative to the base year average price. The Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually, weighted two-thirds by trading volume and one-third by world production, and weight-caps are applied at the commodity, sector, and group level for diversification. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in commodities is not suitable for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility.

Key takeaways

- Commodities have tended to move together in super-cycles lasting a decade or more. These cycles have gradually shortened in length over time. The 2008 – 2020 bear super-cycle is the shortest on record going back to 1800.
- We believe a new bull super-cycle started in March 2020, marked by washed out prices (crude oil prices turned negative).

Super-cycle = If you look at commodity prices over the very long term (hundreds of years), it becomes evident that they tend to move in overall bull and bear cycles, some lasting decades. These are super-cycles.

How does the current bull stack up?

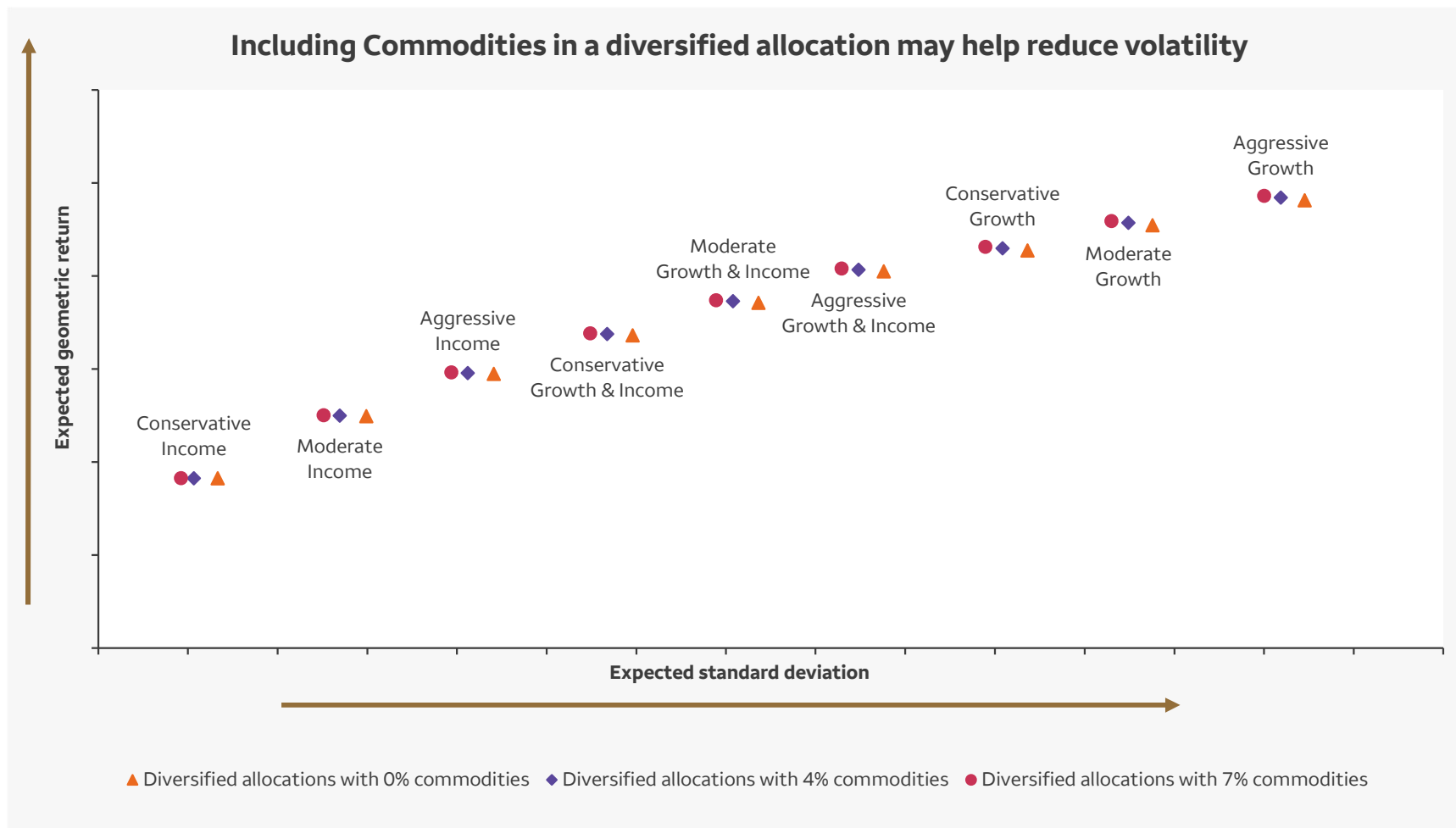


Sources: Bloomberg and Wells Fargo Investment Institute. Daily data. 2020–current bull super-cycle uses Bloomberg Commodity Index from March 18, 2020 to September 30, 2023. 1999–2008 bull super-cycle uses Bloomberg Commodity Index from July 13, 1999 to July 2, 2008. 1971–1980 bull super-cycle uses Reuters Continuous Commodity Index from October 4, 1971 to November 20, 1980. The Reuters Continuous Commodity Index is an equal-weighted geometric average of commodity price levels relative to the base year average price. The Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually, weighted two-thirds by trading volume and one-third by world production, and weight-caps are applied at the commodity, sector, and group level for diversification. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in commodities is not suitable for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Super-cycle = If you look at commodity prices over the very long term (hundreds of years), it becomes evident that they tend to move in overall bull and bear cycles, some lasting decades. These are super-cycles.

Key takeaways

- Despite this year's pullback, commodity prices have been on an incredible run since 2020's lows. We believe a new bull super-cycle began in March 2020, and history suggests that there could be even more gains to come.
- Keep in mind that past bull super-cycles have not been straight up. We expect to see dips, lulls, and pauses in commodity prices during the bull.

Diversification with commodities



Source: Wells Fargo Investment Institute, as of September 30, 2023. Strategic (long-term) return and standard deviation assumptions are as of July 18, 2023. Forecasts are not guaranteed and are subject to change. Strategic expected returns are forward-looking geometric return estimates from Wells Fargo Investment Institute of how asset classes and combinations of classes may respond during various market environments. Expected returns do not represent the returns that an investor should expect in any particular year. They are not designed to predict actual performance and may differ greatly from actual performance. There are no assurances that any estimates given will be achieved. The composition of the diversified allocations are provided on the following slide. The allocations to commodities are added to or removed from the U.S. Large Cap (S&P 500 Index) allocation to arrive at a 0%, 4%, or 7% commodities allocation. Standard Deviation is a statistical measure of the volatility of a portfolio's returns. The higher the standard deviation, the greater volatility has been.

Key takeaways

- We believe Commodities can help mitigate risk in a diversified allocation, even if the allocation is small.
- Because of its typically low correlation with stocks and bonds, we believe including an allocation to Commodities in a diversified portfolio should help reduce volatility and mitigate downside risk without sacrificing return.

Diversification with commodities Cont'd

Risk considerations

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Composition of diversified allocations

- **Conservative Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 76% Bloomberg U.S. Aggregate Bond Index, 3% Bloomberg U.S. Corporate High Yield Bond Index, 3% JPM EMBI Global Index, 12% S&P 500 Index, 2% Russell Midcap Index, 2% Bloomberg Commodity Index.
- **Moderate Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 60% Bloomberg U.S. Aggregate Bond Index, 4% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 16% S&P 500 Index, 5% Russell Midcap Index, 2% Russell 2000 Index, 4% MSCI EAFE Index, 2% Bloomberg Commodity Index.
- **Aggressive Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 47% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 8% JPM EMBI Global Index, 19% S&P 500 Index, 7% Russell Midcap Index, 2% Russell 2000 Index, 7% MSCI EAFE Index, 2% Bloomberg Commodity Index.
- **Conservative Growth & Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 39% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 20% S&P 500 Index, 8% Russell Midcap Index, 5% Russell 2000 Index, 7% MSCI EAFE Index, 4% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.
- **Moderate Growth & Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.
- **Aggressive Growth & Income Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 20% Bloomberg U.S. Aggregate Bond Index, 7% Bloomberg U.S. Corporate High Yield Bond Index, 6% JPM EMBI Global Index, 28% S&P 500 Index, 12% Russell Midcap Index, 6% Russell 2000 Index, 9% MSCI EAFE Index, 6% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.
- **Conservative Growth Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 16% Bloomberg U.S. Aggregate Bond Index, 3% Bloomberg U.S. Corporate High Yield Bond Index, 30% S&P 500 Index, 13% Russell Midcap Index, 8% Russell 2000 Index, 14% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 5% Bloomberg Commodity Index.
- **Moderate Growth Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 8% Bloomberg U.S. Aggregate Bond Index, 3% Bloomberg U.S. Corporate High Yield Bond Index, 31% S&P 500 Index, 14% Russell Midcap Index, 10% Russell 2000 Index, 15% MSCI EAFE Index, 12% MSCI Emerging Markets Index, 5% Bloomberg Commodity Index.
- **Aggressive Growth Liquid:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 31% S&P 500 Index, 16% Russell Midcap Index, 13% Russell 2000 Index, 18% MSCI EAFE Index, 15% MSCI Emerging Markets Index, 5% Bloomberg Commodity Index.

NOTE: The allocations to commodities are added to or removed from the U.S. Large Cap (S&P 500 Index) allocation to arrive at a 0%, 4%, or 7% commodities allocation.

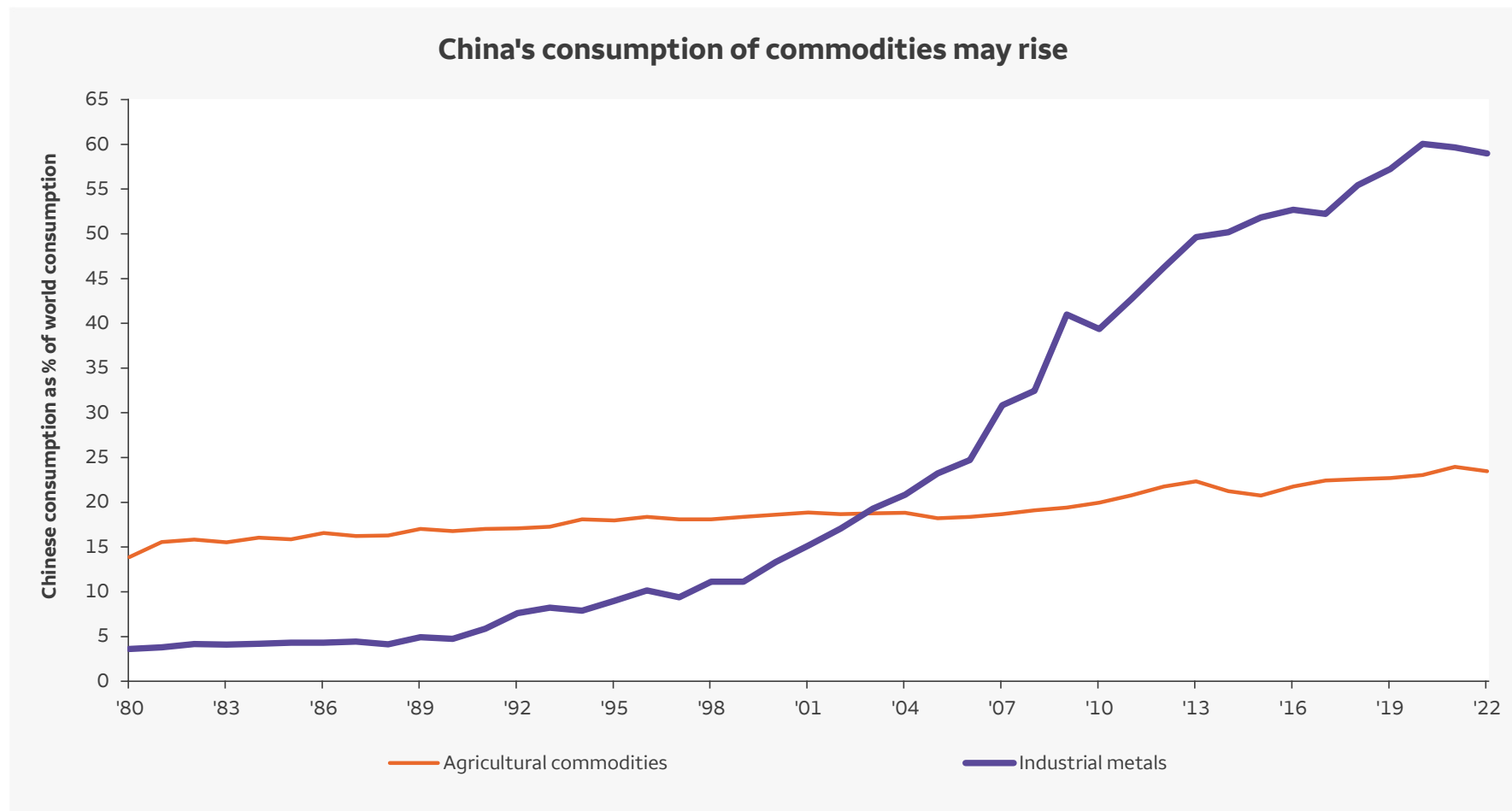
Index definitions

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. **Bloomberg U.S. Treasury Bills (1-3M) Index** is representative of money markets.

Bloomberg U.S. Aggregate Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **JPMorgan EMBI Global Index (USD)** is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

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China is a big commodity consumer

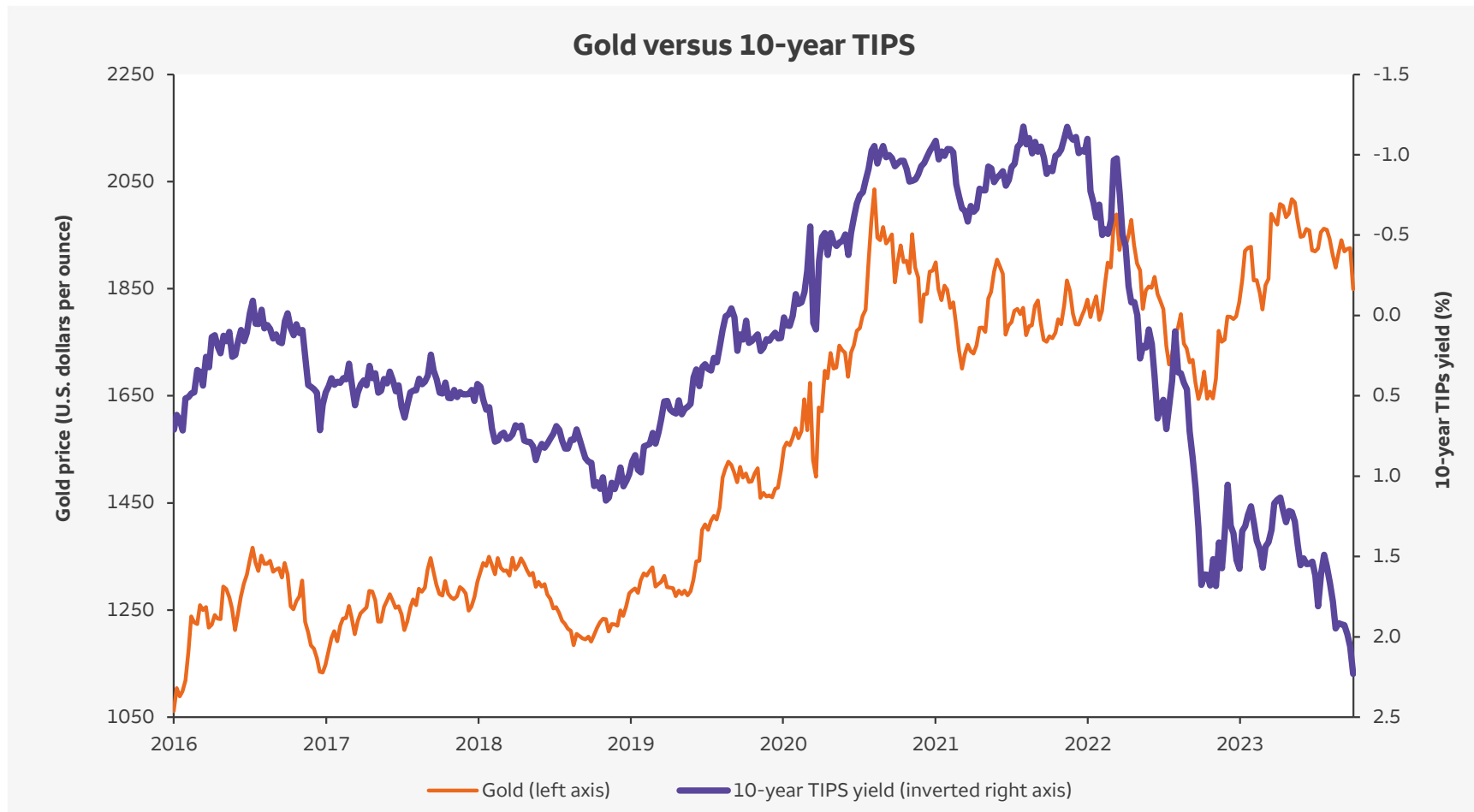


Sources: Bloomberg, U.S. Department of Agriculture, World Bureau of Metal Statistics, and Wells Fargo Investment Institute. Annual data from January 1, 1980 to December 31, 2022. Agricultural commodities represented are corn, soybeans, and wheat. Industrial metals represented are copper, zinc, nickel, and aluminum. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in commodities is not appropriate for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Super-cycle = If you look at commodity prices over the very long term (hundreds of years), it becomes evident that they tend to move in overall bull and bear cycles, some lasting decades. These are super-cycles.

Key takeaways

- China has become the world's largest commodity consumer, accounting for over half of the world's demand for industrial metals.
- We believe commodity investors should keep an eye on China. If China's economy falters, we could see a pause in the commodity bull super-cycle.

All that glitters...

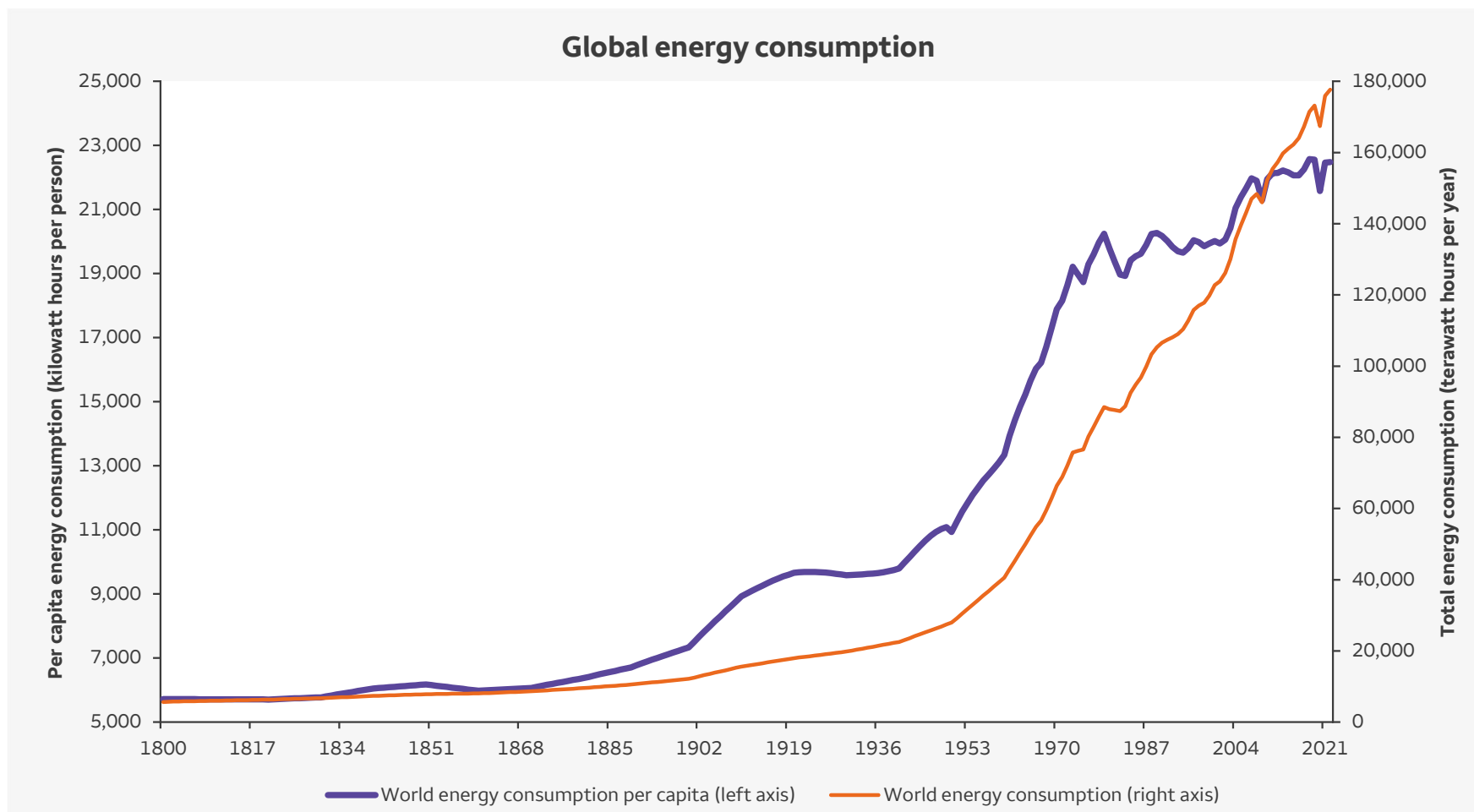


Sources: Bloomberg and Wells Fargo Investment Institute. Weekly data from January 1, 2016 to September 30, 2023. TIPS = Treasury Inflation-Protected Securities. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.** The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in physical commodities, such as gold, exposes a portfolio to other risk considerations such as potentially severe price fluctuations over short periods of time and storage costs that exceed the custodial and/or brokerage costs associated with a portfolio's other holdings.

Key takeaways

- Gold prices have recovered from lows, after a rollercoaster 2022.
- We believe that gold prices will trend higher for the remainder of the year as investor concerns about inflation may bring the market's focus and flows back to the yellow metal.

The world runs on energy

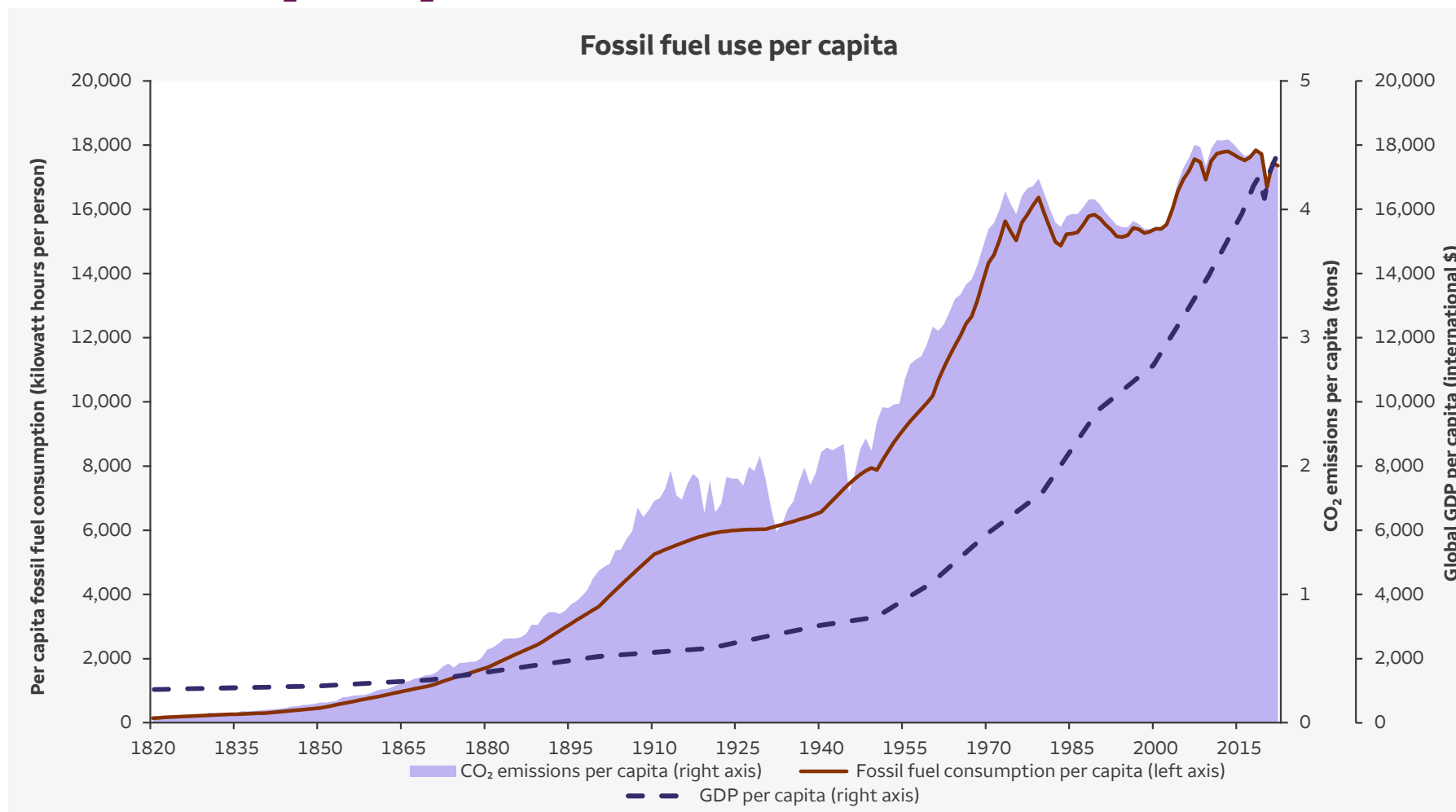


Sources: Our World in Data, BP Statistical Review of World Energy, and Wells Fargo Investment Institute. Annual data from January 1, 1800 to December 31, 2022. Per capita energy consumption is measured by taking the world energy consumption divided by the world population. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in commodities is not appropriate for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility.

Key takeaways

- Energy is arguably the most important commodity group to watch. The world, including other commodity groups, runs on energy.
- Not only has total global energy consumption risen over the past 200 years, but energy use per capita has grown as well.

Fossil fuel use per capita has moderated in recent decades

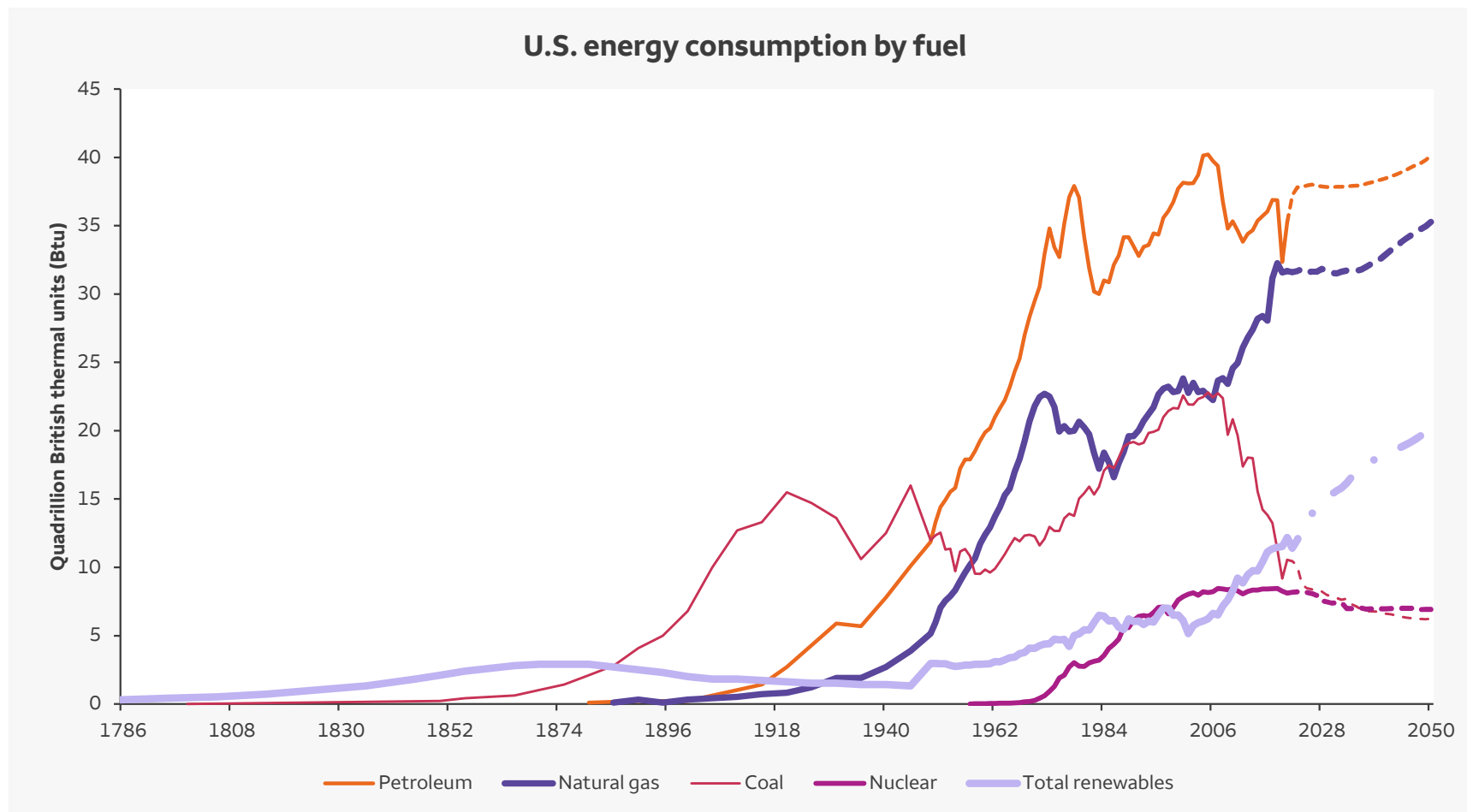


Sources: Our World in Data, BP Statistical Review of World Energy, The World Bank, and Wells Fargo Investment Institute. Annual data from January 1, 1820 to December 31, 2022. GDP = gross domestic product. Per capita data is calculated by taking emissions, consumption, and GDP data divided by the global population. GDP data is in constant international dollars and is sourced from Our World in Data. Due to a lack of total GDP data in 2019 and 2020, GDP data in international dollars was sourced from The World Bank. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in commodities is not appropriate for all investors. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility.

Key takeaways

- The main fuels used to power rising global energy use have been the fossil fuels: oil, coal, and natural gas.
- Historically, fossil fuels, along with other technological advancements, have helped elevate global GDP per person. Yet, in recent years, the use of other energy sources has also supported GDP growth moderating the sharp rise of fossil fuel use per capita.
- However, fossil fuels have helped push carbon dioxide (CO₂) emissions to hit record levels.

Are renewables overtaking fossil fuels?

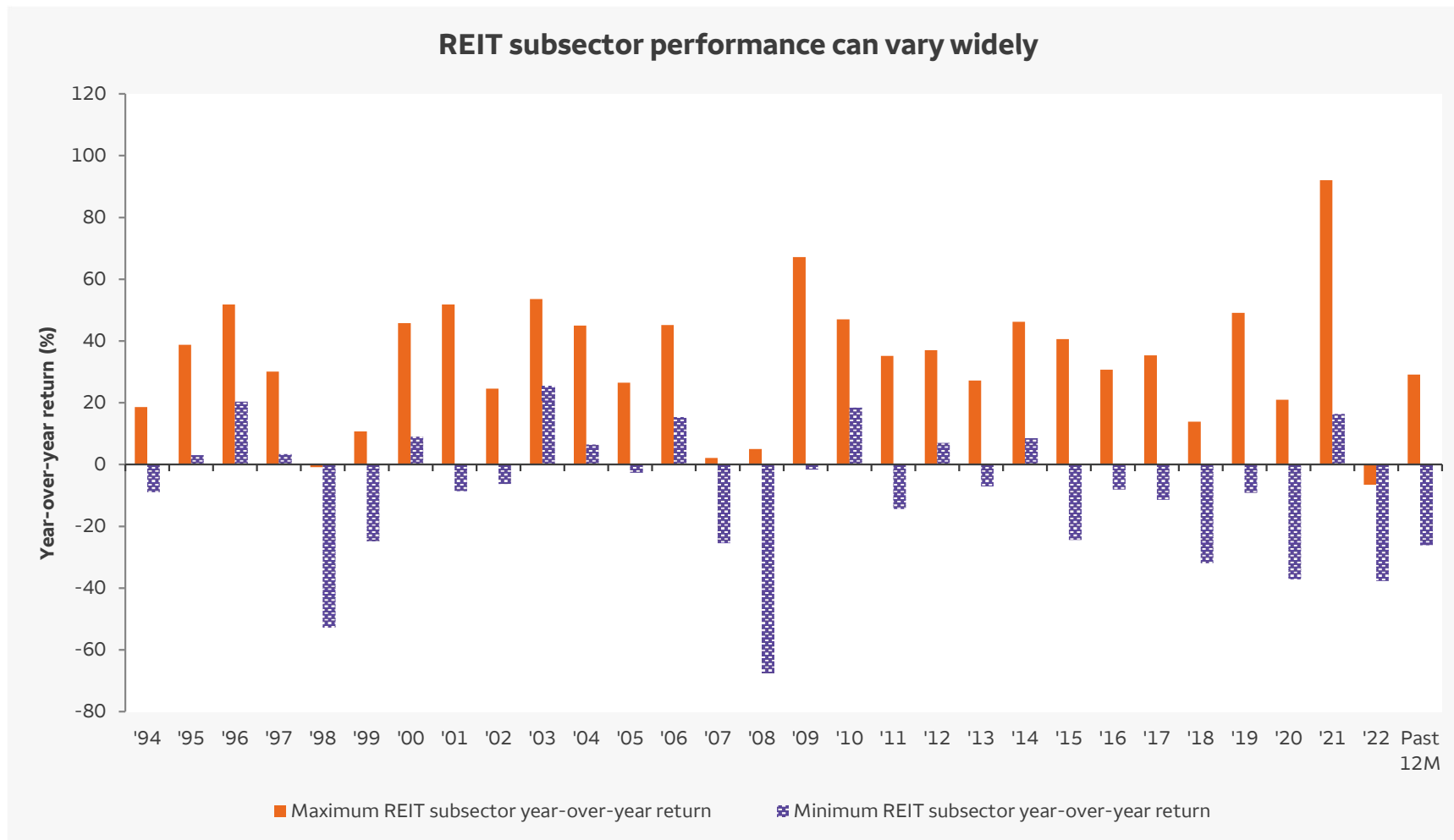


Sources: U.S. Energy Information Administration (EIA) and Wells Fargo Investment Institute. Annual data from January 1, 1786 to December 31, 2022. EIA forecast data from 2022–2050 as of December 31, 2022. Total renewables includes hydro, geothermal, wind, solar, and biomass primary energy consumption. Dotted lines represent EIA forecast data. Forecasts are not guaranteed and based on certain assumptions and on views of market and economic conditions which are subject to change. The commodities markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility.

Key takeaways

- With carbon dioxide (CO₂) and other greenhouse gas levels at such highs, government policies are increasingly incentivizing renewable energy adoption, helping to reduce the use of select fossil fuels, such as coal.
- Despite the accelerating green energy transition, fossil fuels will likely remain among the primary global energy sources for the foreseeable future.

A REIT is a REIT is a REIT, right? No.



Sources: Bloomberg, NAREIT, and Wells Fargo Investment Institute. Data from January 1, 1994 to September 30, 2023. REIT = real estate investment trust. 12M = 12 months. Relative performance is measured by the FTSE NAREIT subsector indexes versus FTSE NAREIT All Equity REITs Index. **Past performance is no guarantee of future results.** An index is unmanaged and not available for direct investment. FTSE NAREIT All Equity REITs Index, a subset of the All REITs Index, is designed to track the performance of REITs representing equity interests in (as opposed to mortgages on) properties. Real estate has special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. Investing in REITs is not appropriate for all investors.

Key takeaways

- REITs come in all shapes and sizes — a REIT that specializes in data centers differs wildly from a REIT that specializes in malls or office buildings — and returns vary widely as a result.
- Monitoring the fundamentals, valuations, trends, and performance of these different REIT subsectors can provide opportunities for investors in REITs.

Alternative investments highlights

Hedge funds

- Over a full market cycle, we believe hedge funds can help decrease risk and improve diversification.
- At this point in the cycle, we prefer strategies like Relative Value and Macro that can help reduce volatility by being less correlated to risky assets.
- Given the likely economic recession in the next few quarters, we expect Merger Arbitrage may struggle as deal activity slows, spreads widen, and lead times for deal closings become extended. Conversely, we believe the opportunity set for Distressed Credit strategies will expand as over-leveraged companies adjust to rising debt service levels.

Private capital

- Private Equity valuations generally lag the public market by six to nine months. Therefore, we anticipate a reduction in valuations over the next several quarters as private markets narrow the gap to public market prices.
- While exit and initial public offerings are slowing as the risks to economic growth rise, we also recognize that we may experience more attractive entry points for Private Equity as managers generally invest committed capital over a three-to-five-year time frame.
- Private Debt strategies focused on distressed and special situations are becoming more attractive as lending conditions tighten and credit stress builds.
- While Private Real Estate has historically performed well over a full market cycle, we are cognizant of slowing economic growth potentially offsetting the gains from higher inflation.

Alternative investments, such as hedge funds and private equity/private debt funds, are not appropriate for all investors and are only open to accredited or qualified investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk/reward profiles of their portfolios, the investments themselves can carry significant risks. There may be no secondary market for alternative investment interests, and transferability may be limited or even prohibited. Hedge fund strategies, such as Equity Hedge, Event Driven, Macro, and Relative Value, may expose investors to risks such as short selling, leverage, counterparty, liquidity, volatility, the use of derivative instruments, and other significant risks.

Alternative investments scorecard

Index	3Q23 return (%)	2Q23 return (%)	YTD return (%)	YOY return (%)	3-year return (%, annualized)
HFRI Fund Weighted Composite as of 9/30/2023	0.84	2.18	4.27	6.69	6.89
HFRI Relative Value as of 9/30/2023	1.61	1.17	4.17	5.70	5.43
HFRI Macro as of 9/30/2023	2.45	1.66	1.61	0.25	7.75
HFRI Event Driven as of 9/30/2023	2.01	1.06	4.51	7.79	7.69
HFRI Equity Hedge as of 9/30/2023	-0.84	3.10	4.80	9.27	6.51
Cambridge Associates U.S. Private Equity as of 3/31/2023	–	–	2.69	-1.58	25.46
Burgiss Private Debt as of 6/30/2023	–	1.76	3.91	7.36	11.50
NCREIF Property as of 6/30/2023	–	-1.98	-3.75	-6.59	6.80

Sources: The Burgiss Group, LLC (Burgiss), Cambridge Associates, IHS Markit, © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute, as of September 30, 2023. YOY = year over year. For illustrative purposes only. Index returns do not represent investment returns or the results of actual trading nor are they forecasts of expected gains or losses a fund might experience. Index returns do not represent investment performance. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns reflect deduction for fees. Because the HFR indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See following pages for index definitions. The Cambridge Index uses a horizon calculation based on data compiled from more than 1,400 institutional-quality buyout, growth equity, private equity energy, and subordinated capital funds formed after 1986. The funds included in the index report their performance voluntarily and therefore the index may reflect a bias toward funds with records of success. **More information on the limitations of utilizing this Index can be found on the following pages.**

Key takeaways

- Hedge fund performance in the past three years has exceeded our expectations based on the Capital Market Assumptions, especially Macro, Equity Hedge, and Event Driven strategies.

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Alternative investments scorecard Cont'd

Alternative investments, such as hedge funds and private equity/private debt funds, are not appropriate for all investors and are only open to accredited or qualified investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk/reward profiles of their portfolios, the investments themselves can carry significant risks. There may be no secondary market for alternative investment interests, and transferability may be limited or even prohibited. Hedge fund strategies, such as Equity Hedge, Event Driven, Macro, and Relative Value, may expose investors to risks such as short selling, leverage, counterparty, liquidity, volatility, the use of derivative instruments, and other significant risks.

REITS have special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Index definitions

HFRI Fund Weighted Composite Index is a fund-weighted (equal-weighted) index designed to measure the total returns (net of fees) of the approximately 2,000 hedge funds that comprise the Index. Constituent funds must have either \$50 million under management or a track record of greater than 12 months. Sub-strategies include: HFRI Event-Driven, Distressed/Restructuring Index, and HFRI Event-Driven (Total) Index.

HFRI Event Driven Index maintains positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

HFRI Macro Index: Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed-income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

HFRI Equity Hedge Index consists of Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50%, and may in some cases be substantially entirely invested in equities, both long and short.

HFRI Relative Value Index maintains positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed-income, derivative, or other security types.

The HFRI indexes are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

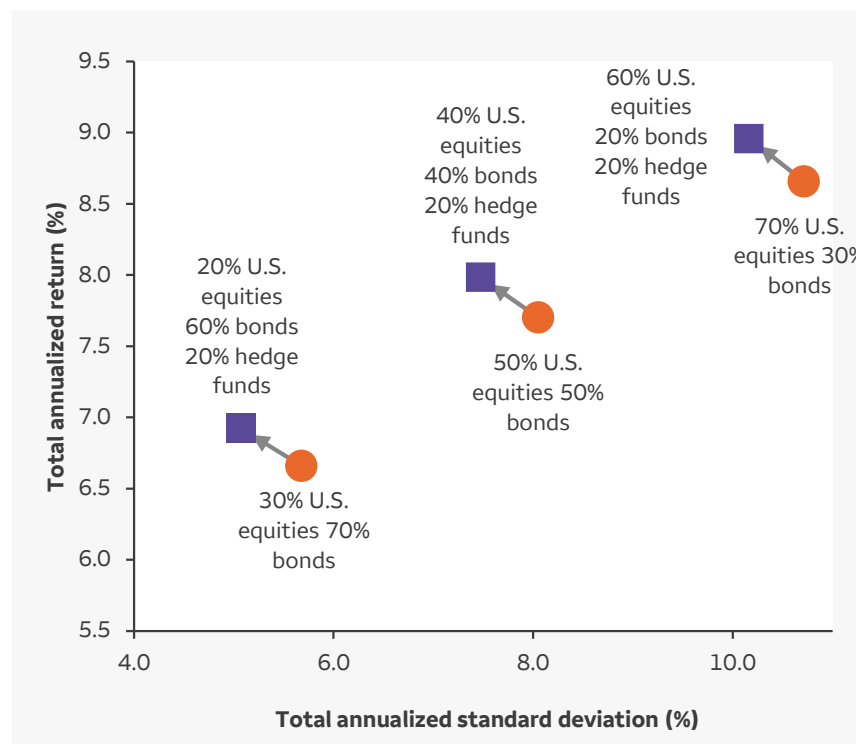
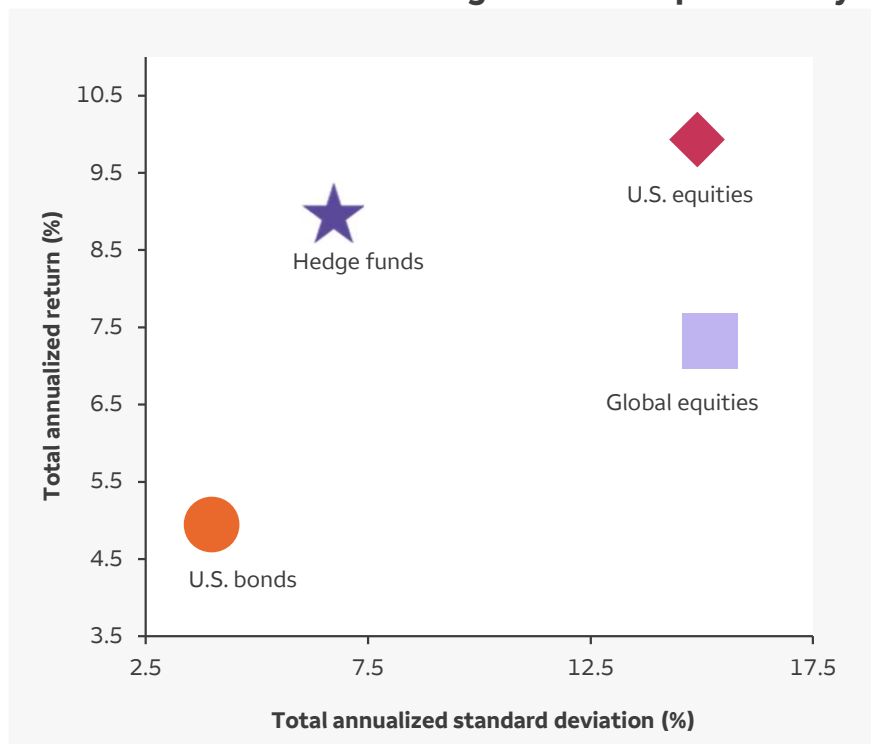
Cambridge Associates LLC U.S. Private Equity Index[®] uses a horizon calculation based on data compiled from more than 1,400 institutional-quality buyout, growth equity, private equity energy, and subordinated capital funds formed after 1986. The funds included in the index report their performance voluntarily and therefore the index may reflect a bias toward funds with records of success. Funds report unaudited quarterly data to Cambridge Associates when calculating the index. The index is not transparent and cannot be independently verified because Cambridge Associates does not identify the funds included in the index. Because Cambridge Associates recalculates the index each time a new fund is added, the historical performance of the index is not fixed, can't be replicated and will differ over time from the day presented. The returns shown are net of fees, expenses and carried interest. Index returns do not represent fund performance.

The Burgiss Private Debt Index is a pooled quarterly time weighted rate of return series based on data compiled by the Burgiss Group, LLC (Burgiss) from over 800 private debt funds (generalist, senior, mezzanine, and distressed debt), including fully liquidated partnerships, formed after 1986. The return series is net of fees, expenses, and carried interest. The benchmark is issued on a quarterly basis, approximately 80 calendar days after quarter end. Index returns do not represent fund performance.

The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.

Diversification with hedge funds

We believe hedge funds can potentially reduce risk in an allocation of stocks and bonds



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from January 1, 1990 to September 30, 2023. Bonds = Bloomberg U.S. Aggregate Bond Index. U.S. equities = S&P 500 Index. Global equities = MSCI World Index. Hedge funds = HFRI Fund Weighted Composite Index. For illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns do not represent investment returns or the results of actual trading nor are they forecasts of expected gains or losses a fund might experience. The Bloomberg U.S. Aggregate Bond Index is a broad-based measure of the investment grade, U.S.-dollar-denominated, fixed-rate taxable bond market. The S&P 500 Index is a market capitalization-weighted index generally considered representative of the U.S. stock market. The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed markets including the United States. The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Index returns do not represent investment returns or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for expenses or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns reflect deduction for fees and expenses. Because the HFR indexes are calculated based on information that is voluntarily provided actual returns may be higher or lower than those reported. The HFRI indexes are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Standard deviation is a measure of the volatility of returns. The higher the standard deviation, the greater volatility has been. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Diversification strategies do not guarantee investment returns or eliminate the risk of loss. See asset class risk on following page.

Key takeaways

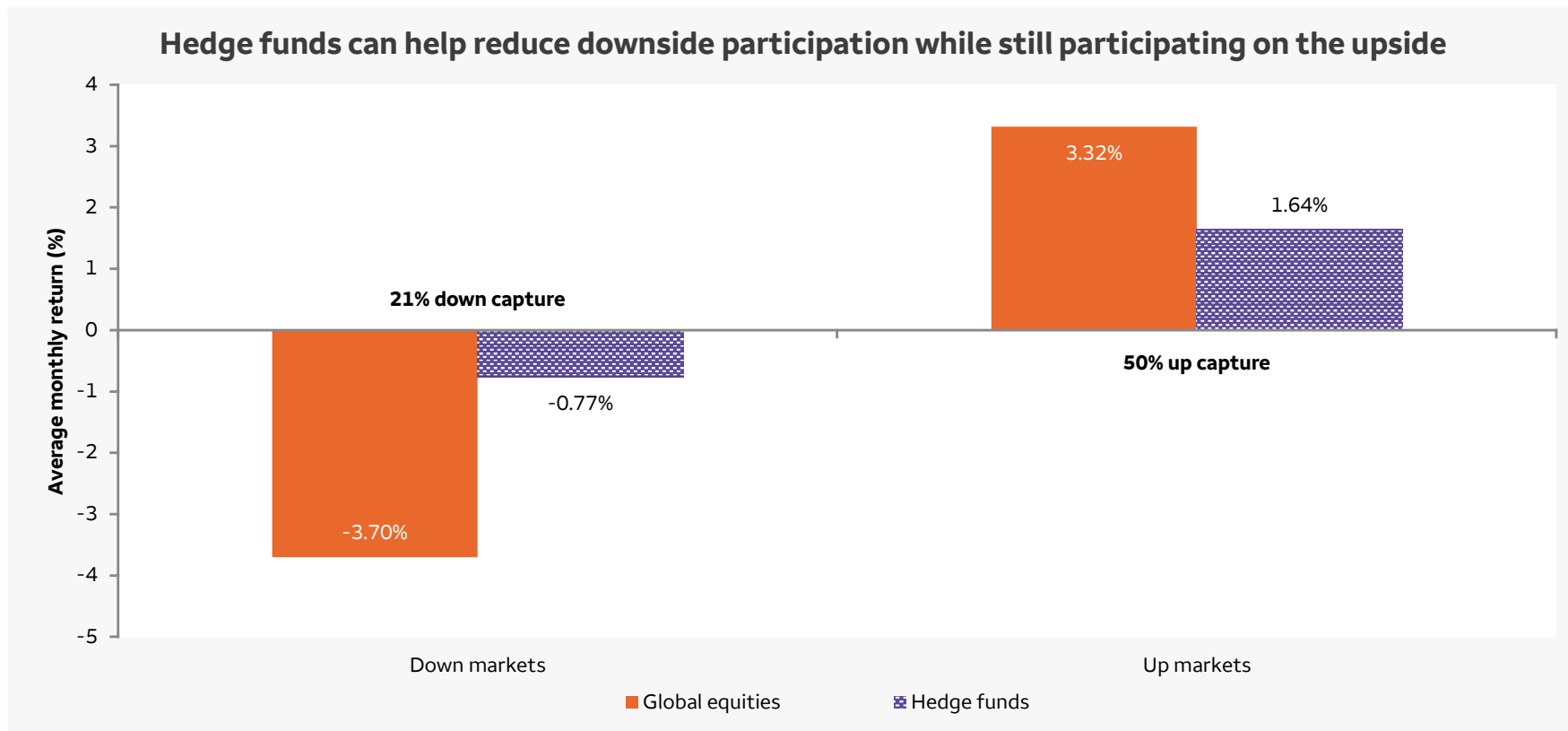
- Adding hedge funds to an allocation with a traditional blend of stocks and bonds has historically increased returns and decreased risk, as charted above.
- Alternative investments can provide valuable diversification, especially during time periods when the correlations between U.S. stocks and bonds prices have been positive.

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Diversification with hedge funds cont'd

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of hedge funds to potentially improve the risk-reward profiles of their portfolios, the investments themselves can carry significant risks. Hedge funds trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods which can result in adverse consequences for the investor.

Downside risk mitigation with hedge funds



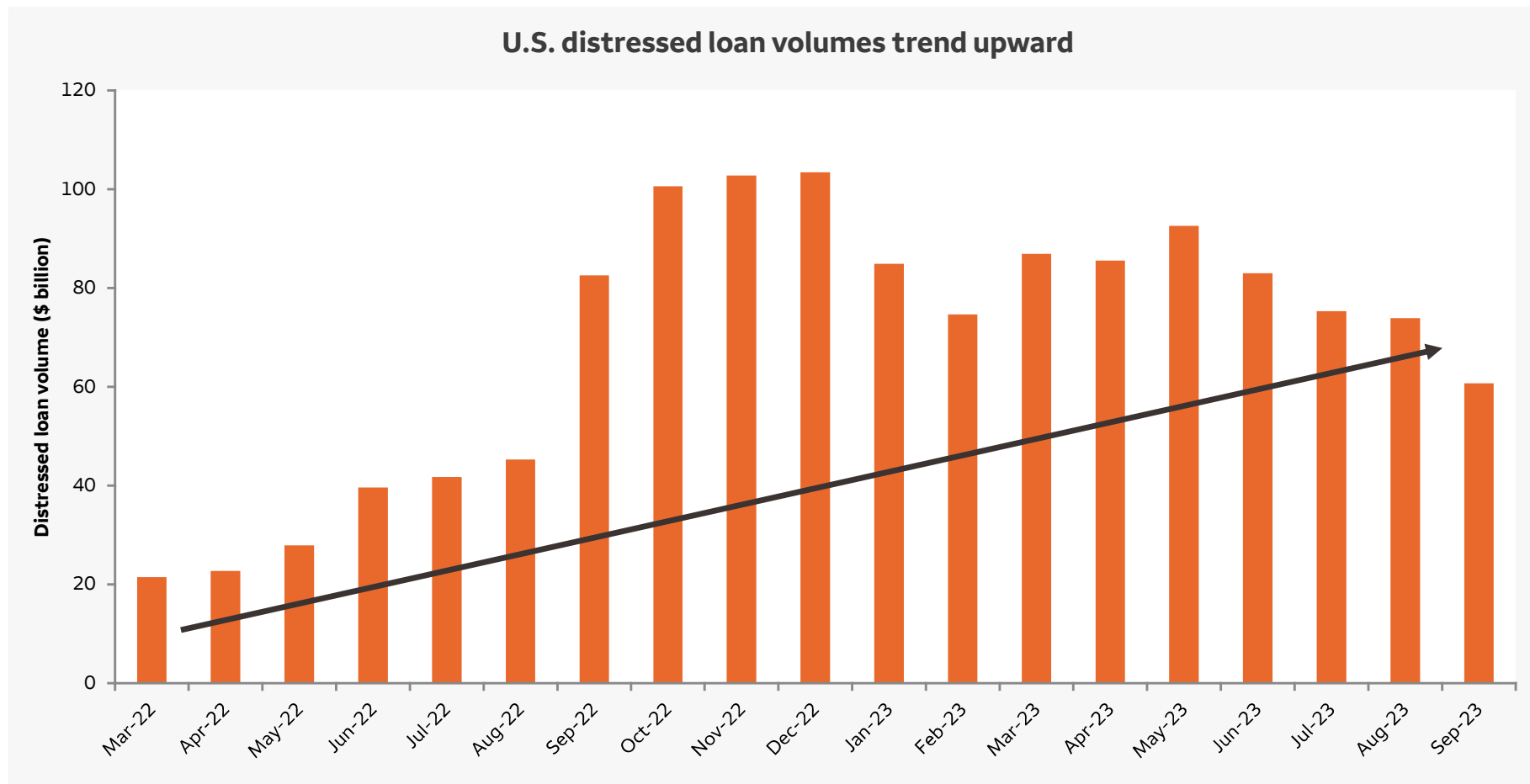
Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from January 1, 1990 to September 30, 2023. Global equities = MSCI World Index. Hedge funds = HFRI Fund Weighted Composite Index. For illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns do not represent investment returns or the results of actual trading nor are they forecasts of expected gains or losses a fund might experience. The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed markets including the United States. The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Index returns do not represent investment returns or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for expenses or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns reflect deduction for fees and expenses. Because the HFR indexes are calculated based on information that is voluntarily provided actual returns may be higher or lower than those reported. The HFRI indexes are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Diversification strategies do not guarantee investment returns or eliminate the risk of loss.

Key takeaways

- Alternative investments, like hedge funds, can help reduce downside participation and provide diversification, especially should stocks and bonds remain positively correlated in the near term.

Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to accredited or qualified investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty.

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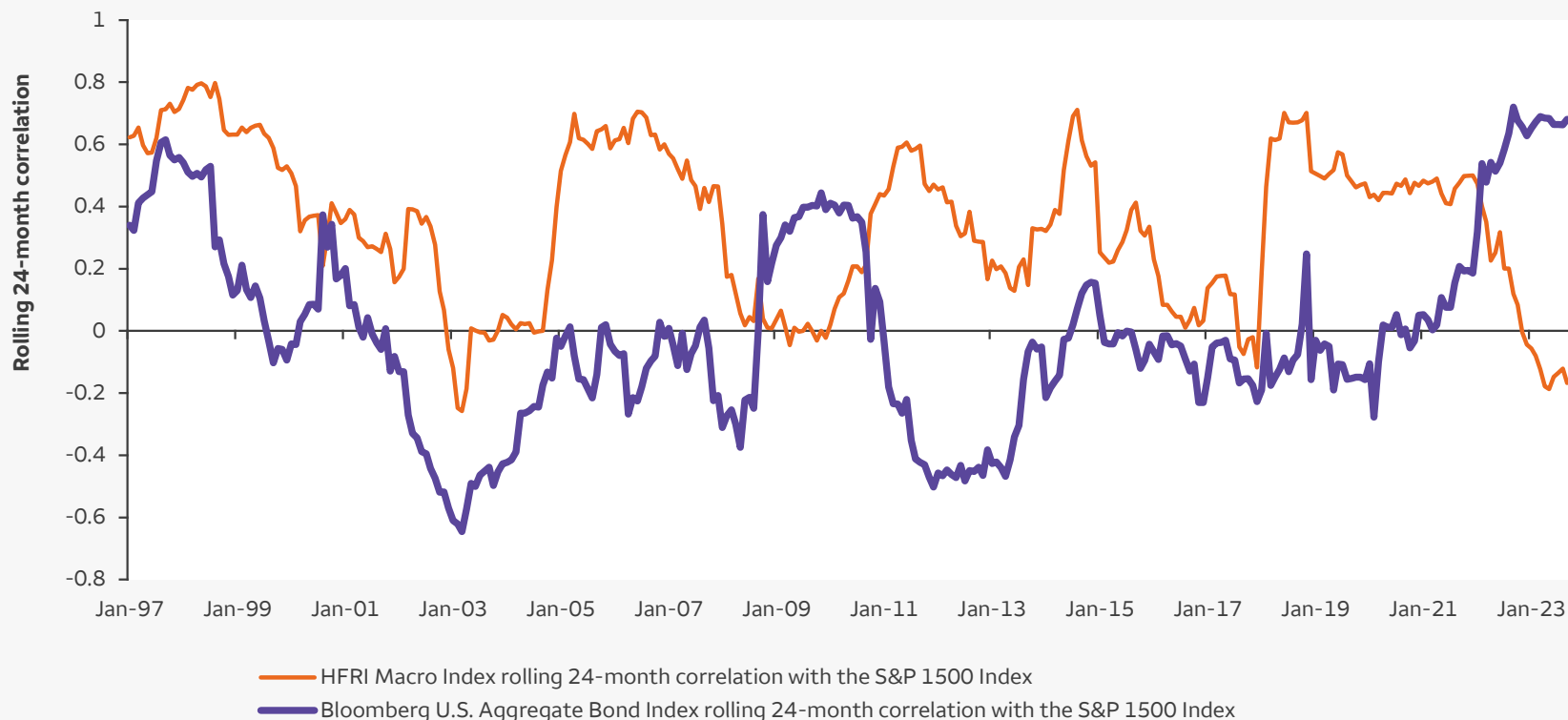
Sources: Pitchbook | LCD and Wells Fargo Investment Institute. Monthly data from March 1, 2022 to September 30, 2023. For illustrative purposes only. Distressed loan volume is based on the Morningstar LSTA US Leveraged Loan Index, which is designed to measure the performance of the U.S. leveraged loan market. Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to accredited or qualified investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty.

Key takeaways

- Given our expectation for a looming recession and outlook for higher rates for longer, we expect the stresses in the loan market will continue to build in the coming quarters.
- While we remain in the early innings of the next credit cycle, we favor Distressed Credit strategies across hedge fund and private capital strategies as we believe the opportunity set will continue to expand over the coming quarters.

Has a new regime for Macro trading begun?

Macro strategies currently provide better diversification to equities than bonds



— HFRI Macro Index rolling 24-month correlation with the S&P 1500 Index
— Bloomberg U.S. Aggregate Bond Index rolling 24-month correlation with the S&P 1500 Index

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Monthly data from January 1, 1997 to September 30, 2023. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions and do not reflect deduction for fees, expenses, or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment **Past performance is no guarantee of future results.** The HFRI Macro Index: Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed-income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis. The S&P 1500 Index is a broad-based capitalization-weighted index of 1500 U.S. companies and is comprised of the S&P 400, S&P 500, and the S&P 600. The Bloomberg U.S. Aggregate Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.

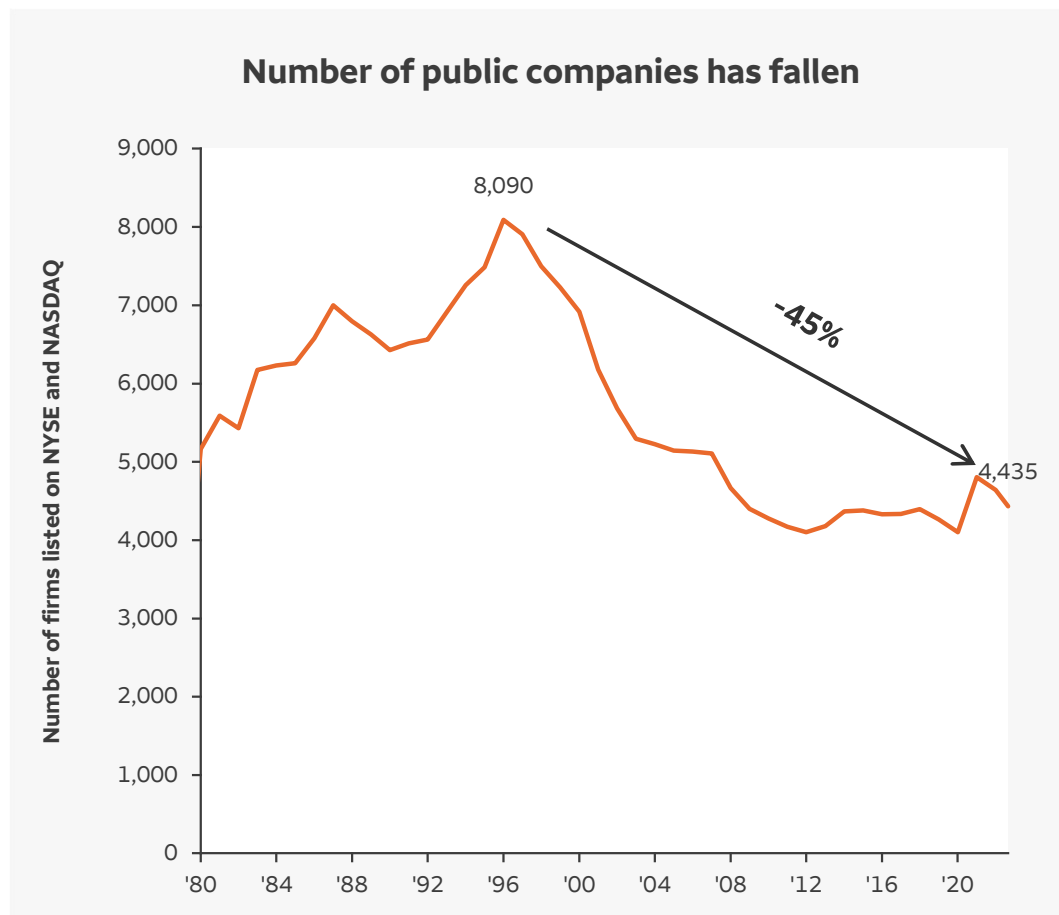
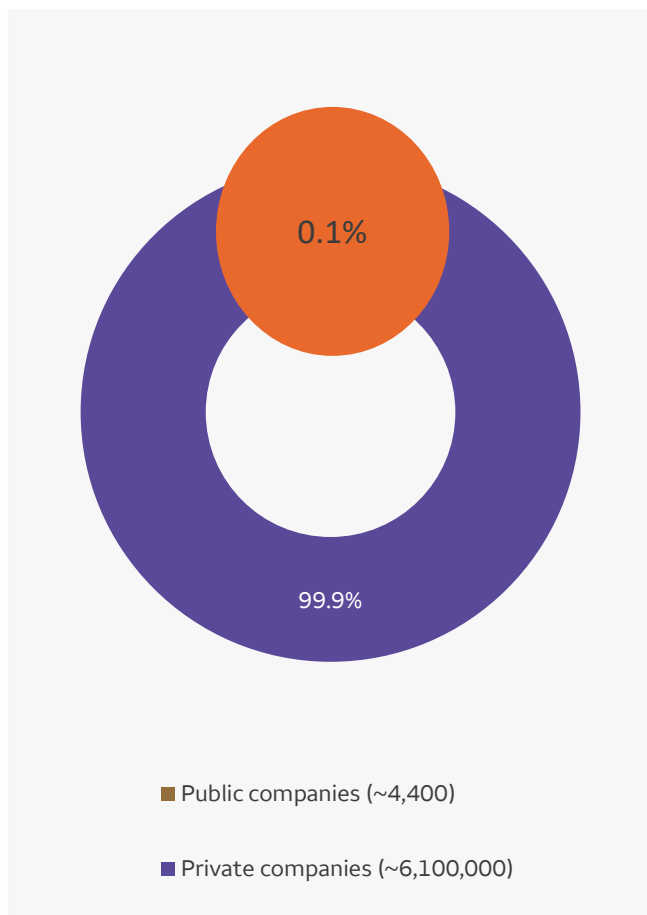
Key takeaways

- Trends in commodities, currencies, and interest rates have led to strong returns for Macro strategies, providing valuable diversification benefits due to a lower correlation to equities.

Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to accredited or qualified investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty.

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Opportunities in Private Equity



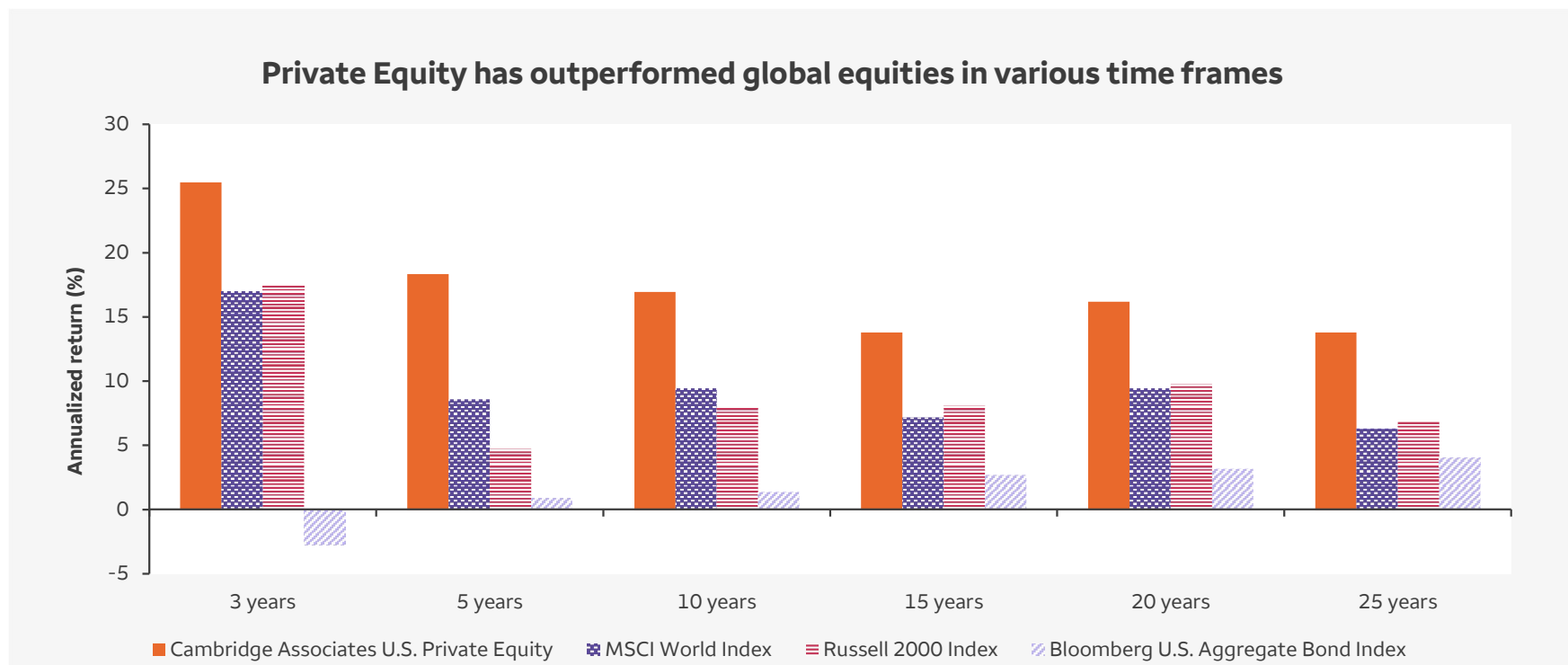
Sources: U.S. Census Bureau, World Federation of Exchanges, and Wells Fargo Investment Institute. Data from January 1, 1980 to August 31, 2023. NYSE = New York Stock Exchange. ~ = approximately. NASDAQ = National Association of Securities Dealers Automated Quotations.

Alternative investments, such as private equity funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and entail significant risks that are appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program.

Key takeaways

- The majority of companies remain private, which inherently offers Private Equity strategies a robust opportunity set.
- The delist rate since 2000 is due to an unusually high rate of acquisitions of publicly listed firms.

Illiquidity premium for Private Equity



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, Cambridge Associates, IHS Markit, and Wells Fargo Investment Institute, as of March 31, 2022. Most recent data lags up to 2 quarters for Cambridge Associates U.S. Private Equity Index. The index representing private equity utilizes a modified private market equivalent (mPME) calculation as a way to replicate private investment performance under public market conditions. Index returns represent general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** More information on the limitations of utilizing this Index can be found on the following page, along with index definitions and asset class risk.

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Key takeaways

- Private Equity funds strive to deliver significant capital appreciation for investors over longer periods of time.
- Private Equity has historically provided an illiquidity premium compared to publicly traded equities. This illiquidity premium has helped compensate investors for the additional risk assumed, in part due to the lack of ease and efficiency to trade or liquidate these assets frequently.

Illiquidity premium for Private Equity Cont'd

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small cap stocks are generally more volatile than large cap stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to interest rate, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates.

Alternative investments, such as private equity funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Private equity funds use complex trading strategies, including hedging and leveraging through derivatives and short selling. These funds often demand long holding periods to allow for a turnaround and exit strategy. Private equity investing involves other material risks including capital loss and the loss of the entire amount invested.

Index definitions

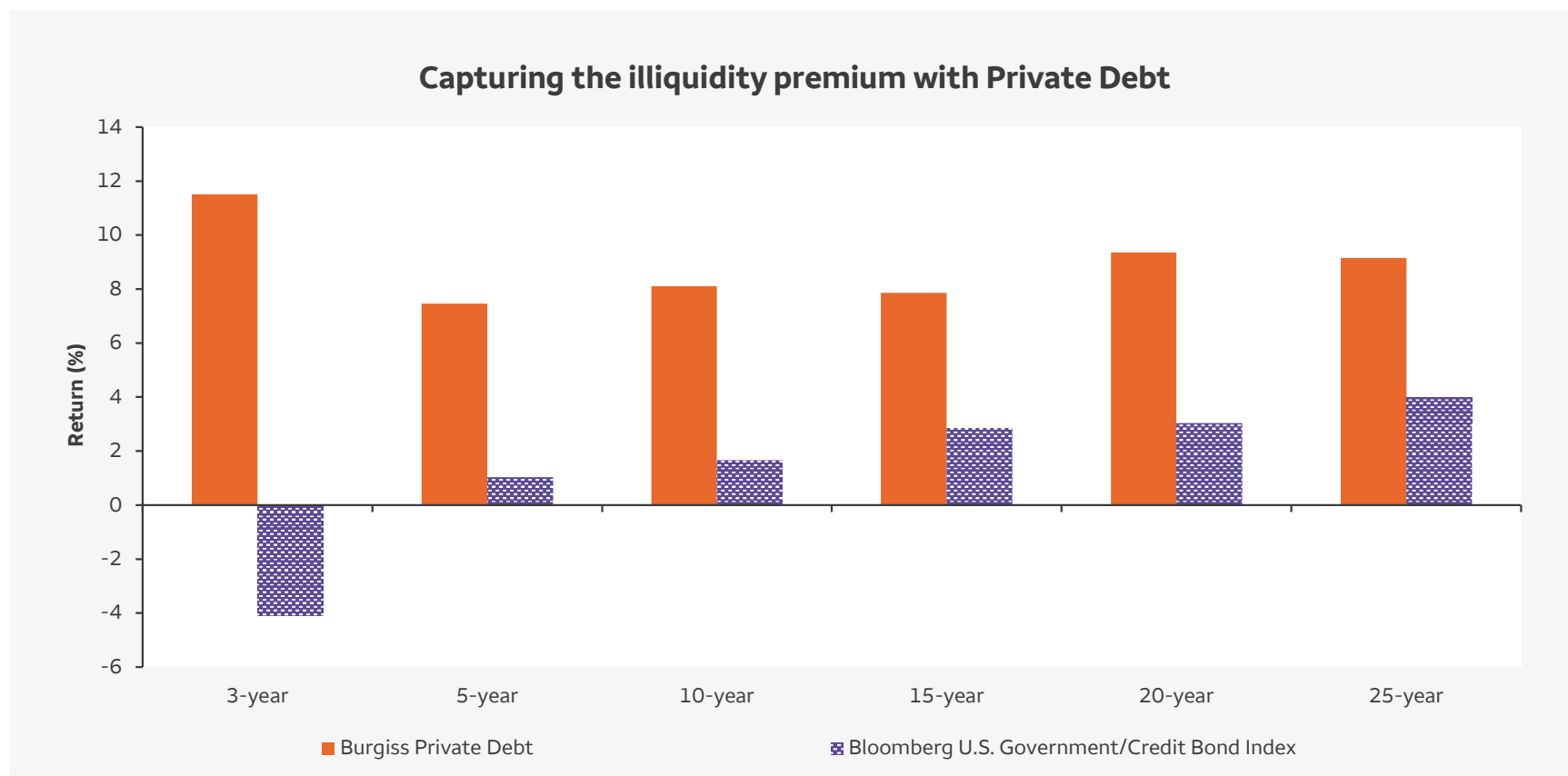
Bloomberg U.S. Aggregate Bond Index is a broad-based measure of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market.

The **Cambridge Associates LLC U.S. Private Equity Index**[®] uses a horizon calculation based on data compiled from more than 1,400 institutional-quality buyout, growth equity, private equity energy, and subordinated capital funds formed after 1986. The funds included in the index report their performance voluntarily and therefore the index may reflect a bias toward funds with records of success. Funds report unaudited quarterly data to Cambridge Associates when calculating the index. The index is not transparent and cannot be independently verified because Cambridge Associates does not identify the funds included in the index. Because Cambridge Associates recalculates the index each time a new fund is added, the historical performance of the index is not fixed, can't be replicated and will differ over time from the day presented. The returns shown are net of fees, expenses and carried interest. Index returns do not represent fund performance.

The **MSCI World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed markets including the United States. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

The **Russell 2000** measures the performance of the 2,000 smallest companies in the Russell 3000[®] Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Private Debt can provide an illiquidity premium



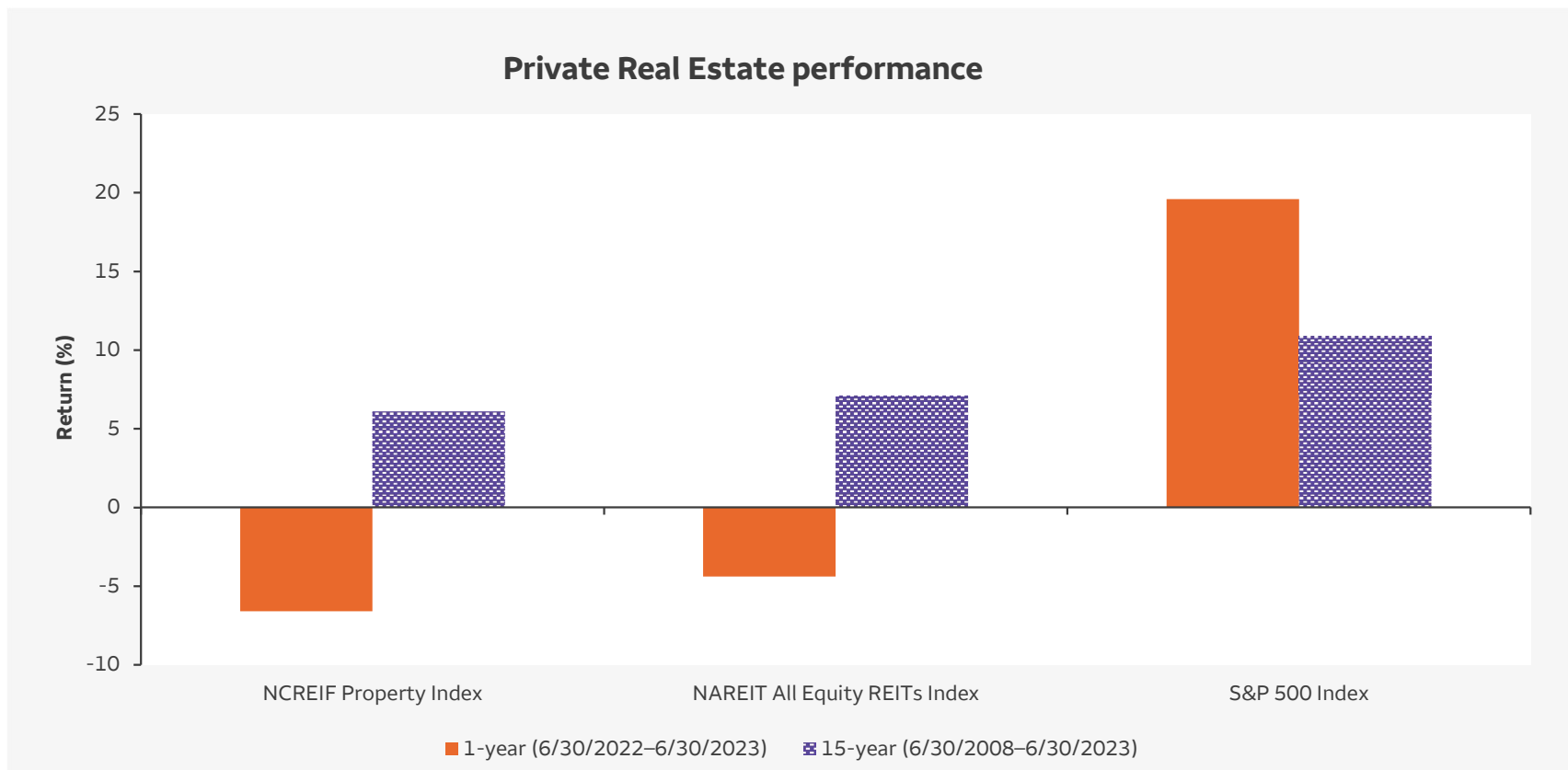
Sources: Bloomberg, The Burgiss Group, LLC (Burgiss), and Wells Fargo Investment Institute, as of June 30, 2023. For illustrative purposes only. The Burgiss Private Debt Index is a pooled quarterly time weighted rate of return series based on data compiled by Burgiss from over 800 private debt funds (generalist, senior, mezzanine, and distressed debt), including fully liquidated partnerships, formed after 1986. The return series is net of fees, expenses, and carried interest. The benchmark is issued on a quarterly basis, approximately 80 calendar days after quarter end. Most recent data lags up to 2 quarters for the Burgiss Private Debt Index. The Bloomberg U.S. Government/Credit Index is a broad-based index that measures the non-securitized component of the Bloomberg U.S. Aggregate Index. It includes investment grade, U.S. dollar-denominated, fixed-rate Treasuries, government-related and corporate securities. Broad-based Indexes do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses, or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- Though less liquid than public debt, Private Debt has historically provided an attractive premium given the complexity of lending to entities that are unable to borrow from traditional capital market sources.

Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Alternative investments, such as private credit funds are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Private equity funds use complex trading strategies, including hedging and leveraging through derivatives and short selling. These funds often demand long holding periods to allow for a turnaround and exit strategy. Private equity investing involves other material risks including capital loss and the loss of the entire amount invested.

Opportunities in Private Real Estate



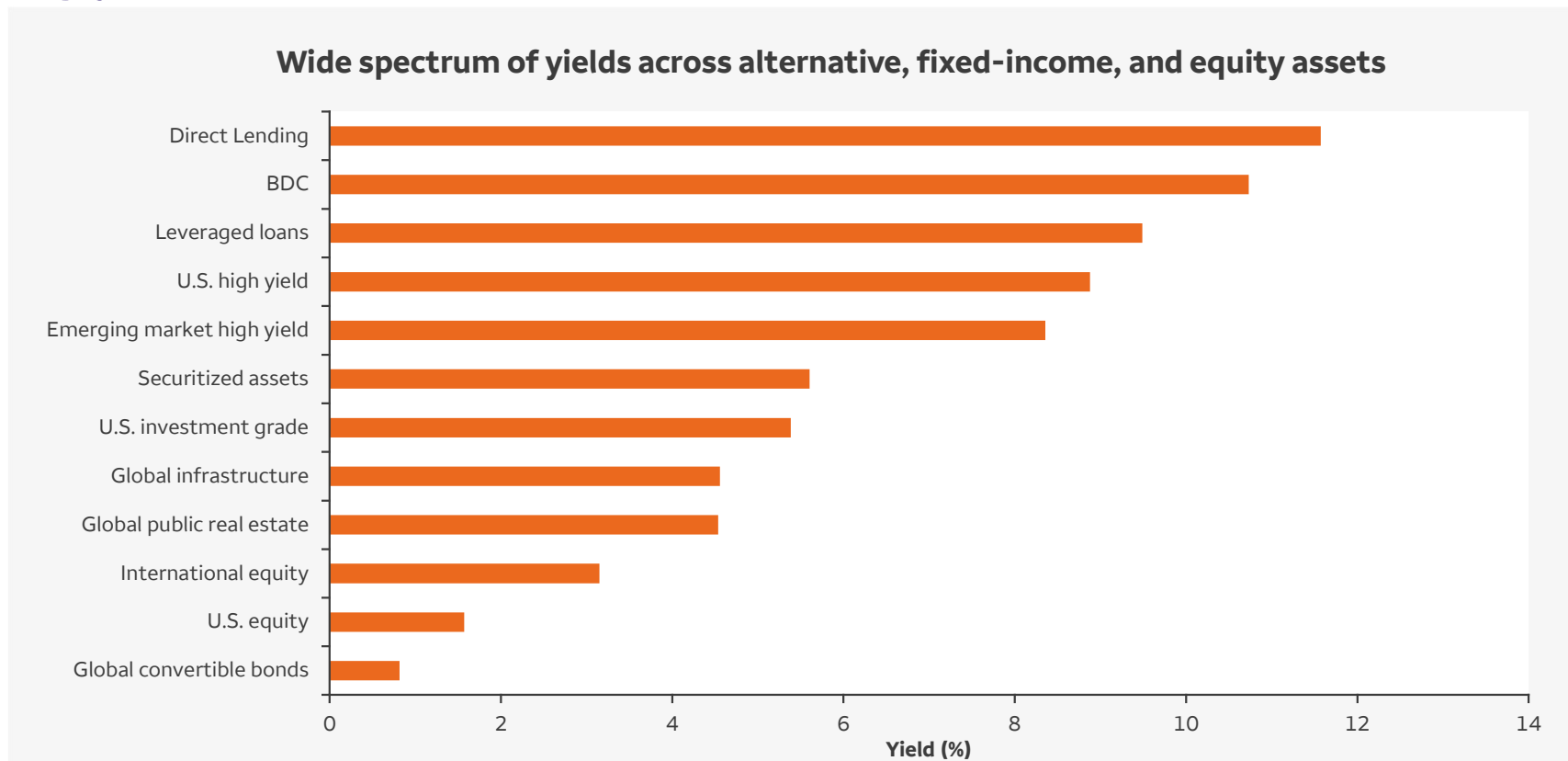
Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries (NCREIF), and Wells Fargo Investment Institute, as of June 30, 2023. For illustrative purposes only. NCREIF Property Index is a composite total return for private commercial real estate properties held for investment purposes only. NAREIT All Equity REIT Index is considered representative of the equity REIT market. S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market-value-weighted index with each stock's weight in the index proportionate to its market value. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Private real assets are not appropriate for all investors. REITs have special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions

Key takeaways

- Despite difficult current conditions, private real assets have returned mid-single digits over a full market cycle, offering diversification through non-correlated return streams.
- Private Real Estate (a sub-strategy of private real assets) features various strategies with differing risk-return profiles. At this point in the cycle, higher interest rates and slowing growth have increased risks and weighed on recent returns.

Finding yield in alternative sources



Sources: Bloomberg, Cliffwater, Morgan Stanley Capital International (MSCI), and Wells Fargo Investment Institute, as of September 30, 2023. Direct lending yield is as of June 30, 2023. For illustrative purposes only. BDC = Business Development Companies. Direct lending: Cliffwater Direct Lending Index; BDC: Cliffwater BDC Index; Emerging market high yield: Bloomberg Emerging Markets High Yield; U.S. high yield: Bloomberg U.S. Corporate High Yield; Leveraged loans: S&P/LSTA U.S. Leveraged Loan 100 Index; Global infrastructure: MSCI World Infrastructure Index; Global public real estate: FTSE NAREIT Equity REITs Index; International equity: MSCI All Country World ex-U.S. Index; Securitized assets: Bloomberg U.S. Securitized: MBS/ABS/CMBS; U.S. investment grade: Bloomberg U.S. Aggregate Bond Index; U.S. equity: MSCI USA Index; Global convertible bonds: Bloomberg Global Convertibles Composite Index. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Please see following slide for the definitions of the indexes.

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to interest rate, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. REITs have special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. Business Development Companies (BDC) involve economic, credit and liquidity risks in addition to the special risks associated with investing in a portfolio of small and developing or financially trouble businesses.

Key takeaways

- Alternative investments can be a source of income for investors seeking to diversify their fixed income portfolios.
- Yields are attractive for Direct Lending strategies and business development companies (BDCs).

Finding yield in alternative sources Cont'd

Alternative investments, such as private equity funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Private equity funds use complex trading strategies, including hedging and leveraging through derivatives and short selling. These funds often demand long holding periods to allow for a turnaround and exit strategy. Private equity investing involves other material risks including capital loss and the loss of the entire amount invested.

Index definitions

Bloomberg Global Convertibles Index blends the three regional Bloomberg Convertibles indexes - the U.S. Convertibles Index, the MEA Convertibles Index, and the APAC Convertibles Index - into a single global benchmark for the convertible asset class. The Global Convertibles Index is rules-based with an objective and transparent set of criteria used for index membership determination and rebalancing.

Bloomberg U.S. Aggregate Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.

Bloomberg U.S. Corporate High Yield Bond Index covers the U.S.-dollar-denominated, non-investment-grade, fixed-rate, taxable corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB= or below. Included issues must have at least one year until final maturity.

Bloomberg U.S. Securitized: MBS/ABS/CMBS racks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC); investment grade debt asset backed securities; and investment grade commercial mortgage backed securities.

Cliffwater BDC Index measures the performance of lending-oriented, exchange-traded Business Development Companies (BDCs), subject to certain eligibility criteria regarding portfolio composition, market capitalization, and dividend history. The CWBDC is a capitalization-weighted index that is calculated on a daily basis using publicly-available closing share prices and reported dividend payouts.

Cliffwater Direct Lending Index seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements.

FTSE NAREIT Equity REITS Index is a broad-based index consisting of real estate investment trusts (REITs). This excludes any equity REITs that are designated as Timber REITs.

J.P. Morgan EMBI Global Index (USD) is a U.S.-dollar-denominated, investible, market-cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. While products in the asset class have become more diverse, focusing on both local currency and corporate issuance, there is currently no widely accepted aggregate index reflecting the broader opportunity set available, although the asset class is evolving. By using the same index provider as the one used in the developed market bonds asset class, there is consistent categorization of countries among developed international bonds (ex-U.S.) and emerging market bonds.

MSCI World Infrastructure is a free float-adjusted market cap weighted index. Its members are infrastructure owners and operators who tend to demonstrate highly inelastic demand patterns, stable, predictable returns and inflation-linked pricing power. Includes companies in the telecom, utilities, energy, transportation and social infra sectors.

MSCI All Country World ex USA Index is a free-float weighted equity index that is designed to measure the equity market performance of 22 developed and 23 emerging markets.

MSCI USA Index is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of the United States.

The S&P/LSTA U.S. Leveraged Loan 100 Index is designed to reflect the performance of the largest facilities in the leveraged loan market.

Note: MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

U.S. dollar

- The U.S. Dollar Index (DXY) climbed higher during the third quarter. A resilient U.S. economy coupled with an expectation for higher U.S. interest rates fostered support for the dollar, highlighting U.S. optimism relative to other major currencies.
- We expect the DXY to range-trade at current levels, or slightly higher, through year-end, supported by a more resilient U.S. economy compared to conditions in Europe, Japan, and the BRICS (Brazil, Russia, India, China, and South Africa) nations.

Developed currencies

- A stronger dollar and deteriorating European data by quarter-end contributed to the euro slipping below 1.08, a level it traded above for most of the quarter. We believe that the euro will remain near current levels, as the European Central Bank should keep rates higher for longer to tackle inflation in the region.
- Disappointed expectations of an early Bank of Japan policy change, coupled with an uptick in U.S. rate expectations saw the yen decline below 145 late in the quarter, its weakest level since late 2022. A continued cooling of a China recovery euphoria and the weaker yuan also weighed on the yen.

Emerging currencies

- The dollar's appreciation also affected emerging market (EM) currencies. Continued declines in the yuan dragged Asian and other commodity-linked currencies broadly lower.
- We expect that EM currencies may follow the dollar's range trading in the fourth quarter. We do not foresee yuan weakness extending much further; higher rates in EM countries may offer better support than for developed market (DM) counterparts.

Currencies scorecard

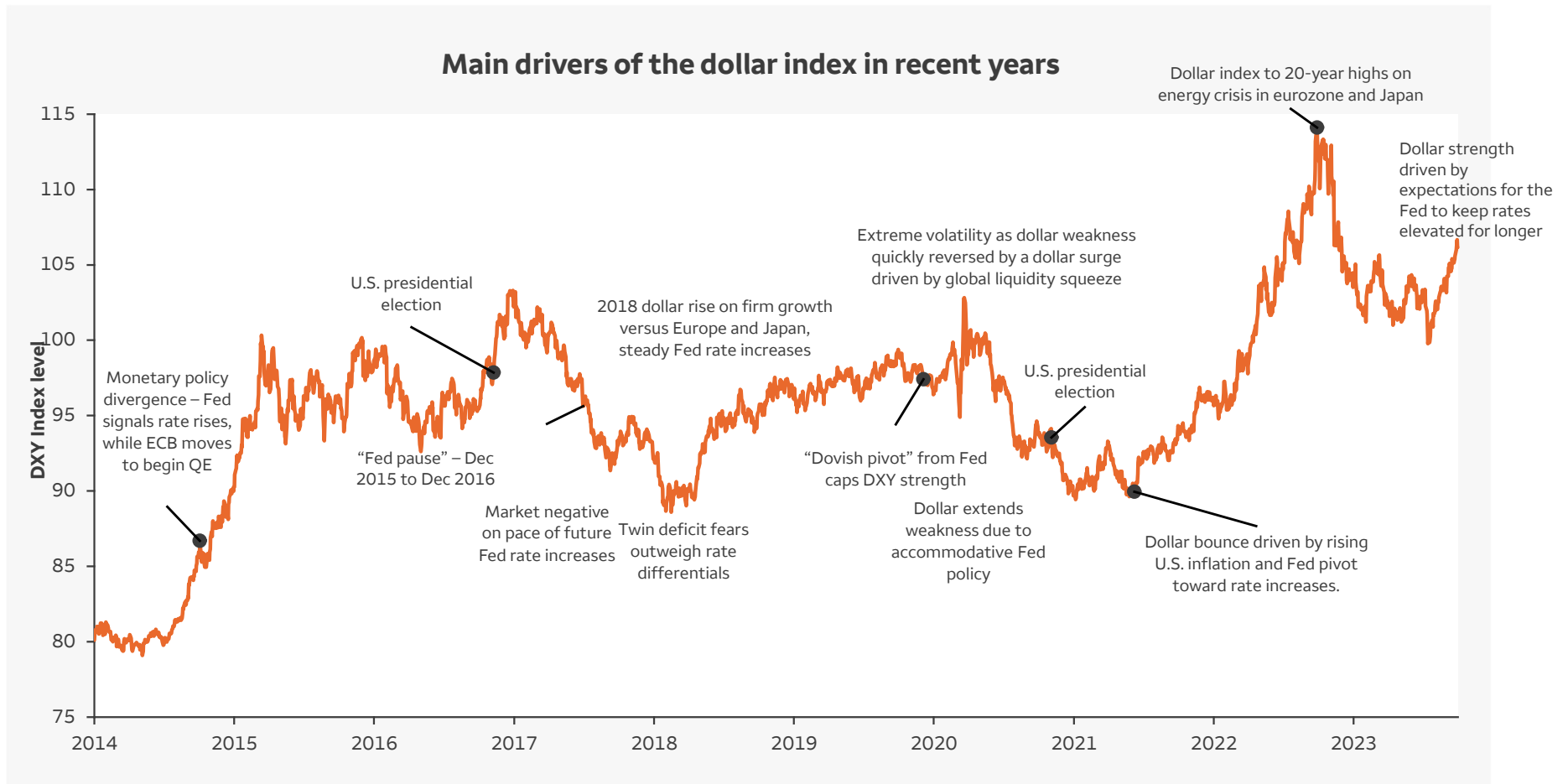
Currency	3Q23	QOQ change (%)	YOY change (%)	Year-end 2022
DXY Index	106.17	2.74	-5.30	103.52
Euro (dollars per euro)	\$1.06	-2.69	7.87	\$1.07
Japanese yen (yen per dollar)	¥149.37	3.18	-3.20	¥131.12
British pound sterling (dollar per pound)	\$1.22	-3.28	9.21	\$1.21
Chinese renminbi (yuan per dollar)	¥7.30	0.70	-2.56	¥6.90

Sources: Bloomberg and Wells Fargo Investment Institute, as of September 30, 2023. QOQ = quarter over quarter. YOY = year over year. The DXY Index measures the value of the U.S. dollar relative to major developed market currencies, notably the euro, the Japanese yen, and the British pound. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- The U.S. Dollar Index climbed higher during the third quarter. A resilient U.S. economy coupled with an expectation for higher U.S. interest rates fostered support for the U.S. dollar. The euro declined, breaching the 1.08 level, and the yen fell below 145 to the dollar as expectations of early policy change faded.
- As weaker data confirmed a lackluster Chinese recovery, the yuan extended second-quarter declines below ¥7.20 to the dollar. This hindered currencies elsewhere in Asia, particularly those tied closely to prospects on mainland China.

U.S. dollar expected to range-trade below 2022 peaks

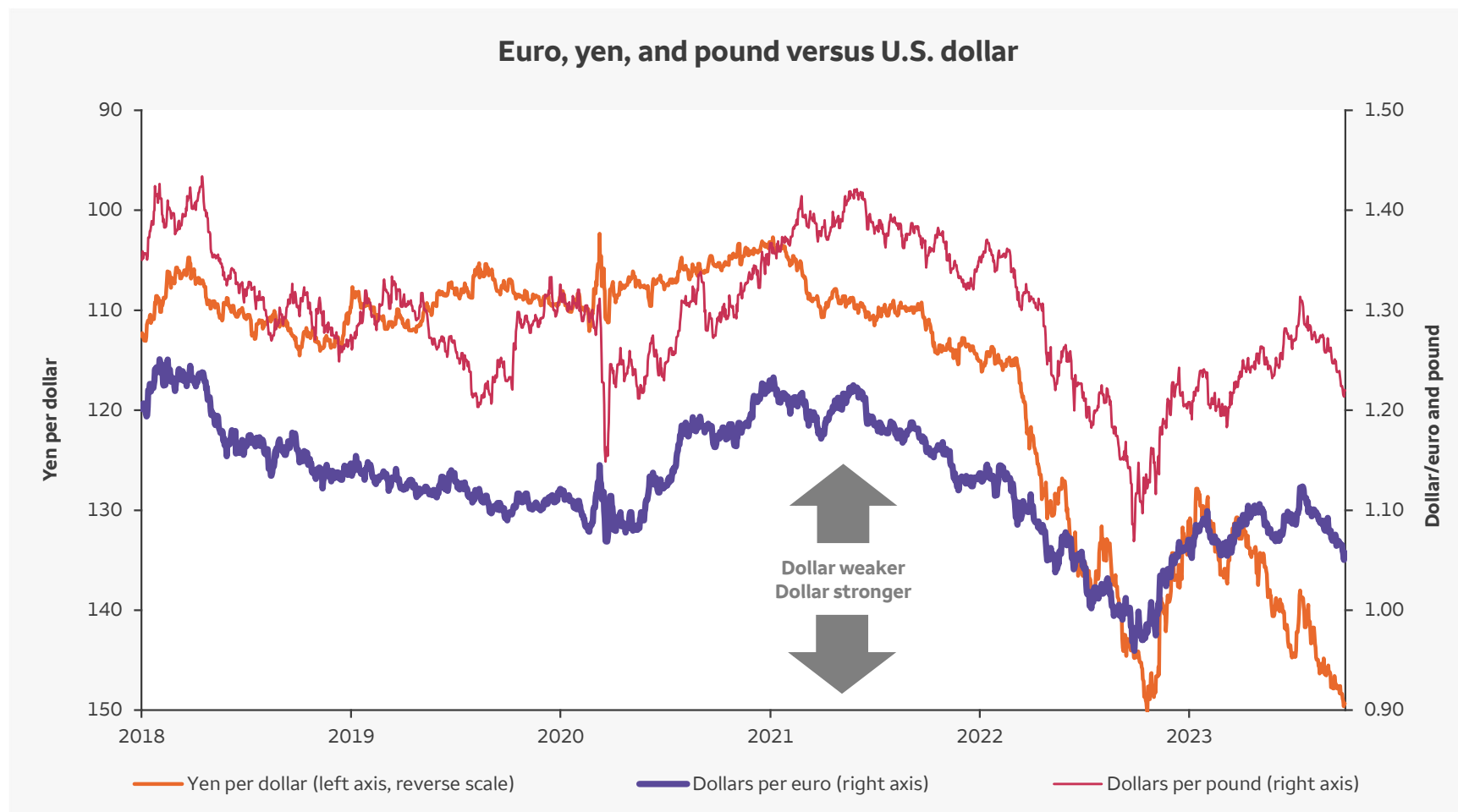


Sources: Bloomberg and Wells Fargo Investment Institute. Daily data from January 1, 2014 to September 30, 2023. The DXY Index measures the value of the U.S. dollar relative to major developed market currencies, notably the euro, the Japanese yen, and the British pound. Fed = Federal Reserve. ECB = European Central Bank. QE = quantitative easing. DXY = U.S. Dollar Index. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- We expect the U.S. Dollar Index to range-trade at current levels, or slightly higher, through year-end, supported by a more resilient U.S. economy compared to conditions in Europe, Japan, and the BRICS (Brazil, Russia, India, China, and South Africa) nations.
- Emerging market currencies may remain under pressure through developed market recessions but could be poised for recovery once the Federal Reserve reverses its rate-hike cycle.

Euro and yen have succumbed to dollar strength



Sources: Bloomberg and Wells Fargo Investment Institute. Daily data from January 1, 2018 to September 30, 2023.

Key takeaways

- The euro may be contained within recent ranges as the Federal Reserve continues to increase rates and a forthcoming recession hits the eurozone hard, as we expect, complicating the European Central Bank's inflation fight.
- The yen may have seen its lows as traders will likely respond to intervention on further weakness, but — failing a faster-than-expected policy normalization from the Bank of Japan — it may not see further gains until the U.S. dollar turns lower.

“De-dollarization” fears are overblown

Share of international and foreign currency banking claims and liabilities



Sources: U.S. Federal Reserve, Bank for International Settlements and Wells Fargo Investment Institute. Annual data from January 1, 2000 to December 31, 2020. Data shows share of banking claims and liabilities across national borders or denominated in a foreign currency, excludes intra-euro area international liabilities and claims, and is at current exchange rates.

Key takeaways

- Moves to denominate some trade transactions in Chinese yuan and other non-U.S.-dollar currencies have led to a surge in reports about “de-dollarization” and the loss of the U.S. currency’s dominant role in global finance.
- The U.S. dollar’s leading share in global banking and trade, backed by the rule of law and robust institutions, cannot easily be replaced.

Local-currency vs. U.S. dollar-denominated returns

Annual returns for local-currency and U.S.-dollar-denominated equity and fixed income indexes

Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
U.S. Dollar Index	1.50	1.46	-0.51	0.37	12.68	9.25	3.57	-9.87	4.26	0.32	-6.75	6.37	8.21	2.56
MSCI EAFE Index (local currency)	5.26	-11.74	17.89	27.46	6.38	5.78	5.88	15.77	-10.54	22.31	1.28	19.25	-6.52	11.20
MSCI EAFE Index (U.S. dollar)	8.21	-11.73	17.90	23.29	-4.48	-0.39	1.51	25.62	-13.36	22.66	8.28	11.78	-14.01	7.59
MSCI EM Index (local currency)	14.40	-12.47	17.39	3.79	5.57	-5.40	10.11	31.00	-9.73	18.52	19.50	0.14	-15.16	4.40
MSCI EM Index (U.S. dollar)	19.20	-18.17	18.63	-2.27	-1.82	-14.60	11.60	37.75	-14.25	18.90	18.69	-2.22	-19.74	2.16
J.P. Morgan GBI Global (Hedged)	3.36	4.71	5.11	1.26	9.95	1.56	4.19	0.50	1.11	5.25	3.36	-2.56	-13.88	-0.68
J.P. Morgan GBI Global (Unhedged)	6.78	5.91	0.84	-5.08	-2.53	-4.84	1.86	9.92	-1.68	5.23	10.52	-9.51	-21.87	-5.43
J.P. Morgan GBI EM Global Index (local currency)	15.44	-1.91	14.98	-8.52	-4.68	-16.98	11.73	15.23	-5.98	13.83	1.32	-3.73	-8.65	1.55
J.P. Morgan EMBI Global Index (dollar denominated)	12.04	8.46	18.54	-6.58	5.53	1.23	10.19	9.32	-4.61	14.42	5.88	-1.51	-16.45	1.09

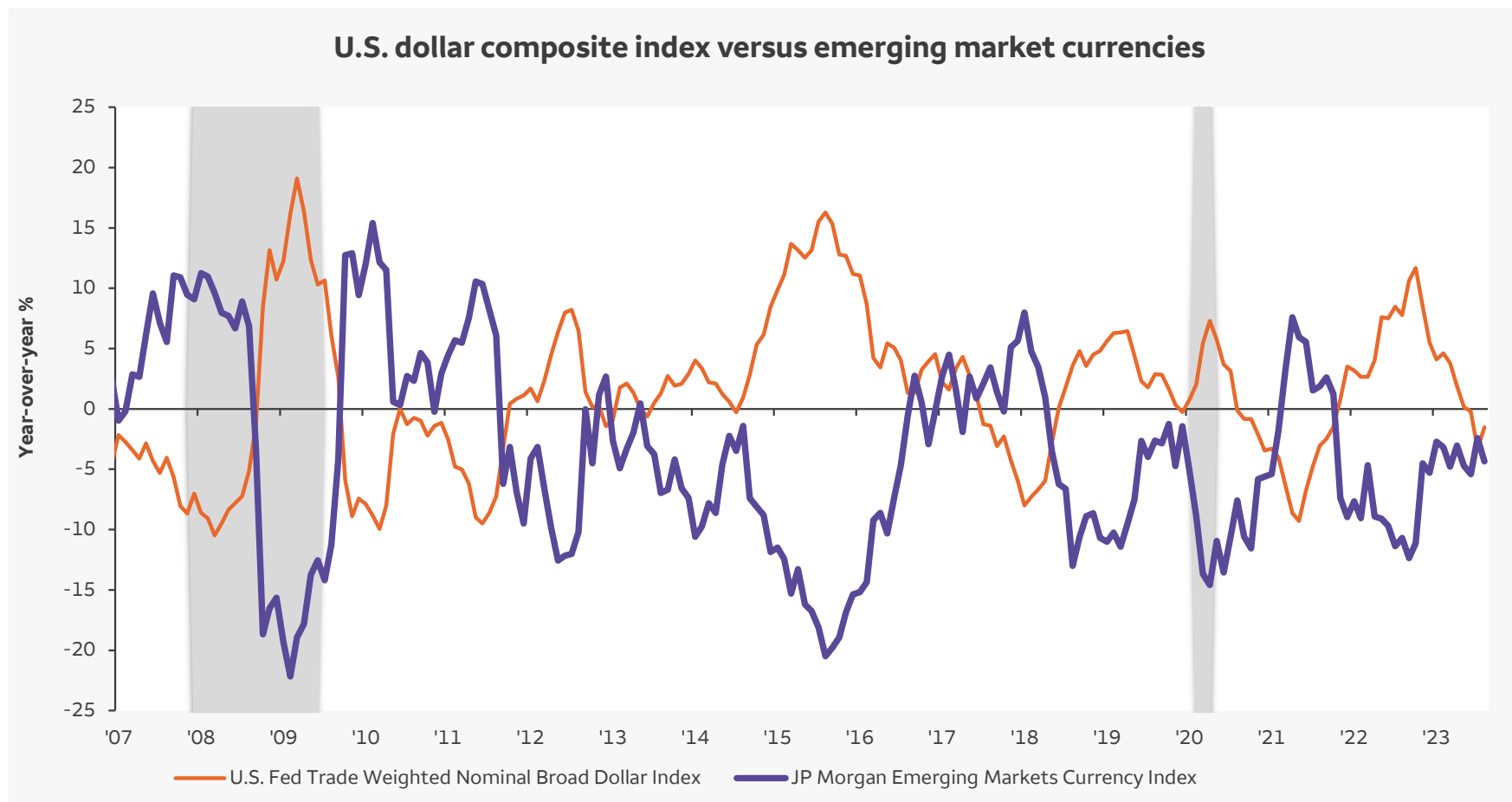
Sources: Bloomberg, © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute, as of September 30, 2023. For illustrative purposes only. YTD = year to date. **The higher value for local currency/hedged vs. U.S. dollar denominated/unhedged is highlighted in green.** MSCI EAFE Index is designed to represent the performance of large and mid-cap securities across 21 developed markets, including countries in Europe, Australasia and the Far East, excluding the U.S. and Canada. The MSCI Emerging Markets Index (USD/Local) is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. J.P. Morgan GBI Global ex-U.S. (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets. J.P. Morgan GBI Global ex-U.S. (Hedged) is an unmanaged market index representative of the total return performance, on a hedged basis, of major non-U.S. bond markets. J.P. Morgan Emerging Markets Bond Index Global (EMBI Global) is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. J.P. Morgan Emerging Markets Bond Index Global (Local Currency) (USD Unhedged) is a comprehensive global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indexes or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. Currency risk is the risk that foreign currencies will decline in value relative to that of the U.S. dollar. Exchange rate movements between the U.S. dollar and foreign currencies may cause the value of an investment to decline.

Key takeaways

- International assets, priced in U.S. dollars, have tended to underperform their local-currency-denominated counterparts when the U.S. dollar is up strongly.
- In 2022, equity and fixed-income indexes priced in their local currency (or unhedged) declined far less than U.S.-dollar-denominated indexes. Year to date, the trend of local-currency-denominated outperformance has continued.

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Emerging market currencies have mirrored the U.S. dollar



Sources: Bloomberg, Federal Reserve, and Wells Fargo Investment Institute. Monthly data from January 1, 2007 to September 30, 2023. Shaded areas represent periods of a U.S. economic recession. The U.S. Fed Trade Weighted Nominal Broad Dollar Index is a weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of major U.S. trading partners. The J.P. Morgan Emerging Market Currency Index tracks the performance of emerging market currencies relative to the U.S. dollar. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Foreign investing involves risks typically not associated with investing domestically, including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Currency risk is the risk that foreign currencies will decline in value relative to that of the U.S. dollar. Exchange rate movements between the U.S. dollar and foreign currencies may cause the value of an investment to decline.

Key takeaways

- Emerging market (EM) currencies were mostly weaker in the third quarter. The Chinese yuan extended declines beyond ¥7.20 to the dollar, and this continued to pressure Asian and commodity-linked currencies lower.
- EM currencies may remain under pressure through developed-market (DM) recessions, although supported by higher interest rates than in DMs. They could be poised for recovery once the Fed reverses its rate-hike cycle and economies start to recover.

Background

- Historical performance may serve as a useful guide for investors, but markets frequently trade on factors outside of fundamental valuations for long periods of time.

Potential benefits of diversification and rebalancing

- Regularly rebalancing a portfolio can add value.
- Because each asset class has unique risk, return, and correlation characteristics, a diversified allocation has the potential to provide more consistent returns with lower volatility.
- Attempting to reduce downside volatility can be critical to long-term performance, as it can allow a portfolio to recover more quickly after a crisis event.
- It is important to recognize that the more a portfolio loses in a downturn, the longer it takes to recoup those losses.
- Diversification has tended to reduce the time it takes to break even from a downside event.

Dangers of market timing

- Missing even a handful of days when the market achieves its best gains can dramatically reduce returns.
- Exiting the market after a bad day could be costly. The stock market's best days have often been preceded by the worst days.
- We do not advocate market timing, but we do believe that modest tactical shifts have the potential to take advantage of short-term investment opportunities or help mitigate short-term risks.

Asset allocation scorecard

Diversified allocation	3Q23 return (%)	2Q23 return (%)	YTD return (%)	YOY return (%)	3-year return (% annualized)
Moderate income liquid	-2.86	1.60	2.40	6.80	-0.80
Moderate growth and income liquid	-2.86	3.05	4.38	10.94	2.79
Moderate growth liquid	-3.13	4.34	5.97	14.60	5.47
60% MSCI ACWI/40% Bloomberg Multiverse	-3.40	1.71	2.96	9.94	-1.07
60% S&P 500 Index/40% Bloomberg U.S. Aggregate Bond Index	-3.26	4.91	7.26	12.93	4.00

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute, as of September 30, 2023. YTD = year to date. YOY = year over year. Performance results for Moderate Income, Moderate Growth and Income, Moderate Growth, and the 60/40 blends are calculated using blended index returns and are for illustrative purposes only. Moderate Income, Moderate Growth & Income, and Moderate Growth allocations are dynamic and change as needed with adjustments to the strategic allocations. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results; assume the reinvestment of dividends and other distributions; and do not reflect deductions for fees, expenses, or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance does not guarantee future results.** [See following page for blended index compositions of the Moderate Income, Moderate Growth and Income, Moderate Growth Liquid, and 60/40 blends, risks and index definitions.]

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Key takeaways

- Our analysis shows a diversified allocation has typically helped smooth out returns over time.
- Adding diversifiers, like Commodities and, where appropriate, Hedge Funds, can help enhance return potential and mitigate risk in a traditional portfolio consisting of stocks and bonds.

Asset allocation scorecard Cont'd

Risk considerations

Asset allocation cannot eliminate the risk of fluctuating prices and uncertain returns.

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Allocation compositions

- **Moderate Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 60% Bloomberg U.S. Aggregate Bond Index, 4% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 16% S&P 500 Index, 5% Russell Midcap Index, 2% Russell 2000 Index, 4% MSCI EAFE Index, 2% Bloomberg Commodity Index.
- **Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.
- **Moderate Growth:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 8% Bloomberg U.S. Aggregate Bond Index, 3% Bloomberg U.S. Corporate High Yield Bond Index, 31% S&P 500 Index, 14% Russell Midcap Index, 10% Russell 2000 Index, 15% MSCI EAFE Index, 12% MSCI Emerging Markets Index, 5% Bloomberg Commodity Index.

60/40 Blends: 60% MSCI ACWI/40% Bloomberg Multiverse Index; 60% S&P 500 Index/40% Bloomberg Aggregate Bond Index

Index definitions

Bloomberg Multiverse Index provides a broad-based measure of the global fixed-income bond market. The index represents the union of the Global Aggregate Index and the Global High-Yield Index and captures investment grade and high yield securities in all eligible currencies. **Bloomberg U.S. Treasury Bills (1-3M) Index** is representative of money markets. **Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. **JPMorgan EMBI Global Index (USD)** is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. **MSCI All Country World Index (ACWI)** is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world. It consists of 46 country indexes comprising 23 developed and 23 emerging market countries. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000[®] Index, which represent approximately 25% of the total market capitalization of the Russell 1000[®] Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000[®] Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

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Market conditions can determine the choice of strategy



Catastrophe

Cash
U.S. IG fixed income
Commodities
Hedge funds
Managed futures



Income

U.S. IG bonds
U.S. high-yield fixed income
Int'l bonds (DM/EM)
Large- and mid-cap equity
DM equity
Real estate



Volatility

U.S. IG fixed income
DM fixed income
Hedge funds
Managed futures



Liquidity

Cash
U.S. IG fixed income
DM fixed income
Large-cap equity
DM equity



Inflation

TIPS or short-term fixed income
Domestic equity
Int'l equity (DM/EM)
Real estate
Commodities



Growth

U.S. high-yield fixed income
EM fixed income
U.S. equity
Int'l equity (DM/EM)
Real estate
Private Equity

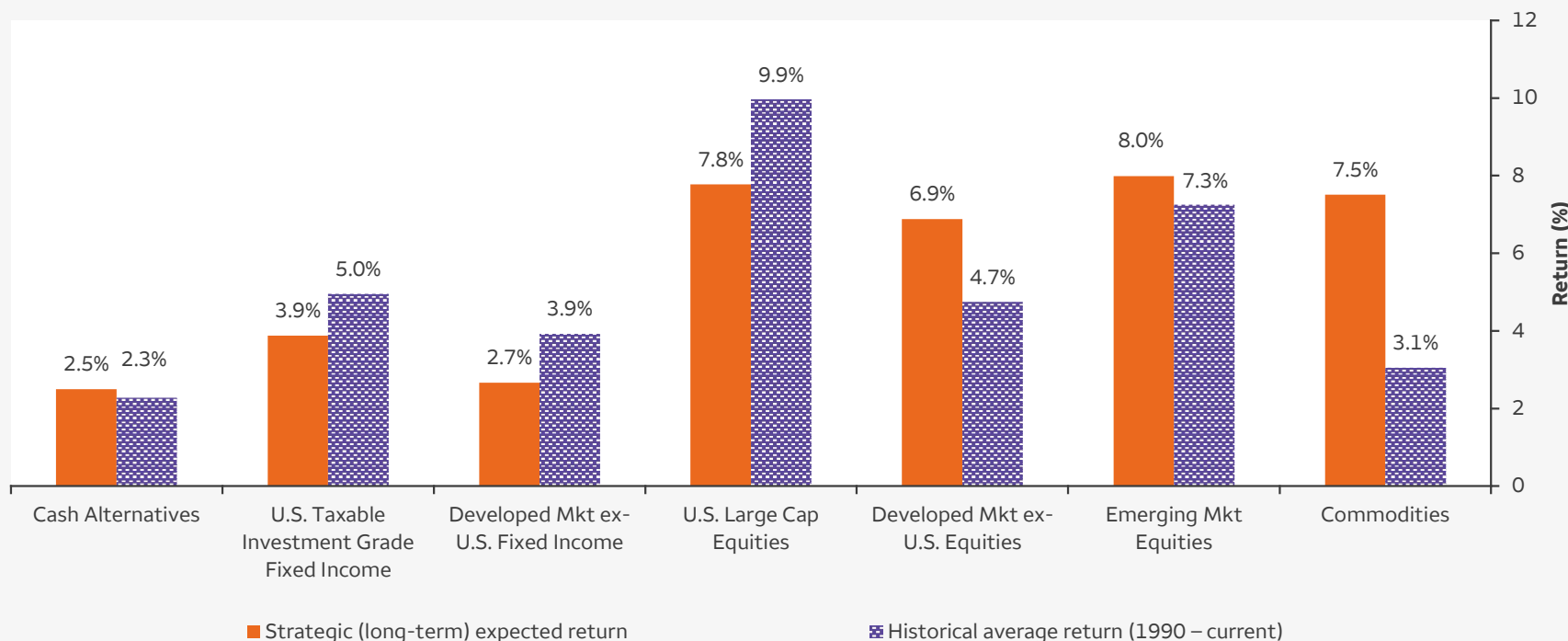
Source: Wells Fargo Investment Institute, as of September 30, 2023. IG = investment grade. DM = developed markets. EM = emerging markets. TIPS = Treasury Inflation-Protected Securities. Hedge Funds, Managed Futures, Real Estate, and Private Equity funds are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of U.S. securities laws. Equity, fixed income, foreign, cash alternatives, and alternative investments are materially different investments with materially different risk and reward characteristics. These risk and reward characteristics should be evaluated carefully before making any investment decision.

Key takeaways

- Certain asset classes can be appropriate under different circumstances or for different investment objectives.
- Our research indicates that the top-performing asset classes when inflation is above average have been U.S. Mid Cap Equities and Commodities, represented by the Russell Midcap Index and Bloomberg Commodity Index, respectively.

Expect returns near historical averages

We are forecasting long-term returns near historical averages



Sources: Bloomberg and Wells Fargo Investment Institute. Historical average returns are for data from January 1, 1990 to September 30, 2023. Strategic (long-term) return assumptions are as of July 18, 2023. Forecasts are based on certain assumptions and on views of market and economic conditions which are subject to change. Strategic expected returns are forward-looking geometric return estimates from Wells Fargo Investment Institute of how asset classes and combinations of classes may respond during various market environments. Expected returns do not represent the returns that an investor should expect in any particular year. They are not designed to predict actual performance and may differ greatly from actual performance. There are no assurances that any estimates given will be achieved. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Indexes in order represented by Bloomberg U.S. Treasury Bill (1–3 Month) Index, Bloomberg U.S. Aggregate Bond Index, JP Morgan GBI Global Ex U.S. Index, S&P 500 Index, MSCI EAFE Index, MSCI Emerging Markets Index, Bloomberg Commodity Index. See following page for index definitions and risks.

Key takeaways

- Investors may need to consider saving more or spending less in this environment to reach their financial goals.

Expect lower returns for longer Cont'd

Risk considerations

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Index definitions

Bloomberg U.S. Treasury Bills (1-3M) Index is representative of money markets.

Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S.-dollar-denominated, fixed-rate taxable bond market.

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually, weighted two-thirds by trading volume and one-third by world production, and weight-caps are applied at the commodity, sector, and group level for diversification.

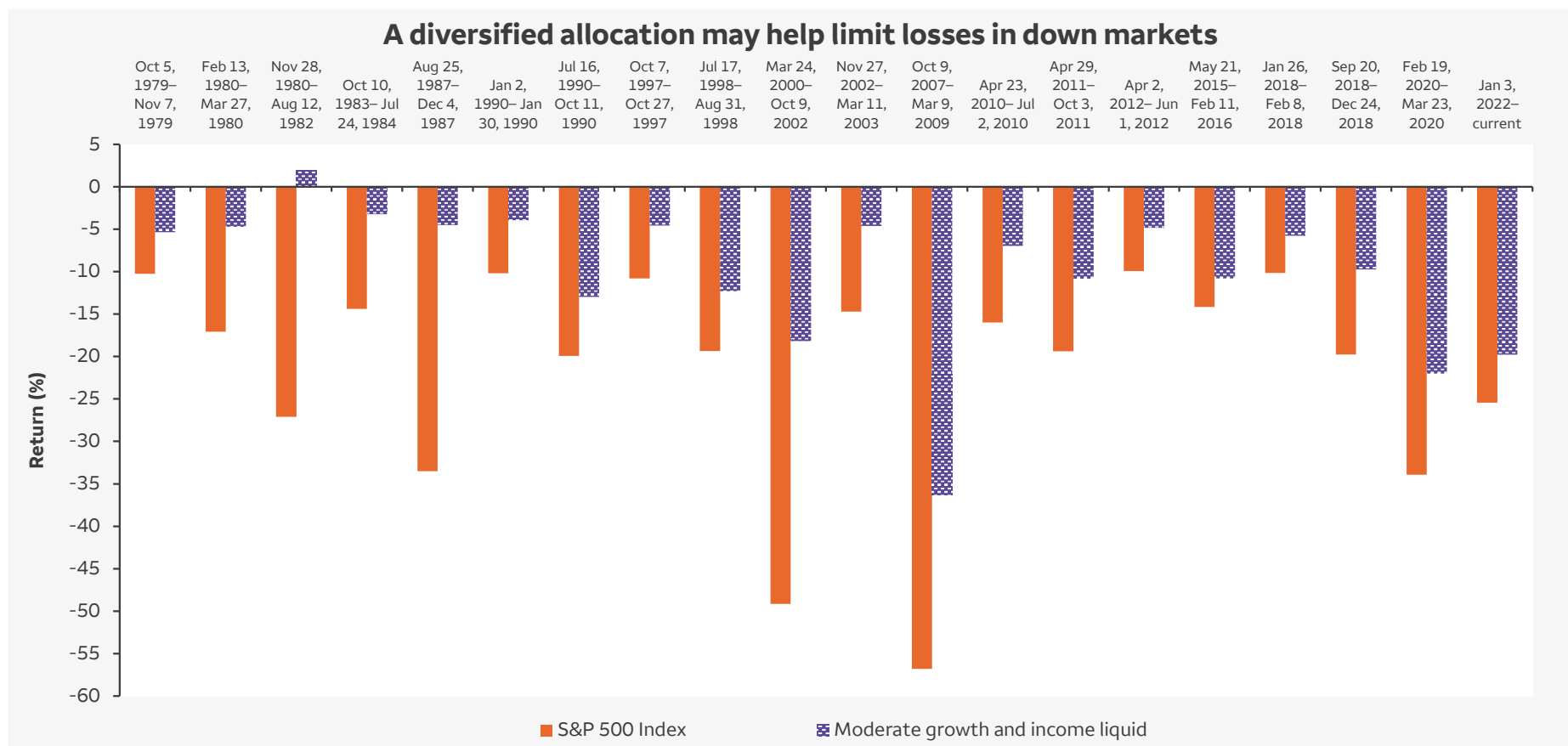
JPMorgan GBI Global ex-U.S. Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world.

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S&P 500 Index is a market capitalization-weighted index generally considered representative of the U.S. stock market. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions.

Diversification may reduce downside risk



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from October 5, 1979 to September 30, 2023. January 3, 2022 to current decline is as of September 30, 2023 and is the peak to trough decline, with trough of October 12, 2022. Performance results for Moderate Growth and Income Liquid are calculated using blended index returns and is presented for illustrative purposes only. Moderate Growth & Income allocation is dynamic and changes as needed with adjustments to the strategic allocations. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance does not guarantee future results.** Blended index composition provided on the following page.

Note: Corrections are declines of 10% or more. Bear markets are declines of 20% or more.

Diversification strategies do not guarantee investment returns or eliminate the risk of loss.

Key takeaways

- A diversified allocation may not experience losses as sharp as an all-equity position during an equity correction or bear market.
- Attempting to reduce downside volatility can be critical to long-term performance, as it can allow a portfolio to recover more quickly after a crisis event.

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Diversification may reduce downside risk Cont'd

Risk considerations

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Allocation composition

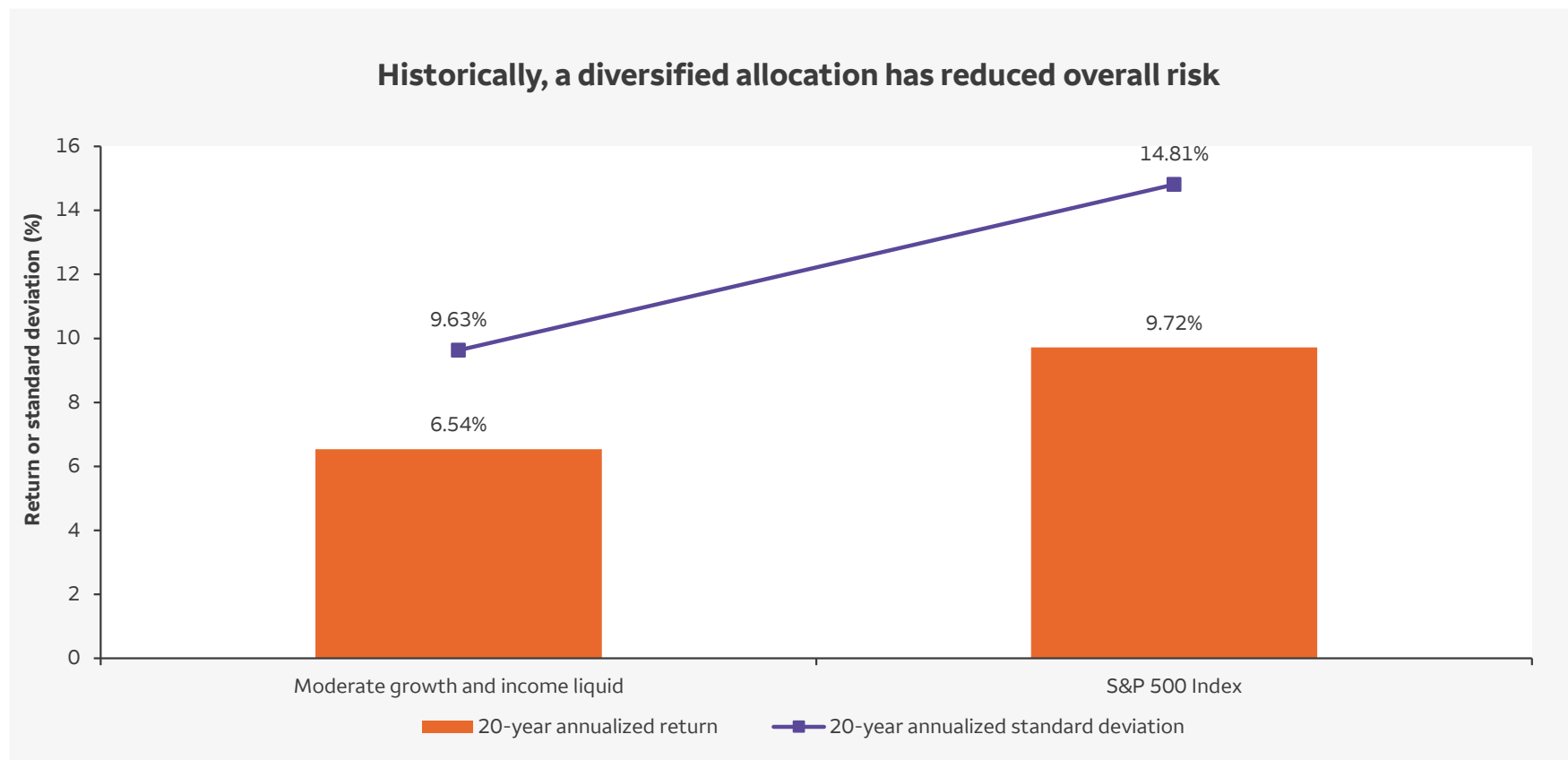
- **Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.

Index definitions

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. **Bloomberg U.S. Treasury Bills (1-3M) Index** is representative of money markets. **Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **JPMorgan EMBI Global Index (USD)** is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

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Diversification may improve risk-adjusted returns



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Diversification does not guarantee investment returns or eliminate risk of loss.

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Key takeaways

- Over time, a diversified allocation has helped mitigate volatility during times of market uncertainty and smooth out returns.
- Real assets and alternative investments can add an element of diversification to a traditional portfolio comprised of stocks and bonds.

Diversification may improve risk-adjusted returns Cont'd

Risk considerations

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Allocation Composition

- **Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.

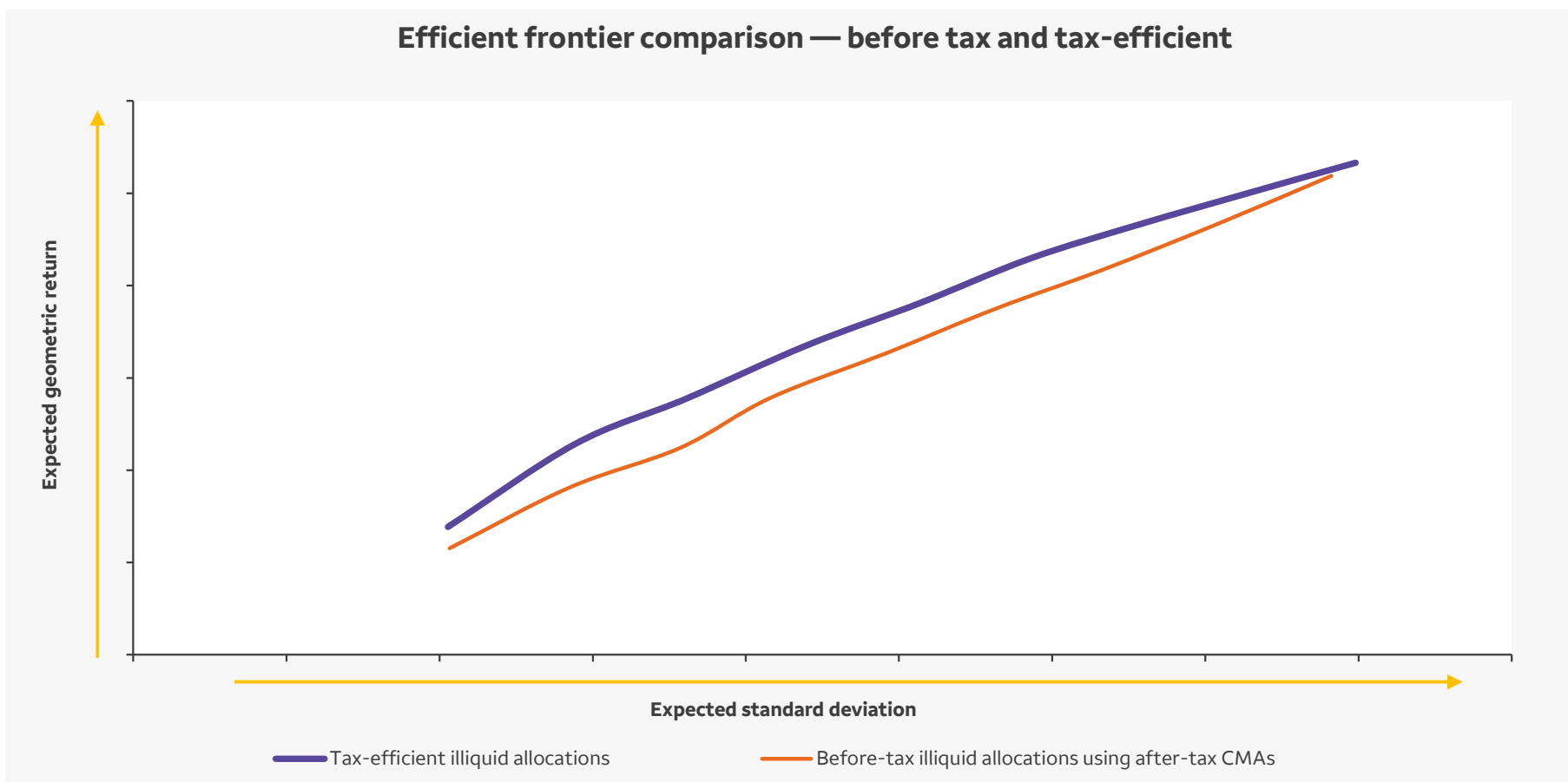
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Taking taxes into consideration can add value

Efficient frontier comparison — before tax and tax-efficient



Source: Wells Fargo Investment Institute, as of September 30, 2023. Strategic (long-term) return and standard deviation assumptions are as of July 18, 2023. Forecasts are not guaranteed and are subject to change. Strategic expected returns are forward-looking geometric return estimates from Wells Fargo Investment Institute of how asset classes and combinations of classes may respond during various market environments. Expected returns do not represent the returns that an investor should expect in any particular year. They are not designed to predict actual performance and may differ greatly from actual performance. There are no assurances that any estimates given will be achieved.

Standard Deviation is a statistical measure of the volatility of a portfolio's returns. The higher the standard deviation, the greater volatility has been. CMA = capital market assumption.

Key takeaways

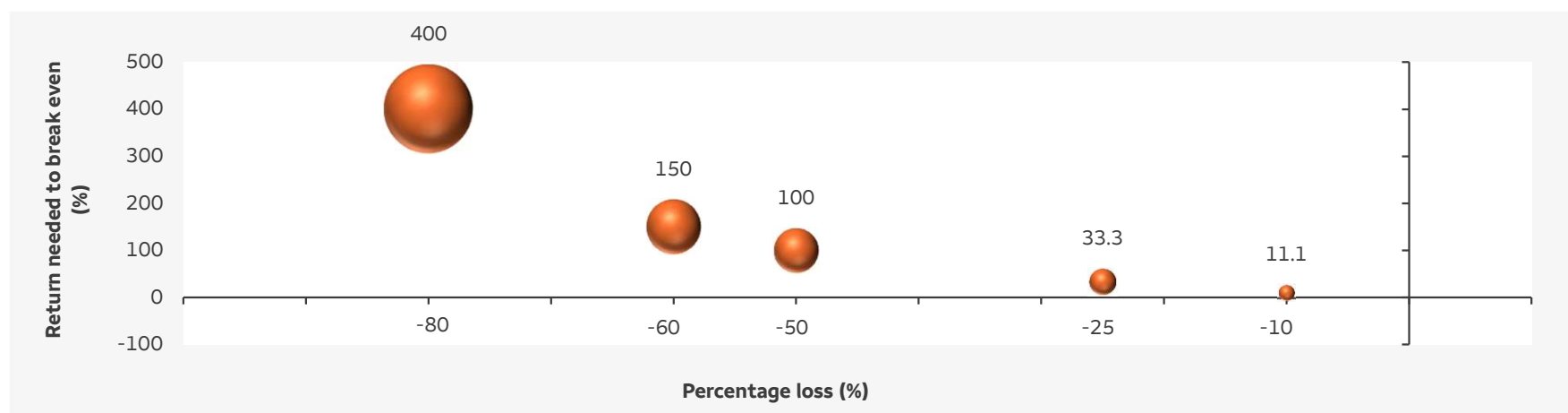
- When developing tax-efficient allocations, we have taken into consideration state, federal, and capital gains taxes.
- The tax-efficient allocations are made more tax efficient by swapping from taxable fixed income to tax-exempt fixed income and reducing allocations to tax-inefficient asset classes like Hedge Funds and Emerging Market Fixed Income.

The greater the loss, the longer it takes to break even

To break even in one period

Periods necessary to break even given a percentage return of

If you lose	You need ...	1%	5%	10%
10%	11%	10.6	2.2	1.1
25%	33%	28.9	5.9	3.0
50%	100%	69.7	14.2	7.3
60%	150%	92.1	18.8	9.6
80%	400%	161.7	33.0	16.9



Source: Wells Fargo Investment Institute, as of September 30, 2023. There is no guarantee it will be possible to break even. All investing involves risk including the possible loss of principal. **Past performance is no guarantee of future results.**

Key takeaways

- It is important to recognize that the more a portfolio loses in a downturn, the longer it typically takes to recoup those losses.

The worst and best days in the market

20 worst days for S&P 500 Index October 1993 – September 2023

Rank (worst days)	Date	S&P 500 Index daily return
1	3/16/2020	-12.0%
2	3/12/2020	-9.5%
3	10/15/2008	-9.0%
4	12/1/2008	-8.9%
5	9/29/2008	-8.8%
6	10/9/2008	-7.6%
7	3/9/2020	-7.6%
8	10/27/1997	-6.9%
9	8/31/1998	-6.8%
10	11/20/2008	-6.7%
11	8/8/2011	-6.7%
12	11/19/2008	-6.1%
13	10/22/2008	-6.1%
14	6/11/2020	-5.9%
15	4/14/2000	-5.8%
16	10/7/2008	-5.7%
17	1/20/2009	-5.3%
18	11/5/2008	-5.3%
19	11/12/2008	-5.2%
20	3/18/2020	-5.2%

20 best days for S&P 500 Index October 1993 – September 2023

Rank (best days)	Date	S&P 500 Index daily return
1	10/13/2008	11.6%
2	10/28/2008	10.8%
3	3/24/2020	9.4%
4	3/13/2020	9.3%
5	3/23/2009	7.1%
6	4/6/2020	7.0%
7	11/13/2008	6.9%
8	11/24/2008	6.5%
9	3/10/2009	6.4%
10	11/21/2008	6.3%
11	3/26/2020	6.2%
12	3/17/2020	6.0%
13	7/24/2002	5.7%
14	11/10/2022	5.5%
15	9/30/2008	5.4%
16	7/29/2002	5.4%
17	12/16/2008	5.1%
18	10/28/1997	5.1%
19	9/8/1998	5.1%
20	1/3/2001	5.0%

Sources: Bloomberg and Wells Fargo Investment Institute. Data from October 1, 1993 to September 30, 2023. For illustrative purposes only. Analysis uses S&P 500 Index price returns. The S&P 500 Index is a market capitalization weighted index composed of 500 stocks generally considered representative of the U.S. stock market. The performance shown is not indicative of any particular investment. An index is unmanaged and not available for direct investment. A price index is not a total return index and does not include the reinvestment of dividends. Total returns assume reinvestment of dividends and capital gain distributions. **Past performance is not a guarantee of future results.** Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions.

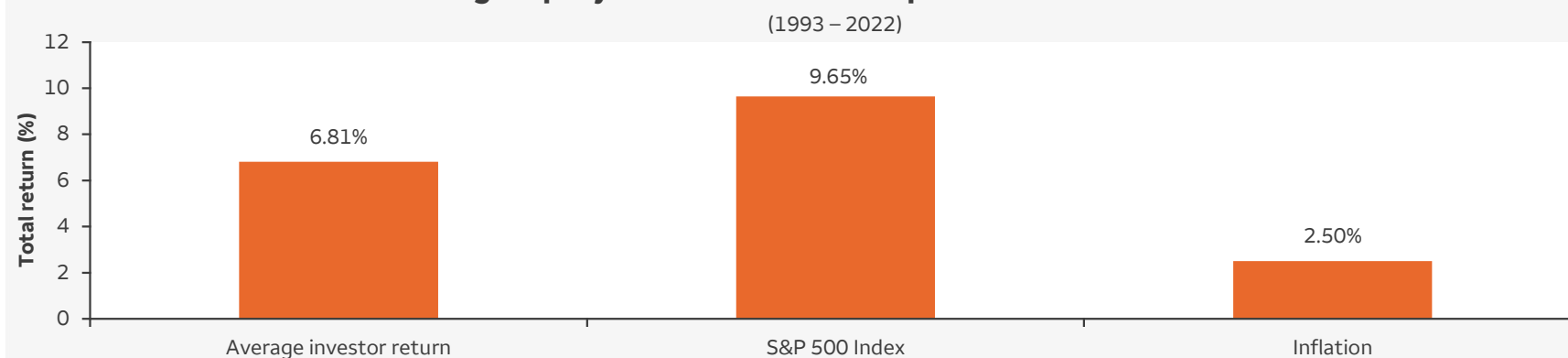
Green highlighted cells represent dates during the October 9, 2007–March 9, 2009 bear market are highlighted in green. Orange highlighted cells represent dates during the February 19, 2020–March 23, 2020 bear market. Cells with red bold italics font represent dates during the January 3, 2022 – current bear market.

Key takeaways

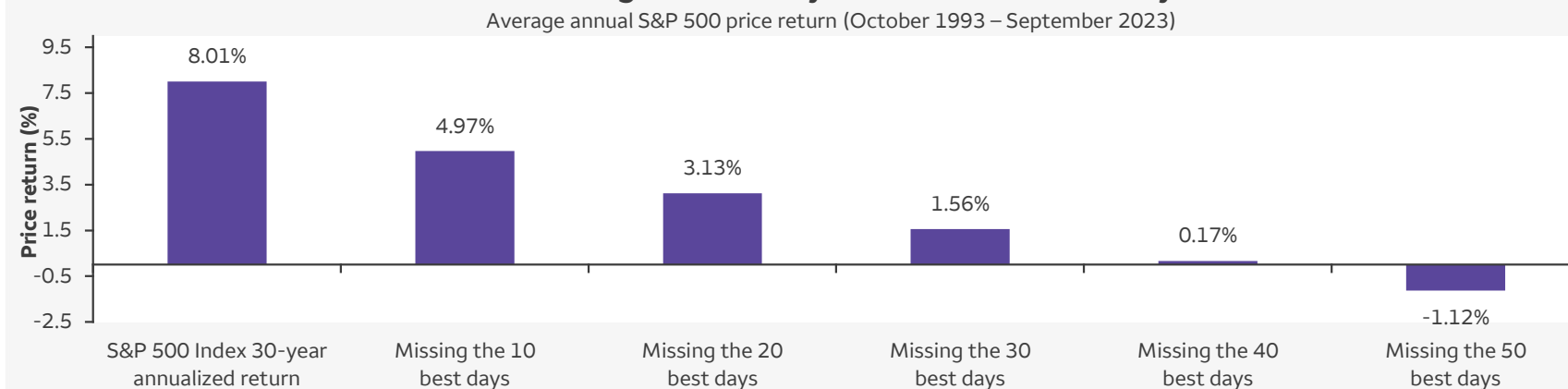
- The market's best and worst days, based on the S&P 500 Index's daily returns, have tended to happen during times of high volatility, like bear markets and recessions. Over the past 30 years, most of the 10 worst days and all of the 10 best days occurred during either the Great Recession of 2007 – 2009 or the COVID-19 2020 recession.
- Additionally, the best and worst days are often clustered together. For example, two of the 20 best days and four of the 20 worst days occurred during the seven trading days between March 9 and March 18, 2020.

Timing the market is risky

Average equity fund investor underperformed benchmark



Missing the best days in the market is costly



Sources: Top chart: Dalbar, Inc., 30 years from 1993–2022; “Quantitative Analysis of Investor Behavior,” 2023, DALBAR, Inc., www.dalbar.com. Bottom chart: Bloomberg and Wells Fargo Investment Institute. Data from October 1, 1993 to September 30, 2023. For illustrative purposes only. Dalbar computed the average stock fund investor return by using industry cash flow reports from the Investment Company Institute. The average stock fund return figure represents the average return for all funds listed in Lipper’s U.S. Diversified Equity fund classification model. All Dalbar returns were computed using the S&P 500 Index. The S&P 500 Index is a market capitalization weighted index composed of 500 stocks generally considered representative of the U.S. stock market. The fact that buy and hold has been a successful strategy in the past does not guarantee that it will continue to be successful in the future. The performance shown is not indicative of any particular investment. An index is unmanaged and not available for direct investment. A price index is not a total return index and does not include the reinvestment of dividends. Total returns assume reinvestment of dividends and capital gain distributions.

Past performance is not a guarantee of future results. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions.

Key takeaways

- Market timing is difficult. Investors who allow their emotions to get the best of them can suffer lower returns.
- We do not advocate market timing, but we do believe that modest tactical shifts have the potential to take advantage of short-term investment opportunities or help mitigate short-term risks.

The cost of market timing

Market downturns (1928 – current)

Drawdowns	Number of occurrences	Average drawdown (%)	Average drawdown time (months)
-5% or more	328	-10.8	1.2
-10% or more	102	-19.4	3.3
-15% or more	47	-27.8	6.0
-20% or more	27	-35.2	9.5

Investing \$1,000,000 in the S&P 500 Index

Time in the market	Past 30 years	Past 20 years	Past 10 years	Past 7 years	Past 5 years
Remain fully invested	\$9,343,582	\$4,305,401	\$2,550,058	\$1,977,637	\$1,471,544
Missing the 10 best days	\$4,085,732	\$1,910,410	\$1,352,094	\$1,071,245	\$804,401
% drop by missing the 10 best days	-56%	-56%	-47%	-46%	-45%
Missing the 50 best days	\$720,827	\$399,150	\$517,353	\$435,857	\$278,343
% drop by missing the 50 best days	-92%	-91%	-80%	-78%	-81%

Sources: Bloomberg, Ned Davis Research, and Wells Fargo Investment Institute. Market downturn analysis: data from January 3, 1928 to September 30, 2023. Past 30 years: data from October 1, 1993 to September 30, 2023. Past 20 years: data from October 1, 2003 to September 30, 2023. Past 10 years: data from October 1, 2013 to September 30, 2023. Past 7 years: data from October 1, 2014 to September 30, 2023. Past 5 years: data from October 1, 2018 to September 30, 2023. For illustrative purposes only. The S&P 500 Index is a market capitalization weighted index composed of 500 stocks generally considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** A price index is not a total return index and does not include the reinvestment of dividends. Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions.

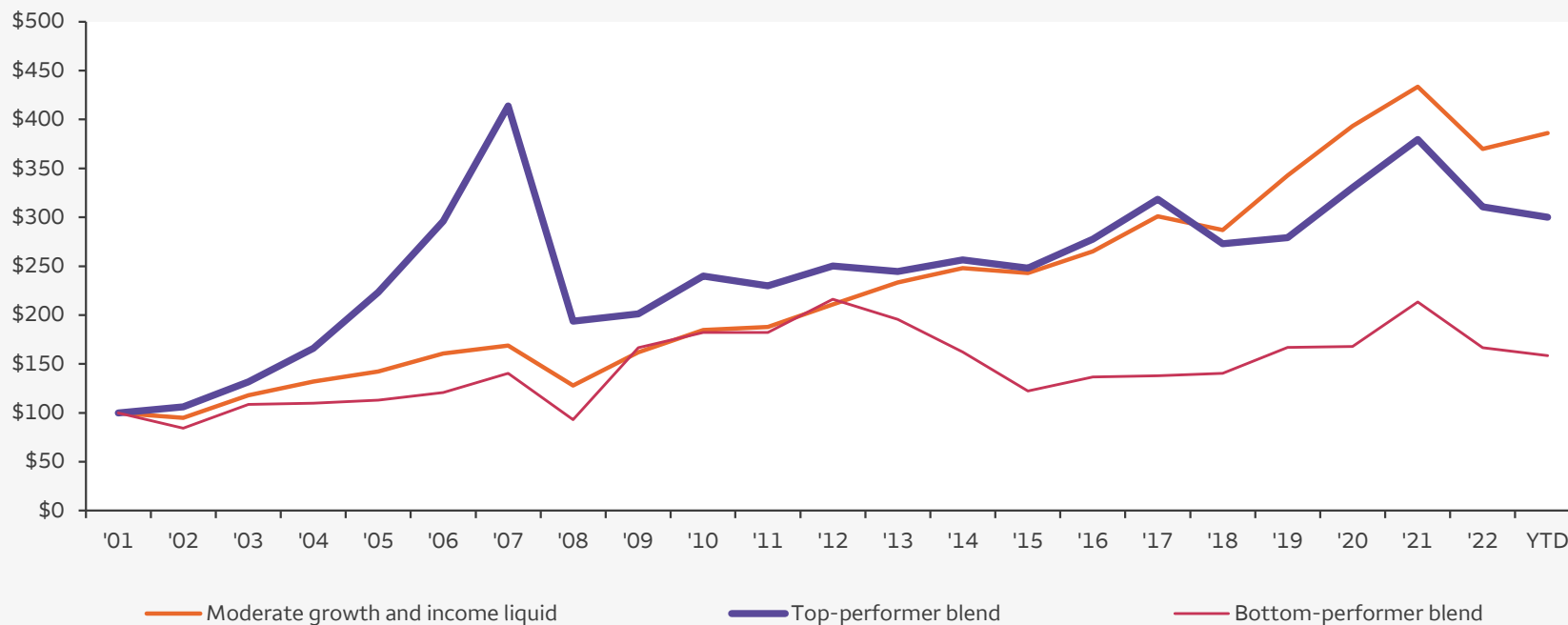
Note: Corrections are declines of 10% or more. Bear markets are declines of 20% or more.

Key takeaways

- The majority of market drawdowns have been between 5% and 10% declines. These have tended to recover much quicker than more severe corrections.
- Over long and short time periods, missing the best 10 days reduced the potential investment amount by 50%. Missing the 50 best days resulted in an ending period balance that was below the original investment.

Behavioral biases could be costly

Chasing past winners or losers has not been a successful strategy



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from December 31, 2001 to September 30, 2023. Indexed to 100 as of December 31, 2001. The top-performer blend allocates 100% in the current year to the top performing asset class of the previous year. The bottom-performer blend allocates 100% in the current year to the bottom performing asset class of the previous year. Performance results for Moderate Growth and Income Liquid and the top and bottom performer blends are calculated using blended index returns. Moderate Growth & Income allocation is dynamic and changes as needed with adjustments to the strategic allocations. Index return information is provided for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns represent general market results, assume the reinvestment of dividends and other distributions and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. **Past performance is no guarantee of future results.** Unlike most asset class Indexes, HFR Index returns reflect deduction for fees. Because the HFR Indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. See following pages for blended index compositions, risks and index definitions. Diversification strategies do not guarantee investment returns or eliminate the risk of loss.

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Key takeaways

- Chasing the previous year's top-performing asset class or worst-performing investment is a strategy that some investors have tended to follow.
- We have found that following the best-performing asset class (hot hand fallacy) and worst-performing investment (gambler's fallacy) did not result in better performance than a diversified allocation.

Behavioral biases could be costly Cont'd

Allocation compositions

- **Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.
- **Top-performer blend:** 2002: 100% Bloomberg U.S. Aggregate Bond Index (1–3 year); 2003: 100% Bloomberg Commodity Index; 2004: 100% MSCI Emerging Markets Index; 2005: 100% MSCI Emerging Markets Index; 2006: 100% MSCI Emerging Markets Index; 2007: 100% MSCI Emerging Markets Index; 2008: 100% MSCI Emerging Markets Index; 2009: 100% J.P. Morgan GBI Global ex-U.S. Index; 2010: 100% MSCI Emerging Markets Index; 2011: 100% Russell 2000 Index; 2012: 100% Bloomberg U.S. Aggregate Bond Index (10+ year); 2013: 100% MSCI Emerging Markets Index; 2014: 100% Russell 2000 Index; 2015: 100% Bloomberg U.S. Aggregate Bond Index (10+ year); 2016: 100% S&P 500 Index; 2017: 100% Russell 2000 Index; 2018: 100% MSCI Emerging Markets Index; 2019: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2020: 100% S&P 500 Index; 2021: 100% Russell 2000 Index; 2022: 100% S&P 500 Index; and 2023: 100% Bloomberg Commodity Index.
- **Bottom-performer blend:** 2002: 100% MSCI EAFE Index; 2003: 100% S&P 500 Index; 2004: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2005: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2006: 100% J.P. Morgan GBI Global ex-U.S. Index; 2007: 100% Bloomberg Commodity Index; 2008: 100% Russell 2000 Index; 2009: 100% MSCI Emerging Markets Index; 2010: 100% Bloomberg U.S. Aggregate Bond Index (10+ year); 2011: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2012: 100% MSCI Emerging Markets Index; 2013: 100% Bloomberg Commodity Index; 2014: 100% Bloomberg Commodity Index; 2015: 100% Bloomberg Commodity Index; 2016: 100% Bloomberg Commodity Index; 2017: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2018: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2019: 100% MSCI Emerging Markets Index; 2020: 100% Bloomberg U.S. Treasury Bill 1–3 Month Index; 2021: 100% Bloomberg Commodity Index; 2022: 100% J.P. Morgan GBI Global ex-U.S. Index; and 2023: 100% Bloomberg U.S. Aggregate Bond Index (10+ year).

Index definitions

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The HFRI indexes are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

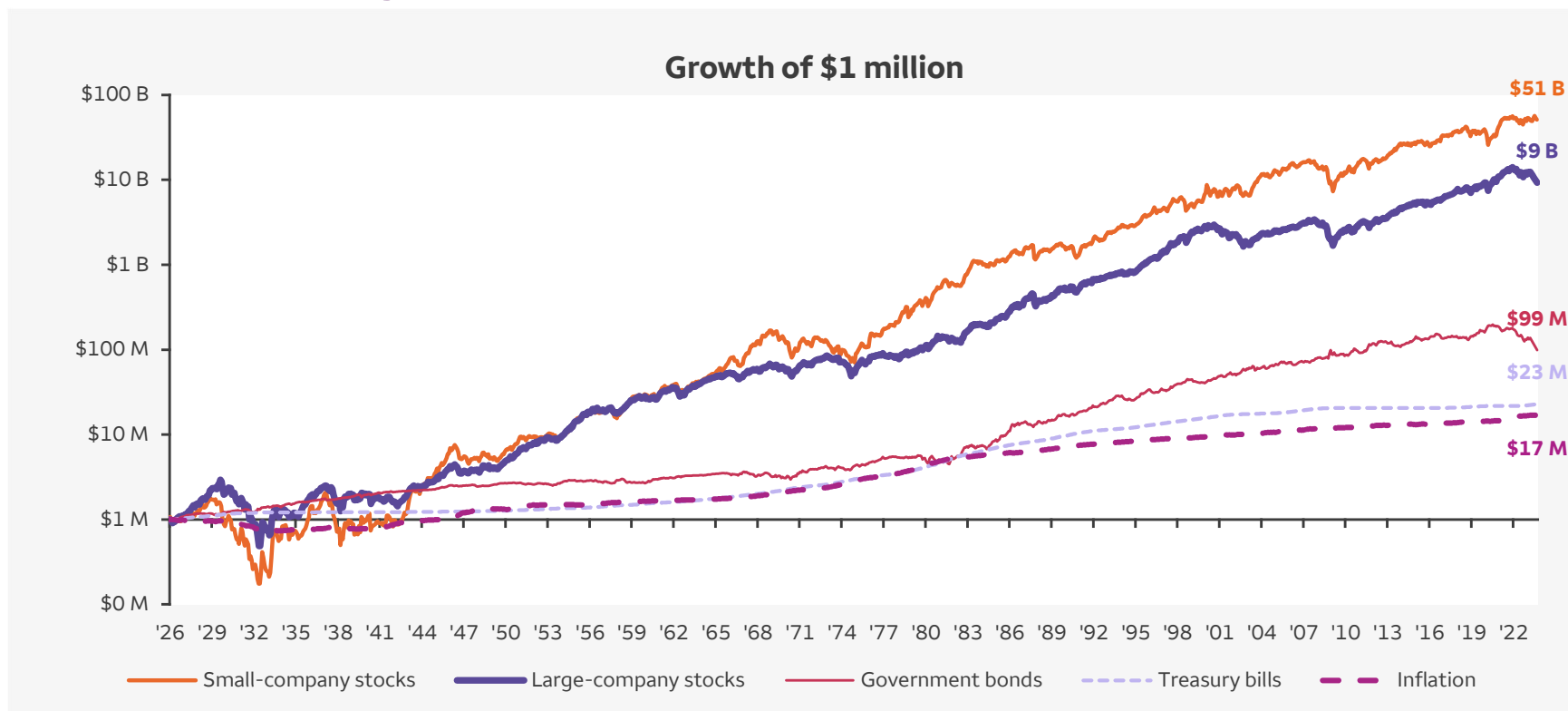
Behavioral biases could be costly - Cont'd

Risk considerations

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Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk-reward profiles of their portfolios, the investments themselves can carry significant risks. There may be no secondary market for alternative investment interests and transferability may be limited or even prohibited. Hedge fund strategies, such as Equity Hedge, Event Driven, Macro and Relative Value may expose investors to risks such as short selling, leverage, counterparty, liquidity, volatility, the use of derivative instruments and other significant risks.

Asset values have grown over time



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Monthly data from January 1, 1926 to September 30, 2023. Large-company stocks: S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market-value-weighted index with each stock's weight in the index proportionate to its market value. Small-company stocks: Russell 2000[®] Index measures the performance of the 2,000 smallest companies in the Russell 3000[®] Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. Government bonds: Bloomberg U.S. Aggregate Government-Related Long Index measures the investment grade, US dollar-denominated, fixed-rate, government-related taxable bond market with long-dated maturities. Treasury bills: Bloomberg U.S. Treasury Bill (1-3 Month) Index is representative of money markets. Inflation: Consumer Price Index measures the price of a fixed basket of goods and services purchased by an average consumer. Prior to April 1, 2023, the following representative indexes were used. Small-company stocks: IA SBBI U.S. Small Stock Index is a custom index designed to measure the performance of small-capitalization U.S. stocks. Government bonds: IA SBBI U.S. Long-Term Government Bond Index is a custom index designed to measure the performance of long-term U.S. government bonds. Treasury bills: IA SBBI U.S. 30-Day Treasury Bill Index is a custom index designed to measure the performance of U.S. Treasury bills maturing in 0 to 30 days. Inflation: IA SBBI U.S. Inflation Index is a custom unmanaged index designed to track the U.S. inflation rate. For illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** M = million. B = billion.

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Key takeaways

- Since 1926, riskier assets have outperformed less risky assets.
- U.S. Treasury bills (T-bills) have tracked inflation fairly closely over this time frame. More recently, T-bill yields have been lower than inflation.

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. Government bonds are guaranteed as to payment of principal and interest if held to maturity and are subject to interest rate risk.

Asset performance — Correlations

Asset class	Cash	U.S. Taxable IG FI	Municipal FI	HY Taxable FI	DM ex-U.S. FI	EM FI	U.S. LC Equities	U.S. MC Equities	U.S. SC Equities	DM ex-U.S. Equities	EM Equities	Commodities	Hedge Funds
Cash	1.00	0.12	-0.05	-0.15	0.11	-0.03	-0.15	-0.15	-0.15	-0.02	0.08	0.06	-0.02
U.S. Taxable IG FI		1.00	0.73	-0.02	0.59	0.37	-0.26	-0.23	-0.29	-0.17	-0.07	-0.14	-0.21
Municipal FI			1.00	0.29	0.42	0.55	0.01	0.06	-0.05	0.10	0.20	0.06	0.12
HY Taxable FI				1.00	0.08	0.79	0.76	0.82	0.74	0.77	0.80	0.58	0.81
DM ex-U.S. FI					1.00	0.37	-0.04	0.00	-0.02	0.19	0.20	0.15	0.05
EM FI						1.00	0.56	0.61	0.52	0.61	0.72	0.44	0.62
U.S. LC Equities							1.00	0.96	0.91	0.88	0.78	0.46	0.85
U.S. MC Equities								1.00	0.96	0.92	0.83	0.55	0.92
U.S. SC Equities									1.00	0.87	0.76	0.46	0.88
DM ex-U.S. Equities										1.00	0.90	0.55	0.91
EM Equities											1.00	0.61	0.90
Commodities												1.00	0.67
Hedge Funds													1.00

Source: Wells Fargo Investment Institute. Strategic (long-term) correlation assumptions are as of July 18, 2023 and are based on data from January 1, 2003 to December 31, 2022. For illustrative purposes only. **Negative values are shaded in red.** Correlation measures the degree to which asset classes move in sync; it does not measure the magnitude of that movement. There is no guarantee that future correlations between the indexes will remain the same. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided, actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. Index correlations represent past performance. **Past performance is no guarantee of future results.** See following pages for risks and index definitions.

Key takeaways

- Correlations can play an important role in portfolio diversification. In addition to risk and return, correlations are primary components of portfolio construction.
- Investing in asset classes with low or negative correlation to equities can achieve diversification and reduce overall portfolio risk.

Indexes in order represented by Bloomberg U.S. Treasury Bill 1 (~3 Month) Index, Bloomberg U.S. Aggregate Bond Index, Bloomberg U.S. Municipal Index, Bloomberg U.S. Corporate High Yield Bond Index, Bloomberg High Yield Muni Index, JPM GBI Global Ex U.S. Index, JPM EMBI Global Index, S&P 500 Index, Russell Midcap Index, Russell 2000 Index, MSCI EAFE Index, MSCI EM Index, FTSE EPRA/NAREIT Developed Index, Bloomberg Commodity Index, HFRI Fund Weighted Index. IG = investment grade. FI = fixed income. LC = large cap. MC = mid cap. SC = small cap. HY = high yield. DM = developed market. EM = emerging market.

Asset performance — Correlations cont'd

Risk considerations

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes and may be subject to the alternative minimum tax, and legislative and regulatory risk. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk-reward profiles of their portfolios, the investments themselves can carry significant risks. Hedge funds trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods which can result in adverse consequences for the investor.

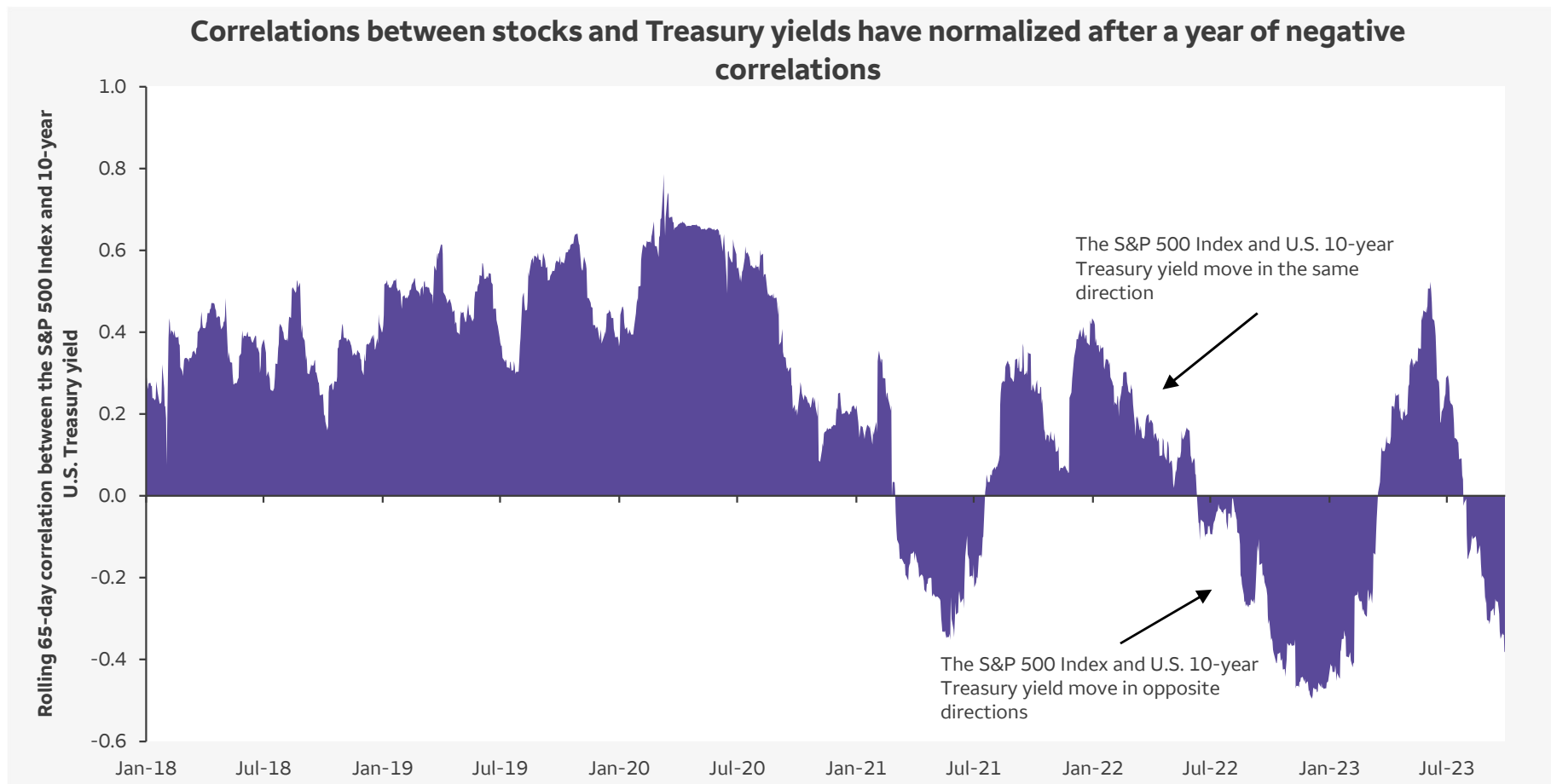
Index definitions

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. **Bloomberg U.S. Treasury Bills (1-3M) Index** is representative of money markets. **Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **Bloomberg U.S. Municipal Index** is considered representative of the broad market for investment-grade, tax-exempt bonds with a maturity of at least one year. **HFRI Fund Weighted Composite Index** is a fund-weighted (equal-weighted) index designed to measure the total returns (net of fees) of the approximately 2,000 hedge funds that comprise the Index. **JPMorgan GBI Global ex-U.S. Index (Unhedged) in USD** is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets. **JPMorgan EMBI Global Index (USD)** is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

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The HFRI indexes are based on information self-reported by hedge fund managers that decide, on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

Short-term stocks and bond yield correlations

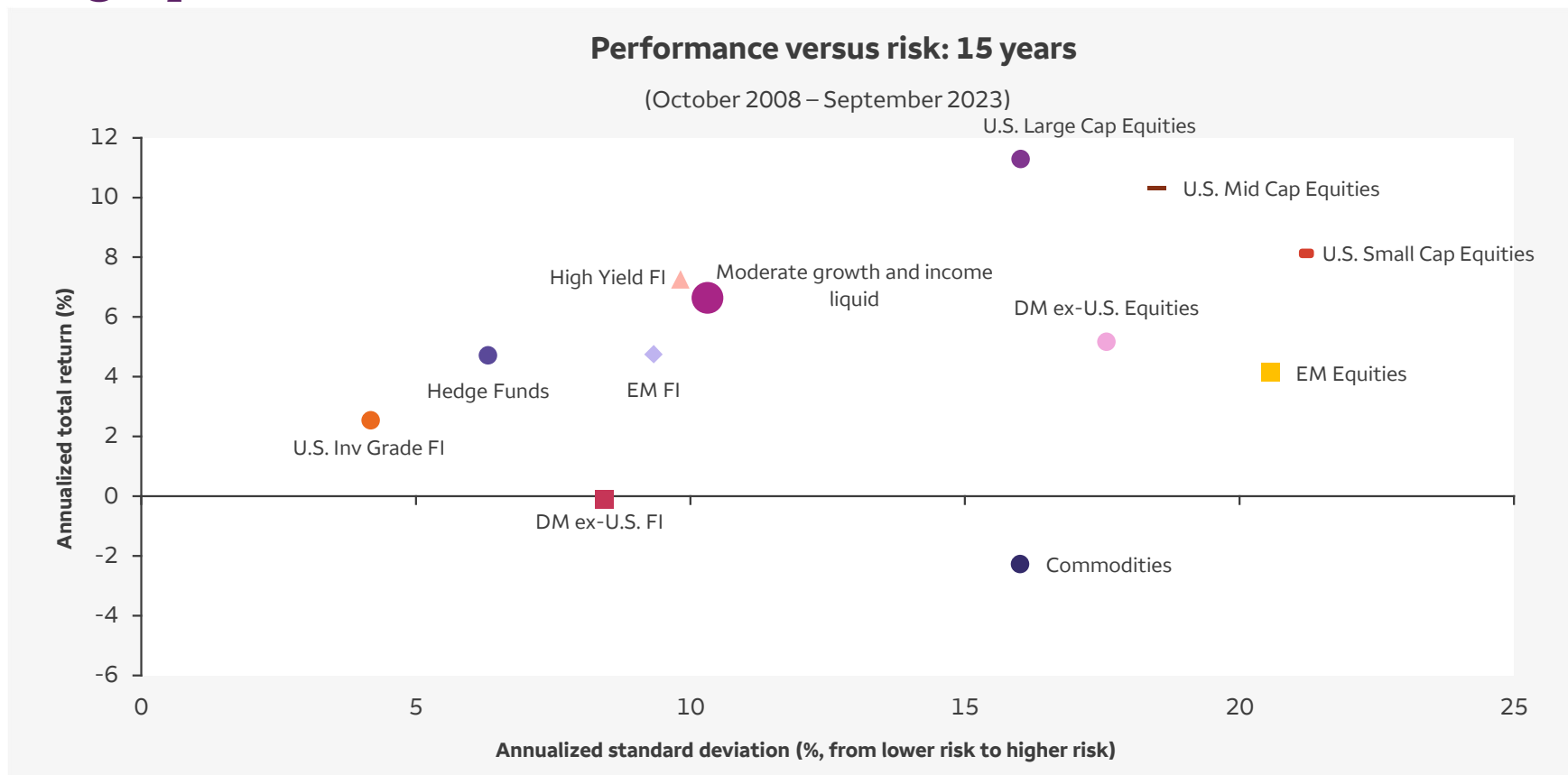


Sources: Bloomberg and Wells Fargo Investment Institute. Daily data from January 1, 2018 to September 30, 2023. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. The S&P 500 Index is a market-capitalization-weighted index considered representative of the U.S. stock market. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Key takeaways

- A rising-yield environment could signify that bond investors have a positive outlook on future economic growth, which may also be a positive sign for the stock market. Alternatively, rising yields could indicate worries that inflation will persist at higher levels. In these cases, a positive correlation between stock prices and bond yields would be reasonable.
- Since 2018, the 10-year Treasury yield and the S&P 500 Index mostly exhibited same-direction moves (both up and both down, or positive correlation).

Finding a potential balance between risk and reward



Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. Data from October 1, 2008 to September 30, 2023. Performance results for Moderate Growth and Income Liquid are calculated using blended index returns and is for illustrative purposes only. Moderate Growth & Income allocation is dynamic and changes as needed with adjustments to the strategic allocations. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. Unlike most asset class indexes, HFR Index returns are net of all fees. Because the HFR Indexes are calculated based on information that is voluntarily provided actual returns may be lower than those reported. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Standard deviation is a measure of the volatility of returns. The higher the standard deviation, the greater volatility has been. See following pages for the blended index composition, risks and definitions of indexes.

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Key takeaways

- We believe a diversified allocation can strike a good balance between risk and return.

Diversification strategies do not guarantee investment returns or eliminate the risk of loss. Indexes represented: U.S. Investment Grade FI = Bloomberg U.S. Aggregate Bond Index. Hedge Funds = HFRI Fund Weighted Index. Emerging Market FI = JP Morgan EMBI Global Index. High Yield FI = Bloomberg U.S. Corporate HY Bond Index. U.S. Mid Cap Equities = Russell Midcap Index. U.S. Small Cap Equities = Russell 2000 Index. Developed Market Ex-U.S. FI = JP Morgan GBI Global Ex U.S. Index. U.S. Large Cap Equities = S&P 500 Index. Developed Market Ex-U.S. Equities = MSCI EAFE Index. Emerging Market Equities = MSCI Emerging Markets Index. Public Real Estate = FTSE EPRA/ NAREIT Developed REITs Index. Commodities = Bloomberg Commodity Index. FI = fixed income. DM = developed market. EM = emerging market.

Finding a potential balance between risk and reward Cont'd

Risk considerations

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes and may be subject to the alternative minimum tax, and legislative and regulatory risk. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

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Allocation composition

- **Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.

Index definitions

Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. **Bloomberg U.S. Treasury Bills (1-3M) Index** is representative of money markets. **Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **HFRI Fund Weighted Composite Index** is a fund-weighted (equal-weighted) index designed to measure the total returns (net of fees) of the approximately 2,000 hedge funds that comprise the Index. **JPMorgan GBI ex-U.S. Index (Unhedged)** in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets. **JPMorgan EMBI Global Index (USD)** is a U.S. dollar-denominated, investible, market cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000[®] Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **S&P 500 Index** is a market capitalization-weighted index composed of 500 stocks generally considered representative of the U.S. stock market.

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Net flows of mutual funds (MFs) and exchange-traded funds (ETFs)

\$Billions	YTD 2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Domestic equity MF	-247	-316	-419	-471	-302	-251	-236	-235	-170	-60	18
Domestic equity ETF	110	317	519	189	132	139	185	167	63	143	134
Int'l equity MF	-23	-87	-43	-120	-19	34	71	23	111	69	84
EM Equity MF	-7	-23	20	-12	2	4	13	-4	-4	7	33
Global/Int'l equity ETF	58	100	211	62	30	71	160	20	110	47	63
Taxable bond MF	37	-393	306	205	219	-2	233	84	-40	16	-13
Government Bond	8	-33	15	26	29	6	2	11	12	6	-51
High yield Bond	-21	-46	22	4	-30	-34	-18	7	-36	-44	56
Tax-exempt bond MF	3	-148	84	39	93	4	26	23	15	28	-58
Total bond ETF	128	197	203	201	146	98	121	84	55	51	12
Money market	731	-4	422	691	553	159	107	-30	21	6	15

Sources: Bloomberg, Investment Company Institute (ICI), and Wells Fargo Investment Institute. Data from January 1, 2013 to August 31, 2023. For illustrative purposes only. **Negative values are shaded in red.** Data represents net new cash flows of mutual funds and net issuance of shares of ETFs. Numbers rounded to the nearest whole number. For number of funds in each category according to ICI please refer to <https://www.ici.org/research/stats/trends>. For definitions and components of each category according to ICI please refer to https://www.ici.org/research/stats/iob_update/iob_definitions. EM = emerging market.

Active versus passive heat map

Percentage of funds in respective Morningstar categories that outperformed their passive benchmark

Equity				
Morningstar category	Benchmark index	Core	Value	Growth
Large cap	Russell 1000 Index	43	69	36
Mid cap	Russell Mid Cap Index	67	69	45
Small cap	Russell 2000 Index	75	59	69
Developed market ex-U.S.	MSCI EAFE Index	33	6	64
Emerging market	MSCI Emerging Market Index	35		
Global large cap	MSCI All Country World Index	34		
Global small cap	MSCI All Country World Small Cap Index	25		

Fixed Income				
Morningstar category	U.S. investment grade	U.S. investment grade municipal	U.S. government	High yield
Benchmark index	Bloomberg U.S. Aggregate Bond Index	Bloomberg U.S. Municipal Index	Bloomberg Intermediate Treasury Index	Bloomberg U.S. Corporate High Yield Index
	67	51	3	63

Real Assets				
Morningstar category	Domestic REITs	Global REITs	MLPs	Commodities
Benchmark index	FTSE NAREIT All Equity REITs Index	FTSE EPRA/NAREIT Developed Index	Alerian MLP Index	Bloomberg Commodity Index
	29	42	17	38

Liquid Alternatives				
Morningstar category	Equity Hedge	Macro	Relative Value	Event Driven
Benchmark index	Wilshire Liquid Alternatives Equity Hedge Index	Wilshire Liquid Alternatives Macro Index	Wilshire Liquid Alternatives Relative Value Index	Wilshire Liquid Alternatives Event Driven Index
	43	49	86	68

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute, as of September 30, 2023. REITs = real estate investment trusts. MLPs = Master Limited Partnerships. **Past performance is no guarantee of future results.** An index is unmanaged and not available for direct investment. Morningstar developed the Morningstar Categories. While the prospectus objective identifies a fund's investment goals based on the wording in the fund prospectus, the Morningstar Category identifies funds based on their actual investment styles as measured by their underlying portfolio holdings. Please see following slides for the definitions of the indexes and the Morningstar Categories. **Shading represents a heat map, ranging from the highest value in the darkest green to the lowest value in the darkest red.**

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Active versus passive heat map Cont'd

Index definitions

Alerian MLP Index is the leading gauge of energy infrastructure Master Limited Partnerships (MLPs). The capped, float-adjusted, capitalization-weighted index, whose constituents earn the majority of their cash flow from midstream activities involving energy commodities, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis (AMZX). **Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities. **Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S. dollar-denominated, non-investment grade, fixed-rate, taxable corporate bond market. **Bloomberg U.S. Municipal Index** is considered representative of the broad market for investment-grade, tax-exempt bonds with a maturity of at least one year. **Bloomberg U.S. Intermediate Treasury Index** measures U.S.-dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury with maturities greater than or equal to 1 year and less than 10 years. **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. **FTSE EPRA/NAREIT Developed Index** is designed to track the performance of listed real estate companies and REITs in developed countries worldwide. **FTSE NAREIT All Equity REITs Index** is designed to track the performance of REITs representing equity interests in (as opposed to mortgages on) properties. It represents all tax-qualified REITs with more than 50% of total assets in qualifying real estate assets, other than mortgages secured by real property that also meet minimum size and liquidity criteria. **MSCI All Country World Index (ACWI)** is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of 23 developed and 23 emerging markets. **MSCI All Country World Small Cap Index** is a free-float-adjusted market-capitalization-weighted index that is designed to measure small cap performance of 23 developed and 23 emerging markets. **MSCI EAFE (DM) and MSCI Emerging Markets (EM) indexes** are equity indexes which capture large and mid cap representation across DM countries (excluding Canada and the U.S.) and EM countries around the world. **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index. **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. **Russell 1000® Index** measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index. **Wilshire Liquid Alternative Equity Hedge Index** measures the performance of the equity hedge strategy component of the Wilshire Liquid Alternative Index. Equity hedge investment strategies predominantly invest in long and short equities. **Wilshire Liquid Alternative Relative Value Index** measures the performance of the relative value strategy component of the Wilshire Liquid Alternative Index. Relative value strategies are focused on the valuation discrepancy in the relationships between markets or securities. **Wilshire Liquid Alternative Global Macro Index** measures the performance of the global macro strategy component of the Wilshire Liquid Alternative Index. Global macro strategies predominantly invest in situations driven by the macro-economic environment across the capital structure as well as currencies and commodities. **Wilshire Liquid Alternative Event Driven Index** measures the performance of the event driven strategy component of the Wilshire Liquid Alternative Index. Event driven strategies predominantly invest in companies involved in corporate transactions such as mergers, restructuring, distressed, buy backs, or other capital structure changes.

Morningstar category definitions

Large cap: Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates and price. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios tend to invest across the spectrum of U.S. industries, and owing to their broad exposure, the portfolios' returns are often similar to those of the S&P 500 Index.

Mid cap: The typical mid-cap blend portfolio invests in U.S. stocks of various sizes and styles, giving it a middle-of-the-road profile. Most shy away from high-priced growth stocks but aren't so price-conscious that they land in value territory. The U.S. mid-cap range for market capitalization typically falls between \$1 billion and \$8 billion and represents 20% of the total capitalization of the U.S. equity market. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Small cap: Favor U.S. firms at the smaller end of the market-capitalization range. Some aim to own an array of value and growth stocks while others employ a discipline that leads to holdings with valuations and growth rates close to the small-cap averages. Stocks in the bottom 10% of the capitalization of the U.S. equity market are defined as small cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Developed market ex-U.S. equity: Invest in a variety of big international stocks. Most of these portfolios divide their assets among a dozen or more developed markets, including Japan, Britain, France, and Germany. These portfolios primarily invest in stocks that have market caps in the top 70% of each economically integrated market (such as Europe or Asia ex-Japan). The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios typically will have less than 20% of assets invested in U.S. stocks.

Emerging market equity: Diversified emerging-markets portfolios tend to divide their assets among 20 or more nations, although they tend to focus on the emerging markets of Asia and Latin America rather than on those of the Middle East, Africa, or Europe. These portfolios invest predominantly in emerging market equities, but some funds also invest in both equities and fixed-income investments from emerging markets.

Global large cap (World Stock): invest in a variety of international stocks that are larger. Global portfolios have few geographical limitations. It is common for these portfolios to invest the majority of their assets in developed markets, with the remainder divided among the globe's smaller markets. These portfolios typically have 20%-60% of assets in U.S. stocks.

Global small cap: invest in a variety of international stocks that are smaller. Global portfolios have few geographical limitations. It is common for these portfolios to invest the majority of their assets in developed markets, with the remainder divided among the globe's smaller markets. These portfolios typically have 20%-60% of assets in U.S. stocks.

Active versus passive heat map - Cont'd

Morningstar category definitions

U.S. investment grade: Intermediate-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed-income issues and typically have durations of 3.5 to 6.0 years. These portfolios are less sensitive to interest rates, and therefore less volatile, than portfolios that have longer durations.

U.S. investment grade municipal: Muni national intermediate portfolios invest in bonds issued by various state and local governments to fund public projects. The income from these bonds is generally free from federal taxes. To lower risk, these portfolios spread their assets across many states and sectors. These portfolios have durations of 4.0 to 6.0 years (or average maturities of five to 12 years).

U.S. government: Intermediate-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations typically between 3.5 and 6.0 years.

High yield: High-yield bond portfolios concentrate on lower-quality bonds, which are riskier than those of higher-quality companies. These portfolios generally offer higher yields than other types of portfolios, but they are also more vulnerable to economic and credit risk. These portfolios primarily invest in U.S. high-income debt securities where at least 65% or more of bond assets are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

Domestic REITs: Real estate portfolios invest primarily in real estate investment trusts of various types. REITs are companies that develop and manage real estate properties. There are several different types of REITs, including apartment, factory-outlet, health-care, hotel, industrial, mortgage, office, and shopping center REITs. Some portfolios in this category also invest in real estate operating companies.

Global REITs: Global real estate portfolios invest primarily in non-U.S. real estate securities but may also invest in U.S. real estate securities. Securities that these portfolios purchase include: debt securities, equity securities, convertible securities, and securities issued by real estate investment trusts and REIT-like entities. Portfolios in this category also invest in real estate operating companies.

MLPs: Energy Limited Partnership funds invest a significant amount of their portfolio in energy master limited partnerships. These include but are not limited to limited partnerships specializing in midstream operations in the energy industry.

Commodities: Broad-basket portfolios can invest in a diversified basket of commodity goods including but not limited to grains, minerals, metals, livestock, cotton, oils, sugar, coffee, and cocoa. Investment can be made directly in physical assets or commodity-linked derivative instruments, such as commodity swap agreements.

Equity Hedge: Long-short portfolios hold sizable stakes in both long and short positions in equities, exchange traded funds, and related derivatives. Some funds that fall into this category will shift their exposure to long and short positions depending on their macro outlook or the opportunities they uncover through bottom-up research. At least 75% of the assets are in equity securities or derivatives, and funds in the category will typically have beta values to relevant benchmarks of between 0.3 and 0.8 during a three-year period.

Macro: These funds offer investors exposure to several different alternative investment tactics. Funds in this category have a majority of their assets exposed to alternative strategies. An investor's exposure to different tactics may change slightly over time in response to market movements. Funds in this category include both funds with static allocations to alternative strategies and funds tactically allocating among alternative strategies and asset classes. The gross short exposure is greater than 20%.

Relative Value: These funds offer investors exposure to several different alternative investment tactics. Funds in this category have a majority of their assets exposed to alternative strategies. An investor's exposure to different tactics may change slightly over time in response to market movements. Funds in this category include both funds with static allocations to alternative strategies and funds tactically allocating among alternative strategies and asset classes. The gross short exposure is greater than 20%.

Event Driven: These funds offer investors exposure to several different alternative investment tactics. Funds in this category have a majority of their assets exposed to alternative strategies. An investor's exposure to different tactics may change slightly over time in response to market movements. Funds in this category include both funds with static allocations to alternative strategies and funds tactically allocating among alternative strategies and asset classes. The gross short exposure is greater than 20%.

Moderate growth and income quilt chart

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	'08 - '22 average
Dev ex US Fixed Inc 11.4%	Emg-Mkt Equity 79.0%	US Small Cap Equity 26.9%	Emg-Mkt Fixed Inc 8.5%	Emg-Mkt Fixed Inc 18.6%	US Small Cap Equity 38.8%	US Large Cap Equity 13.7%	US Large Cap Equity 1.4%	US Small Cap Equity 21.3%	Emg-Mkt Equity 37.8%	CPI 1.9%	US Large Cap Equity 31.5%	US Small Cap Equity 20.0%	US Large Cap Equity 28.7%	Commod 16.1%	US Large Cap Equity 13.1%	US Large Cap Equity 8.8%
Inv-Grade Fixed Inc 5.2%	High Yield Fixed Inc 58.2%	US Mid Cap Equity 25.5%	Inv-Grade Fixed Inc 7.8%	Emg-Mkt Fixed Inc 18.5%	US Mid Cap Equity 34.8%	US Mid Cap Equity 13.2%	Emg-Mkt Fixed Inc 1.2%	High Yield Fixed Inc 17.1%	Dev ex US Equity 25.6%	Cash Alternative 1.8%	US Mid Cap Equity 30.5%	Emg-Mkt Equity 18.7%	Commod 27.1%	CPI 6.5%	Dev ex US Equity 7.6%	US Mid Cap Equity 8.4%
Cash Alternative 1.8%	US Mid Cap Equity 40.5%	Emg-Mkt Equity 19.2%	Dev ex US Fixed Inc 5.9%	Dev ex US Equity 17.9%	US Large Cap Equity 32.4%	60%,40% Blend 10.6%	60%,40% Blend 1.2%	US Mid Cap Equity 13.8%	US Large Cap Equity 21.8%	Inv-Grade Fixed Inc 0.0%	US Small Cap Equity 25.5%	US Large Cap Equity 18.4%	US Mid Cap Equity 22.6%	Cash Alternative 1.5%	60%,40% Blend 7.3%	US Small Cap Equity 7.2%
CPI 0.1%	Dev ex US Equity 32.5%	Commod 16.8%	High Yield Fixed Inc 5.0%	US Mid Cap Equity 17.3%	Dev ex US Equity 23.3%	Mod Grwth Inc 6.2%	CPI 0.7%	US Large Cap Equity 12.0%	US Mid Cap Equity 18.5%	Dev ex US Fixed Inc -1.7%	Dev ex US Equity 22.7%	US Mid Cap Equity 17.1%	60%,40% Blend 16.0%	Hedge Funds -4.1%	High Yield Fixed Inc 5.9%	60%,40% Blend 6.7%
Emg-Mkt Fixed Inc -10.9%	Emg-Mkt Fixed Inc 28.2%	High Yield Fixed Inc 15.1%	60%,40% Blend 5.0%	US Small Cap Equity 16.3%	60%,40% Blend 17.7%	Inv-Grade Fixed Inc 6.0%	Inv-Grade Fixed Inc 0.5%	Commod 11.8%	US Small Cap Equity 14.6%	High Yield Fixed Inc -2.1%	60%,40% Blend 22.1%	60%,40% Blend 15.4%	US Small Cap Equity 14.8%	High Yield Fixed Inc -11.2%	Mod Grwth Inc 4.4%	High Yield Fixed Inc 6.1%
Hedge Funds -19.0%	US Small Cap Equity 27.2%	US Large Cap Equity 15.1%	CPI 3.0%	US Large Cap Equity 16.0%	Mod Grwth Inc 10.7%	Emg-Mkt Fixed Inc 5.5%	Cash Alternative 0.0%	Emg-Mkt Equity 11.6%	60%,40% Blend 14.3%	60%,40% Blend -2.3%	Mod Grwth Inc 19.5%	Mod Grwth Inc 14.8%	Dev ex US Equity 11.8%	Inv-Grade Fixed Inc -13.0%	Hedge Funds 4.3%	Mod Grwth Inc 5.4%
60%,40% Blend -21.6%	Mod Grwth Inc 26.6%	Mod Grwth Inc 14.0%	US Large Cap Equity 2.1%	High Yield Fixed Inc 15.8%	Hedge Funds 9.1%	US Small Cap Equity 4.9%	Dev ex US Equity -0.4%	Emg-Mkt Fixed Inc 10.2%	Mod Grwth Inc 13.6%	US Large Cap Equity -4.4%	Emg-Mkt Equity 18.9%	Hedge Funds 11.8%	Mod Grwth Inc 10.2%	Dev ex US Equity -14.0%	US Mid Cap Equity 3.9%	Emg-Mkt Fixed Inc 4.3%
Mod Grwth Inc -24.2%	US Large Cap Equity 26.5%	60%,40% Blend 12.2%	Mod Grwth Inc 1.7%	Mod Grwth Inc 12.2%	High Yield Fixed Inc 7.4%	Hedge Funds 3.0%	Hedge Funds -1.1%	Mod Grwth Inc 9.1%	Dev ex US Fixed Inc 9.9%	Emg-Mkt Fixed Inc -4.6%	Emg-Mkt Fixed Inc 14.4%	Dev ex US Fixed Inc 10.5%	Hedge Funds 10.2%	Mod Grwth Inc -14.7%	Cash Alternative 3.7%	Hedge Funds 3.6%
High Yield Fixed Inc -26.2%	Hedge Funds 20.0%	Emg-Mkt Fixed Inc 12.0%	Cash Alternative 0.1%	60%,40% Blend 11.4%	CPI 1.5%	High Yield Fixed Inc 2.5%	Mod Grwth Inc -2.0%	60%,40% Blend 8.2%	Emg-Mkt Fixed Inc 9.3%	Hedge Funds -4.7%	High Yield Fixed Inc 14.3%	Dev ex US Equity 8.3%	CPI 7.0%	60%,40% Blend -15.9%	CPI 3.2%	Inv-Grade Fixed Inc 2.7%
US Small Cap Equity -33.8%	Commod 18.9%	Hedge Funds 10.2%	US Mid Cap Equity -1.5%	Hedge Funds 6.4%	Cash Alternative 0.0%	CPI 0.8%	US Mid Cap Equity -2.4%	Hedge Funds 5.4%	Hedge Funds 8.6%	Mod Grwth Inc -4.8%	Hedge Funds 10.4%	Inv-Grade Fixed Inc 7.5%	High Yield Fixed Inc 5.3%	Emg-Mkt Fixed Inc -16.5%	US Small Cap Equity 2.5%	CPI 2.3%
Commod -35.6%	60%,40% Blend 18.5%	Dev ex US Equity 8.2%	US Small Cap Equity -4.2%	Inv-Grade Fixed Inc 4.2%	Inv-Grade Fixed Inc -2.0%	Cash Alternative 0.0%	US Small Cap Equity -4.4%	Inv-Grade Fixed Inc 2.6%	High Yield Fixed Inc 7.5%	US Mid Cap Equity -9.1%	Inv-Grade Fixed Inc 8.7%	High Yield Fixed Inc 7.1%	Cash Alternative 0.0%	US Mid Cap Equity -17.3%	Emg-Mkt Equity 2.2%	Dev ex US Equity 2.3%
US Large Cap Equity -37.0%	Inv-Grade Fixed Inc 5.9%	Dev ex US Fixed Inc 6.8%	Hedge Funds -5.3%	CPI 1.7%	Emg-Mkt Equity -2.3%	Emg-Mkt Equity -1.8%	High Yield Fixed Inc -4.5%	CPI 2.1%	Inv-Grade Fixed Inc 3.5%	US Small Cap Equity -11.0%	Commod 7.7%	Emg-Mkt Fixed Inc 5.9%	Emg-Mkt Fixed Inc -1.5%	US Large Cap Equity -18.1%	Emg-Mkt Fixed Inc 1.1%	Emg-Mkt Equity 1.0%
US Mid Cap Equity -41.5%	Dev ex US Fixed Inc 3.9%	Inv-Grade Fixed Inc 6.5%	Dev ex US Equity -11.7%	Dev ex US Fixed Inc 0.8%	Dev ex US Fixed Inc -5.1%	Dev ex US Fixed Inc -2.5%	Dev ex US Fixed Inc -4.8%	Dev ex US Fixed Inc 1.9%	CPI 2.1%	Commod -11.2%	Dev ex US Fixed Inc 5.2%	CPI 1.4%	Inv-Grade Fixed Inc -1.5%	Emg-Mkt Equity -19.7%	Inv-Grade Fixed Inc -1.2%	Cash Alternative 0.6%
Dev ex US Equity -43.1%	CPI 2.7%	CPI 1.5%	Commod -13.3%	Cash Alternative 0.1%	Emg-Mkt Fixed Inc -6.6%	Dev ex US Equity -4.5%	Emg-Mkt Equity -14.6%	Dev ex US Equity 1.5%	Commod 1.7%	Dev ex US Equity -13.4%	CPI 2.3%	Cash Alternative 0.5%	Emg-Mkt Equity -2.2%	US Small Cap Equity -20.4%	Commod -3.4%	Dev ex US Fixed Inc 0.3%
Emg-Mkt Equity -53.2%	Cash Alternative 0.1%	Cash Alternative 0.1%	Emg-Mkt Equity -18.2%	Commod -1.1%	Commod -9.5%	Commod -17.0%	Commod -24.7%	Cash Alternative 0.3%	Cash Alternative 0.8%	Emg-Mkt Equity -14.2%	Cash Alternative 2.2%	Commod -3.1%	Dev ex US Fixed Inc -9.5%	Dev ex US Fixed Inc -21.9%	Dev ex US Fixed Inc -5.4%	Commod -2.6%

DATA AS OF 9/30/2023

Sources: © 2023 – Morningstar Direct, All Rights Reserved¹, and Wells Fargo Investment Institute. YTD = year to date. Average is calculated as geometric mean. Average is calculated as 15 years from 2008–2022. Blends are rebalanced quarterly. Performance results for Moderate Growth and Income Liquid and the 60/40 blend are calculated using blended index returns. **Past performance does not guarantee future results.** An index is unmanaged and not available for direct investment. Please see the end of the report for the definitions of the indexes that correlate to each asset class.

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Moderate growth and income quilt chart Cont'd

Performance results for the MGI Liquid and 60/40 blends are calculated using blended index returns and for illustrative purposes only. Moderate Growth & Income allocation is dynamic and changes as needed with adjustments to the strategic allocations. Performance results do not represent actual trading, and the results achieved do not represent the experience of any individual investor. In addition, performance results do not reflect the impact of any fees, expenses, or taxes applicable to an actual investment. Unlike most asset-class Indexes, HFR index returns are net of all fees. The Indexes reflect the historical performance of the represented assets and assume the reinvestment of dividends and other distributions. An index is unmanaged and not available for direct investment. **Past performance does not guarantee future results.** Definitions of the Indexes and descriptions of the risks associated with investment in these asset classes are provided below.

60%/40% blend: 60% S&P 500 Index and 40% Bloomberg U.S. Aggregate Bond Index

Moderate Growth and Income: 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% JPM EMBI Global Index, 24% S&P 500 Index, 10% Russell Midcap Index, 6% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.

- **Investment Grade Fixed Income: Bloomberg U.S. Aggregate Bond Index** is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.
- **High Yield Fixed Income: Bloomberg U.S. Corporate High Yield Bond Index** covers the U.S.-dollar-denominated, non-investment-grade, fixed-rate, taxable corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB= or below. Included issues must have at least one year until final maturity.
- **Cash Alternatives/Treasury bills: Bloomberg U.S. Treasury Bill (1–3 Month) Index** is representative of money markets.
- **Commodities: Bloomberg Commodity Index** is a broadly diversified index of commodity futures on 20 physical commodities, subdivided into energy, U.S. agriculture, livestock, precious metals, and industrial metals sectors. Commodity weights are derived in a manner that attempts to fairly represent the importance of a diversified group of commodities to the world economy.
- **Hedge Funds: HFRI Fund Weighted Index** is a fund-weighted (equal-weighted) index designed to measure the total returns (net of fees) of the approximately 2,000 hedge funds that comprise the index. Constituent funds must have either \$50 million under management or a track record of greater than 12 months. Substrategies include: HFRI Event Driven, Distressed/Restructuring Index, and HFRI Event Driven (Total) Index.
- **Developed Market Ex-U.S. Fixed Income: JP Morgan Global Ex U.S. Index (JPM GBI Global Ex-U.S.)** is a total return, market-capitalization-weighted index, rebalanced monthly, consisting of the following countries: Australia, Germany, Spain, Belgium, Italy, Sweden, Canada, Japan, the United Kingdom, Denmark, the Netherlands, and France.
- **Emerging Market Fixed Income: JPM EMBI Global Index** is a U.S.-dollar-denominated, investible, market-cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. While products in the asset class have become more diverse, focusing on both local currency and corporate issuance, there is currently no widely accepted aggregate index reflecting the broader opportunity set available, although the asset class is evolving. By using the same index provider as the one used in the developed market bonds asset class, there is consistent categorization of countries among developed international bonds (ex. U.S.) and emerging market bonds.
- **Developed Market Ex-U.S. Equities: MSCI EAFE Index (Europe, Australasia, Far East) Index** is a free-float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.
- **Emerging Market Equities: MSCI Emerging Markets Index** is a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of emerging markets.
- **U.S. Small Cap Equities: Russell 2000® Index** measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.
- **U.S. Mid Cap Equities: Russell Midcap® Index** measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index.
- **U.S. Large Cap Equities: S&P 500 Index** consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market-value-weighted index with each stock's weight in the index proportionate to its market value.
- **Inflation-CPI: IA SBBI U.S. Inflation Index** is a custom unmanaged index designed to track the U.S. inflation rate.

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Moderate growth and income quilt chart – Cont'd

While the HFRI Indexes are frequently used, they have limitations (some of which are typical of other widely used Indexes). These limitations include survivorship bias (the returns of the Indexes may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to Indexes, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown). The HFRI Indexes are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these Indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Returns of the underlying hedge funds are net of fees and are denominated in USD.

Risk considerations

Investing in stocks involves risk and their returns and risk levels can vary depending on prevailing market and economic conditions. Small- and mid-cap stocks are generally more volatile, subject to greater risks and are less liquid than large company stocks. Foreign investing has additional risks including currency, transaction, volatility and political and regulatory uncertainty. These risks are heightened in emerging markets. Bonds are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes and may be subject to the alternative minimum tax, and legislative and regulatory risk. Investing in commodities is not appropriate for all investors and may subject an investment to greater share price volatility than an investment in traditional equity or debt securities.

Alternative investments, such as hedge funds, are not appropriate for all investors and are only open to “accredited” or “qualified” investors within the meaning of the U.S. securities laws. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk-reward profiles of their portfolios, the investments themselves can carry significant risks. Hedge funds trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods which can result in adverse consequences for the investor.

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