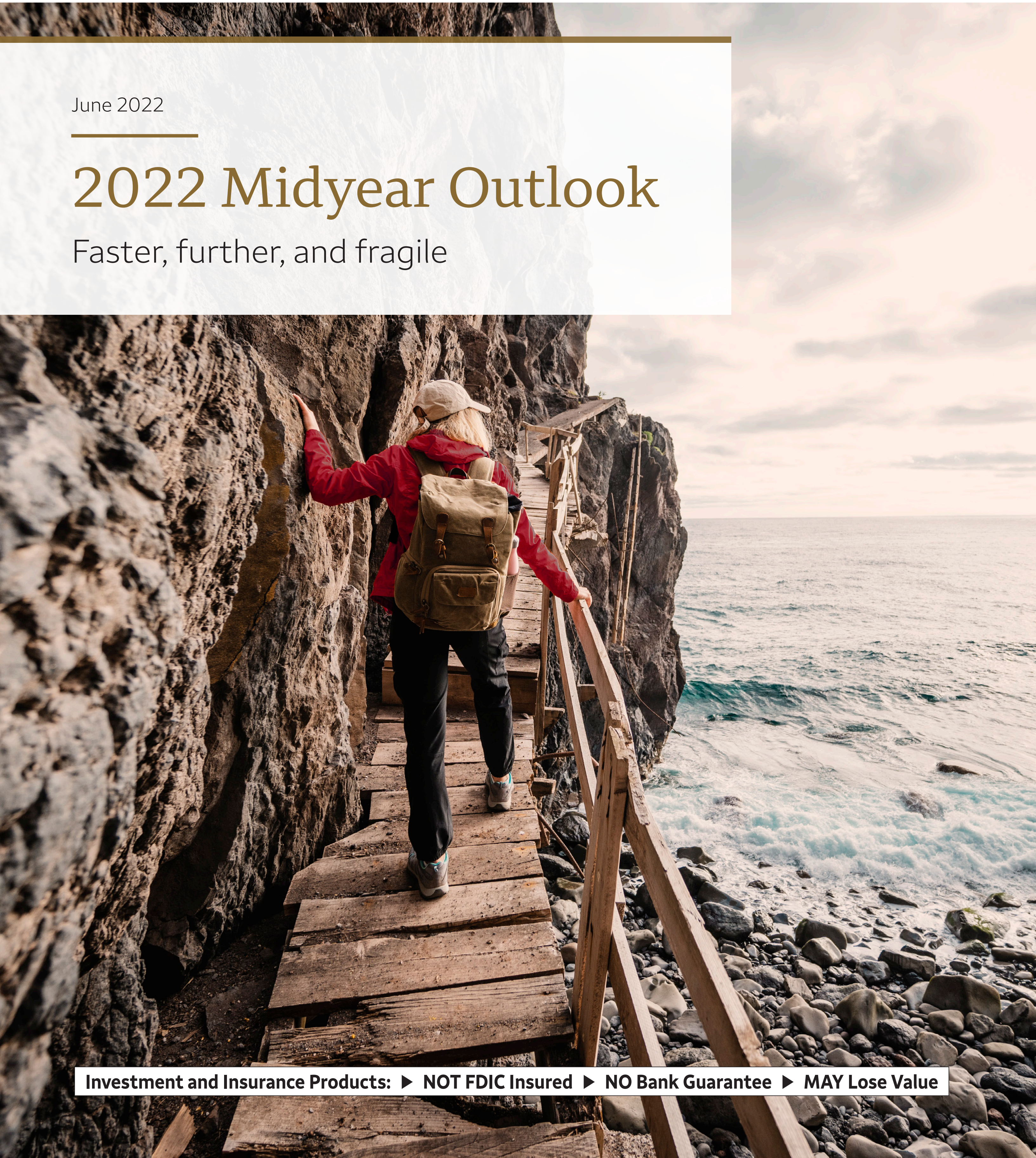
WELLS FARGO
Investment Institute

June 2022

2022 Midyear Outlook

Faster, further, and fragile



Faster, further, and fragile

June 2022

If the economy were a sick patient, I would say that the main symptom is that inflation is outpacing economic growth. This inflation "fever" looks likely to signal a mild recession "disease" late this year and early next year, unless conditions alter the economy's current course. As in the past, we expect it to prove difficult for the Federal Reserve (Fed) “physician” to exactly prescribe the right interest rate dosage.

> *“These are the times that try investors' souls.”*
>
> — with apologies to Thomas Paine

The interest rate prescription should cool inflation but has the side effect of undermining borrowing, spending, and economic growth. And the interest rate side effects can take six to 20 months to fully play out, implying that an overdose is very possible. Certainly, this really tough medicine could do more harm than good, making economic and corporate earnings growth an unfortunate casualty of the treatment.

So, while the economic cycle runs **faster** and the interest rate increases run **further**, we believe the economy and capital markets will remain **fragile**.

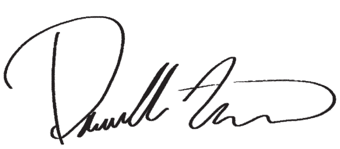
Against this backdrop, we are often asked when the next recession will come. We think the better question is, “If there is a recession, how long and deep might it be?” The answer will depend on how fragile consumer and investor sentiment may be to simultaneous shocks in energy and food price inflation and to higher interest rates during the coming months. At this point, and considering the economy's current rate of slowing, we believe a mild recession seems more likely than not later this year and into early next year.

As with an illness, the anticipation of a recession can focus so much on the risks that the anxiety becomes overwhelming. That's a good reminder for investors when facing the trying times in capital markets this year. As we try to make sound decisions and keep the anxiety at bay, it's essential to keep perspective — to be neither an optimist nor a pessimist but a realist.

To that end, first we remember that the past three years delivered exceptional market performance. Most of all, we always face risk not strictly as an unknown but as something to measure and as part of a disciplined decision process to work out with an investment professional. In fact, investors weigh risk and reward, whether markets are up or down. Our strategists have asked which risks markets are paying us to take, and I am pleased to share their guidance with you in this report.

On behalf of my Wells Fargo colleagues, I want to thank you for the trust you extend to us as our clients. We look forward to walking this road with you in 2022 and beyond.

Darrell L. Cronk, CFA
President, Wells Fargo Investment Institute
Chief Investment Officer, Wealth & Investment Management



What's inside

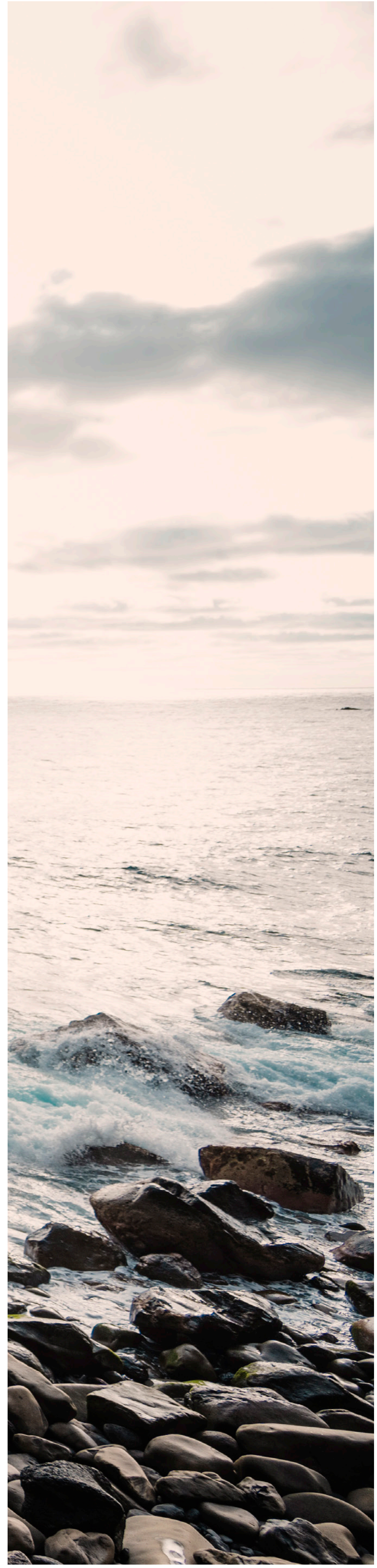
- U.S. recession risk is crossing over a probability level that makes recession our base case for the end of 2022 and into early 2023.
- As inflation and monetary tightening ease more perceptibly in late-2023, we expect a nascent economic recovery that markets may project into 2024.

- We believe positive but slowing earnings per share (EPS) growth will outweigh declining valuations to generate moderate year-end 2022 equity price gains from current levels. For 2023, we expect recession to shrink EPS, but market expectations for recovery later in 2023 should lift valuations and equity markets by year-end.
- We favor U.S. large-cap and U.S. mid-cap equities over international equities and favor quality among equity sectors.

- The Fed has taken a decidedly more aggressive approach toward monetary policy, even as the window of opportunity to engineer an economic soft landing narrows.
- We expect rising U.S. Treasury yields across the entire yield curve, and for short-term rates to rise faster than long-term rates. For now, we favor maintaining a defensive fixed-income posture.

- Commodities had a strong start to the year, but we believe gains are likely to moderate into year-end before accelerating again in 2023.
- For yield investors, we prefer midstream energy C-corporations over public real estate investment trusts (REITs).

- We expect Global Macro and Relative Value strategies to provide critical late-cycle diversification and, in the case of Relative Value, incremental income at a time when inflation-adjusted yields remain low.
- We believe credit stress is likely to build, which eventually should lead to a better opportunity set for Event Driven and Private Debt strategies focused on special situations and distressed debt.



*Alternative investments are not appropriate for all investors and are only open to "accredited investors" or "qualified investors" within the meaning of the U.S. securities laws. They are speculative, highly illiquid, and designed for long-term investment and not as trading vehicles.

Please see pages 25–27 for important definitions and risk considerations.

2022 and 2023 year-end targets

1.5%

2022 U.S. GDP (gross domestic product) growth

Our base case is for a mild recession that is likely to begin late in 2022 and extend into early 2023.

Global economy	Year-end 2021 actuals	Year-end 2022 targets	Year-end 2023 targets
U.S. GDP growth	5.7%	1.5%	-0.5%
U.S. CPI inflation	4.7%	7.7%	3.5%
U.S. unemployment rate	4.2%	3.8%	4.4%
Global GDP growth	5.9%	2.5%	2.0%
Global inflation	3.2%	6.2%	4.1%
Developed market GDP growth	5.1%	1.5%	0.0%
Developed market inflation	3.6%	6.6%	3.1%
Eurozone GDP growth	5.4%	1.1%	-0.8%
Eurozone inflation	2.6%	7.2%	2.0%
Emerging market GDP growth	6.5%	3.2%	3.5%
Emerging market inflation	2.9%	6.0%	4.8%

4,200–4,400

2022 S&P 500 Index

We expect the S&P 500 Index to begin to rebound as investors look for a nascent economic recovery to begin sometime in 2023.

Equities	End of May 2022 values	Year-end 2022 targets	Year-end 2023 targets
S&P 500 Index	4,132	4,200–4,400	4,500–4,700
S&P 500 earnings per share*	$210	220	210
Russell Midcap Index	2,875	2,800–3,000	3,000–3,200
Russell Midcap earnings per share*	$141	155	145
Russell 2000 Index	1,864	1,700–1,900	1,800–2,000
Russell 2000 earnings per share*	$70	85	75
MSCI EAFE Index	2,038	1,800–2,000	1,850–2,050
MSCI EAFE earnings per share*	$147	140	130
MSCI Emerging Markets Index	1,078	900–1,100	950–1,150
MSCI EM earnings per share*	$94	90	80

Source: Wells Fargo Investment Institute, June 17, 2022. GDP = gross domestic product; CPI = Consumer Price Index. **Forecasts, targets, and estimates are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.** An index is unmanaged and not available for direct investment. *Earnings per share data as of year-end 2021.

Please see pages 25–27 for important definitions and risk considerations.

Fixed income	End of May 2022 values	Year-end 2022 targets	Year-end 2023 targets
10-year U.S. Treasury yield	2.84%	3.25%–3.75%	2.75%–3.25%
30-year U.S. Treasury yield	3.04%	3.25%–3.75%	2.75%–3.25%
Federal funds rate	0.75%–1.00%	3.50%–3.75%	4.00%–4.25%

Commodities	End of May 2022 values	Year-end 2022 targets	Year-end 2023 targets
WTI crude oil ($ per barrel)	$114.67	$90–$110	$100–$120
Brent crude oil ($ per barrel)	$119.85	$95–$115	$105–$125
Gold ($ per troy ounce)	$1,837	$2,000–$2,100	$2,100–$2,200
Bloomberg Commodity Index	281.15	260–280	270–290

Foreign currencies	End of May 2022 values	Year-end 2022 targets	Year-end 2023 targets
Dollar/euro exchange rate	$1.07	$0.97–$1.05	$1.00–$1.08
Yen/dollar exchange rate	¥128.67	¥132–¥142	¥125–¥135

Source: Wells Fargo Investment Institute, June 17, 2022. WTI = West Texas Intermediate. **Forecasts, targets, and estimates are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.** An index is unmanaged and not available for direct investment.

3.50%–3.75%

2022 federal funds rate

We expect higher interest rates across maturities by year-end 2022, with the potential for yield-curve inversion through 2023.

$90–$110

2022 West Texas Intermediate crude

Hesitant supply and surging demand should support oil prices through 2023.

$0.97–$1.05

2022 dollars per euro

Dollar strength may fade a little in 2023 as we expect falling inflation to reduce downward pressures on eurozone and Japanese economies.

Please see pages 25–27 for important definitions and risk considerations.

A bumpy post-pandemic transition

Key takeaways

- A mild recession is now our base case for the end of 2022 and into early 2023. As inflation and monetary tightening ease more perceptibly later in 2023, we expect a nascent economic recovery that markets may project into 2024.
- We expect U.S. macroeconomic and interest rate advantages to push the dollar higher against developed market currencies. Emerging market currencies may find more support but are unlikely to broadly outperform the dollar.

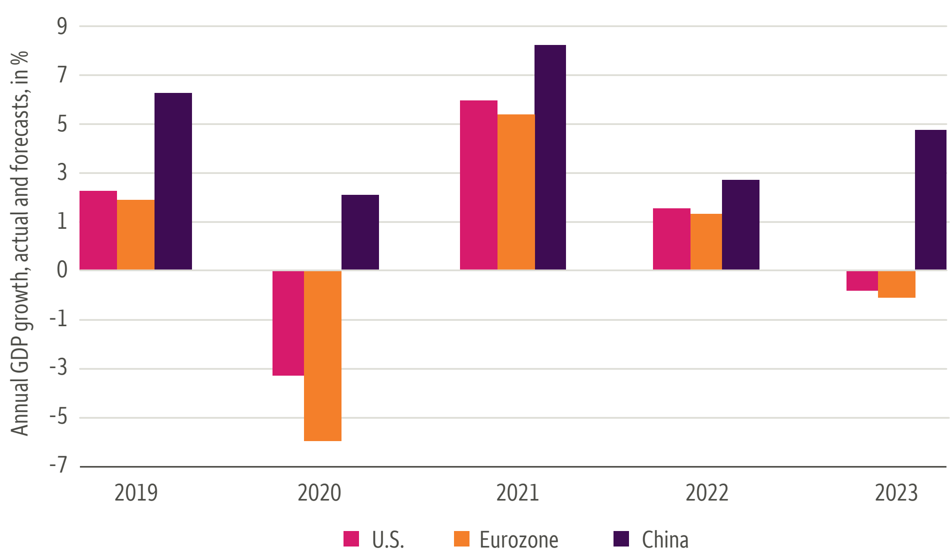
What it may mean for investors

- A more challenging economic environment calls for a more defensive stance within and across asset classes, in our view.

We believe that this economic expansion will rank among the shortest and most volatile cycles over the past century. After only two years, we see clear signs that the expansion is in late cycle, thanks to an inflation accelerant that we expect to fade more noticeably in 2023. We believe that rising U.S. interest rates, inflation's squeeze on real incomes, supply chain disruptions from China's lockdown, and the war in Ukraine increasingly will outweigh support from solid job growth and erode consumer spending in the balance of 2022. U.S. recession risk has risen steadily and is starting to cross over a probability level that makes recession a base case for the end of 2022 and into early 2023. As inflation and monetary tightening ease more perceptibly later in 2023, we expect the beginning of an economic recovery that markets may project into 2024.

By comparison with the U.S., most of the rest of the world economy faces greater vulnerability to energy and other supply shocks, and to slowing 2022 growth in export markets — particularly, a sharp slowdown because of the COVID-19 lockdowns in China. These, plus the dollar's surge in value, have stirred up considerable 2022 headwinds for commodity importers and strongly suggest a coming European recession, likely through mid-2023. Some emerging economies are commodity producers, and we anticipate their tailwind from higher export prices should provide enough offset so that overall emerging market economic growth stays positive, albeit historically slow. By late-2023, we expect economies outside the U.S. should pick up their pace modestly if Europe and the U.S. return to growth, China's government reflates its economy (see the chart below), and inflation moderates as we expect.

A 2023 Chinese growth rebound should cushion chill winds from the West



Sources: IMF, World Economic Outlook, April 2022; Wells Fargo Investment Institute forecasts for 2022 and 2023; data as of April 26, 2022. GDP = gross domestic product. Forecasts are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.

Please see pages 25–27 for important definitions and risk considerations.

Long-term inflation trend is likely to moderate

Our view is that inflation will ease only gradually through most of the second half of 2022, sustaining the pressure on the economy from a squeeze on real incomes and rising interest rates. Lingering supply shortages should sustain cost inflation for manufactured goods. Moreover, services inflation should take support from sizable rent increases in the U.S., wage inflation, and increased demand for travel, entertainment, and other spending coming from the economy's reopening.

As 2023 progresses, with easing supply-chain bottlenecks and moderating business and household spending, we expect noticeably lower inflation. Our forecast is for U.S. inflation to slow to 3.5% in 2023 from 7.7% in 2022, the highest full-year average since the last year of double-digit increases in 1981.

A central concern with the inflation outlook is the effect of recent jolts to supply and demand through 2023 and beyond. Outside shocks have been more responsible for inflation's rise than at any time since the energy price spikes in the 1970s. Key to the outlook is the extent to which institutional changes — including deregulation, labor's reduced bargaining power, and globalization — have unwound after reducing self-perpetuating disruptions to supply and demand that had supported extended stagflation in the 1970s and early 1980s. Our view is that the environment has evolved enough in recent years to prevent inflation from returning to its sub-2% rate in the decade before the pandemic. However, we believe that remaining restraints will support a still-moderate rate once the series of shocks to the economy fully unwind.

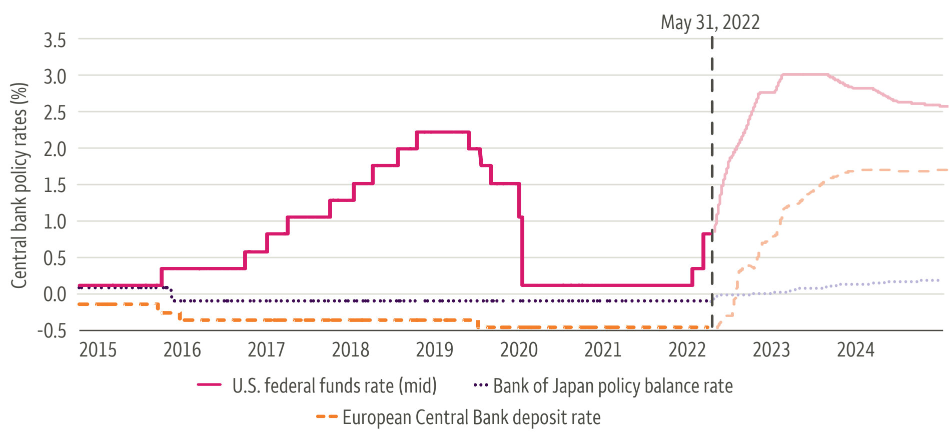
Please see pages 25–27 for important definitions and risk considerations.

Dollar strength to persist in 2022, peak in 2023

We see the dollar's recent strength continuing in 2022 with several key supports. Even as growth slows in the U.S., the structural advantages of a less trade-dependent economy and lower vulnerability to rising import costs (notably, energy) should maintain tailwinds for the dollar versus the euro and the yen. The U.S. interest rate advantage also may help the dollar this year while the Fed raises interest rates faster than those controlled by central banks overseas. However, the dollar's rate support may peak in 2023 as the Fed completes its rate increases. Dollar strength may fade slightly next year if inflation pressures moderate globally, reducing cost pressures on eurozone and Japanese economies.

Market-based expectations for central bank policy rates

Central bank policy rates are likely to rise in 2022 and 2023. However, the chart illustrates that market expectations are for policy interest rates in Japan and the eurozone to narrow the gap with U.S. rates in 2024, once the market expects falling U.S. rates. These initially wider rate gaps should underpin the dollar this year, but this support may weaken in 2023 once the Fed's rapid rate cycle peaks out.



Sources: Bloomberg and Wells Fargo Investment Institute, latest data as of May 31, 2022. Data to the right of the vertical line shows market expectations for central bank policy rates as of May 31, 2022. These interest rate expectations are derived from the Overnight Index Swaps (OIS) market. An OIS is a fixed to floating interest rate swap where the floating leg is computed using a published overnight index rate, and these swap rates are commonly used (as here) to indicate market expectations of central bank policy rates.

Expect mixed performance from emerging market currencies

Many emerging market currencies take support from higher local interest rates and a relatively low dependence on fuel imports, but others face headwinds from geopolitical instability and a China slowdown. We expect mixed performance, whereby those currencies from higher-rate, commodity-exporting economies appreciate by more than those oriented to manufacturing. It may be hard for emerging market currencies in aggregate to outperform the dollar, but they may well appreciate by more than the euro and other developed currencies.

Please see pages 25–27 for important definitions and risk considerations.

Positioning for late-cycle dynamics

Key takeaways

- We expect earnings growth to slow in 2022 and shrink in 2023. However, we believe valuations will rebound in 2023 to lift equity markets by year-end.
- As the cycle matures, our preferences have moved away from cyclicals, and instead, we favor higher-quality asset classes and sectors.

What it may mean for investors

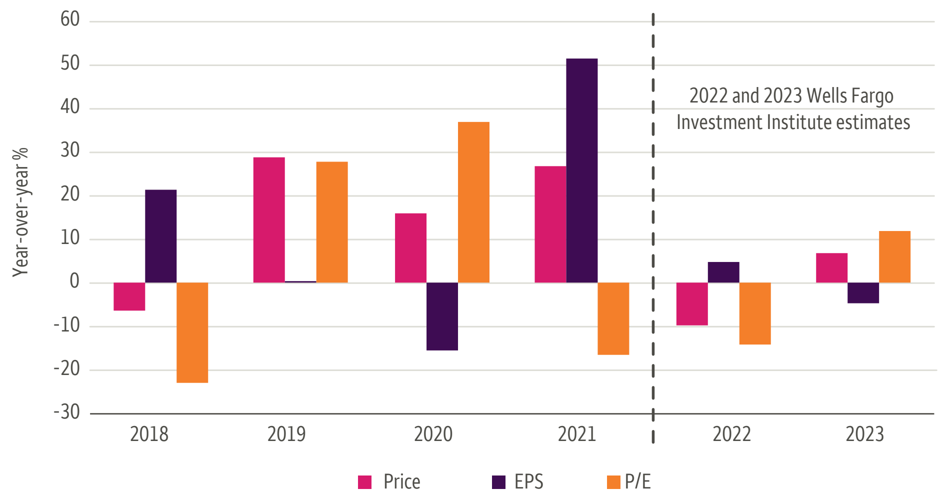
- We believe investors should continue to lean into high-quality U.S. large-cap and mid-cap equities and reduce cyclicality as the economy slows.

Earnings likely to weaken through 2023

In the U.S., we expect 2022 revenue growth to be challenged as the economy slows. Also, we see operating margins falling from record levels while interest, labor, and input expenses climb. We forecast positive but slowing earnings growth in 2022 and an earnings contraction in 2023 due to the recession we expect in late-2022 and early-2023.

Our forecasts for higher interest rates and slower growth likely will continue to place some downward pressure on price/earnings (P/E) multiples in the near term. However, later in 2023 we expect the beginning of an economic recovery that markets may project into 2024. In that case, valuations should stabilize and rise, taking equity prices higher through the end of 2023. The chart below shows the relative impacts from valuations and earnings that we expect on December-to-December S&P 500 Index price changes.

S&P 500 Index price, earnings per share (EPS), and P/E year over year



Sources: Bloomberg and Wells Fargo Investment Institute (WFII)
Yearly data, December 31, 2018, to December 31, 2023, estimates for December 31, 2022 and December 31, 2023. Estimates are based on certain assumptions and on our current views of market and economic conditions, which are subject to change. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Please see pages 25–27 for important definitions and risk considerations.

U.S. equities should continue to outperform international

International equity markets face competing forces that ultimately keep us less favorable compared with U.S. equities for the balance of 2022 and through 2023. In aggregate, earnings growth prospects for developed and emerging markets lag the U.S., in our view, while sentiment, geopolitics, and currency movements confirm our preference for U.S. over international equity markets.

Our currency outlook suggests continued U.S. dollar strength in the near term and modest dollar depreciation in 2023. Elevated commodity prices are likely to benefit emerging market commodity producers, yet higher U.S. and other advanced-country interest rates, as well as slowing global and China economic growth, are headwinds to the broad group. While a recession in Europe likely will weigh on developed market returns, we expect some of these pressures to moderate in the back half of 2023. Yet, we see little catalyst for sustained international equity market outperformance.

Lean into quality in sector allocations

We favor increased emphasis on quality over cyclicals in our sector positioning and selectivity at the sub-industry level. We view quality and selectivity as necessary to at least partially offset near-term headwinds while also remaining in position to potentially benefit from positive structural forces that we believe will present opportunities in the coming years. The table on page 12 lists our sector and sub-industry preferences, but some specifics merit special mention.

At the broad, sector level, we still favor the Information Technology (IT) sector for its high-quality attributes and the prospects for technology's continued long-term integration into the economy. Within the IT sector, we favor the IT Services, Networking Equipment, and Enterprise Software sub-industries because we expect relatively resilient tech spending in the economy and continued high-quality financial metrics in these sub-industries.[1]

We favor the Energy sector for the uptrend in oil prices and secular supply constraints that we expect to persist for some time to come. Within this sector, we prefer Integrated Oil and Gas Companies which have strong capital bases and a positive relationship with commodity price levels. Yet, we would avoid Refiners, which could suffer more acutely from excess capacity should consumer demand soften.

Our preference for the Health Care sector comes from its mix of defensive and quality characteristics.[2] We favor the Managed Care sub-industry of the Health Care sector due to the diminishing risks from both the pandemic and politics along with this group's exposure to steady longer-term growth drivers (such as demographics and industry consolidation).

Favored asset classes

- U.S. Large Cap Equities
- U.S. Mid Cap Equities

Favored equity sectors

- Energy
- Health Care
- Information Technology

1. Sub-industry analysis prepared by Wells Fargo Advisors Global Securities Research (GSR). For more detailed information at the sub-industry level, please see "2022 Midyear Equity Sector Outlook: Different Challenges, Similar Playbook", June 2022.

2. "Defensive" in this context means that the sector has tended to outperform the S&P 500 composite index during volatile periods, such as when the economy slows or monetary policy raises interest rates. "Quality" refers to low leverage and high return-on-equity — in other words, a tendency to have a strong balance sheet and earnings prospects.

Please see pages 25–27 for important definitions and risk considerations.

We also now favor a full, market-weight allocation (neutral rating) to the Consumer Staples and Utilities sectors due to their traditional resilience in a slowing economy. We have added Food & Staples Retailing to our list of favorable sub-industries in Consumer Staples because we expect this group to benefit from an increasingly value-conscious consumer.

Even in sectors we rate as neutral, we see opportunities to diversify away from the aging economic cycle by looking to sub-industries that generally follow the economic cycle less closely than the broader sector does. Examples would include Defense Contractors within Industrials, Property & Casualty Insurance within Financials, and Industrial Gases within Materials.

Please see pages 25–27 for important definitions and risk considerations.

Sector guidance		Sector	Sub-industry guidance: Favorable	Sub-industry guidance: Unfavorable
Favorable		Energy	Integrated Oil Companies; Midstream C-Corps	Oilfield Services; Refiners
Favorable		Health Care	Life Sciences Tools & Services; Managed Care; Medical Devices & Equipment	Generic Pharmaceuticals
Favorable		Information Technology	IT Services; Networking Equipment; Payment Processors; Semiconductor Equipment; Software	Storage & Peripherals
Neutral		Communication Services	Integrated Telecom Services; Interactive Home Entertainment; Interactive Media & Services	Alternative Carriers; Publishing
Neutral		Consumer Staples	Beverages; Food & Staples Retailing; Household Products	Tobacco Products
Neutral		Financials	Insurance Brokers; Property & Casualty Insurance; Universal Banks	Business Development Companies; Mortgage REITs
Neutral		Industrials	Defense Contractors; Multi-Industrials; Railroads	Airlines; Commercial Aerospace
Neutral		Materials	Industrial Gases	—
Neutral		Utilities	Electric Utilities; Independent Power & Renewable Electricity Producers; Multi Utilities; Water Utilities	—
Unfavorable		Consumer Discretionary	Automotive Retail; General Merchandise Stores; Internet & Direct Marketing Retail	Automobile Manufacturers; Homebuilding; Casinos & Gaming; Restaurants
Unfavorable		Real Estate	Apartment REITs; Industrial REITs; Infrastructure (Tower) REITs; Self-storage REITs; Single Family Home REITs	Health Care REITs; Hotel & Lodging REITs; Office REITs

Sub-industry guidance by Wells Fargo Advisors Global Securities Research group. Sector guidance provided by Wells Fargo Investment Institute. As of June 14, 2022.

Please see pages 25–27 for important definitions and risk considerations.

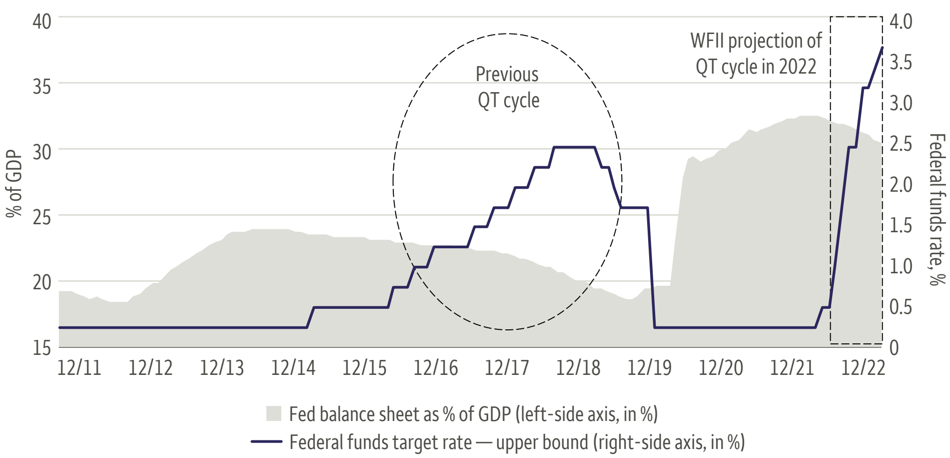
Fed policy dilemma supports higher yields

The Fed has taken a decidedly more assertive approach toward tightening monetary policy, even as the slowing economy narrows the window for a soft landing — i.e., a gradual economic slowdown that avoids a recession. Standing by while inflation rises is not an option, but tightening too fast could easily tip the economy toward a sharp economic slowdown or a recession — in other words a hard landing.

Coupled with tightening monetary policies from the Fed, rising U.S. Treasury yields are likely to continue in the second half of 2022. Fixed-income markets already experienced broadly falling prices and returns in the first half of 2022. We expect increased volatility and uncertainty to persist in the second half as the Fed struggles to tame inflation and remove years of stimulus. However, in our opinion, the most damaging fixed-income price movements in intermediate and longer-term bonds are likely in the rearview mirror. We expect the yield curve to shift higher only gradually toward our targets by year-end.

Fed's tightening in full swing

We expect the Fed to raise rates further and to continue unwinding the size of its balance sheet



Sources: Wells Fargo Investment Institute and Bloomberg, as of June 17, 2022. Monthly data from December 2011 to May 31, 2022. Wells Fargo Investment Institute projection from June 2022 to December 2022. GDP = gross domestic product. QT = quantitative tightening — i.e., monetary policies that reduce the size of the Fed's balance sheet. Projections are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.

Key takeaways

- We expect uncertainties and market volatility to increase in the second half of 2022, while the Fed struggles to tame inflation and avoid an economic recession.
- We believe that the technical imbalance between municipal supply and demand will serve as a strong backdrop for municipal performance.

What it may mean for investors

- We favor playing defense in bond portfolios today. We prefer short-term and intermediate-term maturities while interest rates continue to rise modestly. Although we are neutral on investment-grade credit, we prefer not to increase allocations or extend down the credit spectrum into high-yield fixed income at this time.

Please see pages 25–27 for important definitions and risk considerations.

Favored fixed-income sectors

- U.S. Taxable Investment Grade Fixed Income
- U.S. Short Term Taxable Fixed Income
- U.S. Intermediate Term Taxable Fixed Income
- Municipal Securities

Geopolitical risks and rising rates may affect global investors

The Russia-Ukraine war is likely exacerbating Europe's rapidly slowing economic growth and rising inflation. The war may slow, but not derail, European Central Bank interest rate increases to fight European inflation. As a result, global rates may remain under upward pressure, although the general advantage for U.S. yields is likely to widen well into 2023 (see chart on page 8). Moreover, while the euro and yen remain weak, the dollar's corresponding gains are negative for returns to dollar-based investors. We therefore hold an unfavorable view of Developed-Market ex-U.S. debt.

We are neutral on emerging market sovereign debt denominated in dollars. Beyond the initial impact of the Russia-Ukraine war, U.S. dollar-denominated emerging market sovereign debt should find some support from investors' search for yield, which should allow spreads to stabilize. Higher commodity prices should strengthen credit conditions in many emerging markets. But preexisting headwinds of higher inflation, reduced trade, and the widespread lockdowns in China may negatively impact these economies in 2022.

Still playing defense on fixed income

We expect the continued move in yields, influenced by aggressive Fed interest rate hikes and Fed balance sheet reduction to present headwinds for fixed-income investors in the near term. However, as yields move higher and the Fed slows the economy, opportunities may present themselves to extend duration (interest-rate sensitivity) and buy longer-term bonds. For now, we favor short- and intermediate-term maturities in investment-grade fixed income.

Generating income continues to be one of the top priorities for many fixed-income investors. However, we do not believe investors should extend credit risk because we anticipate that credit conditions will deteriorate as the economy slows, funding costs increase, or financial conditions tighten considerably. We prefer not to increase allocations or extend down the credit spectrum into high-yield fixed income at this time.

Please see pages 25–27 for important definitions and risk considerations.

The table below lists our sector and sub-sector preferences, but some are worth special mention. To reiterate, we are neutral on investment-grade credit, but within that sector we favor the more defensive sub-sectors: We prefer fixed-income securities in consumer staples and health care if consumer buying power erodes under persistent inflation as we expect.[3] We also favor the utilities fixed-income investment-grade sub-sector. Finally, current supply and demand dynamics lead us to favor the oil and gas industry. Elevated hydrocarbon prices throughout the year should support strong cash flow generation for the industry.

Fixed-income sector and sub-sector preferences

	Sub-sectors	
	Favorable	**Unfavorable**
Investment-grade corporate bonds (neutral)	Consumer staples, utilities, and health care, oil & gas	Industrials, consumer discretionary
Municipal bonds (favorable)	Essential-service and tax-supported issuers; transportation issuers (for more aggressive investors)	Niche private higher-education institutions and smaller health care providers

Sub-sector guidance by Wells Fargo Advisors Global Securities Research group. Sector guidance by Wells Fargo Investment Institute. As of June 14, 2022.

Consider municipal bonds

Higher yields caused municipal bonds prices to decline abruptly in the first half of the year; however, this has created better entry opportunities for municipal bond investors. We believe that the technical imbalance between municipal supply and demand will serve as a strong backdrop for performance in the second half. We remain favorable on municipals, and for investors in higher effective tax brackets, municipal securities remain relevant and an important part of fixed-income positioning. Especially for the most conservative investors, we continue to favor essential-service and tax-supported issuers for the core of our credit advice. For more aggressive investors, we expect transportation systems that provide a critical service and possess monopolistic control over large service areas to continue to be more resilient.

3. Sub-sector guidance by Wells Fargo Advisors Global Securities Research group. Sector guidance by Wells Fargo Investment Institute. For more detailed information at the sub-sector level, please see "*Municipal Bond Sector Navigator*", April 2022.

Please see pages 25–27 for important definitions and risk considerations.

2022 commodity rally likely to slow, reaccelerate in 2023

Key takeaways

- Commodity prices are unlikely to repeat their stellar performance since mid-2020, yet we do expect more upside through 2023 and favor holding a full allocation in a broad-based commodity position.
- REIT fundamentals appear solid, yet higher interest rates may weigh on relative performance; therefore, 2022 opportunities and risks appear balanced.

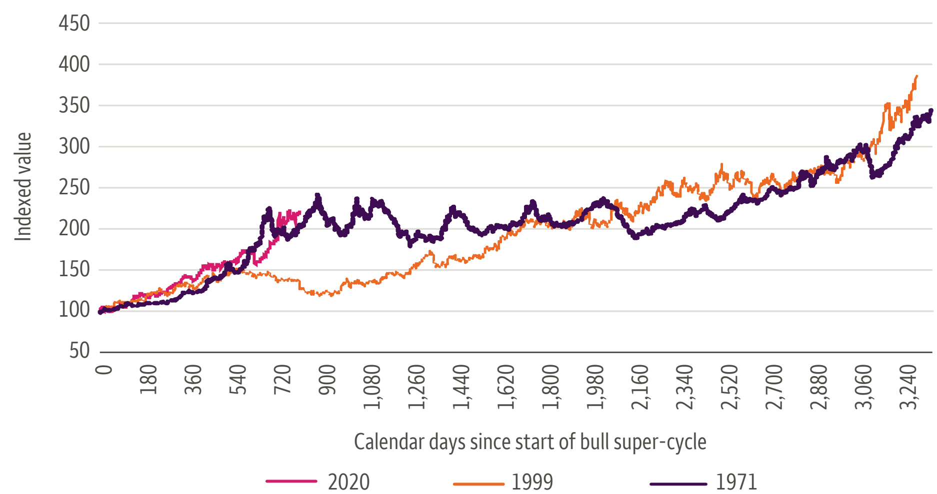
What it may mean for investors

- We expect most commodities to remain range-bound for the rest of 2022, but we look for prices to rise in 2023. REITs should keep pace with equity markets.

2022's first half witnessed record commodity prices due to supply shortages. While supply remains an issue for many commodities long term, we suspect that slowing demand growth may leave most commodity prices range-bound in the second half of 2022 and into early 2023.

In 2023, we are expecting most commodity prices to gradually increase again. While demand growth may struggle — especially during U.S. and European recessions — we believe persistent underlying supply constraints will return as the driving force behind commodity prices. Evidence still suggests that a new commodity bull super-cycle began in March 2020. Bull super-cycles are multiyear periods of strong commodity price gains, underpinned by lingering supply issues. Our favorite sectors in 2022 and 2023 are Energy and Precious Metals, but for different reasons.

Modern commodity bull super-cycles



Sources: Bloomberg and Wells Fargo Investment Institute. Indexed to 100 as of the start of the bull super-cycle. Performance measured from October 4, 1971 to November 20, 1980, July 13, 1999 to July 2, 2008, and March 18, 2020 to May 31, 2022. Commodity performance measured by our Commodity Composite. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Energy price gains to slow in 2022, reaccelerate in 2023

Energy markets are facing some of the toughest structural supply constraints in the commodity complex. The world is struggling to balance climate change concerns against economic growth and the reliance on fossil fuels to power it. That said, slowing global economic growth appears to be reducing global oil demand growth. In response, our year-end 2022 oil target ranges are near today's current prices. We expect supply constraints to return as the main issue in 2023.

Please see pages 25–27 for important definitions and risk considerations.

Defensive nature of precious metals should pay off

Since late 2020, investors have preferred to own economically sensitive commodities, and precious metals have lagged, gold specifically. We believe that investors may warm up to gold over the remainder of 2022 and into 2023, however. Two reasons specifically stand out: 1) gold's defensive nature, which historically has performed well during slower economic periods, and 2) long-term inflation expectations likely will exceed those of the pre-pandemic decade. The greatest risk to higher gold prices would be any significant further climb in interest rates, contrary to our 2023 targets.

Public REITs hounded by rising rates

The most important factors influencing public REITs for the remainder of 2022 and into 2023 are likely to be slowing global growth and Fed policy actions. As the Fed turns its attention to containing inflation through interest-rate hikes, REITs may find themselves underperforming, which is why we are unfavorable on public REITs versus other equity sectors. While it is common to believe that higher-than-normal inflation rates can favor REITs, the real track record is mixed. Some sectors could see strong inflation in rental rates, particularly those with shorter lease terms (such as Hotels, Residential, and Self-storage). Unfortunately, we see much of this upside being offset by a host of other costs, such as construction materials (primarily steel, concrete, and lumber), land, and construction labor. The intra-sector areas of public REITs that we do favor are related to housing (Single Family Home and Apartments) and those with secular tailwinds (Storage, Infrastructure, and Industrial). We remain unfavorable on the Office and Lodging public REIT sub-sectors.

Midstream C-Corporations look attractive

Midstream companies made tremendous strides syncing their cost structures to the lower energy prices of the previous five years. We believe that capital discipline should continue to be a positive for midstream companies even if energy price gains stall. Within the group, we prefer Midstream C-Corporations, based on stronger corporate governance and the ability to attract fund flows from institutional investors. Overall, we continue to favor high-quality names, which means Midstream companies that are large, broadly diversified, and financially strong.

Favored sectors

- Energy
- Precious Metals
- Energy Midstream C-Corporations

Please see pages 25–27 for important definitions and risk considerations.

Meeting late-cycle needs with alternatives

Key takeaways

- For the near future, we favor strategies to help enhance equity and credit market diversification, as well as inflation-adjusted yield, both of which are available through Relative Value and Global Macro hedge fund strategies.
- Credit market conditions are likely to deteriorate later this year despite historically low default and distress at the present time.

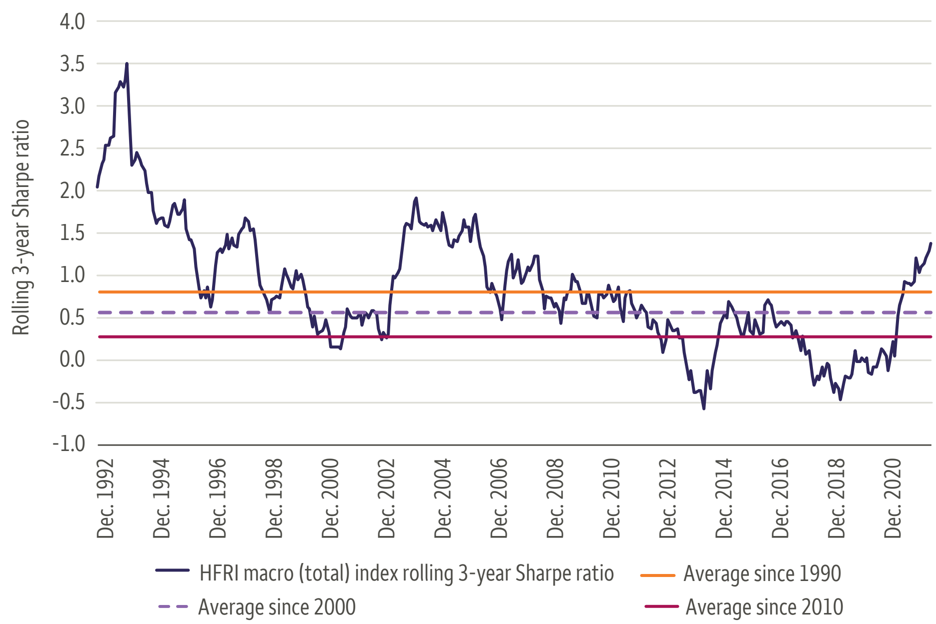
What it may mean for investors

- Late cycle can be an opportune time to allocate to alternative investment strategies that have low correlation to equities and fixed income. We favor allocations to Global Macro and Relative Value.

Given the forecasts of slowing growth, persistent inflation, and rising interest rates — not to mention structurally higher volatility — we prefer not to use hedge fund strategies to "dial up" risk or increase exposure to market risk. Rather, we favor more equity and credit market diversification as well as private-debt opportunities, all of which can be accessed through certain hedge fund and private capital strategies.

Our cyclical guidance for Global Macro and Relative Value remains favorable. We believe that both strategies are likely to find opportunities in the shifting collection of persistent market dislocations and longer-term trends, including the inflation trends discussed above. We expect Global Macro to continue to benefit from several drivers, including higher-than-expected inflation and the impact on commodity prices, higher interest rates, and heightened volatility. Importantly, as the chart below shows, a measure of Global Macro's return after adjusting for risk shows the trend well above its historical averages over different periods.[4]

Global Macro strategy risk-adjusted returns trending above historical averages



Sources: HFRI and Bloomberg, data as of April 30, 2022. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

4. Sharpe ratio measures the performance of an investment compared with a risk-free asset. (for example a U.S. Treasury security), and dividing by the security's annualized standard deviation, a measure of its own risk. The higher the Sharpe ratio, the higher the risk-adjusted return.

Please see pages 25–27 for important definitions and risk considerations.

Within Relative Value, though we are disappointed that the opportunities for convertible bond arbitrage have weakened as concerns have increased about the Information Technology sector, we foresee a rapidly improving environment for Long/Short Credit. Credit spreads have widened from previous tight spreads. We expect further spread widening to create opportunities for strategies that seek to short credit markets and capitalize on the lower earnings and tighter margins that typically accompany a slowing economy and high inflation. Additionally, we continue to like structured credit as a source of non-correlated returns with stable, low-duration yields.

Our outlook for Equity Hedge remains neutral. We have tempered our return expectations because we anticipate that leverage and exposure will trend lower as the cycle matures. In a late-cycle environment, we prefer low-net/low-beta (less market sensitive) strategies against more concentrated, directional strategies — keeping with the mantra "participate but seek to preserve." We remain unfavorable in Event Driven, as we are still not seeing a dramatic increase in distressed opportunities, but we continue to favor the Merger Arbitrage strategy that has the potential to benefit from wider spreads. Deal activity is down from last year's historically strong year, but high-quality companies still have access to debt markets (despite higher interest rates this year). Looking ahead, we expect a competitive — if narrower than previously — merger and acquisition environment.

Lastly, for qualified investors with longer-term investment horizons, we maintain our neutral view for private capital strategies, including Private Equity and Private Debt. For Private Equity, we see opportunities among small- and mid-cap buyouts. Recent acute weakness in technology companies has diminished exit valuations for Growth Equity and Venture Capital funds, but we view this weakness as a good entry point for these strategies, as we believe they have multiple years to deploy capital at more attractive prices. In Private Debt, we downgraded Direct Lending strategies to neutral from favorable. We believe the Direct Lending strategy offers investors the potential for enhanced yield while helping to mitigate both credit and interest-rate risk. However, we are tempering our outlook, as a U.S. recession may occur later this year and as potential underwriting assumptions realign to future growth assumptions.

Favored hedge fund strategies and sub-strategies

- **Relative Value:** Arbitrage
- **Relative Value:** Long/Short Credit
- **Macro:** Systematic
- **Macro:** Discretionary
- **Event Driven:** Merger Arbitrage

Favored Private Capital strategies and sub-strategies

- **Private Equity:** Small and Mid-Cap Buyout
- **Private Equity:** Growth Equity and Venture Capital

Please see pages 25–27 for important definitions and risk considerations.

Our top five portfolio ideas for the second half

1 Build portfolio resilience with diversifiers

Elevated geopolitical risks coupled with aggressive central banks, slowing economic growth, and rising inflation roiled capital markets in the first half of 2022. Equity markets struggled. Rising interest rates produced concerns that the decades-long bond bull market has ended. Although many equity and fixed-income classes may underperform our long-term assumptions as rates potentially rise further and growth continues to wane, diversifiers such as commodities and alternative investments historically have served as a useful portfolio hedge against losses.

As the table below illustrates, year to date, a diversified four-asset-group portfolio has performed better than a 50/50 blended portfolio of global stocks and bonds. Over the past year, the outperformance of the diversified portfolio has been substantially greater. A bear market, as some asset groups already have experienced this year, can occur with little warning. As such, assets that can benefit in both up and down markets may help prepare a portfolio for unanticipated downturns. The potential diversification benefits of commodities can make them an appealing addition to a portfolio allocation. Hedge fund strategies with low or negative correlations to stocks and bonds may help bolster a portfolio's resilience through access to strategies that do not rely solely on positive markets for gains.

Hypothetical allocation	YTD return (%)	YTD standard deviation (%)	YTD Sharpe ratio (%)
Moderate Growth & Income Illiquid (four asset group)	-4.02	11.17	-2.08
50% Bloomberg Multiverse Index/ 50% MSCI ACWI	-5.66	12.11	-2.72

Hypothetical allocation	1-year return (%)	1-year standard deviation (%)	1-year Sharpe ratio (%)
Moderate Growth & Income Illiquid (four asset group)	5.18	7.70	0.93
50% Bloomberg Multiverse Index/ 50% MSCI ACWI	0.62	8.36	0.13

Sources: Morningstar Direct[5] and Wells Fargo Investment Institute. Data as of April 30, 2022. Note: Illiquid (four asset group) may include fixed income, equities, real assets, and alternative investments. Private Equity is rolled up to U.S. small-cap equity and Private Debt is rolled up to U.S. high-yield fixed income starting January 1, 2022, and private real estate is rolled up to public real estate starting April 1, 2022. Performance results for the Moderate Growth and Income Illiquid (4AG) Portfolio is hypothetical and is 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. 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. **Hypothetical and past performance is no guarantee of future results.**

YTD = Year-to-date

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Please see pages 25–27 for important definitions and risk considerations.

2 Be defensive on equity exposure late in an economic cycle

Against the backdrop of a fast-moving business cycle and global central bank tightening, we favor an equity exposure with a bent toward the higher-quality segments of the asset group. Specifically, we believe that the U.S. is better positioned to weather the global economic slowdown and rising interest rates than international or U.S. small-cap companies. These factors likely will affect larger U.S. companies less than smaller ones, and less than European, Japanese and many emerging market companies. Thus, we prefer U.S. over international equities and large-cap and mid-cap stocks over small-cap stocks. Within U.S. equity sectors, we prefer Health Care, Energy, and Information Technology for their potential to post stable, high-quality earnings.

3 Add to fixed-income holdings judiciously in a rising-rate (and inflationary) environment

Looking ahead, we expect high-quality bonds to provide traditional diversification attributes both for income — particularly given that yields have risen — and to help reduce downside participation during periods of heavy equity market volatility. We believe that investors should continue to position fixed-income allocations somewhat defensively by favoring investment-grade intermediate- and short-term fixed income. Most of the increase in investment-grade fixed-income yields and the associated price declines likely occurred during the first half of 2022. As such, we suggest that investors consider incrementally adding back to U.S. Long Term Taxable Fixed Income to strategic target levels.

The recession we anticipate later in 2022 and early in 2023 should cause further spread widening and underperformance in non-investment-grade credit. Investors may consider reducing high-yield exposure in an effort to mitigate additional potential price declines in this asset class. The high-yield asset class should continue to provide more yield than more traditional fixed-income asset classes, but we believe better opportunities exist in other investment-grade fixed-income sectors.

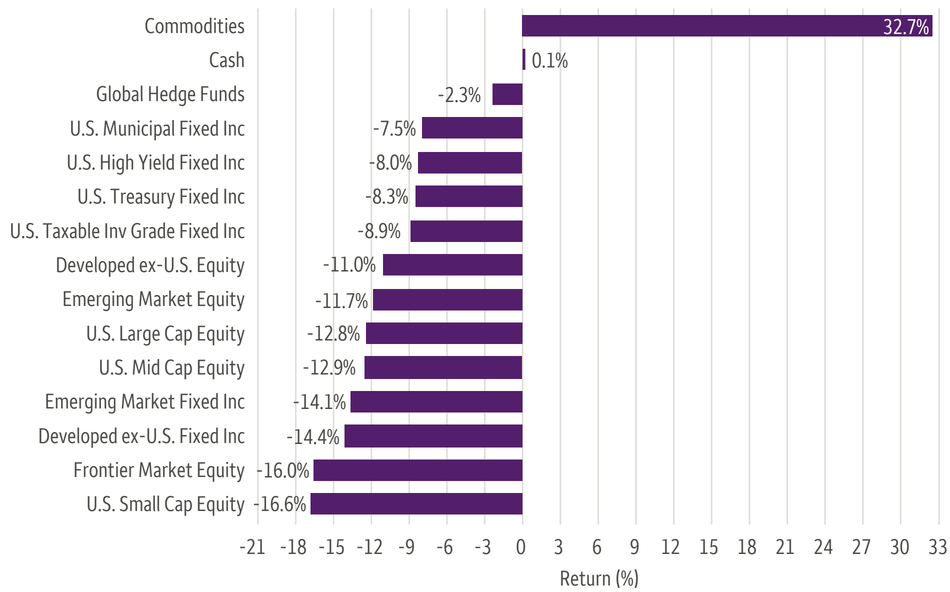
For investors in higher effective tax brackets, we suggest intermediate- and short-term municipal bonds. Rising yields and a favorable supply and demand backdrop present an attractive entry point for this fixed-income sector.

Please see pages 25–27 for important definitions and risk considerations.

4 Match cash allocations to time horizon

The unusual market environment so far this year has led to declining values in most asset classes with very few exceptions. Depending on the investor's risk tolerance, a modest cash allocation may be appropriate during this period of continued market volatility.

So far in 2022, diversifying asset classes has helped mitigate market volatility



Sources: Bloomberg and Wells Fargo Investment Institute. Data as of May 31, 2022. Global Hedge Funds data as of April 30, 2022. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Please see the end of the report for the representative index for each asset class.

However, we caution investors from exiting their long-term allocations in favor of cash due to the challenge of timing correctly when to return to the market. As we've seen, markets can change direction very quickly, and investors may be left with the difficult decision of buying at higher levels than those at which they sold. Additionally, over time, inflation that exceeds cash yields will erode cash holdings. For investors with short-term cash needs and time horizons, we believe a higher cash level or short-term bond allocation is prudent to help ensure funding of those near-term goals. For investors with a long time horizon, we prefer to invest excess cash by dollar cost averaging into the markets over the course of several months to quarters.[6]

6. A periodic investment plan such as dollar cost averaging does not assure a profit or protect against a loss in declining markets. Since such a strategy involves continuous investment, the investor should consider his or her ability to continue purchases through periods of low price levels.

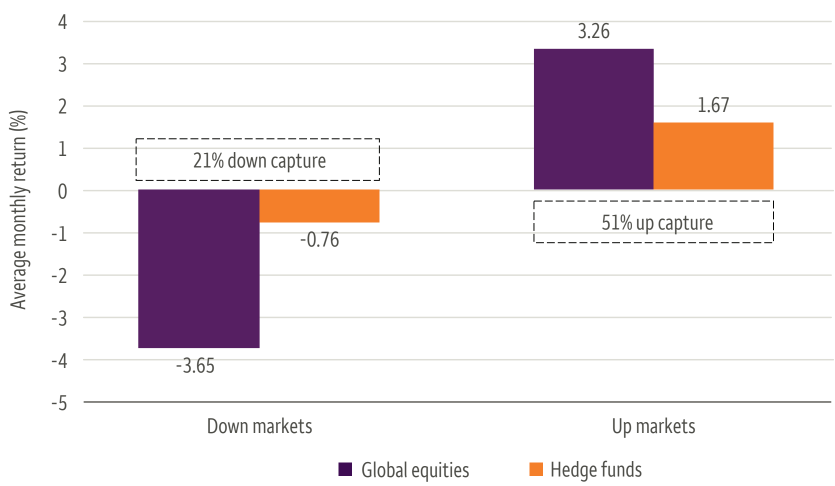
Please see pages 25–27 for important definitions and risk considerations.

5 Seek to mitigate downside risk with alternative investments, including hedge funds

Given our expectations for higher market volatility due to slower growth, persistent inflation, and rising interest rates, investments that can mitigate risk and even provide upside potential under these challenging market conditions warrant consideration for an allocation in a diversified portfolio. Hedge fund strategies, such as Global Macro and Relative Value, offer diversification benefits through lower correlations to traditional stocks and bonds. Global Macro strategies have often performed well when there is a dominant macro trend such as rising inflation and commodities prices. Relative Value strategies seek to take advantage of arbitrage opportunities that are independent of market direction.

As the chart below illustrates, hedge fund strategies historically have offered potential benefits in both up and down markets. For qualified investors with longer time horizons, Private Capital investments with longer lock-up periods may offer additional upside potential. Private Debt strategies, such as Direct Lending strategies, can help insulate portfolios against rising interest rates while offering potentially attractive income streams.

Alternative investments historically offered benefits in both up and down markets



Alternative investments, such as hedge funds, are not appropriate for all investors. 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.

Sources: ©2022 - Morningstar Direct,[7] All Rights Reserved, and Wells Fargo Investment Institute. Monthly data from January 1, 1990 to April 30, 2022. For Illustrative purposes only. Hedge Funds represented by the HRFI Fund Weighted Composite Index. Global Equities represented by the MSCI World Index. Data shown since January 1, 1990, the inception of the HRFI Fund Weighted Composite Index. ***Index returns information is provided 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. 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. An index is unmanaged and not available for direct investment. ***Past performance is no guarantee of future results.***

Up/down market capture ratios are a measure of investment performance in up and down markets relative to the market itself. A down market is one in which the index's quarterly returns is less than zero.

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Please see pages 25–27 for important definitions and risk considerations.

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Resources

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Definitions

Illiquid (Four Asset Group) Portfolio – Moderate Growth & Income:

Moderate Growth & Income is composed of: 2% Bloomberg U.S. Treasury Bill (1–3 Month) Index, 21% Bloomberg U.S. Aggregate Bond Index, 4% Bloomberg U.S. Corporate High Yield Bond Index, 4% JPM EMBI Global Index, 18% S&P 500 Index, 8% Russell Midcap Index, 3% Russell 2000 Index, 6% MSCI EAFE Index, 6% MSCI Emerging Markets Index, 6% NCREIF Property Index, 2% Bloomberg Commodity Index, 10% HFRI Fund Weighted Composite Index, 7% Cambridge Associates U.S. Private Equity Index, 3% Burgiss Private Debt Index. U.S. Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term.

Burgiss Group, LLC (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.

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.

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 between 1986 and 2021. The funds included in the index report their performance voluntarily and therefore the index may reflect a bias towards 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.

Commodities: Bloomberg Commodity Index is comprised of 23 exchange-traded futures on physical commodities weighted to account for economic significance and market liquidity.

Commodity Composite 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 Total Return. The index components and weightings, from Warren and Pearson's Prices, change over time but the 11 commodity groups used from 1786-1932 are: Farm Products, Foods, Hides and Leather products, Textile Products, Fuel and Lighting, Metals and Metal Products, Building Materials, Chemicals and drugs, Spirits (stopped tracking 1890), House furnishing Goods, and Miscellaneous. The PPI-Commodities is compiled by the Bureau of Labor Statistics and shows the average price change from the previous month for commodities such as energy, coal, crude oil and the steel scrap. The NBER Index of Wholesale Prices of 15 Commodities is a measure of price movements of 15 sensitive basic commodities whose markets are presumed to be among the first to be influenced by changes in economic conditions. The Reuters Continuous Commodity Index comprises 17 commodity futures that are continuously rebalanced: cocoa, coffee, copper, corn, cotton, crude oil, gold, heating oil, live cattle, Live hogs, natural gas, orange juice, platinum, silver, soybeans, sugar no. 11, and wheat.

Consumer Price Index (CPI) produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

Developed Markets Ex-U.S. Equities: MSCI EAFE Index is a free float-adjusted market capitalization index that is designed to measure equity market performance across 21 developed market countries excluding the U.S. and Canada.

Developed Market Ex-U.S. Fixed Income: JP Morgan Global Ex United States Index (JPM GBI Global Ex-US) is a total return, market capitalization weighted index, rebalanced monthly, consisting of the following countries: Australia, Germany, Spain, Belgium, Italy, Sweden, Canada, Japan, United Kingdom, Denmark, Netherlands, and France.

Emerging Market Equities: MSCI Emerging Markets Index is a free float-adjusted market capitalization index designed to measure equity market performance of emerging markets. The index consists of 23 emerging market countries.

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 indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

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.

Frontier Market Equity: MSCI Frontier Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of 24 frontier (least developed) markets

Global Hedge Funds: HFRI Fund Weighted Index is a global, equal-weighted index of over 2000 single-manager funds that report to HFR Database. Constituent funds report monthly net-of-all-fees performance in U.S. dollars and have a minimum of $50 Million under management or a 12-month track record of active performance.

Note: HFRI Indices have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices 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 indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI Indices 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 indices 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.

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.

U.S. High Yield Fixed Income: Bloomberg U.S. Corporate High Yield Bond Index covers the universe of fixed-rate, noninvestment-grade debt.

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.

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. Municipal Fixed Income: Bloomberg Municipal Index is considered representative of the broad market for investment grade, tax-exempt bonds with a maturity of at least one year

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. Taxable Investment Grade Fixed Income: Bloomberg U.S. Aggregate Bond Index is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.

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

Risk Considerations

Forecasts and targets are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.

All investing involves risks, including the possible loss of principal. There can be no assurance that any investment strategy will be successful and meet its investment objectives. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors, some of which may be unpredictable. Asset allocation and diversification do not guarantee investment returns or eliminate risk of loss. Each asset class has its own risk and return characteristics, which should be evaluated carefully before making any investment decision. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. Some of the risks associated with the representative asset classes include:

General market risks

Stock markets, especially foreign markets, are volatile. A **stock's** value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **International investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging and frontier markets. Investing in **small- and mid-cap companies** involves additional risks, such as limited liquidity and greater volatility.

Investments in **fixed-income securities, including municipal securities**, are subject to market, interest rate, credit, liquidity, inflation, prepayment, extension, and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in a decline in the bond's price. **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 securities** may also be subject to the alternative minimum tax and legislative and regulatory risk, which is the risk that a change in the tax code could affect the value of taxable or tax-exempt interest income.

Sovereign debt is generally a riskier investment when it comes from a developing country and tends to be a less risky investment when it comes from a developed country. The stability of the issuing government is an important factor to consider, when assessing the risk of investing in sovereign debt, and sovereign credit ratings help investors weigh this risk.

U.S. government securities are backed by the full faith and credit of the federal government as to payment of principal and interest if held to maturity. Although free from credit risk, they are subject to interest rate risk. **Mortgage-related securities** are subject to prepayment and call risks in addition to the risks of investing in debt securities. Call risk is the risk that the issuer will redeem the issue prior to maturity. This may result in reinvestment risk, which means the proceeds will generally be reinvested in a less favorable environment. Changes in prepayments may significantly affect yield, average life, and expected maturity.

Sector investing

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. Risks associated with the **Information Technology** sector include increased competition from domestic and international companies, unexpected changes in demand, regulatory actions, technical problems with key products, and the departure of key members of management. Technology and Internet-related stocks, especially smaller, less-seasoned companies, tend to be more volatile than the overall market. **Real estate** investments have special risks, including possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Alternative investments

Alternative investments, such as **hedge funds, private equity/private debt, and private real estate funds** 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. They entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, and less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt, and private real estate fund investing involve other material risks, including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Private debt strategies seek to actively improve the capital structure of a company, often through debt restructuring and deleveraging measures. Such investments are subject to potential default, limited liquidity, the creditworthiness of the private company, and the infrequent availability of independent credit ratings for private companies. Investing in distressed companies is speculative and involves a high degree of risk. Because of their distressed situation, these securities may be illiquid, have low trading volumes, and be subject to substantial interest rate and credit risks. **Private capital investments** are complex, speculative investment vehicles not appropriate for all investors. They are not subject to the same regulatory requirements as registered investment products and engage in leverage and other aggressive investment practices. There is often limited (or even nonexistent) liquidity and a lack of transparency regarding the underlying assets.

Hedge fund strategies, such as **Event Driven, Equity Hedge, Global Macro, Relative Value, Structured Credit, and Long/Short Credit**, may expose investors to the risks associated with the use of short selling, leverage, derivatives, and arbitrage methodologies. Short sales involve leverage and theoretically unlimited loss potential because the market price of securities sold short may continuously increase. The use of leverage in a portfolio varies by strategy. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage, which can magnify volatility and may entail other risks, such as market, interest rate, credit, counterparty, and management risks. Private capital investments are complex, speculative investment vehicles not appropriate for all investors. They are not subject to the same regulatory requirements as registered investment products and engage in leverage and other aggressive investment practices. There is often limited (or even nonexistent) liquidity and a lack of transparency regarding the underlying assets.

Real assets

Real assets are subject to the risks associated with **real estate, commodities,** and other investments and may not be appropriate for all investors. The **commodities markets,** including investments in **gold and other precious metals**, are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in a volatile and uncertain commodities market may cause a portfolio to rapidly increase or decrease in value, which may result in greater share price volatility. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity. Products that invest in commodities may employ more complex strategies, which may expose investors to additional risks. Investment in **real estate securities** includes risks, such as the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

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