

December 2021

2022 Outlook

Which way to the recovery?

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Capital markets have reached a crossroads at the threshold of 2022. Despite a third straight year of strong stock market price gains, many investors now perceive a delicate balance between further asset price appreciation and a potential retreat from the risk-taking environment in place since the economy reopened in 2020. Investing inherently invites questions about future uncertainties — a wall of worry, as it's called. At the dawn of the new year, various questions meet at a crossroads — questions about the economy's strength amid new COVID-19

variants, doubts that inflation will ease, uncertainty about Federal Reserve policy, unprecedented supply-chain distortions, rising energy prices, and conjecture about whether to add or remove risk exposure to portfolios. All these questions have some bearing on which road the recovery takes next.

For investors, the crossroads typically comes with the “which way should I go?” question and conflicting emotions. That tug is why consultants — from driving instructors to life coaches — typically counsel starting with a fundamental guiding principle. Our starting counsel for investors would be to divide the noise from the important information — in the words of farmers since time immemorial, to separate the indelible chaff from the usable grain. So let's separate them.

The economy is performing well in many ways. Jobs have been plentiful, companies have been strongly profitable, businesses have reopened or new ones have been launched, and consumer savings and incomes have expanded considerably. However, we expect growth to slow next year, as the booming growth profile of the past 18 months transitions into a slower but more sustainable trajectory in 2022. Inflation should remain above its long-term average but should slowly ease if supply shortages normalize as we expect. Liquidity abounds, coupled with solid profit growth and an emerging capital spending cycle that should support higher equity and commodity prices and a gradual move higher in bond yields. As early-cycle dynamics evolve into mid-cycle drivers, we can turn to what history has taught us — that we can expect volatility to decline, confidence to rise, monetary and fiscal policy to transition from an easier to tighter path, and money to flow into risk assets. We believe this describes well our conditions as we step into the new year.

All investments float on the tides of historical precedent, and their course is influenced by the winds of economics, politics, and human nature. In a chryon culture — a world of shifting news cycles where dire predictions and unbridled emotional responses can daze and confuse — we believe wise insights drawn from the study of history and an understanding of fundamental economic principles can offer investors the perspective they need as they stand at a crossroads. It is not the crossroads itself that matters, but rather the decision of how to respond that equates to the greatest success or harm.

Amid the mixed emotions that naturally accompany these transitions, our 2022 Outlook offers a clear direction on what we see next for the recovery and the strategies we favor in capital markets for the coming year. On behalf of my Wells Fargo Investment Institute colleagues, I want to thank you for the trust you extend to us as our clients. We look forward to walking this recovery road past the crossroads with you in 2022 and beyond.

“I’ve lived through some terrible things in my life, some of which have actually happened.”

— Mark Twain

A handwritten signature in dark ink, appearing to read 'Darrell Cronk'. The signature is fluid and stylized, with a large initial 'D'.

Darrell L. Cronk, CFA

President, Wells Fargo Investment Institute
Chief Investment Officer, Wealth and Investment Management

What's inside

Economic and market forecastspage 4

Global economypage 6

- U.S. 2022 economic growth of 4.5%, a still-elevated 4.0% inflation rate, and fourth-quarter unemployment down to 3.6% favor risk assets, such as equities, in our view.
- International economic growth and monetary policy differentials should favor the U.S. dollar over the euro and the yen. A firmer dollar also should keep pressure on emerging market currencies.

Global fixed incomepage 9

- A decrease in Treasury issuance and significant cash still seeking yield-oriented securities should restrain the rise in U.S. Treasury yields.
- The Federal Reserve (Fed) will attempt to keep interest rates low; however, risks are increasing as inflation becomes more acute, which could pressure the Fed to bring policy rate increases forward at a faster pace.

Global equities page 12

- We expect the rate of earnings growth to slow in 2022 but still anticipate record profitability potentially sending equity prices to new all-time highs.
- We favor U.S. large-cap and mid-cap equities over international equities, and cyclical and growth sectors over defensive sectors.

Global real assets page 16

- We expect the ongoing economic recovery to support increased commodity demand and higher prices. We remain favorable.
- Real estate investment trust (REIT) fundamentals appear solid, yet higher interest rates may be a headwind. We remain neutral.

Global alternative investments* page 18

- We pivot our hedge fund guidance in 2022 away from COVID-19 recovery and high-beta opportunities toward strategies that provide diversification and noncorrelated returns to global risk assets.
- For Private Equity, our bias is toward small- and mid-cap buyout, growth equity, and venture capital; in Private Debt, we prefer direct lending to distressed and special situations.

Top 5 portfolio ideas for 2022 page 20

*Alternative investments are not suitable 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 economic and market forecasts

4.5%

U.S. GDP (gross domestic product) growth

Slower economic growth and lower — but still elevated — inflation will likely shape the outlook, as the economy continues to grapple with shortages and the lingering effects of the pandemic.

Economic forecasts	2021 latest* ¹	2022 year-end target
U.S. GDP growth	4.9% (Q3)	4.5%
U.S. CPI inflation	6.2% (Oct.)	4.0%
U.S. unemployment rate ²	4.2% (Nov.)	3.6%
Global GDP growth	3.9% (Q3)	4.5%
Developed market GDP growth	2.7% (Q3)	3.8%
Developed market inflation	3.9% (Q3)	2.8%
Eurozone GDP growth	3.7% (Q3)	3.4%
Eurozone inflation	4.9% (Nov.)	2.7%
Emerging market GDP growth	5.1% (Q3)	5.0%
Emerging market inflation	3.7% (Q3)	4.7%

0.25%–0.50%

Federal funds rate

We believe the Fed will be forced to hike its target federal funds rate.

Foreign currency exchange rates	2021 latest*	2022 year-end target
Dollar/euro exchange rate ²	\$1.13	\$1.10–\$1.18
Yen/dollar exchange rate	¥113	¥110–¥120

Fixed Income targets	2021 latest*	2022 year-end target
Federal funds rate	0.25%	0.25–0.50%
10-year U.S. Treasury yield	1.45%	2.00–2.50%
30-year U.S. Treasury yield	1.80%	2.50–3.00%

Sources: Wells Fargo Investment Institute and International Monetary Fund (IMF), December 8, 2021. *Latest economic and market data as of November 30, 2021.

1. Year-over-year percent change unless specified otherwise

2. The unemployment rate is a level, not a year-to-year change

Real Assets targets	2021 latest*	2022 year-end target
West Texas Intermediate crude (barrel)	\$67	\$85–\$95
Brent crude (barrel)	\$71	\$90–\$100
Gold (troy ounce)	\$1,775	\$2,000–\$2,100
Bloomberg Commodity Index (total return)	205	235–245

\$85–\$95

West Texas Intermediate crude

We see hesitant supply and surging demand supporting oil prices.

Equity targets	2021 latest*	2022 year-end target
S&P 500 Index	4,567	5,100–5,300
Earnings per share	\$209	\$235
Russell Midcap Index	3,194	3,650–3,850
Earnings per share	\$140	\$165
Russell 2000 Index (small cap)	2,199	2,500–2,700
Earnings per share	\$73	\$95
MSCI EAFE Index	2,247	2,400–2,600
Earnings per share	\$146	\$150
MSCI Emerging Markets Index	1,219	1,250–1,450
Earnings per share	\$95	\$100

5,100–5,300

S&P 500 Index

We expect the S&P 500 Index to reach record highs.

Source: Wells Fargo Investment Institute, December 8, 2021. *Latest economic and market data as of November 30, 2021; latest 2021 earnings per share figures reflect consensus estimates. 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 not managed and not available for direct investment. **Past performance is no guarantee of future results.**

A transition year in 2022

Key takeaways:

- Our view is that the U.S. will serve as the global-growth locomotive in a challenging transition year from a pandemic-driven economic cycle.
- A shortage economy will likely keep inflation elevated well into 2022, before supply-chain pressures ease and allow inflation to subside during the second half of the year.

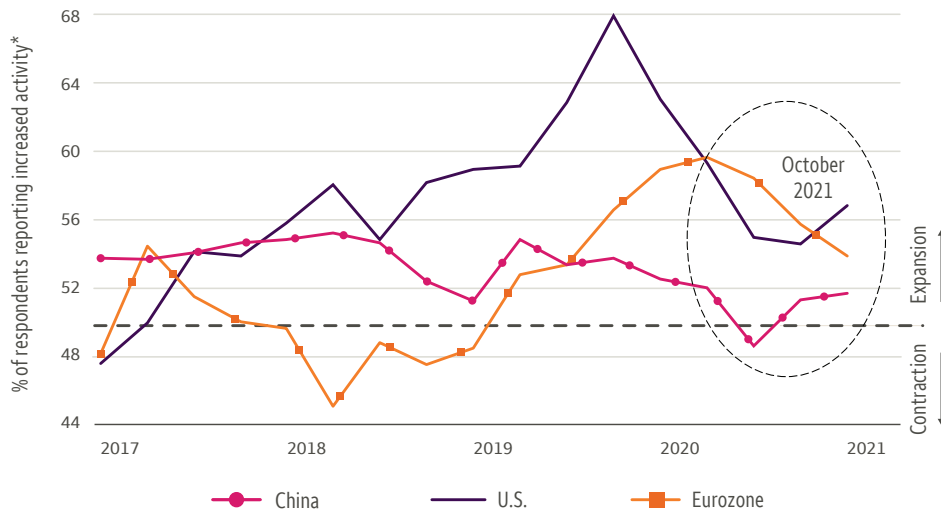
The post-COVID-19 economy comes into view

Our view is that 2022 will be an important transition year for a global growth cycle largely shaped by the pandemic. We expect global economic growth to slow from nearly 6.0% in 2021 to 4.5% in 2022. Even with that downshift, the global economy easily should outpace the 3.3% annual average from 1980 to 2020 barring any unforeseen events. We believe that strength will come from an economic reopening that drives domestic spending, led by travel, entertainment, and other services. Manufactured-goods trade should add support later in the year as supply disruptions ease.

We expect consumer-led strength in the U.S. to serve as the global-growth locomotive through the first half of 2022. Energy self-sufficiency helps insulate the domestic economy from the latest spike in fuel costs, and the economy's reopening should support a revival of frontline services industries most exposed to the pandemic. We also are counting on inventory rebuilding and business spending on plant and equipment to make an increasingly important contribution to refill supply chains and restock shelves. We believe the U.S. growth pace should remain solid, even as inventory restocking and household catch-up spending ease after midyear. During this transition, we expect the U.S. economy to navigate through obstacles in the operating environment, including fuel costs and general price inflation, (modestly) higher interest rates, and reduced monetary and fiscal policy support.

Outside the U.S., the transition in economic growth should be less synchronized during much of the year. Beyond potential outbreaks of COVID-19 is the uneven impact of higher fuel costs that hit hardest in Europe and Asia. Following a sharp 2021 slowdown, the Chinese economy is likely to stabilize (albeit at a slow pace) as the central government injects new credit into the Real Estate sector. Yet, Beijing's priorities, beyond stability, are to encourage domestic production and consumption, and this should temper trade between China and its main partners in Asia and Europe. Broadening vaccination coverage should help the international economies in the second half of the year, but the U.S. is likely to be the main source of global economic growth. The following chart illustrates the divergence between the U.S. and some of the main international economies.

More moderate, less synchronized global growth in 2022?



Sources: Wells Fargo Investment Institute and IHS Markit, Inc., November 30, 2021.

*Purchasing managers' composite index of manufacturing and nonmanufacturing activity. Monthly data: January 2017 through October 2021.

Tracking a different kind of inflation cycle

The pandemic simultaneously built up consumer demand and unspent cash but thinned out the production and transportation of goods — taken together, an unusual way for an economic expansion to begin. We expect average consumer price inflation of 4.0% in 2022, down from 6.2% in October 2021. Inflation should remain above its pre-2020 pace but not high enough to end the expansion. The upside risk to inflation is that rents and wages become self-sustaining, but our conviction is that inflation should ease with supply shortages. As COVID-19 infection rates again retreat, we expect people to reenter the labor force to take the available jobs. A larger pool of available workers should push the unemployment rate from 4.6% in October 2021 to 3.6% a year later.

Risks to our outlook

We anticipate a 2022 global economic rebound, led by the U.S., and lower global inflation, but three main risks stand out:

New COVID-19 outbreaks

- New COVID-19 variants and outbreaks could trigger new restrictions and slow the economy. Fear of the virus could keep workers at home for longer and delay the recovery in spending on services. Likewise, delays in factory output could extend the shortage of goods.

Inflation higher and for longer

- The longer that the COVID-19 interruptions and supply-chain disruptions continue, wage and rent gains would have a higher probability of becoming self-perpetuating and generating persistent inflation, especially in services industries. In addition, if inflation outpaces wage gains, workers could see their incomes buy fewer goods and services. Companies may find limits on their ability to pass along price increases and maintain margins if demand wanes.

A stronger U.S. dollar than we expect

- A dollar stronger for longer signals persistently weak international economic growth, a cause and symptom of weak global trade growth. Unsynchronized global economic growth and weak trade may limit commodity price gains.

Key takeaways

- A stronger dollar is a negative for international investment returns and reinforces our preference for U.S. financial markets.

Dollar firmness to persist

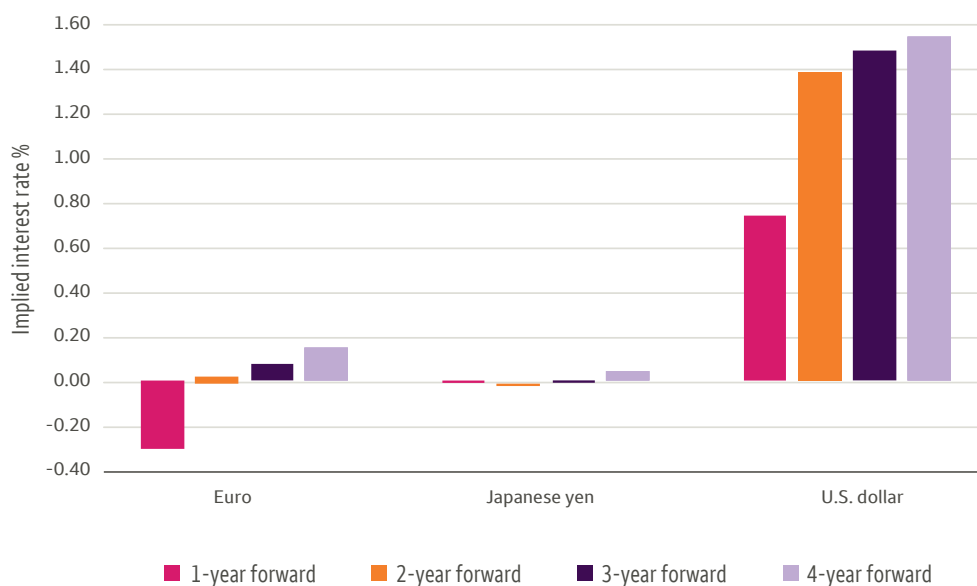
In line with our macroeconomic scenario outlined above, we believe unsynchronized global growth led by the U.S. will support a firmer dollar, with the U.S. Dollar Index (DXY) moving to the upper end of a 92–99 range in 2022. We expect a range of \$1.10–\$1.18 versus the euro and ¥110–¥120 against the yen by year-end 2022. Global supply-chain disruptions also mean slower repair for world trade, an added headwind for more export-oriented Europe and Asia. Additional dollar support should come from interest-rate differentials moving more clearly in favor of the U.S. Inflation pressures are obliging many central banks, including the Fed, to move more rapidly to a more normalized post-COVID-19 monetary policy. However, as the chart below illustrates, the European Central Bank and the Bank of Japan likely will be among the slowest in this direction.

Emerging market currencies should continue to struggle

Many emerging market central banks have moved more proactively to raise rates in the face of inflation pressures. But with the post-COVID-19 recovery very fragile in many cases, higher rates have not supported emerging market currencies. With the dollar improving against developed market ex-U.S. currencies, we expect these trends to continue into 2022, keeping pressure on emerging market foreign exchange rates.

One-month interest rate implied by the swaps market

Short-term interest rates are expected to rise in coming years, in the U.S. and across many developed and emerging markets. But rate increases are expected to be much smaller in the eurozone and are scarcely anticipated at all in Japan. Wider rate gaps should support the dollar.



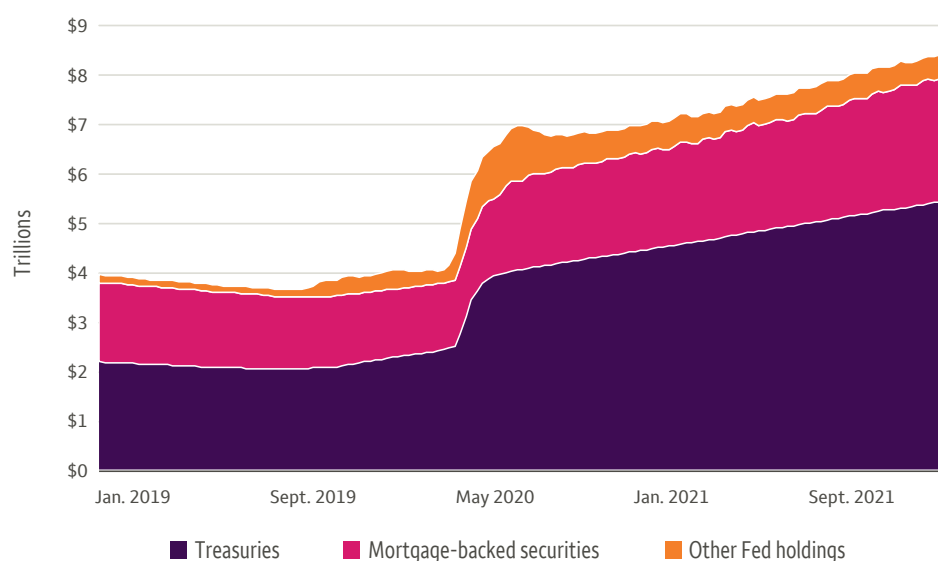
Sources: Bloomberg and Wells Fargo Investment Institute, latest data as of November 17, 2021. These interest-rate expectations are derived from the Overnight Index Swaps (OIS) market. An OIS is a fixed/floating interest-rate swap where the variable-rate side of the swap is computed using a published overnight index rate, and these swap rates are commonly used (as here) to indicate market expectations of central-bank policy rates.

The best offense can be a good defense

We expect next year to be one of transition for global central banks as they balance between supportive policies and inflation threats. The Fed will play a key role as it finishes tapering its bond purchases around midyear and begins to provide guidance on the conditions needed to raise policy rates.

Fed balance sheet

Although the Fed will finish purchasing bonds, the balance sheet will remain elevated, reaching close to \$9 trillion by year-end 2022.



Sources: Wells Fargo Investment Institute and Bloomberg, as of October 25, 2021. Weekly data from January 2, 2019, to November 17, 2021.

We expect rising U.S. Treasury yields to be influenced by a decrease in Treasury issuance and a significant amount of cash that continues to search for yield-oriented securities. Ultimately, we see fixed-income returns struggling to produce positive returns but believe exposure in intermediate maturities may provide some opportunity against a backdrop of rising yields.

Key takeaways

- We expect next year to be one of transition for global central banks as they balance between supportive policies and inflation threats.
- Tax-exempt income is likely to be in high demand given the expectations for higher tax rates.

What it means for investors

- We favor playing defense in bond portfolios today. Manage duration³ exposure as interest rates continue their upward trajectory through next year. The continuing economic recovery and a modest rise in interest rates should support credit and spread-oriented asset classes and sectors.

3. Duration is a measure of a bond's interest rate sensitivity.

Favored fixed-income sectors

- Leveraged Loans
- Commercial Mortgage-Backed Securities
- Preferred Securities
- Municipal Securities

Look for investor focus in 2022 to be on the Fed, which will have the difficult task of trying to keep policy rates low while economic growth and inflation rates remain at above-average levels. To this end, we expect the Fed to hike its target federal funds rate sometime in the second half of 2022. The market may price a more aggressive stance on rate hikes, but we are expecting only one rate hike that raises the federal funds rate target to 0.25%–0.50%. However, if inflation rises throughout the year, contrary to our expectations, the Fed may feel forced to bring policy rate increases forward faster than we expect. We also expect sustained U.S. economic growth to push longer-term rates modestly higher. Our year-end 2022 10-year target range is 2.00%–2.50% while our 30-year target is 2.50%–3.00%, a moderate increase from today's levels.

Rising rates may affect global investors

We expect that central banks in other developed and emerging economies will begin to remove pandemic-related stimulus at a faster pace than the Fed. Rising inflation pressures and a continuing, if uncertain, economic recovery in international developed markets ex-U.S. should keep pressure on bonds in developed ex-U.S. markets. Even with these pressures, yields are likely to rise only gradually in the eurozone and Japan and should remain in many cases at negative or near-zero levels.

We are neutral on emerging market sovereign debt denominated in dollars. In these markets, we continue to prefer sovereigns over corporates. Although the relative long duration of the emerging market sovereign index makes it more vulnerable to an increase in U.S. Treasury yields, we still believe that investors' search for return and yield supports this asset class well.

Global search for yield supports credit and spread

Generating income continues to be one of the top priorities for many fixed-income investors. The continuing recovery coupled with a modest rise in interest rates should support credit and spread-oriented asset classes and sectors. Credit spreads for investment-grade and high-yield corporate bonds remain well below long-term averages. Although spreads could widen out more than we expect under a sudden economic or financial market shock, our conviction is that the healthy growth environment will sustain the appetite for credit risk. Leveraged loans may enjoy strong demand and positive inflows, especially as the market begins to anticipate Fed rate hikes. Preferred securities are another yield-oriented fixed-income sector that could continue to benefit from the sentiment for risk appetite.

Consider municipal bonds

We expect higher tax rates in 2022, even if Congress ultimately compromises on only modest increases. As individuals and institutions assess their specific tax impacts, we expect rising demand for municipal bonds. 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.

Favorable municipal sectors

Essential-service and tax-supported issuers:

Especially for the most conservative investors, we continue to favor essential-service and tax-supported issuers for the core of our credit advice.

Port authorities:

For more aggressive investors, the larger, economically critical port authorities appear poised for meaningful credit improvement as vaccination rates tick up and lockdowns lift, supporting the economic recovery and bolstering import demands.

Sector analysis prepared by
Wells Fargo Advisors Global
Securities Research

Selective opportunities

Hospitality and transportation:

These sectors face continued challenges in the wake of COVID-19, but even the particularly bruised sectors show signs of consumer rebound and sustained revenue improvement. Nevertheless, the potential opportunities in these sectors appear more selective. Please see our detailed report for more information on our specific subsector preferences.⁴

Unfavorable municipal sectors

Niche private higher education institutions and smaller health care providers:

We continue to remain cautious toward narrow niche private higher education institutions and smaller-market health care providers, sectors that have both been significantly impacted by COVID-19 precautions, changes in demand behavior, and the impact on the labor market.

Favorable corporate sectors

While we believe many sectors currently offer relatively commensurate risk/reward profiles, we view Communication Services as relatively attractive due generally to stable cash flows despite higher capital expenditures.

Unfavorable corporate sectors

We see longer-term risk within sectors and for issuers more heavily impacted by the COVID-19 pandemic, such as the Hospitality, Retail, and Travel sectors, as it will take time to see their businesses fully recover. We believe that these credits are relatively unattractive, as they present significant downside should funding costs increase and/or a full recovery not be realized.

4. *Municipal Bond Sector Navigator*, Global Securities Research, Q4 2021

Moving up in quality as the cycle matures

Key takeaways

- We expect the level of earnings to continue to rise in 2022, supported by above-average revenue growth and stable or slightly higher operating margins.
- As the cycle matures, we favor higher-quality asset classes and prefer greater balance between cyclical and growth sectors.

What it means for investors

- We favor leaning into U.S. large-cap and mid-cap equities and favor cyclical and growth equity sectors.

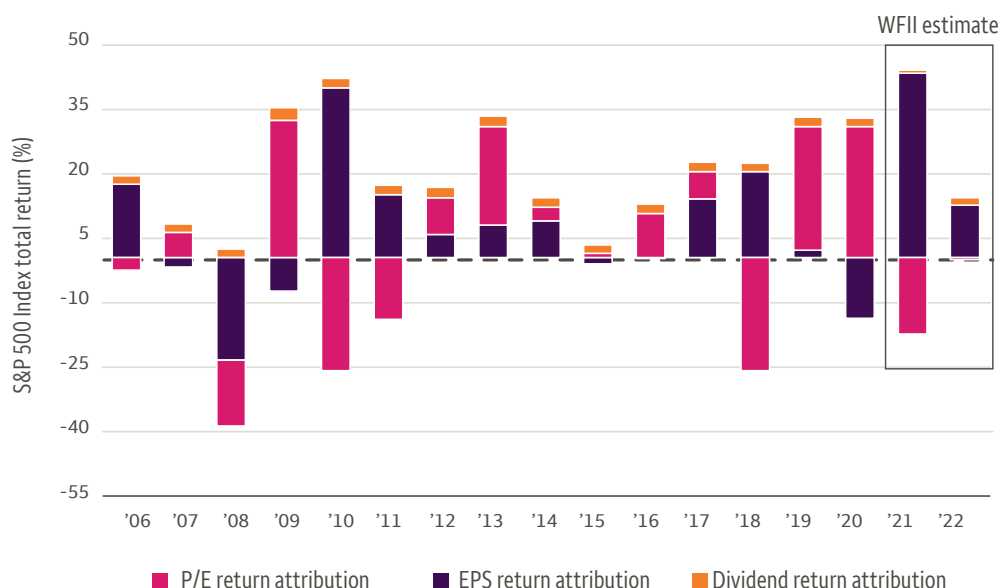
Look for record earnings in 2022, but we expect the pace of earnings growth to slow

While we believe this market cycle is still in its early stages, it is likely past the peak rate of earnings growth. Even so, we expect above-average revenue growth and steady or slightly higher operating margins to guide the level of earnings even higher in 2022. While supply-chain and related inflation headwinds could linger into the first half of 2022, we expect both to ease after midyear. We also anticipate strong sales growth to allow many companies to pass along higher costs and maintain pricing power. Over the past 20 years, S&P 500 Index profits generally have risen with input costs and performance has been strong during inflationary periods.

Despite the Fed tapering its bond buying program in 2022, we expect overall monetary policy to support equity prices. Fiscal policy should be less of a tailwind and midterm elections may pose market sentiment concerns. We estimate that earnings per share (EPS) for the S&P 500 Index will increase from \$210 in 2021 to \$235 in 2022. Even as price/earnings (P/E) ratios declined in 2021, a surge in earnings drove strong returns. In 2022, we expect earnings growth to moderate and P/E multiples to be range-bound. Our 2022 year-end median price target for the S&P 500 Index is 5,200.

We expect earnings growth to drive returns in 2022

We expect total return to moderate with earnings growth in 2022.



Sources: Bloomberg and Wells Fargo Investment Institute (WFII), as of November 12, 2021. Estimates are by WFII. Forecasts are based on certain assumptions and on views of market and economic conditions which are subject to change. **Past performance not a guarantee of future results.**

U.S. large-cap and mid-cap equities favored

The highest-quality and least-cyclical equity asset class is U.S. large caps, followed by U.S. mid caps. In addition, the S&P 500 Index and the Russell Midcap Index have more exposure to the Information Technology sector (a November 2021 upgrade), which we believe will outperform as economic and earnings growth normalizes. By contrast, U.S. small caps tend to be lower in quality and highly cyclical and have typically performed well in the early stages of new bull cycles. As this cycle ages, we believe it's prudent to move up in quality and reduce cyclical risk in investment portfolios.

We expect U.S. equities to dominate earnings growth in 2022, and moving up in market capitalization (as well as quality) likely will provide more stability in profitability and reduce potential volatility. U.S. mid caps offer another option for investors to participate in reflation rallies while avoiding some of the low-quality risk embedded in smaller firms. Our tactical guidance remains most favorable for U.S. large caps, and we recently upgraded U.S. mid caps to favorable.

Cyclicals and growth should outperform defensives

Sector leadership often shifts as market cycles transition from one phase to the next. Early in this cycle, we favored cyclical sectors, such as Energy, Financials, Industrials, and Materials. At the same time, we have maintained an unfavorable view on defensive sectors, such as Consumer Staples and Utilities. With the expectation of moderating economic and earnings growth, we downgraded Energy and Materials and upgraded Information Technology. We anticipate this greater balance between growth and cyclicals should improve quality in the portfolios.

International equities to underperform U.S. equities

International equity markets face competing forces that ultimately leave us less favorable compared with U.S. equities. In aggregate, forward earnings for developed and emerging markets have been trending higher. However, we expect economic growth differentials to favor the U.S., resulting in dollar strength, at least through early next year. Oil producers in emerging markets have benefited from tight supply and recent natural gas shortages, triggering some additional oil production. However, the lack of sufficient local oil production leaves European and Asian companies and consumers more vulnerable to higher energy prices than those in the U.S. In addition, the regulatory clampdown in China could mean more growth-limiting policy restrictions are on the horizon, which would likely weigh more heavily on emerging markets. We expect the global recovery to continue in 2022, but the economic, earnings, and currency picture continues to favor the U.S.

Favored asset classes

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

Favored equity sectors

- Communication Services
- Financials
- Industrials
- Information Technology

Sector analysis prepared by
Wells Fargo Advisors Global
Securities Research

Financials

Our expectations for a combination of higher interest rates, strong capital market activity, and reopening optimism should continue to aid all financials — in particular, universal bank equities.

Information Technology and Communication Services

In the tech-plus category, we believe many long-term trends — social networking, digital advertising, streaming media, enterprise software, and digitalization (especially semiconductors) — should strengthen, even after the pandemic. Many companies within these sectors leverage these themes. We believe these sectors also have some of the strongest quality attributes within the broader market.

Health Care

We prefer the medical devices and life sciences industries, given strong secular growth trends and relatively limited exposure to policy uncertainty.

Consumer Discretionary

Some sub-industries could see greater dispersion as the impact of the pandemic gradually wanes. We prefer a barbell here because we still favor internet retail but also some of the potential reopening opportunities (in particular, hotels, restaurants, leisure, and apparel).

Energy, Industrials, and Materials

We favor moving up in quality and prefer diversified end-market exposure as an underlying allocation theme. An example within each sector would include integrated oil majors, railroads, and coatings, respectively.

Real Estate Investment Trusts (REITs), Consumer Staples, and Utilities

We prefer to be selective within more defensive and rate-sensitive industries. We believe most areas within Real Estate will benefit from a continued U.S. economic expansion in 2022, but this positive view is tempered to a degree by the impact to REITs if interest rates continue to rise. Hence, we would position more toward industrial, self storage, single family home, apartment, and infrastructure (cell towers) — the sectors in which we see durable growth prospects. We would focus on pricing power and brand strength within Consumer Staples, which in our view that household products and beverages may be best positioned in the near term. Lastly, we continue to suggest the core Utilities exposure of a portfolio should be concentrated in high-quality, well-run, regulated utilities in supportive jurisdictions.

			Subsector recommendations provided by Wells Fargo Advisors Global Securities Research	
			Favorable	Unfavorable
Sector recommendations provided by Wells Fargo Investment Institute	Favorable	Communication Services	Integrated telecom services Interactive home entertainment Interactive media and services Movies and entertainment	Alternative carriers Publishing
		Financials	Insurance brokers Property and casualty insurance Universal banks	Business development companies Mortgage REITs
		Industrials	Air freight and logistics Building products Multi-industrials Railroads	Airlines Commercial aerospace
		Information Technology	IT services Networking equipment Payment processors, PC hardware Semiconductors and semiconductor equipment Software	Storage and peripherals
	Neutral	Consumer Discretionary	Casinos and gaming Hotels restaurants and leisure Internet retail Textiles and apparel and luxury goods	Automotive manufacturers Department stores Motorcycle manufacturers
		Energy	Integrated oil companies Midstream (C-corps)	Oil-field services
		Health Care	Life sciences tools and services Medical devices and equipment	Generic pharmaceuticals
		Materials	Coatings Industrial gases	—
		Real Estate	Apartment REITs Industrial REITs Infrastructure (tower) REITs Self-storage REITs Single Family Home REITs	Health Care REITs Hotel and lodging REITs Office REITs
	Most unfavorable	Consumer Staples	Beverages Household products	Tobacco products
		Utilities	Electric utilities Electricity producers Independent power and renewable Multi utilities Water utilities	—

Recommendations as of December 8, 2021.

Commodity bull still running

Key takeaways

- Commodity prices are unlikely to repeat the stellar performance since mid-2020, yet we do expect more upside in 2022 and we remain favorable overall.
- REIT fundamentals appear solid, yet higher interest rates may weigh on relative performance; therefore, 2022 opportunities and risks appear balanced.

What it means for investors

- We expect commodities to perform well in 2022. REITs should keep pace with equity markets.

Favorable commodities and neutral REITs

We are expecting higher commodity prices in 2022; however, we do not expect a repeat of their strong performance since mid-2020. REIT fundamentals appear solid, yet higher interest rates may weigh on relative performance next year. We enter 2022 favorable on commodities and neutral on REITs. Large, well-capitalized, broadly diverse midstream energy companies may fare better than some of their energy peers.

Surging demand and restrained supply imply higher commodity prices

We see demand rebounding to new post-COVID-19 highs in 2022 as the global economic recovery continues, mobility restrictions ease, pent-up activity levels normalize, and the pandemic fades. Commodity supplies likely will continue to be restrained by lingering pandemic-related issues, production discipline among producers, and environmental energy transitions. This rising demand and tepid supply growth should keep commodity prices moving higher in 2022.

We expect healthy rotation between the commodity sectors, yet favor Precious Metals and Energy in 2022 on the strong backdrop supporting gold and oil. We enter 2022 neutral on agriculture commodities — where risks include ample planting and supply after a run-up in prices in 2021 — as well as industrial metals, which face headwinds from China's slow pace of economic growth.

Gold back on track in 2022

After facing numerous headwinds in 2021, we believe gold's path higher looks clearer in 2022. Moderating equity market returns and inflation concerns may bring the market's focus and flows back to the yellow metal next year. Additionally, our forecast for a slightly stronger U.S. dollar suggests the greenback will not be a substantial headwind in 2022 as it was in 2021.

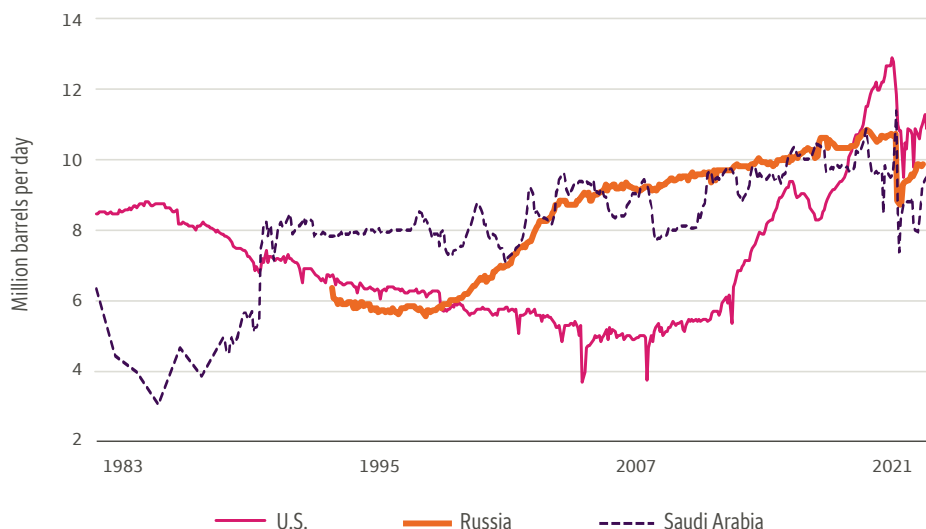
While we are optimistic that gold could finally move higher in 2022, a stronger price trend may take some time to develop, which prompts us to lower our year-end 2022 target range to \$2,000–\$2,100.

Oil's paradigm shift

We expect OPEC Plus (Organization of the Petroleum Exporting Countries and non-OPEC nations such as Russia) to continue to be disciplined in bringing spare capacity back online. U.S. oil production is likely to increase but at a much slower pace than prior cycles as producers have embraced capital discipline. This muted supply response, coupled with strong demand as the growth recovery continues and mobility restrictions ease, should support higher oil prices. Our new 2022 year-end oil targets for West Texas Intermediate and Brent are \$85–\$95 and \$90–\$100 per barrel, respectively.

Oil producers to continue their production discipline

The world's major producers are keeping the oil supply situation tight. Despite prices reaching multiyear highs and demand surging, production remains well below pre-pandemic levels.



Sources: Bloomberg, U.S. Energy Information Administration, and Wells Fargo Investment Institute, October 2021. Monthly data: January 31, 1983 to September 30, 2021.

Favored real assets

- Commodities
- REITs
 - Industrial
 - Single Family Home
 - Apartment
 - Self Storage
 - Infrastructure (tower)

REITs to keep pace

Our expectations for strong demand, improving business conditions, and the economic recovery should be tailwinds for real estate and REITs overall. Most REITs are likely to enjoy higher property values, asking rents, and occupancy in 2022. Although, we believe that struggles will remain for areas such as lodging, hotel, office, and health care. Investors may also be drawn to REITs for their attractive dividend yields in a low-interest-rate environment. In short, the 2022 environment appears conducive for additional gains.

Yet, we do not see a driver for REIT outperformance relative to other equities, especially because our higher-interest-rate forecast is likely to be a headwind.

We enter 2022 with a neutral rating on REITs overall; a favorable rating on apartment, single family home, self storage, infrastructure (towers), and industrial REITs; and an unfavorable rating on office, health care, hotels, and lodging REITs.

Midstream energy (MLPs and C-corporations)

We anticipate higher oil and natural gas prices as well as incrementally more volume should make an attractive environment for midstream energy companies. Investors may take note that the group offers a sizable dividend yield that now appears sustainable after years of cuts and balance-sheet repair.

We expect large, well-capitalized, and broadly diversified midstream companies to hold up well relative to some of their energy-company peers. We generally prefer midstream C-corporations over master limited partnerships (MLPs), as the C-corporation structure is more likely to attract outside capital.

Shifting to noncorrelated strategies

Key takeaways

- We prefer lower-beta strategies such as Relative Value and Macro over directional strategies like Equity Hedge and Event Driven.⁵
- Nondirectional strategies such as Convertible and Merger Arbitrage, coupled with both Discretionary and Systematic Macro, should provide “short volatility” noncorrelated returns and help diversify broader portfolio risk.

What it means for investors

- At this still-early stage of the business cycle, we favor hedge fund strategies that provide diversification and noncorrelated returns, as opposed to strategies that benefit from directional equity and credit exposure.

5. Beta is a measure of an investment's volatility in relation to the overall market (as defined by a specific benchmark). By definition, the market, proxied by the S&P 500 Index, has a beta of 1.0 to itself. Individual investments have beta compared with the S&P 500 Index according to how much their price movements deviate from that benchmark's. An investment whose value moves more than the benchmark's over time has a beta above 1.0; if less than the benchmark, the investment's beta is less than 1.0.

Alternative investments are not suitable 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.

Inflection point for hedge funds

While we continue to favor risk assets in 2022, we believe the role of alternative investments — and specifically hedge funds — is at an inflection point. Valuations across many areas of the global market have returned to or surpassed their pre-pandemic levels, leading us to shift away from the playbook we published in our May 2020 report titled “Alternative Investments and the COVID-19 Crash.” The path forward likely will be more nuanced and more uncertain. Unsynchronized global economic growth, divergent monetary policy, and potentially higher interest rates and above-average globally will require a nimble risk profile from hedge funds with lower leverage, lower interest-rate duration, and lower equity and credit-risk exposure.

Macro and Relative Value strategies move to favorable

We think the greater role of hedge funds in 2022 is providing noncorrelated returns. As a result, we are upgrading our guidance on Macro and Relative Value strategies from neutral to favorable. We anticipate strong levels of convertible bond issuance again next year, which, along with higher interest rates, should continue to support a robust environment for convertible bond arbitrage. Moreover, we favor this strategy because many managers short the equity of the issuer to limit overall market sensitivity.

Our substrategy upgrade of Systematic Macro (from neutral to favorable) drives our favorable rating on the overall Macro strategy. Divergent global economic growth, above-average inflation, higher commodity prices, and rising interest rates should provide opportunities for trend-following and non-trend-following strategies.

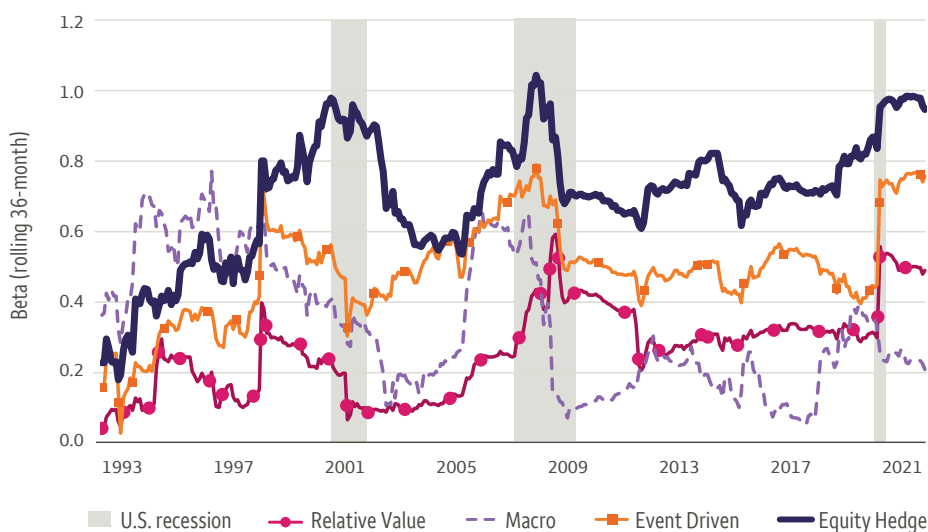
Moreover, Macro historically provides the most diversification of all hedge fund strategies, which aligns with our overall goal for hedge funds in 2022. Finally, though we are downgrading our view on Event Driven to unfavorable, we are upgrading our guidance on Merger Arbitrage from neutral to favorable. High levels of cash on corporate balance sheets make acute financial stress and defaults unlikely risks. Meanwhile, rising rates and uncertainty around deal approval result in higher arbitrage spreads and lift the expected return of the Merger Arbitrage strategy, which also has the advantage of very low historical correlation and sensitivity to the broader market.

Downgrades for Equity Hedge and Distressed Credit strategies

In light of our preference for lower-beta strategies, we are downgrading our guidance on Equity Hedge from favorable to neutral. While we still anticipate a supportive environment for stock selection in 2022, we expect lower returns from Directional Equity Hedge managers versus those generated over the past two years.

Moreover, at the substrategy level, we are also downgrading our cyclical view of Distressed Credit from favorable to unfavorable. Credit spreads are near cycle lows as is the proportion of stressed and distressed debt and the forward-looking default rate. We believe that these conditions limit the opportunity set for Distressed Credit until fundamentals weaken. As seen in the chart below, the rolling three-year betas for both Equity Hedge and Event Driven to global assets are near their respective historical peaks. While this exposure has helped generate annualized returns over the past years of 10.3% and 7.5%, respectively, we think it adds too much risk in a less-synchronized, more-uncertain environment.

Relative Value and Macro have less beta than Equity Hedge and Event Driven



Sources: Hedge Fund Research, Inc., Bloomberg, and Wells Fargo Investment Institute. Monthly data, January 1993–October 2021. Representative indexes include the HFRI Relative Value (Total) Index, the HFRI Macro (Total) Index, the HFRI Event Driven (Total) Index, and the HFRI Equity Hedge (Total) Index. Beta is calculated against a 60/40 composite index of the MSCI ACWI and the Bloomberg Global Aggregate Bond Index.

Selectivity in private capital strategies

Within Private Capital, we continue to see opportunities within small- and mid-cap buyout, growth, and venture capital. While we maintain our favorable guidance for these substrategies, we are downgrading our view on the secondary Private Equity strategy due to tight discount spreads and too much dry powder (cash on the sideline). Considering that abundant cash makes financial stress and defaults unlikely, stressed and distressed debt opportunities seem limited. We are downgrading our guidance on Distressed and Special Situations from favorable to neutral, which in turn results in a downgrade of the Private Debt strategy from favorable to neutral. Opportunities exist for Direct Lending strategies, especially those focused on small- and middle-market companies that are still unable to tap into traditional lending channels. That said, the proliferation of direct lending funds, business development companies, and even collateralized loan obligations dampens our return expectations slightly, though we still acknowledge the incremental floating-rate income these strategies offer in a low-yield environment.

Most favored strategies (and associated substrategies)

- **Relative Value:** Arbitrage
- **Relative Value:** Long/Short Credit
- **Macro:** Systematic and Discretionary
- **Event Driven:** Merger Arbitrage
- **Private Equity:** Small- and Mid-Cap Buyouts and Growth Equity/Venture Capital
- **Private Debt:** Direct Lending

Our top 5 portfolio ideas for 2022



1 Favor U.S. assets amid an uneven global recovery

As we believe 2022 is poised to be a transition year with unsynchronized global growth led by the U.S., we see opportunities in U.S. assets over international ones. U.S. leadership should support a stronger dollar — a negative for international asset returns. In equities, we expect U.S. stocks to dominate in earnings growth and outperform their international counterparts. In fixed income, we prefer U.S. issues over bonds in other developed markets. Strong demand, improving business conditions, and a continued recovery should give a relative edge to U.S. REITs over international REITs.

2 Look for opportunities to add to risk judiciously

Within U.S. equity and fixed-income markets, we favor reallocating or putting new cash to work selectively and incrementally. Selectivity includes a preference to move up in quality. Likewise, we favor a continued defensive approach in fixed-income markets. Because we expect this environment to persist throughout the year, we prefer not to wait for significant market pullbacks to get invested. Instead, portioning cash into increments and investing over a specified period of time, or dollar cost averaging, may be appropriate in today's markets.

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.

3 Seek assets that perform well when inflation is above average

We expect inflation to moderate from current levels in 2022 but to remain above recent historical norms. In this type of economic environment, historically commodities have proven to be an effective hedge. We believe U.S. cyclical stocks, such as Financials and Industrials, also should benefit from above-average economic growth and inflation, in contrast to defensive stocks, such as Utilities and Consumer Staples. Although small-cap equities generally also have historically outperformed in rising inflationary environments, we remain neutral for now, primarily due to the strong gains already experienced in this asset class. Many investors think of Treasury Inflation-Protected Securities (TIPS) when considering an asset class for inflation protection. However, we caution against investing heavily in this asset class given that it has become overvalued and TIPS' yields historically tend to rise (and prices fall), along with other fixed-income yields, while economic growth is strong.

		Low to moderate inflation	Higher than trend inflation
Best-performing asset class	1	U.S. Mid Cap Equities	Commodities
	2	U.S. Large Cap Equities	U.S. Mid Cap Equities
	3	U.S. Small Cap Equities	U.S. Small Cap Equities
Worst-performing asset class	1	Commodities	U.S. IG Fixed Income
	2	DM ex-U.S. Fixed Income	DM ex-U.S. Fixed Income
	3	DM ex-U.S. Equities	Emerging Market Equities

Sources: Bloomberg and Wells Fargo Investment Institute, as of December 8, 2021. Analysis was done using monthly data from March 1, 1997 to October 31, 2021. Higher than trend inflation characterized by 0.2% or higher month over month change in the Consumer Price Index (CPI). Low to moderate inflation characterized by month over month change in CPI less than 0.2%. The table shows the result of top and bottom ranking asset classes but the analysis is based on the following asset classes: DM = Developed Markets. IG = Investment Grade. TIPS = Treasury Inflation-Protected Securities. Analysis done using the following asset classes and representative indexes. U.S. IG Fixed Income: Bloomberg U.S. Aggregate Bond Index, High Yield Fixed Income: Bloomberg U.S. Corporate High Yield Bond Index, DM ex-U.S. Fixed Income: JPM GBI Global Ex U.S. Index, Emerging Market Fixed Income: JPM EMBI Global Index, U.S. TIPS: Bloomberg U.S. Inflation-Linked Bond Index, U.S. Large Cap Equities: S&P 500 Index, U.S. Mid Cap Equities: Russell Midcap Index, U.S. Small Cap Equities: Russell 2000 Index, DM ex-U.S. Equities: MSCI EAFE Index, Emerging Markets Equities: MSCI EM Index, Commodities: Bloomberg Commodity Index, Hedge Funds: HFRI Fund Weighted Index.

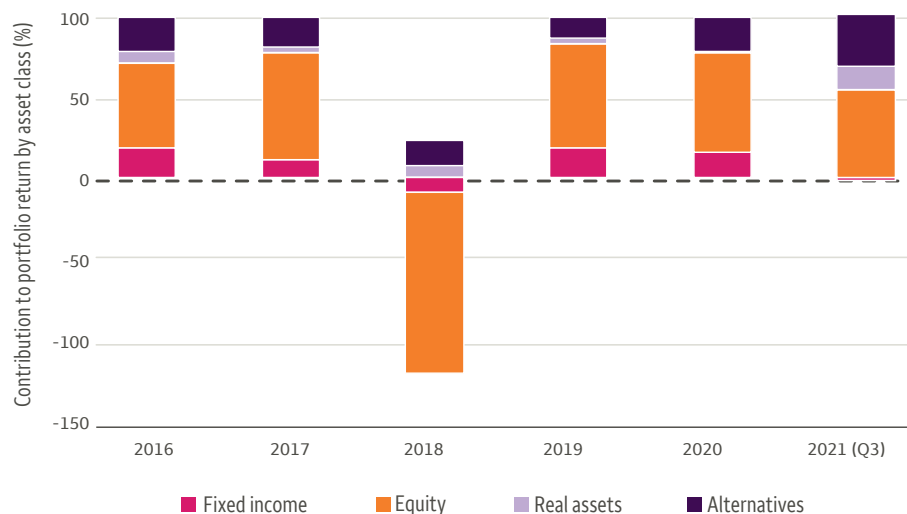
4 Remain cautious on yield-sensitive assets

We expect interest rates to rise modestly in 2022 from current low levels. Rising rates can lead to low or potentially negative returns for fixed income, leading us to favor equities over bonds. However, within equities, we remain unfavorable on yield-sensitive assets, such as the Utilities sector, and neutral on REITs. We prefer the high-yielding midstream energy companies, as we expect these companies to have the ability to grow distributions over time and potentially outperform in a rising-rate environment. The Financials equity sector, which also offers above-average yields, can benefit from rising rates that typically generate expanding profit margins. Floating-rate bank loans (also known as leveraged loans) may be another option for income-seeking investors.

5 Diversify: Return contributions change over time

We expect positive equity returns in 2022, so higher tactical equity allocations should potentially lead to higher portfolio returns. But for risk mitigation, a bond allocation is generally appropriate for most investors. In a rising-rate environment, long-term fixed income may lose money as interest rates rise, but we favor allocations to intermediate-term fixed income, and we also favor preferred and municipal securities as ways to maintain exposure to fixed-income assets. For qualified investors preferring a nonbond alternative to hedge equity risk, we favor nondirectional strategies, including Merger Arbitrage and Convertible Arbitrage, and trend-following Discretionary and Systematic Macro strategies. As of the third quarter of 2021, alternatives and real assets' collective contribution significantly outpaced the past five years. In 2022, we expect this trend to continue. Investors with a disciplined diversification approach may benefit from multiple return sources while potentially reducing risks within the portfolio.

The diversification benefit for a four-asset-group portfolio was especially evident in 2018, when equity prices declined



Sources: Morningstar⁶ and Wells Fargo Investment Institute. Data as of September 30, 2021. Performance results of the moderate growth and income four-asset group are hypothetical and do not reflect actual investment. **Hypothetical and past performance do not guarantee future results.** An index is unmanaged and not available for direct investment. Moderate Growth and 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, and 3% ILPA Private Credit Fund Index. U.S. Investment Grade Fixed Income encompasses the allocations to short term, intermediate term, and long term.

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Definitions

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.

Bloomberg Global Aggregate Bond Index provides a broad-based measure of the global investment grade fixed-rate debt markets.

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

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

Bloomberg U.S. Inflation-Linked Bond Index measures the performance of the U.S. Treasury Inflation Protected Securities (TIPS) market.

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 2020. 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.

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

HFRI Event-Driven (Total) Index consists of Investment Managers who maintain positions in securities of 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. ED exposure contains 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 Equity Hedge (Total) Index maintains 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.

HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 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 \$50M under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

HFRI Macro (Total) Index consists of investment managers who 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.

HFRI Relative Value (Total) Index consists of Investment Managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Manager 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. RVA position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

Institutional Limited Partners Association (ILPA) Private Credit Fund Index is a horizon calculation based on data compiled from 323 private credit funds (credit opportunities and subordinated capital funds), including fully liquidated partnerships, formed between 1986 and 2020. The pooled horizon return is net of fees, expenses, and carried interest. The funds in the index are exclusively those that ILPA members have invested in; the goal of the ILPA private markets benchmark effort is to create a private markets benchmark that represents the investible universe and fund performance for global, institutional investors. The benchmark is issued on a quarterly basis, approximately 140 calendar days after quarter end. All data included in the ILPA Benchmark is derived from the quarterly and annual audited financial statements that general partners produce for their limited partners. Performance statistics include rates of return (net IRR & public market equivalents) and investment multiples (DPI, RVPI and TVPI). These statistics are expressed in terms of time period (since-inception, year-to-date, etc.), quartile ranking, vintage year, geography and strategy. As the benchmark same size expands, the number of statistics, composites and types of analysis is expected to increase. Index returns do not represent fund performance.

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

JPM EMBI Global Index covers 27 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

MSCI All Country World Index (MSCI ACWI) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed and 26 emerging markets.

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

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

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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.

Russell Midcap Index measures the performance of the 800 smallest companies in 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 widely held common stocks that is generally considered representative of the U.S. stock market.

U.S. Dollar Index (USDx) 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.

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 markets. Investing in **small- and mid-cap companies** involves additional risks, such as limited liquidity and greater volatility. **Dividends** are not guaranteed and are subject to change or elimination.

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. **Treasury Inflation-Protected Securities (TIPS)** are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond to fluctuate more than other fixed income securities. TIPS have special tax consequences, generating phantom income on the "inflation compensation" component of the principal. A holder of TIPS may be required to report this income annually although no income related to "inflation compensation" is received until maturity. If sold prior to maturity, fixed-income securities are subject to market risk. All fixed-income investments may be worth less than their original cost upon redemption or maturity. **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.

Similar to bonds, **preferred securities** are interest rate sensitive. Their dividends are not guaranteed and are subject to change. Some preferred securities include a call provision, which may negatively affect the return of the security. A prerefunded bond is a callable bond collateralized by high-quality securities, typically Treasury issues. **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. **Leveraged loans** are generally below investment grade quality ("high-yield" securities or "junk" bonds). Investing in such securities should be viewed as speculative and investors should review their ability to assume the risks associated with investments which utilize such securities. **Floating rate bank loans** are generally considered to have speculative characteristics that involve default risk of principal and interest, collateral impairment, borrower industry concentration, and limited liquidity.

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. **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, declining consumer acceptance of new product introductions, and geopolitical uncertainty that could affect consumer sentiment. **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 the 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 the **Financial** services companies will subject an investment to adverse economic or regulatory occurrences affecting the sector. Some of the risks associated with investment in the **Health Care** sector include competition on branded products, sales erosion due to cheaper alternatives, research and development risk, government regulations and government approval of products anticipated to enter the market. There is increased risk investing in the **Industrials** sector. The industries within the sector can be significantly affected by general market and economic conditions, competition, technological innovation, legislation and government regulations, among other things, all of which can significantly affect a portfolio's performance. 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. **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. **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. **Utilities** are sensitive to changes in interest rates, and the securities within the sector can be volatile and may underperform in a slow economy.

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 suitable 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 suitable 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**, **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 suitable 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**, **MLPs**, and other investments and may not be suitable 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 securities of **MLPs** involves certain risks that differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc.; regulatory risk; and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes, which would reduce the amount of cash flows distributed by the MLP. In addition, there are certain tax risks associated with an investment in MLP units, and conflicts of interest may exist between common unitholders and the general partner, including those arising from incentive distribution payments. Other risks include the volatility associated with the use of leverage, volatility of the commodities markets, market risks, supply and demand, natural and man-made catastrophes, competition, liquidity, market price discount from net asset value, and other material 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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