

February 18, 2025

Global economic summary	3
Wells Fargo Investment Institute forecasts	4
Fixed income	6
Equities	8
Real assets	11
Alternative investments . . .	12
Currency guidance	14
Tactical guidance	15
Capital market assumptions	17
Strategic asset allocation	18

Positioning portfolios for periodic volatility

U.S. equity markets (represented by the S&P 500 Index) climbed more than 23% last year on a price-return basis. Leading the charge upward were mega-cap technology stocks. Over that period, volatility remained mostly muted. After a brief spell of excitement following the U.S. presidential election, uncertainty appears to be brewing once again in U.S. equity markets, largely attributable to investor concerns about trade-policy confusion, noisy headlines, and some evidence of a modest growth slowdown in the U.S.

Meanwhile, the U.S. bond market has also experienced periodic volatility of late. The 10-year U.S. Treasury yield has been fluctuating between 4.2% and 4.8% in recent weeks, largely in response to tariff rhetoric from the White House coupled with persistent stickiness in service-sector and rent inflation.

Is market volatility accelerating?

The U.S. equity bull market, as measured by the S&P 500 Index, has now entered its third year, a stage which historically has been more volatile than the opening two years.¹ We expect stronger and more balanced activity across economic sectors as the U.S. economy's weaker segments improve and corporate earnings growth broadens beyond a handful of mega-cap companies. This year we expect U.S. equity markets to continue moving higher, and volatility could pick up based on certain factors:

Tariffs – President Trump initially called for a 60% tariff on China; a 25% tariff on Mexico and Canada, contingent on halting illegal immigration and fentanyl flows to the U.S.; and a 10% – 20% levy on other trade partners. However, the magnitude and timing of his administration's demands have fluctuated.² Earlier this month, Trump postponed Mexican and Canadian tariffs until March in exchange for promises of increased border security while retaining the additional 10% Chinese tariff. Equity investors were rattled by the irresolute trade-policy rhetoric from the White House, yet we believe they will likely face more policy uncertainties ahead.

Inflation – Imposing tariffs affects equity and fixed-income markets as they have the potential to increase inflation. Immigration restrictions that the Trump administration is currently enforcing may also raise prices as a shrinking labor pool may lead to higher labor costs. Finally, the costs of services and rents have remained stubbornly above the Federal Reserve's (Fed's) target range, putting additional interest-rate cuts on hold and keeping long-term rates elevated.

Artificial Intelligence – The so-called Magnificent 7 mega-cap technology stocks³ accounted for more than half of the S&P 500 Index's rise last year, mostly due to colossal gains bolstered by speculation of artificial intelligence's (AI's) bearing on future performance. We believe any signs of earnings or revenue streams slowing down from the sizzling pace of the past few years could upend markets. Recently, an upstart Chinese firm unveiled its latest AI model, signaling a potential contender to U.S. dominance in the field. The spectacle of an offshore challenger in AI led to a steep decline in the tech-heavy Nasdaq Index, including a record-breaking 17% single-day plunge in the stock price of a principal U.S. microchip enterprise.

Additional factors that we think could cause equity markets to fluctuate in the near term include record-high valuations and the fact that equities have not experienced a 10% correction since October 2023.

1. "It's crunch time for the bull market. The third year is the charm." Barron's, January 10, 2025.

2. "What Trump's New Tariff Push Means for the Economy: Quick Take," Bloomberg, January 17, 2025.

3. The Magnificent 7 stocks include Microsoft, Amazon, Meta, Apple, Alphabet, Nvidia, and Tesla.

(Continued on the next page.)

Positioning portfolios for periodic volatility (continued)

Positioning portfolios for market uncertainty

As equity-market uncertainty likely continues to loom, we suggest that investors consider the following actions to position portfolios for periods of volatility:

- *Prepare to buy the dip:* Use equity-market pullbacks as a potential opportunity to purchase stocks at attractive prices. Historically, our research has found that equity markets (represented by the S&P 500 Index) have rebounded from corrections in a short time frame averaging less than three months absent a recession, which we are not forecasting.⁴
- *Rethink fixed income:* Long-term bond yields entered the year at their highest levels in nearly two decades, and we expect the 10-year U.S. Treasury yield to remain rangebound between 4.5% and 5.0%. In fixed income we suggest investors consider a laddering strategy that spreads bond holdings maturing at various times between one year and 30 years, while adding to duration if yields move above 5.0% and reducing duration if yields fall near 4.0%.
- *Invest in commodities as a hedge against inflation:* Commodities have been the best-performing major asset class so far this year despite oil prices being relatively flat. Like stocks and bonds, we recommend that investors be nimble with commodities by increasing positions on pullbacks and trimming on market strength.
- *Consider alternative investments:* For accredited or qualified investors, hedge fund strategies seek to reduce downside exposure when equity markets decline. We expect hedge funds, particularly Relative Value and Macro, to broadly generate positive returns this year if correlations fall as we expect and the environment for active management becomes more attractive.
- *Stick to an investment plan by rebalancing:* We believe that it is important to monitor portfolio holdings and rebalance back to weightings that reflect strategic targets and tactical adjustments at least annually. Letting a designated asset-allocation mix drift without rebalancing can lead to portfolio risk that deviates from an investor's risk profile. Keeping a portfolio aligned with its strategic allocation targets may help reduce potential overexposure to risky assets during periods of volatility or a market correction.

In our view, equity markets may experience bouts of turmoil in the near term. Rather than react to headline noise or tariff-related volatility, investors may be better suited to focus on broader market implications. We believe equity holdings should be beneficial to portfolio returns based on our current outlook for 2025. Our year-end target midpoint for the S&P 500 Index is 6600, or nearly 10% higher than the current level of the index on a price level. We also expect earnings per share to grow from about \$240 in 2024 to \$275 by year-end.

In our view, as investors gain more confidence in the underlying strength of the U.S. economy and the new administration's economic policies become more well-defined, U.S. equities should continue moving higher with stronger earnings, even as price-to-earnings multiples remain relatively flat.

Our authors

Darrell Cronk, CFA®,
President, Wells Fargo Investment Institute and
CIO, Wealth & Investment Management

Global asset allocation team

Tracie McMillion, CFA®,
Head of Global Asset Allocation

Douglas Beath,
Global Investment Strategist

Michael Taylor, CFA®,
Investment Strategy Analyst

Veronica Willis,
Global Investment Strategist

Michelle Wan, CFA®,
Global Investment Strategist

Global market strategy

Paul Christopher, CFA®,
Head of Global Investment Strategy

Scott Wren,
Senior Global Market Strategist

Gary Schlossberg,
Global Strategist

Jennifer Timmerman,
Investment Strategy Analyst

Global fixed income

Brian Rehling, CFA®,
Head of Global Fixed Income Strategy

Luis Alvarado,
Global Investment Strategist

Anthony Miano, CFA®,
Investment Strategy Analyst

Sam Lombardo,
Investment Strategy Analyst

Global equities and real assets

Sameer Samana, CFA®,
Head of Global Equity and Real Asset Strategy

Chris Haverland, CFA®,
Global Equity Strategist

Austin Pickle, CFA®,
Investment Strategy Analyst

Mason Mendez,
Investment Strategy Analyst

Edward Lee,
Investment Strategy Analyst

Global alternative investments

Mark Steffen, CFA®, CAIA,
Global Alternative Investment Strategist

Chao Ma, PhD, CFA®, FRM,
Global Portfolio and Investment Strategist

Global securities research

Ian Mikkelsen, CFA®,
Equity Sector Analyst, Energy

John Sheehan, CFA®,
Equity Sector Analyst, Real Estate (REITs)

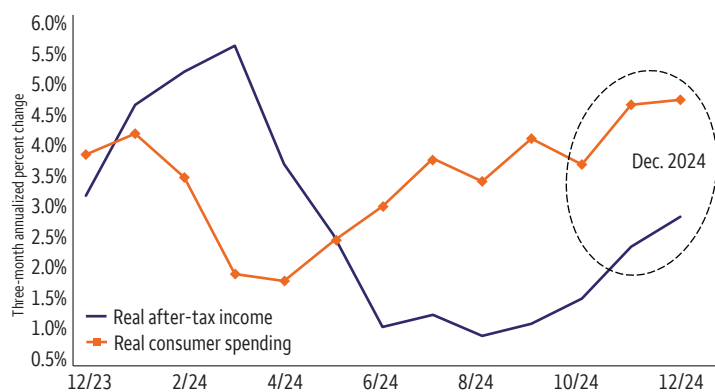
Global economic summary

United States

The U.S. economy started the year on a firm footing despite rising policy uncertainties from Washington. A healthy drawdown of inventories was responsible for the noticeable slowing of fourth-quarter GDP growth to 2.3%, masking another quarter of solid, consumer-led growth. While the strength in overall consumer spending is reassuring (see chart below), outlays remain driven by upper-income households that have benefited most from recent gains in stocks and other financial assets. January business surveys reflected a shift to more balanced growth, with manufacturing activity expanding for the first time since October 2022 and service-sector growth slowing from unsustainable levels at the end of last year.

Lingering strains elsewhere continue to raise yellow flags, however. The housing market remains weak against a backdrop of low affordability tied to elevated home prices and a back-up in mortgage rates. Credit-card balances are high and rising. That likely reflects pinched finances for some lower-income households, especially amid subdued and declining consumer sentiment and a savings rate nearly two percentage points below the 25-year average of 5.7%. And gains in real (inflation-adjusted) incomes (or purchasing power) are facing headwinds from increasingly sticky inflation. The 12-month headline Consumer Price Index (CPI) accelerated to 3.0% in January, the fastest pace since June, while the core measure (excluding food and energy) has been stuck in the 3.2% – 3.3% range for seven months. These trends will likely complicate Federal Reserve (Fed) policy decisions in coming months, made even more difficult by uncertainty around the timing, scope, magnitude, and impact of President Trump's tariff and immigration initiatives.

Spending growth still outrunning income growth through year-end 2024¹



Sources: Wells Fargo Investment Institute and U.S. Commerce Department. Data as of February 6, 2025. ¹Based on three-month moving average data.

Europe

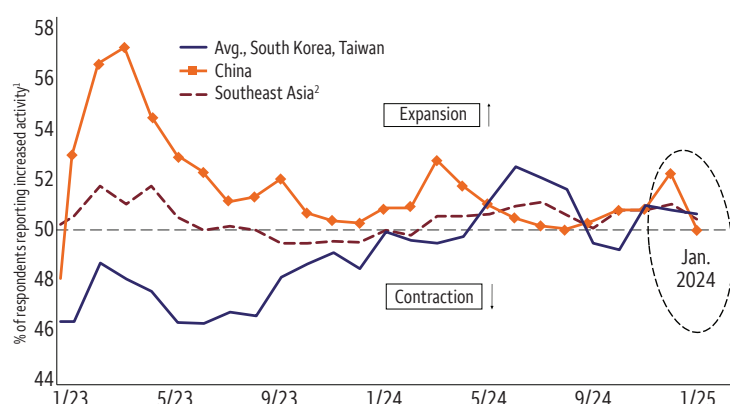
A January business survey of eurozone economic activity⁵ edged into expansionary territory for the first time in five months after growth flatlined during the final quarter of 2024. Unbalanced growth continues to be led by the service sector, masking ongoing declines in manufacturing. That explains why more services-oriented southern European economies continue to outperform their more industrial, export-oriented northern neighbors. Political instabilities in economic heavyweights Germany and France are clouding the outlook, with France's budget problems exacerbating strains. Europe's manufacturing-sector remains challenged by headwinds that include fiscal restraint, elevated energy costs, and tepid world trade growth — atop fresh uncertainties tied to anticipated U.S. tariff increases. The European Central Bank (ECB) reduced its benchmark interest rate for a fifth consecutive meeting in January to combat weak growth, though a reacceleration of eurozone inflation could limit further policy easing.

5. Based on the composite Purchasing Managers' Index (PMI) from S&P Global, Inc.

Asia

Manufacturing activity deteriorated across most of Asia in January amid weaker export demand. Concerns over rising protectionist policies weighed on business confidence and growth prospects. For now, however, Asian manufacturing growth is spread across eight of the 12 major economies we follow according to January business surveys, paced by India. In Japan, service-sector strength outweighed slumping manufacturing to sustain a third straight month of overall expansion. In China, stimulus petered out in January, leaving a composite of business surveys at a four-month low. China's economy is constrained by a property-market slump pressuring household wealth, confidence, and spending; deflation's impact on corporate profits and wages; and deep-seated structural issues like population declines, excessive local-government debt, weak global trade, and capital spending undercut by past overinvestment.

Asian manufacturing activity converging around stall-speed to start 2025



Sources: Wells Fargo Investment Institute, S&P Global, Inc., and China Federation of Logistics & Purchasing. Data as of February 5, 2025. ¹Purchasing managers' composite index of manufacturing activity. China composite includes services activity. ²Average of manufacturing indexes in Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Key economic statistics

Global growth rates ¹	4Q24	3Q24	2Q24
U.S. real economic growth (%)	2.3	3.1	3.0
Eurozone real economic growth (%)	0.0	1.6	0.8
Japanese real economic growth (%)	–	1.2	2.2
Chinese real economic growth (%)	6.6	5.3	3.6

U.S. economic data	1/25	12/24	1/24
Unemployment rate (%)	4.0	4.1	3.7
ISM Manufacturing PMI	50.9	49.2	48.9
ISM Services PMI	52.8	54.0	53.2
Retail sales (%)	–	0.40	-0.90
Consumer confidence (1985 = 100)	104.1	109.5	110.9
Housing starts (millions; annualized)	–	1.50	1.38
U.S. Dollar Index ²	108.4	108.5	103.3
U.S. Consumer Price Index (CPI) (%)	3.0	2.9	3.1
U.S. core CPI (%)	3.3	3.2	3.9
Personal consumption expenditures (PCE) deflator (%)	–	2.6	2.6

Sources: Bloomberg, Wells Fargo Investment Institute, February 12, 2025. ¹Annualized gross domestic product quarter-to-quarter percent change. ²End of period. An index is unmanaged and not available for direct investment. 2Q = second quarter. 3Q = third quarter. 4Q = fourth quarter. **Past performance is no guarantee of future results.** See pages 27-32 for important definitions and disclosures.

Wells Fargo Investment Institute forecasts

Gross domestic product (GDP) growth: Our view is that the economy is headed for another year of above-average, 2.5% growth, even as it weathers increased volatility from policy uncertainties in the U.S. and central-bank policy divergence abroad, along with a squeeze on real (inflation-adjusted) incomes and higher interest rates from inflation's likely turn higher. Looking through the twists and turns of trade and other policy measures, we see the economy's organic strength combining with support from deregulation and looming tax cuts to outweigh inflation headwinds from higher tariffs and wage pressures from tighter immigration controls.

Organic strength should come from further, albeit more moderate growth of inflation-adjusted incomes; adequate, if not ample financial liquidity; and lingering support from windfall gains in household wealth driven by the past year's rally in stocks and other financial assets. We see added support to the economy coming from more balanced growth between vibrant services and lagging manufacturing. Tariff increases are a double-edge sword, in our view, adding to inflation risks but potentially supporting reshoring with the added potential of substituting domestic-made goods for imports. We believe deregulation can boost economic growth directly, through greater investment responding to an improved return on capital, and indirectly, as deregulation spurring investment boosts worker productivity, mitigating the effect of slowing labor-force growth on wage inflation.

CPI inflation: Our view that 12-month CPI inflation will accelerate from 3.0% at the start of 2025 to a 3.3% rate this December is based on a combination of strong economic growth, tariff increases, wage increases from tighter immigration controls, and industry-specific pressure on rents, insurance, and health care. We believe inflation this year would be even higher, if not for the dampening effect of U.S. dollar strength on import prices and, ultimately, for moderating growth responding to firmer inflation early in the year. Moreover, the threat posed by tariff increases, though real, should be kept in perspective. First, trade-sensitive goods in the CPI (including food and energy) make up less than 40% of the CPI, compared to over 60% for less trade-sensitive services. Second, above-average gains in labor-productivity growth have combined with decelerating wage gains to keep a lid on unit labor costs (wages and benefits per unit of output), the largest cost component for most businesses.

Labor market conditions: We expect U.S. job growth to cool in 2025, consistent with a tilt toward more sustainable economic growth than with an economy unwinding toward a recession or even a soft landing. Our takeaway from recent employment data is a reluctance to hire and to fire in a more uncertain economic outlook, netting to a modest improvement in job growth late last year. Looking ahead, we believe reasonably good economic growth and modest increases in the labor supply will limit the rise in the unemployment rate. Labor-force growth will likely be restrained by tighter immigration controls atop increased retirements in an aging workforce. Foreign-born workers have contributed disproportionately to labor supply since early in the post-coronavirus recovery at the end of 2021. The group accounted for 55% of the increase in the labor force during the period, nearly triple its 19% share of the total labor force. We estimate that roughly 30% of foreign-born workers are undocumented and vulnerable to deportation. Tight labor-market conditions likely will slow the deceleration of wage inflation since mid-2024, aggravated by immigration controls. The share of undocumented workers is highest in construction, agribusiness, hospitality, and among caregivers.

Global economy

	Latest (%) ¹	2025 target (%) ¹
U.S. GDP growth	2.8 (Q4)	2.5
U.S. inflation ²	3.0 (Jan.)	3.3 (Dec.)
U.S. unemployment rate ³	4.1 (Jan.)	4.8 (Dec.)
Global GDP growth ⁴	3.4 (Q3)	2.6
Global inflation ⁴	5.7 (Q4)	3.3
Developed-market GDP growth ⁵	1.7 (Q3)	1.7
Developed-market inflation ⁵	3.9 (Q4)	2.4
Emerging market GDP growth	4.6 (Q3)	3.3
Emerging market inflation	7.0 (Q4)	3.8
Eurozone GDP growth	0.7 (Q4)	1.1
Eurozone inflation ²	2.5 (Jan.)	2.0 (Dec.)

Sources: Bloomberg, Wells Fargo Investment Institute (WFII). All latest numbers from Bloomberg as of February 12, 2025. Targets are based on forecasts by Wells Fargo Investment Institute as of February 18, 2025 and provide a forecast direction over a tactical horizon. The closer the current date is to the year-end, the more WFII guidance focuses on the following year's target. Q3 = third quarter. Q4 = fourth quarter.

¹Average percent change in the latest four quarters from the same year-ago period, unless otherwise noted. ²Latest month percent change from a year ago. ³Three-month average as of the date indicated, percent of labor force. ⁴Weighted average of developed country and emerging-market forecasts. ⁵Weighted average of U.S. and other developed-country forecasts. Forecasts are not guaranteed and based on certain assumptions and on views of market and economic conditions which are subject to change.

Wells Fargo Investment Institute forecasts (continued)

Interest rates: The Fed is a dual-mandate bank focused on both price stability (inflation) and full employment. Recent employment data has bolstered the Fed's confidence that the labor market has come into better balance, but inflation's progress toward its stated goal of 2% has mostly stalled in recent months.

Our year-end 2025 federal funds target rate stands between 4.00% and 4.25%. We see one additional 25-basis-point (0.25%) rate cut before the end of 2025. We expect short-term U.S. Treasury rates to move lower in tandem with the decline in the Fed's policy interest rate. Although we believe that the near-term path of long-term interest rates is highly dependent on the state of the economy, our expectations for stronger economic growth and the potential for higher inflation through 2025 makes us anticipate higher longer-term interest rates. Our year-end 2025 10-year target is between 4.5% and 5.0%, and our year-end 2025 30-year target is between 4.75% and 5.25%.

Equities: We would view periods of near-term weakness in equity markets as potential opportunities given our 2025 outlook, which forecasts a broad-based recovery that supports improved revenue growth and expanding margins.

Our view is that the incipient earnings recovery we saw in 2024 will accelerate in 2025. We expect S&P 500 Index earnings per share (EPS) to grow from \$245 in 2024 to \$275 in 2025. We believe that an accelerating earnings recovery in 2025 will allow stocks to rally without further multiple expansion. We forecast for the S&P 500 Index to end 2025 between 6500 and 6700. The table to the right details our earnings and price targets for the remaining equity asset classes.

We remain tilted toward high-quality assets and believe investors should continue to favor U.S. Large Cap Equities (favorable) over Mid Cap (neutral) and Small Cap Equities (neutral) as well as Developed Market Ex.-U.S. (neutral) over Emerging Market Equities (unfavorable).

Commodities: Commodities outperformed U.S. equities and U.S. bonds last month as the Bloomberg Commodity Total Return Index (BCOMTR) ended January with a 4.0% total return. We expect positive economic growth, tight global supply, and Fed interest-rate cuts to support higher commodity prices over the tactical horizon. Our year-end 2025 targets are 250–270 for the BCOMTR, \$2,800–\$2,900 per troy ounce for gold, \$85–\$95 per barrel for West Texas Intermediate (WTI), and \$90–\$100 per barrel for Brent crude.

Global fixed income (%)	Latest	2025 YE target
10-year U.S. Treasury yield	4.54	4.50–5.00
30-year U.S. Treasury yield	4.79	4.75–5.25
Fed funds rate	4.25–4.50	4.00–4.25

Currencies	Latest	2025 YE target
Dollar/euro exchange rate	\$1.04	\$0.98–\$1.02
Yen/dollar exchange rate	¥155	¥158–¥162
ICE U.S. Dollar Index	108	108–112

The Intercontinental Exchange (ICE) U.S. Dollar Index is a weighted average of the value of the U.S. dollar relative to a basket of U.S. trade partner currencies, comprised of the euro, Japanese yen, pound sterling, Canadian dollar, Swedish krona, and Swiss franc. A higher index value indicates dollar appreciation. Additional sources and as-of dates provided under Global real assets table.

Global equities	Latest	2025 YE target
S&P 500 Index	5882	6500–6700
S&P 500 earnings per share	\$244	\$275
Russell Midcap Index	3534	4100–4300
Russell Midcap earnings per share	\$182	\$195
Russell 2000 Index	2230	2700–2900
Russell 2000 earnings per share	\$66	\$80
MSCI EAFE Index	2262	2400–2600
MSCI EAFE earnings per share	\$153	\$170
MSCI Emerging Markets (EM) Index	1075	1100–1300
MSCI EM earnings per share	\$80	\$85

Latest EPS (earnings per share) figures are Bloomberg consensus estimates for full-year 2024 EPS as of February 5, 2025. Additional sources and as-of dates provided under Global real assets table.

Global real assets	Latest	2025 YE target
WTI crude oil price (\$ per barrel)	\$73	\$85–\$95
Brent crude oil price (\$ per barrel)	\$77	\$90–\$100
Gold price (\$ per troy ounce)	\$2,798	\$2,800–\$2,900
Commodities	248	250–270

Sources: Bloomberg, Wells Fargo Investment Institute, as of January 31, 2025. Targets are Wells Fargo Investment Institute forecasts, as of February 18, 2025 and provide a forecast direction over a tactical horizon. The closer the current date is to the year-end, the more WFII guidance focuses on the following year's target. YE = year end. An index is unmanaged and not available for direct investment. See pages 27–32 for important definitions and disclosures. WTI is a grade of crude oil used as a benchmark in oil pricing.

Forecasts, targets, and estimates are not guaranteed and are based on certain assumptions and on our views of market and economic conditions which are subject to change.

Fixed income

Market observations

All major fixed-income asset classes posted either positive or flat returns in January, mostly supported by a decline in U.S. Treasury yields in maturities above one year. Within the U.S., High Yield Taxable Fixed Income (1.4%) outperformed by a wide margin. U.S. Intermediate Term Taxable Fixed Income (0.7%) outperformed both U.S. Short and Long Term Taxable Fixed Income (0.5% and 0.4%). Internationally, Emerging Market (EM) Fixed Income outperformed Developed Market (DM) Fixed Income.

The Federal Reserve (Fed) left the federal funds rate unchanged at 4.25% – 4.50% during January's meeting, pausing the interest-rate-cutting cycle that started in September. Market expectations for rate cuts in 2025 have settled around a total of 25 to 50 basis points (100 basis points equals 1%) of cuts by year-end, roughly in line with the Fed's dot plot. Meanwhile, the Fed continues to unwind its balance sheet and has already shed more than \$1.5 trillion in securities.

U.S. fixed income: Most of the U.S. Treasury yield curve ended January slightly lower from the prior month, but volatility was evident throughout the month. Yields across the curve saw some notable mid-month movement related to a stronger-than-expected jobs report and CPI (consumer price index) data evidencing inflation's ongoing stickiness.

Investor appetite for credit exposure was moderate in January. U.S. Investment Grade (IG) Corporate Fixed Income (0.6%) underperformed High Yield (HY) Taxable Fixed Income (1.4%). HY credit spreads saw volatility throughout the month but ended lower, while IG spreads remained relatively steady and ended the month slightly higher. In our view, current yields above 5% for both classes can provide portfolios with attractive income potential. We maintain a favorable view on IG Corporate Securities and neutral guidance on HY Taxable Fixed Income.

Municipal bond performance was positive in January with a 0.5% return as municipal bond yields declined across much of the curve, except for the longer end of the curve. We are now neutral on U.S. Municipal Bonds given attractive yield opportunities in other fixed-income sectors, but we believe municipal credit fundamentals remain favorable. For investors in higher effective tax brackets, we believe municipal securities still play an important role in fixed-income positioning. We also remain neutral on HY Municipal Bond.

Developed markets (DM): Unhedged DM bond returns (0.4%) were positive in January. Meanwhile, hedged DM bonds (0.0%) were flat as the decline in U.S. yields was relatively small. Bonds from Sweden and Australia performed well in U.S. dollar terms while Canadian bonds performed best in local-currency terms. Japanese bonds in U.S.-dollar terms were able to recover from prior months' losses as the yen appreciated against the dollar over the month.

Emerging markets (EM): Stronger EM foreign exchange rates against the U.S. dollar in January led to improved returns in local-currency terms (2.1%). Dollar-denominated EM bonds were tempered by a relatively small decline in U.S. yields, though they also ended the month positive (1.2%). U.S.-dollar EM bonds from Latin American countries like Mexico, Brazil, and Chile performed well along with bonds from Middle Eastern countries like Saudi Arabia, the UAE, and Qatar.

Wells Fargo Investment Institute perspective

We believe the U.S. central bank will tread cautiously in 2025 with the goal of accomplishing an economic soft landing. Our view is that the U.S. Treasury yield curve will continue to steepen as intermediate- and long-term yields move higher from current levels by year-end

Fixed income index total returns (%)

	MTD	QTD	YTD	1 year	3 year	5 year
U.S. Taxable Inv Grade Fixed Income	0.5	0.5	0.5	2.1	-1.5	-0.6
U.S. Short Term Taxable	0.5	0.5	0.5	4.4	2.1	1.5
U.S. Intermediate Term Taxable	0.7	0.7	0.7	2.5	-0.6	0.1
U.S. Long Term Taxable	0.4	0.4	0.4	-2.2	-7.8	-4.3
U.S. Treasury Bills	0.4	0.4	0.4	5.3	4.1	2.5
U.S. Inv Grade Corporate	0.6	0.6	0.6	2.9	-1.0	-0.1
U.S. Municipal Bonds	0.5	0.5	0.5	2.1	0.5	0.7
High Yield Taxable Fixed Income	1.4	1.4	1.4	9.7	4.3	4.5
DM Ex.-U.S. Fixed Income (Unhedged)	0.4	0.4	0.4	-4.5	-8.3	-5.7
DM Ex.-U.S. Fixed Income (Hedged)	0.0	0.0	0.0	2.9	-0.6	-0.6
EM Fixed Income (U.S. dollar)	1.2	1.2	1.2	8.3	0.6	0.2
EM Fixed Income (Local currency) ¹	2.1	2.1	2.1	1.2	-0.3	-1.2

Sources: Bloomberg, J.P. Morgan, Wells Fargo Investment Institute, January 31, 2025. MTD = month to date. QTD = quarter to date. YTD = year to date. Inv Grade indicates Investment Grade; DM indicates Developed Market; EM indicates Emerging Market. Returns over one year are annualized. ¹Returns are converted to dollars for U.S. investors. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See pages 27-32 for important definitions and disclosures.

2025. We have a neutral view on U.S. Long Term Taxable Fixed Income given the potential for yields to move in either direction, which is highly dependent on the economy's trajectory. We also have a most unfavorable view on U.S. Short Term Taxable Fixed Income as we anticipate that further rate cuts will eventually diminish the attractiveness of yields in this sector. At this time, we believe that the intermediate-term section of the curve strikes the greatest balance for investors between yield generation and price volatility.

Europe appears to have exited a mild recession, but economic struggles and fiscal-policy challenges are expected to persist in 2025 along with interest-rate differentials with the U.S., which may impact fixed-income returns. Japanese yields should remain relatively low despite the recent change in policy from the Bank of Japan. Furthermore, we expect the U.S. dollar should build on its strength through year-end 2025. With yields generally below those available in the U.S. and currency returns seen as negative, we continue to have no strategic or tactical allocations to DM ex-U.S. Fixed Income.

We reiterate our view that EM sovereign bonds, both U.S.-dollar and local-currency denominated, should continue to display positive performance in 2025. However, it is important to point out that most of the support may come on the back of additional interest-rate cuts by the Fed. Still, the attractive yield differential of EM bonds provides greater currency resilience and a larger cushion against capital losses in the event that interest rates climb once again, or credit spreads widen.

Fixed income tactical guidance*

	Guidance
Cash Alternatives	Neutral
U.S. Short Term Taxable	Most Unfavorable
U.S. Intermediate Term Taxable	Favorable
U.S. Long Term Taxable	Neutral
High Yield Taxable Fixed Income	Neutral
DM Ex.-U.S. Fixed Income	Neutral
EM Fixed Income	Neutral

Source: Wells Fargo Investment Institute, February 18, 2025.

*Tactical horizon is 6-18 months.

Fixed income

Sector strategy: U.S. investment-grade securities

Sector tactical guidance* and total returns (%)

Sector	Guidance	1 month	Year to date
Duration	Favorable	–	–
U.S. Government	Neutral	0.5	0.5
Treasury Securities	Neutral	0.5	0.5
Agencies	Neutral	0.5	0.5
Inflation-Linked Fixed Income	Neutral	1.3	1.3
Credit	Favorable	0.6	0.6
Corporate Securities	Favorable	0.6	0.6
Preferred Securities	Neutral	0.6	0.6
Leveraged Loans	Unfavorable	0.7	0.7
Securitized	Favorable	0.5	0.5
Residential MBS	Favorable	0.5	0.5
Commercial MBS	Neutral	0.7	0.7
Asset Backed Securities	Favorable	0.3	0.3
U.S. Municipal Bonds	Neutral	0.5	0.5
Taxable Municipal	Neutral	0.5	0.5
State and Local General Obligation	Favorable	0.5	0.5
Essential Service Revenue	Favorable	0.5	0.5
Pre-refunded	Neutral	0.6	0.6
High Yield Municipal	Neutral	0.8	0.8

Sources: Total returns: Bloomberg as of January 31, 2025. Guidance: Wells Fargo Investment Institute, as of February 18, 2025. *Tactical horizon is 6-18 months. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** MBS = mortgage-backed securities. Duration is a measure of a bond's interest rate sensitivity. See pages 27-32 for important definitions and disclosures.

Duration (Favorable): We have a near-term favorable view of Duration as we favor the intermediate portion of the yield curve and are neutral on the long-term portion. We believe intermediate- and long-term yields will be highly dependent on the economic outlook, and new economic and fiscal policies from the incoming administration could create volatility. For now, our view is that investors will be better rewarded in the long-run by moving excess cash holdings into bonds with longer maturities, hence extending the duration of their fixed-income portfolios.

U.S. Government (Neutral): We remain neutral on the U.S. Government sector. We view holdings of Treasury securities as a high-credit-quality hedge during volatile economic environments, which we no longer expect in the coming quarters. We believe that investor appetite for credit risk will tend to flourish, which may cause securities perceived as safe havens, like U.S. Treasuries, to lag.

Investment-Grade Credit (Favorable): We have a favorable view of the IG Credit sector (and IG Corporate Securities). High-quality IG credit may allow portfolios to generate excess yield (also known as carry) through spread premium that is meant to compensate investors for perceived issuer credit risk. Although IG credit spreads have compressed and are now tighter than long-term averages, we believe that they will most likely remain near current levels for a while or, better yet, will compress further toward new cycle lows.

Still, the higher yields available in these sectors relative to many other IG fixed-income options support our favorable guidance. We reiterate our bias toward selectivity.

Preferred Stock (Neutral): We maintain a neutral position on the Preferred Securities sub-sector. Income-oriented investors with a longer-term perspective could continue to accumulate preferred securities. The current market highlights that the Preferred Securities sub-sector comes with heightened risks relative to high-quality, traditional fixed-income sectors. More specifically, given that preferred securities have an innate long-dated (perpetual) nature, issues with low coupons can experience greater losses than those with higher coupons during a relatively high interest-rate environment. Investors participating in this income-oriented sub-sector should understand the risks and complexities inherent in many preferred securities.

Investment-Grade Securitized (Favorable): We are favorable on the Securitized sector given that a large portion of the sector is in the Residential Mortgage-Backed Securities (RMBS) sub-sector, on which we are also favorable. We believe that the Securitized sector may be positioned to offer value relative to other fixed-income sectors while still providing favorable credit quality and liquidity. Furthermore, we believe the advantage of RMBS over IG corporates remains visible in credit-spread differentials, although it is not as attractive as it was several months ago. We remain neutral on Commercial Mortgage-Backed Securities (CMBS). Although there is still distress in CMBS, we believe it should be less severe than previously feared. Still, we favor staying in the highest credit qualities that may potentially provide more reliable cash flows. We are also favorable on Asset-Backed Securities (ABS). Demand for ABS remains particularly strong, and although credit spreads have compressed in the past few months, we still believe they have room to tighten further.

U.S. Municipal Bonds (Neutral): We now have a neutral view of U.S. Municipal Bonds, especially with other fixed-income sectors displaying more attractive yield opportunities. Within the sector, we still favor both the Essential Service Revenue and State and Local General Obligation sub-sectors. Municipal markets saw positive performance in January as yields declined across much of the curve. In late January, municipal-to-Treasury yield ratios (MTYR) stood near 67% for 10-year issues and at 83% for 30-year bonds, relatively flat from the previous month. From a historical valuation perspective using MTYR, both 10-year and 30-year municipal bonds still appear to be somewhat rich as they are both below long-term averages.

We currently favor the 8- to 18-year maturity range, where investors can potentially pick up incremental yield, with a slight bias toward implementing a barbell approach by investing in the shorter and longer ends of this range. However, the belly of the municipal yield curve (intermediate term) has become more attractive as the curve continues to steepen. We favor a premium coupon structure and find value in the additional spread pickup offered in 4% coupons over 5% coupons. Bonds with lower coupon structures will have longer duration, and the yield-spread pickup is reflective of that. Municipal credit spreads are trading near the upper range of past 12-months, but still are historically tight. We believe that an emphasis on quality and selectivity remains essential. Municipal investors should also undertake meticulous credit research or access professional management.

Equities

Market observations

U.S. equities: Concerns about DeepSeek and its implications for the AI trade along with tariff fears and the Fed halting its rate cuts all contributed to bouts of heightened volatility in January. A robust earnings season to date, a resilient economy, and optimism for potential market-friendly policies from the incoming administration were tailwinds that helped stocks broadly end the month in positive territory. U.S. Mid Cap Equities (+4.3%) outperformed both U.S. Large Cap Equities (+2.8%) and U.S. Small Cap Equities (+2.6%) in January.

In a sharp reversal from December, 10 of the 11 S&P 500 Index sectors posted positive returns last month with the Communications Services (+9.1%) and Health Care (+6.8%) sectors leading. Information Technology (-2.9%) was the only sector to post a negative return in the S&P 500 Index, with the drop primarily driven by DeepSeek fears.

Meanwhile, all the sectors in the Russell Midcap Index and 10 of the 11 sectors in the Russell 2000 Index posted gains last month. The Health Care (+6.7%) and Technology (+6.7%) sectors led the Russell Midcap Index while the typically defensive Consumer Staples (+0.9%), Utilities (+0.8%), and Real Estate (+0.8%) sectors were the biggest laggards. For the Russell 2000 Index, Consumer Staples (+3.6%) and Health Care (+5.4%) led while the Energy (-0.5%) sector lagged, being the only sector within the index to post a negative return.

International equities⁶: U.S. dollar-denominated Developed Market (DM) Equities (+5.3%) significantly outperformed Emerging Market (EM) Equities (+1.8%) last month. The currency conversion into U.S. dollars served as a tailwind to both as the dollar broadly weakened relative to other developed- and emerging-market currencies.

Within DM, the Europe region (+6.9%) outperformed the Pacific region (+2.2%) in January. In the Europe region, Germany (+9.4%) and Sweden (+9.8%) outperformed while Belgium (+2.2%) and Denmark (-1.6%) lagged. In the Pacific region, Australia (+5.1%) and Singapore (+4.6%) outperformed while New Zealand (-1.7%) and Hong Kong (-2.3%) posted negative returns.

Regarding EM, the Latin America region (+9.5%) significantly outperformed the Europe, Middle East, and Africa (+4.5%) and Asia (+0.8%) regions. Within the Latin America region, Brazil (+12.4%) and Colombia (+21.2%) were significant outperformers while Mexico (+3.7%) and Peru (+1.0%) underperformed. In the Europe, Middle East, and Africa region, Hungary (9.8%), the Czech Republic (+9.9%), and Poland (+13.6%) outperformed while Qatar (-0.5%) and Egypt (-1.4%) underperformed. In the Asia region, Taiwan (+3.3%) and Korea (+6.3%) outperformed while Malaysia (-4.7%) and the Philippines (-9.8%) significantly underperformed.

Wells Fargo Investment Institute perspective

Our solid economic growth forecast likely will flow directly to equities' top line and is a heavy consideration in our outlook. We also expect firms' abilities to convert those sales into earnings to improve as we expect corporations to remain committed to cost cutting and increased efficiencies. We forecast that S&P 500 Index earnings per share will increase to \$275 for 2025. We see this solid earnings growth driving prices into our 2025 S&P 500 Index year-end price target of 6500 to 6700.

We prefer U.S. Large Cap (favorable) over Mid Cap (neutral) and Small Cap Equities (neutral). We view U.S. Large Cap Equities as the highest-quality major equity class, with strong company balance sheets compared to other equity classes, durable pricing power, and resilient growth potential. We believe the equity asset class is well positioned to withstand further downside volatility, while our

2025 outlook suggests attractive upside potential. Our preference for quality extends to our view of international equities, where we prefer DM ex-U.S. (neutral) over EM Equities (unfavorable).

Equity index total returns (%)

	MTD	QTD	YTD	1 year	3 year	5 year
U.S. Large Cap Equities	2.8	2.8	2.8	26.4	11.9	15.2
U.S. Large Cap (Growth)	2.0	2.0	2.0	32.7	14.6	18.9
U.S. Large Cap (Value)	4.6	4.6	4.6	19.5	8.1	10.2
U.S. Mid Cap Equities	4.3	4.3	4.3	22.0	8.0	11.0
U.S. Mid Cap (Growth)	6.4	6.4	6.4	30.6	11.2	12.7
U.S. Mid Cap (Value)	3.5	3.5	3.5	19.2	6.6	9.8
U.S. Small Cap Equities	2.6	2.6	2.6	19.1	5.6	8.7
U.S. Small Cap (Growth)	3.2	3.2	3.2	22.7	6.2	7.8
U.S. Small Cap (Value)	2.1	2.1	2.1	15.5	4.7	8.9
DM Equities Ex-U.S. (USD)	5.3	5.3	5.3	9.2	5.7	6.8
DM Equities Ex-U.S. (Local) ¹	4.8	4.8	4.8	14.2	9.9	9.4
EM Equities (USD)	1.8	1.8	1.8	15.3	-0.3	3.5
EM Equities (Local) ¹	1.6	1.6	1.6	19.7	3.2	6.0

Sources: Bloomberg, Standard & Poor's, Russell Indexes, MSCI Inc., Wells Fargo Investment Institute, January 31, 2025. MTD = month to date. QTD = quarter to date. YTD = year to date. DM indicates Developed Market; EM indicates Emerging Market; USD indicates U.S. dollar. Returns over one year are annualized.¹ Returns are in local currencies as experienced by local investors. U.S. investors would experience gains or losses on currency conversion. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See pages 27-32 for important definitions and disclosures.

Equity tactical guidance*

	Guidance
U.S. Large Cap Equities	Favorable
U.S. Mid Cap Equities	Neutral
U.S. Small Cap Equities	Neutral
DM Equities Ex-U.S.	Neutral
EM Equities	Unfavorable

Source: Wells Fargo Investment Institute, February 18, 2025.

*Tactical horizon is 6-18 months.

International equity tactical guidance* by region

Region	Benchmark weight (%)**	Guidance
DM Equities Ex.-U.S.		Neutral
Europe	67	Neutral
Pacific	33	Favorable
EM Equities		Unfavorable
Asia	80	Neutral
Europe, Middle East, and Africa	13	Most unfavorable
Latin America	7	Neutral

Sources: Bloomberg, Wells Fargo Investment Institute (WFII). *Tactical horizon is 6-18 months. Weightings are as of January 31, 2025. WFII guidance is as of February 18, 2025.

**Benchmarks are MSCI EAFE Index for DM and MSCI Emerging Markets Index for EM. Weightings may not add to 100% due to rounding. An index is unmanaged and not available for direct investment.

6. Regional and country returns are measured using the total U.S. dollar returns of their respective MSCI Index. Please see the end of the report for the definitions of the representative indexes.

Equities

U.S. equity sector strategy

S&P 500 Index sector tactical guidance* and total returns (%)

Sector	S&P 500 Index weight (%)**	Guidance***	MTD	QTD	YTD	1 year	3 year	5 year
Communication Services	9.9	Favorable	9.1	9.1	9.1	45.7	15.2	16.4
Consumer Discretionary	11.4	Neutral	4.4	4.4	4.4	40.9	10.5	15.0
Consumer Staples	5.5	Unfavorable	2.0	2.0	2.0	15.4	5.9	8.9
Energy	3.1	Most Favorable	2.1	2.1	2.1	8.3	14.0	15.3
Financials	14.1	Favorable	6.6	6.6	6.6	35.0	11.7	13.7
Health Care	10.5	Neutral	6.8	6.8	6.8	6.3	5.5	10.0
Industrials	8.3	Favorable	5.0	5.0	5.0	24.5	13.1	13.2
Information Technology	30.7	Neutral	-2.9	-2.9	-2.9	27.6	17.3	22.9
Materials	1.9	Neutral	5.6	5.6	5.6	9.8	3.8	11.3
Real Estate	2.1	Neutral	1.8	1.8	1.8	12.5	-0.9	4.6
Utilities	2.3	Unfavorable	2.9	2.9	2.9	31.0	7.4	5.9
Total	100.0							

Sources: S&P 500 Index weight and total returns: Bloomberg, as of January 31, 2025. Guidance: Wells Fargo Investment Institute, as of February 18, 2025. *Tactical horizon is 6-18 months. MTD = month to date. QTD = quarter to date. YTD = year to date. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

**Sector weightings may not add to 100% due to rounding.

***To reposition allocations for consistency with our guidance, add two percentage points of exposure to market weight for favorables, subtract two for unfavorables, and hold market weight for neutrals.

Communication Services (Favorable): The Communication Services sector has multiple secular earnings drivers: search, social media, delivery of live and at-home content, and most recently, the development of artificial intelligence (AI). With the sector trading at a below-market price-to-earnings multiple, we believe the sector warrants a favorable rating.

Consumer Discretionary (Neutral): Fed easing is likely to benefit the Consumer Discretionary sector as it sparks a modest economic rebound and pressures ease on a re-energized consumer. Our ranking framework and our views of the risk-reward balance suggest neutral is the appropriate rating for Consumer Discretionary.

Consumer Staples (Unfavorable): We expect this defensive and rate-sensitive sector to struggle as the economy stages a modest rebound while long-term interest rates stay elevated. Stubborn input-cost inflation and a lack of pricing power should be headwinds.

Energy (Most Favorable): The fundamental case for the sector is attractive as oil supply remains tight, and OPEC+⁷ seemingly is committed to keeping it that way, while U.S. oil producers' capital discipline and preference for shareholder returns versus production growth is likely to aid in that mission. We believe valuations are attractive, and oil prices moving into our targets should provide a sizeable tailwind.

Financials (Favorable): Tailwinds include the start of the Fed easing cycle and the economic upturn we expect, which should coincide with improved confidence, loan growth, and activity. Increased efficiencies and a potentially more favorable than feared regulatory environment should also benefit the sector.

Health Care (Neutral): This typically defensive sector is likely to struggle should the economy stage a modest rebound and the more cyclical areas of the market benefit, as we expect. On the other hand, the sector does enjoy cyclical and secular tailwinds such as the increased use and effectiveness of weight-loss drugs and an aging population that could generate investor interest, especially during a slowdown.

Industrials (Favorable): Tailwinds for the sector include multiple stimulus programs, the energy transition, reshoring, data-center expansion, easing input-cost pressures, and continued supply-chain normalization.

Information Technology (Neutral): We still believe that Information Technology's quality characteristics should serve it well. However, the sector's AI-driven outperformance has lifted valuations to levels that we find unattractive at present.

Materials (Neutral): Our bullish commodity outlook could be a mixed bag for the sector as higher natural gas prices increase costs for the chemicals industry while higher metals prices benefit metals and mining companies. Our ranking framework has deteriorated for the sector while our forecast for a strong dollar is a headwind, yet a cyclical reacceleration would likely be a tailwind. Considering the balance of factors, we believe a neutral rating is appropriate.

Real Estate (Neutral): While we do not envision sustained outperformance over a tactical timeframe from the typically defensive sector as the economy stages a modest rebound, we also see little catalyst for significant underperformance as Real Estate sentiment seemingly has passed its nadir.

Utilities (Unfavorable): The recent Utilities rally, driven by AI power demand optimism and a response to deeply oversold levels, is likely to prove fleeting, in our view. Further, our expectation for elevated interest rates likely poses multiple headwinds, including heightened competition for yield flows from fixed-income investments as well as elevated interest costs for the highly levered sector.

Growth versus Value (Balanced): In our view, the value and growth descriptors are too blunt and broad, and instead we prefer to pick sectors in an effort to enhance equity returns. There is not a straightforward way to sort sector preferences into growth or value styles, but our current sector preferences tilt toward value (we hold a most favorable rating on the Energy sector, a favorable rating on the Financials, Industrials, and Communication Services sectors, and an unfavorable rating on the Consumer Staples and Utilities sectors).

7. Organization of the Petroleum Exporting Countries and their allies.

Equities

Equity sector and sub-sector preferences

Sector	Sector tactical guidance*	Favorable sub-sectors	Unfavorable sub-sectors
Energy	Most Favorable	Integrated Oil; Midstream Energy	Refining
Communication Services	Favorable	Interactive Home Entertainment; Interactive Media & Services	Alternative Carriers; Publishing
Financials		Capital Markets; Diversified Banks; Insurance Broker; Multi-Sector Holdings; Property & Casualty Insurance; Transaction & Payment Processing Services	Business Development Companies; Life & Health Insurance; Mortgage Real Estate Investment Trusts (REITs); Regional Banks
Industrials		Aerospace & Defense; Commercial & Professional Services; Multi-Industrials**	Cargo Ground Transportation; Passenger Airlines
Consumer Discretionary	Neutral	Broadline Retail; Hotels, Restaurants & Leisure; Specialty Retail	Leisure Products
Health Care		Life Sciences Tools & Services; Managed Health Care; Health Care Equipment & Supplies	Health Care Services
Information Technology		Semiconductors; Semiconductor Materials & Equipment; Software	Communications Equipment
Materials		Construction Materials; Industrial Gases; Specialty Chemicals	Containers & Packaging
Real Estate		Data Center REITs; Industrial REITs; Self-Storage REITs; Telecommunications REITs	Diversified REITs; Lodging/Resort REITs; Office REITs; Specialty REITs; Timberland REITs
Consumer Staples	Unfavorable	Beverages; Consumer Staples Merchandise Retail; Household Products	Tobacco
Utilities		Electric Utilities; Independent Power & Renewable Electricity Producers; Multi-Utilities	Water Utilities

Source: Wells Fargo Investment Institute; favored sub-sectors by Global Securities Research (GSR) group and favored sectors by Global Investment Strategy. As of February 18, 2025.
REITs = real estate investment trusts.

*Tactical horizon is 6-18 months.

**Multi-industrials includes the Industrial Conglomerates, Electrical Components & Equipment, Industrial Machinery & Supplies & Components, and Trading Companies & Distributors sub-industries.

For more information, please request our most recent *Equity Recommendations* report.

Real assets

Master limited partnerships (MLPs)

Market observations

MLPs outperformed the broader market in January, with an 8.2% total return (as measured by the Alerian MLP Index) versus a 2.8% return for the S&P 500 Index. WTI crude oil prices gained 1.1% during the month. We note that MLPs typically have low direct business exposure to energy commodity prices as business models are primarily fee based.

We believe investor sentiment toward MLPs has generally improved due to resilient domestic oil demand and visible future demand growth for natural gas, driven by electrification needs and growing export volumes. Additionally, MLPs potentially stand to benefit from deregulatory ambitions of the Trump administration, although the path and extent of these initiatives are still unclear. MLPs have generally become more disciplined on capital expenditures, and many high-quality MLPs now have stronger balance sheets and the potential for sustainable payouts, in our view.

Wells Fargo Investment Institute perspective

We prefer high-quality midstream energy companies that have had stable operating results and solid distribution coverage. These companies tend to be relatively large and well diversified. We also believe that midstream C-corporations typically have stronger corporate governance and a wider institutional investor base relative to midstream companies structured as MLPs.

Commodities

Market observations

Energy: The Bloomberg Commodity Energy Subindex's performance was up 1.8% in January but underperformed the BCOMTR. Brent crude and WTI prices rose by 2.8% and 1.1%, respectively.

Concerns over China's economy and OPEC+'s plan to unwind a portion of its production cuts have weighed on performance over the past 12 months. We believe a gradual unwinding of OPEC+'s production cuts in addition to capital discipline among non-OPEC producers will limit global supply growth in 2025. On the demand front, we expect the positive effects of rate cuts by the Fed and improved economic conditions in 2025 to further support a favorable supply and demand balance. In addition, the potential for tariffs could provide near-term lifts to energy prices. These factors underscore why we remain favorable on the Energy sector.

Metals: Precious metals outperformed the BCOMTR with a 7.6% return in January as gold prices rallied in response to geopolitical tensions from potential tariffs. Looking ahead, we expect robust purchases from central banks, consumer demand, and geopolitical tensions to continue supporting higher demand. Adding to the support of strong existing fundamentals, Fed interest-rate cuts should also continue to support prices.

Industrial metals were up by 1.4% in January, underperforming the BCOMTR. Prices remained elevated relative to long-term averages as demand conditions began to show signs of improvement from a new monetary easing cycle by the Fed and China's stimulus measures to address weakness in its economy. While we believe the economic environment for the Industrial Metals sector is improving, we remain neutral. In our view, China's economy still faces a fragile property sector along with weak manufacturing activity, which will likely pose headwinds for sustained outperformance.

Agriculture: Agricultural commodity prices rose by 4.8% in January, outperforming the BCOMTR, but there was still a wide dispersion in individual performance. Coffee (+18.2%) was the top performer, while cotton (-3.7%) was the worst. Notably, supply

Real assets index total returns (%)

	MTD	QTD	YTD	1 year	3 year	5 year
Public Real Estate	1.8	1.8	1.8	8.1	-2.6	0.1
U.S. REITs	1.0	1.0	1.0	11.4	-1.3	3.2
International REITs	3.3	3.3	3.3	-1.1	-6.8	-4.7
Master Limited Partnerships	8.8	8.8	8.8	29.6	26.4	18.9
Global Infrastructure	2.3	2.3	2.3	21.6	8.2	5.4
Commodities (BCOMTR)	4.0	4.0	4.0	9.1	2.5	9.3
Agriculture	4.8	4.8	4.8	1.8	1.7	11.6
Energy	1.8	1.8	1.8	0.2	-3.4	2.4
Industrial Metals	1.4	1.4	1.4	7.0	-3.3	8.8
Precious Metals	7.6	7.6	7.6	36.5	14.9	11.1
Commodities (S&P GSCI)	3.3	3.3	3.3	8.0	6.8	10.3
Commodities (RICI)	3.0	3.0	3.0	8.1	4.7	12.0

Sources: Bloomberg, Wells Fargo Investment Institute, January 31, 2025. MTD = month to date. QTD = quarter to date. YTD = year to date. REITs = real estate investment trusts. Returns over one year are annualized. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See pages 27-32 for important definitions and disclosures.

constraints among select agricultural commodities have led to strong performances. We still caution that adequate supply growth and an easing of supply-chain disruptions appear to be strong headwinds and could limit performance in 2025.

Wells Fargo Investment Institute perspective

Overall, commodities (measured by the BCOMTR) were up by 4.0% in January, and overall commodity breadth showed signs of improvements. Over the past 12 months, many individual commodities have seen significant corrections, driven by concerns of weak economic conditions. We view periods of weakness as an opportunity for investors, as we expect many of these headwinds to revert in 2025. Therefore, we remain favorable on a broad basket of commodities as we believe long-term supply imbalances will drive positive performance.

Private Real Estate: While headwinds remain for Private Real Estate, the broad economic recovery expected in late 2025 has provided hope for a gradual recovery in real-estate markets. However, higher interest rates continue to pose challenges as credit conditions remain tight across many property types. While the multi-family sector continues to digest new construction coming online, particularly across the Sun Belt region, the demand for apartments remains strong as single-family housing affordability continues to register lows. The Office market remains challenged as companies continue to reassess their future needs while the return-to-office movement stalls. The NCREIF Office Property Index fell by another 0.6% during the fourth quarter of 2024. Since the 2023 banking crisis, lending standards in the commercial real estate market have remained tight. Although longer-term trends in the Industrials sector remain positive given the shift to online retail and the accompanying need for warehouse space, higher valuations and more supply coming online have tempered our outlook in the near term.

Real asset tactical guidance*

Guidance

Commodities	Favorable	Private Real Estate	Neutral
Energy	Favorable	Core	Neutral
Precious Metals	Favorable	Value-Add	Neutral
Agriculture	Neutral	Opportunistic	Neutral
Industrial Metals	Neutral		

Source: Wells Fargo Investment Institute, February 18, 2025. *Tactical horizon is 6-18 months.

Alternative investments*

Market observations

U.S. policy uncertainties and the news of a China technology breakthrough were major market drivers for January. Among rising equity markets supported by solid corporate earnings, international developed-market stocks as well as the Communication Services, Health Care, and Financials sectors led the way up. Nevertheless, the Information Technology sector recorded low single-digit losses. Fixed income posted 0% to 2% gains on the back of elevated interest rates and tightening credit spreads. In commodities, the BCOMTR registered a 4.0% gain in January, underpinned by mid-single-digit returns from precious metals and agricultural commodities.

Relative Value strategies registered a gain of 0.8% for the month, driven by positive contributions across Arbitrage, Structured Credit, and Long/Short Credit sub-strategies. As compared to Equity Hedge and Macro strategies, Relative Value strategies recorded more modest returns owing to their defensive characteristics.

Macro strategies posted a gain of 1.0% in January. Systematic sub-strategies returned 1.1% for the month, driven by positions across equities, agricultural commodities, and precious metals. Rising equity prices, especially in European markets, underpinned gains in long stock positions. The strategies saw further accretive performance in the precious metal and agricultural commodity holdings as both markets rallied due to trade policy uncertainties and adverse weather conditions. However, the long positions in the U.S. dollar partially offset the gains as the U.S. dollar weakened against other major currencies, especially in later part of the month. Additionally, rising industrial metal prices driven by low inventory and improving demand weighed on short holdings. During January, the strategies maintained long U.S. dollar positions and increased short fixed-income holdings and long positions across commodity markets. For the month, Discretionary strategies posted a modest gain of 1.6%.

Event Driven recorded a positive return of 0.9% for the month. Merger Arbitrage sub-strategies saw gains driven by successful deal completions and the prospect of a more supportive regulatory environment, and an equity-market recovery underpinned Activist's return of 2.4%. For Distressed Credit, we continue to expect elevated levels of distressed situations as businesses with overleveraged balance sheets become increasingly stressed under the weight of higher debt-service levels and slower growth.

Equity Hedge strategies posted a 2.1% gain in January but trailed the MSCI All Country World Index. The accretive return was primarily driven by broad equity-market exposure. Throughout the month, the strategies pared back exposures in the U.S. and Europe and rotated into Japan and China. Equity Hedge strategies also rebalanced into Information Technology and Health Care companies from the Consumer Discretionary and Energy sectors. Equity Market Neutral sub-strategies registered a gain of 0.6% for the month. As dispersion among stocks stays elevated and market sentiment grows, we expect the environment for Directional Equity sub-strategies to remain constructive.

Wells Fargo Investment Institute perspective

Relative Value (Neutral): We favor Long/Short Credit sub-strategies that have the potential to capitalize on market volatility and improving credits in a gradual economic recovery. Given Arbitrage sub-strategies' more defensive, absolute-return oriented positioning, we prefer other sub-strategies that may have the potential to benefit from an improving economic landscape.

Macro (Favorable): We continue to favor Macro Discretionary sub-strategies given their ability to capitalize on geopolitical uncertainty

Alternative investments index/strategy total returns (%)

	MTD	QTD	YTD	1 year	3 year	5 year
Global Hedge Funds	1.4	1.4	1.4	11.1	5.6	7.4
Relative Value	0.8	0.8	0.8	8.9	5.2	5.2
Arbitrage	1.2	1.2	1.2	8.2	4.5	5.4
Long/Short Credit	0.9	0.9	0.9	9.8	4.9	5.4
Struct. Credit/Asset-Backed	0.8	0.8	0.8	9.3	5.7	4.7
Macro	1.0	1.0	1.0	5.9	4.7	5.6
Systematic	1.1	1.1	1.1	5.5	4.5	4.7
Discretionary	1.6	1.6	1.6	8.5	5.0	6.5
Event Driven	0.9	0.9	0.9	10.8	5.9	7.5
Activist	2.4	2.4	2.4	12.2	5.0	7.3
Distressed Credit	0.9	0.9	0.9	10.6	6.2	7.8
Merger Arbitrage	0.6	0.6	0.6	6.8	4.7	6.0
Equity Hedge	2.1	2.1	2.1	14.3	6.0	8.7
Directional Equity	2.2	2.2	2.2	14.7	5.9	9.1
Equity Market Neutral	0.6	0.6	0.6	9.8	6.2	5.0

Source: Hedge Fund Research, Inc. (HFR), January 31, 2025. (Preliminary numbers released by HFR on February 7, 2025.) MTD = month to date. QTD = quarter to date. YTD = year to date. Returns over one year are annualized. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** See pages 27-32 for important definitions and disclosures.

and market trends driven by macroeconomics and policy shifts. Yet, we are neutral on Macro Systematic sub-strategies as these diversifying strategies may underperform Directional sub-strategies in a market-recovery scenario.

Event Driven (Favorable): We have upgraded our guidance for Event Driven to favorable given an improving outlook for Activist (Neutral) and Merger Arbitrage (neutral) sub-strategies. In addition, we continue to favor the Distressed Credit sub-strategy. As elevated interest rates flow through the economy, we believe higher debt-service levels and slower growth will meaningfully impact many small- and mid-sized businesses.

Equity Hedge (Neutral): We favor Equity Hedge Directional sub-strategies that can benefit from an improving environment for equities as the strategies generally have the flexibility to increase their market sensitivity in rising markets. For Equity Market Neutral, the low-return, low-volatility sub-strategy may underperform in a rising equity market and during a gradual economic recovery.

Private Equity (Neutral): While we are neutral on Private Equity, we have high conviction in certain sub-strategies and geographies where we believe valuations are more attractive and capital-market funding is less of a headwind. We believe that opportunities do exist — especially in secondaries, middle market, growth equity, and infrastructure investments.

Private Debt (Neutral): We maintain a favorable view on Distressed/Special Situations. The number of distressed opportunities is expected to remain elevated as the effects of elevated interest rates, slower economic growth, and tight lending standards continue to weigh on small- and middle-market businesses. We maintain our neutral rating on Direct Lending sub-strategies as the growing promise of an economic recovery is offset by many lower-quality borrowers that continue to face higher debt-service costs and elevated inflationary pressures.

* Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Alternative investments*

Private placements

Alternative investment strategies outlook*

Private placements	Tactical guidance**
Relative Value	Neutral
Arbitrage	Unfavorable
Long/Short Credit	Favorable
Structured Credit/Asset-Backed	Neutral
Macro	Favorable
Systematic	Neutral
Discretionary	Favorable
Event Driven	Favorable
Activist	Neutral
Distressed Credit	Favorable
Merger Arbitrage	Neutral
Equity Hedge	Neutral
Directional	Favorable
Equity Market Neutral	Unfavorable
Private Equity	Neutral
Large Cap Buyout	Neutral
Small / Mid Cap Buyout	Favorable
Growth Equity	Favorable
Venture	Neutral
Private Debt	Neutral
Direct Lending	Neutral
Distressed / Special Situations	Favorable

Sources: Wells Fargo Investment Institute, February 18, 2025.

*Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

**Tactical horizon is 6-18 months.

Notes on alternative investment structures

The core differences between our guidance for private placements versus liquid alternative mutual funds centers on the expected illiquidity premium and the expected complexity premium often associated with private placements. The illiquidity premium refers to the potential for incremental return or yield generated by owning securities that cannot be sold quickly without affecting the price. Certain securities may be illiquid for one month, quarter, several years or longer. This illiquidity may provide investment managers enhanced flexibility which may result in higher long-term returns. Illiquidity may be experienced in public and private credit securities that can include loans, securitized credit, and stressed and distressed corporate credit. However, equity strategies may also be illiquid for periods of time, especially after a corporate restructuring when debt is converted to equity or within strategies that require significant equity ownership such as Activism. A complexity premium may also be associated with illiquid securities as they often require specialized origination, underwriting and investing strategies. Because private placements do not offer daily liquidity to their investors, they potentially provide greater flexibility to invest in securities that may offer an illiquidity premium. Furthermore, private placements can have a larger concentration in illiquid securities.

The complexity premium potentially offered with private placements results from several structural limitations associated with mutual funds, including provisions of the Investment Company Act of 1940, as amended (1940 Act), that apply at the fund level and not the individual strategy level. The 1940 Act requires, among others, the following:

- Regular liquidity — Redemptions must be paid within seven calendar days
- Regular transparency
- Limits on leverage — 300% asset coverage limits leverage to 33%; making loans; or investing in real estate or commodities
- Limits on concentration — 75% of the value of its total assets cannot be invested more than 5% in any one issuer, 25% in one industry or 10% of the outstanding voting securities of the issuer
- Limits on illiquidity — No more than 15% can be invested in illiquid assets

In addition, under the Investment Advisers Act of 1940, performance-based fees must be symmetric.

As a result of the illiquidity and complexity premiums, performance returns and characteristics are expected to vary between liquid alternative mutual funds and private placements.

In our view, when implementing liquid alternatives in a diversified portfolio, they should not be considered a one-to-one substitute for traditional hedge funds. Our new guidance will reflect these differences in product types.

It is important to remember that only “accredited investors” or “qualified purchasers” within the meaning of U.S. securities laws can invest in private placements. This means investors must have a minimum level of income, assets, or net worth to be eligible. They may also need to meet other qualification requirements. Like all mutual funds, liquid alternative funds are regulated under the 1940 Act, and are open to all investors. As such, they are regulated in their use of leverage and have required levels of liquidity and diversification. Mutual funds must value their portfolios and price their securities daily using fair value guidelines. Hedge funds, on the other hand, face less regulation and are not required to provide investors with periodic pricing or valuation. This allows them a great deal of flexibility but may increase the risks for investors.

Because of the illiquid and complex nature of private placement hedge funds, Wells Fargo Investment Institute will no longer provide tactical percentage guidance for these asset classes. We will instead provide guidance that may be incorporated into portfolios over a longer period of time.

Currency guidance

The U.S. dollar versus developed market currencies

Market observations and outlook

The U.S. dollar was volatile throughout January. The U.S. Dollar Index (DXY) peaked at 109.9 on January 13, its highest level in two years; however, the index declined during the second half of the month and finished at 108.4, the exact same level as year-end 2024. U.S. Treasury yields were also volatile during the month and ended the month slightly lower, displaying influence on the dollar's move. Market expectations of additional Fed rate cuts in 2025 continued to fall while U.S. economic growth remained strong. Fed policy actions (more so than those from other major central banks) over the next few months coupled with potential political risks both in the U.S. and abroad will likely remain key factors for the dollar's near-term levels. In addition, any tariff-related news will likely be supportive of the U.S. dollar in the near term. Overall, the performance of DM currencies against the U.S. dollar was mixed. The yen strengthened as the Bank of Japan raised policy interest rates and continued to hint at a more gradual approach toward policy normalization. The euro was mostly flat last month, climbing a mere 0.08%, even as the ECB cut interest rates in January. The pound ended the month lower, down by 0.97%, while the Canadian dollar fell the most on tariff expectations, down 1.08%.

We expect the dollar to see continued strength through year-end 2025, supported by still-elevated U.S. interest rates and a resilient U.S. economy in comparison to Europe. Current U.S. dollar valuations remain moderately high compared to longer-term historical averages. The dollar may experience continued support as we anticipate the ECB to be more likely than the Fed to cut rates, which would keep interest-rate differentials between the two central banks relatively high. We expect this trend of dollar strength relative to historical values to continue throughout 2025. For year-end 2025, we see ranges of \$0.98–\$1.02 per euro and 158–162 yen per dollar.

Year-end currency targets

	Latest	YE25 targets
Dollars per euro	\$1.04	\$0.98–\$1.02
Yen per dollar	¥155	¥158–¥162
ICE U.S. Dollar Index	108	108–112

Source: Bloomberg, as of January 31, 2025. Targets are Wells Fargo Investment Institute forecasts, as of February 18, 2025 and provide a forecast direction over a tactical horizon. The closer the current date is to the year-end, the more WFII guidance focuses on the following year's target. YE = year end.

The ICE U.S. Dollar Index is a weighted average of the value of the U.S. dollar relative to a basket of U.S. trade partner currencies, comprised of the euro, Japanese yen, pound sterling, Canadian dollar, Swedish krona, and Swiss franc. A higher index value indicates dollar appreciation.

Forecasts are based on certain assumptions and on our views of market and economic conditions, which are subject to change. See pages 27–32 for important definitions and disclosures.

The U.S. dollar versus emerging market currencies

Market observations and outlook

The dollar's flatness in January was mostly a positive for EM currencies, with the MSCI Emerging Markets Currency Index (an index of currencies mirroring the weighting of the more manufacturing-based MSCI Emerging Markets Index, heavily

weighted toward Asia) ending the month higher by 0.84%. Latin American currencies benefited the most, with the Brazilian real (+5.7%), Colombian peso (+4.7%) and Chilean peso (1.5%) rising the most. Among Asian currencies, the Thai baht rose the most (1.25%). The Chinese yuan appreciated slightly; however, the Chinese central bank is clearly allowing yuan depreciation to continue, as it is trading well above its fixing-rate target. Although the Mexican peso finished the month higher by 0.72%, the threat of tariffs caused its value to fall before the Trump administration paused the levies for 30 days. We believe that sustained stronger performance in EM currencies may not materialize until we move past the current period of dollar strength, which we are forecasting through year-end 2025.

Currency hedging

Based on our views on the direction of the U.S. dollar, we provide our currency-hedging guidance in the matrix below. We have revised our view on DM ex-U.S. Fixed Income from unfavorable to neutral, but because we no longer recommend strategic allocations to DM fixed income in local currency, we still do not favor taking tactical positions at this time. For investors with exposure to these bonds, we have revised our hedging guidance from "hedge" to "no hedge"; because we see limited dollar upside from current levels through year-end 2025, we do not expect large currency losses to be a long-term drag on returns. For EM fixed income, the strategic benchmark consists exclusively of dollar-denominated sovereign EM bonds, so we currently believe hedging is unnecessary.

Hedging matrix

Asset class	Strategic benchmark	Currency advice
Developed Market Ex-U.S. Fixed Income	Local currency*	No hedge
Developed Market Ex-U.S. Equities	Local currency	No hedge
Emerging Market Fixed Income	U.S. dollar	N/A
Emerging Market Equities	Local currency	No hedge

Source: Wells Fargo Investment Institute, February 18, 2025. The table above provides guidance for investors who want and are able to hedge against currency losses, or to take advantage of the dollar's move in either direction. Please note that implementation may vary according to the hedging instruments available to investors.

*We no longer recommend strategic allocations and do not favor tactical allocations at this time to Developed Market Ex-U.S. Fixed Income. Hedging guidance applies to those who wish to hold these assets.

We do not favor hedging currency risk for equities at this time. We think the hurdle to hedging currency risk is higher for equities than for bonds because in equity markets, currency movements have had a smaller influence on total return than for fixed income. Further, the cost and complexity of currency hedging for equities may be greater. It is important to consider that many actively managed mutual funds already may incorporate an element of currency hedging. In addition, the cost of hedging against losses from EM currencies is far higher than for those of DMs, and the availability of efficient hedging instruments is limited.

Tactical guidance

Recommended tactical guidance

No changes this month.

The strategic (neutral) asset allocations are based on long-term strategies. However, capital markets tend to move in cycles, and there may be short-term opportunities to enhance the risk/return relationship within a portfolio by temporarily adjusting the strategic allocations. The tactical asset allocation adjustments are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio. The minimum position of any asset class is zero, meaning that no short selling is permitted. The maximum position of all asset classes together is 100%, meaning that no leverage is permitted. The actual extent of the recommended tactical adjustments is a judgment call. It should be enough to make a difference without crowding out other assets or creating a vacuum. Also, all the tactical recommendations have to be considered together. It would not be mathematically possible to underallocate two asset groups while maintaining over-allocations in the other two. Adjustments must be made to bring all the broad asset classes into a proper relationship. These are guidelines to be used prudently for investors with temperaments that agree with a more aggressive, tactical investment style.

Additional asset class guidance

Consider L/S equity strategies: These strategies can provide diversification in an equity portfolio by utilizing both long and short exposures to the asset class. While they can provide diversification, investors should expect higher tracking error (extent to which the strategy's returns have differed from its benchmark) to traditional benchmarks from these strategies. Prudent use through controlled allocations is recommended.

Cash Alternatives and Fixed Income

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
U.S. Short Term Taxable Fixed Income		Cash Alternatives Developed Market Ex.-U.S. Fixed Income Emerging Market Fixed Income High Yield Taxable Fixed Income U.S. Long Term Taxable Fixed Income	U.S. Intermediate Term Taxable Fixed Income	

Equities

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
	Emerging Market Equities	Developed Market Ex.-U.S. Equities U.S. Mid Cap Equities U.S. Small Cap Equities	U.S. Large Cap Equities	

Real Assets

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Private Real Estate	Commodities	

Alternative Investments*

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Hedge Funds–Equity Hedge Hedge Funds–Relative Value Private Debt Private Equity	Hedge Funds–Event Driven Hedge Funds–Macro	

* Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Tactical guidance*

Tactical guidance summary

FIXED INCOME	U.S. Short Term Taxable	Most Unfavorable	We believe that the Fed's interest-rate-cutting cycle has initiated a new downtrend for short-term interest rates. For this reason, we favor reallocating from this asset class into U.S. Intermediate and Long Term Taxable Fixed Income, which we expect will provide an opportunity to lock in attractive yields for a longer period.
	U.S. Intermediate Term Taxable	Favorable	Our view is that U.S. Intermediate Term Taxable Fixed Income currently provides an attractive yield and is less rate sensitive should interest rates increase further above the upper range of our target. The asset class can provide investors with opportunities to outperform cash, cash alternatives, and U.S. Short Term Taxable Fixed Income in the near term.
	U.S. Long Term Taxable	Neutral	Longer-term yields (10-plus years) have been moving higher rapidly over the past few months as fixed-income investors anticipate higher economic growth and inflation levels toward the second half of 2025. We still see potential for long-term yields to decline if a slowdown materializes; however, an earlier uptick of inflation or economic growth could make us adjust our guidance, especially given that we expect slightly higher interest rates by year-end 2025.
	High Yield Taxable	Neutral	From a valuation perspective, we acknowledge that HY bonds still appear expensive, but yields are attractive. We remain neutral on HY Taxable Fixed Income given our expectation that credit spreads and interest rates will remain mostly flat from current levels. We see potential for positive single-digit HY returns over our tactical timeframe. Differences are beginning to surface among HY Taxable Fixed Income sectors and credit ratings, so selectivity remains important.
	Developed Market Ex-U.S.	Neutral	Currency losses are still weighing on returns while political risks add further pressure on yields despite the move from the ECB to cut rates, with more expected over the coming months. We remain neutral on this fixed-income class.
	Emerging Market	Neutral	Dollar-denominated debt is a small portion of sovereign borrowing and is insulated from EM currency volatility, although it is vulnerable to rises in U.S. yields given its longer duration.
EQUITIES	U.S. Large Cap	Favorable	We view U.S. Large Cap Equities as the highest-quality major equity asset class, with strong company balance sheets compared to other equity classes. We believe the equity asset class is well positioned to withstand potential volatility as the cycle matures.
	U.S. Mid Cap	Neutral	The U.S. Mid Cap Equities asset class offers investors higher quality compared to U.S. Small Cap Equities and a reasonable amount of exposure to many economically sensitive sectors that may allow investors to participate in cyclical rallies.
	U.S. Small Cap	Neutral	The U.S. Small Cap Equities asset class has underperformed considerably since 2021. Given that the most extreme operating difficulties are likely behind small caps, the era of significant underperformance is likely behind as well.
	Developed Market (DM) Ex.-U.S.	Neutral	The export-sensitive region is constrained by tepid global trade, fiscal restraint, and elevated fuel costs, but we suspect sentiment has passed its nadir and that the upturn should support higher valuations.
	Emerging Market	Unfavorable	Ongoing political risks from Chinese regulatory reform, U.S.-China diplomatic and economic strains, China's shift to emphasize domestic consumption, and our desire for quality keep us unfavorable on EM equities.
REAL ASSETS	Commodities	Favorable	We expect commodity performance to improve through 2025 as demand strengthens from an improved outlook, a recovery in economic growth, and Fed interest-rate cuts. Over the past year, most individual commodities have seen significant corrections, driven by demand concerns of weak economic conditions. We view this weakness as an opportunity for investors as we expect these headwinds to ease and revert. We remain favorable on Commodities and believe that long-term supply imbalances will drive positive performance.
	Private Real Estate	Neutral	We maintain our neutral guidance on Core, Value-Add, and Opportunistic as supply-demand imbalances recalibrate a new equilibrium. In addition, while we maintain a neutral view on Private Real Estate overall, we remain optimistic that potential lower short-term interest rates and easing credit conditions can lead to an improved environment.
ALTERNATIVE INVESTMENTS*	Hedge Funds–Relative Value*	Neutral	We remain favorable on Long/Short Credit sub-strategies that have the potential to capitalize on market volatility and improving credit conditions in a gradual economic recovery.
	Hedge Funds–Macro*	Favorable	We continue to favor Macro Discretionary sub-strategies given their ability to capitalize on geopolitical uncertainty and markets driven by policy shifts. Yet, we are neutral on Macro Systematic sub-strategies as these diversifying strategies may underperform other directional strategies in a market-recovery scenario.
	Hedge Funds–Event Driven*	Favorable	As the economy recovers, an improving outlook for equity-oriented Activist sub-strategies (neutral) and Merger Arbitrage sub-strategies (neutral) have led us to upgrade the overall category. In addition, we continue to favor the Distressed Credit sub-strategy as many small- and mid-sized businesses remain burdened by higher debt-service costs.
	Hedge Funds–Equity Hedge*	Neutral	We favor Equity Hedge Directional sub-strategies — we expect them to benefit from a broadening equity market rally and improved economic outlook.
	Private Equity*	Neutral	We maintain our neutral cyclical guidance for Private Equity. Valuations have declined from 2021 highs, and deal activity has slowed. As the anticipated economic recovery starts and valuations reach a bottom, we expect that the opportunity to invest new money will improve.
	Private Debt*	Neutral	We maintain a favorable view on Distressed/Special Situations in an effort to capitalize on our expectations for credit-market stress and dislocations. We remain neutral on Direct Lending considering the risks in lower-quality middle-market borrowers.

*Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Capital market assumptions

Fixed income, equities, real assets, and alternative investments

Annual update; as of July 2024

Capital market and asset class assumptions are estimates of how asset classes may perform over the long term, covering multiple economic and market cycles. For example, **downside risk** is based on our assumptions about average returns and the variability of returns. It represents the minimum return that would be statistically likely in 95% of annual returns. In other words, in 19 out of 20 years, performance would likely be better than this figure and in the twentieth year it would likely be worse. There is no guarantee that any particular 20-year period would follow this pattern. **Expected returns** represent our estimate of likely average returns over the next several market cycles. They do not represent the returns that an investor should expect in any particular year. **Geometric return** is the compounded annual growth rate of an investment (asset class or portfolio) over a specified period of time longer than one year. **Standard deviation** is a measure of volatility. It reflects the degree of variability surrounding the outcome of an investment decision; the higher the standard deviation, the greater the risk. **Yield** on a bond assumes constant maturity. **Dividend yield** on an equity or real-asset investment represents the projected dividend as a percentage of the purchase price. The assumptions are not designed to predict actual performance, and there are no assurances that any estimates used will be achieved. The information given has been provided as a guide to help with investment planning and does not represent the maximum loss a portfolio could experience.

Capital market assumptions (%)

	Asset class	Expected arithmetic return	Expected geometric return	Expected standard deviation or risk	Yield or dividend yield	Downside risk
	Inflation	2.5				
	Taxable Cash Alternatives	2.5	2.5	0.5	2.5	1.7
	Tax Exempt Cash Alternatives	2.1	2.1	0.5	2.1	1.3
FIXED INCOME	U.S. Taxable Investment Grade Fixed Income	3.9	3.9	3.8	3.9	-2.1
	U.S. Short Term Taxable Fixed Income	3.1	3.1	1.5	3.1	0.7
	U.S. Intermediate Term Taxable Fixed Income	3.9	3.9	3.5	3.9	-1.7
	U.S. Long Term Taxable Fixed Income	5.4	5.0	9.0	5.0	-8.7
	High Yield Taxable Fixed Income	7.2	6.8	9.0	6.8	-7.0
	U.S. Tax Exempt Investment Grade Fixed Income	3.4	3.3	4.3	3.3	-3.5
	U.S. Short Term Tax Exempt Fixed Income	2.7	2.6	1.8	2.6	-0.2
	U.S. Intermediate Term Tax Exempt Fixed Income	3.4	3.3	4.0	3.3	-3.1
	U.S. Long Term Tax Exempt Fixed Income	4.6	4.5	5.3	4.5	-3.8
	High Yield Tax Exempt Fixed Income	6.1	5.8	7.5	5.8	-5.8
	Developed Market ex-U.S. Fixed Income	3.0	2.7	8.0	2.7	-9.6
	Emerging Market Fixed Income	7.0	6.5	9.5	6.5	-7.9
	Inflation-Linked Fixed Income	3.8	3.5	7.5	3.5	-8.1
	Preferred Stock	5.1	4.4	11.5	4.4	-12.7
EQUITIES	U.S. Large Cap Equities	8.9	7.8	16.0	1.9	-15.2
	U.S. Mid Cap Equities	9.6	8.3	17.0	1.7	-16.0
	U.S. Small Cap Equities	9.8	8.0	20.0	1.4	-19.8
	Developed Market ex-U.S. Equities	8.3	7.0	17.0	2.9	-17.2
	Emerging Market Equities	9.7	7.8	21.0	2.7	-21.1
REAL ASSETS	Private Real Estate	8.9	8.1	13.0	5.0	-11.1
	Private Infrastructure	8.8	8.2	12.0	4.3	-9.7
	Master Limited Partnerships (MLPs)	10.0	8.5	18.0	7.5	-16.9
	Commodities	8.7	7.5	16.0	0.0	-15.5
ALTERNATIVE INVESTMENTS*	Global Hedge Funds	6.2	6.0	6.3	0.0	-3.9
	Hedge Funds – Relative Value	6.5	6.3	7.0	0.0	-4.6
	Hedge Funds – Macro	5.5	5.2	8.0	0.0	-7.1
	Hedge Funds – Event Driven	6.9	6.7	7.5	0.0	-4.9
	Hedge Funds – Equity Hedge	6.6	6.2	8.5	0.0	-6.8
	Global Liquid Alternatives	3.5	3.4	4.0	0.0	-3.0
	Private Equity	14.2	12.6	19.0	0.0	-14.2
	Private Debt	9.3	8.7	11.5	7.0	-8.5

*Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Strategic asset allocation

Client goals	INCOME			GROWTH & INCOME			GROWTH		
Risk Tolerance	Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive

Efficient frontier

An efficient frontier represents the theoretical set of diversified portfolios that attempt to maximize return given a specific level of risk.

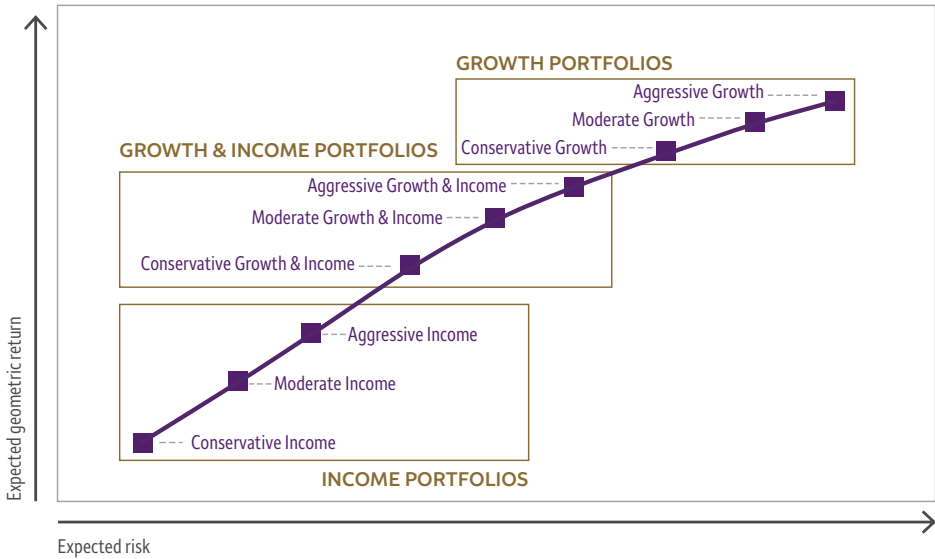


Chart is conceptual and is not meant to reflect any actual returns or represent any specific asset classifications.

Source: Wells Fargo Investment Institute, July 2024

Investment objectives definitions

INCOME

Income portfolios emphasize current income with minimal consideration for capital appreciation and usually have less exposure to more volatile growth assets but can still experience losses.

Conservative Income investors generally assume lower risk, but may still experience losses or have lower expected income returns.

Moderate Income investors are willing to accept a modest level of risk that may result in increased losses in exchange for the potential to receive modest income returns.

Aggressive Income investors seek a higher level of returns and are willing to accept a higher level of risk that may result in greater losses.

GROWTH & INCOME

Growth & Income portfolios emphasize a blend of current income and capital appreciation and usually have some exposure to more volatile growth assets.

Conservative Growth & Income investors generally assume a lower amount of risk, but may still experience losses or have lower expected returns.

Moderate Growth & Income investors are willing to accept a modest level of risk that may result in increased losses in exchange for the potential to receive modest returns.

Aggressive Growth & Income investors seek a higher level of returns and are willing to accept a higher level of risk that may result in greater losses.

GROWTH

Growth portfolios emphasize capital appreciation with minimal consideration for current income and usually have significant exposure to more volatile growth assets.

Conservative Growth investors generally assume a lower amount of risk, but may still experience increased losses or have lower expected growth returns.

Moderate Growth investors are willing to accept a modest level of risk that may result in significant losses in exchange for the potential to receive higher returns.

Aggressive Growth investors seek a higher level of returns and are willing to accept a higher level of risk that may result in more significant losses.

Strategic and tactical asset allocation: Liquid

May include fixed income, equities, and real assets

		CONSERVATIVE			MODERATE			AGGRESSIVE		
		Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)
INCOME	TAXABLE CASH ALTERNATIVES	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
	TOTAL GLOBAL FIXED INCOME	82.0	80.0	-2.0	69.0	68.0	-1.0	61.0	59.0	-2.0
	U.S. Taxable Investment Grade Fixed Income	76.0	74.0	-2.0	60.0	59.0	-1.0	47.0	45.0	-2.0
	Short Term Taxable*	17.0	12.0	-5.0	13.0	9.0	-4.0	11.0	6.0	-5.0
	Intermediate Term Taxable*	45.0	48.0	3.0	36.0	39.0	3.0	27.0	30.0	3.0
	Long Term Taxable*	14.0	14.0	0.0	11.0	11.0	0.0	9.0	9.0	0.0
	High Yield Taxable Fixed Income	3.0	3.0	0.0	4.0	4.0	0.0	6.0	6.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Emerging Market Fixed Income	3.0	3.0	0.0	5.0	5.0	0.0	8.0	8.0	0.0
	TOTAL GLOBAL EQUITIES	14.0	14.0	0.0	27.0	27.0	0.0	35.0	35.0	0.0
	U.S. Large Cap Equities	12.0	12.0	0.0	18.0	18.0	0.0	21.0	21.0	0.0
	U.S. Mid Cap Equities	2.0	2.0	0.0	5.0	5.0	0.0	7.0	7.0	0.0
	U.S. Small Cap Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Developed Market Ex-U.S. Equities	0.0	0.0	0.0	4.0	4.0	0.0	7.0	7.0	0.0
	Emerging Market Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GROWTH AND INCOME	TOTAL GLOBAL REAL ASSETS	2.0	4.0	2.0	2.0	3.0	1.0	2.0	4.0	2.0
	Commodities	2.0	4.0	2.0	2.0	3.0	1.0	2.0	4.0	2.0
	TAXABLE CASH ALTERNATIVES	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
	TOTAL GLOBAL FIXED INCOME	50.0	48.0	-2.0	41.0	38.0	-3.0	33.0	30.0	-3.0
	U.S. Taxable Investment Grade Fixed Income	39.0	37.0	-2.0	30.0	27.0	-3.0	20.0	17.0	-3.0
	Short Term Taxable*	9.0	4.0	-5.0	7.0	1.0	-6.0	4.0	0.0	-4.0
	Intermediate Term Taxable*	23.0	26.0	3.0	17.0	20.0	3.0	12.0	15.0	3.0
	Long Term Taxable*	7.0	7.0	0.0	6.0	6.0	0.0	4.0	2.0	-2.0
	High Yield Taxable Fixed Income	6.0	6.0	0.0	6.0	6.0	0.0	7.0	7.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Emerging Market Fixed Income	5.0	5.0	0.0	5.0	5.0	0.0	6.0	6.0	0.0
	TOTAL GLOBAL EQUITIES	44.0	44.0	0.0	53.0	53.0	0.0	61.0	62.0	1.0
	U.S. Large Cap Equities	23.0	28.0	5.0	27.0	31.0	4.0	31.0	36.0	5.0
	U.S. Mid Cap Equities	8.0	7.0	-1.0	10.0	11.0	1.0	12.0	12.0	0.0
	U.S. Small Cap Equities	2.0	2.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
GROWTH	Developed Market Ex-U.S. Equities	7.0	7.0	0.0	8.0	8.0	0.0	9.0	9.0	0.0
	Emerging Market Equities	4.0	0.0	-4.0	5.0	0.0	-5.0	6.0	2.0	-4.0
	TOTAL GLOBAL REAL ASSETS	4.0	6.0	2.0	4.0	7.0	3.0	4.0	6.0	2.0
	Commodities	4.0	6.0	2.0	4.0	7.0	3.0	4.0	6.0	2.0
	TAXABLE CASH ALTERNATIVES	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
	TOTAL GLOBAL FIXED INCOME	19.0	17.0	-2.0	11.0	9.0	-2.0	0.0	0.0	0.0
	U.S. Taxable Investment Grade Fixed Income	16.0	14.0	-2.0	8.0	6.0	-2.0	0.0	0.0	0.0
	Short Term Taxable*	4.0	0.0	-4.0	2.0	0.0	-2.0	0.0	0.0	0.0
	Intermediate Term Taxable*	9.0	12.0	3.0	6.0	6.0	0.0	0.0	0.0	0.0
	Long Term Taxable*	3.0	2.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0
	High Yield Taxable Fixed Income	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	74.0	74.0	0.0	82.0	82.0	0.0	93.0	91.0	-2.0
	U.S. Large Cap Equities	33.0	37.0	4.0	35.0	39.0	4.0	37.0	41.0	4.0
U.S. Mid Cap Equities	13.0	13.0	0.0	14.0	14.0	0.0	16.0	16.0	0.0	
U.S. Small Cap Equities	5.0	5.0	0.0	6.0	6.0	0.0	7.0	7.0	0.0	
Developed Market Ex-U.S. Equities	14.0	14.0	0.0	15.0	15.0	0.0	18.0	18.0	0.0	
Emerging Market Equities	9.0	5.0	-4.0	12.0	8.0	-4.0	15.0	9.0	-6.0	
TOTAL GLOBAL REAL ASSETS	5.0	7.0	2.0	5.0	7.0	2.0	5.0	7.0	2.0	
Commodities	5.0	7.0	2.0	5.0	7.0	2.0	5.0	7.0	2.0	

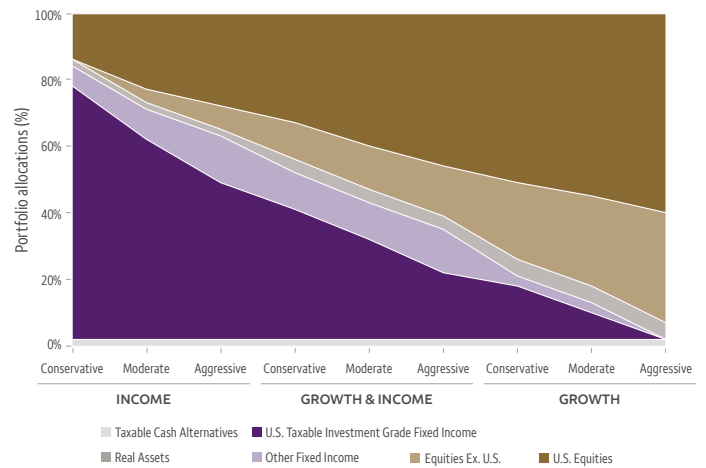
Strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically; last update was October 21, 2024.
 The U.S. Taxable Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. *Wells Fargo Advisors only.
 See next page for Portfolio allocations across the efficient frontier, strategic and tactical.

Strategic and tactical asset allocation: Liquid

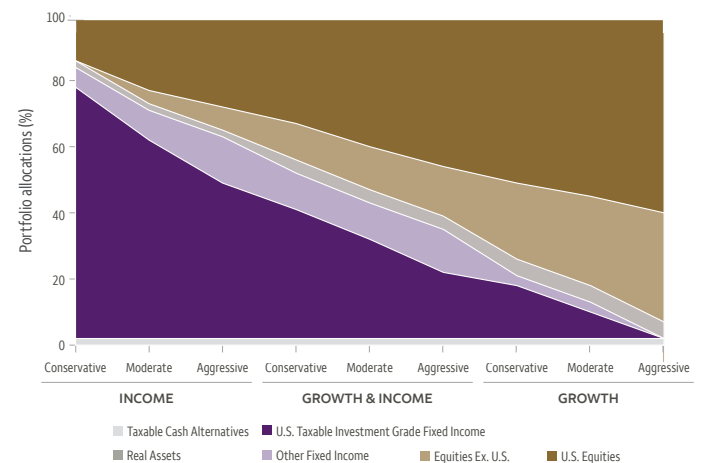
May include fixed income, equities, and real assets (continued)

These allocations span the set of liquid investments available to investors, utilizing broad diversification to help manage portfolio risk. Special issues such as liquidity, cash flow, and taxability would be taken into consideration in the choice of investment vehicles for certain asset classes. Depending on their tax circumstances, investors may wish to utilize the tax-efficient asset allocation guidance. The tactical asset allocation overweightings and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio.

Portfolio allocations across the efficient frontier—strategic



Portfolio allocations across the efficient frontier—tactical



Strategic and tactical asset allocation: Illiquid

May include fixed income, equities, real assets, and alternative investments

		CONSERVATIVE			MODERATE			AGGRESSIVE		
		Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)
INCOME	TAXABLE CASH ALTERNATIVES	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
	TOTAL GLOBAL FIXED INCOME	68.0	66.0	-2.0	55.0	53.0	-2.0	47.0	45.0	-2.0
	U.S. Taxable Investment Grade Fixed Income	63.0	61.0	-2.0	48.0	46.0	-2.0	35.0	33.0	-2.0
	Short Term Taxable*	14.0	9.0	-5.0	11.0	6.0	-5.0	8.0	3.0	-5.0
	Intermediate Term Taxable*	37.0	40.0	3.0	28.0	31.0	3.0	21.0	24.0	3.0
	Long Term Taxable*	12.0	12.0	0.0	9.0	9.0	0.0	6.0	6.0	0.0
	High Yield Taxable Fixed Income	2.0	2.0	0.0	2.0	2.0	0.0	4.0	4.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Emerging Market Fixed Income	3.0	3.0	0.0	5.0	5.0	0.0	8.0	8.0	0.0
	TOTAL GLOBAL EQUITIES	8.0	8.0	0.0	20.0	20.0	0.0	25.0	25.0	0.0
	U.S. Large Cap Equities	8.0	8.0	0.0	12.0	12.0	0.0	15.0	15.0	0.0
	U.S. Mid Cap Equities	0.0	0.0	0.0	4.0	4.0	0.0	6.0	6.0	0.0
	U.S. Small Cap Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Developed Market Ex-U.S. Equities	0.0	0.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
	Emerging Market Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL GLOBAL REAL ASSETS	7.0	9.0	2.0	8.0	10.0	2.0	9.0	11.0	2.0
	Private Real Estate**	5.0	5.0	0.0	6.0	6.0	0.0	7.0	7.0	0.0
	Commodities	2.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	2.0
	TOTAL ALTERNATIVE INVESTMENTS**	15.0	15.0	0.0	15.0	15.0	0.0	17.0	17.0	0.0
	Global Hedge Funds	11.0	11.0	0.0	11.0	11.0	0.0	11.0	11.0	0.0
	Private Equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Private Debt	4.0	4.0	0.0	4.0	4.0	0.0	6.0	6.0	0.0
GROWTH AND INCOME	TAXABLE CASH ALTERNATIVES	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
	TOTAL GLOBAL FIXED INCOME	36.0	34.0	-2.0	27.0	25.0	-2.0	21.0	19.0	-2.0
	U.S. Taxable Investment Grade Fixed Income	29.0	27.0	-2.0	19.0	17.0	-2.0	12.0	10.0	-2.0
	Short Term Taxable*	7.0	2.0	-5.0	4.0	0.0	-4.0	3.0	0.0	-3.0
	Intermediate Term Taxable*	17.0	20.0	3.0	11.0	13.0	2.0	7.0	10.0	3.0
	Long Term Taxable*	5.0	5.0	0.0	4.0	4.0	0.0	2.0	0.0	-2.0
	High Yield Taxable Fixed Income	4.0	4.0	0.0	4.0	4.0	0.0	3.0	3.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Emerging Market Fixed Income	3.0	3.0	0.0	4.0	4.0	0.0	6.0	6.0	0.0
	TOTAL GLOBAL EQUITIES	32.0	32.0	0.0	38.0	38.0	0.0	46.0	46.0	0.0
	U.S. Large Cap Equities	18.0	21.0	3.0	20.0	24.0	4.0	24.0	26.0	2.0
	U.S. Mid Cap Equities	6.0	6.0	0.0	8.0	8.0	0.0	8.0	8.0	0.0
	U.S. Small Cap Equities	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0
	Developed Market Ex-U.S. Equities	5.0	5.0	0.0	6.0	6.0	0.0	7.0	7.0	0.0
	Emerging Market Equities	3.0	0.0	-3.0	4.0	0.0	-4.0	5.0	3.0	-2.0
	TOTAL GLOBAL REAL ASSETS	9.0	11.0	2.0	10.0	12.0	2.0	10.0	12.0	2.0
	Private Real Estate**	5.0	5.0	0.0	6.0	6.0	0.0	6.0	6.0	0.0
	Commodities	4.0	6.0	2.0	4.0	6.0	2.0	4.0	6.0	2.0
	TOTAL ALTERNATIVE INVESTMENTS**	21.0	21.0	0.0	23.0	23.0	0.0	21.0	21.0	0.0
	Global Hedge Funds	10.0	10.0	0.0	10.0	10.0	0.0	7.0	7.0	0.0
	Private Equity	8.0	8.0	0.0	10.0	10.0	0.0	11.0	11.0	0.0
	Private Debt	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0

Strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically; last update was October 21, 2024. The U.S. Taxable Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. Hedge fund allocations are based on private hedge fund capital market assumptions.

*Wells Fargo Advisors only.

See next page for Growth data and Portfolio allocations across the efficient frontier, strategic and tactical.

**Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Strategic and tactical asset allocation: Illiquid

May include fixed income, equities, real assets, and alternative investments (continued)

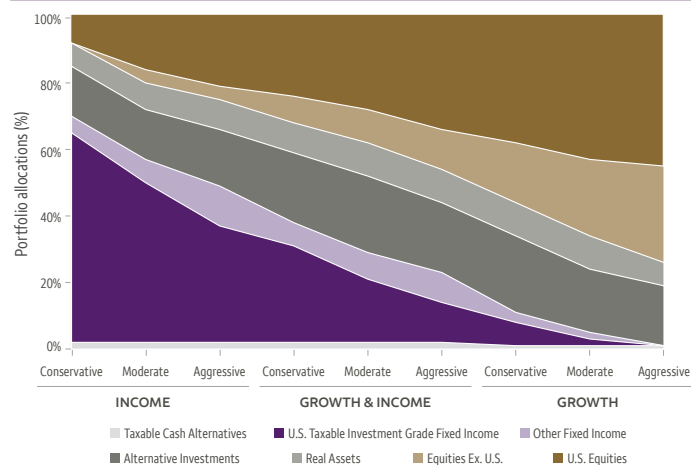
	CONSERVATIVE			MODERATE			AGGRESSIVE		
	Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)	Strategic (%)	Tactical (%)	Difference (%)
GROWTH									
TAXABLE CASH ALTERNATIVES	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
TOTAL GLOBAL FIXED INCOME	10.0	8.0	-2.0	4.0	4.0	0.0	0.0	0.0	0.0
U.S. Taxable Investment Grade Fixed Income	7.0	5.0	-2.0	2.0	2.0	0.0	0.0	0.0	0.0
Short Term Taxable*	2.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermediate Term Taxable*	5.0	5.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0
Long Term Taxable*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High Yield Taxable Fixed Income	3.0	3.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0
Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Emerging Market Fixed Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL GLOBAL EQUITIES	56.0	56.0	0.0	66.0	64.0	-2.0	74.0	72.0	-2.0
U.S. Large Cap Equities	26.0	29.0	3.0	26.0	29.0	3.0	24.0	27.0	3.0
U.S. Mid Cap Equities	9.0	10.0	1.0	13.0	13.0	0.0	15.0	15.0	0.0
U.S. Small Cap Equities	3.0	3.0	0.0	4.0	4.0	0.0	6.0	6.0	0.0
Developed Market Ex-U.S. Equities	12.0	12.0	0.0	14.0	13.0	-1.0	17.0	17.0	0.0
Emerging Market Equities	6.0	2.0	-4.0	9.0	5.0	-4.0	12.0	7.0	-5.0
TOTAL GLOBAL REAL ASSETS	10.0	12.0	2.0	10.0	12.0	2.0	7.0	9.0	2.0
Private Real Estate**	5.0	5.0	0.0	5.0	5.0	0.0	2.0	2.0	0.0
Commodities	5.0	7.0	2.0	5.0	7.0	2.0	5.0	7.0	2.0
TOTAL ALTERNATIVE INVESTMENTS**	23.0	23.0	0.0	19.0	19.0	0.0	18.0	18.0	0.0
Global Hedge Funds	7.0	7.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0
Private Equity	13.0	13.0	0.0	14.0	14.0	0.0	18.0	18.0	0.0
Private Debt	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0

Strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically; last update was October 21, 2024. The U.S. Taxable Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. Hedge fund allocations are based on private hedge fund capital market assumptions.

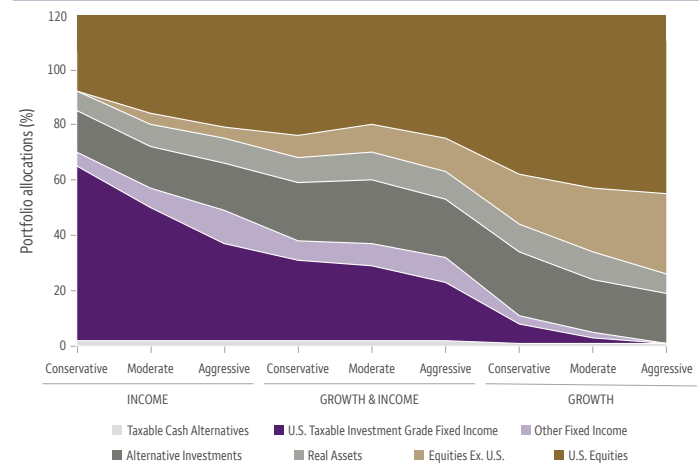
*Wells Fargo Advisors only.

These allocations span the set of investments available to investors, utilizing broad diversification to help manage portfolio risk. Special issues such as liquidity, cash flow, and taxability would be taken into consideration in the choice of investment vehicles for certain asset classes. Depending on their tax circumstances, investors may wish to utilize the liquid tax-efficient asset allocation guidance. The tactical asset allocation overweights and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio.

Portfolio allocations across the efficient frontier—strategic



Portfolio allocations across the efficient frontier—tactical



**Alternative investments 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. Please see pages 27–32 for important definitions and disclosures.

Strategic asset allocation: Tax-efficient illiquid

May include fixed income, equities, real assets, and alternative investments

		CONSERVATIVE	MODERATE	AGGRESSIVE
		Strategic (%)	Strategic (%)	Strategic (%)
INCOME	TAX EXEMPT CASH ALTERNATIVES	2.0	2.0	2.0
	TOTAL GLOBAL FIXED INCOME	80.0	65.0	57.0
	U.S. Tax Exempt Investment Grade FI	80.0	58.0	43.0
	Short Term Tax Exempt*	10.0	7.0	5.0
	Intermediate Term Tax Exempt*	54.0	39.0	29.0
	Long Term Tax Exempt*	16.0	12.0	9.0
	High Yield Tax Exempt Fixed Income	0.0	7.0	14.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	6.0	21.0	30.0
	U.S. Large Cap Equities	6.0	16.0	19.0
	U.S. Mid Cap Equities	0.0	5.0	6.0
	U.S. Small Cap Equities	0.0	0.0	0.0
	Developed Market Ex-U.S. Equities	0.0	0.0	5.0
	Emerging Market Equities	0.0	0.0	0.0
	TOTAL GLOBAL REAL ASSETS	7.0	7.0	7.0
	Private Real Estate**	7.0	7.0	7.0
	Commodities	0.0	0.0	0.0
	TOTAL ALTERNATIVE INVESTMENTS**	5.0	5.0	4.0
	Global Hedge Funds	5.0	5.0	4.0
	Private Equity	0.0	0.0	0.0
	Private Debt	0.0	0.0	0.0
GROWTH AND INCOME	TAX EXEMPT CASH ALTERNATIVES	2.0	1.0	1.0
	TOTAL GLOBAL FIXED INCOME	45.0	35.0	29.0
	U.S. Tax Exempt Investment Grade FI	38.0	30.0	23.0
	Short Term Tax Exempt*	5.0	4.0	3.0
	Intermediate Term Tax Exempt*	25.0	20.0	15.0
	Long Term Tax Exempt*	8.0	6.0	5.0
	High Yield Tax Exempt Fixed Income	7.0	5.0	6.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	34.0	42.0	49.0
	U.S. Large Cap Equities	19.0	22.0	25.0
	U.S. Mid Cap Equities	6.0	7.0	9.0
	U.S. Small Cap Equities	2.0	2.0	2.0
	Developed Market Ex-U.S. Equities	7.0	9.0	10.0
	Emerging Market Equities	0.0	2.0	3.0
	TOTAL GLOBAL REAL ASSETS	7.0	7.0	7.0
	Private Real Estate**	7.0	7.0	7.0
	Commodities	0.0	0.0	0.0
	TOTAL ALTERNATIVE INVESTMENTS**	12.0	15.0	14.0
	Global Hedge Funds	4.0	4.0	0.0
	Private Equity	8.0	11.0	14.0
	Private Debt	0.0	0.0	0.0

Tax-efficient strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically. The U.S. Tax Exempt Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. Hedge fund allocations are based on private hedge fund capital market assumptions.

*Wells Fargo Advisors only.

See next page for Growth data and portfolio allocations across the efficient frontier, strategic.

**Alternative investments 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. Please see pages 27-32 for important definitions and disclosures.

Strategic asset allocation: Tax-efficient illiquid

May include fixed income, equities, real assets, and alternative investments (continued)

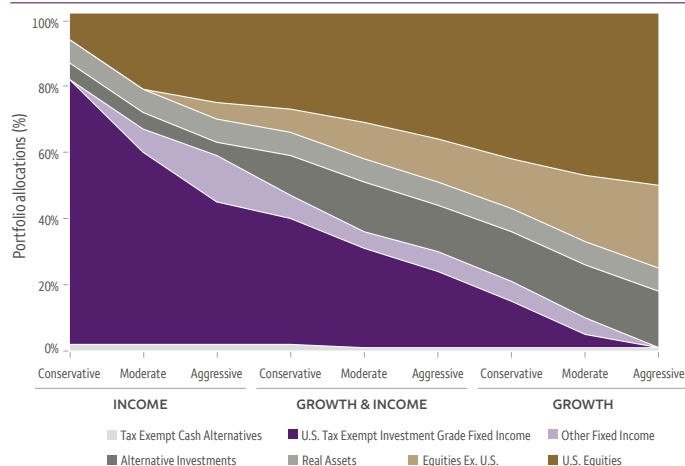
		CONSERVATIVE	MODERATE	AGGRESSIVE
		Strategic (%)	Strategic (%)	Strategic (%)
GROWTH	TAX EXEMPT CASH ALTERNATIVES	1.0	1.0	1.0
	TOTAL GLOBAL FIXED INCOME	20.0	9.0	0.0
	U.S. Tax Exempt Investment Grade FI	14.0	4.0	0.0
	Short Term Tax Exempt*	2.0	0.0	0.0
	Intermediate Term Tax Exempt*	9.0	4.0	0.0
	Long Term Tax Exempt*	3.0	0.0	0.0
	High Yield Tax Exempt Fixed Income	6.0	5.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	57.0	67.0	75.0
	U.S. Large Cap Equities	28.0	32.0	33.0
	U.S. Mid Cap Equities	11.0	11.0	13.0
	U.S. Small Cap Equities	3.0	4.0	4.0
	Developed Market Ex-U.S. Equities	11.0	12.0	12.0
	Emerging Market Equities	4.0	8.0	13.0
	TOTAL GLOBAL REAL ASSETS	7.0	7.0	7.0
	Private Real Estate**	7.0	7.0	7.0
	Commodities	0.0	0.0	0.0
	TOTAL ALTERNATIVE INVESTMENTS**	15.0	16.0	17.0
	Global Hedge Funds	0.0	0.0	0.0
	Private Equity	15.0	16.0	17.0
	Private Debt	0.0	0.0	0.0

Tax-efficient strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically. The U.S. Tax Exempt Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. Hedge fund allocations are based on private hedge fund capital market assumptions. The tactical asset allocation overweights and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio.

*Wells Fargo Advisors only.

These allocations span the set of investments available to investors, utilizing broad diversification to help manage portfolio risk. Special consideration is given to the taxable implications of investing in various asset classes. Taxability may also be taken into consideration in determining the choice of investment vehicles for certain asset classes. Liquidity and cash flow preferences may also be reflected in the choice of investment vehicles for certain asset classes. We suggest that investors who are highly tax-sensitive generally should elect municipal bonds to implement their fixed income allocation. The tactical asset allocation overweights and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio and also take taxation into consideration, therefore, some tactical ideas may not be implemented in these allocations.

Portfolio allocations across the efficient frontier—strategic



**Alternative investments 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. Please see pages 27–32 for important definitions and disclosures.

Strategic asset allocation: Tax-efficient liquid

May include fixed income, equities, and real assets

		CONSERVATIVE	MODERATE	AGGRESSIVE
		Strategic (%)	Strategic (%)	Strategic (%)
INCOME	TAX EXEMPT CASH ALTERNATIVES	3.0	3.0	2.0
	TOTAL GLOBAL FIXED INCOME	91.0	74.0	66.0
	U.S. Tax Exempt Investment Grade FI	91.0	68.0	50.0
	Short Term Tax Exempt*	11.0	8.0	6.0
	Intermediate Term Tax Exempt*	62.0	47.0	34.0
	Long Term Tax Exempt*	18.0	13.0	10.0
	High Yield Tax Exempt Fixed Income	0.0	6.0	16.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	6.0	23.0	32.0
	U.S. Large Cap Equities	6.0	14.0	17.0
	U.S. Mid Cap Equities	0.0	5.0	7.0
	U.S. Small Cap Equities	0.0	0.0	0.0
	Developed Market Ex-U.S. Equities	0.0	4.0	8.0
	Emerging Market Equities	0.0	0.0	0.0
GROWTH AND INCOME	TOTAL GLOBAL REAL ASSETS	0.0	0.0	0.0
	Commodities	0.0	0.0	0.0
	TAX EXEMPT CASH ALTERNATIVES	2.0	2.0	2.0
	TOTAL GLOBAL FIXED INCOME	53.0	43.0	32.0
	U.S. Tax Exempt Investment Grade FI	45.0	35.0	25.0
	Short Term Tax Exempt*	6.0	4.0	3.0
	Intermediate Term Tax Exempt*	30.0	24.0	17.0
	Long Term Tax Exempt*	9.0	7.0	5.0
	High Yield Tax Exempt Fixed Income	8.0	8.0	7.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	45.0	55.0	66.0
	U.S. Large Cap Equities	21.0	26.0	30.0
	U.S. Mid Cap Equities	10.0	12.0	14.0
	U.S. Small Cap Equities	2.0	3.0	3.0
	Developed Market Ex-U.S. Equities	8.0	9.0	13.0
	Emerging Market Equities	4.0	5.0	6.0
	TOTAL GLOBAL REAL ASSETS	0.0	0.0	0.0
	Commodities	0.0	0.0	0.0

Tax-efficient strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically. The U.S. Tax Exempt Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term.

*Wells Fargo Advisors only.

See next page for Growth data and portfolio allocations across the efficient frontier, strategic.

Strategic asset allocation: Tax-efficient liquid

May include fixed income, equities, and real assets (continued)

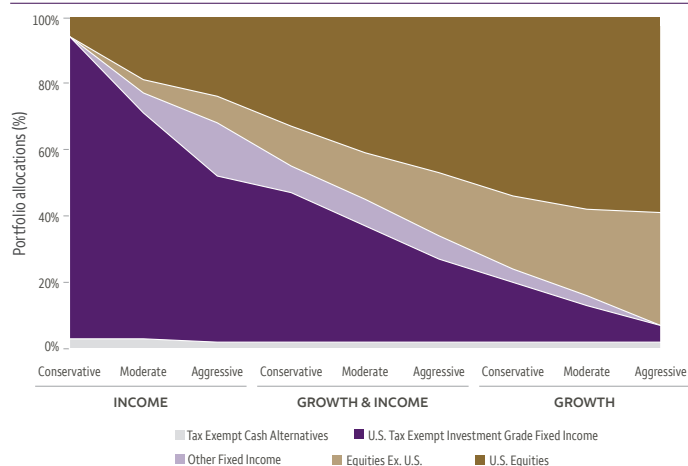
		CONSERVATIVE	MODERATE	AGGRESSIVE
		Strategic (%)	Strategic (%)	Strategic (%)
GROWTH	TAX EXEMPT CASH ALTERNATIVES	2.0	2.0	2.0
	TOTAL GLOBAL FIXED INCOME	22.0	14.0	5.0
	U.S. Tax Exempt Investment Grade FI	18.0	11.0	5.0
	Short Term Tax Exempt*	2.0	0.0	0.0
	Intermediate Term Tax Exempt*	12.0	8.0	5.0
	Long Term Tax Exempt*	4.0	3.0	0.0
	High Yield Tax Exempt Fixed Income	4.0	3.0	0.0
	Developed Market Ex-U.S. Fixed Income	0.0	0.0	0.0
	Emerging Market Fixed Income	0.0	0.0	0.0
	TOTAL GLOBAL EQUITIES	76.0	84.0	93.0
	U.S. Large Cap Equities	34.0	36.0	33.0
	U.S. Mid Cap Equities	15.0	16.0	18.0
	U.S. Small Cap Equities	5.0	6.0	8.0
	Developed Market Ex-U.S. Equities	14.0	13.0	18.0
	Emerging Market Equities	8.0	13.0	16.0
	TOTAL GLOBAL REAL ASSETS	0.0	0.0	0.0
	Commodities	0.0	0.0	0.0

Tax-efficient strategic allocations are updated annually; last update was July 16, 2024. Tactical allocations are updated periodically. The U.S. Tax Exempt Investment Grade Fixed Income encompasses the allocations to Short Term, Intermediate Term, and Long Term. The tactical asset allocation overweights and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio.

*Wells Fargo Advisors only.

These allocations span the set of liquid investments available to investors, utilizing broad diversification to help manage portfolio risk. Special consideration is given to the taxable implications of investing in various asset classes. Taxability may also be taken into consideration in determining the choice of investment vehicles for certain asset classes. Liquidity and cash flow preferences may also be reflected in the choice of investment vehicles for certain asset classes. We suggest that investors who are highly tax-sensitive generally should elect municipal bonds to implement their fixed income allocation. The tactical asset allocation overweights and underweights are designed to provide guidance on shorter-term (6–18 months) weightings in the portfolio and also take taxation into consideration, therefore, some tactical ideas may not be implemented in these allocations.

Portfolio allocations across the efficient frontier—strategic



Disclosures

Forecasts, targets, and estimates are not guaranteed and are based on certain assumptions and on our views of market and economic conditions which are subject to change.

Risk considerations

Past performance does not indicate future results. The value or income associated with a security or an investment may fluctuate. There is always the potential for loss as well as gain. Investments discussed in this report may be inappropriate for some investors depending on their specific investment objectives and financial position.

Asset allocation and diversification are investment methods used to manage risk. They do not assure or guarantee better performance and cannot eliminate the risk of investment losses. Your individual allocation may be different than the strategic long-term allocation above due to your unique individual circumstances, but is targeted to be in the allocation ranges detailed. The asset allocation reflected above may fluctuate based on asset values, portfolio decisions, and account needs.

Cash alternatives typically offer lower rates of return than longer-term equity or fixed-income securities and provide a level of liquidity and price stability generally not available to these investments. Each type of cash alternatives has advantages and disadvantages which should be discussed with your financial advisor before investing.

Alternative investments, such as hedge funds, private capital funds, and private real estate funds, carry specific investor qualifications and involve the risk of investment loss, including the loss of the entire amount invested. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk-reward profiles of their portfolios, the investments themselves can carry significant risks. Government regulation and monitoring of these types of investments may be minimal or nonexistent. There may be no secondary market for alternative investment interests and transferability may be limited or even prohibited.

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.

Private debt refers to loans to companies which are not provided by banks or public markets, and instead are provided by private investors and private markets.

The use of **alternative investment strategies**, such as Equity Hedge, Event Driven, Macro and Relative Value, are speculative and involve a high degree of risk. These strategies may expose investors to risks such as short selling, leverage risk, counterparty risk, liquidity risk, volatility risk, the use of derivatives and other significant risks. Distressed credit strategies invest in, and might sell short, the securities of companies where the security's price has been, or is expected to be, affected by a distressed situation. This may involve reorganizations, bankruptcies, distressed sales, and other corporate restructurings. 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. Structured credit strategies aim to generate returns via positions in the credit sensitive area of the fixed income markets. The strategy generally involves the purchase of corporate bonds with hedging of interest rate exposure. The use of alternative investment strategies may require a manager's skill in assessing corporate events, the anticipation of future movements in securities prices, interest rates, or other economic factors. No assurance can be given that a manager's view of the economy will be correct which may result in lower investment returns or higher return volatility. Long/short credit strategies seek to mitigate interest rate and credit risks regardless of market environment through investment in credit-related and structured debt vehicles. These strategies involve the use of market hedges and involve risks associated with the use of derivatives, fixed income, foreign investment, currency, hedging, leverage, liquidity, short sales, loss of principal and other material risks.

Equity sector risks: *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, and increasing household debt levels that could limit consumer appetite for discretionary purchases.

Consumer Staples industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, government regulation, the performance of overall economy, interest rates, and consumer confidence. The *Energy* sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources, and risks that arise from extreme weather conditions. Investing in *Financial Services* companies will subject a portfolio to adverse economic or regulatory occurrences affecting the sector. Some of the risks associated with investment in the *Health Care* sector include competition on branded products, sales erosion due to cheaper alternatives, research & development risk, government regulations, and government approval of products anticipated to enter the market. Risks associated with investing in the *Industrials* sector include the possibility of a worsening in the global economy, acquisition integration risk, operational issues, failure to introduce to market new and innovative products, further weakening in the oil market, potential price wars due to any excesses industry capacity, and a sustained rise in the dollar relative to other currencies. *Materials* industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement, and manufacturing and cost containment issues. *Technology and Internet-related* stocks, especially of smaller, less-seasoned companies, tend to be more volatile than the overall market. *Real estate* has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic 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.

Investing in **commodities** is not appropriate for all investors. Exposure to the commodities markets may subject an investment to greater share price volatility than an investment in traditional equity or debt securities. 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.

Investments in **fixed-income securities** are subject to market, interest rate, credit/default, liquidity, inflation and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. **High yield** fixed income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment grade fixed income securities. **Municipal bonds** offer interest payments exempt from federal taxes, and potentially state and local income taxes. Municipal bonds are subject to credit risk and potentially the Alternative Minimum Tax (AMT). Municipal securities are also subject to 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. Although **Treasuries** are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

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.

Mortgage-related and asset-backed securities are subject to the risks associated with investment in debt securities. In addition, they are subject to prepayment and call risks. Changes in prepayments may significantly affect yield, average life and expected maturity. If called prior to maturity, similar yielding investments may not be available for the Fund to purchase. These risks may be heightened for longer maturity and duration securities.

Currency hedging is a technique used to seek to reduce the risk arising from the change in price of one currency against another. The use of hedging to manage currency exchange rate movements may not be successful and could produce disproportionate gains or losses in a portfolio and may increase volatility and costs.

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities.

There is no guarantee that **dividend-paying stocks** will return more than the overall stock market. Dividends are not guaranteed and are subject to change or elimination. There are no guarantees that **growth** or **value** stocks will increase in value or that their intrinsic values will eventually be recognized by the overall market. The return and principal value of stocks fluctuate with changes in market conditions. The growth and value type of

Disclosures *(continued)*

investing tends to shift in and out of favor. The prices of **small and mid-size company** stocks are generally more volatile than large company stocks. They often involve higher risks because smaller companies may lack the management expertise, financial resources, product diversification and competitive strengths to endure adverse economic conditions.

Investing in **foreign securities** presents certain risks that may not be present in domestic securities. For example, investments in foreign, emerging and frontier markets present special risks, including currency fluctuation, the potential for diplomatic and potential instability, regulatory and liquidity risks, foreign taxation and differences in auditing and other financial standards.

Investing in **gold, silver** or other precious metals involves special risk considerations such as severe price fluctuations and adverse economic and regulatory developments affecting the sector or industry.

Investing in long/short strategies is not appropriate for all investors. **Short** selling involves sophisticated investment techniques that can add additional risk, and involves the risk of potentially unlimited increase in the market value of the security sold short, which could result in potentially unlimited loss for the Fund.

Master Limited Partnerships (MLPs) involves certain risks which 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. 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.

Merger arbitrage involves investing in event driven situations such as reorganizations, spin-offs, mergers, and bankruptcies, and involves the risks that the proposed opportunities in which the fund may invest may not materialized as planned or may be renegotiated or terminated which can result in losses to the fund.

There are special risks associated with investing in **preferred securities**. Preferred securities are subject to interest rate and credit risks and are generally subordinated to bonds or other debt instruments in an issuer's capital structure, subjecting them to a greater risk of non-payment than more senior securities. In addition, the issue may be callable which may negatively impact the return of the security. Preferred dividends are not guaranteed and are subject to deferral or elimination.

Investing in **real estate** involves special risks, including the possible illiquidity of the underlying property, credit risk, interest rate fluctuations and the impact of varied economic conditions. Other risks associated with investing in listed **REITs** include the use of leverage, unexpected reductions in common dividends, increases in property taxes, and the impact to listed REITs from new property development.

Privately offered **real estate** funds are speculative and involve a high degree of risk. Investments in real estate and real estate investments trusts have special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. There can be no assurance a secondary market will exist and there may be restrictions on transferring interests.

Sovereign debt are bonds issued by a national government in a foreign currency and are used to finance a country's growth. In addition to the risks associated with investing in international and emerging markets, sovereign debt involves the risk that the issuing entity may not be able or willing to repay principal and/or interest when due in accordance with the terms of the debt agreement.

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.

1. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.

Economic index definitions

An index is unmanaged and not available for direct investment.

Inflation is the change in the **Consumer Price Index (CPI)**. The CPI measures the price of a fixed basket of goods and services purchased by an average consumer.

Core inflation is the change in the core **Consumer Price Index (CPI)**. The core CPI measures the price of a fixed basket of goods and services — excluding the volatile food and energy components — purchased by an average consumer.

Consumer Confidence Index measures and details consumer confidence, which is the degree of optimism or pessimism toward the state of the economy.

JPMorgan Emerging Markets Currency Index tracks the performance of emerging-market currencies relative to the U.S. dollar.

MSCI Emerging Markets Currency Index is an index of emerging market currencies versus the dollar, where the weight of each currency within the index matches the relevant country weight within the Morgan Stanley Capital International (MSCI) Emerging Markets Equity Index.

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.

Purchasing Managers' Index (PMI) is an indicator of the economic health of the manufacturing sector. The PMI index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment.

Institute of Supply Management (ISM) Purchasing Manager's Index gauges internal demand for raw materials/goods that go into end-production. An Index value over 50 indicates expansion; below 50 indicates contraction. The values for the index can be between 0 and 100.

U.S. Dollar Index (USD, DXY) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies.

Institute for Supply Management (ISM) Manufacturing Index is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management. The ISM Manufacturing Index monitors employment, production inventories, new orders and supplier deliveries.

Institute of Supply Management (ISM) Non-manufacturing Index (ISM Services Survey) measures the rate and direction of change in activity in the nonmanufacturing industries. An index with a score over 50 indicates that the industry is expanding, and a score below 50 shows a contraction. The values for the index can be between 0 and 100.

Personal consumption expenditures (PCE) is the primary measure of consumer spending on goods and services in the U.S. economy. It accounts for about two-thirds of domestic final spending, and thus it is the primary engine that drives future economic growth.

Alternative investments — strategy definitions

Private Equity. The Burgiss Private Equity Index is based on the pool of private equity funds sourced by Burgiss and is asset weighted. The index is calculated using cash flow and valuation histories of the underlying funds within Burgiss manager universe. The underlying funds are classified by Burgiss private capital classification system and the cash flow data is sourced from institutional investors around the world.

Global Hedge Funds. HFRI Fund Weighted Composite Index. 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 \$50 Million under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

Relative Value. HFRI Relative Value (Total) Index. Strategy is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. Relative Value (RV) position may be involved in corporate transactions also, but as opposed to Event Driven (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.

Disclosures *(continued)*

Arbitrage. HFRI RV: Multi-Strategy Index: multi-strategies employ an investment thesis predicated on realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager.

Long/Short Credit. HFRI RV: Fixed Income — Corporate Index. Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed-income instrument. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond. They typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.

Structured Credit/Asset Backed. HFRI RV: Fixed Income — Asset Backed Index. Includes strategies predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed-income instrument backed by physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. Strategies are designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments, which frequently include loans, pools and portfolios of loans, receivables, real estate, machinery or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed-income instruments, broadly speaking. In many cases, investment managers hedge, limit, or offset interest-rate exposure in the interest of isolating the risk of the position to strictly the disparity between the yield of the instrument and that of the lower-risk instruments.

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

Systematic Macro. HFRI Trend Following Directional Index is a global, equal-weighted index of single-manager funds that report to the HFR Database. The HFRI Trend Following Directional Index is comprised of funds that employ trend following strategies such as Macro: Currency – Systematic, Macro: Systematic Diversified, certain Macro: Multi-Strategy funds and other Macro funds that utilize, to some degree, trend following.

Discretionary Macro. HFRI Macro: Discretionary Thematic Index. Strategies primarily rely on the evaluation of market data, relationships and influences, as interpreted by individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top-down analysis of macroeconomic variables. Investment Managers may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency and commodity markets; they frequently employ spread trades to isolate a differential between instrument identified by the Investment Manager as being inconsistent with expected value. Portfolio positions typically are predicated on the evolution of investment themes the Manager expects to develop over a relevant time frame, which in many cases contain contrarian or volatility-focused components.

Event Driven. HFRI Event Driven (Total) Index. Maintains positions in companies currently or prospectively involved in corporate transactions of a wide variety including 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. Exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company-specific developments.

Investment theses are typically predicated on fundamental (as opposed to quantitative) characteristics, with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

Activist. HFRI ED: Activist Index. Strategies may obtain or attempt to obtain representation on the company's board of directors in an effort to impact the firm's policies or strategic direction and in some cases may advocate activities such as division or asset sales, partial or complete corporate divestiture, dividends or share buybacks, and changes in management. Strategies employ an investment process primarily focused on opportunities in equity and equity-related instruments of companies that are currently or prospectively engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off or other catalyst-oriented situation. These involve both announced transactions and situations in which no formal announcement is expected to occur. Activist strategies would expect to have greater than 50% of the portfolio in activist positions, as described.

Distressed Credit. HFRI Event Driven Directional Index is a global, equal-weighted index of single-manager funds that report to the HFR Database. The HFRI Event Driven Directional Index is comprised of Event Driven Funds that are classified as Special Situations, Credit Arbitrage and Distressed funds..

Merger Arbitrage. HFRI ED: Merger Arbitrage Index. Strategies primarily focus on opportunities in equity and equity-related instruments of companies that are currently engaged in a corporate transaction. Merger Arbitrage involves primarily announced transactions, typically with limited or no exposure to situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross-border, collared, and international transactions that incorporate multiple geographic regulatory institutions, typically with minimal exposure to corporate credits. Strategies typically have over 75% of positions in announced transactions over a given market cycle.

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

Directional Equity. HFRI EH: Long/Short Directional Index is a global, equal-weighted index of single-manager funds that report to the HFR Database. The HFRI EH: Long/Short Directional Index is comprised of Equity Hedge funds that are not considered Equity Market Neutral. The HFRI EH: Long/Short Directional Index includes funds that are classified as Fundamental Growth, Fundamental Value, Multi-Strategy, Quantitative Directional and sector-focused (i.e., Energy/Basic Materials, Healthcare and Technology).

Equity Market Neutral. HFRI EH: Equity Market Neutral Index. Strategies employ sophisticated quantitative techniques to analyze price data to ascertain information about future price movement and relationships between securities. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies predicated on the systematic analysis of common relationships between securities. In many cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high-frequency techniques may be employed; trading strategies may also be based on technical analysis or designed opportunistically to exploit new information that the investment manager believes has not been fully, completely, or accurately discounted into current security prices. Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Note: While the HFRI Indices are frequently used, they have limitations (some of which are typical of other widely used indexes). These limitations include survivorship bias (the returns of the indexes may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indexes, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown). The HFRI Indices are based on information hedge fund managers 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

Disclosures *(continued)*

business are included in the index until the date that they cease operations. Therefore, these indexes may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Returns of the underlying hedge funds are net of fees and are denominated in USD.

Asset class index definitions

Fixed income representative indexes

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

Short Term Taxable Fixed Income. Bloomberg U.S. Aggregate

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

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

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

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

U.S. Treasury. Bloomberg U.S. Treasury Index includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.

U.S. Municipal Bond. 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. Commercial Mortgage Backed Securities. Bloomberg U.S. CMBS Index measures the investment-grade market of US Agency and US Non-Agency conduit and fusion CMBS deals.

U.S. Investment Grade Corporate Fixed Income. Bloomberg U.S. Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

U.S. TIPS. Bloomberg U.S. TIPS Index represents Inflation-Protection securities issued by the U.S. Treasury.

U.S. Government Agencies. Bloomberg U.S. Agency Index includes native currency agency debentures from issuers such as Fannie Mae, Freddie Mac, and Federal Home Loan Bank.

U.S. Government. Bloomberg U.S. Government Bond Index includes U.S.-dollar-denominated, fixed-rate, nominal U.S. Treasury securities and U.S. agency debentures.

Credit. Bloomberg U.S. Credit Index includes investment-grade, U.S.-dollar-denominated, fixed-rate, taxable corporate- and government-related bonds.

Securitized. Bloomberg U.S. Mortgage Backed Securities (MBS) Index includes agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

High Yield Taxable Fixed Income. Bloomberg U.S. Corporate High-Yield Index covers the universe of fixed-rate, non-investment-grade debt.

Developed Market Ex-U.S. Fixed Income (Unhedged). J.P. Morgan GBI Global ex-U.S. Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

Developed Market Ex-U.S. Fixed Income (Hedged). J.P. Morgan Non-U.S. Global Government Bond Index (Hedged) is an unmanaged market index representative of the total return performance, on a hedged basis, of major non-U.S. bond markets. It is calculated in U.S. dollars.

Emerging Market Fixed Income (U.S. dollar). J.P. Morgan Emerging

Markets Bond Index (EMBI Global) currently covers more than 60 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.

Emerging Market Fixed Income (Local Currency). J.P. Morgan Government Bond Index-Emerging Markets Global Diversified tracks the performance of bonds issued by emerging market governments and denominated in the local currency of the issuer.

Preferred Stock. ICE BofA Fixed Rate Preferred Securities Index tracks the performance of fixed rate US dollar denominated preferred securities issued in the U.S. domestic market.

Leveraged Loans. S&P/LSTA Leveraged Loan Index is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weightings, spreads and interest payments.

Asset-Backed Securities. Bloomberg U.S. ABS Index measures the investment-grade market of US Credit Card, Auto and Student Loan asset backed securities deals.

Equity representative indexes

U.S. Large Cap Equities. S&P 500 Index is a capitalization-weighted index calculated on a total return basis with dividends reinvested. The index includes 500 widely held U.S. market industrial, utility, transportation and financial companies.

U.S. Large Cap Equities (Growth). Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

U.S. Large Cap Equities (Value). Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

U.S. Mid Cap Equities. Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe.

U.S. Mid Cap Equities (Growth). Russell Midcap Growth Index measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell Midcap Index companies with higher price-to-book ratios and higher forecasted growth values.

U.S. Mid Cap Equities (Value). Russell Midcap Value Index measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell Midcap Index companies with lower price-to-book ratios and lower forecasted growth values.

Communication Services Index (Comm Svc): The Communication Services Index comprises those companies included in the S&P 500 that are classified as members of the GICS® communication services sector.

Consumer Discretionary Index (Cons Disc): The Consumer Discretionary Index comprises those companies included in the index that are classified as members of the GICS® consumer discretionary sector.

Consumer Staples Index (Cons Stap): The Consumer Staples Index comprises those companies included in the index that are classified as members of the GICS® consumer staples sector.

Energy Index: The Energy Index comprises those companies included in the index that are classified as members of the GICS® energy sector.

Financials Index (Fncls): The Financials Index comprises those companies included in the index that are classified as members of the GICS® financials sector.

Health Care Index (HC): The Health Care Index comprises those companies included in the index that are classified as members of the GICS® health care sector.

Industrials Index (Indust): The Industrials Index comprises those companies included in the index that are classified as members of the GICS® industrials sector.

Information Technology Index (IT): The Information Technology Index comprises those companies included in the index that are classified as members of the GICS® information technology sector.

Materials Index (Matrls): The Materials Index comprises those companies included in the index that are classified as members of the GICS® materials sector.

Disclosures *(continued)*

Utilities Index (Utils): The Utilities Index comprises those companies included in the index that are classified as members of the GICS® utilities sector.

Real Estate Index: The Real Estate Index comprises those companies included in the index that are classified as members of the GICS® real estate sector.

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. Small Cap Equities (Growth). Russell 2000 Growth Index measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-value ratios and higher forecasted growth values.

U.S. Small Cap Equities (Value). Russell 2000 Value Index measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Developed Market Ex-U.S. Equities (U.S. dollar)/(Local). MSCI EAFE Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance of 21 developed markets, excluding the U.S. and Canada.

Developed Market Small Cap Equity (U.S. Dollar). MSCI EAFE Small Cap Gross Total Return USD (M2EASC Index) is an equity index which captures small cap representation across developed markets countries around the world, excluding the U.S. and Canada. With 2,358 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country. Returns measured in U.S. Dollars.

Developed Market Small Cap Equity (Local Currency). MSCI EAFE Small Cap Gross Total Return Local Index (GCLDEAFE Index) is an equity index which captures small cap representation across developed markets countries around the world, excluding the U.S. and Canada. With 2,358 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country. Priced in MSCI LCL Currency.

Emerging Market Equities (U.S. dollar)/(Local). MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of 23 emerging markets.

Frontier Market Equities (U.S. dollar)/(Local). 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.

MSCI AC Asia Index captures large and mid cap representation across Developed Markets countries and Emerging Markets countries in Asia. With 1,244 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Australia Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Australia market.

MSCI Belgium Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Belgium market.

MSCI Brazil Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Brazil market.

MSCI Colombia Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Colombia market.

MSCI Czech Republic Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Czech Republic market.

MSCI Denmark Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Denmark market.

MSCI Emerging Markets EMEA Index is a stock market index that tracks large and mid-cap companies in 11 emerging markets in Europe, the Middle East, and Africa (EMEA). The index covers about 85% of the free-adjusted market capitalization in each country.

MSCI Egypt Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Egypt market.

MSCI Europe Index is a stock market index that tracks the performance of large and mid-sized companies in 15 European countries. It's part of the Modern Index Strategy and is designed to cover about 85% of the market capitalization in each country.

MSCI Germany Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Germany market.

MSCI Hong Kong Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Hong Kong market.

MSCI Hungary Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Hungary market.

MSCI Korea Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Korea market.

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

MSCI Malaysia Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Malaysia market.

MSCI Mexico Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Mexico market.

MSCI New Zealand Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the New Zealand market.

MSCI Pacific Index captures large and mid cap representation across 5 Developed Markets countries in the Pacific region. With 294 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Peru Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Peru market.

MSCI Philippines Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Philippines market.

MSCI Poland Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Poland market.

MSCI Qatar Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Qatar market.

MSCI Singapore Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Singapore market.

MSCI Sweden Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Sweden market.

MSCI Taiwan Index is a capitalization-weighted stock index designed to measure the performance of the large and mid cap segments of the Taiwan market.

Real assets representative indexes

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

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

NCREIF Office Property Index is a sub-index of NCREIF Property Index. It only contains office properties.

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

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

Infrastructure. The S&P Global Infrastructure Index is designed to track 75 companies from around the world chosen to represent the listed infrastructure industry while maintaining liquidity and tradability. To create diversified exposure, the index includes three distinct infrastructure clusters: energy, transportation, and utilities.

MLPs. Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated real-time on a price-return basis and on a total-return basis.

Disclosures *(continued)*

Commodities (BCOMTR). Bloomberg Commodity Total Return Index (BCOMTR) is composed of future contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13 week (3 month) U.S. Treasury Bills. **Bloomberg Commodity Index (BCOM)** is comprised of 23 exchange-traded futures on physical commodities weighted to account for economic significance and market liquidity.

Bloomberg Agriculture Subindex is a commodity group subindex of the Bloomberg Commodity Index. It is composed of futures contracts on coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat. It reflects the return of the underlying commodity futures and is quoted in USD.

Bloomberg Energy Subindex is a commodity group subindex of the Bloomberg Commodity Index. It is composed of futures contracts on crude oil, ultra-low sulfur diesel, unleaded gasoline, low sulphur gasoil, and natural gas. It reflects the return of the underlying commodity futures and is quoted in USD.

Bloomberg Industrial Metals Subindex is a commodity group subindex of the Bloomberg Commodity Index. It is composed of futures contracts on aluminum, copper, nickel and zinc. It reflects the return of the underlying commodity futures and is quoted in USD.

Bloomberg Precious Metals Subindex is a commodity group subindex of the Bloomberg Commodity Index. It is composed of futures contracts on gold and silver. It reflects the return of the underlying commodity futures and is quoted in USD.

Commodities (S&P GSCI). **S&P Goldman Sachs Commodity Index** serves as a benchmark for investment in the commodity markets and as a measure of commodity performance over time. It is a tradable index that is readily available to market participants of the Chicago Mercantile Exchange. The index was originally developed by Goldman Sachs.

Commodities (RICI). **Rogers International Commodity Index** is a U.S. dollar based index representing the value of a basket of commodities consumed in the global economy. Representing futures contracts on 37 physical commodities, it is designed to track prices of raw materials not just in the U.S. but around the world.

General disclosures

Global Investment Strategy (GIS) and Global Securities Research (GSR) are divisions of Wells Fargo Investment Institute, Inc. (WFII). WFII is a registered investment adviser and wholly owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by the Global Investment Strategy division of WFII. Opinions represent WFII opinion as of the date of this report and are for general informational purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GIS does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

The information contained herein constitutes general information and is not directed to, designed for, or individually tailored to, any particular investor or potential investor. This report is not an offer to buy or sell or solicitation of an offer to buy or sell any securities mentioned. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs, and investment time horizon. Your actual portfolio allocation may differ from the strategic and tactical allocations reflected in this report.

Wells Fargo Wealth & Investment Management provides financial products and services through bank and brokerage affiliates of Wells Fargo & Company. Brokerage products and services offered through Wells Fargo Clearing Services, LLC, a registered broker-dealer and non-bank affiliate of Wells Fargo & Company. Bank products are offered through Wells Fargo Bank, N.A.

Wells Fargo Advisors is registered with the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions or communications made with Wells Fargo Advisors.

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company.

Additional information is available upon request.