CHIEF INVESTMENT OFFICE

Viewpoint

Five For 2025

November 2024

All data, projections and opinions are as of the date of this report and subject to change.

IN BRIEF

- This month we highlight our top five areas of high conviction and trends that we think should prevail throughout 2025 and into 2026.
- We maintain our tactical Equity overweight relative to Fixed Income, our diversified, balanced approach in Growth versus Value, and continue to favor the U.S. relative to the rest of the world as we close out the choppiness at the end of 2024.
- Our highest conviction Fixed Income call remains that the yield curve will normalize by short rates moving lower, and investors, in our opinion, should therefore consider moving out investable cash in Fixed Income to their strategic duration target as cash yields are likely to decrease relatively quickly from here, and the short-term backup in yields may be an opportunity.

As we move through many unknowns, we look for areas of high conviction and trends that we think should prevail throughout 2025 and into 2026. While the concerns of high deficits and government debt, potential new policy initiatives, elevated geopolitical risk, and questions surrounding Federal Reserve (Fed) actions remain top of mind, we find bright spots that break through and maintain the bull market advance, in our view. We highlight our top Five For 2025:

1. The U.S. corporate profit cycle powers on with attractive growth expected again in 2025.
2. The equity markets head into phase two of rebalancing, which would allow for broader participation as the fundamentals are likely to improve across the "rest of the best".
3. Lower short- and intermediate-term interest rates as we expect the Fed to cut rates, which should provide some relief to Small-capitalization shares and support a merger and acquisition cycle in Mid-capitalization stocks.
4. A steeper yield curve would provide more normalcy in the Fixed Income markets.
5. Disruptive Innovation led by the Artificial Intelligence (AI) revolution could begin to unfold across a variety of industry groups helping to sustain solid corporate profit margins, increase productivity measurably, and support the build-out of the power generation and infrastructure themes.

All of the above sustains the global competitiveness and market attractiveness of the U.S. relative to the rest of the world.

CIO ASSET CLASS VIEWS

This month, the Global Wealth & Investment Management Investment Strategy Committee (GWIM ISC) did not make any tactical asset allocation adjustments. We maintain an overweight to Equities, with a preference for U.S. Equities, both Large- and Small-caps, relative to the rest of the world, and still favor a significant allocation to bonds in a well-diversified portfolio. Through periods of episodic volatility, we favor a diversified and balanced approach.

View the CIO Asset Allocation Guidelines ▶

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	CIO View				
Asset Class	Underweight		Neutral	Overweight	
Global Equities				●	
U.S. Large Cap Growth			●		
U.S. Large Cap Value				●	
U.S. Small Cap Growth				●	
U.S. Small Cap Value				●	
International Developed		●			
Emerging Markets			●		
Global Fixed Income		●			
U.S. Governments				●	
U.S. Mortgages				●	
U.S. Corporates		●			
International Fixed Income			●		
High Yield		●			
U.S. Investment-grade Tax Exempt			●		
U.S. High Yield Tax Exempt		●			
Alternative Investments*					
Hedge Funds Private Equity Real Assets			●		
Cash					

*Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors.

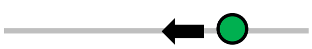
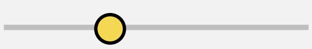
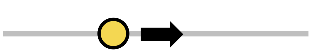
CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio.

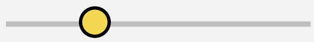
The Five For 2025 are all part of our next decade thesis of the Advancement of the Asset Light Era. In this era, the economy and corporate America increasingly become "asset light" given rapid innovation and the continued focus on experience spending. At the same time, cash-rich asset light companies are increasingly in need of asset-heavy infrastructure to advance their growth. This combination, along with the fact that investment demand in a wide variety of assets should increase as the need to invest more for retirement accelerates, should support our view of rising asset prices in general in the years ahead. While it is natural to focus on the known unknowns, we shift our attention to our Five for 2025. We maintain our tactical Equity overweight relative to Fixed Income, our diversified, balanced approach in Growth versus Value, and continue to favor the U.S. relative to the rest of the world as we close out the choppiness at the end of 2024.

CIO INVESTMENT DASHBOARD AS OF NOVEMBER 5, 2024

Equities remain well supported by elements like earnings expansion, a relatively solid economic backdrop, and easier monetary policy. However, we continue to see crosscurrents in the market landscape moving forward. Long-term investors should consider using any episodic market volatility to their advantage and remain diversified across portfolios.

Current readings on the key drivers of Equities for investors to consider, with arrows representing the recent trend:

Factor	Implication for Equities Negative Neutral Positive	CIO View
Earnings		According to FactSet, S&P 500 revenue and earnings grew by 2.8% and 1.0% last year, respectively. Accordingly, for 2024, consensus expects growth of 5.0% and 9.5%. Revenue growth for Q2 grew by 5.3% on a year-over-year (YoY) basis. In Q3, an expansion of 5.0% is anticipated. Profits for Q2 grew by 11.2%. In Q3, they are expected to increase by 5.2%. For 2025, revenue and earnings are expected to grow by 5.7% and 14.7% respectively. Meanwhile, according to BofA Global Research, there was a slight rebound in the Global Earnings Revision Ratio in October. Still, the three-month average of the ratio fell to near its long-term average. The number of upgrades to profit estimates surpasses downgrades in 3 of 20 countries and in 3 of 16 tracked industries.
Valuations		The S&P 500 price-to-earnings (P/E) ratio (next 12 months) stands at around 21.3x above its long-term average. This headline measure suggests that Large-cap U.S. Equities in general remain expensive, although relative discounts can be found in areas like Small-cap and Value.
U.S. Macro		Following an expansion of 2.9% last year, growth in real gross domestic product (GDP) through Q3 of this year has cooled to an average of 2.5% at a seasonally adjusted annual growth rate. Excluding volatile measures in trade and inventories, final sales to domestic purchasers have averaged a solid 3.0% over the same timeframe, from an annual expansion of 2.7% last year. Data suggests a continued progression toward normalized economic growth. BofA Global Research expects GDP growth of 2.0% for Q4 and 2.7% for all of 2024. For 2025, an annual growth rate of 1.9% is anticipated.
Global Growth		Excluding the U.S., pockets of weakness have become more apparent in the global economy. In the eurozone, a cooling services sector, together with manufacturing weakness, is raising economic uncertainty. In China, in response to continued economic malaise, fresh policies have been announced. These aim to support both growth, including measures to aid the property market, and investor sentiment. These follow other efforts to bolster consumption and the services sector. Meanwhile in the U.S., consumption in general has remained a sturdy economic support. After growth of 3.5% and 3.0% in 2022 and 2023 respectively, the global economy is expected to slightly accelerate in 2024 to growth of 3.1%, followed by an expansion of 3.2% in 2025, according to BofA Global Research. This compares to average growth of 3.8% from 2000 to 2019, according to the International Monetary Fund.
U.S. Monetary Policy / Inflation		Stressing a data-dependent approach, Fed Chairman Jerome Powell has emphasized a widened range of potential policy paths, influenced by stronger economic data and uncertainty related to fiscal and trade policies. Following the Fed's expected adjustment this month for a 25 basis points (bps) cut, BofA Global Research expects a 25 bps cut in December and 125 bps of cuts next year for a 2025-end target range of 3.00%-3.25%.
Fiscal Policy		U.S. pandemic-era fiscal support totaled nearly 31% of GDP, much of which has faded. Longer-term initiatives include the 2022 CHIPS and Science Act, a $280 billion plan to bolster the country's technological industrial base, and the 2022 Inflation Reduction Act (IRA), a $370 billion effort largely to develop a renewable energy supply chain, among other elements. Following a $1.2 trillion spending package authorized in March to keep federal agencies funded until October, a bill was passed to fund them through December 20, 2024.
Corporate Credit		Credit spreads overall reflect lessened concern about an economic slowdown. For both Investment-grade (IG) and High Yield (HY), they have fully reversed a marginal tightening of financial conditions, which occurred in early August, and have contracted further.

Factor	Implication for Equities Negative Neutral Positive	CIO View
Yield Curve		Inversions, whereby longer-dated yields are below shorter-dated ones, remain in place in the fed funds (FF)/10s and 3-month/10s sections. These types of structures may suggest a heightened anticipation of policy interest rate cuts in the future, historically as a result of increased near-term economic risk. However, the 2/10s and 2/30s segments portray normal yield curve formations which may anticipate firmer inflation expectations and those relating to future fiscal policy, among other factors.
Technical Indicators		The S&P 500 remains above its 200-day moving average, which is also in an uptrend. The percentage of New York Stock Exchange stocks closing above their 200-day moving average, a measure of market breadth, has lagged improvement in that of the cumulative advance/decline indicator.
Investor Sentiment		According to the American Association of Individual Investors, bullish sentiment remains well above that of bearish sentiment. Meanwhile, the Chicago Board Options Exchange Volatility Index has risen to its highest level since August, above its year-to-date (YTD) and 12-month averages. Cash levels in institutional portfolios have declined to a level signaling a "sell" signal, according to the BofA Global Research Fund Manager Survey. However, the BofA Bull & Bear Indicator still signals "neutral" at 6.2.

Source: Chief Investment Office.

EQUITIES

We are slightly overweight Equities: Elevated geopolitical risk, shifting expectations for the pace of interest rate cuts, the potential for normalizing economic data, and inflationary pressures that remain above the Fed's target level could act as potential headwinds. However, we ultimately maintain a positive bias for Equities amid a sustained earnings recovery, broadening market leadership, relatively stable consumers, healthy balance sheet and credit markets, and easier monetary policy.

We are slightly overweight U.S. Equities: The U.S. currently remains our preferred Equity region relative to the rest of the world, given relatively stronger balance sheets in aggregate, attractive earnings growth estimates and better consumer fundamentals. Our view on U.S. Large-caps remains positive on strong fundamentals and the ability to produce free cash flow (FCF) and healthy shareholder payouts. We maintain a slight Small-cap overweight considering expectations for solid economic growth, a broadening profits cycle, and lower costs of capital moving forward. Small-caps tend to outperform after the Fed begins an interest rate cutting cycle and the Fed recently made its first cut to the fed funds rate since 2020.

At this point in the cycle, we suggest a balance in Equity portfolios and broader exposure across sectors. In addition to the leadership and fundamental strength in recent years from the Technology and Communication Services sectors, we are starting to see improvement in earnings from other sectors including Financials, Utilities, Consumer Discretionary and Healthcare. As the cycle starts to broaden out and as financial conditions further ease, it is important to have Equity exposure across cyclical, interest rate-sensitive and growth sectors. We continue to emphasize exposure to Financials amid forecasts for lower interest rates that can help improve credit risks, default rates, revenues, net interest income and asset valuations on Financials balance sheets. We are less favorable on Industrials after mixed results from Q2 earnings reports, few green shoots, and cautious company guidance for the second half of 2024. Infrastructure-related investments and projects related to secular growth trends in electric power demand, energy transmission and distribution, cloud and data center builds, and next-generation AI-focused semiconductor technology that is increasingly power hungry could drive multiyear demand for select growth and cyclical stocks.

We continue to emphasize Healthcare to reflect a balance between Value and Growth, modest positioning, attractive capital returns, dividend growth, and our preference for quality at a reasonable price. We recently reduced exposure to Energy as weaker demand from China combined with a growing supply outlook for 2025 is a concern and could weigh on oil prices, energy cash flows and earnings in coming quarters. Our positive outlook for Utilities is based on accelerating electric power demand for the first time since the early 2000s, driven by the growth in AI and electrification of the economy. While we are constructive on Information Technology (IT) and Communications Services as longer-term thematic trends, we maintain our neutral view in the near term on elevated valuations, crowded positioning, which was a significant factor in the early August sell-off and declining earnings growth rates sequentially, despite well-above-market-average earnings growth from these two important sectors. We deemphasize Materials as demand is weak, especially from China, and pricing power remains questionable. With interest rates

EQUITY WATCH LIST

- Economic data for production, labor, consumer expectations, and credit and liquidity conditions
- Progression of earnings estimates and margins
- Reorganization of global supply chains and U.S.-China relationship
- A sustained broader rotation that favors Small-caps, cyclicals and Emerging Markets (EM)

RISK CONSIDERATIONS

- Heightened geopolitical risk and conflict in the Middle East
- Shifting expectations surrounding the outlook for Fed rate cuts
- Inflationary pressures that remain above the Fed's target level
- Pressures within the Office segment of Commercial Real Estate (CRE)

moving lower over the last couple of months, we are neutral Real Estate (RE) and prefer being selective in the RE subsectors due to positive fundamentals in some areas of RE but remain cautious of weaker trends in other areas like CRE.

We believe strategic portfolios should continue to incorporate both Growth and Value factors that would simultaneously benefit from the possibility of cyclical and secular forces gaining traction. While we ultimately believe that AI and related investments still have long-term momentum, the summer reversal in mega-cap Growth stocks acted as a reminder to avoid overexposure. Meanwhile, Value continues to trade at a relative discount to Growth and may benefit from lower interest rates moving forward. We suggest a disciplined and balanced approach between Value and Growth for long-term investors and emphasize the importance of diversification in portfolios.

We are neutral Emerging Market Equities: EM Equities appear attractively valued, but the Fed rate cutting cycle is unlikely to have a major positive effect given small current account deficits across the EM universe. We continue to expect a wide return dispersion between individual EM countries and regions. Recent major stimulus measures in China should offer more support for the local market and its closest regional trading partners in the near term. Nonetheless growth is likely to remain constrained on a structural basis by headwinds from the real estate sector, weak household balance sheets, a tighter domestic regulatory environment and global export controls. Central and Eastern European markets remain most exposed to the Russia-Ukraine war through trade links and high dependency on natural gas imports, while market direction in Latin America, the Middle East and Africa should remain broadly tied to the direction of natural resource prices, particularly on any broadening of the Middle East conflict. The structural rise in EM consumer spending remains a big reason why we believe investors should consider maintaining a strategic allocation to EM Equities, as appropriate. The emerging world now constitutes around 40% of global Personal Consumption Expenditures, according to the United Nations, and ongoing convergence with developed economies should support GDP growth and corporate earnings over the longer term. We favor active management[1] when investing in EM, as fundamentals differ across countries based on fiscal capacity, external funding needs, corporate governance and other factors.

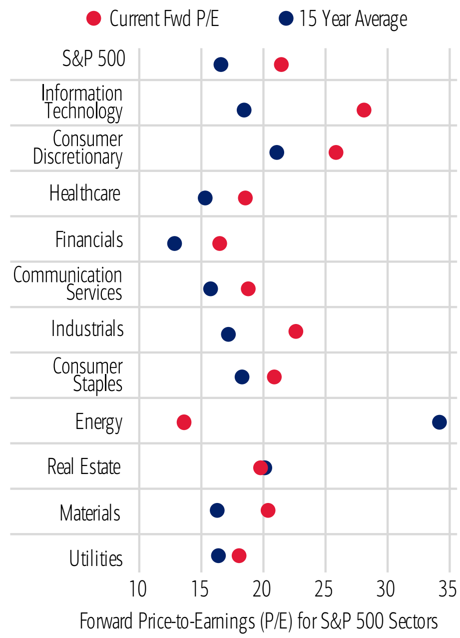
We are slightly underweight International Developed Market Equities: We continue to prefer U.S. versus International Developed given our higher-quality view. We remain slightly underweight Europe. Downside risk remains from the potential for fiscal tightening in high-budget-deficit European Union (EU) countries and increased political uncertainty following national and EU parliamentary elections. Natural gas prices have fallen, but ongoing curtailment of Russian supply and growing demand from Asia mean that supply constraints could reemerge at a later stage. We are slightly overweight Japan Equities. A potential yen recovery could represent a headwind for Japanese exporters, but the Bank of Japan (BoJ) is likely to move only gradually on future rate hikes. Sustained positive inflation and corporate reforms in Japan meanwhile remain fundamental supports for valuation. As aggregate net energy importers, International Developed markets would also be more vulnerable to any potential rise in energy prices on any broadening of the Middle East conflict. We believe long-term investors should maintain some strategic exposure to International Developed Equities, as appropriate, given that they trade at a discount relative to U.S. Equities, contain more of a balance between Value and Growth sectors, can offer attractive dividend yields, and provide diversification.

FIXED INCOME

We are slightly underweight Fixed Income: We are still favorable on a significant allocation to bonds in diversified portfolios but are currently slightly overweight Equities. The Fed's ability and willingness to change rate policy aggressively to protect the labor market is largely positive for the economy but increases the risk of higher inflation (all things being equal). We therefore moved to a neutral duration position in October. That move was well-timed as the 10-year Treasury is now up around 70 bps from the lows, largely on the belief that a Republican victory in the November elections may be positive

[1] Active management seeks to outperform benchmarks through active investment decisions such as asset allocation and investment selection.

Sector Valuations



Source: Bloomberg as of November 5, 2024. The Chief Investment Office (CIO) views and opinions expressed are for informational purposes only, are made as of the date of this material, and are subject to change without notice. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance.

FIXED INCOME WATCH LIST

- Economic and fiscal implications of the U.S. election
- Level of real rates in the U.S.
- Credit Spreads and muni/Treasury ratios
- Global central bank activity
- Global economic growth
- U.S. short-term funding markets
- U.S. Inflation

RISK CONSIDERATIONS

- Heightened U.S. deficit spending
- Resilient or accelerating inflation
- Any increase in risk aversion at current tight credit spreads
- Dislocations in CRE markets
- Potential for a short-term liquidity crunch

for macro risk, and potentially a catalyst for higher deficits, inflation and rates. While we still believe, on balance, that rates may drift lower from here over the medium term, the relative opportunity is not nearly as compelling as when 10-year rates were 5%, and real rates were close to 2.5%. Our highest conviction Fixed Income call remains that the yield curve will normalize by short rates moving lower, and investors, in our opinion, should therefore consider moving out investable cash in Fixed Income to their strategic duration target as cash yields are likely to decrease relatively quickly from here, and the short-term backup in yields may be an opportunity.

We are slightly overweight on U.S. governments: Nominal and real rates are more attractive due to the recent back-up, and provide good income-generating power, in our opinion, as well as a decently priced hedge to macroeconomic risk. Real yields—the yield after inflation, as measured by Treasury Inflation-Indexed Securities—are now 1.80% to 2.20% across the curve, the higher end of the range since 2008. Substantially positive yields higher than inflation levels on U.S. government-guaranteed securities is a welcome relief for savers after years of financial repression. We recommend a neutral duration position versus a stated benchmark, to take advantage of these higher yields, protect against declining rates on cash balances, and as prudent positioning against macro risk in the increased Equity positioning of a diversified portfolio by moving to their long-term strategic duration target.

We remain slightly underweight both Investment-grade Corporates and High Yield: This view is largely predicated on valuations that continue to screen expensive, leaving less room for upside and outperformance relative to duration matched Treasurys. Over the last 12 months, credit markets have fully embraced the improved macro and technical backdrops. With IG at around 85 bps and HY at around 300 bps, spreads continue to reflect a healthy growth picture in addition to relatively strong demand with yields solidly in the 5% area for high-quality corporates.

To be clear, we don't see a risk or catalyst for spreads to move meaningfully wider over the short term. Bouts of volatility in credit spreads are normal, and history has shown that credit spreads can trend at low/rich levels for an extended period (i.e., late 1990s and mid-2000s). With the U.S. economy still on strong footing and earnings growth reaccelerating, any move wider in credit spreads could be more contained, in our view. However, the margin for error at current valuations is still slim. On average, at starting spread levels of 100 bps or less, IG underperforms duration-matched Treasurys 12 months forward.

We therefore continue to believe that an up-in-quality and defensive tilt within a corporate allocation is prudent and would look to re-risk portfolios should we see spreads move above 130 bps—all else being equal.

HY yield-to-worst remains around 7.5%, above the median level seen over the last 25 years and provides modest compensation for credit losses, in our view. However, similar to IG, HY spreads look priced to perfection and continue to price in a soft/no-landing outcome and a continued improvement in default losses. Current spreads in the BB-rated and B-rated cohorts are both roughly in the 10th percentile historically, and we would look for substantially wider levels as a more attractive entry point. We therefore maintain our slight underweight positioning and see better risk-adjusted opportunities in other asset classes such as Equities.

We are neutral U.S. Investment-grade Tax Exempt and slightly underweight U.S. High Yield Tax Exempt: Last month we upgraded U.S. IG Tax Exempt from slight underweight to neutral as muni valuations had cheapened to approximately average levels during late August and September from very rich levels earlier in the year. We attribute this cheapening to higher net supply after the seasonally high redemption period of June to August, while new muni issuance is tracking about 40% higher than last year. We expect technical factors to strengthen again in November, when new issuance generally slows, and reinvestments are needed for seasonally heavy coupon payments in December and January. We believe municipal credit quality remains generally solid, with most states projecting abundant levels of rainy-day funds in fiscal years 2024 and 2025; this should allow state and local governments to maintain their creditworthiness if economic conditions worsen. However, with over 20,000 municipal issuers, there are certainly credit outliers to the downside, and some muni subsectors such as healthcare and private higher education face particular challenges. Additionally, credit spreads for low-quality munis are currently tighter than their long-term averages. Therefore, investors should be cautious in reaching down the credit spectrum.

We are slightly overweight Mortgage-backed Securities: Aiming to bring down stubbornly high inflation, the Fed steadily tightened financial conditions by raising interest rates and engaging in quantitative tightening (QT). Weaker technical dynamics led to a material widening of Mortgage-backed Securities (MBS) spreads last year, breaking into the 80 bps range in October 2023 before retracing back to the current high-40s bps. This contraction occurred as the market, and the Fed gradually grew more comfortable with the prospect of unwinding QT by starting rate cuts in Q4, while the economy maintained its resilience. In our opinion, the current level of MBS spreads after the rally still represents value when compared to corporates, using the long-term average.

Duration extension, which is a key risk for MBS investors, has been substantially mitigated, with MBS duration now significantly extended. Another important risk, interest rate volatility, remains elevated at levels that make MBS bonds more appealing, as their spreads are likely to outperform should interest rate volatility subside. Although weak demand from the Fed, financial institutions holding two-thirds of the MBS market, and an unsettling geopolitical/macro environment make it possible for MBS spreads to widen further, MBS spreads and yields appear attractive relative to Treasurys and IG corporate bonds over the long term.

ALTERNATIVE INVESTMENTS

Unlike Traditional asset classes, establishing and exiting allocations to Alternative Investments (Alts) can be a long-dated process given liquidity constraints. Because of their illiquid and long-term nature, Alts should be viewed in terms of strategic allocations. Therefore, our views on Alts strategies within each asset class reflect potential tilts in new dollar deployment based on relative opportunity, in contrast to a tactical repositioning in public markets.

Some key CIO principles for qualified investors to consider when investing in Alts include:

- **Think strategically and long term:** Alts are largely illiquid and therefore require a long time horizon when incorporating into portfolios.
- **Invest methodically, including in downturns:** A properly implemented Alts program requires a consistent commitment, particularly within private markets strategies; withdrawing during periods of volatility can undermine the long-term benefits of the asset class and result in underallocation.
- **Diversify:** Seek diversification by strategies and managers. Investing methodically within private markets strategies also improves vintage year diversification.
- **Prioritize high-conviction managers:** Performance dispersion is significantly wider within Alts than in Traditional investment strategies; manager selection is therefore a potential opportunity.

Hedge Funds: In September, Hedge Funds (HF) overall returned 1.4%, bringing YTD returns to 8.2%.[2] Equity Hedge (EH) strategies lead all other HF strategies in terms of YTD performance with gains of 10.4% through September. Early estimates for October suggest near-flat performance for EH strategies during a period of equity market weakness, with alpha gains offsetting beta[3] losses. Alpha[4] generation for EH strategies has largely been driven by strong long side alpha since the mid-summer timeframe. The year began promisingly for short side alpha, but the punctuated bouts of volatility over the last several months have eroded the excess returns coming from the short side of the book.[5] With pair-wise stock correlations below long-term averages and idiosyncratic risk above average over the last two decades, we still see a conducive environment for fundamental EH strategies. Notably, quantitative EH strategies have also performed well over the course of the year, sidestepping the spikes in volatility and large factor rotations.

Macro HF strategies, meanwhile, bounced back in September with positive performance of 1.6%, bringing YTD returns to 4.8%.[6] Trend-following strategies benefited from

[2] HFR, Inc. As of September 30, 2024.
[3] Beta is a measure of a stock's volatility in relation to the overall market.
[4] Alpha is the excess return of an investment relative to the return of a benchmark index.
[5] BofA Capital Strategy Group, Morgan Stanley Prime Brokerage, Goldman Sachs Prime Services. As of September 30, 2024.
[6] HFR, Inc. As of September 30, 2024.

CIO Views on Alts Strategies

Hedge Funds

Equity Hedge +	
Bull case	Potential alpha generation opportunities for low net strategies in volatile or high-dispersion markets; sustained improvement in short alpha; low net better positioned if Equities sell off
Bear case	Return of concentrated and beta-driven market would limit opportunity set; short alpha has started strong this year but has dissipated
Event Driven	
Bull case	Higher rates pressuring levered balance sheets creating potential for distress; if merger deal spreads were to widen; higher risk-free rate positive for merger arbitrage
Bear case	Distress may not materialize in size or may be delayed; low mergers & acquisition volumes and high regulatory uncertainty; lower rates negative
Relative Value	
Bull case	Still in world of higher yields; economic resiliency supportive of credit; decent though declining dispersion in HY
Bear case	Spreads not attractively wide; potential increase in credit risk and defaults in coming year
Macro +	
Bull case	Possible "higher-for-longer" rate regime could create cross-asset volatility in rates and foreign exchange; inflation stickiness could exacerbate macro volatility
Bear case	Coordinated Central Bank rate cuts could limit dispersion; choppy markets difficult for trend-following; interest rate volatility declining

Private Equity

Buyout	
Bull case	Current vintages likely attractive for long-term given profitability focus; within PE, Secondaries benefiting from secular growth and institutional investors seeking liquidity; deal activity starting to pick up and could surge if momentum builds
Bear case	Higher rates require larger Equity investments; deal and exit activity susceptible to higher-for-longer
Venture/Growth	
Bull case	Significant correction benefits providers of capital; AI could drive investment supercycle; early VC stages more insulated than later stages; falling rates would likely be tailwind
Bear case	Ex-AI VC market still challenged; VCs focused on supporting portfolio companies; initial public offering drought could continue; timelines extended plus increased risk of dilution; higher rates drag on unprofitable companies
Special Situations	
Bull case	Default rates rising; "higher-for-longer" would increase pressure on levered balance sheets; RE-adjacent opportunities; companies seeking creative financing before maturities
Bear case	Rate cuts could smooth out credit cycle, keeping it more average
Private Credit +	
Bull case	High current yields; healthy spread to public credit over time; economic resiliency supportive of credit; secular tailwinds supporting growth; fresh capital can underwrite to current risks
Bear case	Credit risk could rise and lower-quality most at risk; regulatory scrutiny; public leveraged credit competition; significant capital allocating to PC; interest rates declining

Bull case is an environment or set of factors that could represent tailwinds for the strategy. **Bear case** is an environment or set of factors that could represent headwinds for the strategy. **+ symbol** indicates the strategies CIO views as having the most favorable opportunity set for new investment within the Alts asset classes.

agricultural commodities and Equities, while energy and rates detracted. The increase in interest rate volatility and potential reemergence of the higher-for-longer risk could create opportunities for the Macro strategies.

Private Equity: Private Equity (PE) notched modest gains of approximately 1.6% in Q2,[7] once again lagging public Equities. Earnings releases from prominent publicly listed Alts asset managers, which can serve as a rough gauge of industry trends, suggest improving positive PE performance in Q3 in the mid-single-digits range. Buyout strategies have been resilient, if muted, over the recent rate-hiking cycle and continue to exhibit outperformance over longer time horizons. Venture Capital (VC) has been enduring a more acute valuation reset that, while not as severe as the dot-com peak-to-trough drawdown, has exceeded declines during the 2008/2009 Global Financial Crisis.[8] Thematically, PE strategies have been contending with a slower velocity of capital recycling, though exit activity has accelerated over Q2 and Q3 and is now up over 50% YoY.[9] With the prospect of lower interest rates, expectations are for deal activity to accelerate further into next year. The need for capital remains high across private markets, particularly in the startup ecosystem where VC and PE growth investors have retrenched. While still contending with higher interest rates for the time being, we see a potential improvement in the relative outlook for PE strategies on the horizon.

Private Credit (PC), meanwhile, has continued to perform well throughout this era of higher interest rates. Using private fund performance data, PC generated returns of 1.7% in Q2, bringing the one-year internal rate of return to 8.3%.[10] While PC has remained resilient in the face of continued skepticism, market dynamics throughout most of the year have led to declining yields and spreads. Interest rate cuts will likely depress yields further.

As we have communicated, the Goldilocks environment for PC has been slowly receding as new headwinds emerge. Credit losses have long been expected to increase off exceptionally low levels, given the strains of high borrowing costs on borrowers' balance sheets, yet a broad contagion in PC markets is unlikely, in our view. In fact, PC spreads tightened in both Q2 and Q3 amid stiff competition from public leveraged-credit markets, driving yields lower to approximately 10.7%.[11] Given still high starting yields, it is still possible to pencil out mid- to high-single-digit returns over the next 12 months under conservative scenarios with higher-than-expected default rates and recovery rates lower than the historical experience.

Deployment challenges have emerged as another headwind due to near-term supply/demand imbalances. New PC issuance has remained muted, broadly syndicated leveraged loan markets have refinanced large volumes of PC loans and competed aggressively for new deals, and demand from institutional and retail investors has remained strong. Importantly, a pickup in PE deal activity could mitigate the current imbalance and restore the structural thesis of continued PC growth. The substantial $1.7 trillion[12] of global PE dry powder that will ultimately need to be invested will likely require hundreds of billions of dollars in annual PC financing.

We continue to emphasize partnering with established and well-resourced managers, and think PC is best positioned within a diversified allocation to Alts and should be tactically compared to other Alts asset classes and strategies, in particular PE.

Private Real Estate: Overall, Private Real Estate (PRE) has shown some signs of stabilization although prices in Q3 were still modestly negative. Cap rates have similarly been relatively steady over the course of the year, though variations across sectors and geographies remain.[13] PRE entered the year with optimism that the asset class would bottom out and find market clearing prices. Performance momentum and fair value estimates have seemed to bolster that view. Expectations of interest rate declines also fueled part of the improving outlook, but recent moves in rate markets suggest higher-for-longer could reemerge as a risk. Accordingly, deal activity has remained anemic if stable

REAL ASSETS

Private Real Estate	
Bull case	Supply/demand imbalance in Residential driving secular opportunities; sectors like Data Centers rising; cap rates slowly reflecting lower valuations; lower mortgage rates may unlock markets; lending strategies offering compelling profiles; distressed/opportunistic could emerge given stress
Bear case	Transactions remain depressed; pressure rising in value-add multifamily financed with floating-rate debt and over-supply in certain markets
Infrastructure +	
Bull case	Within RE, Infrastructure to continue benefiting from fiscal spend; large need for energy transition and upgrading aging infrastructure; potential to be inflation beneficiary if new resting rate structurally higher
Bear case	Higher rates challenging project financing; lower inflation could mitigate relative attractiveness
Tangible Assets	
Bull case	Geopolitical risk could spill over and pressure commodities supply; China stimulus could drive demand; macro factors including currency could support oil prices; untethered U.S. gov't debt; potential for diversification and inflation hedge
Bear case	Muted global growth or lack of China follow-through may reduce demand; balanced energy supply has offset Middle East tensions; real rates staying high could pressure "safe" havens like gold

Bull case is an environment or set of factors that could represent tailwinds for the strategy. **Bear case** is an environment or set of factors that could represent headwinds for the strategy. **+ symbol** indicates the strategies CIO views as having the most favorable opportunity set for new investment within the Alts asset classes.

[7] Cambridge Associates, PitchBook, Inc. As of June 30, 2024.
[8] PitchBook, Inc. As of September 30, 2024.
[9] PitchBook, Inc. As of September 30, 2024.
[10] Cambridge Associates, Refinitiv EIKON. As of June 30, 2024.
[11] BofA Global Research. As of September 30, 2024.
[12] Preqin. As of October 31, 2024.
[13] MSCI Real Capital Analytics. As of September 30, 2024.

YoY. Market participants are still hoping for a pickup in activity in the coming year, driven by clarity on the interest rate picture and improving return expectations.

Overall, PRE values have declined 2% over the last twelve months and approximately 12% from their recent peak[14] suggesting the valuation reset has been working its way through the system. New supply is hampering rent growth in certain sectors and geographies, such as apartments and industrial; however, supply growth is projected to ease in the coming year. With publicly listed real estate investment trusts (REITs) trading at a premium relative to net asset value, public markets appear to no longer view PRE as overvalued.[15]

We continue to expect systemic issues to be contained but for the PRE cycle to continue to play out as a slow burn. As suggested, reduced interest rate uncertainty would likely spur transaction activity and aid in price discovery. For the longer term, PRE continues to make sense as a strategic allocation given the potential diversification benefits and income features.

Infrastructure: Within the Real Assets space, Infrastructure remains a key long-term theme. The U.S. has a widely acknowledged aging infrastructure base that will require significant public and private investment. Hundreds of billions of dollars have already been earmarked for infrastructure spend through several federal bills in recent years. Infrastructure also has direct links to the Energy Transition theme, which will play out over the coming decades. In addition, Infrastructure has historically performed well on a relative basis during inflationary periods and has the potential to improve diversification in portfolios. Notably, in this era of higher inflation, PE deal activity, which can serve as a gauge of higher long-term return on investments, has shifted on a relative basis toward Infrastructure and away from Technology over the last three years.[16]

Tangible Assets: Global growth anchors demand for commodities and remains subdued. But expectations for impactful fiscal and monetary stimulus in China is raising expectations for global growth and providing some support for commodity prices in the near term. The expected rebound in global demand is reflected in industrial metals, where aggregate indexes are up nearly 10% since early August. Geopolitical risk and geoeconomic maneuvering are wild cards for energy commodity prices. Absent a supply disruption, the oil market appears fundamentally balanced with ample supply and restrained demand. For gold, additional Fed interest rate cuts, a likely weakening of the dollar from overvalued territory, untethered U.S. government debt, and geopolitical tensions should continue to support prices. We continue to believe gold is most effectively implemented as a strategic diversifier.

With the Fed shifting to an easier monetary policy stance on labor market concerns, the dollar will likely remain under pressure even as it has exhibited bouts of strength. Importantly, the U.S. dollar remains overvalued versus a number of major currencies.

[14] MSCI Real Capital Analytics Commercial Property Price Index. As of September 30, 2024.
[15] Green Street, "U.S. Commercial Property Outlook". November 1, 2024.
[16] Preqin. Infrastructure includes Industrials, Energy, Utilities, Raw Materials and Natural Resources. As of August 5, 2024.

MACRO STRATEGY

- GDP grew at a 2.8% pace in Q3 as accelerating consumer spending (3.7%) was increasingly satisfied by drawing down inventories and more imports, which subtracted from growth. Final sales to domestic purchasers accelerated to about a 3.5% growth rate as surging household wealth and solid income gains boost demand growth.
- Hurricanes and strikes temporarily slowed payroll job growth in October, while most other indicators show layoffs remain low with claims for unemployment compensation back down after a quick storm-related pop. The October unemployment rate remained low at 4.1%, ADP jobs rose strongly, and consumer confidence jumped much more than expected on improving perceptions of the labor market.
- September core personal consumption expenditures inflation increased more than the consensus forecast and remained stuck at 2.7% on a YoY basis for the third straight month following the higher-than-expected September core consumer price index rate (3.3% YoY), which has also seen its downtrend stall recently.
- The profits cycle for large U.S. companies and massive fiscal stimulus remains supportive of economic growth and risk-assets in the near term.
- J.P. Morgan Global Manufacturing purchasing managers' index continues to suggest global cyclical momentum remains weak but massive fiscal and monetary stimulus out of China could help arrest waning global cyclical momentum.

ECONOMIC FORECASTS (AS OF 11/01/2024)

	Q1 2024A	Q2 2024A	Q3 2024A	Q4 2024E	2024E	2025E
Real global GDP (% y/y annualized)	-	-	-	-	3.1	3.2
Real U.S. GDP (% q/q annualized)	1.6	3.0	2.8	2.0	2.7	1.9
CPI inflation (% y/y)	3.2	3.2	2.6	2.5	2.9	2.2
Core CPI inflation (% y/y)	3.8	3.4	3.2	3.2	3.4	2.7
Unemployment rate (%)	3.8	4.0	4.2	4.3	4.0	4.5
Fed funds rate, end period (%)	5.33	5.33	4.83	4.38	4.38	3.13

The forecasts in the table are the baseline view from BofA Global Research. The Global Wealth & Investment Management (GWIM) Investment Strategy Committee (ISC) may make adjustments to this view over the course of the year and can express upside/downside to these forecasts. There can be no assurance that the forecasts will be achieved. Economic or financial forecasts are inherently limited and should not be relied on as indicators of future investment performance.
A = Actual. E/= Estimate.
Sources: BofA Global Research; GWIM ISC as of November 5, 2024. Forecasts are subject to change.
When assessing your portfolio in light of our current guidance, consider the tactical positioning around asset allocation in reference to your own individual risk tolerance, time horizon, objectives and liquidity needs. Certain investments may not be appropriate, given your specific circumstances and investment plan. Certain security types, like hedged strategies and private equity investments, are subject to eligibility and suitability criteria. Your advisor can help you customize your portfolio in light of your specific circumstances.

S&P 500 SCENARIOS BASED ON FORWARD P/E AND 2025 EARNINGS PER SHARE (EPS)

The table below provides a rough indication of where the S&P 500 Index's central tendency could be, given various scenarios for EPS in 2025 and P/E ratio multiples. These scenarios are not official price targets and are not meant to signal levels where portfolio actions may always be needed. However, during times of market volatility, it's useful to keep this basic framework in mind when considering whether to incrementally add to or trim risk from portfolios while staying invested in one's strategic asset allocation framework.

2025 EPS	EPS Forward P/E (Next 12 months)				
	19.0x	20.0x	21.0x	22.0x	23.0x
$305	5,795	6,100	6,405	6,710	7,015
$295	5,605	5,900	6,195	6,490	6,785
$285	5,415	5,700	5,985	6,270	6,555
$275	5,225	5,500	5,775	6,050	6,325
$265	5,035	5,300	5,565	5,830	6,095
$255	4,845	5,100	5,355	5,610	5,865
$245	4,655	4,900	5,145	5,390	5,635

For illustrative purposes only. Source: Chief Investment Office as of November 5, 2024.

CIO ASSET CLASS VIEWS AS OF NOVEMBER 5, 2024

Asset Class	CIO View: Underweight		CIO View: Neutral	CIO View: Overweight		Comments
Global Equities				●		We are slightly overweight Equities and continue to view weakness as a buying opportunity for long-term investors. We remain overweight the U.S. and neutral EM, with a slight underweight to International Developed.
U.S. Large-cap Growth			●			We have a slight preference for Value over Growth, given better absolute and relative valuations. We believe portfolios should incorporate both Growth and Value factors as appropriate.
U.S. Large-cap Value				●		
U.S. Small-cap Growth				●		We maintain a slight overweight to Small-caps on attractive valuations, the declining cost of capital and the stable U.S. consumer.
U.S. Small-cap Value				●		
International Developed		●				International Developed Equities valuations appear attractively valued, but underlying rates of nominal growth are expected to trail U.S. levels. International markets also remain more vulnerable to any potential broadening of conflicts in Ukraine and the Middle East.
Emerging Markets			●			We are neutral EM Equities overall with regional markets likely to be driven by relative exposures to China, the ongoing Russia-Ukraine conflict and natural resource prices. Valuations appear attractive, but Fed rate cuts are unlikely to have a major positive impact.
International						
North America				●		The U.S. remains our preferred region given balance sheet strength, better fundamentals for consumer spending and healthy shareholder payouts.
Eurozone		●				Risks remain from potential fiscal tightening in high-budget-deficit EU countries, increased political uncertainty and the potential for energy supply constraints to reemerge amid the ongoing Russia-Ukraine and Middle East conflicts.
U.K.			●			Domestic demand at risk from still high mortgage rates, alongside higher taxes from government budget. Withdrawal from EU single market remains a negative for medium-term growth with limited changes to U.K.-EU trade relations expected under new parliament.
Japan				●		Potential yen recovery could represent a headwind for exporters, but BoJ is likely to raise rates only gradually. Sustained positive inflation and official efforts to increase corporate returns to shareholders remain fundamental supports for valuation.
Asia Pac ex-Japan*		●				Regional market a near-term beneficiary from China stimulus measures, but longer-term outlook dampened by exposure to ongoing structural constraints for Chinese economy.
Global Fixed Income		●				Bonds remain attractive and provide good diversification for multi-asset class portfolios with both reasonable income and the ability to decline substantially in yield in an economic downturn. Neutral positioning recommended, balancing the risk of further tightening/higher yields against significantly better valuations.
U.S. Governments				●		Nominal and real yields are very attractive across the curve relative to the last 10 to 15 years. A Treasury allocation for liquidity, principal preservation and diversification is preferred, as Treasurys can provide short-term diversification benefits to Equities among Fixed Income sectors. Rate volatility has increased and may remain high.
U.S. Mortgages				●		MBS spreads have tightened to the high-40s bps after a notable rally since the beginning of Q4 in 2023, and they have been range-bound YTD. This is still 1.3x the 10-year average, making MBS more attractive relative to Treasury and Corporate in terms of yield and spreads. With a longer-term horizon in mind, we are slightly overweight on the asset class, recognizing that there are near-term upside risks in spreads due to the unpredictability of QT and the macro environment.
U.S. Corporates		●				We remain slightly underweight IG Corporates despite a modest backup in spreads over the last month. This reflects our view that while all in yields may still be compelling, credit spreads have rallied sharply, YTD, and at around 95 bps, remain priced for a strong macro backdrop and leave little room for error. At current valuations, IG tends to underperform Treasurys modestly on an excess return basis 12 months forward. Therefore, a slightly underweight position is appropriate until a better entry point presents itself.
International Fixed Income			●			International rates markets remain attractive and are no longer trading at a significant discount to the U.S.
High Yield		●				Valuations present more attractive medium-to-long-term returns even after estimating credit losses. However, increased recession concerns could cause near-term price losses, and spreads are not at recessionary levels. Any additions to HY, therefore, should have a long-time horizon. Within HY, we prefer balanced exposure between floating-rate loans and HY unsecured.
U.S. Investment-grade Tax Exempt			●			Muni valuations have cheapened to approximately average levels, making for a better entry point on new investments. We attribute this to higher net supply after the seasonally high redemption period of June to August, while new muni issuance is tracking approximately 40% higher than last year. We expect valuations to richen again in November and December given expectations of lower issuance and the need to reinvest seasonally heavy December and January coupon payments. Fundamental conditions remain generally favorable for state and local government bonds, but challenges exist in certain subsectors, e.g., private higher education and healthcare.
U.S. High Yield Tax Exempt		●				HY munis are rich relative to IG munis, with tighter than average credit spreads. An up-in-quality focus should help mitigate increased credit risk due to potential economic weakening.

* Asia Pac ex-Japan refers to the geographic area surrounding the Pacific Ocean. The Asia Pac ex-Japan covers the western shores of North America and South America, and the shores of Australia, eastern Asia and the islands of the Pacific. Tactical qualitative investment strategy weightings are relative in nature versus the strategic weightings for a fully diversified portfolio. Weightings are based on the relative attractiveness of each asset class. Tactical strategy weightings are for a 12- to 18-month time horizon. CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio. Because economic and market conditions change, recommended allocations may vary in the future. Asset allocation cannot eliminate the risk of fluctuating prices and uncertain returns. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

CIO EQUITY SECTOR VIEWS AS OF NOVEMBER 5, 2024

The CIO Equity sector view is developed by applying a multi-input process combining the CIO's factor views and fundamental bottom-up industry outlook with top-down macro-economic changes and trends. The factor approach emphasizes valuation and momentum as key inputs, with a fundamental overlay taking into consideration forward-looking views of growth, profits, policy, events and sentiment as well as inclusion of certain investment themes. BofA Global Research's sector strategy views are also captured as an input into the CIO process. Our sector views are developed with a 12- to 18-month outlook but are revisited monthly by the GWIM Investment Strategy Committee.

Sector	CIO View Underweight Neutral Overweight	Comments
Utilities	○ ○ ○ ● ○	We favor exposure to Utilities on accelerating electricity demand forecasts driven by the AI boom which looks to be a positive long-term tailwind for the sector, catalyzing growing electricity demand for the first time since the early 2000s, and supporting even higher investment in power generation, transmission and distribution. Further, there are also some renewed and lower cost plans for investment in renewable energy and grid-hardening projects at utilities historically provide reliable earnings and outperform in the late cycle and during economic growth slowdowns, especially regulated utilities that provide a defensive hedge to portfolios. Given the better demand outlook from AI and data centers, we see reason to view even this historically low volatility group of stocks in a more constructive light. Over the next decade, the IRA legislation provides a strong runway for future renewable energy investments and projects. We view the need for increasing investment in electric infrastructure as structural and not dependent on any specific piece of legislation. We prefer Utilities with strong balance sheets, constructive regulatory mechanisms, and low-volatility business models. Unregulated Independent Power Producers (IPPs) are a small subsector that we currently favor given exposure to growth from rising AI and data center demand. Valuations based on forward price-earnings multiples are attractive compared to the broader S&P 500 index and momentum is strong. **Risk Considerations: 1) slower power demand growth than forecast, 2) greater regulatory scrutiny, 3) power outage events.**
Financials	○ ○ ○ ● ○	The positive outlook for the Financials sector is concurrent with the start of a Fed easing cycle. Perhaps counterintuitively, a lower fed funds rate benefits deposit gatherers because of the immediate decline in interest expense paid on deposits. The decline in interest revenue from loans/securities is much more gradual, so net interest income has likely bottomed for this cycle. The risks associated with the regional banking troubles in March 2023 have faded and a pickup in regional bank mergers in recent months suggests confidence has been sufficiently restored to deploy capital. Funding pressure coupled with capital discipline has modestly tightened credit standards and slowed the pace of lending, but the start of Fed cuts would alleviate pressure on both fronts. A lower Fed target rate typically lowers interest rates across the curve (and throughout the U.S. financial system), which would have the effect of increasing bond prices and shrinking losses generated by higher rates. Shrinking unrealized losses in bond portfolios should accrete to equity holders in the form of a higher book value and increased capital flexibility for banks, insurance companies, and asset managers. Capital return will likely remain the cornerstone of the investment case for most of the Financials sector. Lower interest rates should also improve credit quality (especially CRE) and facilitate workouts instead of charge-offs. Overall, the volatility of the Financials sector should improve with the recent addition of large e-payment card networks that have been stable earnings compounders historically (without taking credit risk). We also favor alternative asset managers with proven track records, billions in dry powder, that consistently draw fund inflows, and maintain management fee pricing power. Alts (especially PE) have demonstrated an ability to thrive in all kinds of economic environments, including recession. Overall, valuation is attractive and earnings driven momentum should continue to improve as rates move lower**. Risk Considerations: 1) a persistently inverted yield curve, 2) interest rate volatility, 3) a deep credit cycle for CRE, 4) lost market share to non-bank lenders.**
Healthcare	○ ○ ○ ● ○	Consider positions in larger biopharma stocks with attractive relative valuations and upcoming catalysts. In an environment where financial conditions are in flux, Healthcare stocks provide attractive characteristics, including quality, dividend growth, dividend yield and lower beta. Healthcare fundamentals have been able to withstand much of the macro pressures seen globally, but flows last year were weak in the Healthcare sector. Further, in 2023 negative earnings revisions were made by analysts across the sector. Distributors, medical devices, and large biopharma are best positioned, in our view, to weather pressure on margins, while a return to a more normalized environment should benefit life science equipment and tools companies as we progress through 2024. As a whole, large pharmaceutical companies remain attractive as they trade at a material discount to Healthcare-sector peers and the broader market. Further, significant cash on strong balance sheets, combined with more aggressive business development efforts and a greater focus on explaining long-term growth drivers make large pharma more attractive over the intermediate term. Over a longer duration, drug pricing headwinds may return as demographic shifts put more pressure on government payors and as value-based care initiatives gain momentum. Emphasize exposure to long-term positive trends in life science/bioprocessing equipment, innovative and differentiated medical devices and animal health, as well as more intermediate opportunities in Large-cap biopharma and diversified medical technology. Valuation remains attractive, and momentum is slowing. **Risk Considerations: 1) repeal of the Affordable Care Act without another plan in place and uncertainty, 2) drug pricing negotiations broaden out from the current IRA structure.**
Consumer Discretionary	○ ○ ○ ● ○	With a resilient consumer, a solid job market, lower interest rates on the horizon and a better-than-expected economic backdrop, we are overweight Consumer Discretionary. Slightly lower energy costs, wage increases and a strong job market with only selective job cuts confined largely to the technology-related industries is helping to maintain solid consumer spending. Consumers remain resilient and are finding ways to alter their budgets to accommodate both experiences and necessities. Further, with inflation declining from the highs experienced last summer, and interest rates also moving lower, this is supporting consumer confidence. Consumer retail channels are shifting back to online spending as value-oriented consumers utilize alternative payment methods to supplement their spending and seek out bargains. More evidence of economic strength and a resilient consumer could help support relative earnings growth and relative valuation levels. Valuation for the sector is elevated with positive momentum. **Risk Considerations: 1) economic slowdown, 2) spikes in energy prices or interest rates, 3) geopolitical uncertainty.**

Sector	CIO View Underweight		Neutral		Overweight	Comments
Information Technology			●			The Technology sector is neutral despite improvements in supply chains and AI-driven flows into mega-cap Technology stocks. However, margin risks remain for companies in the sector, and the potential remains for downward earnings revisions that are more likely to affect higher-beta, higher-valuation companies. Despite strong long-term Cloud and AI trends, software margins could continue to deteriorate, as Cloud consumption could potentially come under some pressure near term and is not immune to a macro slowdown. We suggest a neutral weight in IT, with a bias to larger and higher-quality companies with strong earnings growth, FCF and balance sheets. We continue to encourage investors to be careful about unprofitable, expensive, and long-duration IT companies. The pandemic accelerated the digital transitions for many industries, but, over the longer-term, we remain positive on the secular growth trends for Cloud computing, machine learning and AI, data centers, software, cybersecurity, and semiconductors. Valuations in the sector declined in 2022 but were still elevated after rising again in 2023 and to start 2024, especially after the rally in AI-related companies. Further, any additional moves higher in interest rates could pressure multiples for high-growth and high-valuation technology stocks with low to no profits; therefore, look for GARP (growth at a reasonable price) in software and semiconductors. The IT sector still generates significant FCF, dividend growth and remain long-term fundamental drivers for the sector. Technology is deflationary by nature; therefore, long-term investors should look to add to transformational and industry-leading businesses on market weakness. Valuations remain elevated and momentum recently stalled. **Risk Considerations: 1) China exposure and trade wars, 2) supply chain constraints, 3) Generative AI monetization, 4) narrow breadth and premium valuations.**
Communication Services			●			We are neutral on the Communication Services sector, as some of the largest companies in this sector provide high-quality fundamental characteristics and could be more attractive in a slow-growth economic environment. Despite our concern for ongoing regulatory oversight and the never-ending battle over content, management teams are now adjusting their business models to reduce costs and become more efficient. Ad spending is moving from e-commerce to travel and leisure, hence advertisers are having to shift their targeting. Retailers are suffering from rising costs and slowing sales, which could drive changes in advertising spend. We are constructive on the sector based on three key factors: 1) Valuation multiples were largely de-risked last year; 2) Earnings estimates were reduced; and 3) More importantly, broad cost-reduction plans could create potential earnings upside. Valuations are a little rich and momentum tuned positive again. **Risk Considerations: 1) regulatory and anti-trust risks, 2) capital expenditures ramps for AI investments that limit EPS and FCF, 3) lower engagement pressuring growth.**
Industrials			●			We are neutral on the Industrials sector after mixed Q2 earnings results, a lack of significant green shoots in the industrial economy outside of AI and electrification, and cautious second-half company guidance. Longer term there are multiple thematic drivers for Industrials over the next three to five years including improving outlooks for international defense budgets outside the U.S. as the global risk environment is elevated, underpinning favorable dynamics for defense companies. Recent safety and manufacturing issues in commercial aerospace weighed on the sector but longer-term aerospace should benefit from a multi-year backlog of commercial plane orders to build and deliver. Potential improvements in the global capital expenditures cycle, including the normalization and reshoring of supply chains and manufacturing, and investment in new equipment after years of focusing on productivity, and fiscal stimulus plans could support the construction, transportation, machinery, and freight and logistics industries longer term. However, weaker import/export demand from Europe and China could be a near-term drag on earnings growth for industrial conglomerates and transport stocks. Secular growth drivers like the evolution of AI and increased power demand support the longer-term view for electrical equipment and Industrials related to this trend. Valuation is slightly elevated, and momentum recently turned negative. **Risk Considerations: 1) short-cycle recovery timing continues to be pushed back, 2) inflation resurgence drives up input costs, pressuring margins, 3) continued supply chain stress.**
Real Estate			●			The decline in interest rates from 2023 peak levels reduces some but not all risks regarding refinancing and the cost of capital for RE projects. Further, expectations of additional Fed rate cuts in addition to negative positioning and very bearish sentiment last year in the RE sector could lead to increased Equity portfolio exposure to the sector. However, interest rates are still elevated compared to the zero-rate policy environment, therefore, increased interest expenses could still weigh on RE sector earnings in coming quarters. We would be more selective within the RE sector and prefer neutral sector exposure. There are mixed outlooks among its subsectors because of consumer and corporate changes like remote work, eCommerce, less business travel, etc., that are potential longer-term headwinds for CRE companies (e.g., office), mall operators and retail-related property owners as companies consolidate RE footprints. Furthermore, risks are rising for downward pressure on rental rates as lease contracts expire and new contracts are negotiated. Continue to emphasize longer-term secular trends in data centers, communication infrastructure (towers), storage and industrial RE. Valuation remains neutral, and momentum is neutral. **Risk Considerations: 1) spike in interest rates and borrowing costs, 2) declining demand for CRE in over supplied markets, 3) workout problems.**
Energy		●				We remain concerned for the global oil supply and demand outlook for 2025. Despite tensions and conflicts in the Middle East, production has not been interrupted and therefore has capped oil price upside. Further, growing oil production from both OPEC+ producers and non-OPEC producers in Guyana, Gulf of Mexico, offshore Brazil and other regions could add to inventories in an environment that is already moving towards an oversupplied market. Combined with slower global demand, led by China this year, we see risks to energy company cash flows and earnings estimates in future quarters. OPEC+ indicating they could change the current energy policy by ending the production cuts that supported oil prices in recent quarters is a significant risk and important change in current policy for energy markets. This dynamic has investor sentiment very cautious on the sector. Any potential oil price declines to lower ranges could weigh on energy stocks next year. Energy companies are still returning cash to shareholders through a combination of base dividends, increasingly less variable dividends, and stock buybacks. Longer term, secular headwinds still confront the sector, including the transition to clean energy, lower renewable energy costs, declining short-cycle inventories and sustainability-focused investors. Continue to emphasize companies that are low-cost producers with high FCF, balance sheet strength and low break-even oil prices. Energy stocks still provide attractive valuations and strong dividends with declining momentum. **Risk Considerations: 1) lower oil and natural gas commodity prices, 2) slower global energy demand.**

Sector	CIO View: Underweight		Neutral		Overweight	Comments
Materials		●				Pockets of slower global growth and weaker commodity prices factor into our more cautious view on the Materials sector for 2024. We are seeing deceleration in the pricing cycle from higher pricing levels in 2022 and 2023. Higher interest rates in the developed world and ongoing trials securing labor and materials are pushing some project timelines to the right, and, with the additional challenge of higher energy costs, we are seeing some formerly profitable projects being reconsidered. On the supply side, concerns remain about too much new capacity in the future for petrochemicals and commodity chemicals with questions regarding demand levels for 2024. Multiples could expand or contract dependent on pricing across the commodity complex. Downward pricing pressure would give some intermediaries relief on costs, but if they are also experiencing volumes decline, operating leverage could be at risk. We still see some longer-term tailwinds for demand, such as bipartisan support for U.S. infrastructure and energy transition spending, AI growth and renewable power buildouts over the longer term; however, mixed data and the slower-than-expected growth and activity in China makes the risk-reward outlook less attractive with both inflation and pricing power moving lower. Earnings revision trends could be mixed this year. As a result, the underlying sector valuation is neutral, but momentum is neutral. **Risk Considerations: 1) slower global economic growth, 2) weaker residential and non-residential construction, 3) oversupplied materials markets.**
Consumer Staples	●					Remain underweight the more defensive Consumer Staples sector and prefer exposure to the more cyclical Consumer Discretionary sector. Broad-based slowdown in demand for consumer-packaged goods products is a function of trade down, substitution and a more discerning bargain-seeking consumer. Demand for needs and necessities across personal care and household products has held up better than most other consumer packaged goods products. It's too early to tell whether the popularity of the weight-loss drugs is affecting food and beverage volumes or whether consumers are altering their budgets to reflect the still-elevated consumer goods prices. Without a predictable return to positive volume growth, traditional consumer packaged goods companies will likely struggle to show improvement in profits and margins needed to support current relative valuation levels. Valuations are more reasonable, and momentum stalled. **Risk Considerations: 1) soft demand across consumer-packaged goods, 2) consumer trade down and substitution, 3) ongoing growth in private label and store brands.**

Source: Chief Investment Office. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

CIO THEMATIC INVESTING AS OF NOVEMBER 5, 2024

Taking the long view, the following themes and subthemes are considered among the most powerful structural forces in the world. They are macro in nature but carry risks and reward for companies, both large and small. These themes are transformational and carry long-term implications for economic growth, the cost of capital and global earnings. Gaining exposure to these themes is a key ingredient to investing, in our view.

ARTIFICIAL INTELLIGENCE (AI)	Building on last year's AI-enthusiasm, the next act for **Generative AI** is about adoption and deployment. The promise that AI will eventually aid productivity and efficiencies while reducing costs is also hastening the need for complementary industrial and service **Robotics/Automation**. Use cases of Generative AI and robotics within **Healthcare Innovation** abound, with the potential to aid drug discovery, age-related disease treatments and gene therapies/ mapping. The massive growth in unstructured data being created and processed by machines, devices and systems is feeding **Big Data Analytics and Storage**. An ongoing migration of data and applications to **Cloud Computing** infrastructure as well as hardware providers supports the AI data boom.
DEMOGRAPHICS	Several demographic transitions serve as important arbiters of future growth. That's true about the **Great Wealth Transfer** of over $84 trillion in assets likely to be inherited through 2045, according to Cerulli Associates. As main recipients, both the Millennials (born 1981-1996) and Gen Z (born 1997-2012) could have greater influence on consumer spending patterns and preferences. Tax treatment and business regulation continue to drive an intra-U.S. migration, while a **Global Migration** cycle is also underway given displaced populations owing to conflict, forced migration and other factors. Changing the face of consumerism globally is the **Emerging Market Consumer**, which represents a powerful middle-class cohort with rising incomes and improved health outcomes. With lengthening life expectancies globally, **Global Ageing** puts a renewed focus on healthcare, aged-care, financial, and consumer products and services. So too does the **Silver Tsunami** of ageing and wealthy Baby Boomers, who represent the bulk of consumer spending in the U.S.
INFRASTRUCTURE	Infrastructure needs today span physical infrastructure well beyond its useful life, to energy assets, both traditional and renewable. As the sought-after **Energy Transition** toward renewable energy sources such as solar, wind, hydrogen, and nuclear remain in focus, so does reliable **Energy Storage** and **Distribution** of our energy sources. If the **Future Mobility** of the global car fleet is electric, Electric Vehicle (EV) production demands more mining of copper, lithium, nickel, manganese, cobalt and graphite, etc. to produce EVs as compared to internal combustion engines. Other key investment opportunities exist given disruptions through climate related events, cyber threats, or general impairments to the **National Grid**; but also globally, the risk of scarcity/stress to resource facilities among **Water/Waste Management**.
SECURITY	**Industrial Policies** are in, as the "visible hand" of the government is just as prominent as the "invisible hand" of the private sector, with hundreds of billions of dollars committed from the White House to incentivize security and self-reliance of suppliers and resources. Regulation pertaining to **Surveillance** and adjacent technologies, as well as legislation of data privacy rights will be a topic on Capitol Hill in 2024. Of national security concern, defense spending in the years ahead likely remains elevated given ongoing Ukraine-Russia and Israel-Hamas wars in addition to simmering U.S.-China tensions. **Aerospace and Defense** should benefit from the remilitarization in the wake of shrinking stockpiles. Ongoing and sophisticated ransomware and data breaches bolsters **Cybersecurity** budgets across industries. With the commercialization of space, security extends to **Space** and space-based assets (such as drones, satellites, data links, weather monitoring and Global Positioning System (GPS)).
POLYCRISIS	Growing conflict and crisis globally can be described as **Multipolar Disorder,** leading to unforeseen realities for the macroeconomic backdrop and markets. **Resource Protectionism** has been on the rise as the extraction, sourcing and management of the world's resources will stay in focus with commodities, metals and mining complexes already stretched. Although net zero commitments are widespread, the current path to **Decarbonization** targets remains narrow. Also at crisis levels, global debt reached a staggering $307 trillion last year according to Institute of International Finance, putting in focus **Debt and Deficit** concerns. A million people in the U.S. have died of drug overdose since 2000 while suicide rates are at their highest level in over 80 years—All tragedies related to **Deaths of Despair**, and of particular impact to our healthcare system.

Index Definitions

Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. Indexes are all based in U.S. dollars.

Equity/S&P 500 Index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the index focuses on the large-cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market.

J.P. Morgan Global Manufacturing Purchasing Managers' Index data gives a detailed look at the manufacturing sector including the pace of manufacturing growth and the direction of growth for this sector.

Chicago Board Options Exchange Volatility Index is a real-time market index that represents the market's expectation of 30-day forward-looking volatility.

MSCI Real Capital Analytics Commercial Property Price Index is computed based on the resale prices of properties whose earlier sales prices and sales dates are known. The index represents the relative change in the price of property over time rather than its absolute price.

Consumer Price Index is a price index, the price of a weighted average market basket of consumer goods and services purchased by households.

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Asset allocation, diversification and rebalancing do not ensure a profit or protect against loss in declining markets.

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Investments in Infrastructure Assets will be subject to risks incidental to owning and operating infrastructure projects, including risks associated with the general economic climate, geographic or market concentration, government regulations and fluctuations in interest rates. The industries targeted for investment may be highly regulated by governmental agencies. Such regulations may impact an investor's ability to acquire, dispose of and/or manage investments.

Alternative investments are speculative and involve a high degree of risk.

Alternative investments are intended for qualified investors only. Alternative Investments such as derivatives, hedge funds, private equity funds, and funds of funds can result in higher return potential but also higher loss potential. Changes in economic conditions or other circumstances may adversely affect your investments. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk.

Nonfinancial assets, such as closely-held businesses, real estate, fine art, oil, gas and mineral properties, and timber, farm and ranch land, are complex in nature and involve risks including total loss of value. Special risk considerations include natural events (for example, earthquakes or fires), complex tax considerations, and lack of liquidity. Nonfinancial assets are not in the best interest of all investors. Always consult with your independent attorney, tax advisor, investment manager, and insurance agent for final recommendations and before changing or implementing any financial, tax, or estate planning strategy.

Sustainable and Impact Investing and/or Environmental, Social and Governance (ESG) managers may take into consideration factors beyond traditional financial information to select securities, which could result in relative investment performance deviating from other strategies or broad market benchmarks, depending on whether such sectors or investments are in or out of favor in the market. Further, ESG strategies may rely on certain values based criteria to eliminate exposures found in similar strategies or broad market benchmarks, which could also result in relative investment performance deviating.