

August 2024

CHIEF INVESTMENT OFFICE

Viewpoint

The Ghosts of August Shall Fade

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

IN BRIEF

- The last several weeks have been turbulent for equity markets, and the potential
 for episodic volatility persists amid concerns such as: the Federal Reserve (Fed)
 falling behind the curve, softening economic data, crowded positioning unwinding,
 the yen carry trade, November's U.S. presidential election, and rising geopolitical
 tensions globally.
- However, we ultimately continue to see tailwinds for Equities moving forward, including a sustained earnings recovery, broadening market leadership, a still relatively stable consumer base, healthy balance sheets and credit markets, and the potential for easier monetary policy later this year.
- The ballast of Fixed Income is helping to cushion the downdraft in Equities so far in August. We'd reaffirm our guidance within Fixed Income of slightly long duration and a preference for quality across the segments and curve.
- We believe many parts of the economy—the labor market, savings rate, interest
 rates, retail sales—are normalizing (slowing down back to trend) following the
 anomalies created by the pandemic. Given this normalization, it helps to step back
 and remember: no economy in the world is as large, diverse and wealthy as the U.S.
 economy.

It's early August, but the month is already living up to its reputation as being among the most volatile for the capital markets. In brief, here are six factors creating concerns and volatility in the markets:

Concern 1: The Fed is behind the curve in cutting interest rates in the face of weakening U.S. economic indicators, namely the jump in the U.S. unemployment rate to 4.3% in July as the economy added only 114,000 jobs last month. The jobless rate has climbed by nearly one percentage point in the past year and comes alongside other factors pointing to slower economic growth, like the downturn in manufacturing as measured by the Institute for Supply Management Purchasing Managers' Index (PMI), and rising credit card delinquencies. The fed funds futures market is now pricing in a 75% probability of a 50 basis point (bps) cut in September and a 50% probability for another 25 bps in November.

Concern 2: That U.S. and Chinese consumers are pulling back and retrenching, undercutting the twin engines of global consumption since the U.S. and China, combined, account for a staggering 44% of global consumption, according to figures from the United Nations (UN). While Q2 U.S. earnings have come in solidly in most cases, one underlying theme from a number of firms has been flagging/weakening U.S. consumer demand amid

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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 higher quality U.S. Large- and Small-caps, and still favor a significant allocation to bonds in a diversified portfolio. Through these periods of episodic volatility, asset class diversification is working again when it is needed most.

View the CIO Asset Allocation Guidelines ► Listen to the audio cast ►

	CIO View			
Unde	weight	Neutral	Ove	weight
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^{*}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.

higher costs of goods and services. Both discretionary and non-discretionary spending in the U.S. have softened this year, prompting concerns that the almighty U.S. consumer, accounting for nearly 70% of U.S. gross domestic product (GDP), is set to roll over. While lower income households in the U.S. have pulled back on spending this year, the negative wealth effects from swooning U.S. Equities could cool spending among higher-income households in the months ahead, piling on more downside pressure on U.S. economic prospects.

Concern 3: The unwinding of the Artificial Intelligence (AI) trade as investors start to question the massive capital spending plans of Large-cap technology companies juxtaposed against when the transformational effects of AI will begin to pay off for technology firms and the economy in general. U.S. technology leaders have spent billions on the buildout of the AI infrastructure this year, and signaled to investors they were not done during the Q2 earnings calls. The messaging didn't go down well, triggering a rethink and selloff along the technology complex as investors weigh the costs of the AI revolution versus expected returns. Not helping matters, the unwinding of the yen carry trade.

Concern 4: The unwinding of the yen carry trade¹ as the Bank of Japan (BoJ) raises rates much faster-than-expected and pulls back on bond buying. A hawkish BoJ is a clear signal that the decade of ultra-easy monetary policy is over in Japan; the yen has surged by about 12% since July 10, undermining the popular yen-funded carry trade among investors. Meanwhile, as a funding currency, the yen has helped fuel and fund demand for U.S. technology stocks—ergo, the unwinding of the yen carry trade has filtered into the downdraft in U.S. big technology. It's also hammered the technology-heavy indexes of Taiwan and South Korea—technology makes up 78% of the MSCI Taiwan Index and nearly 50% of the MSCI South Korea Index.

Concern 5: That the U.S. election will be tighter than originally thought, given that Vice President Kamala Harris, not President Biden, has emerged as the Democratic nominee. Prior to President Biden stepping aside, the markets grew comfortable with the notion that former President Donald Trump would be re-elected president in November, taking out the drama and uncertainty of the November vote. The script has been flipped, however, with the unexpected turn in the Democratic ticket. At this point, various polls point to a very tight race for the White House, which is expected to add to market volatility between now and election day.

Concern 6: That rising geopolitical tensions in the Middle East—pitting regional heavyweights Israel vs Iran—boil over, sparking a greater regional conflict that imperils a large share of the world's oil supplies. The markets have come to discount geopolitical risks in Ukraine, the Middle East and the South China Sea, although sentiment can quickly turn negative and add to market gloom/volatility with each new incident of violence.

Finally, from a market structure perspective, if we had to add a seventh concern, it would be that the extended trade of low volatility in both Equities and Fixed Income is forcefully being unwound, given the massive spike in the fear gauge—Chicago Board Options Exchange (CBOE) Volatility Index (VIX). With the VIX rising to levels last experienced during the onset of the pandemic in a matter of days, overly exposed investors to low asset class volatility through large liquid mega capitalization stocks may be forced to liquidate. This could add further pressure to stock indexes in August.

Where do we go from here?

Given all the moving parts of the moment, we expect the U.S. and global markets to remain volatile and choppy over the near-term. The ballast of Fixed Income is helping to cushion the downdraft in Equities so far in August. Asset class diversification is working again when it is most needed. We believe that Equities will climb that wall of worry once again as the concerns unexpectedly fade away. Our base case has not changed and is grounded in the following opinions:

¹ When investors borrow in a currency with low rates and invest in currencies with higher rate of return.

- Buy U.S. Equities on weakness given our view on still-healthy profit growth for the balance of this year and next
- Stay in the market—timing the market is a fool's errand
- Stay U.S.-centric—U.S. assets remain core holdings of portfolios
- U.S. elections matter, but economic growth and earnings matter more to returns
- The potential benefits of Al are still in front of us—owing to the coming boost in productivity and operating leverage, the corporate earnings backdrop remains favorable over the long run
- Our core belief that the U.S. economy and corporate America are very asset-light in a world in which investors have high and growing demand for assets can create an attractive risk/reward opportunity for long-term investors

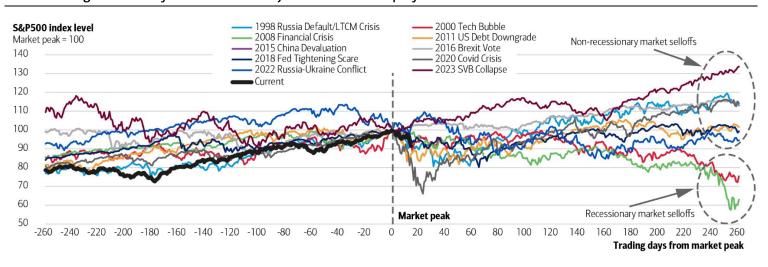
From a macro perspective, a U.S. recession remains a distant concern at this point. BofA Global Research is not forecasting a recession. We believe many parts of the economy—the labor market, savings rate, interest rates, retail sales—are normalizing (slowing down back to trend) following the anomalies created by the pandemic.

In addition, we believe corporate earnings remain healthy, likely to grow 10.5% this year.

And finally, during times of market spasms, it helps to step back and remember that no economy in the world is as large, diverse and wealthy as the U.S. economy. Episodes of market volatility have been typically followed by resets and an upward grind in Equities. This time, we believe, will be no different.

Investors have experienced several event-driven market selloffs over recent decades. The deepest and most protracted were the 2000 technology bubble and the 2008 Global Financial Crisis (GFC), both of which were accompanied by recessions. But when the economy has not entered a recession, the equity market has typically regained its crisis peak within a 12-month period (Exhibit 1).

Exhibit 1: August Volatility in Context: 10 Major Event Driven Equity Selloffs.



Source: Chief Investment Office, Bloomberg, Data as of August 5, 2024. It is not possible to invest directly in an index. Past performance is no guarantee of future results.

CIO INVESTMENT DASHBOARD AS OF AUGUST 6, 2024

We continue to see crosscurrents in the market landscape and expect that a volatile environment will persist. While valuations for U.S. Equities remain elevated relative to long-term averages, with the S&P 500 forward price-to-earnings (P/E) ratio hovering around 20.0x, earnings are becoming more supportive with consensus estimating annual earnings growth of 10.5% for 2024, according to FactSet. As short-term exposures are rebalanced, long-term investors should consider using market volatility and weakness 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:

Implication for Equities					
Factor	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 5.1% and 10.5%. Revenue growth for Q2 is expected to be 5.3%, compared to an expansion in Q1 of 4.3%. Profits for Q2 are anticipated to have grown by 11.8%, after a Q1 result of 5.9%. Meanwhile, according to BofA Global Research, the three-month average of the Global Earnings Revision Ratio stands above its long-term average. Showing a hint of recent softness, the number of upgrades to profit estimates surpasses downgrades in 6 of 20 countries and in 2 of 16 tracked industries.			
Valuations	O	The S&P 500 P/E ratio (next 12 months) stands at just over 20.0x, above its long-term average. This headline measure suggests that U.S. Equities remain expensive, although relative discounts can be found in areas like Small-cap and Value.			
U.S. Macro	— O	Following an expansion of 2.5% last year, growth in real GDP for the first half of this year has cooled to an average of 2.1% at a seasonally adjusted annual growth rate. Excluding volatile measures in trade and inventories, final sales to domestic purchasers averaged a solid 2.6%, from 2.3% last year. Recent data suggests a more apparent pace towards normalized economic growth. BofA Global Research expects GDP growth of 2.5% for Q3 and 2.7% for all of 2024.			
Global Growth	O	The global economy has generally shown resilience in the face of diverse headwinds. Bolstered by the services sector, growth in the euro area has stabilized in the first half of the year. A curbed cooling of inflation has allowed for a slight loosening of monetary policy, amid an overall tightening fiscal stance. Meanwhile, the fallout of regional parliamentary elections has raised political uncertainty. In China, officials have taken and vow more measures to help combat continued economic malaise. 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 3.2%, 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	→	In July, the Federal Open Market Committee (FOMC) held steady its policy interest rate. Chairman Jerome Powell emphasized a greater balance of risks between the Fed's inflation and employment mandates, raising anticipation of a cut occurring in September. Influenced by recent economic data, market expectations call for between four and five cuts of 0.25% this year. BofA Global Research now expects a cut in September and another in December, which would take the present target range of 5.25%-5.50% to 4.75%-5.00% by the end of the year.			
Fiscal Policy	O	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. This year in March, a \$1.2 trillion spending package was authorized, avoiding a government shutdown, and keeping federal agencies funded until October. A tax bill that aimed to retroactively enhance the child tax credit while liberalizing certain corporate tax provisions failed to garner enough votes in the Senate, effectively suspending negotiations.			
Corporate Credit		While generally reflecting lessened concern about an economic slowdown, U.S. High Yield (HY) and Investment grade (IG) credit spreads have recently exited the upper bound of ranges established this year, suggesting a tightening of financial conditions at the margin.			
Yield Curve	O	Inversions, whereby longer-dated yields are below shorter-dated ones, are normalizing in the 2/10s and 2/30s segments but remain in place in the fed funds (FF)/10s and 3-month/10s sections. These shifts suggest increased near-term economic risk, as well as a heightened anticipation of policy interest rate cuts in the future.			
Technical Indicators	0	The S&P 500 remains above its 200-day moving average, which is also in an uptrend. Measures of market breadth, such as the percentage of New York Stock Exchange stocks closing above their 200-day moving average and the cumulative advance/decline indicator, have shown marginal improvement.			
Investor Sentiment	→	According to the American Association of Individual Investors, bullish sentiment continues to outweigh bearish sentiment. Yet the CBOE VIX has spiked to its highest level since the coronavirus pandemic in 2020, above its year-to-date (YTD), 12-month and long-term averages. This suggests heavy demand for hedges against volatility in the S&P 500. Cash levels in institutional portfolios signal "neutral," according to the BofA Global Research Fund Manager Survey. The BofA Bull & Bear Indicator is also flashing a neutral signal at 6.6.			

Source: Chief Investment Office.

EQUITIES

We are slightly overweight Equities: The last several weeks have been turbulent for Equity markets, and the potential for episodic volatility persists amid softening economic data, elevated geopolitical risk, carry trade and crowded positioning unwinding and the upcoming U.S. presidential election. However, we ultimately continue to see tailwinds for Equities moving forward, including a sustained earnings recovery, broadening market leadership, still relatively stable consumers, healthy balance sheets and credit markets, and the potential easier monetary policy later this year.

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. U.S. Large-caps have not been exempt from recent high velocity rotations and market weakness, however, our view remains positive on strong fundamentals and the ability to produce healthy shareholder payouts. Small-caps recently gave back some of July's gains amid weaker economic data and portfolio derisking, but we maintain a slight overweight considering expectations for solid economic growth, a broadening profits cycle, lower costs of capital and a potentially favorable election year backdrop.

We continue to incorporate cyclical exposure in our sector views by maintaining overweight allocations to areas like Energy, Consumer Discretionary and Industrials. 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 Al-focused semiconductor technology that is increasingly power hungry have come under pressure recently but could drive multiyear demand for select cyclical stocks. We continue to emphasize Healthcare to reflect a balance between Value and Growth, low positioning and negative sentiment coming out of 2023, and our preference for quality at a reasonable price. We maintain overweight exposure to Energy for strong free cash flows (FCF), capital return to shareholders, seasonal strength and as a hedge for energy security, inflation reaccelerating and geopolitical tensions. Energy remains the cheapest sector on valuation metrics and can provide some attractive FCF yields. We remain cautious toward Consumer Staples where some consumers are trading down for better pricing and value. The picture for Utilities is mixed, driven by the higher cost of capital that could delay some renewable energy projects, but on the other hand, the trends in Al and data centers could drive increased power demand in the coming years. 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 and crowded positioning post-strong outperformance. We deemphasize Materials as demand slows, supplies increase, and pricing power remains questionable. With interest rates 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 weaker trends in other areas like CRE. We remain neutral Financials, as higher interest rates and higher capital reserves could increase volatility, but valuations are attractive, interest rate outlooks are moving lower on expectations for Fed rate cuts and banks re-rated in 2023. Risks are declining for higher cost of deposits at banks and higher cost of capital for real estate companies as interest rates move lower.

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 Al and related investments still have long-term momentum, the recent reversal in mega-cap Growth stocks acts as a reminder to avoid overexposure. Meanwhile, Value continues to trade at a relative discount to Growth and may benefit from lower interest rates later this year. 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, particularly after the recent market selloff, but Fed rate cuts are 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. Growth in the heavyweight China market is likely to remain soft on a protracted basis, given structural weakness in the construction sector and constraints on the Technology sector from a tighter domestic regulatory environment and global export controls. Stronger domestic demand in the broader Asia-Pacific region should help to offset external weakness from China exposure. 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 Israel-Hamas 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 UN, and ongoing convergence with

EQUITY WATCH LIST

- Heightened geopolitical risk and conflict in the Middle East
- Inflationary pressures are moving lower but remain above the Fed's target level
- Economic data for production, labor, consumer expectations, and credit and liquidity conditions
- Progression of earnings estimates amid margin pressures
- Reorganization of global supply chains and U.S.-China relationship
- Pressures within the Office segment of Commercial Real Estate (CRE)
- A sustained broader rotation that favors Small-caps, cyclicals and Emerging Markets (EM)
- Shifting expectations surrounding the outlook for Fed rate cuts

developed economies should support GDP growth and corporate earnings over the longer term. We favor active management² 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: Valuations have dropped following the recent market selloff, but 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-budgetdeficit European Union (EU) countries and increased political uncertainty following 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 maintain a neutral view on Japanese Equities. Unwinding of the yen carry trade and uncertainty over future BoJ interest rate and intervention policy should make for further volatility, though sustained positive inflation and corporate reforms 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 slightly overweight Equities currently. Yields moved lower last month, as economic and inflation data were weaker-than-expected. Throughout the month, Chair Powell had communicated a fairly dovish view of inflation and the likely path of rates over the next 12 months. He solidified that view after the FOMC meeting on July 31 when he prepared the market for a rate cut in September if August's data confirmed the disinflationary trend. Slumping equity markets then sparked a massive "flight to quality" rally in high-quality Fixed Income, exacerbating the move lower in yields.

These sharp rate moves confirm our intuition; at these yields—and at this part of the interest rate cycle—high-quality Fixed Income may be a good diversifier for macro and Equity risk in a portfolio, in our opinion, and serves an important role in diversified portfolios.

We are therefore slightly overweight on U.S. governments. Nominal and real rates are still reasonably attractive 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—have moved lower but are still 1.75% to 2% across the curve, the high end of the range since 2008. Substantially positive yields above inflation on U.S. government-guaranteed securities is a welcome relief for savers after years of financial repression. We still suggest a slightly long-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. However, given the sharp move lower in yields, the market may get ahead of itself on expected Fed rate cuts; we will carefully monitor our duration positioning in light of recent moves.

We remain slightly underweight both Investment-grade Corporates and High Yield. While we saw significant repricing wider in IG and HY during early August, credit spreads still screen rich, with little room for upside, particularly if one assumes that economic data could begin to confirm weaker trends. Over the last 12 months, credit markets have fully embraced the improved macro and technical backdrops. Despite recent widening, valuations, with IG at around 105 bps and HY at around 375 bps, continue to reflect a healthy growth picture in addition to relatively strong demand despite the fact that yield buyers could step back, as IG yield is now trading inside of 5% for the first time since early 2023. We expect that primary market volumes will slow dramatically through the balance

FIXED INCOME WATCH LIST

- Resilient or resurgent inflation
- Increased risk aversion or recessionary risk via spreads, yields or new issue activity
- Signs of significantly negative Fixed Income fund flows
- Dislocations in CRE markets
- Potential credit deterioration if economic weakness

² Active management seeks to outperform benchmarks through active investment decisions such as asset allocation and investment selection.

of August, and that a key test for the market and clearing levels will come later in September as new issue volumes accelerate—creating an additional source for near-term spread volatility.

To be clear, we don't see a risk or catalyst for spreads to move meaningfully wider over the short term, and we are hesitant to call one weak data point (i.e., July nonfarm payrolls) a paradigm shift in the forward outlook/trend. 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 (albeit maybe slowing), 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 105 bps or less, IG underperforms duration-matched Treasurys 12 months forward.

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

Credit losses in IG are generally minimal and not a large component of spreads or yields, but the same cannot be said in HY. Fortunately, HY yields-to-worst—while volatile of late—remain around 7.5%. Valuations provide modest compensation for credit losses and suggest reasonable returns over medium-to-longer time frames. Spreads, however, are currently in the 375 bps range, below the 650 bps to 800+ bps level seen in many recessions, and, similar to IG, fully reflect a soft/no-landing outcome and a moderation or improvement in default losses over the next 12 months. We therefore maintain our slight underweight positioning and see better risk-adjusted opportunities in other asset classes such as Equities. Within HY allocations, we prefer a balanced allocation between secured floating-rate leveraged loans and unsecured HY bonds.

We are slightly underweight both U.S. Investment-grade Tax Exempt and U.S. High Yield Tax Exempt: Muni valuations remain somewhat richer than average for longer term municipal bonds, as seasonally high redemptions in the June to August period drive a negative supply environment. We expect technical factors to weaken in September, with higher new issuance and lower redemptions providing muni investors a better entry point at that time. 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 during a potential economic recession. However, with over 20,000 municipal issuers, there are certainly credit outliers to the downside, and some muni subsectors face particular challenges. For example, demographic shifts are causing fewer applications to colleges and universities, and higher labor costs are adversely affecting hospitals and other healthcare institutions. Therefore, credit selection will remain an important determinant of portfolio returns.

We are slightly overweight Mortgage-backed Securities: Aiming to bring down stubbornly high inflation, the Fed has 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 70 bps range in October 2023 before retracing back to the current mid-40s to mid-50s bps range. 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 lengthened. 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: While YTD performance has generally been strong from an alpha³ generation perspective, Hedge Funds (HF) have encountered more challenging conditions in recent months. As volatility picked up in July and into August, Equity Hedge (EH) strategies experienced multiple degrossing episodes, with exposures to mega-cap Technology names being trimmed and shorts being covered (particularly index products).⁴ Macro HF strategies, meanwhile, have been front and center in the large market rotations in August, with stop losses being triggered in certain crowded trades (including carry trades and distribution trades around FOMC and European Central Bank policy paths) and trend-following strategies beginning to flip positioning (e.g., commodities trading advisor moving-average levels in Equities likely began crossing in the recent market moves). Notably, other HF strategies, including Event Driven and even quantitative equity market neutral, appear to have been more insulated in the August volatility. Importantly, most HFs we have anecdotally surveyed have taken wait-and-see approaches to the recent moves, opting to stay disciplined, focus on high conviction positions for potential adds, and not overreact while respecting the market.

Private Equity: Private Equity (PE) notched modest gains of approximately 1%-2% in Q1⁵, 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 modestly positive PE performance in Q2 in the low 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 GFC.⁶ Thematically, PE strategies have been contending with a slower velocity of capital recycling, though first half of the year has shown a modest pickup in exit activity of 15% year-over-year⁷. With the prospect of lower interest rates coming into focus, 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 high interest rates for the time being, we see a potential improvement in the relative outlook for PE strategies on the horizon.

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; short alpha improving after difficult start last year; low net better positioned if Equities sell off

Bear Return of concentrated and beta**-driven market case would limit opportunity set

Event Driven

Bull	creating potential for distress; merger deal
case	spreads moderately wide and higher risk-free
	rate positive for merger arbitrage
Bear	Distress may not materialize in size or may be
case	delayed; low mergers & acquisition volumes and
Lase	high regulatory uncertainty

Relative Value

Bull	Still in world of higher yields; economic resiliency
case	supportive of credit; decent dispersion in HY
Bear	Spreads not attractively wide; potential increase
case	in credit risk and defaults in coming year

Macro +

Bull	Possible "higher-for-longer" rate regime could create cross-asset volatility in rates and foreign
case	exchange; inflation stickiness could exacerbate macro volatility
Bear case	Coordinated Central Bank rate cutting could limit dispersion; choppy markets difficult for trendfollowing: interest rate volatility declining

Private Equity

Buyout

	current virtuges likely attractive for long term
	given lower valuations and profitability focus;
Bull	within PE, Secondaries benefiting from secular
case	growth and institutional investors seeking
	liquidity; deal activity likely to surge if rates and
	inflation fall
Rear	Higher rates require larger Fourty investments.

Current vintages likely attractive for long-term

Higher rates require larger Equity investments deal and exit activity still low

Venture/Growth

Bull case	Significant correction in the last two years benefits capital providers; Al could drive investment supercycle; early VC stages more insulated than later stages; falling rates would likely be tailwind
Bear case	Ex-Ál VC market still challenged; VCs focused on supporting portfolio companies; initial public offering drought continues; timelines extended plus increased risk of dilution; higher rates drag on unprofitable companies

Special Situations

Bull	increase pressure on levered balance sheets; RE-
case	adjacent opportunities; companies seeking
	creative financing before maturities
Bear	Rate cuts could smooth out credit cycle, keeping
case	it more average

Default rates rising; "higher-for-longer" would

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 likely to rise and lower-quality most at risk; regulatory scrutiny; public leveraged credit competition; significant capital allocating to PC

^{**}Beta is a measure of a stock's volatility in relation to the overall market. **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.

³ Alpha is the excess return of an investment relative to the return of a benchmark index.

⁴ BofA Capital Strategy Group, Morgan Stanley Prime Brokerage, Goldman Sachs Prime Services. As of August 5, 2024

⁵ Cambridge Associates, PitchBook, Inc. As of March 31, 2024.

⁶ PitchBook, Inc. As of March 31, 2024.

⁷ PitchBook, Inc. As of June 30, 2024.

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 1.3% in Q1, bringing the 1-year internal rate of return to 8.9%8. Other PC indexes peg Q1 performance north of 3%9. While PC has remained resilient in the face of skepticism from market commentators, dynamics in Q1 and continuing into Q2 have led to declining yields and spreads. Potential interest rate cuts could 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. PC spreads in fact tightened in O2 amid stiff competition from public leveraged-credit markets, driving yields lower by roughly 30 bps to approximately 11.4%¹⁰. Given high starting yields, it is still possible to pencil out mid-to-high single digit returns over the next twelve 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. This dynamic has contributed to the narrowing of PC spreads in the first half of the year, both relative to base rates as well as relative to broadly syndicated loans. Importantly, a pickup in PE deal activity would mitigate the current imbalance and restore the structural thesis of continued PC growth. The substantial \$1.8 trillion¹¹ 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 returns in Q1 and Q2 were still moderately negative. Cap rates have similarly been relatively steady in the first half of the year, though with variations across sectors and geographies 12. PRE entered the year with optimism that the asset class would bottom out and find market clearing prices. The stickiness of interest rates during the first half likely delayed the beginning of a recovery, but recent rate declines in August could improve the outlook. PRE performance momentum and fair value estimates also suggest a bottom may be in sight. Accordingly, deal activity has remained anemic. Market participants are still hoping for a pick-up in activity in the second half of the year, driven by clarity on the interest rate picture and improving return expectations.

Overall, PRE values have declined 5% in the past year and approximately 20% from the recent peak, ¹³ 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. Publicly listed real estate investment trusts (REITs) have traded at smaller discounts relative to net asset value this year compared to last, and other estimates of fair value (including relative to bonds) suggest PRE valuations are not meaningfully rich or cheap overall, though with significant variation by sector.

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. New capital deployment in general, and PRE lending strategies in particular, look interesting. For the longer term, PRE continues to make sense as a strategic allocation given the potential diversification benefits and income features.

Real Assets

Bull

Private Real Estate

Supply/demand imbalance in Residential driving secular opportunities; sectors like Data Centers rising; transaction cap rates slowly reflecting lower valuations; lower mortgage rates may case unlock markets; lending strategies offering compelling profiles; distressed/opportunistic could emerge given stress

Appraisal cap rates slower to fully adjust; Bear transactions remain depressed; pressure rising in value-add multi-family financed with floatingrate debt

Infrastructure +

Within RE, Infrastructure to continue benefiting from fiscal spend; large need for energy Bull transition and upgrading aging infrastructure; case potential to be inflation beneficiary if new resting rate structurally higher Higher rates challenging project financing; lower Bear inflation could mitigate relative attractiveness

Tangible Assets

Geopolitical risk could spill over and pressure Bull commodities supply; macro factors including currency could support oil prices; potential for case diversification and inflation hedge Muted global growth may reduce demand Bear support; increasing 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.

⁸ Cambridge Associates, Refinitiv EIKON. As of March 31, 2024.

⁹ Lincoln International. Lincoln Senior Debt Index. As of March 31, 2024.

¹⁰ BofA Global Research. As of June 30, 2024.

¹¹ Pregin. As of December 31, 2023.

¹² Green Street, "Cap Rate Observer". As of June 13, 2024.

¹³ Green Street's Commercial Price Index. As of July 5, 2024.

Infrastructure: Within RE, 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, Private Equity 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 Tech over the last three years ¹⁴.

Tangible Assets: Global growth anchors demand for commodities and has recently lost momentum as U.S. and global economic data have consistently missed to the downside. The J.P. Morgan Global Manufacturing PMI dropped back into contraction territory in July. The stable but weak global demand backdrop is reflected in industrial metals, where aggregate indexes have been under pressure the last few months and flattish over the last two years. We believe global growth and commodity demand will remain muted, but geopolitical risk and geoeconomic maneuvering are wild cards for energy commodity prices. Looking forward, anticipated 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 gold prices. We continue to believe gold is most effectively implemented as a strategic diversifier.

With the Fed eventually shifting to an easier monetary policy stance as growth slows, 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 Preqin. Infrastructure includes Industrials, Energy, Utilities, Raw Materials and Natural Resources. As of August 5, 2024

MACRO STRATEGY

- In the U.S., macro momentum is slowing, and economic data continue to miss to the downside. The unemployment rate rose to 4.3% in July, while job growth remained weaker than expected. The July ISM manufacturing index surprised to the downside, falling to 46.8 (below 50 indicates contraction) with weak orders and employment components. Weekly layoffs data are also ticking higher.
- The profits cycle for large U.S. companies and massive fiscal stimulus remains supportive of economic growth and risk-assets in the near term. The outlook for monetary liquidity is less certain over the rest of the year and has been contracting the last few weeks.
- Low financial obligations relative to firm nominal personal income gains and rising net worth continues to support resilient consumer spending, even as the labor market softens.
- J.P. Morgan Global Manufacturing PMI continues to suggest global cyclical momentum remains weak and is reflected in downward pressure on commodity prices.

ECONOMIC FORECASTS (AS OF 8/2/2024)

	Q1 2024A	Q2 2024A	Q3 2024E	Q4 2024E	2024E	2025E
Real global GDP (% y/y annualized)	-	-	-	-	3.2	3.3
Real U.S. GDP (% q/q annualized)	1.4	2.8	2.5	2.0	2.7	2.2
CPI inflation (% y/y)	3.2	3.2	2.7	2.5	2.9	2.2
Core CPI inflation (% y/y)	3.8	3.4	3.2	3.1	3.4	2.7
Unemployment rate (%)	3.8	4.0	4.0	4.0	3.9	4.1
Fed funds rate, end period (%)	5.33	5.33	5.13	4.88	4.88	3.88

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 August 6, 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 2024 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 2024 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.

2024 EPS	EPS Forward P/E (Next 12 months)								
	17.0x	18.0x	19.0x	20.0x	21.0x				
\$265	4,505	4,770	5,035	5,300	5,565				
\$255	4,335	4,590	4,845	5,100	5,355				
\$245	4,165	4,410	4,655	4,900	5,145				
\$235	3,995	4,230	4,465	4,700	4,935				
\$225	3,825	4,050	4,275	4,500	4,725				
\$215	3,655	3,870	4,085	4,300	4,515				
\$205	3,485	3,690	3,895	4,100	4,305				

For illustrative purposes only. Source: Chief Investment Office as of August 6, 2024.

CIO ASSET CLASS VIEWS AS OF AUGUST 6, 2024

	CIO View			w		
Asset Class	Underw	eight	Neutra	al Overweigl	nt 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	•	•	0	• •	We have a slight preference for Value over Growth, given better absolute and relative valuations. We believe portfolios	
U.S. Large-cap Value	•	•	•	•	should incorporate both Growth and Value factors as appropriate.	
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.	
U.S. Small-cap Value	•	•	•	•	consumer.	
International Developed	•	0	•	• •	International Developed Equities valuations have dropped following the recent selloff, 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	•	•	0	• •	We are neutral EM Equities overall with regional markets likely to be driven by relative exposures to weaker China growth, the ongoing Russia-Ukraine conflict and natural resource prices. Valuations appear attractive, particularly after the recent selloff, 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	•	0	•	• •	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.	•	•	0	• •	Domestic demand at risk from still-high mortgage rates, alongside uncertainty over fiscal policy following general election. Withdrawal from EU single market remains a negative for medium-term growth with limited changes to UK-EU trade relations expected under new government.	
Japan	•	•	0	• •	Unwinding of yen carry trades and uncertainty over future BoJ interest rate and intervention policy should make for further volatility. Sustained positive inflation and official efforts to increase corporate returns to shareholders remain fundamental supports for valuation.	
Pac Rim*	•	•	0	• •	Regional activity to be dampened by exposure to weaker Chinese growth but offset by relative strength in domestic demand. Large weighting in Financials increases vulnerability to any potential broadening in banking sector stress.	
Global Fixed Income	•	0	•	• •	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. Slightly long-duration 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 mid-40's (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	•	0	•	• •	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	•	•	0	• •	International rates markets have become significantly more attractive as global Central Banks raise rates to fight inflation, no longer trading at a significant discount to the U.S. except in Japan where the BoJ is still keeping longer-term rates artificially low.	
High Yield	•	0	•	• •	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	•	O	•	• •	Muni valuations remain richer than average, as seasonally high redemptions, in the June to August period drive negative supply environment Fundamental conditions remain generally favorable for state and local government bonds. However, investors should be selective in certain muni subsectors that face particular challenges, such as private higher education (fewer applications) and health care (labor shortages/higher supply costs).	
U.S. High Yield Tax Exempt	•	0	•	• •	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.	

^{*} Pacific Rim refers to the geographic area surrounding the Pacific Ocean. The Pacific Rim 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 AUGUST 6, 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.

CIO View					
Sector	Underweig	nt Neut	ral Overv	weight	Comments
Energy	• •	•	0	•	Despite signs of slowing demand, we remain overweight the Energy sector for three key reasons: 1) Attractive valuation as the lowest valued sector in the S&P 500 on cash flows and earnings; 2) High FCF generation at current oil price levels and attractive FCF yields and; 3) The decline in Energy in 2023 combined with negative sentiment and low conviction for Energy provides an attractive hedge for energy security, inflation, disruption in energy production and geopolitical risks. OPEC+ extended their production cuts through the end of Q3 2024, and the decline in capital expenditures for long-cycle energy investments in recent years also supports Energy prices and stocks. Above-average energy prices combined with substantial cost-cutting initiatives and capital discipline over recent years built significant operating leverage into Energy companies. We also highlight higher cash returns to shareholders through base dividends, variable dividends, and stock buybacks. Longer term, secular headwinds still confront the sector, including the transition to clean energy, lower renewable energy costs and sustainability-focused by 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 moderating momentum.
Healthcare	• •	•	0	•	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 recently improved.
Consumer Discretionary	• •	•	0	•	With a resilient consumer, a strong job market and 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 are interest rates also moving lower, this is helping to improve consumer confidence. Consumer retail channels a 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 and momentum is slowing.
Industrials	• •	•	0	•	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. Aerospace is benefiting as well from the ongoing recovery in consumer and business air travel and a multiyear backlog of commercial plane orders to build and delayed deliveries. Potential improvements in the global capital expenditures cycle, including the normalizatio 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 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 Industrials, and near term the sector provides exposure to short-cycle/early-cycle areas. Valuation is slightly elevated, and momentum is neutral.

	C	IO View	ı	
Sector	Underweight	Neutral	Overweight	Comments
Information Technology	• •	0	• •	The Technology sector is neutral despite improvements in supply chains and Al-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 Al trends, software margins could continue to deteriorate, as Cloud consumption could potentially come under some pressure near term and is not immune to a macor 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 Al, 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 Al-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 broke down.
Communication Services	• •	0	• •	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 more 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 deteriorated over the last month.
Financials	• •	0	• •	We are neutral on the Financials sector but would note incremental fundamentals seem to be improving in some subsectors. U.S. banks collectively have experienced fairly stable deposits this year after an extensive period of outflows since peaking in April 2022. Depositors have sought the perceived "safety" of the biggest banks and the higher yield offered by money market funds. Funding pressure coupled with capital discipline has modestly tightened credit standards and slowed the pace of lending, but anticipated Fed cuts later this year would alleviate pressure on both fronts. Despite headwinds, bigger banks are better positioned than regional peers (especially regarding CRE exposure) and valuations still remain below the through-the-cycle median level which is supportive of additional merger & acquisitions activity. Risks to the downside appear balanced compared to potential upside for banks. Capital return will remain the cornerstone of the investment case for banks. Overall, the volatility of the Financials sector should improve with the recent addition of large e-payment and credit card networks that have been stable earnings compounders historically. We also favor life insurers, which gain significant tailwinds from higher interest rates with higher-yielding investment portfolios. Investment income accounts for roughly one-third of life insurance revenues. Given structural headwinds in property and casualty insurance, we prefer, for qualified investors, alternative asset managers, like PE, that consistently draw fund inflows, typically find their most lucrative investment opportunities in times of economic stress and maintain pricing power in management fees. Overall, valuation is attractive, and momentum stalled over recent weeks, but fundamentals won't markedly improve until rates move lower and until further clarity around regulatory capital requirements.
Real Estate	• •	0	• •	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 Fed rate cuts in the future 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 recently improved.
Utilities	•	•	• •	Utility investors continue to balance implications from a still-elevated cost of capital compared to the past decade with accelerating electricity demand forecasts driven by the AI boom, which are expected to drive a renewed push for investment in renewable energy and grid-hardening projects at utilities. Regulatory reviews are an important risk factor for the sector, and we note this risk is elevated in 2024 as state-level regulators have become increasingly sensitive to passing along increases to rate payers who are financially stretched by lingering inflation. 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. Utilities have provided greater balance and lower beta and helped diversify cyclical Equity exposure in portfolios. For the longer-term, we emphasize Utilities with growing renewable power generation from solar and de-emphasize ones that rely strictly on coal-power generation. Over the next decade, the IRA legislation provides a strong runway for future renewable energy investments and projects—though we expect noise about potential IRA repeal to dominate ahead of the November election, with potential for volatility among Utility stocks perceived as IRA "leaders." 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. Valuation is slightly elevated, and momentum recently improved as Utilities outperformed the broader market over recent weeks.

	(CIO View	ı	
Sector	Underweight	t Neutral	Overweight	Comments
Materials	• •	٠	• •	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 around 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, Al 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, and momentum recently declined.
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 new 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 rich and momentum improved over the last couple of weeks on market volatility.

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 AUGUST 6, 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 Al-enthusiasm, the next act for **Generative Al** is about adoption and deployment. The promise that Al 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 Al 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 Al 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.

MSCI Taiwan Index is designed to measure the performance of the large and mid-cap segments of the Taiwan market.

MSCI South Korea Index is designed to measure the performance of the large and mid cap segments of the South Korean market

Institute for Supply Management Purchasing Managers' and Manufacturing Index is a monthly indicator of U.S. economic activity based on a survey of purchasing managers at manufacturing firms nationwide.

J.P. Morgan Global Manufacturing PMI 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 (CBOE) Volatility Index (VIX) is a real-time market index that represents the market's expectation of 30-day forward-looking volatility.

Lincoln Senior Debt Index is a quarterly index that tracks the fair market value of 1,600 middle market, direct lending credit investments every quarter across approximately 175+ fund clients in the U.S. and in Europe.

Green Street's Commercial Price Index is a time series of unleveraged U.S. commercial property values that captures the prices at which commercial real estate transactions are currently being negotiated and contracted.

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Investing involves risk, including the possible loss of principal. Past performance is no guarantee of future results.

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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.

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