BANK OF AMERICA

CHIEF INVESTMENT OFFICE

# Viewpoint

## On The One Hand

May 2023

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

### IN BRIEF

- While the economy is slowing it is doing so in an organized fashion at this point. In addition, earnings have been better than expected, inflation is trending down, and the Federal Reserve (Fed) is expected to pause. However, regional banking instability, tighter financial conditions, heightened geopolitical risk, a declining money supply, and concerns regarding the debt ceiling dripping through all add to the nervousness overhanging the markets.
- We maintain a neutral view on Equities, as risks to economic growth and corporate profits remain skewed to the downside. The Fed is winding down its rate hiking cycle but will likely maintain its higher-for-longer stance, with BofA Global Research anticipating the first rate cut in March 2024.
- In Fixed Income, we continue to stick to a higher quality bias and are looking for opportunities to extend duration overall.

The overall environment can be characterized by a general slowing in the economy due to rolling recessions across housing, manufacturing, and the overbuilt high-growth, unprofitable areas. There are small strains developing in the jobs market, but they are not even close to widespread as yet. This is usually the last area for recession tendencies to show up. The leading economic indicators are negative, the yield curve is still inverted, but corporate earnings and the consumer are showing their resolve. China's reopening has been bumpy, but their own consumer is the engine of growth, and the mild winter in Europe continues to be additive to the global growth stage. Finally, the U.S. services sector is still working off the high consumer pent-up demand, but we are now just starting to witness some drags. The net summation is that "on the one hand," while the economy is slowing, it is doing so in an organized fashion at this point. In addition, earnings have been better than expected, inflation is trending down, and the Fed is expected to pause. This collective mix is keeping asset prices range bound just about everywhere with a slight recent uptrend.

Having said this, investors remain nervous and continue to beat the "bull" drum more in Fixed Income than Equities and are quite happy staying on the sidelines for now. Regional banking instability, tighter financial conditions, heightened geopolitical risk, a declining money supply and concerns regarding the debt ceiling dripping through all add to the nervousness overhanging the markets.

As far as markets are concerned, valuations in Equities have corrected some 20% since early 2022 but have risen back to slight premium levels this year as the higher-priced Technology sector led the recent uptick in equity markets. Short-term Fixed Income and cash yields are competitive with near-term equity returns, which should keep shorter-term money on the

### CIO ASSET CLASS VIEWS

This month, the Global Wealth & Investment Management Investment Strategy Committee did not make any tactical asset allocation adjustments. We remain neutral both Equities and Fixed Income, with a preference for U.S. Equities relative to International, and a preference for high quality Fixed Income. We expect this "grind-it-out", range-bound market environment to continue as we look ahead to the balance of the year.

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| | CIO View | | | | |
|---|---|---|---|---|---|
| Asset Class | Underweight | | Neutral | Overweight | |
| Equities | | | ● | | |
| U.S. Large-cap | | | | ● | |
| U.S. Mid-cap | | | | ● | |
| U.S. Small-cap | | | ● | | |
| International Developed | | ● | | | |
| Emerging Markets | | | ● | | |
| Fixed Income | | | ● | | |
| U.S. Investment-grade Taxable | | | | ● | |
| International | | | ● | | |
| Global High Yield Taxable | | ● | | | |
| U.S. Investment-grade Tax Exempt | | ● | | | |
| U.S. High Yield Tax Exempt | | ● | | | |
| Alternative Investments* | | | | | |
| Hedge Funds | | | | | |
| Private Equity | | | | | |
| Real Estate | | | | | |
| Tangible Assets / Commodities | | | | | |
| 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 multi-asset portfolio.

sidelines, in our opinion. Overall investor sentiment remains poor, which keeps markets from getting overly frothy across the board. Year-to-date (YTD) gains on the S&P 500 continue to be dominated by a handful of stocks, while the rest of the constituents struggle. This does not mean the broader market cannot advance from here, but it is something to be mindful of as we move through Q2.

S&P 500 corporate earnings could decline by around 10% this year to about $200 for S&P 500 but the latest trends are signaling this could be too light. We will watch margins, pricing power and volumes closely for any signs that the second half is more positive than originally expected. Stay tuned.

The bottom line is that we foresee a “grind-it-out” range-bound market continuing in the U.S. with a wait-and-see attitude from investors throughout this year. The debt ceiling concerns, office and commercial property worries, and geopolitical risks all continue to weigh on the market. Credit default swaps on one-year Treasurys have dramatically increased at the same time one-month Treasury bill yields relative to three-month yields have widened considerably. This concern is likely to keep a lid on near-term gains in risk assets post-earnings season.

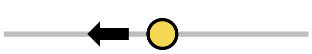
Dividend growth, diversification of Growth and Value, energy, infrastructure, robotics, life sciences and automation are all drivers of the next bull market, in our view. We continue to look for upgrade opportunities in small-caps and international later this year. The long-term bull market we expect is not likely to begin assertively until next year as earnings return to an uptrend. For now, we remain neutral across the asset classes. Furthermore, if the broader backdrop heads lower due to deteriorating liquidity and/or surprises to the downside in earnings in the next few months, we are prepared to become more defensive.

In Fixed Income, we continue to stick to a higher-quality bias and are looking for opportunities to extend duration overall. As the Fed pauses and inflation comes down, we expect the 10-year yield to fall to around 3.25% by year-end. Although we believe credit spreads are too narrow at current levels, we do not foresee major widening. A more normal yield curve could be the surprise for next year. We have time for that, in our opinion.

## CIO INVESTMENT DASHBOARD AS OF MAY 2, 2023

A global growth slowdown is continuing to unfold, with economic data broadly weakening, global central banks continuing to tighten policy to combat inflationary pressures, and liquidity conditions and credit availability tightening. In the U.S., inflation has moderated from the peak in mid-2022 but is still well above the Fed’s 2% target. U.S. corporate profit trends are less supportive, with consensus now estimating annual earnings growth of 1.3% for 2023, according to FactSet. Financial conditions remain generally tight, reflecting investor worries over the prospect of an economic slowdown. Absolute valuations for U.S. Equities have recently risen with the S&P 500 forward price-to-earnings (P/E) ratio now hovering above its long-term average. Investor sentiment remains generally bearish. We continue to believe that market volatility will be elevated for most asset classes and expect the “grind-it-out” environment to persist for markets in the near term before stabilizing later this year. In our view, asset allocation decisions could be more frequent this year as we move through the final phase of the reset period.

**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, actual S&P 500 revenue and earnings growth in 2022 was 11.1% and 3.9%, respectively. Accordingly, this year, consensus expects growth of 2.3% and 1.3%. In Q1, estimates call for sales growth of 3.3%, but profits decline of 3.2%, on a year-over-year (YoY) basis. Profit estimates for this year continue their decline. According to BofA Global Research, subdued expectations characterize the Global Earnings Revision Ratio. Improving slightly, analyst earnings downgrades outnumber upgrades in 16 of 20 countries. Still, this negative balance exists in 15 of 16 tracked industries. |

| Factor | Implication for Equities (Negative / Neutral / Positive) | CIO View |
|---|---|---|
| **Valuations** | | U.S. Equities are still not cheap given the cloudy earnings picture. The S&P 500 price-to-earnings (P/E) ratio (next 12 months) is around 18.3x, up from 16.7x at the end of 2022. Elevated interest rates will likely continue to suppress the relative appeal of Equities versus Fixed Income. |
| **U.S. Macro** | | Real gross domestic product (GDP) grew by 1.1% in Q1 2023 at a seasonally adjusted annual growth rate, after growth of 2.6% in Q4 2022. A large decline in inventories masked robust consumption, which rose by its quickest rate since June 2020. Yet this strength was front-loaded, softening in February and March. Investment contracted for a fourth straight quarter. On the demand side, a strong labor market and a cushion of savings have helped support consumer spending. Less clear is their durability in the face of a burdensome cost of living and rising interest rates. BofA Global Research expects GDP growth of 1.0% for 2023. |
| **Global Growth** | | Elevated inflation and monetary tightening by global central banks are raising uncertainty over the trajectory for global economic growth. Sparked by the conflict in Ukraine, inflation in Europe has recently been fueled by resilient business activity, raising expectations for tighter monetary policy. Meanwhile, authorities in the U.S. have taken steps to ease bank-related stress, which has weighed on credit creation. In China, measures of economic growth are recovering after the government shifted away from restrictive economic policies late last year. Overall, the global economy was expected to have expanded by 3.4% in 2022. This year, it's expected to grow by 2.7%, according to BofA Global Research. |
| **U.S. Monetary Policy / Inflation** | | BofA Global Research anticipates a terminal Federal Open Market Committee (FOMC) target range of 5.00% to 5.25%. Shifts in market expectations for its future trajectory may reflect resilient inflation data versus expectations for a sharper decline later, brought by a recent bout of financial instability. The pace of the balance sheet runoff continues, with the cap at $95 billion per month in Treasury bonds and MBS. |
| **Fiscal Policy** | | According to the Brookings Institution, the fading of pandemic-era fiscal support, which totaled nearly 31% of GDP, has been dragging on U.S. economic growth. Since that initiative, a $280 billion plan to strengthen the country's industrial base, by investing in semiconductor production and research and development of new technologies, has been authorized. Also approved was the 2022 Inflation Reduction Act. Among other initiatives, it provides nearly $370 billion over 10 years for energy security and climate change projects. The Treasury Department has employed temporary measures to postpone breaching the federal debt limit as policymakers negotiate to raise it. Certain segments of the bond market have begun to reflect uncertainty over the outcome of the talks. |
| **Corporate Credit** | | High Yield (HY) and Investment-grade (IG) credit spreads have vacillated this year. After declining in February to their lowest level since April 2022, they have widened somewhat, due to worries that financial system stress may tighten credit markets. Tighter financial conditions generally reflect investor worries over the prospect of a notable economic slowdown. |
| **Yield Curve** | | Inversions, whereby longer-dated yields are below shorter-dated ones, exist across the Treasury yield curve. This includes the 3-month/10s and the fed funds/10s segments. The 2s/10s spread remains deeply inverted, though by a lesser magnitude, as anticipation builds for an end to the interest rate upcycle. Overall, the Treasury market suggests a higher probability of a recession in the U.S. |
| **Technical Indicators** | | The Chicago Board Options Exchange (CBOE) Volatility Index (VIX) is close to the 16 level, below historical averages. Measures of market breadth, such as the percentage of NYSE stocks closing above their 200-day moving average and the cumulative advance/decline indicator, show relative weakness. The BofA Global Breadth Indicator is signaling "neutral." |
| **Investor Sentiment** | | Reflecting a larger share of neutral-minded investors, bearish sentiment has declined some, though optimism hasn't risen much, according to the American Association of Individual Investors. Moreover, BofA Bull & Bear Indicator now signals "neutral," at 2.9. However, institutional portfolio higher cash levels continue to signal a tactical contrarian "buy" signal, according to BofA Global Research's Fund Manager Survey. |

Source: Chief Investment Office.

## EQUITIES

**We are neutral Equities:** We maintain a neutral view on Equities, as risks to economic growth and corporate profits remain skewed to the downside. The Fed is winding down its rate hiking cycle but will likely maintain its higher-for-longer stance, with BofA Global Research anticipating the first rate cut in March 2024. We expect stability in risk assets to come with peak labor market weakness, a stabilization in earnings downgrades, a spike in volatility and core inflation moving lower toward the Fed's target. Since these conditions are likely to materialize over the next few months, a defensive and high-quality bias is warranted in the near term. We favor U.S. Equities on a risk-adjusted basis for now, but as interest rate differentials narrow and the dollar weakens, non-U.S. markets could see new tailwinds. We remain slightly underweight European Equities and International Developed Market Equities.

**We are slightly overweight U.S. Equities overall:** The U.S. currently remains our preferred Equity region relative to the rest of the world, given relatively stronger balance sheets on aggregate, healthy shareholder payouts and better consumer fundamentals. We maintain a slight overweight to U.S. Large-caps given our higher-quality bias, with a preference for Value over Growth. We remain neutral Small-cap Equities, which have lower-quality balance sheets, rising cost of capital, a higher proportion of non-earning companies within the index, and less financial flexibility to generate shareholder payouts, which can be detrimental during an economic slowdown. In our view, Small-caps could be leaders of the next decade but need to stabilize in 2023, and margins need to expand relative to Large-caps to outperform consistently.

We expect earnings per share (EPS) for the S&P 500 to decline in 2023 by around 10% to $200 on economic weakness and margin pressures. In our view, the analyst community has yet to fully discount a downturn in the profit cycle for 2023 earnings estimates. Once the focus shifts to weaker fundamentals for earnings, we believe valuation multiples could see another leg lower from current levels. S&P 500 valuations have risen from 16.7x at the end of 2022 to around 18x today. Additional near-term risks for Equities come from a global slowdown in growth and profits, persistently elevated levels of inflation, higher interest rates, a Fed policy error, the U.S. debt ceiling and tightening credit conditions. Given these factors, we expect volatility to continue in the near term and maintain a neutral stance.

Our "on guard" stance continues to tilt more defensive. From a sector perspective, we remain overweight Healthcare to reflect our preference for quality at a reasonable price. We are slightly overweight Energy, which has strong free cash flows (FCF) and attractive valuations, and Utilities, which is likely to provide relative earnings stability in a slowing economic growth environment. Despite some cyclical sectors outperforming YTD, we remain neutral Industrials and Information Technology. We remain slightly underweight Materials, as recession risk rises and pricing power may have peaked in this sector, and remain fully underweight Consumer Discretionary. We remain slightly underweight Real Estate and neutral Financials as both areas have recently come under pressure due to regional bank stress and concerns regarding CRE. With the Fed already tightening monetary conditions with higher interest rates and quantitative tightening (QT), the regional bank stress could reduce liquidity further, and banks are likely to tighten lending standards. The higher costs of deposits and higher cost of capital are likely to weigh on earnings for both the Financials and Real Estate sectors in coming quarters. We remain neutral Communication Services after it being the worst performing sector in 2022. Performance is improving this year as company management teams are adjusting their business models for greater efficiency and lower costs. In addition, consensus earnings estimates have been reduced and valuation multiples compressed. We are closely monitoring earnings trends across all sectors as Q1 results continue to roll in better than feared so far. Importantly, company guidance and outlooks for the remainder of 2023 are key and are gradually turning more cautious.

We believe strategic portfolios should continue to incorporate both Growth and Value factors that would simultaneously gain from cyclical and secular forces gaining traction. We currently maintain a preference for Value, which is trading at a relative discount to Growth, is seeing better earnings trends, and has led Growth when the Fed paused in past periods of elevated inflation. However, in the long run, Growth should benefit from accelerated secular investments in 5G, artificial intelligence, cloud computing, robotics and health infrastructure globally.

**We are neutral Emerging Market Equities:** Emerging Market (EM) Equities appear attractively valued but may struggle to sustain a return advantage in an environment of high and still rising global interest rates, a still relatively strong U.S. dollar and any potential broadening in banking sector stress. We continue to expect a wide return dispersion between individual EM countries and regions. The heavyweight Chinese market stands to benefit from an acceleration in growth following the abandoning of zero-Covid restrictions, policy support for the real estate market and regulatory relief in the

### EQUITY WATCH LIST

- Continued Fed tightening as inflationary pressures persist
- 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
- Ongoing conflict in Eastern Europe
- Broadening banking sector stress
- Pressures within Commercial Real Estate (CRE)

Technology sector. Asian markets more broadly should see positive spillovers from the improvement in Chinese consumer demand. Central and Eastern European markets remain most exposed to the Russia-Ukraine crisis 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. The structural rise in EM consumer spending remains a big reason that 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 (PCE) 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 in Europe given headwinds to economic growth and corporate profits, greater economic exposure to any potential broadening in banking sector stress, upward pressures on core inflation and a hawkish European Central Bank (ECB). Natural gas prices have fallen from their crisis peaks, but ongoing curtailment of Russian supply and growing demand from China mean that supply constraints could reemerge at a later stage. We maintain a neutral view on Japanese Equities, which could see additional tailwinds from China's economic reopening, though less monetary accommodation, higher interest rates, and a stronger currency are likely to be relative hurdles for export-exposed Japanese markets. 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, offer an attractive dividend yield and provide strong diversification benefit.

## FIXED INCOME

**We are neutral on Fixed Income:** Even after the recent rally, nominal and real rates are some of the most attractive in over a decade. Banking system stress has decreased, but the economy is still deteriorating and later in the economic cycle as recessionary signals increase. Ten-year Treasurys are currently around 3.5%. Real yields—the yield after inflation is considered, as measured by Treasury Inflation-Protected Securities (TIPS)—are approximately 1.25% to 1.5% across the curve. Earning a positive, substantial yield on U.S. government-guaranteed securities after inflation is a welcome reprieve for savers after years of financial repression. We are therefore favorable on Fixed Income near term while being slightly positive on U.S. Governments, although our positioning is neutral relative to Equities on the 12- to 18-month time horizon.

Recently, banking sector stress has severely affected the market landscape. There were deposit outflows from the banking system, particularly from smaller banks, as some bank failures roiled markets. These flows and the overall stress have abated materially based on recent Fed data, but these issues will likely only further tighten lending conditions. Leading economic indicators remain weak, money supply growth is still negative, and yield curves remain inverted, although they have steepened dramatically in recent weeks as short bonds reflect significantly fewer rate hikes. Inflation expectations remain stable at around 2.25% to 2.5% across the curve, highlighting that the market believes that the inflation problem is behind us, and that Fed policy will successfully bring inflation back to target. Fixed Income has diversified multi-asset class portfolios in this recent episode and will continue to do so, in our opinion. With rates lower in this risk-off environment, we are therefore currently neutral duration versus a stated benchmark but will continue to look for prudent opportunities to potentially extend duration in the future.

### FIXED INCOME WATCH LIST

- Deeper yield-curve inversions
- Signs of any risk aversion or recessionary risk in terms of spreads, yields or new issue activity
- Signs of significantly negative Fixed Income fund flows
- Dislocations in CRE markets
- Potential credit deterioration in the economic weakness

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

**We are neutral Investment-grade corporates and remain slightly underweight High Yield:** IG spreads have rallied from YTD wides as concerns regarding stress in the banking sector have partially subsided. That said, with financial conditions continuing to tighten in the U.S., the macroeconomic backdrop remains challenged. Credit markets appear unfazed, however, as IG spreads in the 130 to 140 basis points (bps) range imply a low probability (20% to 30%) of a recession over the next 12 months. Therefore, we continue to believe a modest up-in-quality/defensive tilt within a corporate allocation is prudent at this time. We believe that 175 to 200 bps remains a more attractive level to potentially reposition Fixed Income portfolios in credit.

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 roughly around 9%. Valuations provide modest compensation for credit losses and suggest reasonable returns over medium to longer time frames. However, as sentiment remains depressed and as concerns of a recession become more prevalent, yields could rise again, so there may still be additional price losses to come. Spreads, moreover, are in the 500 bps range, below the 650 to 800+ bps level seen in many recessions. We therefore maintain our slight underweight positioning. Within HY allocations, we prefer a balanced allocation between secured floating-rate leveraged loans and unsecured HY bonds.

**We remain slightly underweight U.S. Investment-grade Tax Exempt and U.S. High Yield Tax Exempt:** Muni valuations remain rich relative to Treasurys and corporate bonds. We attribute this mainly to low primary market issuance; while issuance has increased recently, it is still down about 19% YTD. Within the muni market, high yield is currently expensive relative to IG, with tighter-than-average credit spreads. We do expect muni valuations relative to Treasurys to cheapen later this year, through a combination of higher supply and potentially deteriorating economic conditions. If that occurs, we would consider upgrading our view on the tax-exempt sector, which generally has lower credit risk than most other non-Treasury Fixed Income asset classes. We believe credit conditions are still strong for munis, but budget pressures are likely to emerge due to weakening tax revenues, increased operating expenses, and higher required pension contributions. Positively, muni issuers were able to add to reserves over the last couple of years, and states' balance sheets are close to their strongest positions in decades. Therefore, we expect defaults on IG muni bonds to remain low. However, a focus on higher credit quality and lower-risk sectors (e.g., general obligations and essential service revenue bonds) should help mitigate the risk of spread widening in a weakening economy. Extra caution may be warranted in higher-risk sectors, e.g., hospitals—which are experiencing higher labor and supply costs; transit—which is affected by the secular, post-coronavirus shift to remote work; and private higher education—which has seen declines in enrollment and weak revenue growth.

**We are neutral Mortgage-backed Securities**: Aiming to combat high inflation, which has risen to a four-decade high, the Fed has steadily tightened financial conditions by raising interest rates and engaging in QT since last year. As a result, mortgage-backed securities (MBS) spreads have been under pressure and have widened significantly before retracing most of it and are now close to 60 bps. At current levels, MBS spreads appear modestly attractive relative to Treasurys and IG corporate bonds.

A portion of the key sector risk has been at least partially mitigated, with MBS duration now significantly lengthened and further extension limited in a rising-rate environment. However, interest rate volatility remains elevated at levels last seen during the height of the pandemic, which is negative for MBS investors. Furthermore, the technical picture for MBS demand appears challenged by banks' liquidity concerns, reduced savings and increased lending activity. Effectively, the Fed and financial institutions, which collectively own two-thirds of the MBS market, are less active participants currently. Given the Fed's lack of experience with QT and the unsettling geopolitical situation, it's probable that the MBS spreads will resume widening. Consequently, we believe the rewards and risks of the MBS sector are now more balanced.

## ALTERNATIVE INVESTMENTS

**We favor a strategic approach when allocating to Hedge Funds, Private Equity, Private Real Estate and Tangible Assets.** Within Alternative Investments asset classes, however, we see opportunities and challenges in the current environment for qualified investors.

**Hedge Funds:** After outperforming traditional asset classes in 2022, Hedge Funds trailed in Q1 2023. Macro strategies in particular suffered in March as large declines in U.S. Treasury yields hurt short rates positioning across both Managed Futures and Global Macro substrategies. Despite a tepid start to the year, we see opportunities for Hedge Funds amid an uncertain market environment.

We continue to maintain favorable outlooks on Equity Hedge (EH) and Macro strategies through this phase of the cycle. Within EH, we favor strategies and managers with low-to-moderate net exposures given the expectation for equity market volatility in the near term. For Macro, our expectation is that the strategies will continue to work well as they have since 2020, unless we return to an environment like the decade post-Global Financial Crisis (GFC) of 2008/2009 which was characterized by low rates/low inflation/low volatility.

**Private Equity:** As has been the case for several quarters, our expectation is for Private Equity (PE) Buyout and Venture Capital (VC) to continue to face performance difficulties in the near term. Higher interest rates and inflation have created headwinds for these strategies beginning in late 2021, which have likely not been fully reflected in valuations given the lags typical in Private Markets. VC in particular has been challenged by virtue of its exposure to growth/technology companies. However, given the long-term nature of PE Buyout and VC, elevated volatility in equity markets may be seeding the opportunities for current- and coming-year vintages.

Situated higher in the capital structure, debt-oriented strategies like Private Credit may be more suited for a defensive posture, though the strategy is not without risks. The potential deterioration of interest coverage ratios is the primary vector of concern for this largely floating-rate asset class. Meanwhile, as interest rates have risen, investors have been compensated in the form of higher yields. With a potential turn in the cycle, Private Credit may be susceptible to credit deterioration; however, the strategy has historically weathered downturns relatively well, including during the GFC.

**Private Real Estate:** At the strategy level, we have downgraded our outlook for core/core-plus real estate to neutral given the macroenvironment. Performance in 2022 was solid at 7.5%[2], though the quarterly trend showed steep declines, with Q4 2022 (-5.0%) registering the worst quarterly return since the GFC. Importantly, different property sectors and geographies are facing their own unique dynamics, suggesting that differentiation is warranted. The recent issues spreading through the banking system, however, may have tipped the balance for the strategy overall between favorable fundamentals and financing pressures in favor of the latter.

The valuation gap between core private real estate cap rates and the implied cap rates of publicly traded Real Estate Investment Trusts (REIT) continues to draw attention. Given that gap, investors are focused on the degree to which private real estate valuations will have to decline to reflect the higher-rate environment. For the longer term, Private CRE continues to make sense as a strategic allocation given the diversification benefits and income features. Opportunistic and distressed real estate strategies will likely emerge as areas of opportunity as the asset class works through this reset.

**Commodities:** Global growth anchors demand for commodities and remains weak as the U.S. economy cools. Thus, cyclical commodities like copper and oil remain under pressure.

[2] National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End Diversified Core Equity (NFI-ODCE) as of March 2023.

### ALTERNATIVE INVESTMENTS WATCH LIST

- Return to zero interest-rate-policy (ZIRP) stagnation reducing opportunity for Macro Hedge Funds
- Greater-than-expected defaults impacting Private Credit
- For CRE, slowdowns in net operating income growth in multifamily rentals and industrials/data centers and/or increased distressed sales
- Whether “down rounds” become commonplace in Venture Capital

China's re-opening is a key pillar of support but growth in other parts of the world is slowing. As evidence, the JPMorgan Global Manufacturing Purchasing Managers' Index is near "50" (49.6) suggesting global manufacturing is neither expanding nor contracting. The Organisation for Economic Co-operation and Development Global Leading Indicator for G20 also suggests global growth will remain under pressure. Financial stress, fiscal budget woes and elevated geopolitical risk are giving some tactical support to gold but we continue to believe gold is most effectively implemented as a strategic diversifier.

The U.S. dollar is following the path of U.S. relative real interest rates versus other major currencies. Financial stress has pushed the Fed to inject liquidity while the bond market is pricing in a Fed pause and eventual rate cuts, pressuring the dollar. Over the medium term, the dollar continues to look expensive, in our view.

**Tangible assets:** As inflation remains elevated, tangible assets—such as real estate, timber, and farm and ranch land—have historically done well in a high-inflationary environment and can add potential diversification benefit to a traditional portfolio. It can also add a diversification benefit to Hedge Funds and PE investments.

## MACRO STRATEGY

- Following 12 straight monthly declines in the Conference Board's Leading Economic Index, coincident indicators of economic activity like industrial production and jobs growth are slowing. The profits cycle is reinforcing weaker trends in business investment spending while consumer spending growth will likely slow over the next few quarters as excess savings gets worked down. Overall, the economy appears to be near stall speed and susceptible to ongoing bouts of financial stress. We continue to expect a mild recession, but even this outcome is not reflected in consensus S&P 500 earnings estimates.
- The macro backdrop warrants near-term caution on risk-assets like Equities and HY and points to elevated volatility overall, but we continue to believe it will create opportunities for long-term investors over the rest of the year.

## ECONOMIC FORECASTS (AS OF 4/28/2023)

| | 2022A | Q1 2023A | Q2 2023E | Q3 2023E | Q4 2023E | 2023E |
|---|---|---|---|---|---|---|
| **Real global GDP (% y/y annualized)** | 3.4* | - | - | - | - | 2.7 |
| **Real U.S. GDP (% q/q annualized)** | 2.1 | 1.1 | 1.0 | -1.0 | -2.0 | 1.0 |
| **CPI inflation (% y/y)** | 8.0 | 5.8 | 4.2 | 3.5 | 3.1 | 4.1 |
| **Core CPI inflation (% y/y)** | 6.1 | 5.6 | 5.1 | 4.2 | 3.5 | 4.6 |
| **Unemployment rate (%)** | 3.6 | 3.5 | 3.5 | 3.8 | 4.3 | 3.8 |
| **Fed funds rate, end period (%)** | 4.33 | 4.83 | 5.13 | 5.13 | 5.13 | 5.13 |

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 May 2, 2023. 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 2023

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 2023 and price-to-earnings (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.

| 2023 EPS | EPS Forward P/E (Next 12 months) | | | | |
|---|---|---|---|---|---|
| | 15.0x | 16.0x | 17.0x | 18.0x | 19.0x |
| **$240** | 3,600 | 3,840 | 4,080 | 4,320 | 4,560 |
| **$230** | 3,450 | 3,680 | 3,910 | 4,140 | 4,370 |
| **$220** | 3,300 | 3,520 | 3,740 | 3,960 | 4,180 |
| **$210** | 3,150 | 3,360 | 3,570 | 3,780 | 3,990 |
| **$200** | 3,000 | 3,200 | 3,400 | 3,600 | 3,800 |
| **$190** | 2,850 | 3,040 | 3,230 | 3,420 | 3,610 |
| **$180** | 2,700 | 2,880 | 3,060 | 3,240 | 3,420 |

For illustrative purposes only. Source: Chief Investment Office as of May 2, 2023.

## CIO ASSET CLASS VIEWS AS OF MAY 2, 2023

| Asset Class | CIO View | | | | | Comments |
|---|---|---|---|---|---|---|
| | Underweight | | Neutral | Overweight | | |
| **Equities** | • | • | ● | • | • | We are neutral Equities as risks to economic growth and corporate profits have recently increased. We remain overweight the U.S. and neutral EM, with a slight underweight to International Developed. |
| **U.S. Large-cap** | • | • | • | ● | • | We have a slight preference for Value over Growth, given better absolute and relative valuations. Higher interest rates should pressure Growth more, especially higher multiple, non-earning areas. We believe portfolios should incorporate both Growth and Value factors as appropriate. |
| **U.S. Mid-cap** | • | • | • | ● | • | Our preference to stay higher up in the size scale keeps us favoring Large- and Mid-caps compared to Small-caps. |
| **U.S. Small-cap** | • | • | ● | • | • | We are neutral Small-caps, as they have lower-quality balance sheets, a higher proportion of non-earning companies within the index, and less financial flexibility to generate shareholder payouts. However, they maintain reasonably attractive absolute and relative valuation versus Large-caps. |
| **International Developed** | • | ● | • | • | • | International Developed Equities remain attractively valued, but additional central bank policy tightening is likely to exceed the U.S. Underlying rates of nominal growth are also expected to trail U.S. levels. |
| **Emerging Markets** | • | • | ● | • | • | We are neutral EM Equities overall with regional markets likely to be driven by relative exposures to Chinese growth, the ongoing Russia-Ukraine conflict and natural resource prices. Valuations appear attractive, but high and still rising global rates remain a headwind. |
| **International** | | | | | | |
| **North America** | • | • | • | ● | • | The U.S. remains our preferred region given balance sheet strength, better fundamentals for consumer spending and healthy shareholder payouts. |
| **Eurozone** | • | ● | • | • | • | Lower natural gas prices are a source of relief, but key risks stem from elevated inflation, hawkish central bank policy, weaker economic growth and the potential for energy supply constraints to re-emerge amid the ongoing Russia-Ukraine conflict. |
| **U.K.** | • | • | ● | • | • | Domestic demand at risk from still high mortgage rates. Historically weak exchange rate risks compounding inflation pressures. Withdrawal from European Union single market remains a negative for medium-term growth. |
| **Japan** | • | • | ● | • | • | Some positive spillover expected from rising consumption in China, but headwinds likely to increase from rising domestic interest rates. Nominal growth expectations remain among the lowest for the major developed economies. |
| **Pac Rim*** | • | • | ● | • | • | Regional activity stands to benefit from improvement in Chinese consumer demand. Large weighting in Financials increases vulnerability to any potential broadening in banking sector stress. |
| **Fixed Income** | • | • | ● | • | • | Bonds are more 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 duration is suggested, balancing continued inflation risk against significantly better valuations. |
| **U.S. Investment-grade Taxable** | • | • | • | ● | • | Preference for Treasurys relative to credit and spread products, as nominal and real rates are some of the most attractive in over a decade, while the economy deteriorates later in the economic cycle and recessionary signals increase. |
| **International** | • | • | ● | • | • | International rates markets have become significantly more attractive as global central banks raise rates to help fight inflation, no longer trading at a significant discount to the U.S. except in Japan where the Bank of Japan is keeping longer-term rates artificially low. |
| **Global High Yield Taxable** | • | ● | • | • | • | Valuations now present more attractive medium- to long-term returns even after estimating credit losses. However, poor near-term sentiment and rising recession concerns may exacerbate 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 remain rich relative to Treasurys and corporate bonds. We attribute this to low primary market issuance. We do expect muni valuations relative to Treasurys to cheapen later this year, through a combination of higher supply and potentially deteriorating economic conditions. If that occurs, we would consider upgrading our view on the tax-exempt sector, which generally has lower credit risk than most other non-Treasury fixed income asset classes. However, a focus on higher credit quality and lower-risk sectors (e.g., general obligations and essential service revenue bonds) should help mitigate the risk of spread widening in a weakening economy. |
| **U.S. High Yield Tax Exempt** | • | ● | • | • | • | HY munis are rich relative to Investment-grade munis, with tighter-than-average credit spreads. An up-in-quality focus should help mitigate increased credit risk due to 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.

| Asset Class | CIO View (Underweight / Neutral / Overweight) | Comments |
|---|---|---|
| **Alternative Investments*** | | Given the differences in liquidity characteristics between AI and traditional investments, the CIO asset class views on AI portfolio positioning continue to be neutral-rated versus our strategic allocations. These types of investments, in our opinion, should not be viewed at the asset class level on a tactical basis, but rather the tactical positioning should be expressed at the sub-asset class level. We will continue to provide strategy-level guidance for qualified AI investors. We believe allocations to AI can introduce differentiated returns that can help complement existing traditional holdings by potentially enhancing returns, helping to reduce risk and capitalizing on opportunities not available through traditional investments. |
| **Hedge Funds** | Neutral | An allocation to Hedge Funds has the potential to reduce volatility and diversification to portfolios. At the strategy level, we continue to favor Equity Hedge and Macro strategies (as part of a diversified portfolio of Hedge Funds) given the macro environment. |
| **Private Equity** | Neutral | Buyout and Venture/Growth strategies will likely continue to face performance headwinds in the near term given the pressures from higher rates. Prospectively, we see potential opportunities for current- and coming-year vintages given lower entry valuations and the long-term nature of the strategies. Private Credit faces credit deterioration risks in a slowdown, though the strategy is enjoying attractive yields and has historically proven resilient. |
| **Tangible Assets/ Commodities** | Neutral | Global growth anchors demand for commodities and remains weak as the U.S. economy cools. Thus, cyclical commodities like copper and oil remain under pressure. Financial stress, fiscal budget woes and elevated geopolitical risk are giving some tactical support to gold but we continue to believe gold is most effectively implemented as a strategic diversifier. Over the medium term, the dollar continues to look expensive, in our view. |
| **Real Estate** | Neutral | CRE has been in the spotlight given cost-of-capital pressures and more recently questions about regional banks' appetite for CRE mortgages. We expect more of a slow-moving reset, with significant variation by sector and geography, rather than a GFC-style collapse. CRE lending and distressed strategies may emerge as opportunities. Private Infrastructure offers interesting long-term yield opportunities as many of these hard assets often have contractual cost inflation pass-throughs. |

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. **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.** * Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors. Source: Global Wealth & Investment Management Investment Strategy Committee.

## CIO EQUITY SECTOR VIEWS AS OF MAY 2, 2023

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 |
|---|---|---|
| **Healthcare** | Overweight | Consider using recent weakness to position in larger biopharma stocks with attractive valuations. In an environment where financial conditions are tightening and economic growth is slowing, Healthcare stocks provide attractive characteristics, including quality, dividend growth, dividend yield and lower beta. Healthcare fundamentals to date have been able to withstand much of the macro pressures seen globally. Distributors, life science equipment and large biopharma are best positioned, in our view, to weather pressure on margins, while innovation and breadth of portfolio should continue to allow for modest price taking in areas of medical technology and devices. 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 med tech. Valuation remains attractive and momentum is neutral but improving recently for the Healthcare sector. |

| Sector | CIO View: Underweight | | Neutral | Overweight | | Comments |
|---|---|---|---|---|---|---|
| **Energy** | | | | ● | | Declining but still solid global energy demand, tight global supplies, limited spare capacity, risk of potential global disruptions, and the decline in long-cycle energy investments are supportive for Energy stocks. Higher energy prices combined with substantial cost-cutting initiatives and capital discipline over recent years built significant operating leverage into Energy companies. Despite declines in energy prices this year, earnings and FCF outlooks remain strong for energy companies relative to other sectors. There remains room for positioning to improve for the sector despite strong outperformance over the last two years. Despite tougher YoY comps in 2023, remain positive on the Energy sector due to valuation, earnings power and higher cash returns to shareholders through base dividends, variable dividends, and stock buybacks. Further, China's reopening, while likely choppy and not linear, could add to global demand for energy and support prices at higher levels as the year progresses. Longer term, secular headwinds still confront the sector, including the transition to clean energy, lower renewable energy costs and Environmental, Social and Governance (ESG) focus by investors. Continue to emphasize companies that are low-cost producers with high FCF, balance sheet strength and low break-evens. After two years as the top-rated Equity sector, we remain overweight the Energy sector, but, due to tougher comps and lower energy commodity prices YoY it moves down on the sector list. Energy stocks still provide attractive valuations and strong dividends but slowing momentum. |
| **Utilities** | | | | ● | | Utilities provide stable and consistent earnings outlooks, especially relative to other more cyclical sectors. In addition, as we progress through later stages of this economic cycle, Utilities historically outperform in the late cycle and during economic growth slowdowns, especially regulated utilities. Utilities provide greater balance and lower beta, and help pair with our cyclical exposure in equity portfolios. We expect consistent earnings results despite slowing economic growth. There is also the potential for higher interest rates that could potentially weigh on this interest rate-sensitive sector and be a potential headwind near term as a bond proxy sector. For the longer term, we emphasize Utilities with growing renewable power generation from wind and solar and de-emphasize ones that rely strictly on coal-power generation. The 2022 Inflation Reduction Act (IRA) legislation provides a strong runway for future renewable energy investments and projects while also providing visibility and greater certainty for future earnings and dividend growth. Prefer utilities that can capitalize on the energy transition to greater renewable power generation and positive demographic trends. Valuation is above historical averages and momentum is neutral, but defensive qualities remain. |
| **Consumer Staples** | | | ● | | | The prospects for continued consistent demand for essential consumer packaged goods (CPG) products from an even more conservative consumer may support relatively better top-line revenue growth, when also coupled with selective but moderating retail price increases. Input and ingredient cost pressures could moderate further and may provide some downside gross margin protection over time. The Consumer Staples sector has historically outperformed other cyclical areas of the market during a period of negative earnings revisions due to the recurring nature of consumer product company revenue streams, leading to better relative earnings growth. More visible and predictable earnings and a less severe period of downside earnings revisions help support the sector's relative valuation. Consistent cash flows through varying economic cycles help support higher dividend payouts and increased shareholder capital returns. The defensive characteristics of the sector could potentially attract "safe haven" investment flows over various cycle outcomes despite the already elevated valuations. Valuations are expensive, but momentum and relative performance have improved. |
| **Information Technology** | | | ● | | | The Technology sector is neutral despite improvements in supply chains and recent flight-to-quality flows into mega-cap Technology stocks. However, margin risks remain for companies in the sector as IT budgets and technology investments are showing signs of slowing. Despite some of the most expensive Technology stocks experiencing significant valuation re-ratings last year, we remain concerned about 2023 enterprise spending being under greater scrutiny on tighter spending budgets and the potential for additional valuation re-ratings in the sector. Further, the potential remains for downward earnings revisions that are more likely to affect higher-beta, higher-valuation companies. Investors are debating whether a bottom is in for semiconductor stocks, as the group is looking more attractive. Despite strong long-term Cloud 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 Tech, with a bias to higher-quality and more fairly valued companies with both strong FCF and balance sheets. We continue to encourage investors to be careful about unprofitable, expensive, and long-duration Tech 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 artificial intelligence, and data centers, software, cybersecurity, and semiconductors. Valuations in the sector declined in 2022 but are still elevated, and any additional moves higher in interest rates could pressure multiples for high-growth and high-valuation tech stocks with low to no profits; therefore, look for GARP (growth at a reasonable price) in software and semiconductors. The Tech sector still generates significant FCF and 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 weakness from the Fed's tightening and the re-rating of Technology stocks. Valuations remain elevated and momentum is improving. |
| **Communication Services** | | | ● | | | We are neutral on the Communication Services sector, as some of the largest companies in this sector have higher-quality fundamental characteristics and could be more attractive in an economic slowdown. 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; 3) and more importantly, broad cost reduction plans could create potential earnings upside. Valuations have declined and momentum improved to start the year. |

| Sector | CIO View | | | | | Comments |
|---|---|---|---|---|---|---|
| | Underweight | | Neutral | | Overweight | |
| **Industrials** | | | ● | | | The Industrial sector is neutral, driven by divergent fundamental outlooks across subsectors. Softening domestic end markets, ongoing supply chain issues, elevated labor and energy costs, cautious guidance, and weaker export demand driven by Europe and China are weighing on the outlook for industrial conglomerates and transports. On the positive side, the global threat environment is heating up and driving an improving outlook for defense budgets in the U.S., Europe, and Southeast Asia, underpinning favorable dynamics for defense companies. Aerospace is benefiting as well from the ongoing recovery in consumer and business air travel, which remain below pre-pandemic levels. Potential improvements in the global capex cycle, including reshoring of supply chains and manufacturing, and investment in new equipment after years of focusing on productivity, could support the construction, transportation, machinery, and freight and logistics industries longer term. However, elevated inflation, tighter monetary policy and slower growth are weighing on general sentiment for Industrials. Valuation is slightly elevated, and momentum is stalling. |
| **Financials** | | | ● | | | We are neutral on the Financials sector. Despite the arrival of a high-interest rate regime, U.S. banks collectively have seen nearly $0.5 trillion in deposit outflows so far this year, according to Fed data, exacerbated by the recent high-profile bank failures. Depositors have sought the perceived safety of the biggest banks and the higher yield offered by money market funds. Funding pressure will likely lead to tighter credit standards and slow the pace of lending going forward. Despite headwinds, net interest income is still expected to grow modestly this year and improve earnings power, and valuations appear to already discount a lot of potential bad news. Risks to the downside appear balanced compared to potential upside for banks, with prospects for big banks relatively better than smaller regional banks. Capital return will remain the cornerstone of the investment case for banks. Overall, the volatility of the financial sector should improve with the recent addition of large e-payment 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 alternative asset managers, like PE, which consistently draw fund inflows, typically find their most lucrative investment opportunities in times of economic stress and maintain pricing power in management fees. |
| **Materials** | | ● | | | | Slower global growth, weaker commodity prices and tighter monetary conditions factor into our more cautious view on the Materials sector. We are seeing deceleration in the positive pricing cycle that has been driven by favorable supply and demand conditions over the last two years. Higher interest rates in the developed world and ongoing trials securing labor and materials are pushing industrial project timelines to the right, and with the additional challenge of higher energy costs, we are seeing some formerly profitable projects be reconsidered. Meanwhile, the supply side continues working at maximum capacity to meet the demand levels and thus may end up overshooting. We see this reflected in rising inventory level data across some value chains and are increasingly cautious as the dynamic may spread and become a trend. We want to reposition investment portfolios ahead of a potential contraction in the pricing cycle, as rising inventories and slowing volumes give buyers more bargaining power. Multiples could meaningfully contract if we start to see persistent pricing declines across the commodity complex. Such a trend 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 near-term tailwinds for demand, such as bipartisan support for U.S. infrastructure spending and reopening policies in China, but on balance risks for performance are growing relative to potential rewards. Amidst softening demand trends and expected supply growth in the near term, consensus estimates appear elevated. As a result, the underlying sector valuation is neutral, while momentum is stalling. |
| **Real Estate** | | ● | | | | We are underweight the Real Estate (RE) sector on CRE concerns. Tighter financial conditions and higher cost of capital could slow growth and weigh on earnings in the RE sector. Higher interest rates could increase refinancing risks and increase interest expenses which could be a downside risk to sector earnings in 2023. RE was a higher conviction sector when inflation was rising, but with some inflation measures moderating and higher costs of capital for the industry, we would be more selective within the RE sector. 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 real estate footprints. With interest rates moving higher, the cost of capital for real estate growth projects could be a headwind depending how long rates remain elevated. 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 real estate. Valuations are neutral and momentum turned negative. |
| **Consumer Discretionary** | ● | | | | | Following a protracted period of above-trend post-pandemic spending levels, the consumer is facing persistent and troublesome inflation headwinds that could result in a more conservative discretionary spending pattern as a slowing economy and potential employment security issues weigh on consumer confidence. Big-ticket purchases of autos and homes have been deferred due to supply restraints and higher average selling prices, and, as a result, the consumer has pivoted to travel and leisure experiences that drove demand for hotels, airlines and theme parks. The potential exists for consumers to retrench and assess their personal financial position, further deferring big-ticket purchases, including travel and leisure, until they feel more confident about the economy and other macro headwind factors. A retrenched consumer may revert to normalized spending patterns that drive demand for essentials only as the consumer attempts to deleverage their balance sheet and draw down savings balances for everyday needs. The ongoing period of declining real disposable income is being punctuated by stubbornly high energy costs and ongoing consumer goods inflation and potentially exacerbated by the removal of the student loan forbearance that has been extended into 2023, which could provide an additional strain on household incomes. The earnings revision life cycle has historically led to several quarters of negative earnings estimate revisions and declining relative valuations versus the more stable consumer products companies. Valuation for the sector is still elevated and momentum is negative. |

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 MAY 2, 2023

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 significant 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.

| Big Data | Demographics | Climate Change |
|---|---|---|
| The massive growth in unstructured data being created by connected machines, devices and systems is fueling data processing and data analytics. Complementing artificial intelligence technologies are replete with applications for big data. The size of the digital world and Internet of Things (IoT) is accelerating the migration of data and applications to a cloud computing environment. Data centers and cloud-based storage will likely capture incremental data created. | Several demographic transitions serve as important arbiters of future growth. With elongated life expectancies globally, longevity for older populations will likely mean a renewed focus on healthcare, aged-care, financial, and consumer products and services for longer, serving as a multitrillion-dollar potential opportunity. Both the Millennials (born 1981-1996) and Gen Z (born 1997-2012) could have greater influence over the next decade on consumer spending and preferences. While we are neutral the EM asset class on a tactical basis, we believe the EM consumer represents a powerful middle-class consuming cohort over the longer term. Uplifting the bottom billions, or poorest socioeconomic group with growing access to electricity, internet and sanitation can also offer a demographic dividend for multinational companies. | With emphasis from the White House, a much greater focus is on health, renewable energy, clean water and sanitation, and other industries that tend to support a more sustainable future. Companies that embrace more climate-friendly business models and operations, as well as consumer products and services, are likely to enjoy sustained growth opportunities over the long term. Globally, nuclear energy is re-emerging and increasingly acknowledged as a 'green' energy solution. Other key investment opportunities: Renewable energy (solar, wind and hydrogen), as well as energy-efficiency such as building systems, water/waste management, and energy storage and distribution. |

| Future Mobility | Security | Post-crisis World |
|---|---|---|
| The future of mobility hinges on next-gen infrastructure. This includes the telecom industry's deployment of the 5G network, which is expected to prove to be the greatest accelerant and enabler to smart cities (smart buildings, safety and security), autonomous vehicles and unmanned drones. The growing electric vehicle market will likely demand installation of charging equipment and fuel peripheral industries such as battery material demand. | Expanding the IoT means security for a growing ecosystem of devices and end points. With the increase in time spent on online platforms, (as well as adoption of online payments/FinTech), data privacy/surveillance and governance is expected to play a larger role in a post-pandemic world, as will bolstering cybersecurity defenses and budgets. With the commercialization of space, cybersecurity will likely extend to space-based assets (think satellites, data links, weather monitoring and GPS). | In the post-crisis world, reshoring policies are increasingly focused on building more resiliency into supply chains, helping to sculpt tripolar supply chains pivoting between North America, Asia and Europe. A number of labor force dynamics have converged to place unprecedented demand on labor not only in the U.S. but around the world, hastening the need for industrial and service automation/robotics. The extraction, sourcing, use and management of the world's resources will stay in focus as both the agriculture and commodity complexes are stretched given the geopolitical backdrop. If the future entails increased investments into electric vehicles and greener energies, then the future will be mineral- and material-intensive, calling for more mining of copper, lithium, nickel, manganese, cobalt and graphite, etc. Lastly, real assets in the post-crisis world are a key buffer to above-trend inflation. |

## 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.**

**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.

**Conference Board's Leading Economic Index** is an American economic leading indicator intended to forecast future economic activity.

**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.

**JPMorgan Global Purchasing Managers' Index (PMI)** consists of a diffusion index that summarizes whether market conditions, as viewed by purchasing managers, are expanding, staying the same, or contracting

## Important Disclosures

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

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All 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.

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

Dividend payments are not guaranteed, and are paid only when declared by an issuer's board of directors. The amount of a dividend payment, if any, can vary over time.

Investments have varying degrees of risk. Some of the risks involved with equity securities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Small cap and mid cap companies pose special risks, including possible illiquidity and greater price volatility than funds consisting of larger, more established companies. Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments and yields and share price fluctuations due to changes in interest rates. Bonds are subject to interest rate, inflation and credit risks. Municipal securities can be significantly affected by political changes as well as uncertainties in the municipal market related to taxation, legislative changes, or the rights of municipal security holders. Income from investing in municipal bonds is generally exempt from federal and state taxes for residents of the issuing state. While the interest income is tax-exempt, any capital gains distributed are taxable to the investor. Income for some investors may be subject to the Federal Alternative Minimum Tax. Investments in high-yield bonds (sometimes referred to as "junk bonds") offer the potential for high current income and attractive total return, but involves certain risks. Changes in economic conditions or other circumstances may adversely affect a junk bond issuer's ability to make principal and interest payments. Treasury bills are less volatile than longer-term fixed income securities and are guaranteed as to timely payment of principal and interest by the U.S. government. Mortgage-backed securities are subject to credit risk and the risk that the mortgages will be prepaid, so that portfolio management may be faced with replenishing the portfolio in a possibly disadvantageous interest rate environment. Investments in foreign securities (including ADRs) involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates, and risk related to renting properties, such as rental defaults. There are special risks associated with an investment in commodities, including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors.

**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.