MERRILL
A BANK OF AMERICA COMPANY

CHIEF INVESTMENT OFFICE

Viewpoint

Decision Time

September 2022

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

IN BRIEF

- It is our view that this post-pandemic cycle in economic and market terms is unlike any other. There are many unknowns, including a wide swing in the money supply from growth to contraction. This creates a more volatile backdrop, with a wide range in equity market indexes in the short term, in our opinion.
- Leading economic indicators point to slower U.S. growth over the balance of the year.
- We maintain a neutral view on Equities as risks to economic growth and corporate profits remain skewed to the downside. As growth moderates, profit estimates are likely to follow as the Federal Reserve (Fed) pursues a more aggressive tightening bias.
- We still expect high-quality Fixed Income to be a diversifier—in the long run, coupon income is a larger determinant of total returns than price changes due to rate moves—and this diversification effect has historically proven true when rate volatility decreases.

In the past couple of months, we experienced a powerful rally in July and most of August that retraced 50% of the downdraft from the highs in late January to the mid-June lows in the S&P 500. On the flip side, through the balance of August, the market weakness has cut that comeback to only 25% as investors caught the eyes of global central banks (led by the Fed) and froze in the aggressive hawkish stares. While the roller coaster ride carried through other "rivers of volatility" re-emerged. These include: wider credit spreads, rising Treasury yields, a stronger dollar, falling commodity prices, European bond market fragility, and strains in some frontier markets. Our continued "on guard" stance is now leaning toward a more defensive tone as we analyze key trends across asset classes. In the coming weeks we believe it will likely become decision time regarding asset allocation for the back half of the reset period.

We expect the back half of the reset period to last approximately six to nine months. During this period, we believe corporate earnings will be adjusted lower, valuations will normalize, Treasury yields will likely peak, inflation will continue to fall, the European economic landscape will likely face one of the most difficult winter periods in decades, China will reflate, and the tightening of financial conditions by the Fed will start to bite even more. We also expect consumer balance sheets to remain reasonably healthy as the job market continues to show some resolve. In summary, it is our view that this post-pandemic cycle in economic and market terms is unlike any other. There are many

CIO ASSET CLASS VIEWS

This month, the Global Wealth & Investment Management Investment Strategy Committee did not make any tactical asset allocation adjustments. Our continued "on guard" stance is now leaning toward a more defensive tone as we analyze key trends across asset classes. We remain neutral Equities, with a preference for U.S. Equities relative to International, and a slight underweight to Fixed Income. We continue to emphasize broad portfolio diversification as we continue to monitor a post pandemic cycle that is unlike any other.

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

*Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors.
CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of multi-asset portfolio.

unknowns, a wide swing in the money supply from growth to contraction, some classic core cycle signals and also quite a few counterintuitive trends. This creates a more volatile backdrop with wide ranges in equity market indexes in the short term, in our opinion.

Below, we outline some key thoughts investors should consider as they make asset allocation decisions in the coming weeks and months.

Balanced Investor

- Maximizing diversification across asset classes, including Alternatives for qualified investors where appropriate.
- Overweighting more defensive sectors such as Utilities and Healthcare and solid areas of free cash flow like Energy and dividend leaders.
- Using future areas of weakness in the months ahead to rebalance where appropriate.
- Focusing on long-term positioning early next year once earnings are reset.

More Defensive Investor

- Reducing exposure to Equities and/or credit in a tax-efficient manner if liquidity is needed.
- Waiting for better values in the coming months if Equity exposure is reduced.
- Focusing on liquidity in the short term but do not sway too far from your risk budget given the difficulty in timing the post-pandemic market environment.

Longer-term Investors With Excess Cash

- Looking for opportunities to increase higher-quality positions in Equities on extreme weakness later in the year—both at home and overseas.
- Adding to diversified sectors later in Q4 and early 2023 as the profits cycle stabilizes and the Fed ultimately pauses.
- Focusing on high free cash flow areas like Energy; more defensive areas in Healthcare and growth in Technology should be target sectors.
- Using excess cash opportunistically over time, not at a point in time.

Fixed Income Investors

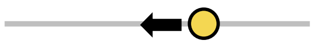
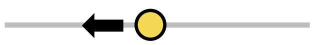
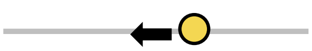
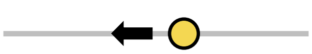
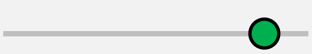
- Adding to Treasurys, though rates may move a bit higher, and lengthening duration overall.
- Taking advantage of the backup in yields across the curve.
- Being selective on individual credits and focusing on after-tax yields.

We believe its “Decision Time”.

CIO INVESTMENT DASHBOARD

A global growth slowdown is unfolding with economic data in the U.S, Europe and China weakening. Inflation is elevated in the U.S. and accelerating in Europe, while the property sector in China is weighing on consumer sentiment. Central banks in developed and emerging countries are tightening policy aggressively to combat inflationary pressures. Corporate profits currently remain supportive, with consensus estimating annual earnings growth of 8.5%, but are likely to weaken as restrictive monetary policy fully filters through into the broad economy. Corporate credit conditions remain generally supportive, but credit spreads have widened amid tightening financial conditions. Absolute valuations for U.S. Equities remain slightly above historical averages, and investor sentiment remains bearish. We continue to believe that market volatility will rise for most asset classes and expect the “grind-it-out” environment to persist for markets over the next several months, especially as the mid-term elections draw near.

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

Factor	Implication for Equities (Negative / Neutral / Positive)	CIO View
Earnings		For Q2, actual earnings for the S&P 500 slightly surpassed estimates. The year-over-year (YoY) growth rate for the quarter registered at 7.7%, supported by 15.5% growth in revenue. Annual growth for this year is expected at 8.5%, with revenue at 11.5% according to FactSet. While analyst downgrades for earnings outnumber upgrades globally overall, their limited scope so far suggests some resilience, according to BofA Global Research Global Earnings Revision Ratio.
Valuations		Absolute valuations for U.S. Equities have become less extended and are slightly above their historical average. The S&P 500 price-to-earnings (P/E) ratio (next 12 months) has fallen to 16.5x from 21.5x in late 2021 due in large part to price volatility. Meanwhile, the S&P 500's earnings yield is 279 basis points (bps) above the 10-year Treasury yield. On this basis, relative to Fixed Income, valuations seem slightly attractive. However, economic uncertainty may dampen margin and profit estimates, weakening their anchor. Rising interest rates are also a risk reducing the relative appeal of Equities.
U.S. Macro		Real gross domestic product (GDP) growth in Q2 2022 contracted by 0.6% on a seasonally adjusted annual growth rate. For Q3, the Atlanta Fed's GDPNow tracker forecasts a rebound of growth to 2.6%. Consumption, business investment and exports are supporting growth, which has been weighed on by residential investment and inventories. On the demand side, a strong labor market, economic reopening and excess savings should help support consumer spending. However, a rising cost of living, supply-chain challenges, rising interest rates, and labor shortages, to a lesser extent, are headwinds to growth. BofA Global Research expects growth of 1.3% for 2022 and -0.1% in 2023.
Global Growth		Geopolitical developments are sustaining global uncertainty. In Europe, they are exacerbating commodity-related inflation and destabilizing the economic outlook. Additionally, tensions between the U.S. and China have recently increased. Meanwhile, a strategy to eliminate the coronavirus, which has dragged on consumption and the services sector, and weakness in the property market have weighed on China's economy. Officials have recently taken further policy steps to shore up the economic recovery. The global economy is expected to expand by 3.1% in 2022 and then by 2.6% in 2023, according to BofA Global Research.
Monetary Policy / Inflation		The Federal Open Market Committee's (FOMC) target policy interest rate range stands at 2.25% to 2.50%. BofA Global Research anticipates a year-end range of 3.50% to 3.75%, implying further hikes totaling 1.25% over the next three meetings. These forecasts suggest a peak in the rate of monetary policy tightening. However, Fed Chairman Jerome Powell raised the bar for a pivot to looser policy in comments at Jackson Hole Fed Summit. This month, the balance sheet runoff began operating at full capacity, at $95 billion per month in Treasury bonds and Mortgage-backed Securities (MBS). Recently, YoY inflation data, such as the Consumer Price Index (CPI), the Producer Price Index (PPI) and the Personal Consumption and Expenditures Price Index have undershot expectations. Some of these measures may have peaked.
Fiscal Policy		Fiscal stimulus in the U.S. in response to the pandemic totaled nearly 31% of GDP. Designed in part to combat persistent inflation, the Inflation Reduction Act was signed into law. Alongside fiscal deficit reduction via measures to raise public revenues, including a 15% minimum corporate tax rate and prescription drug pricing reform, the legislation provides nearly $370 billion over 10 years for energy security and climate change projects, among other initiatives. This follows the authorization of a $280 billion plan to strengthen the country's industrial base, by investing in semiconductor production and research and development of new technologies.
Corporate Credit		High yield (HY) and Investment-grade (IG) credit spreads narrowed during July through mid-August, after widening over the first half of the year to their fullest extent since Q3 of 2020. More recently, their renewed and general upward trend and elevated degree indicate less accommodative financial conditions and investor worries over the prospect of a notable economic slowdown.
Yield Curve		Year-to-date (YTD), the all-important fed funds/10s curve has flattened, signaling growing concern over the sustainability of the business cycle, more in line with cautionary trends in other parts of the yield curve. Elevated rates on the front end have in part reflected raised anticipation for an aggressive interest-rate upcycle by the Fed. Rates on the back end have recently tempered their rise, reflecting raised economic uncertainty.
Technical Indicators		The Chicago Board Options Exchange (CBOE) Volatility Index (VIX) has rebounded from its recent low near mid-August and stands above its 12-month and year-to-date averages. Indicators of market breadth —including the cumulative advance/decline line for New York Stock Exchange (NYSE) Equities and the percentage of them above their 200-day moving average—have begun to deteriorate after improving in July.
Investor Sentiment		Bearish sentiment remains within extreme territory, according to the American Association of Individual Investors. Institutional portfolio cash levels are off their highest since October 2001 but remain well above their long-term average and continue to signal a tactical contrarian "buy" signal, according to BofA Global Research's Fund Manager Survey. The BofA Bull & Bear Indicator also signals "buy," at 0.4.

Source: Chief Investment Office. Data as of September 6, 2022.

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. As growth moderates, profit estimates are likely to follow as the Fed pursues a more aggressive tightening bias. BofA

Global Research expects 50 bps hikes at the September and November FOMC meetings followed by a 25 bps hike in December, bringing the target range to 3.50% to 3.75%. In addition, the Fed is expected to continue shrinking its balance sheet with the run-off cap doubling starting this month. We continue to favor U.S. Equities over International on a risk-adjusted basis and believe that tightening monetary policy will continue to pressure the riskier areas of the market. We remain slightly underweight European Equities and International Developed Market Equities given that Eurozone growth is likely to weaken on the back of the energy price shock, declining business and consumer confidence, and slowing money supply growth.

We are overweight U.S. Equities overall: The U.S. remains our preferred Equity region relative to the rest of the world given relatively stronger balance sheets on aggregate, healthy shareholder payouts, better consumer fundamentals and a greater degree of energy independence. We maintain a slight overweight to U.S. Large-caps given our higher quality bias, with a preference for Value, which should benefit from higher levels of inflation. We remain neutral Small-cap Growth and Small-cap Value. Small-caps have lower-quality balance sheets, 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. However, we believe a neutral position is appropriate at this stage given their reasonably attractive absolute and relative valuation versus large-caps.

We expect earnings per share (EPS) for the S&P 500 to improve to $218 in 2022 but decline in 2023 by 8% to $200 on economic weakness and margin pressures. S&P 500 valuations remain relatively attractive for long-term investors compared to the elevated levels seen earlier this year but are still not cheap given the cloudy earnings picture. Near-term risks for Equities come from a global slowdown in growth and profits, persistently elevated levels of inflation and a Fed policy error. We would expect volatility to continue as financial conditions tighten as the Fed continues their hiking cycle.

We continue to prefer certain cyclical sectors with strong free cash flows and attractive valuations like Energy and Financials and are also slightly overweight defensive sectors like Real Estate (RE), Healthcare and Utilities, which are likely to provide some stability. Given our view that we are in a late-cycle environment, we remain neutral Information Technology, Industrials and Consumer Staples. We remain slightly underweight Materials as recession risk rises and the U.S. dollar strength weighs on the sector. We remain fully underweight Consumer Discretionary and Communication Services.

We believe portfolios should incorporate both Growth and Value factors that would simultaneously gain from cyclical and secular forces gaining traction. Growth should continue to benefit from accelerated secular investments in 5G, artificial intelligence, cloud computing, robotics and health infrastructure globally. However, current economic conditions suggest that investors may want to consider emphasizing Value, which is trading at a relative discount to Growth and is seeing better earnings trends.

We are neutral Emerging Market Equities: Emerging Market (EM) Equities appear attractively valued but remain vulnerable to further escalation of the conflict in Eastern Europe, Fed tightening and U.S. dollar strength. We continue to expect a wide return dispersion between individual EM countries and regions. Central and Eastern European markets are most exposed to the Ukraine/Russia crisis through international sanctions and high dependency on natural gas imports. Cyclically-oriented markets in Latin America, the Middle East and Africa should be relatively well positioned, in our view, as commodity prices remain elevated, while markets in Asia remain more at risk from high energy and food import prices. For the heavyweight Chinese market, we also see ongoing uncertainty related to economic and regulatory policy. 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.

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

We are slightly underweight International Developed Market Equities: We continue to prefer U.S. versus International Developed given our higher-quality view. We remain slightly underweight Europe given headwinds to economic growth and corporate profits from higher energy prices, elevated inflation and a more hawkish European Central Bank (ECB). Potential for further reduced gas supplies from Russia, political upheaval in Italy and fallout from widespread heat waves have all contributed to the likelihood of further economic weakness across the region. Inflation has yet to peak, forcing the ECB to tighten monetary policy while balancing the risk caused to peripheral debt. We maintain a neutral view on Japanese Equities, which remain well supported by large fiscal and monetary stimulus, though stringent travel bans and elevated coronavirus cases have disrupted the country's plans for economic reopening. Despite these challenges, we believe long-term investors should consider maintaining some strategic exposure to International Developed Equities, as appropriate, as they trade at a steep discount relative to U.S. Equities, offer an attractive dividend yield, and provide strong diversification benefits.

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
- Fiscal policy adjustments and taxes
- Reorganization of global supply chains and U.S.-China relationship
- Ongoing conflict in Eastern Europe

FIXED INCOME

We are underweight Fixed Income: The Fed delivered another 75 bps interest rate hike in July, its second in a row, a very large amount of monetary policy tightening in a short amount of time. The market now currently expects another 100+ bps of rate hikes before the Fed pauses, resulting in a peak fed funds rate of about 3.75% by the end of the year. Leading economic indicators have continued to roll over, with the 2s/10s Treasury yield curve now inverted by 30 bps—the most since the technology-media-telecom (TMT) crisis in 2000. While inflation—a lagging indicator—has only just started to decelerate, this all suggests that the market is fairly convinced that the declaration is likely to continue: Five-year inflation expectations have decreased markedly by approximately 100 bps to around 2.75%.

Against this backdrop, we recently increased exposure both to Fixed Income and to duration in multi-asset class portfolios. We are still slightly short duration versus a stated benchmark; however, as there is a non-zero risk that the Fed may eventually have to move to 4%+ on the fed funds rate to bring inflation back to 2%, which may potentially increase rates further on the short and long end. While that is not our base case, it is not a risk that can be completely dismissed and therefore slightly short duration balances the risks appropriately, in our opinion. The Fed seems to be finally getting out from behind the curve. Overall price action in Fixed Income and Equities seems to imply that the market feels that the Fed's current policy path is correct and will appropriately balance the risks of slowing inflation without severely hampering economic growth or causing an abrupt spike in unemployment. BofA Global Research is now forecasting a mild recession this year, returning to 1% real GDP growth in mid-2023.

Investors less focused on managing short-term Equity volatility, with all Fixed Income portfolios or with better ability to withstand price volatility, should still underweight Treasury allocations while favoring high-quality, IG spread products —corporates and municipals. Furthermore, lower-quality Fixed Income—preferreds and High Yield—continue to be significantly more attractive than last year, although we remain slightly underweight high yield following a rally during the summer months. We still expect high-quality Fixed Income to be a diversifier—in the long run, coupon income is a larger determinant of total returns than price changes due to rate moves—and this diversification effect has historically proven true when rate volatility decreases.

We remain slightly overweight Investment-grade corporates and slightly underweight High Yield: IG credit spreads have been in a defined uptrend (i.e., higher highs and lower lows for the majority of the year). The first bout of volatility, to start the year, was largely driven by technical factors related to interest rate volatility flaring up. Investor angst then shifted from rates to recession and macro concerns as the Fed navigates an increasingly challenging inflation and growth backdrop. More recently, spreads tightened during most of July and August as rate volatility subsided, inflation showed early signs of peaking and the technical backdrop improved. While spreads at around 140 bps are not yet fully discounting a near-term or imminent recession, we believe that current valuations offer a more balanced risk/return opportunity, particularly given significantly more attractive all-in yields (around 4.75%) from a historical perspective.

Despite uncertainties with regard to the macro backdrop next year, we believe that corporate credit could modestly outperform Treasurys this year given strong underlying corporate credit fundamentals and liquidity, and also our view that most issuers should be well positioned to handle inflationary/cost pressures and/or slowing aggregate demand. Further widening in credit spreads in response to an unexpected or large move in Treasury yields, inflation or both remains a key risk; however, a move wider in spreads should be viewed as a repositioning opportunity absent a more material pickup in recession risk in 2023.

Credit losses in IG are generally manageable 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 8% after rallying into the mid 7%-range in early August. We believe valuations once again provide reasonable compensation for credit losses and imply favorable returns over medium to longer time frames, although not as good compared to late June when yields were closer to 9%. However, as sentiment remains depressed and concerns of a recession become more prevalent, yields could rise again, so there may still be additional price losses to come. We therefore maintain our slight underweight positioning. Within HY allocations, we prefer a balanced allocation between secured floating-rate leveraged loans and unsecured high yield bonds.

Muni yields have risen, with those on shorter-term maturities rising more than longer-term ones; however, the muni yield curve remains positively sloped in contrast to the inverted Treasury yield curve. Muni valuations relative to Treasurys are about average for short maturities but significantly cheaper than average for long maturities. We believe fundamental conditions remain solid for now. However, we note that public pension funding ratios have weakened due to poor YTD investment returns, and this increases budget pressures for state and local governments in the form of higher actuarially required contributions. We are also concerned that tax revenues could weaken if the economy goes into recession, and this could be further exacerbated by higher inflation-driven operating expenses. We expect munis to provide value over Treasurys for tax-sensitive investors, particularly longer-maturity bonds. We suggest investors shift their focus to higher credit quality in light of potential economic weakening.

We are slightly underweight Mortgage-backed Securities. This view is driven by concerns regarding the pace of quantitative tightening, along with reduced demand from commercial banks as loan demand recovers. Commercial banks may also reduce their purchases of MBS as deposits decline. Against this backdrop, MBS spreads have come under pressure and continue to leak wider. The rapid move in Treasury yields has also caused mortgage duration to extend from the low 2s seen in mid-last year to the high 5s, according to the Bloomberg U.S. MBS Index. However, due to higher mortgage rates, a smaller percentage of mortgages are currently eligible for refinancing, so duration extension may be limited in the future. That being said, interest rate volatility remains a key concern with regard to a pickup in prepayments. Furthermore, any miscommunication or negative surprise as a result of rising inflation, particularly as it relates to the Fed's balance sheet reduction, is a material risk. Hence, it is prudent to position conservatively within the sector, in our opinion. In the long run, MBS appears attractive versus Treasurys, and the sector is a large component of the high-quality bond market. Therefore, we believe investors should maintain exposure as appropriate for their particular investment objectives and risk tolerance.

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 Commercial Real Estate (CRE) markets
- Potential credit deterioration in the economic weakness

ALTERNATIVE INVESTMENTS

Given the differences in liquidity characteristics between Alternative Investments (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.

We favor a strategic approach when allocating to Hedge Funds: The outlook for Event Driven strategies remains mixed, although the opportunity set has arguably improved in certain sub-strategies. We maintain a cautious posture with respect to distressed strategies, but are closely watching the space as it has the potential to rapidly become attractive. The same can be said for Merger Arbitrage. Deal spreads have widened YTD, offering higher prospective returns; however, Mergers & Acquisitions volumes have declined YoY and could continue to fall depending on economic conditions. In this environment, deal completion risk is elevated given volatile markets and an aggressive regulatory posture. While we are still cautious on Relative Value (RV) strategies, the outlook improved in Q2 with significant credit spread widening across multiple sectors, but have since contracted somewhat over the summer. Corporate high yield, non-agency structured credit, and municipal bonds are generally offering a more attractive risk-reward profile given recent market action, in the view of many RV managers.

With the increased volatility in markets we have seen so far in 2022, Global Macro Strategies performed well and we remain positive on this strategy. Macro managers typically made money from being short sovereign Fixed Income markets and long the U.S. dollar against currencies like the euro, pound and yen which depreciated. Long Commodities generally made money, with some give-back over the summer. However, fundamentals for many energy markets remain positive. Many macro managers believe more monetary tightening is coming to bring down inflation, with economic growth taking a much harder hit than is currently being discounted. In such an environment, traditional markets may suffer while opportunities for macro managers could be quite strong.

We maintain our positive outlook for Equity Hedge funds. We continue to favor funds managed with low to moderate net exposure and factor biases given the neutral view on the beta contribution from global Equities in the current environment. Greater stock dispersion is expected to drive an attractive backdrop for stock pickers given an elevated focus by investors on earnings, free cash flow generation and capital allocation efficiency. In an environment of continued volatility, we believe that a hedged and less-constrained approach to investing in Equities (relative to traditional long-only funds) presents the opportunity to outperform broader Equities.

A market environment with bearish investor sentiment opens up opportunities to add long positions trading at discounted prices. While market participants assess the effect of a potential recession on the near-term fundamentals of businesses, lower stock prices are providing long-term-minded investors with attractive entry points to invest in stocks with elevated projected Internal Rates of Return (IRR)—a method of calculating an investment's rate of return. Short positions generated significant returns and alpha[2] in the first of half of 2022, but were a drag on performance recently during the summer rally. However, we believe short exposure will continue to add value to a portfolio. The abundance of cheap capital over the last several years has significantly deteriorated corporates' capital allocation discipline. With more scrutiny from investors, a higher cost of financing and high inflation driving higher expenses, the backdrop for short practitioners is attractive.

We favor a strategic approach when allocating to Private Equity: Private Equity (PE) Buyout deal activity continues to slow, and many expect closed deal activity to diminish for the remainder of 2022 as announced deal flow has declined. Rising interest rates and falling public market indexes are also having a direct effect on the pricing environment: in many cases, with the cost of debt rising, the proportion of Equity has also risen. While we are positive on Venture/Growth Equity, fund-raising momentum has slowed. Fund managers are preparing portfolio companies for persistent slowdown in fundraising, with burn rates now a renewed focus and alternative capital sources, such as debt, being explored. However, even as we acknowledge that the decline in public Equities will likely have a spillover effect into the private markets (often with a quarter or two lag), we believe it is important for diversification to remain committed to private markets. As companies stay private for longer, we believe investors should continue their allocation to private companies as appropriate to capture early and mid-stage growth.

Private Credit is an attractive category for income-oriented investors who are willing to take some credit risk, as it helps mitigate duration risk in the face of rising rates and provides a return premium over public liquid credit. So far this year, Private Credit has continued to deliver for investors, on average providing flat returns while most other Fixed Income investments have declined materially. Even with some mark-downs, credit defaults remain low. In another positive for the strategy, floating rate resets are coming, which are expected to be back-end loaded for the year. If the economy settles into a soft landing and defaults don't rise materially, returns could be good for the rest of 2022. However, if there is more of a hard landing, we could see defaults rise from historically low levels with negative implications for this strategy.

We favor a strategic approach when allocating to Private Real Estate: Despite growing economic uncertainty, we remain constructive on Core/Core-plus Real Estate. Returns in Q2 have moderated somewhat from the exceptional outperformance seen in 2021, and we expect that to continue over the near term. However, the asset class remains on track to deliver attractive risk-adjusted returns overall, and has the potential to outperform other asset classes that have suffered greater price volatility. Strong fundamentals in key property types (multifamily, industrial, data centers) remain in place and are unlikely to be quickly reversed.

Not surprisingly, transaction volume has recently begun to slow, due to higher rates and borrowing costs. However, for non-traded real estate investment trusts (REITs) of sufficient size and dry powder, there may be opportunities to take advantage of recent volatility and acquire larger pools of assets from public counterparts at discounted prices. We remain neutral on Opportunistic Real Estate; however higher rates and volatility could create interesting scenarios over the medium term.

While technically not classified as Real Estate, Private Infrastructure enjoys some of the positive characteristics of Real Estate and offers some interesting opportunities.

[2] Alpha is a measure of the active return on an investment, the performance of that investment compared with a suitable market index.

Infrastructure assets are well positioned, in our view, in the current inflationary, possibly recessionary, environment. Underlying hard assets with collateral-based cash flows, inflation-linked earnings and contractual cost inflation pass-through are key features of many sectors within the infrastructure market. Additionally, the essential nature of services provided by infrastructure assets provides a level of resiliency in otherwise challenging macro environments, in addition to the diversification aspects relative to traditional debt and equity investments.

Commodities and the dollar: For investors, there is a growing list of reasons to shore up and maintain strategic exposure to commodity prices. Elevated geopolitical risk and the risk of supply disruptions for oil and soft commodities should continue to support higher prices. Many commodities (particularly oil) are off their peak as the U.S. economy slows and the risk of a recession increases. Some countries in Europe may already be in a recession, although this will take time to confirm. Investor flows are showing the renewed interest in Commodities, attracted by, in part, the benefit of diversification. From a business cycle timing perspective, Commodity allocations have often exhibited relative outperformance versus stocks and bonds when the labor market is tight and inflation is high. Given our view that inflation is to remain elevated, a tactical allocation to commodities up to 5% of a diversified portfolio may be reasonable depending on an investor's risk tolerance and time horizon.

Positioning within Commodities could be important to help mitigate the risk of rising real interest rates. Rising real interest rates would have the biggest effect on Commodities, like gold, because the price of gold is largely determined by speculation relative to other more fundamental commodities. For this reason and others, we favor cyclical Commodities (industrial commodities and Energy, for example) over gold.

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 a real diversification benefit to a traditional portfolio. It can also add a diversification benefit to Hedge Funds and PE investments.

MACRO STRATEGY

- Leading economic indicators point to slower U.S. growth over the balance of the year. The economy will likely continue to lose momentum until the Fed stops draining liquidity with its aggressive quantitative tightening schedule. Declining real growth and inflation will squeeze corporate revenues and profits.
- Growth risks in the rest of the world, particularly Europe and EMs, remain elevated and are more acute than the U.S. We maintain our preference for U.S. assets versus the rest of the world even as the U.S. economy slows.

ECONOMIC FORECASTS (AS OF 9/2/2022)

	2021A	Q1 2022A	Q2 2022A	Q3 2022E	Q4 2022E	2022E
Real global GDP (% y/y annualized)	6.1	-	-	-	-	3.1
Real U.S. GDP (% q/q annualized)	5.7	-1.6	-0.6	-0.5	-2.0	1.3
CPI inflation (% y/y)	4.7	8.0	8.6	8.2	6.7	7.9
Core CPI inflation (% y/y)	3.6	6.3	6.0	6.0	5.5	6.0
Unemployment rate (%)	5.4	3.8	3.6	3.5	3.8	3.7
Fed funds rate, end period (%)	0.07	0.33	1.58	2.88	3.63	-

The forecasts in the table above 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. BofA Global Research 2022 end period S&P 500 estimate is 3600; end period 10-year Treasury estimate is 2.75%; 2022 average West Texas Intermediate Oil estimate is $100/barrel.
Sources: BofA Global Research; GWIM ISC as of September 6, 2022. 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.

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.

S&P 500 SCENARIOS BASED ON FORWARD P/E AND 2023

2023 EPS	EPS Forward P/E (Next 12 months)				
	15.0x	16.0x	17.0x	18.0x	19.0x
$250	3,750	4,000	4,250	4,500	4,750
$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

For illustrative purposes only. Source: Chief Investment Office as of September 6, 2022.

CIO ASSET CLASS VIEWS

Asset Class	CIO View: Underweight		CIO View: Neutral		CIO View: Overweight	Comments
Global 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 Growth			●			We have a slight preference for Value over Growth, given better absolute and relative valuations and ongoing economic reopenings. 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. Large-cap Value				●		
U.S. Small-cap Growth			●			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.
U.S. Small-cap Value			●			
International Developed		●				International Developed Equities remain more vulnerable to rising oil and gas prices and elevated geopolitical risk, and underlying nominal growth is expected to trail behind U.S. levels.
Emerging Markets			●			We are neutral EM Equities overall, with cyclically oriented markets relatively well positioned, in our view, as commodity prices remain high. Key risks stem from escalation of conflict in central and Eastern Europe, rising U.S. interest rates, dollar strength and economic and regulatory policy in China.
International						
North America				●		The U.S. remains our preferred region given balance sheet strength, better fundamentals for consumer spending and a lower likelihood of a deeper energy shock.
Eurozone		●				Downside risk stems from higher oil and gas prices and elevated geopolitical uncertainty in Eastern Europe, which may weigh on real household incomes, industrial profits and economic growth.
U.K.			●			Domestic demand is at risk from the rising household fuel price cap. Post-Brexit withdrawal from the European Union single market remains a negative for medium-term growth.
Japan			●			Large fiscal and monetary stimulus are key sources of support for growth in the domestic economy, though market-based inflation expectations remain among the lowest for the major developed economies.
Pac Rim*			●			Large weighting in Financials and Materials should benefit from normalization of economic activity. China exposure and international shifts on foreign policy toward Hong Kong remain an ongoing source of uncertainty for the region.

* 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.

CIO ASSET CLASS VIEWS (CONTINUED)

Asset Class	CIO View: Underweight		Neutral		Overweight	Comments
Global Fixed Income		●				Bonds diversify multi-asset class portfolios by providing income and relative stability. Slightly below-benchmark duration is suggested, balancing the risk of slower economic growth against the potential for even higher short-term rates than anticipated.
U.S. Governments		●				Yields are attractive across the curve relative to the last 10 years, but expensive relative to persistently higher inflation. Some Treasury allocation for liquidity and principal preservation is advised, as Treasurys provide the best short-term diversification benefits to Equities among Fixed Income sectors. Interest rate volatility has increased and may remain high.
U.S. Mortgages		●				Although the Fed has successfully started to tighten monetary policy without the MBS market overreacting, any miscommunication or persistent inflation leading to increased MBS balance sheet reduction remains a key risk. In addition, MBS purchases from banks may slow further as lending increases and/or deposits decline, presenting a headwind. Finally, recent geopolitical challenges can keep interest rate volatility elevated, a negative driver of MBS performance. In the short term, we expect MBS to underperform Treasurys and prefer conservative positioning in short-duration assets.
U.S. Corporates				●		Investment-grade spreads have widened around 40 to 50 bps YTD, but at +140 to 150 bps, are not yet quite discounting a U.S. recession. That being said, at current valuations, risks look more appropriately priced, particularly on an all-in yield basis. With credit curves still relatively flat we see the best risk adjusted opportunities in the front end of the curve, i.e.; three to five years.
International Fixed Income	●					Compressed yields and risk premiums around the globe compared to the U.S., combined with potentially higher volatility in non-U.S. markets, present unfavorable risk/reward conditions for non-U.S. Fixed Income, justifying an underweight position.
High Yield		●				Valuations now present significantly more attractive medium to long-term returns even after estimating credit losses. However, poor near-term sentiment and rising recession fears may exacerbate near-term price losses. 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. High Yield Tax Exempt		●				HY muni valuations and credit spreads have widened due to weak technicals. We suggest up-in-quality to guard against potential economic weakening.
U.S. Investment-grade Tax Exempt			●			The muni yield curve has bear-steepened recently with shorter-term maturities rising more than longer-term ones, but is still positively sloped, in contrast to the inverted Treasury curve. Short-maturity muni valuations are about average relative to Treasurys, but long-maturity muni valuations are cheaper than average. Muni credit remains generally solid, but we note that weaker pension funding levels increase budget pressures. Tax revenues could also weaken if the economy goes into recession, and this could be further exacerbated by higher inflation-driven operating expenses. We expect munis to provide value over Treasurys for tax-sensitive investors, particularly longer-maturity bonds. We suggest investors shift their focus to higher credit quality in light of potential economic weakening.
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						The shift in Fed policy has led to greater volatility in the Equity and rate markets. An allocation to Hedge Funds has the potential to lower the impact of the volatility and possibly take advantage of the dislocation and sector rotation. For a Hedge Fund allocation at the strategy level, we continue to suggest incremental overweight to Equity Hedge strategies as part of a diversified portfolio of Hedge Fund strategies. Additionally, we continue to see opportunities in the macro space given the rise in geopolitical risk, the potential for uneven economic growth, interest rate differentials and inflation expectations between countries and regions and its impact on rates, commodities and foreign currencies.
Private Equity						We see opportunities across a number of different PE strategies. We believe that an allocation to buyout and Venture/Growth Equity managers gives investors access to new and innovative technologies as companies stay private for longer. Generally, Private Credit strategies have outperformed traditional Fixed Income portfolios so far this year, and they have the benefit of interest rate resets that will be coming later this year. However, credit and default risks rise as the economy contracts, so investors need to keep this in mind when contemplating an allocation.
Real Assets						Demand for many Commodities remains strong, and we are seeing significant price appreciation across a wide swath of sectors. The Ukraine/Russia conflict combined with sanctions from the West has added to supply problems and price appreciation for certain commodities. Our outlook remains positive over the short and medium terms. An allocation to Tangible Assets/Commodities as appropriate could be a good buffer to high inflation.

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 36-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 as of September 6, 2022.

CIO EQUITY SECTOR VIEWS

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
Energy	• • • ● •	The potential for global disruptions, solid global energy demand, tight inventories, limited spare capacity and the inflationary environment are supportive for Energy stocks. Higher energy prices combined with substantial cost-cutting initiatives over recent years built significant operating leverage into Energy companies. Further, earnings and free cash flow outlooks remain solid for upstream energy companies on higher realized oil and natural gas prices and continued capital discipline. Additional cyclical and value rotations could improve flows, positioning and sentiment, and potentially pull some investors back into the sector. Lower capital expenditures (capex) budgets and fewer long cycle investments in the Energy sector over recent years could support higher oil prices in the near and intermediate terms. Positive view on Energy for its cyclical reflation trade, but, longer term, the secular headwinds still confront the sector. Headwinds include the transition to clean energy, lower renewable energy costs and increasing Environmental, Social and Governance (ESG) focus by investors. Continue to emphasize companies that are low-cost producers with high free cash flows, balance sheet strength and low break-evens. Despite strong YTD gains, Energy still provides attractive valuations with positive momentum.
Utilities	• • • ● •	Utilities maintain more stable and consistent earnings outlooks, especially relative to other more cyclical sectors. In addition, as we progress to later stages of this economic cycle, Utilities historically outperform in late cycle and during economic growth slowdowns, especially regulated utilities. Utilities provide more balance and lower beta for Equity portfolios and help pair with our cyclical exposure as we progress through the current cycle. 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 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. Earnings and dividend growth opportunities remain for Utilities that can capitalize on the energy transition to greater renewable power generation and positive demographic trends. Neutral valuation but improving momentum.
Healthcare	• • • ● •	Positive on the Healthcare sector's exposure to factors 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 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 like life science equipment and managed care. Large pharmaceutical companies (which make up roughly 60% of the Healthcare Index) 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. Medical devices and technology remain among the most challenging places within Healthcare due to cost pressures and potentially increasingly inconsistent end-market spending habits. Emphasize exposure to long-term positive trends in dental, life science/bioprocessing equipment, innovative and differentiated medical devices and managed care, as well as more intermediate opportunities in large-cap biopharma. Valuation remains attractive for the Healthcare sector compared to the market, despite mixed valuations across the subsectors.
Financials	• • • ● •	Banks face tough comps relative to 2021 earnings, which were enhanced by loan loss reserve releases. That said, we believe accelerating loan growth and higher interest rates should drive double-digit growth in net interest income in the second half of the year. With typically half of a bank's revenue coming from net interest income, this sets the stage for several quarters of above-trend revenue growth, which falls almost entirely to the bottom line. Importantly, this does not appear to be fully discounted in stock valuations or consensus earnings estimates. Enhanced earnings power should fuel ongoing capital return, which has been the cornerstone of the investment case for banks in recent years. Given structural headwinds in insurance, we prefer market exchanges that evolved into fee-based data and analytics providers. We also favor alternative asset managers, like Private Equity, which consistently draw fund inflows, typically benefit from low interest rates and maintain pricing power in management fees. U.S. banks remain well capitalized and, in our view, are likely to return more capital to shareholders in coming quarters in buybacks and dividends, and provide some attractive Price/Book valuations.

Sector	CIO View					Comments
	Underweight		Neutral	Overweight		
Real Estate	○	○	○	●	○	The outlook for Real Estate improved over recent quarters, driven by the gradual reopening of the economy and positive financial conditions. If growth slows and inflation remains elevated, Real Estate could be an asset in strong demand. Consider being selective in the sector due to a mixed outlook among its subsectors as a result 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 owners. However, RE's positive correlation with inflation and opportunity to provide both a potential inflation hedge and attractive yield makes the sector attractive. Continue to emphasize longer-term secular trends in data centers, communication infrastructure, storage and industrial real estate. Valuation is neutral, and relative performance has been resilient amidst higher volatility.
Information Technology	○	○	●	○	○	The Technology sector is neutral due to ongoing supply chain issues and margin risks for companies in the sector. Despite some of the most expensive Technology stocks experiencing significant valuation re-ratings this year, we remain concerned about rising rates and the potential for additional valuation re-ratings in the sector. Further, the potential remains for downward revisions that are more likely to impact higher-beta, higher-valuation companies. Especially as the semiconductor cycle continues to be driven by uncertain supply constraints versus historical demand drivers. This will most certainly impact margins as average selling prices (ASP) are now at risk at the slightest hint of demand cuts. Despite strong Cloud tailwinds software margins could also deteriorate as labor costs increase. We suggest a neutral weight in Tech, with a bias to higher quality and more fairly valued companies. We continue to encourage investors to be careful about unprofitable, expensive and long-duration Tech. 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, data centers, software, cybersecurity and semiconductors. Valuation is still elevated, and a move higher in interest rates could pressure multiples for high-growth and high-valuation tech stocks with little to no profits; therefore, look for GARP (growth at a reasonable price) in software and semiconductors. The Tech sector still generates significant free cash flow and dividend growth and remain strong 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 pivot and the re-rating of Technology stocks. Valuations remain elevated and weak momentum year-to-date.
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 over the balance of the year 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 CPG 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 new "safe haven" investment flows over various cycle outcomes despite the already reasonable valuations. Valuations are not cheap but momentum and relative performance has improved.
Industrials	○	○	●	○	○	The Industrial sector is neutral due to ongoing supply chain issues, mixed trends across industries, cautious guidance and divergent fundamental outlooks across subsectors within the Industrial sector. On a positive note, defense stocks have been currently outperforming, and potential improvements in the global capex cycle, including re-shoring of supply chains and manufacturing could support the construction, transportation, machinery, and freight and logistics industries longer term. However, fears of high inflation, tighter monetary policy and slower growth are weighing on general sentiment for Industrials. Valuation is slightly elevated, and momentum is neutral.
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. Rising 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 of 2021 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 do still see some near-term tailwinds for demand, such as bipartisan support for U.S. infrastructure spending and potentially loosening monetary policy 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 slowing.

Sector	CIO View: Underweight	CIO View: Neutral	CIO View: Overweight	Comments
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 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 in the third quarter, 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, going into the fall season, may revert back to a normalized spending pattern with a focus on back-to-school and return-to-work scenarios 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 to year end 2022, 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.
Communication Services	●			We remain underweight the Communication Services sector due to concern for a heighted regulatory environment going into the midterm elections, potential shifts in advertising spending, and increased competitive environment for content. Both European and U.S. advertising spend is slowing due to supply chain, inflation and ongoing macro uncertainties. 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 lower advertising spend. This is also being exacerbated by increased competition in the streaming wars just as the consumer comes out of binge watching post-coronavirus. Long duration stocks without profits could see additional valuation re-ratings in 2022. Valuation is elevated and momentum has deteriorated.

Source: Chief Investment Office as of September 6, 2022. 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

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. Although constructed with a global lens, in today's tightly woven world, what transpires or disrupts in Asia has a tendency to emerge in Europe or North America, and vice versa. 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.

Theme	Comments
Big Data	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.
Demographics	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.
Climate Change	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	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.
Security	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).
Post-crisis World	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.

Source: Chief Investment Office as of September 6, 2022.

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.

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.

Bloomberg US Mortgage Backed Securities Index tracks fixed-rate agency mortgage backed pass-through securities guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food, and medical care.

Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output.

Consumption and Expenditures Price Index is one measure of U.S. inflation, tracking the change in prices of goods and services purchased by consumers throughout the economy.

Important Disclosures

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

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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.