

# Viewpoint

## Clash of Competing Forces

May 2022

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

### IN BRIEF

- Given our view that competing forces—inflation and slower growth—are likely to cast large shadows through the balance of the year, we are lowering our risk budget across our portfolios where appropriate. We continue to emphasize a diversified, balanced and measured approach to asset allocation and expect risk assets to be “on guard” until there are concrete signs that inflation has peaked.
- We have lowered our Equity overweight and downgraded International Developed Markets, given our continued concerns in Europe, and Small-caps evenly. With these changes, Equities are positioned broadly as a slight overweight relative to Fixed Income. The allocations from the downgraded areas are being added to cash and Fixed Income in a balanced approach, on average, across the Chief Investment Office (CIO) portfolios where appropriate. This month, we are also adjusting our sector allocations to balance our cyclical positioning with some defensive sectors.
- Our downgrade of European Equities and International Developed Market Equities to underweight from neutral is driven by our view that Euro area growth is likely to weaken on the back of the energy price shock, declining business and consumer confidence and slowing money supply growth.
- Finally, for investors able to assume a lower level of liquidity, we believe Alternative Investments (AI) for qualified investors, including Real Assets, can also help diversify and balance out risks in a multi asset portfolio, particularly in a complex market cycle such as this one.

Market volatility gathered momentum at the close of April. The S&P 500 had its worst month in terms of performance since March of 2020 and the NASDAQ saw its worst performance since October 2008. The rotation within the equity markets continues to shift toward areas that are higher in quality and more defensive in nature as yields have backed up and concerns over the global growth outlook have grown. We continue to expect a choppy market environment with elevated volatility, particularly as the Federal Reserve (Fed) is widely expected to raise interest rates this week by 50 basis points (bps) and again in both June and July by the same amount.

Given our view that competing forces—inflation and slower growth—are likely to cast large shadows through the balance of the year, we are lowering our risk budget across our portfolios where appropriate. We continue to emphasize a diversified, balanced and measured approach to asset allocation and expect risk assets to be “on guard” until there are concrete signs that inflation has peaked. To lower our risk budget and further increase

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### CIO ASSET CLASS VIEWS

This month, the Global Wealth & Investment Management Investment Strategy Committee reduced our Equity overweight relative to Fixed Income, by lowering International Developed Market Equities to a slight underweight, and trimming our overweight to Small-cap Value. We will add the balance of allocations from the downgraded areas to Fixed Income and cash evenly. This month we also adjust our sector allocations to balance cyclical and defensive positioning. We continue to emphasize a diversified, balanced and measured approach to asset allocation.

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Asset Class	CIO View		
	Underweight	Neutral	Overweight
Global Equities	●	●	●
US. Large Cap Growth	●	●	●
US. Large Cap Value	●	●	●
US. Small Cap Growth	●	●	●
US. Small Cap Value	●	●	●
<b>International Developed</b>	●	●	●
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.

balance we have lowered our Equity overweight (downgraded International Developed Markets, given our continued concerns in Europe, and Small-caps evenly). With these changes, Equities are positioned broadly as a slight overweight relative to Fixed Income. The allocations from the downgraded areas are being added to cash and Fixed Income in a balanced approach, on average, across the CIO portfolios where appropriate. Although Fixed Income yields could drift higher, they have started to become competitive again. In Equities, we continue to advocate a total return approach as the importance of dividend yield is likely to rise as the wall of worry remains high in the foreseeable future.

Moreover, sticking with our “on guard” theme, we have also adjusted our Equity-sector-based portfolios with an increase to Real Estate (up to slight overweight), Healthcare (up to slight overweight) and Utilities (up to neutral), and a decrease to Consumer Discretionary (down to slight underweight), Technology (down to neutral), Industrials (down to neutral) and Communication Services (down to underweight).

Overall, the principles of diversification, in our view, rise in importance as more complex market cycles develop and mature. Frequent pull-backs and rallies in risk assets should be expected in the next couple of years. We do not want to time these gyrations. Rather, we prefer to have a solid balance in portfolios to help smooth out some volatility.

Finally, for investors able to assume a lower level of liquidity, we believe Alternative Investments for qualified investors, including Real Assets, can also help diversify and balance out risks in a multi-asset portfolio, particularly in a complex market cycle such as this one.

## CIO INVESTMENT DASHBOARD

Economic growth in the U.S. should remain healthy, however the risk for a slowdown has risen as inflation runs hot, the Fed has pivoted to a more aggressive tightening bias, and geopolitical uncertainty has increased. Corporate profits currently remain supportive, with consensus estimating annual earnings growth of 9.7%, but recently upward earnings revisions have cooled. Corporate credit conditions remain generally supportive due to solid corporate earnings and cash flows. Absolute valuations for U.S. Equities have become less extended, but still remain higher than the historical average. Investor sentiment has returned to extremely bearish levels seen earlier this year. We continue to believe that volatility will remain in a higher range as compared to pre-pandemic levels and expect the “grind-it-out” environment to persist for markets.

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

Factor	Implication for Equities			CIO View
	Negative	Neutral	Positive	
Earnings				For 2021, S&P 500 earnings grew by 48.4%, according to FactSet. For Q1 this year, the blended year-over-year (YoY) growth rate, which combines companies that have already reported with the consensus analysts' estimates of those that haven't, has increased to 7.9% from 5.4% on April 1. Annual growth is expected at 9.7%, also revised higher since then. Moreover, over 80% of companies have positively surprised profit expectations, according to Bloomberg. However, earnings revisions across major regions and many sectors are declining. Scarce upgrades largely reflect the effects of higher commodities prices and bond yields, as well as chip shortages.
Valuations				Absolute valuations for U.S. Equities have become less extended, though they remain higher than the historical average. The S&P 500 price-to-earnings (P/E) ratio (next 12 months) has fallen to 17.7x from 21.5x in late 2021, due to both price volatility and rising earnings estimates. Relative to Fixed Income, valuations are still attractive, but are becoming less so due in part to an increase in both rates and the price of the S&P 500. Its earnings yield is 269 bps above the 10-year Treasury yield, indicating some upside for Equities relative to Fixed Income.
U.S. Macro				Growth of U.S. real gross domestic product (GDP) in the first quarter of 2022 contracted by 1.4% on a seasonally adjusted annual growth rate, compared to a 6.9% expansion to end 2021. Despite weakness in trade and an inventory drawdown, final sales to private domestic purchasers, an underlying measure of demand accelerated, indicating inherent strength in consumption and investment. On the demand side, consumer spending remains supported by an improving labor market, economic reopening, record-high household net worth and excess savings. Supply-chain challenges and labor shortages to a lesser extent remain impediments to growth. BofA Global Research expects growth of 2.7% for 2022.
Global Growth				Geopolitical developments are sustaining global uncertainty, exacerbating commodity-related inflation and destabilizing the economic outlook in Europe. Meanwhile, despite recent economic normalization across the global economy, as populations and many governments increasingly learn to live with the coronavirus, China

Factor	Implication for Equities			CIO View
	Negative	Neutral	Positive	
				remains an exception. Recent lockdowns are dragging on consumption and the services sector, among other effects. The global economy is expected to expand by 3.3% in 2022, according to BofA Global Research.
Monetary Policy / Inflation	←	●		The Federal Open Market Committee (FOMC) began its policy interest rate upcycle, hiking by 0.25% at its March meeting. Fed Chairman Jerome Powell and others have suggested a notable likelihood for larger increases should conditions warrant, sustaining anticipation for a quicker pace of tightening monetary policy, including the runoff of the Fed's balance sheet in 2022. Overall, inflation data, such as the Consumer Price Index (CPI), the Producer Price Index (PPI) and consumer expectation for nearer-term price inflation, has surprised to the upside. Trailing strong demand, the Ukraine/Russia geopolitical conflict and lockdowns in China risk renewed strains for already constrained supply in the global economy.
Fiscal Policy	←	●		Including the Bipartisan Infrastructure Framework approved in October, fiscal relief in the U.S. equates to nearly 31% of GDP since the start of the pandemic. Undermined by persistent inflation, momentum towards approving President Biden's Build Back Better economic agenda through the reconciliation process by the Democratic-controlled Congress has stalled. The 2023 budget proposal calls for greater military and social spending along with taxes on the wealthiest Americans, aimed at cutting federal deficits over the longer-term.
Corporate Credit	←	●		While past measures taken by the Fed and rising corporate profitability have underpinned benign corporate financing conditions, High yield (HY) and Investment-grade (IG) credit spreads have widened a bit this year, though these levels still imply accommodative financial conditions, amid strong economic fundamentals.
Yield Curve	←	●		The all-important fed funds/10s curve has remained in a steepening trend. While signaling a positive economic outlook, a flattening trend in other yield curves may reflect growing concern over the sustainability of the business cycle, amid an aggressive interest-rate upcycle by the Fed. Rates on the back end have recently risen on expectations for robust growth of nominal GDP and Fed policy.
Technical Indicators	←	●		At April-end, the Chicago Board Options Exchange (CBOE) Volatility Index (VIX) moved to the upperpart of a general range between 20 and 30. Market breadth has begun to deteriorate again. The cumulative advance/decline line for New York Stock Exchange (NYSE) Equities fell to its lowest level since March 2021. Meanwhile, the percentage of New York Stock Exchange (NYSE) stocks above their 200-day moving average has declined to around 36%.
Investor Sentiment			●	Bearish sentiment is approaching an extreme, according to the American Association of Individual Investors. Institutional portfolio cash levels continue to signal a tactical contrarian "buy" signal, according to BofA Global Research's Fund Manager Survey, while its Bull & Bear Indicator is near a "buy" reading, at 2.1.

Source: Chief Investment Office. Data as of May 3, 2022.

## EQUITIES

**We expect Equities to outperform Fixed Income:** This month the Global Wealth & Investment Management Investment Strategy Committee trimmed the magnitude of our Equity overweight relative to Fixed Income, and we remain slightly overweight. While risks remain, global Equities should benefit from higher nominal growth levels, healthy corporate profits, rising consumer spending, and an improvement in the service sectors in the near-term. However, rising bond yields are likely to remain a headwind for valuation multiples as the Fed pursues a more aggressive tightening bias, with BofA Global Research expecting three 50 bps hikes in May, June and July, and 25 bps for all other meetings this year. While we continue to favor U.S. Equities on a risk-adjusted basis, we acknowledge that tightening monetary policy and rising bond yields could continue to pressure the riskier areas of the markets. Therefore we are trimming our allocation to Small-cap Value, while maintaining an overweight stance. Additionally, we are downgrading European Equities and International Developed Market Equities to underweight from neutral 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, with stronger balance sheets on aggregate, prospects for higher levels of nominal growth and a favorable earnings backdrop. U.S. Large-caps generally offer a balance of Quality, Yield and Growth factors, while Small-caps offer higher cyclicality and more attractive relative valuations.

We expect earnings per share (EPS) for the S&P 500 to improve to \$221 in 2022. U.S. Equity valuations are still higher than historical averages, but the recent selloff has brought the forward P/E to a more reasonable 17.7x level from 21.5x in December 2021. Near-term risks for Equities come from uncertainty surrounding the conflict in Eastern

Europe, ongoing coronavirus concerns, China's slowdown and elevated levels of inflation. We would expect volatility to continue as financial conditions tighten as the Fed continues their hiking cycle.

This month we are adjusting our sector allocations to balance our cyclical positioning with some defensive sectors. We continue to prefer certain cyclical sectors with strong free cash flows and attractive valuations like Energy, Materials and Financials given the current macroeconomic backdrop. Recently we have become more constructive on defensive sectors like Real Estate and Healthcare, which are likely to provide some stability; this month we raise both to a slight overweight from neutral. In addition, we are raising our allocation to Utilities to neutral from underweight. Given our view that we are in the early stages of a late cycle environment, we are lowering our outlook for Information Technology and Industrials to neutral, and we are increasing the magnitude of our underweight to Communication Services. We continue to maintain a positive outlook for the health of the U.S. consumer; however, rising input costs pose a risk to margins, so we are moving to a slight underweight in Consumer Discretionary from neutral, and remain underweight Consumer Staples. We view this month's sector adjustments as another step toward a well-diversified and balanced stance.

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 has higher exposure to cyclical sectors that may benefit from higher inflation. We maintain a slight overweight to Small-cap Equities, given their cyclical nature, correlation to interest rates and inflation, and the rising capital expenditures (CapEx) cycle.

**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 and the lingering effects of the pandemic. Looking forward, we see further challenges stemming from slower economic growth in China and rising U.S. interest rates. We nonetheless continue to expect a wide return dispersion between individual EM countries and regions. Central and Eastern European markets are most exposed to further fallout from the Ukraine/Russia crisis through the effect of international sanctions and high dependency on natural gas imports from Russia. Cyclically-oriented markets in Latin America, the Middle East and Africa should be relatively well positioned as commodity prices remain high, while markets in Asia remain more at risk from high energy and food import prices. For the heavyweight Chinese market, we also see ongoing policy risks related to industry-specific regulation. The structural rise in EM consumer spending remains a big reason that we believe investors should maintain a strategic allocation to EM Equities. 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<sup>1</sup> when investing in EM, as fundamentals differ across countries based on fiscal capacity, external funding needs, corporate governance and other factors.

**We are downgrading International Developed Market Equities to a slight underweight:** We continue to prefer U.S. versus International Developed given our higher-quality view. This month we are downgrading Europe and International Equities to underweight from neutral given headwinds to economic growth and corporate profits from higher energy prices, elevated inflation and the potential for the European Central Bank to become more hawkish than currently assumed. European Equities are now experiencing more earnings downgrades than upgrades for the first time since November 2020, as macroeconomic conditions have begun to deteriorate.

<sup>1</sup>Active management seeks to outperform benchmarks through active investment decisions such as asset allocation and investment selection.

## EQUITY WATCH LIST

- Regional economic reopenings, coronavirus case trends, vaccination distribution timeline
- 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:** While we remain underweight Fixed Income, this month we are trimming the magnitude of the underweight slightly given valuations, by adding to IG Corporates and Treasuries where appropriate. We prefer portfolios to be positioned short duration relative to the duration of a stated benchmark that is specifically aligned to investment goals. The Fed is as far behind the curve as it has been in more than 40 years. The Fed has pivoted hawkishly, and has even higher conviction that it must withdraw monetary policy accommodation at a somewhat faster pace to deal with high inflation. Quantitative tightening is expected imminently, at a much faster pace than last time. Treasury market volatility has increased significantly, and all major Fixed Income sectors are now negative year-to-date (YTD). This has been a historically bad start to the year, given the abrupt and historic change of the Fed's policy stance.

Yield curves have flattened significantly over the past twelve months, with numerous inversions having occurred at different parts of the curve, but some mild steepening has occurred leading to un-inversions. The yield curve is extremely flat to mildly inverted between three and 10 years. As long as the fed funds/10-year curve remains this positive—alongside other positive data, like leading economic indicators—the chances of a recession near-term is low, although there is greater risk in 2023 and 2024. Inflation expectations are high; however, they have moved down dramatically. The 5-year inflation breakeven hit an all-time record high of 3.73% on March 25, and is now closer to 3.25%. This still seems to leave the Fed two unattractive options, in our view: maintain the current expected path of policy tightening and allow for a continued overshoot of inflation; or adjust policy further to get inflation back down to their 2% target, at the expense of a markedly higher chance of a recession.

While there may be more upside to Treasury rates over the medium term, with a move from 50 bps to 3% the majority of the near-term rate move may have occurred. Treasuries should still be considered for most investors' portfolios, especially to complement portfolios with Equity risk. However, 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. We still expect Fixed Income to be a diversifier—in the long run, coupon income is a larger determinant to total returns than price changes due to rate moves—and this diversification effect has proven true when rate volatility decreases.

**We remain slightly overweight Investment-grade corporates and slightly underweight High Yield:** Investment-grade credit spreads have widened during the month of April, giving up roughly 50% of the recent rally and are now trading at +130-140 bps. We continue to believe that recent weakness in IG is primarily a reflection of monetary policy uncertainty and technical factors—and not building credit stresses in the market. Issuance has been pulled forward, and fund flows remain under pressure amid historically significant price drawdowns, for long duration IG corporates (10+ years), in particular. Despite uncertainties with regard to the macro backdrop next year, we believe

that credit could modestly outperform Treasuries this year given strong underlying corporate credit fundamentals. 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 toward ~150 bps should be viewed as a repositioning opportunity absent a pickup in recession risk in 2023.

Credit losses in IG are generally manageable and not a large component of spreads, but the same cannot be said in HY. Despite an improving fundamental backdrop, credit losses may rise and meaningfully reduce total returns. The yields now available in HY (roughly 4%) provide very meager compensation. Within HY allocations, we prefer larger allocations to secured floating-rate leveraged loans versus unsecured high yield bonds, although both should be included, and we caution investors to be aware that strong near-term performance may not be sustainable.

Municipal bond valuations have cheapened significantly versus Treasuries this year and are now quite cheap versus historical averages. We believe fundamental conditions remain strong, with municipal issuers benefitting from strong growth in tax collections and generous fiscal stimulus passed by the federal government in 2020 and 2021. However, technicals remain weak because retail demand has slackened due to high inflation, sharply tightening monetary policy, and the reduced likelihood of tax rate increases. Muni credit spreads (e.g., BBB vs AAA) have also widened modestly, although we believe this too is based on technical, not fundamental weakness. We still expect munis to provide value over Treasuries for tax-sensitive investors in 2022, particularly carefully researched mid-to-lower-quality credits. However, munis are unlikely to outperform as strongly as they did in 2021 due to the weaker technicals, in our view.

**We are slightly underweight Mortgage-Backed Securities:** Due to concerns about Fed quantitative tightening, along with reduced demand from commercial banks as loan demand recovers, Mortgage-Backed Securities (MBS) spreads have come under pressure and are leaking 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. Because of the higher mortgage rates, only a small percentage of mortgages are currently eligible for refinancing, so duration extensions may be limited in the future. Going forward, increased volatility and fluctuating mortgage rates may mean a higher prepayment risk. Furthermore, any miscommunication or negative surprise as a result of rising inflation, particularly as it relates to 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 Treasuries, and the sector is a large component of the high-quality bond market. Therefore, we believe investors should maintain exposure in the sector as appropriate for their particular investment objectives and risk tolerance.

#### FIXED INCOME WATCH LIST

- Deeper or new inversions in the yield curve, particularly in 2s/10s and 10s/30s, which would be interpreted as increased recessionary risk. Signs of significantly negative Fixed Income fund flows
- Inflation breakevens for signs of stabilization, or an “un-anchoring” of inflation expectations
- Signs of any risk aversion or recessionary risk in terms of spreads, yields or new issue activity
- Potential tax changes if consensus is eventually reached on the Build Back Better bill
- Dislocations in Commercial Real Estate (CRE) markets

#### 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.

**We favor a strategic approach when allocating to Hedge Funds:** In line with our overall overweight view on Equities, we currently see favorable opportunities for select Hedge Fund strategies for qualified investors, such as Equity Long/Short. Uncertainty has increased for the market and resulted in higher volatility across both Equities and bonds. The list of factors contributing to it seems to grow by the week: the pace and magnitude of the rate hikes, its effect on U.S. and global growth, the strength and persistence of inflation, the Ukraine/Russia conflict and China. Now more than ever, we believe a hedged approach could serve investors well.

We see an attractive opportunity set for Equity Hedge funds in 2022, most particularly for funds managed with low to moderate net exposure and factor biases. In a volatile market environment, we believe that a hedged and less constrained approach to investing in Equities (relative to traditional long only funds) presents the opportunity to potentially outperform broader Equities. Our return expectations for broader Equities in 2022 remain modest. With this backdrop, we expect alpha—the measure of the active return on an investment—generation on both longs and shorts to be the main driver of Equity Hedge funds' performance.

On the long side, the volatility exhibited by segments of the market so far in 2022 offers the opportunity to invest at discounted prices in select high quality companies. Even though these stocks typically have robust fundamentals and attractive long term prospects, they declined with the rest of the market where selling has been relatively indiscriminate, particularly in technology and healthcare. Funds with a long-term investment horizon are cautiously building up exposure into high conviction ideas they deem attractively valued, believing that earnings as opposed to macro factors will ultimately be the key driver of performance. Moreover, the relatively unconstrained mandate of Equity Hedge managers allows them to orient their portfolios toward the most attractive subsectors in their universe and to concentrate in unique opportunities.

After a tumultuous period for short sellers in 2020 and the start of 2021, short positions are generally currently performing well and generating alpha. Rising interest rates implies a higher cost of financing. Combined with inflationary pressures driving higher expenses, incumbent and/or low quality businesses with the need to invest to avoid being disrupted are facing challenges. In a punishing market environment for companies that disappoint investors, the identification of specific catalysts for short positions has become less critical, in our view.

We remain cautious on Event Driven and Relative Value strategies. While credit spreads have widened somewhat recently and are off their lows, they are still tight relative to historic levels. Rising interest rates are likely to be a headwind for some strategies as the trend for interest rates is clearly upward. In addition, there is a lack of opportunities for distressed strategies, although this could change as interest rates rise and the era of limitless monetary liquidity appears to be ending. On a positive side, we are more constructive on Merger Arbitrage due to robust deal activity and relatively attractive spreads which have widened quarter-over-quarter due to Equity volatility and elevated regulatory risks.

We are positive on trading strategies, many of which can take advantage of global dislocations, changes to interest rates and the macro environment. For qualified investors seeking diversified return streams, these managers who can position their portfolio both long and short, could provide competitive and less-correlated returns. There is also a level of asset class diversification to consider, as these managers invest across all parts of the investment spectrum: stocks, bonds, currencies and commodities. In the current

geopolitical environment, the diversification offered by trading strategies could provide an investment portfolio some buffer to global political events.

**We favor a strategic approach when allocating to Private Equity:** We view these strategies as long-term potential portfolio return enhancers with unique access to specialized investments and strategies unavailable in traditional portfolio construction. We see opportunities in Buyout and Growth Equity, as these strategies are somewhat insulated from the daily volatility we see on the public side. Also, valuations for these companies tend to be more anchored to fundraising events than the stock market. However, the combination of a few factors – (i) public market volatility and the resultant decline in Initial Public Offerings (IPOs) (reducing a potential capital-raise alternative for more mature companies); (ii) a likely reduction in the level of capital inflow from non-traditional investors; and (iii) current and anticipated macroeconomic headwinds such as interest rate increases, supply chain constraints and inflation could lead to a valuation correction in VC and Growth Equity. While the correction 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, investors should consider to continue their allocation to private companies to capture that 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. As interest rates rise, income investors need to seek alternative sources of income that aren't overwhelmed by duration-sensitive losses. Middle market lending is showing itself to continue to offer investors attractive premiums over public market debt, further enhanced by structures that allow degrees of portfolio leverage. The less liquid nature of these investments are still well rewarded versus public markets. Almost all debt in this space is floating rate and offers investors a chance to offset risk in the face of rising interest rates and inflation.

**We favor a strategic approach when allocating to Private Real Estate:** The Commercial Real Estate (CRE) market continues to rebound, with all the major subsectors posting positive performance in Q1. Industrial continued to lead in Q1, benefiting from the surge in logistical needs. Multi-family housing was the second best performer, with strong residential demand. Hotels, office and retail all put up positive, if muted, numbers. While we still favor the Industrial sector, valuations have become rich.

The macro backdrop is supportive of the investment case for Core/Core-Plus Real Estate, which emphasizes quality investments in well-located and well-positioned assets in growing and liquid primary and secondary markets. While we do not necessarily expect returns over the next year to match the outperformance seen in 2021, we do believe that 2022 has the potential to be another strong year for Core/Core-plus Real Estate, and we maintain a positive view on the asset class longer term, given attractive supply/demand characteristics. A large increase in new supply would likely lead us to reevaluate, but various barriers to new construction (as well as the visibility afforded by permitting and construction timelines) significantly reduce the supply-side risks over the near term.

**Commodities and the dollar:** For investors, there is a growing list of reasons to shore up and maintain strategic exposure to commodity prices. Persistent supply chain disruptions, elevated geopolitical risk and rising commodity prices from oil to corn and wheat all appear to have staying power. Contrary to popular consensus, the dollar has remained strong. However, a weaker dollar, potentially driven by valuations, could eventually emerge as an additional catalyst for Commodities. At the same time, investor flows are revisiting the diversification benefits of Commodities. 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. Over the long term, global growth anchors demand, in our view, and is the most important factor to consider when allocating to Commodities. Despite recent downward revisions to global growth forecasts, we do not see a recession on the 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.

The U.S. dollar continues to benefit from relatively stronger economic growth and a Fed that is raising rates to address elevated inflation faster than other major central banks like the European Central Bank and Bank of Japan. This has helped the dollar to remain strong, exploiting the relative interest rate advantage versus the developed world. Growth risks in China and the rest of the world have also added to the attractiveness of the dollar. However, longer term valuation metrics like purchasing power parity continue to point toward downward pressure as we look further out.

**Tangible assets:** As inflation rises and seems to be more persistent than first predicted, tangible assets—such as real estate, timber, and farm and ranch land— have historically done well in a high inflationary environment and add a real diversification benefit to a traditional portfolio. It also adds a diversification benefit to Hedge Funds and Private Equity (PE) investments.

## MACRO STRATEGY

- Consumer spending and business investment grew at an above-trend pace in Q1, a key positive dynamic emerging from a negative headline growth print. We think recession risks are low this year, but with inflation far above target, the Fed is likely to have a difficult time reining in inflation without eventually causing a recession. Elevated geopolitical risk adds to this risk. We believe this is likely to keep markets volatile.
- Growth risks in the rest of the world, particularly China and Europe, have increased as well. We maintain our preference for U.S. assets versus the rest of the world.

## ECONOMIC FORECASTS (AS OF 4/29/2022)

	2021A	Q1 2022A	Q2 2022E	Q3 2022E	Q4 2022E	2022E
Real global GDP (% y/y annualized)	6.1	-	-	-	-	3.3
Real U.S. GDP (% q/q annualized)	5.7	-1.4	3.5	2.5	1.8	2.7
CPI inflation (% y/y)	4.7	8.0	7.7	7.2	6.2	7.3
Core CPI inflation (% y/y)	3.6	6.3	5.4	5.2	5.0	5.5
Unemployment rate (%)	5.4	3.8	3.4	3.2	3.1	3.4
Fed funds rate, end period (%)	0.07	0.33	1.38	2.13	2.63	-

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. **Past performance is no guarantee of future results.** 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. Note: BofA Global Research 2022 end period S&P 500 estimate is 4500; end period 10-year Treasury estimate is 2.50%; 2022 average West Texas Intermediate Oil estimate is \$100/barrel. Sources: BofA Global Research; GWIM ISC as of May 3, 2022.

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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 EPS Forward P/E (Next 12 months)

2023 EPS	Forward P/E (Next 12 months)				
	18.0x	19.0x	20.0x	21.0x	22.0x
\$275	4,950	5,225	5,500	5,775	6,050
\$265	4,770	5,035	5,300	5,565	5,830
\$255	4,590	4,845	5,100	5,355	5,610
\$245	4,410	4,655	4,900	5,145	5,390
\$235	4,230	4,465	4,700	4,935	5,170
\$225	4,050	4,275	4,500	4,725	4,950
\$215	3,870	4,085	4,300	4,515	4,730

For illustrative purposes only. Forecasts are subject to change. Source: Chief Investment Office as of May 3, 2022.

## CIO ASSET CLASS VIEWS

Asset Class	CIO View					Comments
	Underweight	Neutral	Overweight			
Global Equities	●	●	●	●	●	We retain our positive view on Equities based upon favorable relative valuations and solid global growth. We remain overweight the U.S. and neutral EM, with a slight underweight to International Developed.
U.S. Large-cap Growth	●	●	●	●	●	Growth should continue to benefit from accelerated secular trends, but Value, which has higher exposure to cyclical sectors, should benefit from higher inflation and economic reopening. We believe portfolios should incorporate both Growth and Value factors.
U.S. Large-cap Value	●	●	●	●	●	
U.S. Small-cap Growth	●	●	●	●	●	Small-caps have relatively attractive valuations and could benefit from further cyclical rotation.
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 as commodity prices remain high. Key risks stem from escalation of conflict in central and Eastern Europe, ongoing fallout from the pandemic, rising U.S. interest rates and industry-specific regulation in China.
<b>International</b>						
North America	●	●	●	●	●	The U.S. remains our preferred region on corporate earnings and balance sheet strength, with a domestic demand-driven recovery likely to remain resilient as the economy continues to reopen.
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 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					Comments
	Underweight	Neutral	Overweight			
Global Fixed Income	●	●	●	●	●	Bonds diversify multi-asset class portfolios by providing income and relative stability. Below-benchmark duration is preferred, as fiscal and monetary policy supports higher inflation, stronger nominal growth and higher long-term rates over the medium term.
U.S. Governments	●	●	●	●	●	While yields are still expensive relative to inflation, they provide significantly better value and lower risk-to-reward than at any point since the pandemic. Some allocation to Treasuries for liquidity and principal preservation is still advised, as Treasuries continue to provide one of the best short-term diversification benefits to Equities among Fixed Income assets. Interest rate volatility has increased and may remain high.
U.S. Mortgages	●	●	●	●	●	Although the Fed has successfully started to tighten monetary policy without markets overreacting, any miscommunication or persistent inflation leading to increased MBS balance sheet reduction remains a key risk. Furthermore, MBS purchases from banks may slow as lending increases, presenting a potential headwind. Finally, recent geopolitical challenges can increase interest rate volatility, a negative driver of MBS performance. In the short term, we expect MBS to underperform Treasuries and recommend conservative positioning in short-duration assets.
U.S. Corporates	●	●	●	●	●	Credit spreads have continued to widen amid interest rate volatility and weaker technical dynamics. With IG at +130 to 140 bps, the index is well off last 12 months lows in spread, and also at a level which we continue to believe is consistent with a technical selloff and not indicative of fundamental deterioration or recession. While markets could remain choppy, we continue to prefer high grade Corporates over Treasuries given incremental carry and see best opportunities in the front end of the curve (i.e. 1-3 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, in our view, justifying an underweight position.
High Yield	●	●	●	●	●	Valuations present mediocre absolute long-term returns after estimating credit losses. Near-term performance may be reasonable – given where the economy is in the business cycle – however we don't view the risk/reward favorably. Any additions to HY risk need to have a long timeframe. 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 but fundamentals remain solid.
U.S. Investment-grade Tax Exempt	●	●	●	●	●	Municipal bond valuations have cheapened significantly versus Treasuries and are now quite cheap versus historical averages. Muni credit continues to benefit from growing tax collections and generous fiscal stimulus passed over the previous 2 years. However, demand is weak due to high inflation, monetary tightening, and the lower likelihood of tax rate increases. We still believe munis provide value over Treasuries for tax-sensitive investors, particular well-researched, mid-to-lower quality credits.
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 recommend incremental overweight to Equity long/short 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. Even though GDP numbers were weaker than expected in Q1, 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. Private Credit strategies will likely outperform a traditional Fixed Income portfolio as interest rates rise as many of these investments are more credit- than interest rate-sensitive, generally have a shorter duration and tend to be floating-rate securities.
Real Assets						Demand for many Commodities remains strong and we are seeing significant price appreciation across a wide swath of sectors. Problems and dislocations in global logistics are causing bottlenecks and aggravating the supply/demand imbalance, adding upward pressure on prices. The Ukraine/Russia conflict has only added to supply problems and price appreciation for certain commodities. Our outlook remains positive over the short and medium terms. An allocation to Real Assets/Commodities could be a good buffer to rising 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 May 3, 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					Comments
	Underweight	Neutral	Overweight			
Energy	●	●	●	●	●	The potential for global disruptions, strong 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 CapEx budgets and fewer long cycle investments in the Energy sector over recent years could support higher oil prices in the near- and intermediate-term. 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. Even given year-to-date gains, Energy still provides attractive valuations with positive momentum.
Financials	●	●	●	●	●	Banks face tough comps relative to 2021 earnings which were enhanced by loan loss reserve releases. That said, 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.
Real Estate	●	●	▶	●	●	We are raising our allocation to the Real Estate sector as the outlook for Real Estate improved over recent quarters, driven by the gradual re-opening 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 sub-sectors 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), leisure (e.g., hotels), mall operators and owners. However, Real Estate's positive correlation with inflation and opportunity to provide both a potential inflation hedge, yield and reopening exposure makes the sector more attractive. Continue to emphasize longer-term secular trends in data centers, communication infrastructure, storage and industrial real estate with a focus on eCommerce distribution facilities. Valuation is neutral and relative performance has been resilient amidst higher volatility.
Materials	●	●	●	●	●	Despite supply chain constraints, China shutdowns and conflicts in Europe, we remain constructive on the Materials sector given the inflationary backdrop, low inventories, strong demand trends and tight commodity markets. Supply constraints are mixed helping to keep prices elevated but not allowing companies to run at maximum efficiency. Low inventory levels relative to consumption are helping companies to pass through cost inflation and help protect margins, and could extend the cycle, as inventories need to be rebuilt. There is high potential operating leverage embedded in the sector, driven by lower-cost profiles when compared to prior cycles, which could help enhance profitability if volume growth trends persist. Packaging and specialty chemicals are benefiting from healthy U.S. consumer demand, while the greatest improvement in marginal demand is occurring in cyclical Commodities exposed to automotive, construction and aerospace end markets, which have yet to fully recover. Rising input and labor costs are building in specific areas of the sector and could compress margins but supply cannot keep up with strong demand currently and supports higher prices in many cases. The metals and mining sub-sector is delivering strong top line revenues and bottom line earnings. Valuation is attractive compared to the market and momentum is neutral after recent consolidations.

CIO View

Sector	Underweight Neutral Overweight	Comments
Healthcare		<p>Raising the Healthcare sector allocation to gain 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 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 sub-sectors.</p>
Utilities		<p>We are raising our allocation to the Utilities sector to Neutral as we look to better balance our cyclical exposure as we progress through the current cycle. We expect consistent earnings results despite slowing economic growth, There is still 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 transition to greater renewable power generation and positive demographic trends. Neutral valuation and improving momentum recently.</p>
Information Technology		<p>Lowering our allocation to the Technology sector to 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's) 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 recommend a neutral weight in Tech, with a modest bias to lower priced and value-oriented 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 declining momentum.</p>
Industrials		<p>Lowering exposure to the Industrial sector to Neutral due to ongoing supply chain issues, mixed trends across industries, cautious guidance and divergent fundamental outlooks across sub-sectors within the sector. On a positive note, the defense stocks are 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 the Industrials. Valuation is elevated and momentum is neutral.</p>
Consumer Discretionary		<p>We are reducing the Consumer Discretionary sector in response to persistent inflationary pressures and an uncertain global geopolitical environment, both potentially impacting consumer spending trends along with declining consumer sentiment. Stubbornly high finished goods inflationary pressures could continue into late 2022 as a result of further supply chain disruptions, inflated energy costs, labor shortages and wage cost pressures and may limit the anticipated increase in supply that could have potentially closed the demand and supply gap for consumer products. Further supply restraints of big ticket items such as autos and housing could be exacerbated by the geopolitical uncertainties and remain prohibitive for several more quarters to come as supply chain constraints make it more difficult to meet existing demand. Despite the favorable macro environment for wages and employment, and a more willing and able consumer, there could be a potential shift in spending behaviors such as big ticket purchase deferrals, products and services trade down and substitutions. All combined, these behavioral changes could begin to influence near term consumer demand. The shift to experiences could be a bright spot in the consumer economy as pandemic induced mask mandates are lifted and the elimination of pandemic restrictions allow for freer movement and drives demand for travel and leisure activities. Additionally, macro uncertainty tends to be a catalyst for an increase in nesting activities at home and a desire to age in place that has historically been an impetus for home improvement remodel and repair despite the mounting consumer headwinds. Consumer Discretionary's relative performance peaked and turned lower, and higher costs could potentially pressure margins and earnings going forward. Valuation is elevated, and momentum is declining.</p>

Sector	CIO View			Comments
	Underweight	Neutral	Overweight	
Consumer Staples				Consumer Staples face tougher revenue and earnings comps as we lap the pandemic-driven stay-at-home benefits. Increases in labor, input, freight and packaging costs could further pressure YoY profitability as companies potentially increase promotional activity in an attempt to retain pandemic-affected consumers. Historically, Consumer Staples performance is a function of relative earnings growth and the sector could face decelerating earnings growth in 2022, especially compared to cyclical areas that are expected to see improving earnings growth. Valuation is extended with better momentum recently.
Communication Services				Further reducing the Communication Services sector allocation due to concern for a heightened regulatory environment going into the mid-term elections, potential shifts in advertising spending, and increased competitive environment around 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 May 3, 2022. BofA Global Research is research produced by BofA Securities, Inc. ("BofAS") and/or one or more of its affiliates. BofAS is a registered broker-dealer, Member SIPC, and wholly owned subsidiary of Bank of America Corporation. 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.

Theme	Comments
<b>Big Data</b>	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.
<b>Demographics</b>	<p>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, financials, 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.</p> <p>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.</p>
<b>Climate Change</b>	With emphasis from the new administration, 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. Key investment opportunities: Renewable energy (solar, wind and hydrogen), as well as energy-efficiency such as building systems, water/waste management, and energy storage & distribution. An increased focus on ESG factors and metrics promotes the shift toward stakeholder capitalism.
<b>Future Mobility</b>	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.
<b>Security</b>	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).
<b>Post-crisis World</b>	In the post-crisis world, reshoring policies are increasingly focused on building more resiliency into their supply chains, helping to sculpt tri-polar 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 is a key buffer to above-trend inflation.

Source: Chief Investment Office as of May 3, 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.

**Purchasing Managers' Index (PMI)** is a measure of the prevailing direction of economic trends in manufacturing.

## Important Disclosures

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

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The Global Wealth & Investment Management Investment Strategy Committee (GWIM ISC) is responsible for developing and coordinating recommendations for short-term and long-term investment strategy and market views encompassing markets, economic indicators, asset classes and other market-related projections affecting GWIM.

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.

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