



Hampton Roads Commercial Real Estate

2024 Economic Forecast

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Hampton Roads (Virginia Beach/Norfolk)

Virginia

October 1, 2023, update

bankofamerica.com/local

 @BankofAmerica

194K

Digital active
clients¹

500

Local employees



22

Financial centers



87

ATMs



4

Merrill® offices



1

Bank of America
Private Bank office

Business lending

Small business



\$78 million

Loans to small business

Credit extended to businesses that generally have annual revenues of less than \$5 million.

Commercial business



\$719 million

Loans to commercial business

Credit extended to businesses that generally have annual revenues of \$5 million to \$2 billion.

Personal banking and investing



\$4.5 billion

Total FDIC deposits*



\$63 million

Home loans**



\$6.4 billion

Bank of America Private Bank
client balances***

\$8.8 billion

Merrill client balances***

*Total deposits within this market as of June 30, 2022, which may be inclusive of Consumer, Global Wealth Management (GWIM), Global Banking and Global Markets deposits.

**Home loan dollars reflect a rolling 12-month total of first mortgage loan production figures including Consumer Banking and GWIM.

***Global Wealth and Investment Management (GWIM), the wealth and investment management division of Bank of America, includes Bank of America Private Bank and Merrill. GWIM Client Balances consists of assets under management of GWIM entities, brokerage assets, and assets in custody of GWIM entities.

Community support

Grants and matching gifts² (since 2018)



\$7.4 million

Advancing economic mobility in the communities we serve, including creating opportunities for people of color. The Bank of America Charitable Foundation provides grants and matching gifts on behalf of employees.²

Employee giving and volunteerism² (since 2018)



\$1.1 million

Total contribution by employees donated to local nonprofits and community needs. A portion of this amount was matched by the Bank of America Charitable Foundation.



30K hours

Employee volunteer hours contributed locally as part of our annual goal of giving 2 million volunteer hours across the company. #BofAVolunteers

The power of local connections

At Bank of America, we have leading capabilities across all our businesses and a strategy that is focused on connecting our capabilities to deliver for our customers and clients. In every situation, we're committed to growing responsibly and sustainably - ensuring everything we do aligns to our purpose of helping people live better financial lives.

- Families can have the tools and support they need to live more successful financial lives.
- Neighborhoods can be built on a solid foundation of responsible home lending and economic development.
- Businesses, small and large, can benefit from our financial and intellectual capital.
- And the organizations, nonprofits and companies addressing society's toughest problems can have the resources and expertise of the company and the efforts of our over 200,000 employees behind them.

In each market, we strive to connect everything our company offers to our clients' personal and financial goals so we can provide tailored solutions to fit their needs. It's how we make this large company personal and how we help our customers, clients and communities thrive.

Neighborhood Builders®

Through Neighborhood Builders®, we're advancing community sustainability by equipping organizations and their leaders with tools and resources to do more, including funding and leadership development workshops.

- Hampton Roads Community Action Program
- The Mariners' Museum and Park

¹ Digital active users represents mobile and/or online 90-day active users.

² Community support amounts represent a cumulative five-year period of contributions; 20 quarters from fact-sheet date.

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Viewpoint

2024: A Foundational Year

December 2023

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

IN BRIEF

- A soft landing is our base case for 2024, meaning growth will likely slow, and the labor market weakens, but we do not expect a deeper downturn that typically corresponds with significant declines in risk-assets.
- While we continue to anticipate a choppy market environment given elevated headline risk, we believe the next couple of months will bring the beginning of a long rotation in Equities that includes a move up in areas that have significantly lagged and areas that are well placed for a more substantive rally later next year.
- We concur that the Federal Reserve (Fed) will likely start cutting next year in response to economic weakness, with short rates likely declining faster than long rates, allowing the yield curve to begin to normalize.
- Our portfolio strategy remains “balanced” while fully invested to start the year, as we believe that adjustments below the surface in terms of Value and Growth, Small- and Mid-capitalization shares versus Large-capitalization, and U.S. versus non-U.S. (including Emerging Markets) are paramount in 2024.
- This month we introduce additional strategy level guidance for Alternative Investments, for qualified investors, within a well-diversified portfolio.

As we transition from one economic and business cycle regime to another, we are beginning to experience more “normal” interaction between asset classes. In 2023, we maintained a balanced portfolio strategy through the year with the view that both stocks and bonds would ultimately provide attractive risk-adjusted returns on a combined basis in a choppy, grind-it-out type of environment. With a powerful upswing in Equities in November as bond yields dropped sharply, the U.S. dollar weakened, and inflation declined, U.S. stocks rallied close to the highs experienced in late July. The “wedge” in the markets that led to negative returns in 2022 was inflation and the fact that the Fed would continue to significantly tighten financial conditions namely by raising rates. In the fall of 2023, this wedge was lifted, and markets began to factor in a peak in rates and ultimately a pivot toward an easing cycle earlier than expected in 2024. This has been a tailwind for Equity and bond markets to close out 2023. We expect one more rally later in December after a brief consolidation period, as our expectations are for economic data to continue to showcase a “soft-landing” scenario for the economy in 2024, earnings to remain solid, consumer and investment spending resilient, and portfolio rebalancing to continue. As markets advance, we expect better breadth—wider participation across equity markets—and the yield curve to continue to shift toward a steepening.

CIO ASSET CLASS VIEWS

This month, the Global Wealth & Investment Management Investment Strategy Committee (GWIM ISC) did not make any tactical asset allocation adjustments. As we look ahead to 2024, we have an overall constructive view for stocks and bonds. Given that, we remain neutral both Equities and Fixed Income relative to our strategic targets while emphasizing a balanced approach to portfolio construction.

Listen to the audio cast ►

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

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

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

Our title for 2024 is “A Foundational Year”. Why? We have six main themes that are catalysts for a move from a “tighter” state to a more normal foundation:

- Asset Allocation decisioning and diversification help portfolio returns in 2024.
- Economic growth, inflation and interest rates normalize.
- The U.S. dollar enters a weak cycle.
- Corporate profit margins and earnings growth remain positive.
- Narrow leadership in the equity markets shifts to broader leadership.
- Negative investor sentiment shifts to a more balanced or constructive viewpoint.

With these foundational elements in mind for 2024, we expect an overall constructive viewpoint for both stocks and bonds. However, we also have to be aware of a few wildcards that could change market direction without notice:

- Significantly elevated geopolitical volatility.
- Leverage and debt refinancing the commercial property market.
- The timing and reasoning of Fed rate cuts.
- U.S. sovereign debt servicing concerns.

Over the course of 2024, the interplay between the solid foundation we expect for the overall macro environment and the wildcards that could unfold in specific areas will likely be the largest arbiter of asset class returns for the full year. Geopolitical risk and the U.S. presidential election should dominate the headlines. However, we expect investors to continue to keep Fed policy top of mind throughout the year. Does the Fed cut because real yields are too wide in its opinion, or does it have to cut because the economic slowdown is sharper than expected? In our view, this question should encircle the capital markets until we officially enter the next expansion. Therefore, our portfolio strategy remains “balanced” while fully invested to start the year, as we believe that adjustments below the surface in terms of Value and Growth, Small- and Mid-capitalization shares versus Large-capitalization, and U.S. versus non-U.S. (including Emerging Markets) are paramount in 2024. In Fixed Income, we have a similar viewpoint as it relates to credit versus Treasuries, Mortgage-backed Securities (MBS), and tax-exempt positioning, plus the length of duration overall.

We believe bond yields and inflation dynamics have peaked, that consumer spending should slow down as economic growth shifts from above trend to below trend, and that the key, once again, will be level of earnings growth for corporate America. We expect earnings for the S&P 500 to grow approximately 6% (consensus remains elevated with a forecast of 12% growth) to around \$235 per share with a price target of 5000, which is about 10% higher than early December 2023 levels. Transitions from one economic and business cycle regime to another are never easy. They tend to include many questions, mixed economic data, adjustments to policy tools, and various degrees of timing as to when this all filters into business and consumer confidence. We will be watching employment data, corporate earnings and the money supply (financial conditions overall) closely to best assess the ultimate “landing.” In the long run, looking past the next 12 months, we continue to believe that productivity driven by automation, robotics and generative artificial intelligence (AI) across sectors, plus capital investment in infrastructure, energy transition, cybersecurity, climate solutions technology and significant advancement in laboratory sciences development all represent the core themes of the next era of growth.

What is the Chief Investment Office’s (CIO) view of the overall state for the U.S. and global macroeconomic outlook for 2024? What does a “soft landing” actually mean? In terms of Fed policy, is a “higher for longer” period in store for investors or does an easing cycle ensue?

Upside surprises to liquidity conditions and deficit-funded fiscal stimulus defined the macro backdrop in 2023, reinforcing demand and earnings. Specifically, even as the Fed raised

interest rates and continued with quantitative tightening (QT), regional bank stress pushed the Fed to initiate liquidity injections, and foundational liquidity increased over the balance of the year. Meanwhile, fiscal stimulus (2022 CHIPS and Science Act, Inflation Reduction Act (IRA) supplemental defense spending) accounted for the lion's share of business investment spending while excess liquidity from past fiscal injections backstopped consumer spending along with labor market hoarding. The combination was supportive of stimulus-led growth and reflected in a narrow rally in Equities.

These tailwinds might be fading but do not appear to be reversing course in 2024. With this in mind, a soft landing is our base case for 2024, but the risks appear to be asymmetric to the downside. A soft landing would mean growth will likely slow, and the labor market weakens, but we do not expect a deeper downturn that typically corresponds with significant declines in risk assets. Like last year, hopes for a soft landing will depend on the path of inflation and whether the Fed keeps the liquidity tap flowing. For now, with inflation slowing, the Fed appears more inclined to backstop any acceleration in economic weakness with liquidity injections or rate cuts even if inflation continues to run above its 2% target. And while the fiscal boost could simmer next year, counter-cyclical fiscal policy seems unlikely, in our view. Lastly, strong consumer balance sheets and a still tight labor market continue to support spending on services, an outsized contributor to overall economic growth.

What's the downside? The labor market is the transmission mechanism from a soft landing to a hard landing. The labor market data point to normalization, on balance, but there are some signs of a shakier backdrop, including rising unemployment as seen in the uptick in the unemployment rate and rising continuing claims for unemployment insurance. Leading indicators continue to point to weak private sector demand, and consumer spending on expensive items like houses and durable goods are already deteriorating heading into the new year, a key reason we do not foresee a cyclical upswing in the first half. There is also some concern that the unsustainable fiscal backdrop is crowding out non-stimulus-driven private sector business investment spending that is already under pressure from a weak profits backdrop, weak global growth, and tight lending standards. The next concern would be the profits cycle, which is under renewed pressure in Q4 from slowing nominal growth—both inflation and real growth. And while profits and profit margins were resilient this year, growth was slow and narrow and reflected in the narrowness in breadth of equity returns. Lastly, given the geopolitical backdrop, if supply-side inflation picks up, the Fed might have to keep rates higher for longer.

We do see some potential for a budding cyclical upswing in the back half of the year if inflation continues to fall faster than expected and if the Fed is cutting rates. This would likely require some help from a more benign geopolitical backdrop to limit supply-side inflation pressures and allow the Fed to accelerate a normalization of interest rates. An acceleration in global growth later in the year could also support the domestic economy and profits cycle and the case for a soft landing. For now, though, BofA Global Research sees real global growth slowing to a weak 2.8% next year.

After a year of narrow leadership in the equity markets, what type of overall environment could be in store for 2024? Does leadership expand? How have equity markets performed, historically, when an interest-rate-tightening cycle has ended?

While the top contributing stocks in the S&P 500 continue to represent the majority of year-to-date (YTD) index returns, the latest rally in Equities has seen some welcome broadening in participation. In our view, market leadership has the potential to expand further in 2024. While we continue to anticipate a choppy market environment given elevated headline risk, we believe the next couple of months will bring the beginning of a long rotation in Equities that includes a move up in areas that have significantly lagged and areas that are well placed for a more substantive rally later next year.

If history is a guide, the end of the Fed's hiking cycle could act as an additional tailwind for stocks in the near-term. Investors are increasingly confident that the fed funds rate has reached a cyclical peak amid moderating inflation and economic data. Historically, the S&P 500 Index has seen an average return of 6.9%, 13.2% and 18.9% in the three, six, and 12

months after the final Fed hike, respectively. Next year the focus will likely shift to the outlook for rate cuts, which have historically been followed by more muted Equity performance on average. However, investors should keep in mind that the path of monetary policy is just one of many factors that could influence the direction of markets moving forward. We continue to see many crosscurrents in the market and economic landscape and emphasize a balanced and diversified approach for the year ahead.

Many areas have significantly underperformed in 2023 and in some cases, even for an extended period. What does the CIO see around the corner in 2024 and beyond for Small-capitalization shares and Value versus Growth?

Small-caps closed out November with their biggest monthly gain since January as optimism that the Fed might be done raising rates helped fuel a broad-based rally in Equities. The gains for the smaller size segment narrowed some of the performance gap with Large-caps this year but the Russell 2000, which indexes Small-caps, still trails the Russell 1000 by around 13 percentage points.¹ Higher interest rates, concerns over an economic slowdown and the regional banking crisis proved a challenging combination of headwinds for smaller companies, which tend to have lower-quality balance sheets and less financial flexibility.

Their comparative weakness also comes against a backdrop of more than a decade of underperformance, which has pushed valuations to historically cheap levels. The relative forward price-to-earnings (P/E) multiple between the Russell 2000 and Russell 1000 fell to roughly 30% below its long-term average, according to BofA Global Research. Despite these favorable conditions for Small-caps to outperform in the next cycle, risks to a more sustained uptrend in the intermediate term remain, especially as economic growth cools and as Small-caps still face potential further strain if interest rates remain higher-for-longer given that they carry more floating-rate debt and face a more front-loaded debt maturity schedule than Large-caps. We therefore maintain our tactically neutral view on Small-caps with a bias toward Large-caps, but they remain on our 2024 watch list since the case for possible tactical upgrade could strengthen once it looks clearer that the cycle has turned, and cyclical momentum picks up.

From a style perspective, Value has also had a challenging year as Big Tech stocks dominated the market. The Russell 1000 Growth Index is up nearly 35% versus a 5% gain for the Value index.² Like Small-caps, Value massively underperformed over the last decade as Growth benefited from the low-interest-rate environment, pushing the Value index to an extreme discount to Growth on a relative forward P/E basis. But as inflation surged and rates climbed in 2022, a countertrend emerged when Value trounced Growth by about 20 percentage points, its widest margin since 2000. While that rotation stalled out in 2023 as enthusiasm over generative AI powered Growth, greater balance between Growth and Value over the longer-term could be possible as elevated rates and inflation relative to the last decade catalyze a possible shift toward Value. At the same time, higher quality Growth companies will likely continue to benefit from long term secular tailwinds from the ongoing digitalization of the economy. We continue to believe a well-diversified portfolio includes a mix of both Growth and Value, but we maintain a slight preference for Value given favorable valuations.

What about for International Markets versus U.S.?

International Equities have trailed U.S. markets in 2023, having also underperformed in eight of the prior 10 years. We nonetheless remain cautious on the tactical outlook.

In Europe, fiscal policy is likely to tighten in 2024, natural gas prices have stabilized (even rising slightly over recent months), and the consumer discretionary sector has given up its equity market leadership on the back of China's lost demand momentum. Furthermore, resilient core inflation implies a higher-for-longer interest rate path for the European Central Bank. Elsewhere within developed markets, Japan may continue to receive near-term support from accommodative monetary policy and the recent campaign from regulators pushing

¹ Bloomberg. Year-to-date returns through December 4, 2023.

² Ibid.

corporates to boost shareholder value. However, monetary policy is likely to be normalized next year, which should make for higher interest rates and a stronger currency and could hurt export-driven segments of the local market.

Emerging markets continue to be held back by underperformance in Asia, and we see reasons to de-emphasize China in particular on the back of several structural constraints. These include the legacy of regulatory tightening in the technology sector in addition to U.S. semiconductor export controls, structural weakness in housing construction, the shrinking labor force and flatlining consumer price inflation. The rest of Asia should nonetheless remain better positioned on the back of rising household incomes and an expanding digital economy. Meanwhile, for Latin America, we do not expect to see the same boost from industrial commodities that has typically come during past periods of construction-led Chinese growth.

We nonetheless remain more constructive on Emerging and International Developed Markets over the medium to longer term. Both trade at a discount relative to U.S. Equities, contain more of a balance between Value and Growth sectors and offer relatively attractive dividend yields.

The years of double-digit and high-single-digit economic expansion in China that have supported growth across the emerging world may now be behind us, but the more important question for markets over the medium term will be the future composition of China’s growth. This is more likely to be concentrated in areas that are aligned with the strategic goals of the authorities, such as information technology (IT) and advanced manufacturing. At the same time, markets such as southeast Asia, India and Mexico are likely to benefit from a longer-term reorientation of global supply chains and consequent expansion of their domestic manufacturing capacity, while producers of key material inputs to clean energy hardware and equipment in Latin America and Africa remain exposed to growth in demand for these commodities.

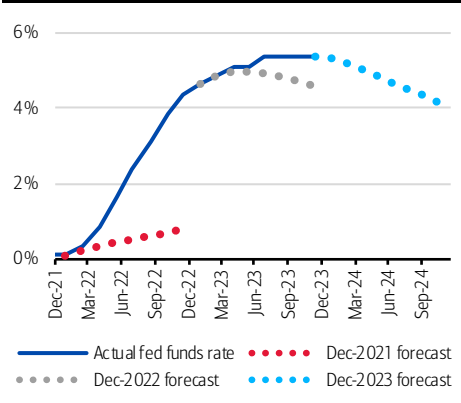
While we remain of the view that current conditions do not warrant a tactical upgrade to International Market Equities at this stage, we therefore continue to recommend that investors maintain longer-term exposure.

What are rate expectations for 2024, how should investors prepare for a rate hike cycle that may have peaked, and what areas of Fixed Income offer the most promise?

In December 2021, policy rates were 0.125%, and the market expected three 25 basis points (bps) hikes in 2022; it got effectively 17 instead. By the end of 2022, policy rates were 4.375%, and the market was forecasting two to three 25 bps rate hikes, followed by one to two rate cuts. 2023 actually saw four hikes—and no cuts. Correct point-in-time rate forecasts are difficult; the utility of over-relying on such specific forecasts for asset allocation is questionable. We do, however, maintain high conviction that the Fed is at or close to the end of the rate hike cycle, which is corroborated by a plethora of economic and market data, as well as comments from policymakers themselves (Exhibit 1).

The market currently expects five rate cuts in 2024, helping to avert a recession and usher in an economic “soft landing.” We concur that the Fed will likely start cutting next year in response to economic weakness, with short rates likely declining faster than long rates, allowing the yield curve to begin to normalize. The Fed has done enough for now, in our opinion, because a tremendous amount of monetary policy tightening remains in the pipeline that is subject to a significant and unknowable lag, money supply is decreasing, and Fed balance sheet run-off continues. At the same time, however, the history of high inflationary episodes is definitive: High inflation episodes witness multiple spikes the vast majority of the time (Exhibit 2).

Exhibit 1: Rate Forecasts May Deviate Significantly From Actual Outcomes.



Source: Bloomberg as of December 31, 2021, December 31, 2022, and December 1, 2023.

Therefore, our strategy is informed by our general economic, rate and cycle views—not beholden to specific rate forecasts. The interest rate cycle is a ‘cycle’ for a reason; it follows a relatively predictable pattern because it is actively managed by policymakers. Yet there are, quite often, significant deviations in either direction. With valuations, the verdict is clearer—credit products across corporates and municipals are nowhere near recessionary valuations, while inflation-adjusted yields across Fixed Income looks quite attractive. Current rate forecasts are a reasonable “average” outcome across an infinite number of potential futures, but whatever specific future is ultimately realized will likely be different from the “average” outcome expected ahead of time. Our preference is therefore to take slightly more rate risk in 2024 and slightly less credit risk. With that lens, we remain just slightly long duration, not excessively long. This balances our view that the end of the rate hike cycle is here, against the unexpected (but historically more likely) outcome of another inflationary spike. We also remain slightly positive on interest-rate-sensitive products, favoring Treasuries and agency MBS. This balances much more favorable nominal and real yields after two years of negative returns against the risk that a resurgence in inflation makes them even more favorable. We remain just slightly underweight on Investment-grade (IG) Corporates and neutral on municipals—not excessively negative on either. This balances valuations which underprice recessionary risk while allowing us to take in additional spread in excess of expected credit losses—one of the most prudent and risk-aware methods to add incremental, long-term portfolio returns over time, in our opinion.

How should qualified investors think about Alternative Investment (Alts) exposure and assets that are less correlated with the public markets in general for 2024? What are the areas we consider the largest opportunity sets?

The landscape of Alts is nothing if not varied. There exist many asset classes and strategies within Alts that help serve to enhance potential return and others that help to reduce correlations or volatility. We believe that investors accessing Alts should always do so in a strategic manner, with appropriately long-time horizons and by allocating to a range of strategies, managers and vintages.

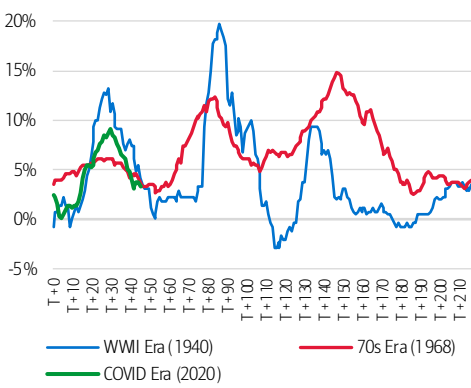
Against the current macro backdrop, we still see value in tilting new money Alts allocations toward asset classes and strategies that can be more defensive and diversifying. Notwithstanding an improving market environment to close the year, we are mindful of 1) still-high policy rates; 2) uncertainty and likely volatility bursts in the coming year; and 3) the potential for the debate over interest rates to settle in favor of structurally higher-for-longer, which could challenge asset class returns. And given the experience of the post-pandemic regime, we therefore believe the following areas in Alts can balance potential risks facing public markets and help to diversify portfolios.

In Hedge Funds (HF), we have emphasized Macro and Equity Hedge strategies, particularly those with low market exposures and low correlations to public Equities and Fixed Income. In PM, Private Credit (PC)—with high yields and positioned at the top of the capital stack—still offers a compelling profile relative to PE strategies. Certain areas within Real Estate, including Infrastructure, remain key long-term themes, with significant fiscal expenditure and incentives, ties to the “energy transition”, and the potential to hedge against higher inflation.

CIO INVESTMENT DASHBOARD AS OF DECEMBER 5, 2023

We continue to see many crosscurrents in the market and economic landscape. While recession concerns have abated, growth is expected to fall below trend in 2024. Near-term risks remain as the lagged effects of tighter monetary policy filter through the economy. Consensus now estimates annual earnings growth of 0.7% for 2023, according to FactSet. Valuations for U.S. Equities remain elevated relative to long-term averages, with the S&P 500 forward P/E ratio hovering around 18.9x. We expect a “grind-it-out” market environment as we head into 2024.

Exhibit 2: High Inflationary Episodes Usually Witness Multiple Inflation Spikes.



Note: T (January of each legend year) + [X] = X months.
Sources: Bloomberg; Bureau of Labor Statistics; Chief Investment Office. Data as of October 30, 2023.

Over the long-term we expect Private Equity (PE)—including Buyout and Venture Capital (VC)—to outperform Private Markets (PM). In addition, “fresh capital” (i.e., new pools of capital or fund vintages) allocated to PE in the current and coming years will likely generate attractive long-term returns given lower entry valuations. The nearer term, though, still favors PC for now.

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				According to FactSet, actual S&P 500 revenue and earnings growth in 2022 were 11.1% and 3.9%, respectively. Accordingly, this year, consensus expects growth of 2.3% and 0.7%. Q4 estimates call for sales growth of 3.1% and profits growth of 2.8% on a year-over-year (YoY) basis. For 2024, consensus expects growth of 5.4% and 11.6% respectively. Meanwhile, according to BofA Global Research, the Global Earnings Revision Ratio moderated further in November. Over the past three months, the number of downgrades to profit estimates surpasses upgrades. Globally, downgrades outpace upgrades in 15 of 20 countries and in 14 of 16 tracked industries.
Valuations				The S&P 500 P/E ratio (next 12 months) has risen to 18.9x, higher than the long-term average and 16.8x at the end of 2022. This headline measure suggests that U.S. Equities remain expensive amidst an outlook for slowing economic growth. Elevated interest rates should continue to suppress the relative appeal of Equities versus Fixed Income.
U.S. Macro				Real gross domestic product (GDP) grew by 5.2% in Q3 2023 at a seasonally adjusted annual growth rate, the quickest pace in nearly two years. On the demand side, a resilient labor market and a cushion of savings have helped support consumer spending. Longer-run fiscal programs have helped support investment. A burdensome cost of living and rising interest rates remain headwinds to growth. BofA Global Research expects Q4 GDP growth of 1.5% and 2.5% for all of 2023. Next year, annual growth is expected at 1.4%.
Global Growth				Diverse headwinds face the global economy. In the Euro area, a taut labor market has factored in elevated core inflation and tight monetary policy, which has weighed on economic growth. In China, officials have taken steps to loosen regulation and credit availability, among other measures, to combat weakness in the property market and financial stress, which has fueled concern over the sustainability of the economic recovery. In the U.S., there remains economic resilience in general. After growth of 3.5% last year, the global economy is expected to expand by 3.1% this year and by 2.8% in 2024, according to BofA Global Research. This compares to average growth of 3.8% from 2000 to 2019, according to the International Monetary Fund.
U.S. Monetary Policy / Inflation				Lower-than-expected inflation and softer activity data prompted BofA Global Research to update their Fed forecast from one more rate hike to a more likely hold in December of the Fed's policy rate of 5.25% to 5.50%. The market currently has nearly priced in a 25 bps cut by June, in line with the base case of BofA Global Research.
Fiscal Policy				U.S. pandemic-era fiscal support totaled nearly 31% of GDP. Moreover, a \$280 billion plan to strengthen the country's industrial base by investing in semiconductor production and research and development of new technologies has been authorized. Also approved was the 2022 IRA. Among other elements, it provides nearly \$370 billion over 10 years for energy security and climate change projects. Despite these initiatives, nearer-term fiscal support has waned, with the latest examples being the end to a moratorium on student loan debt payments and the expiration of a child-care subsidy in September. A two-tiered stopgap measure to continue to fund the U.S. government is set to expire in January 19 and February 2.
Corporate Credit				Near their YTD lows, U.S. High Yield (HY) and IG credit spreads reflect lessening concern about an economic slowdown. However, current levels remain above those registered last year.
Yield Curve				Inversions, whereby longer-dated yields are below shorter-dated ones, exist in most segments across the U.S. Treasury yield curve. These include the fed funds (FF)/10s, 3-month/10s and 2/10s segments. As longer-dated yields have moved higher relative to those shorter-dated, the degree of many of these inversions has lessened since June. Overall, the Treasury market suggests a higher probability of a recession in the U.S.
Technical Indicators				The Chicago Board Options Exchange (CBOE) Volatility Index (VIX) briefly broke below support in place throughout the year, signaling low expectations for near-term volatility. Moreover, the S&P 500 remains above its 200-day moving average, which is also in an uptrend. However, there remains relative weakness in measures of market breadth, such as the percentage of New York Stock Exchange stocks closing above their 200-day moving average and the cumulative advance/decline indicator.
Investor Sentiment				According to the American Association of Individual Investors, sentiment has recovered which may reflect rising anticipation for relatively easier monetary policy. A decline in the cash levels in institutional portfolios has ended the "buy" signal in the Fund Manager Survey, published by BofA Global Research. Moreover, at a level of 2.7, the BofA Bull & Bear Indicator also now signals "neutral."

Source: Chief Investment Office.

EQUITIES

We are neutral Equities: Equities rallied in November as moderating economic data fueled investor confidence that the Fed reached the end of its hiking cycle. This dynamic helped drive interest rates lower and equity valuations higher. Further, defensive positioning this fall was reversed, and investors added risk to Equity portfolios during November. We continue to search for additional conditions to support a durable, broad-based rally in 2024. In our view, the current economic backdrop warrants a balanced approach and a high-quality bias in the near term.

We are slightly overweight U.S. Equities overall: The U.S. currently remains our preferred Equity region relative to the rest of the world, given relatively stronger balance sheets in aggregate and better consumer fundamentals. Our high-quality bias favors U.S. Large-caps with strong fundamentals and the ability to produce healthy shareholder payouts. We remain neutral Small-cap Equities, which have lower-quality balance sheets, rising cost of capital, a higher proportion of non-earning companies within the index, and less financial flexibility to generate shareholder payouts. In our view, Small-caps have favorable valuations and could be leaders of the next decade but need to stabilize relative to Large-caps to outperform consistently.

We expect 2023 earnings per share (EPS) for the S&P 500 to remain relatively flat compared to 2022's earnings before making a more pronounced recovery in 2024, but downside risks to the earnings outlook remain. Additional near-term risks for Equities come from a global slowdown in growth and profits, persistently elevated levels of inflation, higher interest rates, a Fed policy error, and tightening credit conditions. Given these factors, we maintain a neutral view.

Our “on guard” stance continues to favor balanced and diversified Equity exposure. From a sector perspective, we emphasize Healthcare to reflect a balance between Value and Growth, and our preference for quality at a reasonable price. We maintain overweight exposure to Energy, as elevated oil prices could drive stronger free cash flow (FCF) and earnings. Energy remains the cheapest sector on valuation metrics, and continued capital discipline by energy companies should support the trend of returning more cash to shareholders. We are watching for further slowdowns in global growth that could potentially weigh on energy prices; however, current oil prices support strong cash flow generation. We maintain neutral exposure to Utilities, as higher interest rates are a key overhang for this bond proxy sector. In addition, the higher cost of capital could delay some renewable energy projects, which were expected to drive earnings growth for the Utilities sector. While we are constructive on Industrials and IT as longer-term thematic trends, we maintain our neutral view in the near term. We deemphasize Materials as demand slows, and pricing power may have peaked in this sector. We remain underweight Consumer Discretionary, as risks remain for future job cuts and as consumers continue to work down excess savings from the pandemic. We remain slightly underweight Real Estate (RE) and prefer being selective in the RE subsectors due to positive fundamentals in some areas of RE but weaker trends in other areas like CRE. We remain neutral Financials, as higher interest rates and higher capital reserves could increase volatility. The higher costs of deposits and the higher cost of capital are likely to weigh on earnings for both the Financials and RE sectors in coming quarters. We remain neutral Communication Services as it rebounds from being the worst-performing sector in 2022 and due to questions regarding the health and trends in advertising markets.

We believe strategic portfolios should continue to incorporate both Growth and Value factors that would simultaneously gain from cyclical and secular forces gaining traction. We currently maintain a slight preference for Value, which is trading at a relative discount to Growth and has led Growth when the Fed paused in past periods of elevated inflation. However, in the long run, Growth should benefit from accelerated secular investments in artificial intelligence, cloud computing, robotics, mobile data and health infrastructure globally. We continue to suggest a disciplined and balanced approach between Value and Growth for long-term investors.

We are neutral Emerging Market Equities: Emerging Market (EM) Equities appear attractively valued but may struggle to sustain a return advantage in an environment of persistently high global interest rates, a still relatively strong U.S. dollar and any potential broadening in banking sector stress. We continue to expect a wide return dispersion between individual EM countries and regions. Growth in the heavyweight Chinese market is likely to remain soft on a protracted basis, given structural weakness in the construction sector and constraints on the Technology sector from a tighter domestic regulatory environment and global export controls. Stronger domestic demand in the broader Asia-Pacific region should help to offset external weakness from China exposure. Central and

EQUITY WATCH LIST

- Heightened geopolitical risk and conflict in the Middle East
- Inflationary pressures are moving lower but remain above the Fed's target level
- Economic data for production, labor, consumer expectations, and credit and liquidity conditions
- Progression of earnings estimates amid margin pressures
- Reorganization of global supply chains and U.S.-China relationship
- Pressures within the Office segment of Commercial Real Estate (CRE)

Eastern European markets remain most exposed to the Russia-Ukraine war through trade links and high dependency on natural gas imports, while market direction in Latin America, the Middle East and Africa should remain broadly tied to the direction of natural resource prices, particularly on any broadening of the Israel-Hamas conflict. The structural rise in EM consumer spending remains a big reason 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 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 management³ when investing in EM, as fundamentals differ across countries based on fiscal capacity, external funding needs, corporate governance and other factors.

We are slightly underweight International Developed Market Equities: We continue to prefer U.S. versus International Developed given our higher-quality view. We remain slightly underweight Europe, given headwinds to economic growth and corporate profits, greater exposure to any potential broadening in banking sector stress, and the potential for fiscal tightening in high-budget-deficit European Union (EU) countries. Natural gas prices have fallen from their crisis peaks, but ongoing curtailment of Russian supply and growing demand from Asia mean that supply constraints could reemerge at a later stage. We maintain a neutral view on Japanese Equities, which should see a near-term continuation of central bank accommodation relative to the rest of the world but an ongoing normalization of monetary policy as inflation returns to more normal levels on a sustained basis. As aggregate net energy importers, International Developed markets would also be more vulnerable to any potential rise in energy prices on any broadening of the Middle East conflict. We believe long-term investors should maintain some strategic exposure to International Developed Equities, as appropriate, given that they trade at a discount relative to U.S. Equities, contain more of a balance between Value and Growth sectors, can offer attractive dividend yields and provide diversification.

FIXED INCOME

We are neutral on Fixed Income: Nominal and real rates are some of the most attractive in 20 years. The 10-year Treasury crossed the key 5% threshold following resilient economic data and the Fed's initial messaging that it intended to keep rates "higher for longer," but it did not remain there. The Fed delivered an expected pause in November, and Chair Powell's overall comments were perceived as dovish and a signal that rate hikes are likely finished. This caused the entire yield curve to rally, with the 10-year currently 70 bps lower from its closing peak. Markets currently indicate around 99% chance that the Fed is done raising rates this cycle.

Real yields—the yield after inflation, as measured by Treasury Inflation-Protected Securities (TIPS)—are approximately 2% across the curve, the higher end of the range since 2008. Earning a positive, substantial yield after inflation on U.S. government-guaranteed securities is a welcome relief for savers after years of financial repression. We are therefore favorable on Fixed Income near-term and slightly positive on U.S. Governments, although our positioning is neutral relative to Equities on the 12- to 18-month time horizon.

We recommend a slightly long-duration position versus a stated benchmark to take advantage of higher nominal and real yields and as prudent positioning against macro risk in the Equity portion of a diversified portfolio.

While banking sector stress remains relatively low, lending standards will likely continue to tighten. Leading economic indicators remain weak, money supply growth is still negative, and yield curves remain inverted. Inflation expectations have been relatively stable at

FIXED INCOME WATCH LIST

- Deeper yield-curve inversions or increased rate volatility in either direction
- Increased risk aversion or recessionary risk via spreads, yields or new issue activity
- Signs of significantly negative Fixed Income fund flows
- Dislocations in CRE markets
- Potential credit deterioration in the economic weakness

³ Active management seeks to outperform benchmarks through active investment decisions such as asset allocation and investment selection.

around 2% to 2.5% across the curve, highlighting the market's belief that the inflation problem is behind us, and that Fed policy will successfully bring inflation back to target.

We are slightly underweight both Investment-grade Corporates and High Yield: For IG, this reflects our view that despite relatively attractive all-in yields of around 5.75%, credit spreads do not appropriately reflect the risk of continued deterioration in corporate credit fundamentals as the economic cycle matures and growth slows heading into 2024 in response to the lagged effect of tighter financial conditions. Credit spreads are currently trading at YTD lows of around 105 to 110 bps and have been remarkably resilient despite the pressure of heightened interest rate volatility.

In our view, this strength has been largely a function of yield-orientated buyers, better-than-expected economic data, corporate earnings strength, and a soft landing scenario in the U.S. now a consensus view for 2024 and 2025. To be clear, we don't see a risk or catalyst for spreads to move materially wider over the intermediate term, macro uncertainties notwithstanding. However, the margin for error at current valuations remains slim, as IG typically underperforms duration-matched Treasuries at an entry point near current levels. We see more limited upside in credit spreads and see the risk of at least modestly wider spreads over the coming quarters. The primary risk factor to our slightly underweight view is that the technical backdrop is likely to remain supportive with negative net issuance in 2024. That said, we don't see spreads moving back to prepandemic lows witnessed before the Fed liftoff in March of 2022.

We therefore believe that an up-in-quality and defensive tilt within a corporate allocation is prudent and would look to re-risk portfolios should we see spreads move closer to the 150 bps level and/or an improvement in data drives a shift in our fundamental views.

Credit losses in IG are generally minimal and not a large component of spreads or yields, but the same cannot be said in HY. Fortunately, HY yields-to-worst—while volatile of late—remain around 8.5%. Valuations provide modest compensation for credit losses and suggest reasonable returns over medium-to-longer time frames. Spreads, however, are in the 375 bps to 400 bps range, below the 650 bps to 800+ bps level seen in many recessions. We therefore maintain our slight underweight positioning. Within HY allocations, we prefer a balanced allocation between secured floating-rate leveraged loans and unsecured HY bonds.

We are neutral on U.S. Investment-grade Tax Exempt and remain slightly underweight on U.S. High Yield Tax Exempt: Since upgrading U.S. Investment-grade Tax-exempt to neutral from slight underweight in October, muni valuations versus Treasury securities have richened materially. However, we believe munis still provide value for tax-sensitive Fixed income investors. We expect technical conditions to strengthen further over the coming months. Primary market issuance is expected to slow down, as is typical, from late December through most of January. However, even after that, we believe muni supply will remain restrained by the still-elevated interest rate environment and generally abundant issuer reserves, causing at least some potential issuers to fund capital expenditure from internal resources rather than debt. Retail demand for municipal bond funds has begun to strengthen, sparked by the recent decline in yields and corresponding rise in net asset values. Assuming rates stabilize or continue to decline, we believe tax-sensitive investors will be increasingly interested in munis for their attractive tax-equivalent yields. Muni fundamentals appear to be generally stable. However, credit spreads are tighter than average, and certain muni subsectors face particular risks, so investors should be selective when going down the credit spectrum for additional yield.

We are slightly overweight on Mortgage-backed Securities: Aiming to bring down stubbornly high inflation, the Fed has steadily tightened financial conditions by raising interest rates and engaging in QT. Weaker technical dynamics have caused MBS spreads to widen materially this year, with spreads breaking into the 70 bps range in October. Given this more attractive level, we made the decision to go slightly overweight from neutral, before spreads re-traced back to their current high-50 bps range. In our opinion,

the current level of MBS spreads after the rally still represents value when compared to corporates, using the long-term average.

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

ALTERNATIVE INVESTMENTS

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

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

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

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

Hedge Funds: Performance YTD has been muted, with HF overall returning 2.1% through October.⁴ Equity Hedge (EH) strategies have struggled to generate sustained alpha over the course of the year, with challenging technicals and factor dynamics hampering short alpha in particular. EH strategies have returned 2.1% YTD through October compared to 10.7% for the S&P 500 and 7.2% for the MSCI All Country World Index.⁵ Fundamentally, we believe wider dispersion in equity markets will drive the alpha opportunity for EH strategies. If, conversely, equity market gains remain concentrated then EH may continue to struggle in such an environment.

Macro strategies have similarly faced challenging dynamics in 2023, returning -0.2% YTD through October⁶. Sharp reversals in Treasury yields and equity market volatility in March and November generally caught managers offside, leading to retrenchments in directional positioning. We still see opportunity for Macro given the potential for a higher-for-longer environment and the fact that these strategies performed well amid rising rates and

CIO Views on Alts Strategies

Hedge Funds

Equity Hedge +	
Bull case	Potential alpha* generation opportunities for low net strategies in volatile or high dispersion markets; short alpha improving after difficult start in 2023; low net also better positioned if Equities sell off
Bear case	Though breadth has improved, observed dispersion remains low; beta**-driven market would reduce opportunities
Event Driven	
Bull case	Higher rates pressuring levered balance sheets creating potential for distressed; merger deal spreads wider and higher risk-free rate positive for merger arbitrage
Bear case	Distress may not materialize in size or may be delayed; mergers & acquisition volumes still low and high regulatory uncertainty
Relative Value	
Bull case	Now in world of higher yields; economic resiliency supportive of credit; decent dispersion in HY
Bear case	Spreads not attractively wide; potential increase in credit risk and defaults in coming year
Macro +	
Bull case	Possible "higher-for-longer" rate regime could create cross-asset volatility in rates and foreign exchange; next leg down in inflation could prove more challenging to achieve
Bear case	Fed pause could take direction out of Fixed Income; choppy markets difficult for trend-following

*Alpha is a measure of the active return on an investment, the performance of that investment compared with a suitable market index. **Beta is a concept that measures the expected move in a stock relative to movements in the overall market. **Bull case** is an environment or set of factors that could represent tailwinds for the strategy. **Bear case** is an environment or set of factors that could represent headwinds for the strategy. **+ symbol** indicates the strategies CIO views as having the most favorable opportunity set for new investment within the Alts asset classes.

⁴ HFR, Inc. HFRI Fund-Weighted Composite Index. As of October 31, 2023.
⁵ HFR, Inc., Bloomberg HFRI Equity Hedge (Total) Index. As of October 31, 2023.
⁶ HFR, Inc. HFRI Macro (Total) Index. As of October 31, 2023.

inflation for the three years prior to the current one. In addition, Macro can offer significant portfolio utility by virtue of its low historical correlations to Equities and Fixed Income and its propensity to generate “crisis alpha.”

Private Equity: Exuberance in 2021 followed by rising rates and inflation in 2022-2023 have led to moribund markets in PE, in particular for Buyout and VC. The primary manifestation of the challenges facing PE strategies has been depressed investment and exit activity. Sponsors and investors will gladly turn the page on 2023 and look to (or hope that) the coming year offers a reprieve. For the time being, PE strategies still face an environment in which public and private debt are offering Equity-like potential returns, making the relative value calculation for PE more challenging. With that said, there is a path to PE’s reinvigoration coming into view. If the cycle were to unfold definitively away from the higher “resting rate” of inflation and interest rates that some investors fear, then Buyout and VC strategies could be kickstarted into new bull cycles with surges in transaction volumes. Conversely, if inflation and interest rates surprise to the upside, then PE strategies may find 2024 to be a third consecutive challenging year. For now, the name of the game remains: adapt to the new financing regime and focus on driving profitability through operational improvements.

PC, meanwhile, continues to perform well and remains, in our view, a compelling asset class to commit fresh capital to given the macro backdrop. The asset class is offering potential Equity-like returns while enjoying a position at the top of the capital stack. We have previously noted the numerous risks associated with PC and believe investors should allocate prudently within a diversified portfolio construct while focusing on manager and fund selection. Defaults are expected to increase, as are credit losses. Even so, expected returns are still in the high single digits, low double digits range. A hard-landing scenario could still see positive returns given the cushion of high starting yields. If distress were to unfold, we would look to Special Situations and Distressed strategies as the next areas of opportunity. Lastly, we encourage investors to keep tabs on the changing nature of PC—its rapid evolution means that in the coming years the asset class will likely have an even more varied landscape than it does today.

Private Real Estate: Higher borrowing costs have continued to affect every corner of Private Real Estate (PRE), not just this cycle’s poster child of PRE turbulence: Office. Analogous to PE, PRE transactions volumes have declined significantly. With a wide bid-ask between potential buyers and sellers and limited transactions, PRE investors have repeatedly expressed a lack of confidence in valuations. Hence, there remains a sizable gap between the implied cap rates—calculated by dividing the net operating income by the quantity of a real estate investment trusts (REITs) equity market capitalization and the full amount of outstanding debt—of public REITs and appraisal-based cap rates across PRE. Transactions will need to pick up to aid in price discovery given the disconnect in public and private valuations, and peak (or potentially declining) interest rates may prove to be the catalyst. For the time being, we continue to expect a slow-moving reset. Sector and geographic differentiation are warranted and can provide opportunity for discerning investors. New capital deployment in general, and RE credit in particular, look increasingly interesting. For the longer term, PRE continues to make sense as a strategic allocation given the diversification benefits and income features.

Infrastructure: Within Real Estate, Infrastructure remains a key long-term theme. The U.S. has a widely acknowledged aging infrastructure base that will require significant public and private investment. Hundreds of billions of dollars have already been earmarked for infrastructure spend through several Federal bills in recent years. Infrastructure also has direct links to the Energy Transition theme, which will play out over the coming decades. In addition, Infrastructure has historically performed well on a relative basis during inflationary periods and has the potential to improve diversification in portfolios.

Tangible Assets/Commodities: Global growth anchors demand for commodities and remains under pressure, but production cuts, inventory restocking, and geopolitical risk are supporting oil prices and broader indexes in recent periods. Weaker global growth is

Private Equity

Buyout

	Current vintages likely attractive for long-term given lower valuations and profitability focus; within PE, Secondaries stand out for having secular growth and large base of institutional investors seeking liquidity; deal activity likely to surge if rates and inflation fall
Bull case	
Bear case	Higher rates require larger Equity investments; deal and exit activity still low

Venture/Growth

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

Special Situations

	Default rates rising; higher-for-longer would increase pressure on levered balance sheets; real estate-adjacent stress creating opportunities; companies seeking creative financing prior to maturities
Bull case	
Bear case	Fed-engineered soft or no landing could smooth out credit cycle, keeping it more average

Private Credit +

	High current yields; healthy spread to public credit; economic resiliency supportive of credit; secular tailwinds supporting growth; fresh capital can underwrite to current risks
Bull case	
Bear case	Economic recession could lower rates / create credit issues; regulatory attention could change dynamics; large amount of dollars allocating to PC

Real Estate

Private Real Estate

	Supply/demand imbalance in residential driving secular opportunities; sectors like Data Centers rising; transaction cap rates slowly reflecting lower valuations; lower mortgage rates may unlock markets; lending strategies offering compelling profiles; distressed/opportunistic could emerge given stress
Bull case	
Bear case	Appraisal cap rates yet to fully adjust and wide to implied public REIT cap rates; transactions depressed; pressure rising in value-add multi-family financed with floating rate debt

Infrastructure +

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

Tangible Assets/Commodities

	Geopolitical risk could spill over and pressure commodities supply; macro factors including currency could support oil prices; potential for diversification and inflation hedge
Bull case	
Bear case	Slowing global growth reduces demand support for commodities; increasing energy supply has offset Mid-East tensions; higher real rates could pressure “safe” havens like gold

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

showing up in cyclical commodity prices like industrial metals, which declined over 17% YTD through December 4. We believe global growth and commodity demand will remain muted in the rest of the year, but geopolitical risk and geoeconomic maneuvering are wild cards for energy markets. Elevated geopolitical risk also supported gold prices in the first half of 2023, but interest rate volatility has caused the asset class to oscillate. We continue to believe gold is most effectively implemented as a strategic diversifier.

As long as the Fed remains restrictive in rhetoric and action (e.g., QT plus interest rate hikes), the broad dollar indexes will remain firm, in our view. Once the Fed starts to ease policy the dollar will likely resume the weakening trend that persisted in the first half of the year. It is likely that a Fed shift would also coincide with weaker U.S. growth on an absolute basis and relative to other countries, where it has held clear advantages. Importantly, the U.S. dollar remains overvalued versus a number of major currencies.

Other Tangible Assets within Private Markets—such as timber and farmland—have historically performed well in high-inflationary environments, providing potential diversification to traditional portfolios. Tangible Assets can also add diversification to other Alts such as HF and PE investments.

MACRO STRATEGY

- The unprecedented flood of fiscal stimulus into a full-employment economy has postponed a Fed-tightening-induced recession that would have otherwise occurred by now. Nominal GDP rebounded at an 8.6% annual rate in Q3, supporting corporate profits, as both real growth and inflation accelerated. Leading indicators continue to point to weak real, private sector demand in the year ahead.
- The global growth cycle appears unlikely to provide a significant boost to U.S. growth and profits over the balance of the year. Cyclical momentum, as gauged by the Global Manufacturing Purchasing Managers’ Index ex-U.S., remains under pressure. China’s efforts to reignite consumer appetites have so far come up short, while survey data in Germany and France point to a recession in Europe.
- A wait-and-see Fed leading to higher inflation is supporting the profits cycle and Equities to the benefit of higher-quality firms. It has also caused a rise in duration risk as the Fed’s commitment to 2% inflation is in question.

ECONOMIC FORECASTS (AS OF 12/1//2023)

	Q4 2023E	2023E	Q1 2024E	Q2 2024E	Q3 2024E	Q4 2024E	2024E
Real global GDP (% y/y annualized)	-	3.1	-	-	-	-	2.8
Real U.S. GDP (% q/q annualized)	1.5	2.5	0.5	0.5	0.5	1.0	1.4
CPI inflation (% y/y)	3.2	4.1	3.1	3.1	2.8	2.6	2.9
Core CPI inflation (% y/y)	4.0	4.8	3.6	3.2	3.2	3.0	3.2
Unemployment rate (%)	3.9	3.7	4.0	4.1	4.2	4.4	4.2
Fed funds rate, end period (%)	5.38	5.38	5.38	5.13	4.88	4.63	4.63

The forecasts in the table are the baseline view from BofA Global Research. The Global Wealth & Investment Management (GWIM) Investment Strategy Committee (ISC) may make adjustments to this view over the course of the year and can express upside/downside to these forecasts. There can be no assurance that the forecasts will be achieved. Economic or financial forecasts are inherently limited and should not be relied on as indicators of future investment performance.
A = Actual. E/ = Estimate.
Sources: BofA Global Research; GWIM ISC as of December 5, 2023. Forecasts are subject to change.
When assessing your portfolio in light of our current guidance, consider the tactical positioning around asset allocation in reference to your own individual risk tolerance, time horizon, objectives and liquidity needs. Certain investments may not be appropriate, given your specific circumstances and investment plan. Certain security types, like hedged strategies and private equity investments, are subject to eligibility and suitability criteria. Your advisor can help you customize your portfolio in light of your specific circumstances.

S&P 500 SCENARIOS BASED ON FORWARD P/E AND 2024

The table below provides a rough indication of where the S&P 500 Index’s central tendency could be, given various scenarios for EPS in 2024 and P/E ratio multiples. These scenarios are not official price targets and are not meant to signal levels where portfolio actions may always be needed. However, during times of market volatility, it’s useful to keep this basic framework in mind when considering whether to incrementally add to or trim risk from portfolios while staying invested in one’s strategic asset allocation framework.

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

For illustrative purposes only. Source: Chief Investment Office as of December 5, 2023.

CIO ASSET CLASS VIEWS AS OF DECEMBER 5, 2023

Asset Class	CIO View					Comments
	Underweight		Neutral		Overweight	
Equities	●	●	●	●	●	We are neutral Equities, as risks to economic growth and corporate profits remain. We remain overweight the U.S. and neutral EM, with a slight underweight to International Developed.
U.S. Large-cap	●	●	●	●	●	We have a slight preference for Value over Growth, given better absolute and relative valuations. Higher interest rates should pressure Growth more, especially higher multiple, nonearning areas. We believe portfolios should incorporate both Growth and Value factors as appropriate.
U.S. Mid-cap	●	●	●	●	●	Our preference to stay higher up in the size scale keeps us favoring Large- and Mid-caps compared to Small-caps.
U.S. Small-cap	●	●	●	●	●	We are neutral Small-caps, as they have lower-quality balance sheets, a higher proportion of nonearning companies within the index, and less financial flexibility to generate shareholder payouts. However, they maintain reasonably attractive absolute and relative valuation versus Large-caps.
International Developed	●	●	●	●	●	International Developed Equities remain attractively valued, but additional central bank policy tightening is likely to exceed the U.S. and markets remain more vulnerable to any potential broadening of the Middle East conflict. Underlying rates of nominal growth are also expected to trail U.S. levels.
Emerging Markets	●	●	●	●	●	We are neutral EM Equities overall with regional markets likely to be driven by relative exposures to weaker Chinese growth, the ongoing Russia-Ukraine conflict and natural resource prices. Valuations appear attractive, but high global rates remain a headwind.
International						
North America	●	●	●	●	●	The U.S. remains our preferred region given balance sheet strength, better fundamentals for consumer spending and healthy shareholder payouts.
Eurozone	●	●	●	●	●	Lower natural gas prices are a source of relief, but key risks stem from elevated inflation, potential fiscal tightening in high budget deficit EU countries, weaker economic growth and the potential for energy supply constraints to reemerge amid the ongoing Russia-Ukraine and Middle East conflicts.
U.K.	●	●	●	●	●	Domestic demand at risk from still high mortgage rates. Historically weak exchange rate risks compounding inflation pressures. Withdrawal from EU single market remains a negative for medium-term growth.
Japan	●	●	●	●	●	Near-term relative support expected from monetary accommodation versus the rest of the world, but headwinds likely to increase from ongoing normalization of interest rates. Official efforts to increase corporate returns to shareholders a potential boost for valuation.
Pac Rim*	●	●	●	●	●	Regional activity to be dampened by exposure to weaker Chinese growth but offset by relative strength in domestic demand. Large weighting in Financials increases vulnerability to any potential broadening in banking sector stress.
Fixed Income	●	●	●	●	●	Bonds are attractive and provide good diversification for multi-asset class portfolios with both reasonable income and the ability to decline substantially in yield in an economic downturn. Slightly long-duration positioning recommended, balancing the risk of further tightening/high yields against significantly better valuations.
U.S. Investment-grade Taxable	●	●	●	●	●	Preference for Treasuries relative to credit and spread products, as nominal and real rates are some of the most attractive in over a decade, while the economy slows and recessionary signals remain.
International	●	●	●	●	●	International rates markets have become significantly more attractive as global Central Banks raise rates to fight inflation, no longer trading at a significant discount to the U.S. except in Japan where the Bank of Japan is still keeping longer term rates artificially low.
Global High Yield Taxable	●	●	●	●	●	Valuations present more attractive medium to long term returns even after estimating credit losses. However, increased recession concerns could cause near term price losses, and spreads are not at recessionary levels. Any additions to HY, therefore, should have a long-time horizon. Within HY, we prefer balanced exposure between floating rate loans and HY unsecured.
U.S. Investment-grade Tax Exempt	●	●	●	●	●	Muni valuations richened materially in November due to strong technical and fundamental conditions that we expect to persist. Primary market issuance is expected to weaken, as is typical, in December and January, and growth after that will be muted by the combination of issuers' abundant internal resources and still elevated rates. Retail demand has begun to increase and should continue to do so if rates stabilize or decline further. Credit is generally stable, but credit spreads are tighter than average and certain muni subsectors face particular challenges, so investors should be selective in going down the credit spectrum for additional yield.
U.S. High Yield Tax Exempt	●	●	●	●	●	HY munis are rich relative to IG munis, with tighter than average credit spreads. An up in quality focus should help mitigate increased credit risk due to potential economic weakening.

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

CIO EQUITY SECTOR VIEWS AS OF DECEMBER 5, 2023

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

Sector	CIO View					Comments
	Underweight		Neutral		Overweight	
Energy	●	●	●	●	●	We remain overweight Energy. High oil prices could drive higher-than-expected cash flows, FCF and earnings for energy stocks. The current environment of solid but slowing energy demand, tight global supplies, OPEC+ supply cuts, limited spare capacity, risk of potential global disruptions, plus the decline in capital expenditures and long-cycle energy investments are all supportive for Energy stocks. Higher energy prices combined with substantial cost-cutting initiatives and capital discipline over recent years built significant operating leverage into Energy companies. Despite declines in energy prices earlier this year, earnings and FCF outlooks remain strong in absolute terms for energy companies and relative to other sectors. YoY comps are tough in 2023, but we remain positive on the Energy sector due to valuation, earnings power and higher cash returns to shareholders through base dividends, variable dividends and stock buybacks. Longer term, secular headwinds still confront the sector, including the transition to clean energy, lower renewable energy costs and Environmental, Social and Governance (ESG) focus by investors. Continue to emphasize companies that are low-cost producers with high FCF, balance sheet strength and low break-even oil prices. Energy stocks still provide attractive valuations and strong dividends with slowing momentum.
Healthcare	●	●	●	●	●	Consider positions in larger biopharma stocks with attractive valuations. In an environment where financial conditions are tightening and economic growth is slowing, Healthcare stocks provide attractive characteristics, including quality, dividend growth, dividend yield and lower beta. Healthcare fundamentals to date have been able to withstand much of the macro pressures seen globally but flows YTD have been weak in the Healthcare sector. Distributors, life science equipment and large biopharma are best positioned, in our view, to weather pressure on margins, while innovation and breadth of portfolio should continue to allow for modest price taking in areas of medical technology and devices. Large pharmaceutical companies remain attractive as they trade at a material discount to Healthcare sector peers and the broader market. Further, significant cash on strong balance sheets, combined with more aggressive business development efforts and a greater focus on explaining long-term growth drivers make large pharma more attractive over the intermediate term. Over a longer duration, drug pricing headwinds may return as demographic shifts put more pressure on government payors and as value-based care initiatives gain momentum. Emphasize exposure to long-term positive trends in life science/bioprocessing equipment, innovative and differentiated medical devices and animal health, as well as more intermediate opportunities in large-cap biopharma and diversified med tech. Valuation remains attractive and momentum is neutral.
Utilities	●	●	●	●	●	Higher interest rates are a headwind for Utilities as an interest-rate-sensitive and bond proxy sector. Further, the higher cost of capital could delay and push out renewable energy projects at utilities, and these projects are potential drivers of earnings growth in the sector. Utilities historically provide reliable earnings and outperform in the late cycle and during economic growth slowdowns, especially regulated utilities. Utilities provide greater balance and lower beta and help diversify cyclical Equity exposure in portfolios. Higher interest rates recently weighed on the sector and could be a potential near-term headwind. For the longer term, we emphasize Utilities with growing renewable power generation from solar and de-emphasize ones that rely strictly on coal-power generation. Over the next decade, the 2022 IRA legislation provides a strong runway for future renewable energy investments and projects while also providing visibility and greater certainty for future earnings and dividend growth. Prefer utilities that can capitalize on the energy transition to greater renewable power generation and positive demographic trends. Valuation is neutral and momentum is neutral.
Consumer Staples	●	●	●	●	●	The prospects for continued consistent demand for essential consumer packaged goods (CPG) products from an even more conservative consumer may support relatively better top-line revenue growth when also coupled with selective but moderating retail price increases. Input and ingredient cost pressures could moderate further and may provide some modest defense to margins over time. The Consumer Staples sector has historically outperformed other cyclical areas of the market during a period of negative earnings revisions due to the recurring nature of consumer product company revenue streams, leading to better relative earnings growth. More visible and predictable earnings and a less severe period of downside earnings revisions help support the sector's relative valuation. Consistent cash flows through varying economic cycles help support higher dividend payouts and increased shareholder capital returns. The defensive characteristics of the sector could potentially attract "safe haven" investment flows over various cycle outcomes despite the already elevated valuations. Valuations are elevated and momentum is neutral.

Sector	CIO View					Comments
	Underweight		Neutral		Overweight	
Information Technology	●	●	●	●	●	The Technology sector is neutral despite improvements in supply chains and recent flight-to-quality and AI-driven flows into mega-cap Technology stocks. However, margin risks remain for companies in the sector as IT budgets and technology investments are showing signs of slowing. Despite some of the most expensive Technology stocks experiencing significant valuation re-ratings last year, we remain concerned about enterprise spending being under greater scrutiny on tighter spending budgets going forward and the potential for additional valuation re-ratings in the sector. Further, the potential remains for downward earnings revisions that are more likely to affect higher-beta, higher-valuation companies. Despite strong long-term Cloud trends, software margins could continue to deteriorate, as Cloud consumption could potentially come under some pressure near term and is not immune to a macro slowdown. We suggest a neutral weight in IT, with a bias to larger and higher-quality companies with both strong FCF and balance sheets. We continue to encourage investors to be careful about unprofitable, expensive and long-duration IT companies. The pandemic accelerated the digital transitions for many industries, but, over the longer term, we remain positive on the secular growth trends for Cloud computing, machine learning and artificial intelligence, data centers, software, cybersecurity and semiconductors. Valuations in the sector declined in 2022 but are still elevated after rising again in 2023, especially after the recent rally in artificial intelligence-related companies. Further, any additional moves higher in interest rates could pressure multiples for high-growth and high-valuation technology stocks with low to no profits; therefore, look for GARP (growth at a reasonable price) in software and semiconductors. The IT sector still generates significant FCF, dividend growth and remain long-term fundamental drivers for the sector. Technology is deflationary by nature; therefore, long-term investors should look to add to transformational and industry-leading businesses on weakness from the Fed's tightening and the re-rating of Technology stocks. Valuations remain elevated and momentum turned positive.
Communication Services	●	●	●	●	●	We are neutral on the Communication Services sector, as some of the largest companies in this sector have higher-quality fundamental characteristics and could be more attractive in an economic slowdown. Despite our concern for ongoing regulatory oversight and the never-ending battle over content, management teams are now adjusting their business models to reduce costs and become more efficient. Ad spending is moving from e-commerce to travel and leisure, hence advertisers are having to shift their targeting. Retailers are suffering from rising costs and slowing sales, which could drive changes in advertising spend. We are more constructive on the sector based on three key factors: 1) valuation multiples were largely de-risked last year; 2) earnings estimates were reduced; and, 3) more importantly, broad cost-reduction plans could create potential earnings upside. Valuations are neutral and momentum improved.
Industrials	●	●	●	●	●	The Industrial sector is neutral, driven by divergent fundamental outlooks across subsectors. Softening international end markets, improved but ongoing supply chain issues, elevated labor and energy costs, cautious guidance, and weaker export demand driven by Europe and China are weighing on the outlook for industrial conglomerates and transports. On the positive side, improving outlooks for defense budgets in the U.S., Europe and Southeast Asia as the global threat environment is elevated, underpinning favorable dynamics for defense companies. Aerospace is benefiting as well from the ongoing recovery in consumer and business air travel. Potential improvements in the global capex cycle, including reshoring of supply chains and manufacturing, and investment in new equipment after years of focusing on productivity, could support the construction, transportation, machinery and freight and logistics industries longer term. However, elevated inflation, tighter monetary policy and slower growth are potential headwinds near term, but secular growth drivers support the longer-term view for Industrials. Valuation is slightly elevated, and momentum is neutral.
Financials	●	●	●	●	●	We are neutral on the Financials sector. Despite the arrival of a high-interest rate regime, U.S. banks collectively have seen nearly \$0.7 trillion in deposit outflows so far this year, according to Fed data, and more than \$1.1 trillion since peaking a year ago (April 2022). Depositors have sought the perceived safety of the biggest banks and the higher yield offered by money market funds. Funding pressure coupled with higher regulatory capital requirements will likely lead to tighter credit standards and slow the pace of lending going forward. Despite headwinds, net interest income is still expected to grow modestly this year and improve earnings power, and valuations appear to already discount a lot of potential bad news. Risks to the downside appear balanced compared to potential upside for banks, despite higher capital requirements that could be near-term headwind. Capital return will remain the cornerstone of the investment case for banks. Overall, the volatility of the Financials sector should improve with the recent addition of large e-payment and credit card networks that have been stable earnings compounders historically. We also favor life insurers, which gain significant tailwinds from higher interest rates with higher-yielding investment portfolios. Investment income accounts for roughly one-third of life insurance revenues. Given structural headwinds in property and casualty insurance, we prefer alternative asset managers, like PE, that consistently draw fund inflows, typically find their most lucrative investment opportunities in times of economic stress and maintain pricing power in management fees. Overall, valuation is attractive, but momentum declined in the sector.
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 from pricing peaks last year. Higher interest rates in the developed world and ongoing trials securing labor and materials are pushing industrial project timelines to the right, and, with the additional challenge of higher energy costs, we are seeing some formerly profitable projects being reconsidered. Meanwhile, the supply side continues working at maximum capacity to meet the demand levels and thus may end up overshooting. We see this reflected in rising inventory level data across some value chains and are cautious, as the dynamic may spread and become a trend. Multiples could meaningfully contract if we start to see persistent pricing declines across the commodity complex. Such a trend would give some intermediaries relief on costs, but if they are also experiencing volumes decline, operating leverage could be at risk. We still see some longer-term tailwinds for demand, such as bipartisan support for U.S. infrastructure spending and reopening policies in China, but on a risk-reward outlook appeared less attractive with inflation and pricing power moving lower. Amidst softening demand trends and expected supply growth in the near term, consensus estimates appear elevated. As a result, the underlying sector valuation and momentum are neutral.

Sector	CIO View			Comments
	Underweight	Neutral	Overweight	
Real Estate	●	●	●	We are underweight the RE sector on CRE concerns. Tighter financial conditions and higher cost of capital could slow growth and weigh on earnings in the RE sector. Higher interest rates could increase refinancing risks and increase interest expenses, which could be a downside risk to sector earnings in coming quarters. RE was a higher-conviction sector when inflation was rising, but with inflation measures moderating and higher costs of capital for the industry, we would be more selective within the RE sector. There are mixed outlooks among its subsectors because of consumer and corporate changes like remote work, eCommerce, less business travel, etc., that are potential longer-term headwinds for CRE companies (e.g., office), mall operators and retail-related property owners as companies consolidate RE footprints. Furthermore, risks are rising for downward pressure on rental rates as lease contracts expire and new contracts are negotiated. Continue to emphasize longer-term secular trends in data centers, communication infrastructure (towers), storage and industrial real estate. Valuations are neutral and momentum only very recently started to improve.
Consumer Discretionary	●	●	●	Following a protracted period of above-trend, post-pandemic spending levels, the consumer is facing persistent and troublesome inflation headwinds that could result in a more conservative discretionary spending pattern as a slowing economy and potential employment security issues gradually 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 have driven demand for hotels, airlines and theme parks. The potential exists for consumers to retrench and assess their personal financial position, further deferring big-ticket purchases, including travel and leisure, until they feel more confident about the economy and other macro headwind factors. A retrenched consumer may revert to normalized spending patterns that drive demand for essentials only as the consumer attempts to deleverage their balance sheet and draw down savings balances for everyday needs. The ongoing period of declining real disposable income is being punctuated by stubbornly high energy costs and ongoing consumer goods inflation and is potentially exacerbated by the removal of the student loan forbearance, 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 declined recently.

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

CIO THEMATIC INVESTING AS OF DECEMBER 5, 2023

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

Big Data	Demographics	Climate Change
The massive growth in unstructured data being created by connected machines, devices and systems is fueling data processing and data analytics. Complementing artificial intelligence technologies are replete with applications for big data. The size of the digital world and Internet of Things (IoT) is accelerating the migration of data and applications to a cloud computing environment. Data centers and cloud-based storage will likely capture incremental data created.	Several demographic transitions serve as important arbiters of future growth. With elongated life expectancies globally, longevity for older populations will likely mean a renewed focus on healthcare, aged-care, financial, and consumer products and services for longer, serving as a multitrillion-dollar potential opportunity. Both the Millennials (born 1981-1996) and Gen Z (born 1997-2012) could have greater influence over the next decade on consumer spending and preferences. While we are neutral the EM asset class on a tactical basis, we believe the EM consumer represents a powerful middle-class consuming cohort over the longer term. Uplifting the bottom billions, or poorest socioeconomic group with growing access to electricity, internet and sanitation can also offer a demographic dividend for multinational companies.	With emphasis from the White House, a much greater focus is on health, renewable energy, clean water and sanitation, and other industries that tend to support a more sustainable future. Companies that embrace more climate-friendly business models and operations, as well as consumer products and services, are likely to enjoy sustained growth opportunities over the long term. Globally, nuclear energy is re-emerging and increasingly acknowledged as a 'green' energy solution. Other key investment opportunities: Renewable energy (solar, wind and hydrogen), as well as energy-efficiency such as building systems, water/waste management, and energy storage and distribution.
Future Mobility	Security	Post-crisis World
The future of mobility hinges on next-gen infrastructure. This includes the telecom industry's deployment of the 5G network, which is expected to prove to be the greatest accelerant and enabler to smart cities (smart buildings, safety and security), autonomous vehicles and unmanned drones. The growing electric vehicle market will likely demand installation of charging equipment and fuel peripheral industries such as battery material demand.	Expanding the IoT means security for a growing ecosystem of devices and end points. With the increase in time spent on online platforms, (as well as adoption of online payments/FinTech), data privacy/surveillance and governance is expected to play a larger role in a post-pandemic world, as will bolstering cybersecurity defenses and budgets. With the commercialization of space, cybersecurity will likely extend to space-based assets (think satellites, data links, weather monitoring and GPS).	In the post-crisis world, reshoring policies are increasingly focused on building more resiliency into supply chains, helping to sculpt tripolar supply chains pivoting between North America, Asia and Europe. A number of labor force dynamics have converged to place unprecedented demand on labor not only in the U.S. but around the world, hastening the need for industrial and service automation/robotics. The extraction, sourcing, use and management of the world's resources will stay in focus as both the agriculture and commodity complexes are stretched given the geopolitical backdrop. If the future entails increased investments into electric vehicles and greener energies, then the future will be mineral- and material-intensive, calling for more mining of copper, lithium, nickel, manganese, cobalt and graphite, etc. Lastly, real assets in the post-crisis world are a key buffer to above-trend inflation.

Index Definitions

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

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

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.

MSCI All Country World Index is a stock index designed to track broad global equity-market performance.

Broad dollar index is a measure of the value of the United States dollar relative to other world currencies.

Global Manufacturing Purchasing Managers' Index (PMI) ex-U.S. is an index of the prevailing direction of economic trends in the manufacturing and service sectors.

HFRF Fund Weighted Composite Index is a global, equal-weighted index of hedge funds with minimum assets under management of USD \$500MM which report to the HFR Database and are open to new investments.

HFRF Equity Hedge (Total) Index is Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities.

HFRF Macro (Total) Index is when investment managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

Growth/Russell 1000 Index is a stock market index that tracks the highest-ranking 1,000 stocks in the Russell 3000 Index, which represent about 93% of the total market capitalization of that index.

Russell 1000 Value Index measures the performance of the large-cap value segment of the US equity universe.

Russell 2000 Index is a small-cap U.S. stock market index that makes up the smallest 2,000 stocks in the Russell 3000 Index.

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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. When interest rates go up, bond prices typically drop, and vice versa. 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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