MERRILL
A BANK OF AMERICA COMPANY

CHIEF INVESTMENT OFFICE

Capital Market Outlook

July 25, 2022

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

IN THIS ISSUE

Macro Strategy—*A Tri-polar Framework for Potential Catalysts*: In surveying potential catalysts for the back half of this year, we use a three-factor framework.

In it, the first element is associated with the outlook for the supply-demand balance of the global economy. We believe it may influence the trajectory for inflation, our second factor. Third is how these components influence forecasts for monetary policy and its effect on the economy.

Market View—*A Scorecard Framework for European Markets:* European Equities have exhibited significant return dispersion across individual countries this year, but most have trailed behind U.S. and global markets amid a range of challenges for the region. Reductions in the supply of natural gas from Russia, political turmoil in Italy and the recent heat waves sweeping across the continent have all contributed to the gloom, posing downside risks for growth and upside risks for inflation.

We remain tactically underweight in Europe, but continue to expect the specific characteristics of each country to determine relative strength within the region. We have therefore constructed a scorecard framework based on five key market drivers in order to help assess the relative prospects across 15 major countries in the current environment.

Thought of the Week—*10 Years of Xi:* Chinese Equity indexes have significantly underperformed global benchmarks under Xi Jinping's tenure, and the Renminbi (RMB) has failed to gain a meaningful share of global currency reserves. Why?

In our view, strong headline economic growth is easily swamped by a high level of economic policy uncertainty driven by governance risk, an inefficient financial system, demographic challenges—both an aging population and a lack of diversity of thought—and trust and transparency issues. The headwinds are a bad recipe for organic innovation.

MACRO STRATEGY ▶

Rodrigo C. Serrano, CFA®
Director and Senior Investment Strategy Analyst

MARKET VIEW ▶

Ehiwario Efeyini
Director and Senior Market Strategy Analyst

THOUGHT OF THE WEEK ▶

Jonathan Kozy
Managing Director and Senior Macro Strategy Analyst

MARKETS IN REVIEW ▶

Data as of 7/25/2022, and subject to change

Portfolio Considerations

As this period of uncertainty matures, markets, in our view, will be searching for signs of stability to finally bottom out and create a new base. While risks remain, global Equities still have the support of higher nominal growth levels, healthy corporate profits, a strong consumer and an improvement in the service sectors in the near term. We still expect high-quality Fixed Income to be a diversifier, and this diversification effect has historically been true when rate volatility decreases. For investors, there is a growing list of reasons to consider shoring up and maintaining strategic exposure to commodity prices.

MACRO STRATEGY

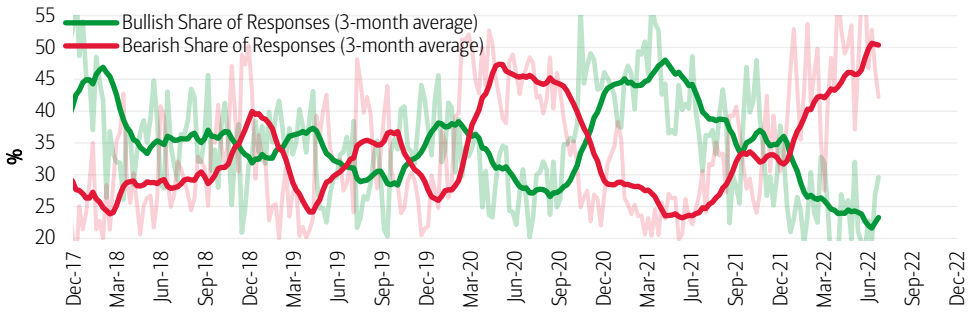
A Tri-polar Framework for Potential Catalysts

Rodrigo C. Serrano, CFA®, Director and Senior Investment Strategy Analyst

In the U.S., the Chief Investment Office (CIO) assigns an approximate 60% possibility outcome for a successful conclusion of *The Reset* Phase: Amid a recalibration by interest rate and equity markets, incorporating a new macroeconomic regime, corporate earnings would experience a contained decline, not deep like prior "recessionary" cycles. A continued evolution would see the economy eventually consolidate, setting the stage for a new cyclical uptrend and sustaining the current secular equity bull market—a "bend but not break" outcome.

According to the American Association of Individual Investors (AAII), retail sentiment hovers near extreme bearish levels (Exhibit 1). A similar conclusion can be implied by trackers published by BofA Global Research, such as the Bull & Bear Indicator and the aggregated cash level held by institutional investors, relayed in the Global Fund Manager Survey. In short, we believe a realization of positive catalysts could factor in notable equity market rallies as sentiment turns.

Exhibit 1: We Think The Motto "Climbing A Wall Of Worry" Is Particularly Relevant Today For Risk Assets.



Note: Light Green shows weekly Bullish share of responses. Light Pink shows weekly Bearish share of responses. Sources: AAII; Chief Investment Office. Data as of July 21, 2022. Note: Share of responses do not add up to 100% due to the share of neutral investors (excluded from the chart).

That said, we also believe investor psychology and financial market volatility reflect uncertainty and shifting expectations, amid a widened variability of potential outcomes. Conversely to an opportunistic progression, our estimation also implies a 40% chance of further weakness in Equities to reflect a deteriorating economy and its consequences.

We outline potential constructive catalysts, signaling a possible peak of macroeconomic disequilibrium, as well as headwinds, indicating stubborn imbalances.

Peak Disequilibrium...

We view cresting inflation as a potentially constructive catalyst for risk-oriented assets. The U.S. Consumer Price Index (CPI) recently hit a fresh 40-year peak, at 9.1% on a year-over-year (YoY) basis. Yet market-based forecasts have declined, as have consumer expectations for longer-run pricing pressures, potentially signaling peak macroeconomic disequilibrium.

An additional positive would be continued improvement in the supply-demand balance. A shift from pandemic-era consumption patterns and a cooling of demand have helped lead to higher inventories, prompting some retailers to lower prices. This development may be helping to clear supply-chain bottlenecks. Measures indicating both elevated timeframes for supplier deliveries and prices paid by manufacturers have cooled, according to the Institute for Supply Management. Positive YoY aggregate price indicators compiled by Bloomberg, tracking the value of industrial metals, energy and agriculture, have declined by nearly double-digit percentages from their recent summits.

A sharper-than-expected cooling in inflation may trigger greater investor optimism for a slower tightening and less restrictive terminal stance of monetary policy, uncertain elements seen by many as notable headwinds for risk-focused assets. Helping could be a positive geopolitical development, particularly in Eastern Europe, that improves the prospects for supply-demand equilibrium in commodities markets.

Investment Implications

Until there is greater clarity, we favor a defensive posture within a well-diversified portfolio. Longer-run investment opportunities include Value, Energy, and Real Assets, alongside less correlated alternative investments, in our view. We suggest a patient and disciplined implementation approach, such as dollar-cost averaging.

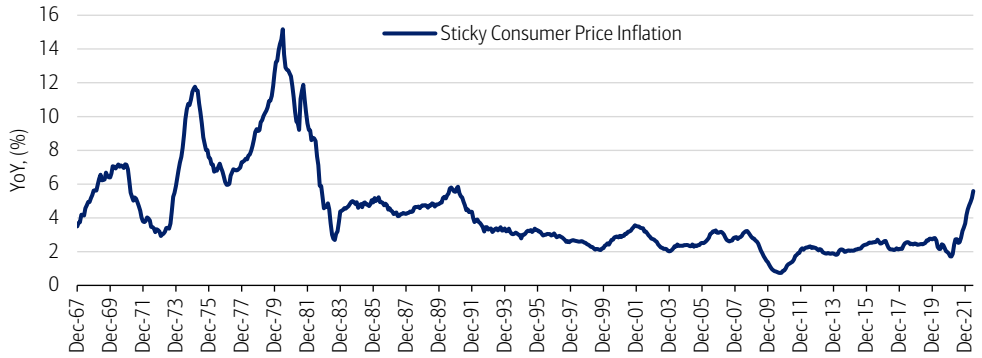
Collectively, these may stunt the upward path for the U.S. dollar and global interest rates, while supporting global equity markets. Also helping stabilize corporate earnings outlooks would be less pressure on margins due to cooling upward pressure on costs, while a notable shift in consumer and investor sentiment may serve to stabilize demand and valuations respectively.

...or Stubborn Imbalances?

While supply-demand imbalances are improving, further rupture of tense international relations could render them more stubborn. Spurred by the Ukraine/Russia conflict, a worsening of Europe's energy crisis may accelerate recessionary conditions with spillover effects into the global outlook. Another deglobalizing factor could be renewed political antagonism over Brexit with the UK where a search to replace Prime Minister Boris Johnson is ongoing. Meanwhile, though more assimilated by most major economies, an intensified coronavirus propagation may still hinder progress toward equalizing labor market supply with demand. In the U.S., a tracker for YoY wage growth published by the Atlanta Federal Reserve Bank hit its highest level on record in June.

This gain still trailed inflation, which may itself persist for longer than expected. Aggregated, the annual price hike for a class of items considered to possess a greater magnitude of inflationary inertia was its largest since early 1991 (Exhibit 2). Imbalance in the housing market affecting rental costs, a notable item in this measure, may pressure services inflation, offsetting cooling price pressures in goods.[1]

Exhibit 2: Subject To Fewer Price Adjustments, The Sticky-Price Measure[2] Seems To Encompass An Element Of Inflation Expectations.



Sources: Atlanta and Cleveland Federal Reserve Banks. Data as of June 30, 2022.

Such a treacherous inflationary climate may further heighten memories of the 1970s. Monetary policy prematurely flip-flopped from seeking to tame inflation to shoring up economic growth, succeeding at neither for longer, in our view. Implementation of lessons learned, such as a more steadfast approach to decisively curb inflation, could surprise markets and further destabilize the global outlook.[3]

Addendums

No less important are developments in China, in our opinion. A market-friendly conclusion to the country's Zero-Covid policy, combined with effective stimulative measures, especially for the property market, may provide greater stability to the global economic outlook.[4] We wonder though if raised demand could renew strains in commodity markets if imbalances exist.

The evolution of the U.S.-China relationship may also signal relief, for instance, if a potential cut in tariffs is seen as a push toward greater cooperation to tackle global challenges. Conversely, disagreements, such as no audit deal raising the risk of a delisting of Chinese companies in the U.S., may raise worry of a further fissure between both superpowers. In this climate, other potential geopolitical flashpoints, such as negotiations over Iran's nuclear program and Taiwan, may be more difficult to successfully address. Meanwhile, political risk globally may rise under a more onerous economic backdrop. In Europe, this dynamic may complicate policymaking for the European Central Bank.

[1] "Relief Eludes Many Renters as Fed Raises Interest Rates"—*The New York Times* (July 11, 2022).
[2] "Are Some Prices in the CPI More Forward Looking than Others? We Think So"– Cleveland Federal Reserve Bank Economic Commentary (Issue 2010-2; May 19, 2010).
[3] "For the Federal Reserve, Easing Too Soon Risks Repeat of Stop-and-Go 1970s"—The Wall Street Journal (July 10, 2022).
[4] Zero-Covid is a policy designed to eliminate community spread of the coronavirus.

MARKET VIEW

A Scorecard Framework for European Markets

Ehiwario Efeyini, Director and Senior Market Strategy Analyst

European Equities have exhibited significant return dispersion across individual countries this year. In local terms, three of the 15 major markets have delivered total return gains. But in common currency most have trailed behind global indexes as the region faces tough trade-offs in meeting its main macroeconomic objectives. The CPI rose by 8.6% year-on-year in June, prompting the European Central Bank (ECB) to raise interest rates by 50 basis points last week for its first hike in over a decade. But inflation in Europe remains more supply-driven than elsewhere and this may be exacerbated by recent developments. The heat waves sweeping across the continent over recent weeks have depleted water levels in key transportation routes such as the river Rhine, making for reduced shipping loads, higher delivery costs and potential water supply shortages for hydropower generation. At a time when the Federal Reserve and other major central banks are tightening policy much more aggressively, the euro exchange rate is also likely to remain weak, which should only put more upward pressure on local inflation through the import channel. And on the growth side, additional risks stem from the parliamentary upheaval in the eurozone's third-largest economy, Italy, following Mario Draghi's resignation as prime minister last week, which calls into question the country's reform agenda and its eligibility for close to EUR 200 billion in European Union (EU) fiscal support funds.

Macroeconomic conditions in Europe may yet deteriorate further as the Russia/Ukraine conflict moves into its sixth month. The European Commission last week proposed a voluntary 15% reduction in natural gas demand across EU member states from next month out to March 2023. Piped gas deliveries from Russia have already been curtailed in response to Western sanctions, and the possibility of additional supply cuts later in the year is forcing European policymakers to consider increasingly severe measures in order to rebuild storage ahead of the winter months. This poses further downside risk to growth and upside risk to inflation.

We recently released an Equity scorecard for Emerging Markets, and to take a closer look at regional conditions we apply a similar framework to Europe here using key differentiating drivers for each of the major countries. While challenges abound for Europe as a whole, the specific characteristics of each country should help to determine relative strength within the region. Based on five categories—inflation, exposure to Russian gas, market weighting in the Energy sector, dividend yields and valuation—we classify the 15 major markets (Exhibit 3) with a view to assessing which may be more or less well-positioned in the current environment.

Portfolio Implications

Our tactical stance on Europe remains underweight, but varying conditions across individual markets in terms of local inflation rates, energy exposure, valuation and others should continue to see a wide dispersion in relative returns between different countries within the region.

Exhibit 3: A Five-Category Framework To Assess European Markets.

	Inflation rate Year-on-year CPI (%)	Russian gas exposure Share of total energy consumption	Energy weighting Share of market capitalization	Dividend yield Rate (%)	Valuation PE/PB* ratio composite (standard deviations** from 10-year average)
Austria	8.7	15%	28%	5.8	-1.2
Belgium	10.5	1%	0%	3.9	-1.4
Denmark	9.1	4%	0%	2.2	-0.2
Finland	8.1	3%	14%	4.7	-0.7
France	6.5	2%	9%	3.0	-0.6
Germany	8.2	14%	0%	3.9	-2.3
Ireland	9.6	0%	0%	1.9	-0.7
Italy	8.5	10%	12%	5.9	-0.8
Netherlands	9.9	2%	0%	2.5	-0.4
Norway	7.0	0%	39%	4.9	0.5
Portugal	9.0	0%	18%	3.4	2.0
Spain	10.0	0%	6%	4.0	-1.6
Sweden	8.9	1%	0%	4.5	-1.3
Switzerland	3.2	7%	0%	2.9	-0.9
UK	9.1	0%	13%	4.2	-0.6

*P/E=price-earnings; P/B= price-to-book. **Standard deviation is the statistical measure of market volatility, measuring how widely prices are dispersed from the average price. Sources: MSCI; Bloomberg; Eurostat; Chief Investment Office. Data as of June 2022.

Category 1: Inflation. As we see in most major developed economies, aggregate consumer price inflation levels in Europe remain well in excess of central bank targets. There is, however, considerable variation across the continent with markets like Spain and Belgium in double digits, far above others in the region such as France and Switzerland. This further

RETURN TO FIRST PAGE

complicates the task of the ECB, and in the meantime countries with higher inflation rates are likely to experience greater setbacks to discretionary income.

Category 2: Exposure to Russian gas. EU officials have pledged to cut their demand dependence this year on Russian gas imports by two-thirds and on Russian oil imports by 90%, before ending their reliance on all Russian fossil fuels by 2027. Solidarity demand cuts as proposed by policymakers last week would go some way toward sharing the burden across member countries, but those with more exposure to Russian imports will still face higher costs from reduced supply and the need to secure piped gas substitutes from other sources.

Category 3: Energy sector weighting. Pre-pandemic underinvestment, ongoing labor shortages, weaker exports from Russia and the global recovery in transportation service activity remain tailwinds for oil prices. Alongside the industry cost-cutting of recent years, this should continue to support profitability across energy companies and benefit countries that have larger weightings in the sector.

Category 4: Dividend yields. The ECB was the latest of the major central banks to raise interest rates last week. But this follows a string of rate hikes by other monetary authorities over recent months across both developed and emerging economies. As global interest rates move higher and yields on Fixed Income assets become more attractive, higher-yielding equity markets are likely to be relative beneficiaries.

Category 5: Valuation. Valuation multiples for most European markets have fallen through their historical long-term averages since the start of the year. On a country basis, current valuation levels should give some indication of the scope for price resilience as discount rates rise and earnings expectations potentially come down with slowing economic growth.

The scorecard assigns a value to each of the 15 markets based on their ranking across these five categories, with a maximum possible score of 75 for each country (Exhibit 4).

Exhibit 4: Scorecard Based On Country Rankings Across Categories.

	Inflation rate	Russian gas exposure	Energy weighting	Dividend yield	Valuation	Overall
Norway	13	11	15	13	2	54
Austria	9	1	14	14	11	49
Finland	12	6	12	12	7	49
Italy	10	3	10	15	9	47
Spain	2	11	8	9	14	44
UK	5	11	11	10	5	42
France	14	7	9	5	6	41
Sweden	8	9	1	11	12	41
Portugal	7	11	13	6	1	38
Germany	11	2	1	8	15	37
Switzerland	15	4	1	4	10	34
Belgium	1	9	1	7	13	31
Ireland	4	11	1	1	8	25
Netherlands	3	7	1	3	4	18
Denmark	5	5	1	2	3	16

Scores based on country rankings in each category from 1 (worst) to 15 (best). Source: Chief Investment Office. Data as of June 2022 based on information from MSCI, Bloomberg and Eurostat—see Exhibit 3.

Norway, Western Europe's largest oil and gas producer, has been one of Europe's top performing markets in 2022 and ranks highest, benefiting further from its relatively low inflation rate and high dividend yield. Other markets that are more insulated from Russian energy supply such as Spain and the UK also score relatively well. The Netherlands and Ireland by contrast have been underperformers this year and remain at the lower end of the table as two of the lowest-yielding markets with no exposure to the energy sector. Though this classification serves as a useful point of reference, investors should nonetheless consider other important factors. Countries outside the eurozone such as the UK, Norway and Sweden have generally seen a faster pace of interest rate hikes, while the Swiss franc in particular has depreciated far less than the euro, limiting imported inflation and boosting returns in common currency. Shifts in fiscal and regulatory policy on the back of changes in political leadership should also be watched for their influence on relative returns. In addition to the ongoing uncertainty in Italy, Sweden will stage a general election in September, while the ruling Conservative party in the UK is set to appoint a new prime minister in the same month. We maintain a tactically underweight stance in mainland Europe overall, but local conditions should continue to distinguish individual markets from the broader region.

THOUGHT OF THE WEEK

10 Years of Xi

Jonathan Kozy, Managing Director and Senior Macro Strategy Analyst

Xi Jinping assumed the office of General Secretary of the Chinese Communist Party on November 15, 2012, and the office of the President of the People's Republic of China on March 14, 2013. As we approach the 10-year mark for both, below is a macroeconomic and markets-based assessment of his relative performance. By traditional economic growth metrics, China has performed well, growing its share of the global economic pie. But equity and foreign exchange investors don't seem impressed.

Economic Growth: According to the International Monetary Fund (IMF), including the latest estimate for 2022, real economic growth in China averaged a very impressive 6.3% annualized over the 10-year period from 2013–2022. Based on purchasing power parity (PPP), China's share of the global economic pie has risen from 15.4% to 18.8% over that time period. By this metric, China surpassed the U.S. in size in 2016, though it remains smaller in market-based terms and well behind in per capita gross domestic product. Trend growth is also slowing. Perhaps the biggest headwind to growth over a strategic investing time frame is the demographic inputs to innovation. It is increasingly hard to find young workers to train in advanced manufacturing and technology while over two-thirds of Chinese people do not finish high school.[5] Immigration restrictions also limit diversity of thought.

Governance: In addition to demographics, governance remains a key risk. While governance can be categorized as stable, there are concerns over the treatment of private companies as well as geopolitical risk associated with Taiwan that certainly fits into a strategic investment time frame. China's Rule of Law ranking, according to World Justice Project's rankings, fell from 76th in 2013 to 98th in 2020. While other measures like the World Bank/NRGI/Brookings Index scoring of Rule of Law improved over Xi's tenure, it remains below zero, indicating weak governance. Similar trends can be seen in regulatory quality and control of corruption.[6] China's Zero-COVID policy adds to concerns over doing business or investing in China.

Equity markets: Equity investors have been unimpressed with China's headline growth. Chinese equity markets have significantly underperformed global equities in U.S. dollar terms during Xi's term. The MSCI China Index has annualized returns of 4.0%, the Hang Seng Index 2.7%, and the Bloomberg China Aggregate Total Return Index 3.6%. This compares to 12.5% for the MSCI U.S. Index, 8.5% for the MSCI ACWI Index and 4.4% for the MSCI EAFE Index.[7]

Currency Reserve Status: Central bank currency investors are also hesitant to buy in to China solely based on economic size. Gaining global reserve currency share has been a main goal for Xi and the Communist party in recognition of its vulnerability to the U.S. dollar's reserve currency status. But China's reserve currency progress has been a slow-moving train. According to data from the IMF, during Xi's tenure the RMB's share of allocated currency reserves has grown from zero to just 3%.

Bottom line: Reserve currency status is a good proxy for geoeconomic power and, like forward-looking equities, summarizes investor sentiment to some extent. Economic size, existing networks/alliances, deep and liquid capital markets, technological supremacy, military might, fiscal responsibility and sound governance—all are tangible, measurable properties that are viewed favorably by the foreign exchange market participants, according to various empirical studies.[8] Transparency, predictability, trust, credibility and forward guidance are also key metrics for central banks, multinational corporations and individuals to gauge confidence in equity markets or a sovereign currency. While China is improving in some parts (economic size and military might, for example), equity and currency markets view a number of tangible and intangible investment attributes as inadequate including the inefficiency of the financial system, a lack of alliances, transparency, predictability, trust and credibility. This adds up to a great deal of economic uncertainty and makes investing in the currency and equities less attractive on a risk-adjusted or relative basis.

Portfolio Implications

The factors that likely contributed to China's equity market underperformance during Xi's 10-year tenure remain in place. The MSCI All Country World Index (ACWI) allocates just 4% to Chinese Equities.[9] While this seems like a small allocation for such a large economy, a strategic allocation of less than 5% makes sense to mitigate the geopolitical risk and the governance risk associated with investing in companies domiciled in an authoritarian country with a lack of rule of law. Investors can gain exposure to China's economic size through multinational firms domiciled elsewhere.

[5] Center for Strategic and International Studies (CSIS) ChinaPower Podcast June 10, 2022.

[6] Data sourced from Haver Analytics as of July 20, 2022.

[7] Bloomberg Data from March 14, 2013–July 20, 2022.

[8] Eichengreen, Barry, et al. How Global Currencies Work Past, Present, and Future. Princeton University Press, 2019.

[9] See MSCI ACWI Index (USD) at msci.com/documents.

Equities

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
DJIA	31,899.29	2.0	3.7	-11.2
NASDAQ	11,834.11	3.3	7.3	-24.0
S&P 500	3,961.63	2.6	4.7	-16.2
S&P 400 Mid Cap	2,396.73	4.0	5.7	-15.0
Russell 2000	1,806.88	3.6	5.8	-19.0
MSCI World	2,650.82	3.2	4.2	-17.2
MSCI Europe, Australasia, Far East	1,897.38	4.4	2.8	-17.3
MSCI Emerging Markets	990.37	3.0	-0.6	-18.2

Fixed Income†

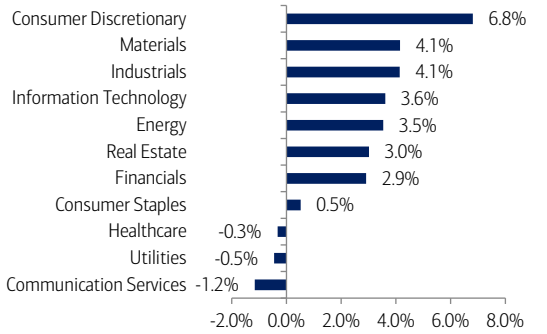
	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Corporate & Government	3.52	1.22	1.77	-9.47
Agencies	3.17	0.65	0.68	-5.34
Municipals	2.94	0.24	1.70	-7.43
U.S. Investment Grade Credit	3.53	1.17	1.79	-8.74
International	4.43	1.58	2.72	-12.05
High Yield	8.06	2.48	4.30	-10.50
90 Day Yield	2.38	2.29	1.63	0.03
2 Year Yield	2.97	3.12	2.95	0.73
10 Year Yield	2.75	2.92	3.01	1.51
30 Year Yield	2.97	3.08	3.18	1.90

Commodities & Currencies

	Total Return in USD (%)			
Commodities	Current	WTD	MTD	YTD
Bloomberg Commodity	250.04	2.7	-0.3	18.1
WTI Crude $/Barrel††	94.70	-3.0	-10.5	25.9
Gold Spot $/Ounce††	1727.64	1.1	-4.4	-5.6

	Total Return in USD (%)			
Currencies	Current	Prior Week End	Prior Month End	2020 Year End
EUR/USD	1.02	1.01	1.05	1.14
USD/JPY	136.12	138.57	135.72	115.08
USD/CNH	6.77	6.76	6.69	6.36

S&P Sector Returns



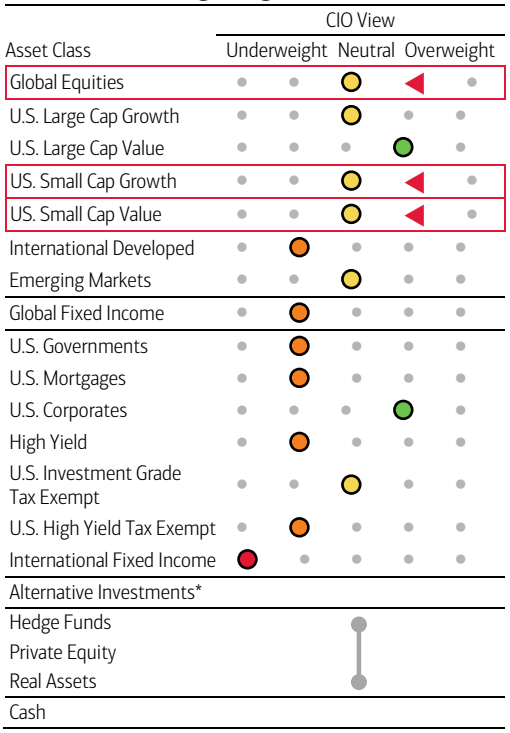
Sources: Bloomberg; Factset. Total Returns from the period of 7/18/2022 to 7/22/2022. †Bloomberg Barclays Indices. ††Spot price returns. All data as of the 7/22/2022 close. Data would differ if a different time period was displayed. Short-term performance shown to illustrate more recent trend. **Past performance is no guarantee of future results.**

Economic Forecasts (as of 7/22/2022)

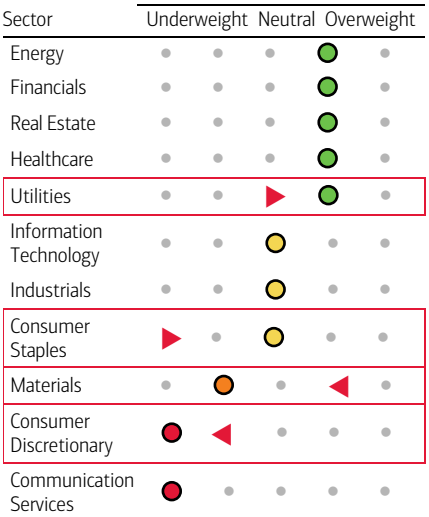
	2021A	Q1 2022A	Q2 2022E	Q3 2022E	Q4 2022E	2022E
Real global GDP (% y/y annualized)	6.1	-	-	-	-	3.0
Real U.S. GDP (% q/q annualized)	5.7	-1.6	-1.5*	-0.5	-2.0	1.1
CPI inflation (% y/y)	4.7	8.0	8.6*	8.2	6.9	7.9
Core CPI inflation (% y/y)	3.6	6.3	6.0*	6.2	5.9	6.1
Unemployment rate (%)	5.4	3.8	3.6	3.7	4.2	3.8
Fed funds rate, end period (%)	0.07	0.33	1.58	2.88	3.38	-

The forecasts in the table above are the base line 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. Historical data is sourced from Bloomberg, FactSet, and Haver Analytics. **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 July 22, 2022.

Asset Class Weightings (as of 7/5/2022)



CIO Equity Sector Views



*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. Source: Chief Investment Office as of July 5, 2022. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

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.

Consumer Price Index (CPI)/Drug Retail is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Indexes are available for the U.S. and various geographic areas.

S&P 500 Equity Index is a stock market index that measures the stock performance of 500 large companies listed on stock exchanges in the United States. It is one of the most commonly

MSCI China Index measures large and mid-cap representation across China securities listed on the Shanghai and Shenzhen exchanges.

Hang Seng Index is a freefloat-adjusted market-capitalization-weighted stock-market index in Hong Kong.

Bloomberg China Aggregate Total Return Index tracks the performance of the CNY-denominated fixed income market.

MSCI U.S. Index is a stock market index that measures the performance of large- and mid-cap companies in the U.S.

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

MSCI EAFE Index is a stock market index that is designed to measure the equity market performance of developed markets outside of the U.S. & Canada.

World Bank/NRGI/Brookings Index measures the quality of extractive sector governance in resource-producing countries around the world.

Important Disclosures

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

This material does not take into account a client's particular investment objectives, financial situations, or needs and is not intended as a recommendation, offer, or solicitation for the purchase or sale of any security or investment strategy. Merrill offers a broad range of brokerage, investment advisory (including financial planning) and other services. There are important differences between brokerage and investment advisory services, including the type of advice and assistance provided, the fees charged, and the rights and obligations of the parties. It is important to understand the differences, particularly when determining which service or services to select. For more information about these services and their differences, speak with your Merrill financial advisor.

Bank of America, Merrill, their affiliates and advisors do not provide legal, tax or accounting advice. Clients should consult their legal and/or tax advisors before making any financial decisions.

The Chief Investment Office ("CIO") provides thought leadership on wealth management, investment strategy and global markets; portfolio management solutions; due diligence; and solutions oversight and data analytics. CIO viewpoints are developed for Bank of America Private Bank, a division of Bank of America, N.A., ("Bank of America") and Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S" or "Merrill"), a registered broker-dealer, registered investment adviser and a wholly owned subsidiary of Bank of America Corporation ("BofA Corp."). This information should not be construed as investment advice and is subject to change. It is provided for informational purposes only and is not intended to be either a specific offer by Bank of America, Merrill or any affiliate to sell or provide, or a specific invitation for a consumer to apply for, any particular retail financial product or service that may be available.

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

BofA Global Research is research produced by BofA Securities, Inc. ("BofAS") and/or one or more of its affiliates. BofAS is a registered broker-dealer, Member SIPC, and wholly owned subsidiary of Bank of America Corporation.

All recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

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

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. 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. Investments in foreign securities 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. 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.