

CHIEF INVESTMENT OFFICE

# Capital Market Outlook

November 21, 2022

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

## IN THIS ISSUE

**Macro Strategy—*Likely Not There Yet:*** Encouraging news about U.S. inflation, signs of easing coronavirus restrictions in China, and a sharp rollover in the trade-weighted dollar exchange rate have helped extend the current S&P 500 index rally into a fourth week.

While Equities have corrected much of their early-year overvaluation, the risk of corporate earnings disappointments in coming quarters has increased with broadening global economic weakness and prospects for slowing nominal growth, as both global real gross domestic product (GDP) and inflation are anticipated to decline in 2023. In our view, risk-asset rallies, such as the current equity market rally, will thus remain on shaky ground until signs of an upturn in the global economic outlook start to emerge.

**Market View—*Global Population Trends: 8 Billion and Rising:*** The United Nations (UN) last week counted the birth of the world's eight billionth person, completing a doubling of the global population since 1975. In a decade that has so far been marked by uncertainty and major shocks from pandemic to recession, war and inflation, demographic trends are among the most predictable faced by investors over time.

Demographic changes over the coming years should have long-term implications for the contours of the global economy and markets through a range of channels including consumption, saving, investment, resource demand and government policy.

**Thought of the Week—*COP27—Slow Progress in the Right Direction:*** As the UN 2022 Climate Change Conference (COP27) comes to a close, it was implementation that was in focus.

Following a series of commitments at last year's conference, somewhat sluggish negotiations at the action-orientated COP27 underscored that the road to Net Zero will not be a smooth one. But in our view, the conversation, and the increasing focus on the transition to a low-carbon economy, are steps in the right direction.

## MACRO STRATEGY ►

**Chief Investment Office  
Macro Strategy Team**

## MARKET VIEW ►

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## THOUGHT OF THE WEEK ►

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## MARKETS IN REVIEW ►

**Data as of 11/21/2022,  
and subject to change**

### Portfolio Considerations

We remain neutral Equities, with a preference for U.S. Equities relative to International, and a slight overweight to high-quality Fixed Income. We continue to emphasize broad portfolio diversification, including Alternatives\*, as we continue to monitor trends in inflation, the Fed, corporate earnings, rates, and the dollar.

\*Many products that pursue Alternative Investment strategies are available only to qualified investors.

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## Likely Not There Yet

### Chief Investment Office Macro Strategy Team

Encouraging official and anecdotal inflation data, hopes for smaller interest rate increases, and signs of easing Chinese coronavirus restrictions helped support new life into Equities and other risk assets over the past week. However, we believe that the current rally remains on shaky grounds.

First, as discussed in our November 14 Capital Market Outlook (CMO), financial conditions have tightened significantly as we approached 2023, and the Fed is not finished raising rates or ending quantitative tightening (QT). Indeed, even though the fed funds rate currently stands near 4%, the central bank's use of forward interest rate guidance and QT as policy tools has also tightened liquidity.

Forward guidance became an essential tool for the Fed after the fed funds rate hit the zero bound in 2008, a situation in which its balance sheet also gained importance as a monetary policy tool. The effect of these policy tools on interest rate expectations and financial market conditions suggests that the fed funds rate alone does not fully reflect the stance of monetary policy. In fact, according to recent research conducted at the Federal Reserve Bank of San Francisco, a proxy measure for the fed funds rate that incorporates data from financial markets to better assess the broader stance of monetary policy shows that policy has been substantially tighter since late 2021 than implied by the fed funds rate alone. Specifically, "tightening financial conditions are similar to what would be expected if the funds rate had exceeded 5¼% by September 2022." After the November Fed rate hike, that effective rate now exceeds 6%.

In other words, according to the San Francisco Fed, "accounting for the broader stance of policy and comparing the proxy rate to simple rules suggests U.S. monetary policy tightened sooner and more sharply than has been generally recognized." This is evident in the spread between the 10-year Treasury note yield and the fed funds rate, which has narrowed sharply over the past year and has recently started to dip below zero. The waning effect of the pandemic stimulus and aggressive monetary tightening of the past six months, along with Fed plans for more rate hikes ahead, suggest that this spread is likely to turn more negative in coming months, a typical precursor of recessions. Growing financial market stress; rapid flattening, and recent inversion, of the yield curve; significant loss of pricing power reported by various businesses, including truckers and retailers; rapidly rising layoff announcements; tightening lending conditions; weakening corporate earnings in Q3, and equity market turmoil are not surprising in this context.

With U.S. policy tighter than meets the eye, global energy shortages, sharply rising average global short-term interest rates over the past year (up from about 1% to over 4%, which is more than twice their 2014-2020 average, for example), and 24% cumulative average global inflation estimated for the four years from 2021 to 2024—according to the October International Monetary Fund's (IMF) World Economic Outlook (WEO) report—it's not surprising that global growth expectations are dimming either. This is evident in the Organisation for Economic Cooperation and Development (OECD) leading indicator covering its 38 member countries, which has moved deeper into contraction territory in October, while the S&P Global Purchasing Managers' composite index for manufacturing and nonmanufacturing has remained in contractionary territory for three months. According to the IMF report, "a growing share of economies are in a growth slowdown or outright contraction," with the balance of risks tilted firmly to the downside. Indeed, the IMF sees about a 25% chance of global growth falling below 2.0% over the year ahead, which would rank in the 10th percentile of global growth since 1970. The IMF's base case is for global growth to slow from 6% in 2021 to 3.2% in 2022 and 2.7% in 2023, which would still be much below the 3.4% average global real economic growth of the past 42 years. According to the report, "this is the weakest growth profile since 2001 except for the global financial crisis and the acute phase of the pandemic and reflects significant slowdowns for the largest economies."

While the Blue Chip Economic Indicators survey shows a slight increase in consensus expectations for 2022 U.S. real GDP growth from 1.6% in the October survey to 1.8% in

### Investment Implications

Equities do not tend to bottom before the contours of a recession become clear, and with the probability of a U.S. and global recession rising, we expect the current equity market relief rally to prove ephemeral yet again.

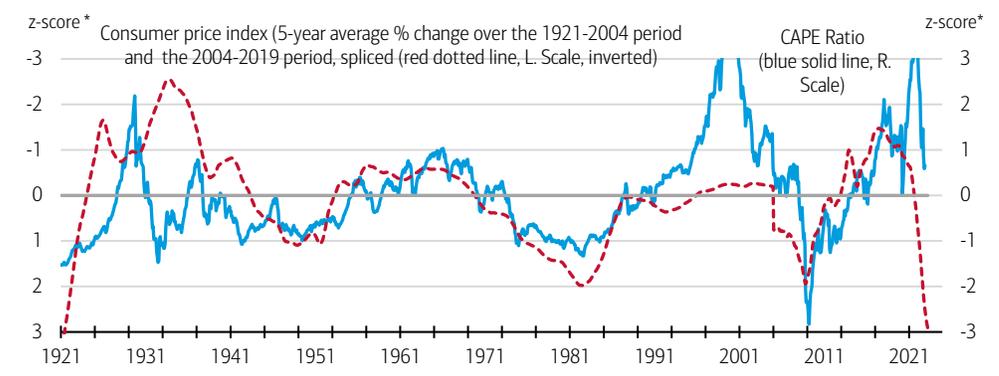
November, this is sharply less than had been anticipated at the beginning of the year, when it was projecting a 3.9% GDP increase for 2022. The consensus GDP growth estimate for 2023 has remained unchanged from last month at a puny 0.2%, sharply down from the 2.6% estimate for 2023 growth reported in January.

All of this suggests the trend of declining 2023 earnings expectations is likely to pick up steam, as is already evident in the declining earnings revisions ratio reported by BofA Global Research in recent months and the 10% drop in its 2023 S&P 500 earnings per share (EPS) estimate. While this is well below the consensus, it is much better than the typical earnings decline of roughly 30% in recessions. Still, a more severe recession than anticipated could cause a more-severe-than-average earnings decline. This, combined with a still elevated price-earnings (P/E) ratio indicates that, notwithstanding the past month's rally, the equity market is not out of the woods yet.

The Shiller Cyclically Adjusted Price Earnings (CAPE) multiple for the S&P 500 index reached its second-highest level of the past century before the Equity bear market began earlier this year (Exhibit 1). It had surpassed the 1929 peak, which is now the third biggest on record, but fell just short of the 1999 tech-bubble valuation peak, which holds the record.

While that excessive valuation has corrected significantly so far in 2022, P/Es tend to drop much more from extreme levels such as those reached earlier this year than they have so far. Also, as shown in Exhibit 1, the sharp rise in trend inflation and its inverse correlation with P/Es suggests multiples may have further downside adjustment ahead of them. All this, combined with a deteriorating economic and corporate revenue growth outlook (as discussed in the November 14 CMO) and downside pressures on profit margins creates risks to Equities and risk assets in general. Many similarities between the 1999 tech bubble and the post-pandemic tech bubble also suggest a longer-term rotation toward Value stocks is likely.

#### Exhibit 1: P/E Adjustment To 40-Year High Inflation Appears Incomplete.



\*z-score is the number of standard deviations from the mean value of the reference population. Standard deviation from mean is a quantity calculated to indicate the extent of deviation for a group as a whole. Sources: Fed Board: Standard and Poor's/Haver Analytics. Data through Q3 2022. Cited as of November 10, 2022.

If inflation falls faster than the market expects in 2023, interest rates could decline and offset some of the downward pressure on valuations. That has been the basis for market rallies this year, as hopes for a "Fed pivot" spring eternal. Yet, the basis for a Fed pivot also implies a substantial cooling of the economy that would temper the overheated labor market and take pressure off wage inflation. That, in turn, implies an earnings recession, which corporate earnings reports show has already begun in Q3 outside the Energy sector.

All in all, it is clear that the Fed has tightened more than meets the eye and is planning to err on the side of restraint for the foreseeable future, which is inconsistent with a cyclical upturn in the economy anytime soon. Together, a drop in inflation and a decline in the real growth outlook imply a double whammy for nominal GDP growth and corporate revenues that would work against any P/E multiple expansion from declining rates, in our view.

## Global Population Trends: 8 Billion and Rising

*Ehiwario Efejini, Director and Senior Investment Strategy Analyst*

The UN last week counted the birth of the world's eight billionth person, completing a doubling of the global population since 1975. In a decade that has so far been marked by uncertainty and major shocks from pandemic to recession, war and inflation, demographic trends are among the most predictable faced by investors over time. This year's milestone was correctly forecast by the UN as far back as the early 1990s. And though global population growth is expected to slow from an annual rate of 1.3% over the past 30 years to 0.7% over the next 30 years, current projections would still result in a total of 9.7 billion world inhabitants by 2050—almost an additional two billion from today's levels.

These demographic changes will have long-term implications for the contours of the global economy and markets through a range of channels including consumption, saving, investment, resource demand and government policy. Population growth and productivity are the two main ingredients that determine a country's economic output. And demographic trends will therefore be important for market participants to take into account as they assess investment prospects around the world. Surveying population dimensions across the world's major economies, we highlight some key features that investors should note:

- China stands as the world's most populous country today, but is set to lose that distinction to India in 2023. Indeed China's population is projected to peak next year before shrinking by 1.3% (or 19 million people) over the subsequent decade, while India's population is forecast to grow by 8.3% (119 million people) over the same period.
- More than half of the projected increase in the global population out to 2050 will likely be concentrated in eight countries, of which five are in Africa and three in Asia: the Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and Tanzania. African economies have the youngest populations in the world with a median age of just 18.7 years.
- Europe is home to many of the world's oldest populations (Germany and Italy being among the oldest with median ages of 44.9 years and 47.3 years respectively), but most are expected to continue to grow over the next few decades. Three in particular—Ireland, Norway and Luxembourg—should broadly keep pace with the global average.
- Japan, the world's oldest major economy with a median age of 48.7 years, will likely see the biggest decline in population among its developed world peers—a reduction of 20.2 million people between now and 2050, or 16% of its total population today.
- The U.S. population is expected to grow at an annual rate of 0.4% between now and 2050—a slower rate than the world as a whole. But the U.S., along with New Zealand, Ireland and Iceland, is among the youngest of the world's major developed economies with a median age of 37.9 years.

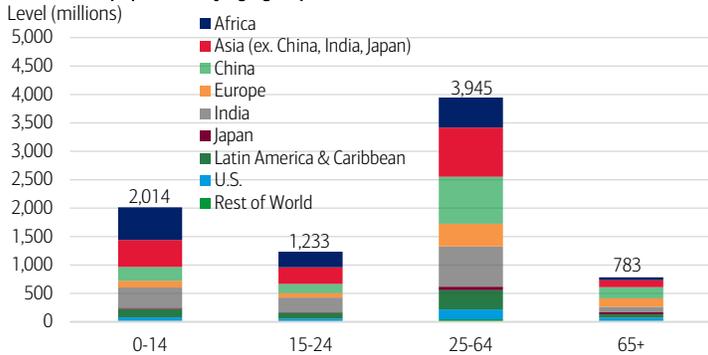
Beyond the trends in overall populations, important for investors will also be the changing demographic composition within individual markets. Franco Modigliani's—an Italian-American economist—"life-cycle hypothesis" predicts that populations should save more during their working lives, running down those savings (dissaving) as they age. All else equal, this suggests that younger countries with growing numbers of economically active people will be better positioned to accumulate capital for local investment in new businesses, physical infrastructure and asset markets. Taking the world as a whole, most major age categories are expected to see their populations increase over the next few decades out to mid-century (Exhibit 2). The student-worker population (aged 15-24) is expected to grow by 67 million people (5.4%). The mature worker population (aged 25-64) should increase in size by 851 million (21.6%). And experiencing by far the fastest population growth of any age category would be retirees (aged 65+), whose cohort will expand by 820 million, more than doubling its current size. The exception is forecast to be young dependents (aged 0-14), the number of whom is projected to fall by 3.6 million (-0.2%) by 2050.

### Investment Implications

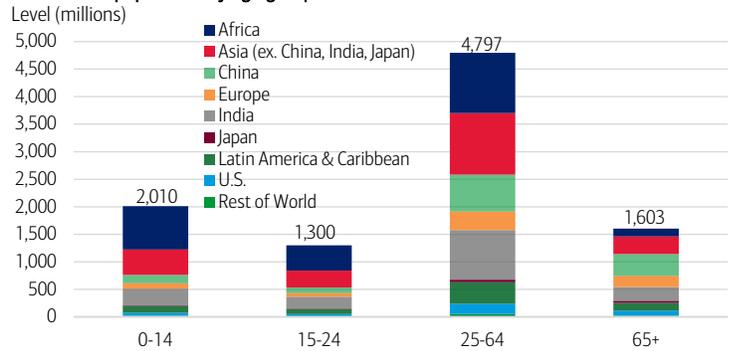
The addition of almost 2 billion people to the global population between now and 2050 will place bigger constraints on global resource supplies, likely favoring industries that can relieve these bottlenecks through increased consumption efficiency or alternative sources. Shifts in the global age composition between working-age people and retirees across countries should also have demand implications for a range of categories including robotics and automation, travel and leisure, luxury goods, healthcare, and retail.

## Exhibit 2: Global Population Age Distribution—2022 vs. 2050.

### 2022 Global population by age group



### 2050 Global population by age group

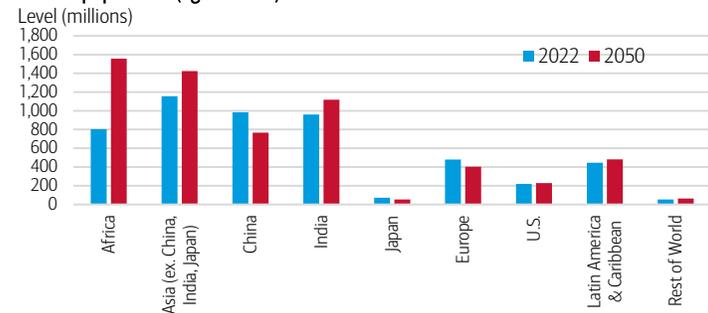


Sources: United Nations. Data as of 2022. Rest of World is Oceania, North America excluding U.S. and Mexico.

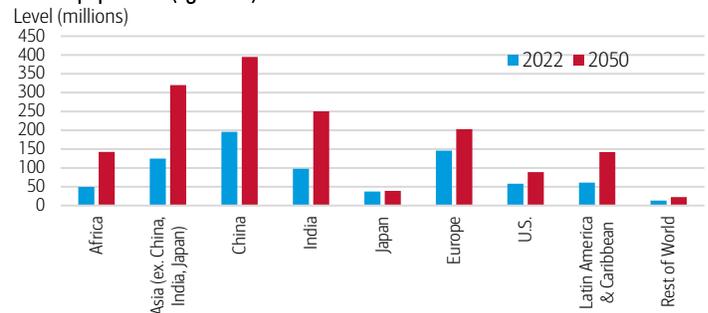
In short, the world is ageing. But the story will differ from market to market (Exhibit 3). Those with higher numbers of economically active people relative to retirees are projected to have more of the most basic ingredient for growth in economic output and investment capital than those with older populations. Meanwhile, in the absence of offsetting policies to boost productivity (such as investment in technology, infrastructure, education and training) or to expand the labor force (such as encouraging more women into the workplace, raising the retirement age or increasing immigration), graying countries will be at a growth disadvantage. Two-thirds of the total net increase in the world's mature workers (570 million) will likely occur in Africa, with close to 70% of the remainder (196 million) coming from India. By contrast, Japan, Europe and China are projected to see declines in their 25- to 64-year-old populations of 16 million, 66 million and 156 million, respectively, while their retiree populations are expected to increase by a respective 1.8 million, 57 million and 199 million. Indeed on current projections, China alone will account for a quarter of the new retirees created globally between now and mid-century.

## Exhibit 3: Regional Population Composition—Workers Vs. Retirees.

### Worker population (aged 15-64)



### Retiree population (aged 65+)



Source: United Nations. Data as of 2022. Rest of World is Oceania, North America excluding U.S. and Mexico.

In addition to these macroeconomic outcomes, the changes set to take place in the age structure of the world's population should also have a number of sector-specific market implications. The addition of almost 2 billion people between now and 2050 will place bigger constraints on global resource supplies across energy, food and water, likely favoring industries that can relieve these bottlenecks through increased consumption efficiency or alternative supply sources. The related investment themes of climate change mitigation and adaptation should also gain further traction over the coming decades. With over 800 million new retirees to enter the 65+ age segment between now 2050 (291 million of them over the next decade), we also expect to see structural demand strength in sectors such as Travel and Leisure, Luxury Goods and Healthcare. The rapidly increasing number of retirees around the world should be a further support for the robotics industry, including caregiver service robots and industrial automation equipment to boost productivity among the remaining workforce. Growth in the world's working-age population—90% of which will likely come from Africa and India—should also be a strong tailwind for underdeveloped consumer-facing sectors in these economies such as Finance, Telecommunications and Retail. This should apply particularly for countries that make the most progress on structural reforms, governance quality and political stability over the coming years.

## COP27—Slow Progress in the Right Direction

*Emily Avioli, Assistant Vice President and Investment Strategist*

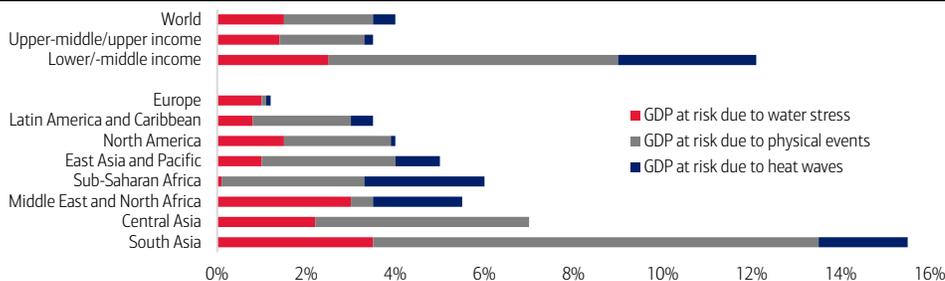
*Anna Potts, Assistant Vice President and Investment Analyst*

As 2022 COP27—the UN Climate Change Conference—comes to a close, it was implementation that was in focus—presenting the latest opportunity for public and private sectors alike to deliver scalable action on climate change and keep the Paris Agreement goal of keeping warming under 1.5C alive. Following a series of commitments at last year’s conference, somewhat sluggish negotiations at the action-orientated COP27 underscored that the road to Net Zero will not be a smooth one, but conversations confirmed the crucial need to address climate change in this “critical decade.”

With a backdrop of devastating climate and weather events in the last year, and after fraught and extended negotiations, for the first time in 30 years of climate talks, developed countries agreed to provide finance to help rescue and rebuild developing countries. Known as the “loss and damage fund”, it aims to see more aid committed from developed countries who are responsible for the lion’s share of global emissions,<sup>1</sup> to developing countries, who are more burdened by the physical impacts (Exhibit 4). Developed countries have yet to meet their 2009 pledge to provide developing countries with \$100 billion in climate finance annually by 2020—and even that target falls short of what’s required,<sup>2</sup> amplifying the importance of the financial assistance committed to at COP27.

Beyond the “loss and damage fund”, additional commitments would likely require the mobilization of private finance, which has so far played a relatively small part in total Emerging Market climate-related investment flows.<sup>3</sup> There’s also the possibility for fiscal support on this front—President Biden pledged billions to help countries adapt to climate change ahead of COP27, a measure that has yet to be approved, and the European Commission announced a fund designed to help Africa adapt to the chagrin of other developing countries.<sup>4</sup>

**Exhibit 4: GDP At Risk From Climate Change.**



Sources: S&P Global Ratings, October 14, 2022.

Emission reduction targets were also in focus with little progress having been made since 2021 COP26, in part due to the challenge the conflict in Ukraine poses to global energy markets. More action is needed here, as current commitments fall short of what’s required to meet Net Zero targets by 2050 and to the dismay of many, a resolution to cause emissions to peak by 2025 was removed from the final agreement. But there were some related bright spots—the G20 reaffirmed its existing commitment to limit global warming to 1.5C, over a dozen nations announced their intention to join a global pledge to cut methane emissions (bringing supporting countries to more than 140),<sup>5</sup> and the U.S. voiced initial support for a proposal to phase down oil, gas and coal,<sup>6</sup> while Brazil’s president-elect said the Amazon would reach “zero deforestation” by the end of the decade.

When compared to the copious commitments made at last year’s COP26, this year highlights the difficulty of achieving action-based outcomes. But in our view, the conversation, and the increasing focus on the transition to a low carbon economy, are steps in the right direction. While more action is required, countries, companies and investors are increasingly collaborating with a goal to help make meaningful change and will all play an integral part in facilitating an orderly and just transition.

<sup>1</sup> Global Carbon Atlas, 2021.

<sup>2</sup> OECD, “Climate Finance Provided and Mobilised by Developed Countries in 2016-2020” 2022.

<sup>3</sup> Absolute Strategy Research, November 11, 2022.

<sup>4</sup> Deutsche Welle, “COP27: EU pledges funding for African adaptation, resilience,” November 16, 2022.

<sup>5</sup> Bloomberg, “More Nations Pledge to Cut Methane Emissions From Cows to Oil,” November 16, 2022.

<sup>6</sup> Bloomberg, “US Backs Tough Fossil Fuel Phase Down Pledge at Climate Summit,” November 16, 2022.

### Investment Implications

For investors, we continue to expect clean energy and related commodities, materials, equipment and infrastructure to benefit in the long run as both companies and countries progress toward their Net Zero targets. A focus on the mitigation of risks associated with climate change, as well as the investment opportunities presented by the green energy transition, could represent opportunities for investors over the next several years.

Equities

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
DJIA	33,745.69	0.1	3.3	-5.4
NASDAQ	11,146.06	-1.5	1.6	-28.2
S&P 500	3,965.34	-0.6	2.6	-15.6
S&P 400 Mid Cap	2,510.63	-0.8	3.3	-10.4
Russell 2000	1,849.73	-1.7	0.3	-16.6
MSCI World	2,658.90	-0.5	4.5	-16.5
MSCI EAFE	1,922.38	0.3	10.0	-15.5
MSCI Emerging Markets	943.01	0.8	11.2	-21.5

Fixed Income<sup>†</sup>

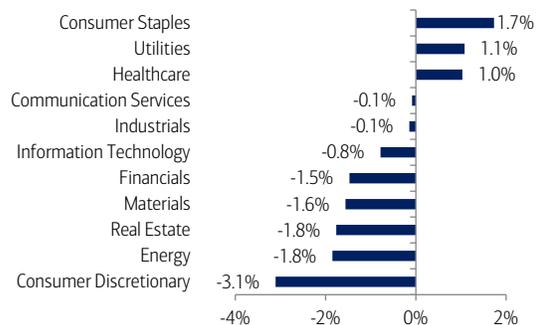
	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Corporate & Government	4.71	0.52	2.22	-14.29
Agencies	4.64	-0.14	0.75	-8.53
Municipals	3.72	1.90	3.66	-9.67
U.S. Investment Grade Credit	4.73	0.48	2.40	-13.69
International	5.50	1.24	3.57	-16.68
High Yield	8.82	0.70	1.08	-11.58
90 Day Yield	4.23	4.16	4.06	0.03
2 Year Yield	4.53	4.33	4.48	0.73
10 Year Yield	3.83	3.81	4.05	1.51
30 Year Yield	3.93	4.02	4.16	1.90

Commodities & Currencies

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Commodities				
Bloomberg Commodity	248.97	-1.7	1.5	17.5
WTI Crude \$/Barrel <sup>††</sup>	80.08	-10.0	-7.5	6.5
Gold Spot \$/Ounce <sup>††</sup>	1750.68	-1.2	7.2	-4.3

	Total Return in USD (%)			
	Current	Prior Week End	Prior Month End	2020 Year End
Currencies				
EUR/USD	1.03	1.03	0.99	1.14
USD/JPY	140.37	138.81	148.71	115.08
USD/CNH	7.13	7.09	7.34	6.36

S&P Sector Returns



Sources: Bloomberg; Factset. Total Returns from the period of 11/14/2022 to 11/18/2022. <sup>†</sup>Bloomberg Barclays Indices. <sup>††</sup>Spot price returns. All data as of the 11/18/2022 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 11/18/2022)

	2021A	Q1 2022A	Q2 2022A	Q3 2022A	Q4 2022E	2022E	2023E
Real global GDP (% y/y annualized)	6.2	-	-	-	-	3.3	2.3
Real U.S. GDP (% q/q annualized)	5.9	-1.6	-0.6	2.6	0.5	1.8	-0.4
CPI inflation (% y/y)	4.7	8.0	8.6	8.3	7.5	8.1	4.4
Core CPI inflation (% y/y)	3.6	6.3	6.0	6.3	6.1	6.3	4.4
Unemployment rate (%)	5.4	3.8	3.6	3.5	3.6	3.6	4.8
Fed funds rate, end period (%)	0.07	0.33	1.58	3.08	4.38	4.38	4.88

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 November 11, 2022. 8

Asset Class Weightings (as of 11/7/2022) CIO Equity Sector Views

Asset Class	CIO View			Sector	CIO View		
	Underweight	Neutral	Overweight		Underweight	Neutral	Overweight
Global Equities	●	●	●	Energy	●	●	●
U.S. Large Cap Growth	●	●	●	Utilities	●	●	●
U.S. Large Cap Value	●	●	●	Healthcare	●	●	●
U.S. Small Cap Growth	●	●	●	Financials	●	●	●
U.S. Small Cap Value	●	●	●	Real Estate	●	●	●
International Developed	●	●	●	Information Technology	●	●	●
Emerging Markets	●	●	●	Consumer Staples	●	●	●
Global Fixed Income	●	●	●	Industrials	●	●	●
U.S. Governments	●	●	●	Materials	●	●	●
U.S. Mortgages	●	●	●	Consumer Discretionary	●	●	●
U.S. Corporates	●	●	●	Communication Services	●	●	●
High Yield	●	●	●				
U.S. Investment Grade Tax Exempt	●	●	●				
U.S. High Yield Tax Exempt	●	●	●				
International Fixed Income	●	●	●				
Alternative Investments*							
Hedge Funds							
Private Equity							
Real Assets							
Cash							

\*Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors. CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio. Source: Chief Investment Office as of November 7, 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.**

**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.

**Consumer Price Index** is a price index, the price of a weighted average market basket of consumer goods and services purchased by households.

**S&P Global Purchasing Managers' composite index for manufacturing and nonmanufacturing** are closely-watched market-moving economic indicators, covering more than 30 advanced and emerging economies worldwide

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