CHIEF INVESTMENT OFFICE

Capital Market Outlook

December 12, 2022

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

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Macro Strategy—*2023 Dollar Outlook: Fed Hawkishness Peaking, But Is The Rest Of The World Attractive?* Broad U.S. dollar indexes likely peaked at the end of September after a decade-plus-long bull market that leaves the greenback overvalued by many metrics. The dollar should weaken over the balance of 2023, as Federal Reserve (Fed) hawkishness has likely peaked, but the dollar still has a number of tailwinds including a real yield advantage versus developed markets. The Fed and inflation are the key indicators to watch along with geoeconomic prospects in China and Europe. Capital allocators need a reason to be excited about the organic economic growth outlook for the rest of the world for a more significant dollar depreciation, in our view. China's coronavirus reopening policy and the conflict in Ukraine are significant factors, muddying the outlook for the rest of the world and supporting the dollar.

For investors, international Equities and U.S. companies with foreign revenue exposure could benefit from a weaker dollar, but we are cautious about tactically allocating around a dollar view given the chicken-and-egg problem. We have more conviction that a weaker dollar could serve to reinforce commodities, helping to balance demand destruction from the global cyclical slowdown.

Market View—*Drivers of Asset Prices in 2023 and Implications:* We believe the major drivers for 2023 will be falling Inflation, Fed tightening policy at first then doing a mini-pivot (the major pivot that is cutting rates comes later), corporate earnings declining and then finding some stability in the second half, and China reopening and stimulating their economy.

Add to that two known-unknowns—the outcome and timeline of the conflict in Europe and the Fed's resolve to crush inflation even as economic strains pick up.

Thought of the Week—*Can The International Market Recovery Be Sustained?* Having trailed behind U.S. Equities for much of 2022, non-U.S. markets have outperformed over recent weeks, particularly on the back of supportive policy developments in China and Europe.

International markets still face a long list of challenges, but after an extended period of price declines these risks will have to be weighed carefully against a number of key developments that could potentially do more to support the major non-U.S. markets in 2023 than in 2022.

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Managing Director and Senior Macro Strategy Analyst

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Managing Director and Head of CIO Portfolio Strategy

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Ehiwario Efeyini
Director and Senior Market Strategy Analyst

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Data as of 12/12/2022, and subject to change

Portfolio Considerations

We favor bonds in the first half of 2023 and stocks in the second half. We remain neutral Equities with a preference for U.S. Equities relative to International, and maintain our slight overweight to high quality Fixed Income. We continue to believe that market volatility will be elevated for most asset classes and expect the "grind-it-out" environment to persist for markets over the next several months before stabilizing later in 2023. Portfolio diversification, including Alternative Investments* for qualified investors, can help mitigate volatility and allow for participation in a renewed bull market.

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

MACRO STRATEGY

2023 Dollar Outlook: Fed Hawkishness Peaking, But Is The Rest Of The World Attractive?

Jonathan W. Kozy, Managing Director and Senior Macro Strategy Analyst

The U.S. dollar should weaken over the balance of 2023, in our view, as Fed hawkishness has likely peaked, and valuation metrics look stretched. The Fed and inflation are the key indicators to watch, but geoeconomic prospects (growth and risk sentiment) in China and Europe will also be swing factors. In short, capital allocators need a reason to be excited about the organic economic growth outlook for the rest of the world in order to see a more significant dollar depreciation. Given the geopolitical overhangs in the main engines of growth outside the U.S., there are still good reasons to think the dollar will stay strong, even if it has peaked.

Fed hawkishness has been one key factor driving the dollar's push higher over the last year. Given the contraction in broad measures of money supply, we believe inflation is set to surprise to the downside, and Fed hawkishness has probably peaked. In the first half of 2023, the Fed will likely stop raising rates, and forward guidance will take a noticeably more dovish tone, in our view. Importantly, the European Central Bank (ECB) could lag the Fed in a less hawkish pivot because geopolitical risk raises upside risk to inflation, and price stability is its sole mandate. And the Bank of Japan (BoJ) has policy rates pegged to zero for now, leaving the potential for a more significant narrowing of interest rate differentials on top of an already undervalued yen. The end of Fed tightening in 2023 could also boost risk-on currencies like Australian (AUD), New Zealand and Canadian dollar (CAD), all of which benefit from higher commodity prices and relatively less exposure to geopolitical risk.

Global growth is next on our list of key factors to watch for the direction of the dollar, and Europe and China are the two key engines. To the extent that currencies are proxies for geoeconomic power, euro and Chinese renminbi (RMB) weakness over the last decade reflect a few key vulnerabilities. A sharp reversal may be challenging.

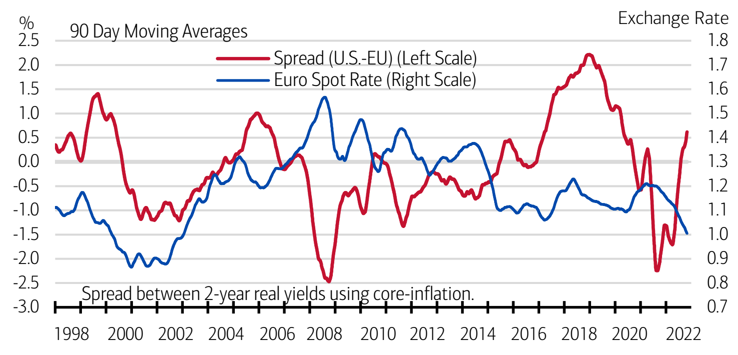
The euro area has been rolling from one crisis to the next over the last 10 years, starting with the monetary policy-induced double-dip recession in 2012. Economic performance is reflected in the euro's depreciation from around 1.50 EUR/USD to near parity over this time period. If Europe ends up in a recession in the next few quarters, it will be its fourth recession in the last 15 years. The conflict in Ukraine serves to further destabilize the outlook for European growth while also adding to broader geopolitical uncertainty. Both support the dollar. Real two-year yield differentials between the U.S. and euro area tend to summarize growth, inflation and monetary policy outlooks and are in line with our view that, while the dollar may have peaked, it remains supported by a real yield advantage for now (Exhibit 1A).

Investment Implications

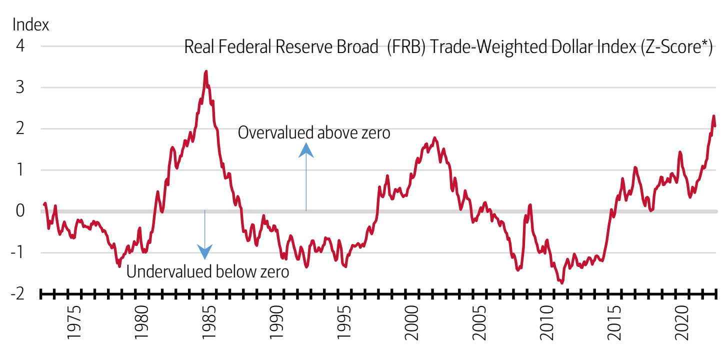
For investors, international Equities and U.S. companies with foreign revenue exposure could benefit from a weaker dollar, but we are cautious about tactically allocating around a dollar view. We have more conviction that a weaker dollar could serve to reinforce commodities, helping to balance demand destruction from the global cyclical slowdown. Our peak dollar view also coincides with our view that the 2-year Treasury yield has probably peaked.

Exhibit 1: Real Yields Favor U.S. Dollar Versus Developed Economies But Valuations Are a Headwind.

1A) Dollar Maintains Real Yield Advantage Versus Europe.



1B) Valuation A Headwind For The U.S. dollar.



*Z-score=measures of an observation's variability. Sources: Bloomberg; FRB; Bureau of Economic Analysis/Haver Analytics; Chief Investment Office. Data as of December 1, 2022.

In China, Xi Jinping's—President of the People's Republic of China—decision to pursue a zero-Covid policy was a significant factor in the attractiveness of U.S. assets versus China, further powering the broad dollar. Reopening will likely come in fits and starts in our view, with coronavirus and non-coronavirus—Flu, RSV (Respiratory Syncytial Virus)—hospitalizations likely to pick up. In addition, investors are rightly concerned about both strategic and tactical investment in Chinese assets given the overhang of a potential conflict with Taiwan.

Even if China does successfully reopen, given the structural changes taking place in Europe related to the Russia/Ukraine conflict, it could be a mistake to assume euro area growth will benefit as much as it would have in the past.

One reason we have more conviction of dollar depreciation beyond the near term is that the decade-long bull market has left valuation as a significant headwind for medium-term dollar prospects. Since 2011, the Bloomberg Dollar Index (BBDXY), a trade and liquidity weighted index, is up by over a third. Adjusted for prices, the Real FRB Trade-Weighted Dollar Index has been trending higher since 2011 and appears overvalued at a level only exceeded by the early 1980s (Exhibit 1B).

To be brief, the advantages that remain in place for the U.S. dollar can be summarized by relatively higher risk-adjusted investment return prospects for U.S. assets versus the rest of the world, in part because of Fed hawkishness. We think the balancing act playing out is near-term pressure on the dollar from a moderation of Fed hawkishness and extended valuations versus substantial uncertainty about the economic outlook for the rest of the world and the potential for more acute risk-off sentiment if the U.S. enters a recession. Below we summarize our analysis of the dollar.

Exhibit 2: U.S. Dollar Fundamentals.

Current readings on the key drivers of the U.S. dollar* for investors to consider, with arrows representing the recent trend:

	Implication for U.S. Dollar*			
Factor	Negative	Neutral	Positive	CIO View
Monetary Policy & Inflation				Fed hawkishness has arguably been the key factor driving dollar strength over the last year. Given the contraction in money supply, we believe inflation is set to surprise to the downside and Fed hawkishness has probably peaked. The ECB will likely lag the Fed in a less-hawkish pivot, in our view, because geopolitical risk raises upside risk to inflation. The BoJ's yield curve control policy has rates pegged at zero, leaving the Fed as the driver of short-term interest rate differentials and likely driving yen strength more recently.
Economic Growth				The dollar tends to weaken when global growth picks up. The most recent Global Ex-U.S. S&P Global Purchasing Managers' Index (PMI) showed deteriorating global growth and an overall reading in contraction territory. But U.S. survey data are also deteriorating, and we expect a recession next year. China's coronavirus reopening policy and the Russia/Ukraine conflict will be key factors in relative growth differentials. BofA Global Research believes a recession is likely in the U.S., euro area and U.K. in the year ahead. On a relative basis, it believes the outlook for the U.K. is the worst, followed by the U.S., where it expects a recession starting in the first quarter of 2023. Euro area growth is expected to be 0.0% in 2023. The economic outlook supports our view that the EUR/USD low of 0.95 reached in September should hold.
Relative Interest Rates				The U.S. benefits from relative interest rate advantage versus most of the developed world with the 2-year Treasury yield currently well over 4% versus around 2% in Germany and near zero in Japan. Using core inflation metrics, the U.S. also holds a two-year real yield advantage (even with a negative real yield) over Europe (Exhibit 1B). On the other hand, using core inflation, China's real two-year yield is positive.
Risk Environment				Geopolitical tensions and the risk environment are supportive of dollar strength. In Europe, the conflict in Ukraine continues to exacerbate commodity-related inflation and destabilize the economic outlook. In China, there is uncertainty about reopening the economy as well as tensions over Taiwan. The Japanese yen also tends to benefit from risk-off or high-risk environments given its common use in carry trades.
Valuations				Valuations are a medium-term headwind for the dollar. The Real FRB Trade-Weighted Dollar Index is currently over two standard deviations overvalued relative to its historical average (Exhibit 1A). Using Consumer Price Indexes (CPI) to measure fair value based on purchasing power parity (PPP), the euro is over 20% undervalued, and the yen is more than 80% undervalued. On the contrary, the Euro still looks slightly overvalued in PPP terms using *producer* prices.
Fiscal Trends				The fiscal deficit in the U.S. is narrowing but still projected to be over 5% of gross domestic product (GDP) in 2022. Similarly, the euro area is also running a deficit but has been on an improving trend. Wartime budgets are unlikely to be significant drivers of currency in the near or medium terms, in our view, but long-term sustainability metrics are worth watching as interest costs are rising.
Current Account Trends				The U.S. is running a persistent and deteriorating current account deficit. The euro area's trend is also negative, and recently the balance also moved negative as Europe deals with structural energy supply issues. Japan runs a current account surplus with a flattish trend. Commodity currencies like CAD and AUD have positive trending current account balances.
Technical Indicators				The BBDXY passed through its 200-day moving average. The index breakdown was partly driven by EUR/USD breaking through its 200-day moving average of 1.03. From a positioning perspective, the Commodities Futures Trading Commission (CFTC) requires large speculators and commercial traders (hedgers) to report net positions. This group is positioned net short the dollar. Historically this has been bearish for the dollar (the data are more confirming historically, not contrarian).

*As measured by the Bloomberg Dollar Index BBDXY, a trade and liquidity weighted Index. As of December 1, 2022 the largest Index weights are the following: 31% EUR, 14% Japanese Yes (JPY), 11% CAD, 11% Pound sterling (GBP), 9% Mexican Peso (MXN), 7% Chinese currency (CNH), 5% Swiss Franc (CHF), 5% AUD.

MARKET VIEW

Drivers of Asset Prices in 2023 and Implications

Niladri Mukherjee, Managing Director and Head of CIO Portfolio Strategy

The last three years have been eventful on many counts for investors. An unprecedented global health crisis, self-imposed economic shutdowns, government backstops and breakthrough vaccines headlined 2020. In 2021, massive additional fiscal and monetary stimulus, the advent of new variants, and historically strong nominal growth proved to be key catalysts. Not to be undone, 2022 has kept investors on the edge of their seats with inflation spiking to 40-year highs, an historically fast pace of monetary policy tightening, and spiking global rates plus the largest land war in Europe since World War II. The sheer pace and force of such unthinkable developments proved to be toxic for financial assets. As we turn the page to 2023, we list the key drivers of asset prices, some known-unknowns, and how investors could approach this cloudy macro setting.

Investment Implications

We believe Fixed Income will outperform Equities in the first half of 2023. Equities will likely take the baton in the second half of 2023. Value areas of the market should be preferred, with a tilt to free cash flow characteristics. Cash returns remain attractive.

Main drivers: Inflation and the labor market, Fed policy, earnings, and China

Inflation should move lower given the lagged effects of policy tightening and a slowing in global growth. The recent moderation in CPI, average hourly earnings, industry rent data, lower commodity prices, not to mention a collapse in money growth, all point in that direction. But the time frame to achieving the 2% inflation target could be longer than market bulls acknowledge given that labor market softening could take time, and wage pressures may not dissipate easily, especially in the red-hot services sector. The consumer could also keep spending, supported by roughly $1.1 trillion in excess savings; however, the momentum should moderate, helping bring demand in line with supply.

Implication: 1. Fixed Income returns are likely to be positive (both from an attractive level of yield and capital appreciation perspective); 2. The dollar stabilizes (it is showing signs of this currently) and potentially weakens as the year progresses.

The shock and awe of the **Fed's tightening efforts** are likely in the rearview mirror. The Fed should slow down rate increases at the December meeting to a +50 basis points hike and eventually get to a level of 5% to 5.25% and then pause to assess the inflation and growth dynamics (a mini pivot). Then the Fed is likely to hold rates at those elevated levels for some time to ensure that inflation is truly brought under control, minimizing the risk of the "stop and go" mistake of the 1970s when inflation came roaring back. As such, rate cuts (a full pivot) are further out until the job of anchoring inflation is achieved. Meanwhile, the Fed is likely to continue to shrink its balance sheet unless liquidity conditions force its hand to be more accommodative.

Implication: 1. Rates on the back end are capped and move lower given the weakening growth and moderating inflation backdrop; 2. Further inversion of the yield curve as the Fed holds the policy rates at higher levels; 3. Cash returns remain attractive; 4. Positive real yields keep Fixed Income in favor versus Equities during first half of 2023; 5. During the second half of 2023, equity valuation multiples could stabilize and eventually rise in anticipation of relatively easier monetary conditions in late 2023 and 2024.

The "inflation and rate shock" of 2022 could give way to the **"earnings shock" of 2023**. Companies will have to manage through a slowdown in nominal GDP, while margin pressures remain due to the persistence of higher input costs, especially for labor. Eventually layoffs could pick up, further contributing to slowing demand and moderating revenues. However, earnings decline in this cycle could be shallower than average during recessions due to healthier household and company balance sheets as a starting point. But the necessary adjustment to earnings estimates for next year is now coming through—earnings per share estimates for the S&P 500 Index are down roughly $7 since October to $235—with more to come, in our view.

Implication: 1. Equity volatility increases in first half of 2023 as declining earnings estimates render any meaningful rallies fragile; 2. Performance dispersion based on earnings quality, sustainable dividends and balance sheet strength; 3. Credit spreads have a widening bias especially for lower quality credits; 4. During the second half of 2023, a stabilization in declining earnings estimates leads to a choppy end to the bottoming process for stocks.

In the last 18 months or so, the **Chinese economy and markets** have been held back by strict pandemic guidelines, regulatory overhauls and a property sector downturn. In recent weeks, rising cases and protests are adding to the near-term uncertainty. However, post the Party Congress, the government has begun to support growth through a series of policy actions such as a comprehensive 16-point package to support the property sector signaling some regulatory relief, rate cuts and liquidity release by the central bank, and even some easing of their zero-Covid policy. The potential for the economy to reopen, albeit with caution and uncertainty—gradually in the first half of 2023 but more broadly in the second half—could lead to a recovery in output and improving risk sentiment.

Implication: 1. Positive for China-dependent investments and countries; 2. Support for energy and commodity prices given improving Chinese demand.

Known-Unknowns: Russia/Ukraine, Fed's resolve to see the job through

Regional conflicts rarely create a fog for the entire global economy, but the **ongoing conflict in Europe** is an exception, and that fog is only getting denser as both Russia and Ukraine continue to dig in, and the bar for negotiating is high. The range of potential outcomes is wide, ranging from a broader conflict directly involving the U.S., to a proxy war between North Atlantic Treaty Organization and Russia that goes on for years, to a surprise and lasting ceasefire.

Implication: 1. Themes such as defense spending and energy security (both traditional and clean) continue to garner capital; 2. Depending on outcome and timeline, major effect could be on euro/dollar currency pair, oil and gas prices, and inflation dynamics and monetary policy for Europe. For example, a decline in hostilities could be a positive catalyst for European and International stocks.

The **Fed's choices in 2023** continue to be between "bad" and "worse." For inflation to move to its target of 2%, a significant slowdown may be a necessary condition. For now, this "bad" option is one the Fed and most investors seem to have accepted. But acceptance is more palatable today because the economy is humming along, the labor market is strong, and politicians see no reason to get in the Fed's way. However, as job losses rise, market and economic stress pick up, and as Congress is unable to provide fiscal backstops, will the Fed have the resolve to stay the course or will they choose the "worse" option of pivoting early, thereby increasing the risk of inflation expectations pushing higher.

Implication: Equities—a more sentimental asset class—will likely rally with an early Fed pivot, but bonds—a more astute one—could sniff out this "worse" outcome policy mistake by pushing rates higher. This could lead to an uncertain and volatile macro environment for some time, eventually ending with much more aggressive Fed policy to break the back of inflationary forces.

What we think investors should consider?

This depends on the type of investor, specifically their risk tolerance and time horizon. Most investors should remain diversified across traditional and alternative asset classes in this environment. The expected returns in the medium term for both stocks and bonds are better today than at any time in the last 12 to 18 months.

Given that relative valuations are better for Fixed Income than Equities and a slowing global economy, bonds should be favored in multi-asset portfolios, in our opinion. As bond yields at the front end top out and most of the earnings downgrades are in the rearview mirror, the bottoming process for Equities should move into its advanced phase. But since no one can pinpoint this time frame with accuracy, pullbacks along the way should be used to build positions, in a dollar cost averaging fashion. In the near term, increasing cash flows through bonds and dividends can support the total return potential of portfolios. Quality dividends are available within Utilities and Energy, two sectors that we currently prefer. Long-term growth-oriented investors should put together their buy lists comprising high-quality free cash flow oriented names, and, as we progress through 2023, add selectively to thematic areas such as automation, healthcare innovation, infrastructure development, climate mitigation, natural resources and energy security, and cybersecurity.

THOUGHT OF THE WEEK

Can The International Market Recovery Be Sustained?

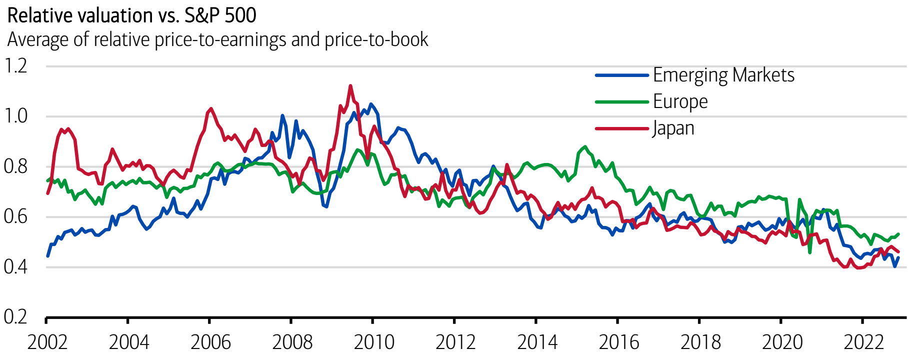
Ehiwario Efeyini, Director and Senior Market Strategy Analyst

Having trailed behind U.S. Equities for much of 2022, non-U.S. markets have outperformed over recent weeks. China, which had been the weakest major equity market in the world over the past two years has been one of the strongest over the past month. Investors have begun to anticipate a move away from close to three years of zero-Covid policy toward full economic reopening as some of the restrictions on quarantine periods, testing and contact tracing are relaxed, with last month's demonstrations expected to accelerate this shift. And incremental support measures for the Real Estate sector, primarily aimed at increasing liquidity provision for stressed housing developers, have also lifted investor sentiment.

In Europe, fuel price caps and fiscal transfers have limited the passthrough from higher wholesale energy prices, helping to insulate consumers and manufacturers from disruptions to Russian supply. Retail prices have also softened on the back of weaker industrial demand and mild weather in October and November. And most European Union (EU) countries have now increased their gas storage capacity to above the 80% level that was set out by the EU Commission in March, a crucial development heading into the winter season.

After an extended period of price declines and significant valuation compression, non-U.S. markets now trade well below their average historical discount to U.S. Equities (Exhibit 3).

Exhibit 3: Relative Valuations In The Major International Markets Are Historically Low.



Sources: U.S. Energy Information Administration. Data as of November 28, 2022.

In an environment of high and rising global interest rates, non-U.S. markets may also offer a relatively high dividend yield and less exposure to long duration sectors such as Information Technology, Communication Services and Consumer Discretionary. And should a continued downtrend in U.S. inflation allow the Fed to pause its rate hiking cycle in the first half of 2023, this shift in the rate cycle alongside a likely peak in the U.S. dollar could potentially come as an additional source of support.

International markets still face a long list of challenges. A period of recession and earnings contraction potentially looms. Inflation in Europe remains in the double digits with the onset of winter gas demand approaching. The Ukraine conflict could escalate further. And in China an undervaccinated population and underresourced healthcare system could jeopardize the nascent reopening, while ongoing homebuyer pessimism and still anemic home sales are likely to keep the Real Estate sector under pressure. Moreover, the risk of a higher and more persistent fed funds terminal rate and a still historically strong dollar are unlikely to subside while economic data in the U.S. remain firm. It may yet be too early to take a more positive view on the rest of the world. But these risks will have to be weighed carefully against a number of key developments that could potentially do more to support the major non-U.S. markets in 2023 than in 2022.

Investment Implications

We continue to favor U.S. Equities over international markets heading into 2023, particularly against the backdrop of ongoing inflation challenges in Europe and significant constraints on growth for both Europe and China. But a less restrictive policy environment in these markets, as well as the potential for a shift in Fed policy and dollar direction, could reduce some of the headwinds faced by non-U.S. Equities in 2023.

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Equities

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
DJIA	33,476.46	-2.7	-3.2	-6.0
NASDAQ	11,004.62	-4.0	-4.0	-29.1
S&P 500	3,934.38	-3.3	-3.5	-16.2
S&P 400 Mid Cap	2,469.58	-4.0	-4.1	-11.8
Russell 2000	1,796.66	-5.1	-4.7	-18.9
MSCI World	2,662.86	-2.5	-2.1	-16.3
MSCI EAFE	1,978.88	-0.2	1.8	-13.0
MSCI Emerging Markets	978.28	0.5	0.6	-18.4

Fixed Income†

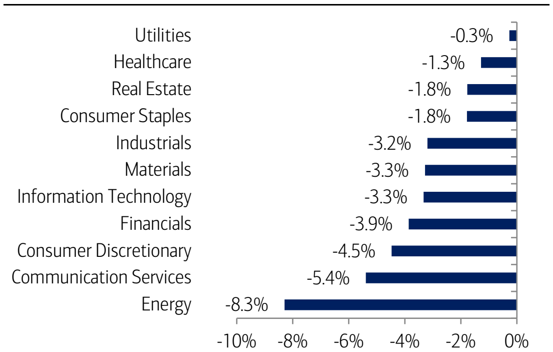
	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Corporate & Government	4.46	-0.35	1.00	-12.30
Agencies	4.47	-0.28	0.19	-7.65
Municipals	3.42	0.33	0.83	-8.03
U.S. Investment Grade Credit	4.49	-0.44	0.89	-11.84
International	5.20	-0.26	1.41	-14.20
High Yield	8.52	-0.19	0.72	-9.98
90 Day Yield	4.26	4.25	4.32	0.03
2 Year Yield	4.34	4.27	4.31	0.73
10 Year Yield	3.58	3.49	3.61	1.51
30 Year Yield	3.56	3.55	3.74	1.90

Commodities & Currencies

	Total Return in USD (%)			
Commodities	Current	WTD	MTD	YTD
Bloomberg Commodity	242.94	-2.3	-3.6	14.7
WTI Crude $/Barrel††	71.02	-11.2	-11.8	-5.6
Gold Spot $/Ounce††	1797.32	0.0	1.6	-1.7

	Total Return in USD (%)			
Currencies	Current	Prior Week End	Prior Month End	2020 Year End
EUR/USD	1.05	1.05	1.04	1.14
USD/JPY	136.56	134.31	138.07	115.08
USD/CNH	6.96	7.02	7.05	6.36

S&P Sector Returns



Sources: Bloomberg; Factset. Total Returns from the period of 12/5/2022 to 12/9/2022. †Bloomberg Barclays Indices. ††Spot price returns. All data as of the 12/9/2022 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 12/9/2022)

	Q4 2022E	2022E	Q1 2023E	Q2 2023E	Q2 2023E	Q4 2023E	2023E
Real global GDP (% y/y annualized)	-	3.4	-	-	-	-	2.3
Real U.S. GDP (% q/q annualized)	0.5	1.9	-1.0	-2.0	-1.5	1.0	-0.3
CPI inflation (% y/y)	7.3	8.0	5.7	4.1	3.5	3.1	4.1
Core CPI inflation (% y/y)	6.1	6.2	5.6	4.7	3.8	3.2	4.3
Unemployment rate (%)	3.6	3.6	3.7	4.2	4.8	5.3	4.5
Fed funds rate, end period (%)	4.38	4.38	5.13	5.13	5.13	4.88	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 December 9, 2022.

Asset Class Weightings (as of 12/6/2022)

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

CIO Equity Sector Views

	CIO View				
Sector	Underweight		Neutral	Overweight	
Energy				●	
Utilities				●	
Healthcare				●	
Financials				●	
Real Estate				●	
Information Technology			●		
Consumer Staples			●		
Industrials			●		
Materials		●			
Consumer Discretionary	●				
Communication Services	●				

*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 December 6, 2022. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

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.

Bloomberg Dollar Spot Index tracks the performance of a basket of 10 leading global currencies versus the U.S. Dollar.

Bloomberg Dollar Index (BBDXY) tracks the performance of a basket of 10 leading global currencies versus the U.S. Dollar.

Real Broad Trade-weighted Index measures the strength of the US dollar relative to the currencies of the nation's trading partners.

Global Ex-U.S. S&P Global Purchasing Managers' Index (PMI) is a survey-based economic indicator designed to provide a timely insight into business conditions.

Real Federal Reserve Broad Trade-Weighted Dollar Index is an index created by the Fed to measure the value of the USD, based on its competitiveness versus trading partners.

Consumer Price Index (CPI) measures the overall change in consumer prices based on a representative basket of goods and services over time.

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