



# GETTING REAL ABOUT THE MARKETS

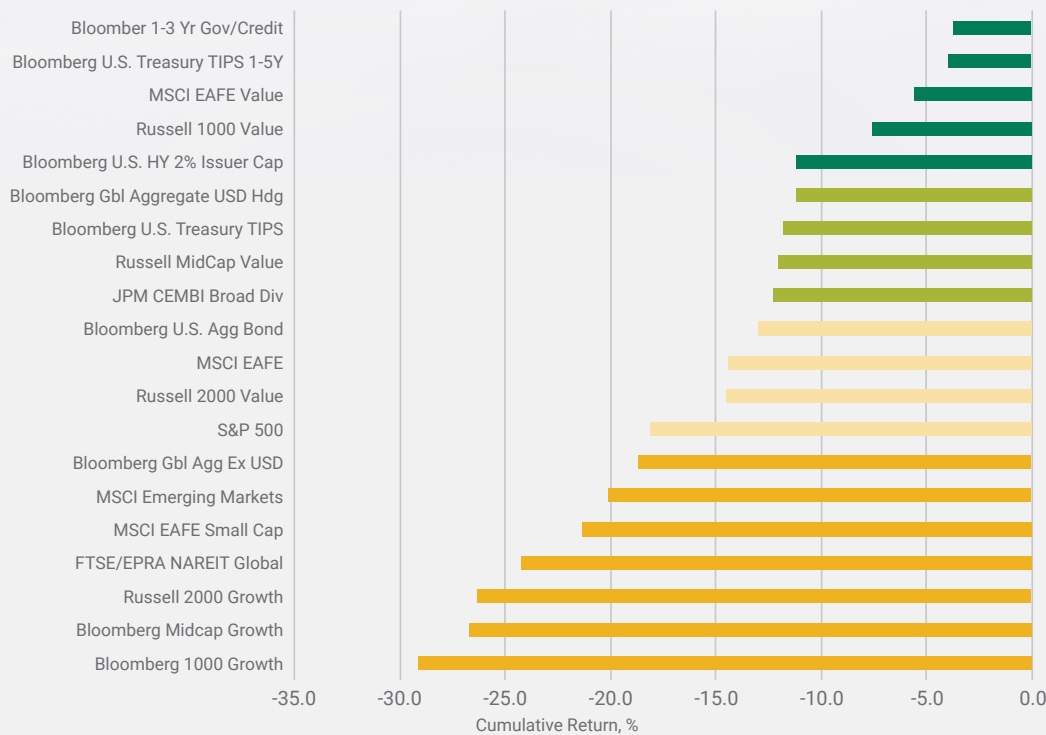
March 28, 2023

Headline news can help you stay on top of the markets, but what does it mean for you? In this Office Talks, we're giving you our take on the current environment, including how our investment teams manage for rising rates, ongoing inflation and a possible recession.

## WHERE WE ARE TODAY

### 2022: A Terrible, No Good, Very Bad Year for Markets

Asset Class Benchmark Index Returns 1/1/2022 - 12/31/2022



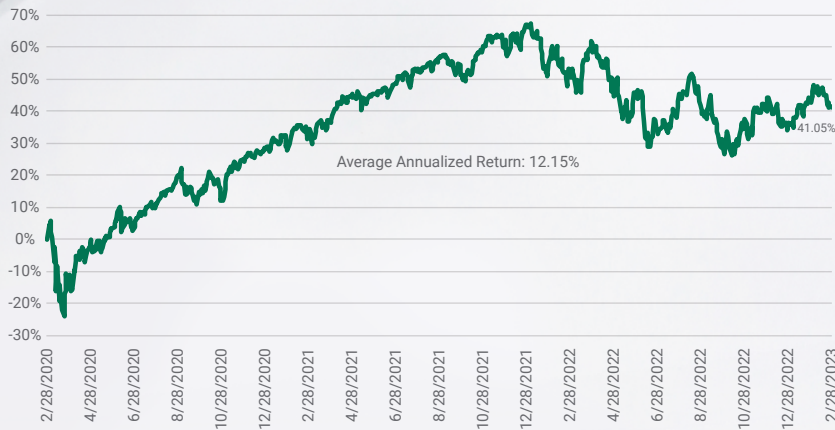
2022 was a dismal year that resulted in losses across all assets. The last time both stocks and bonds were down in the same year was in 1969. It's important to note that the backdrop today is very different from a year ago.

Data from 1/1/2022 to 12/31/2022. Source: FactSet **Past performance is no guarantee of future results.**

2022 Backdrop	2023 Backdrop – It's very different
<ul style="list-style-type: none"> <li>▪ High valuations</li> <li>▪ Low interest rates</li> <li>▪ Surprisingly high inflation</li> <li>▪ Inflation led to aggressive rate-hikes by the Federal Reserve (the Fed)</li> </ul>	<ul style="list-style-type: none"> <li>▪ A reset in valuations has occurred across equities and fixed income</li> <li>▪ Within fixed income, investors can lock in yields that haven't been this high in years</li> </ul>

## Putting Recent Performance In Perspective

### S&P 500 Index Cumulative Return Over The Past 3 Years



Data from 2/28/2020 to 2/28/2023 Source: FactSet **Past performance is no guarantee of future results**

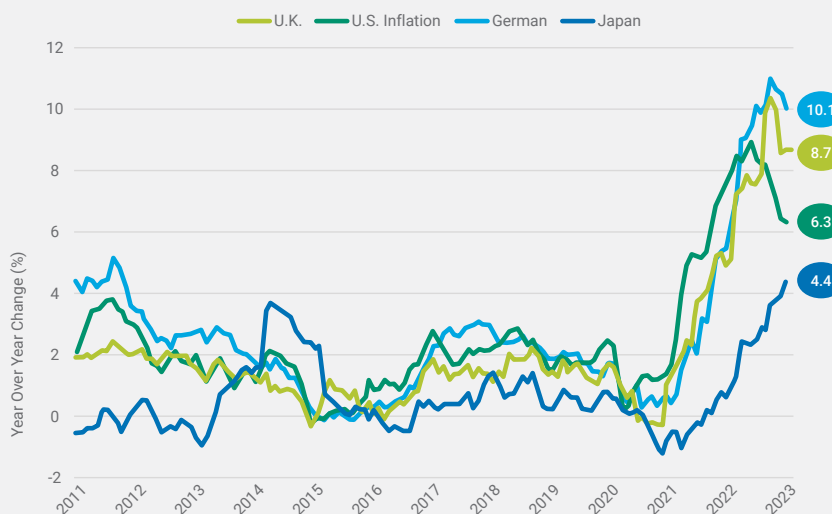
While we expect volatility to continue, markets have overcome many tough times in the past and, over the long term, staying invested has played an essential role in helping investors achieve their goals.

For this year, we're still dealing with the three-sided issues of inflation, growth and interest rates--all of which are interrelated. A good analogy may be a Rubik's cube for moving forward: Solving one side can prompt issues on a different side.

For example, the Fed has been focused on getting inflation right and we're starting to see the fix create other issues in the markets.

## Inflation Remains Elevated: Has It Peaked?

### Global Consumer Prices

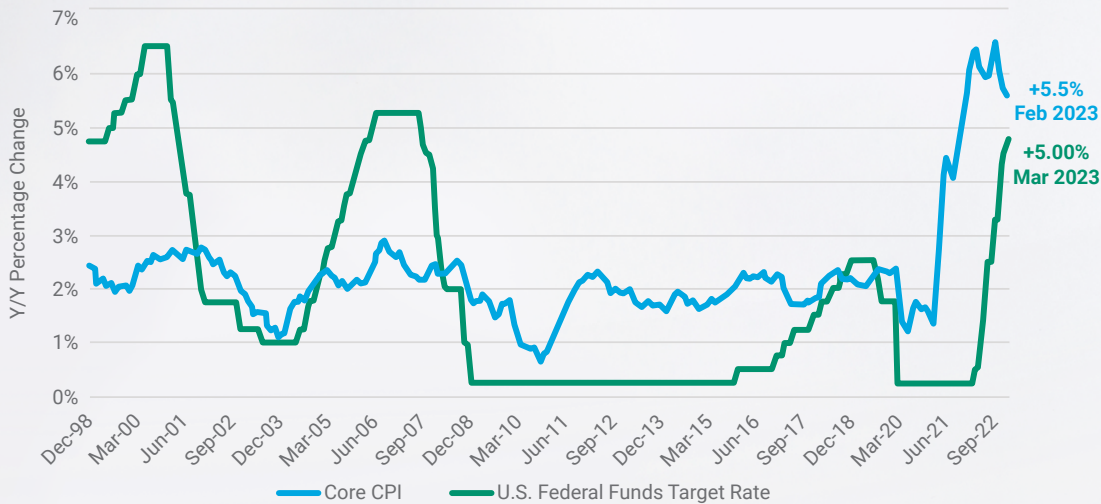


The **Consumer Price Index (CPI)** is the most widely reported measure of price changes across countries. It measures the change in the out-of-pocket expenditures of all urban households. Inflation diminishes future purchasing power, especially for investors in cash equivalents and long-duration treasuries.

The Fed has been clear that its main objective is to lower inflation until it is significantly closer to its 2% target. CPI has risen over 6% versus last year and is better than in mid-2022. Still, it is at multi-decades high. Because inflation is stubborn, the Fed's path to taming prices could be bumpier and longer than previously expected.

# “Sticky” Inflation Has Forced Fed Tightening

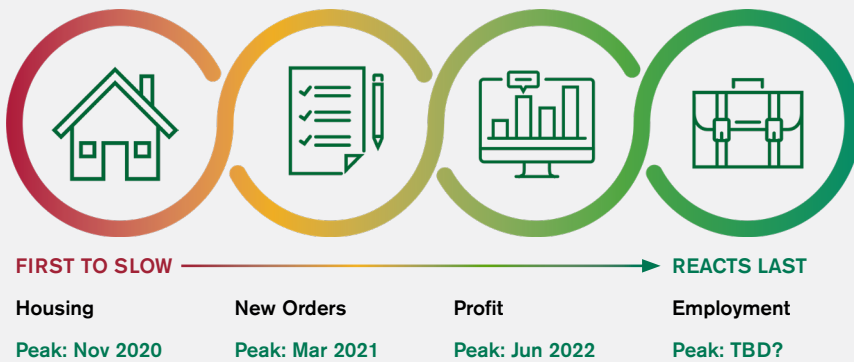
**Inflation and Fed Funds Rate**  
December 1998 to March 2023



Source: FactSet, U.S. Bureau of Labor Statistics, 12/1/1998 to 3/22/2023  
Effective Federal Funds Rate and Consumer Price Index, all items excluding food and energy for the United States (percent change from year ago).

Since March 2022, the Fed hiked nine times bringing the Fed funds target range from 0.50% to 5.0%. Why is the Fed so aggressive? Central banks learned from the 1970s and 1980s they need to raise interest rates, to get inflation out of the system and prevent it from becoming worse.

## Implications of the Fed Tightening Cycle



Source: Michael Kantowitz, Chief Investment Strategist, Piper Sandler & Co.

This current cycle has followed a similar pattern with home sales declining as mortgage rates rose. We also saw a clear slowdown across manufacturing and services sectors. Company performance also declined. Employment is typically the last to turn in the cycle and right now the jobs market remains solid.

However, from an inflationary standpoint, strong unemployment is keeping inflation elevated and may keep us in this cycle longer.

Typically, after rate hikes, the first indicators to slow (in order) are:

- Housing
- Manufacturing orders
- Profits
- Employment

Tracking these indicators gives us an idea of where we are in a cycle.

In 1970s, the Fed acted slow, so we went into a 'wage price spiral' which took 10 years to eliminate it. It's why the Fed is so committed to the path that they've taken today.

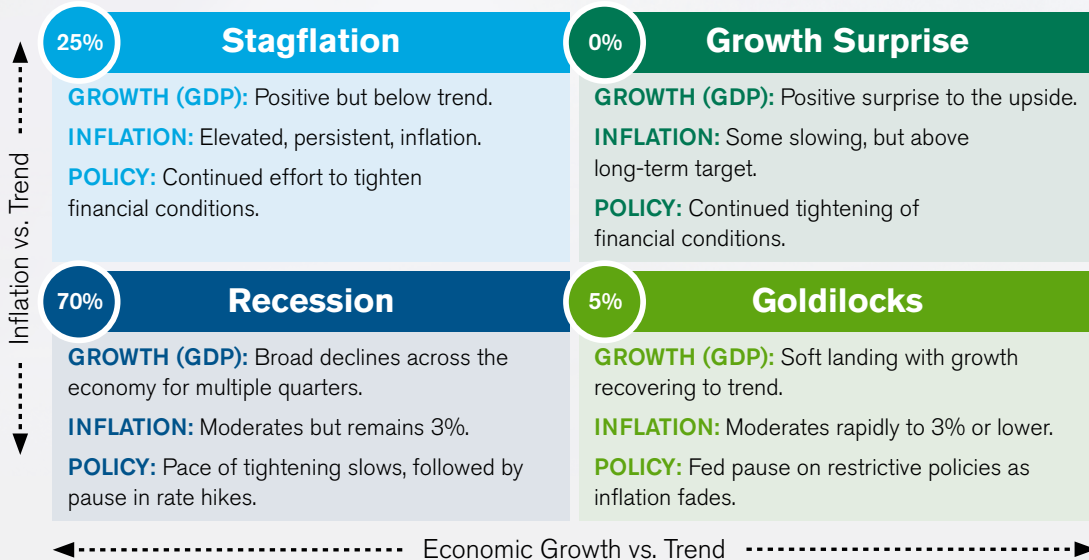


# WHAT WE'RE WATCHING

We want to position portfolios based on where we believe the market is going. Our investment teams have partnered to create a framework for evaluating macro (large economic trend) scenarios based on this intersection between inflation and growth.

## Next Up for the Economy: Our 6-Month Outlook

Probability of occurrence over the next six months.



Source: American Century Investments as of 3/10/2023. Opinions and estimates offered constitute our judgment and along with other portfolio data, are subject to change without notice. Forecasts are not a reliable indicator of future performance. The opinions expressed are those of American Century Investments (or the fund manager) and are no guarantee of the future performance of any American Century Investments fund. For each asset class, American Century develops a set of assumptions for return, risk, and correlation. Because asset class returns and relationships are ultimately grounded in economic fundamentals, we forecast over the equivalent of a complete economic and market cycle. We arrive at our return forecasts through various modeling techniques, such as a classic valuation approach, a risk-premium approach, and an historical risk and return analysis. In addition to this quantitative process, we employ a qualitative review, recognizing that there are elements that can't be easily captured by a quantitative process.

Using this framework, we can try to anticipate where the markets might go in the next six months and assign probabilities to each outlook. **Gross Domestic Product (GDP)** is a measure of the total economic output in goods and services for an economy.

<b>First scenario: Stagflation</b>	<b>Second scenario: Growth Surprise</b>
<ul style="list-style-type: none"> <li>▪ Growth would continue to slow but inflation stays high.</li> <li>▪ However, we do see signs that inflation is slowing.</li> <li>▪ Our probability of this scenario is 25% (down from 35%).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inflation would stay high because growth is so strong; The Fed would have to continue hiking indefinitely.</li> <li>▪ We don't think it's a realistic scenario, mainly because that's the environment that we just left behind.</li> <li>▪ We put the probability at 0%.</li> </ul>
<b>Third scenario (most probable): Recession</b>	<b>Fourth scenario: Goldilocks</b>
<ul style="list-style-type: none"> <li>▪ Tighter financial conditions would take a toll on consumer spending and corporate sentiment.</li> <li>▪ We've just updated our probability from 60% to 70%.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Fed manages to bring inflation down without severely limiting growth.</li> <li>▪ We see a slight possibility of the Fed pulling off this type of soft landing at 5%.</li> </ul>

## Portfolio Implications: Our Views on Investing in a Recession

70%

### Recession

<p style="text-align: center; color: #004A87; margin: 0;"><b>Equity and Real Assets</b></p> <ul style="list-style-type: none"> <li>▲ Quality stocks in defense sectors - utilities, health care, consumer staples</li> <li>▲ Secular earnings growers with competitive advantages</li> <li>▼ Commodity-linked assets, except for gold</li> <li>▼ Real estate equities</li> </ul>	<p style="text-align: center; color: #004A87; margin: 0;"><b>Fixed Income</b></p> <ul style="list-style-type: none"> <li>▲ Longer duration strategies</li> <li>▲ Higher-quality credit</li> <li>▲ Maintain some inflation protection</li> </ul>
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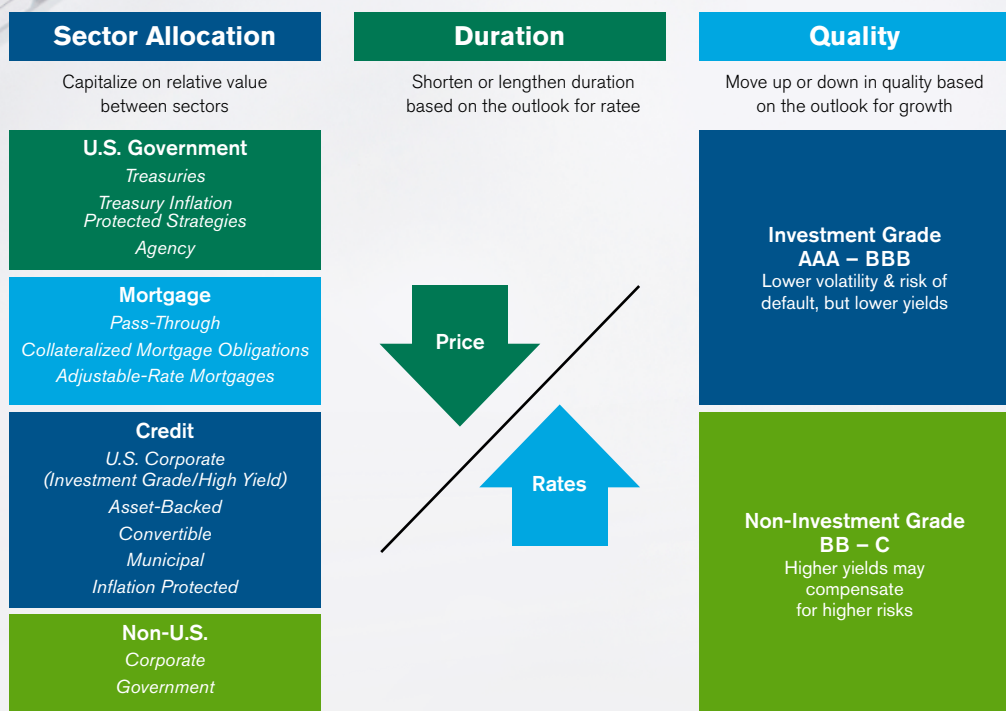
This type of environment may lend itself to the strengths of active managers who instead of buying every stock in an index, can research to identify higher quality companies that can benefit from longer-term trends, even during a recession.

Source: American Century Investments as of January 2023. Opinions and estimates offered constitute our judgment and along with other portfolio data, are subject to change without notice. Forecasts are not reliable indicators of future performance. The opinions expressed are those of American Century Investments (or the fund manager) and are no guarantee of the future performance of any American Century Investments fund. For each asset class, American Century develops a set of assumptions for return, risk, and correlation. Because asset class returns and relationships are ultimately grounded in economic fundamentals, we forecast over the equivalent of a complete economic and market cycle. We arrive at our return forecasts through various modeling techniques, such as classic valuation approach, a non-premium approach, and an historical risk and return analysis. In addition to the quantitative process, we employ a qualitative scenario, recognizing that there are elements that can't be easily captured by a quantitative process.

In a recessionary environment, quality matters. Investors look for companies with more stable earnings and stronger balance sheets, particularly in sectors like consumer staples and companies that are innovating and may benefit from secular growth trends like renewable energy or the expansion of 5G.

On the other hand, commodities and real estate could likely remain under pressure in a lagging growth environment.

## Adjusting Fixed-Income Portfolios to Changing Markets



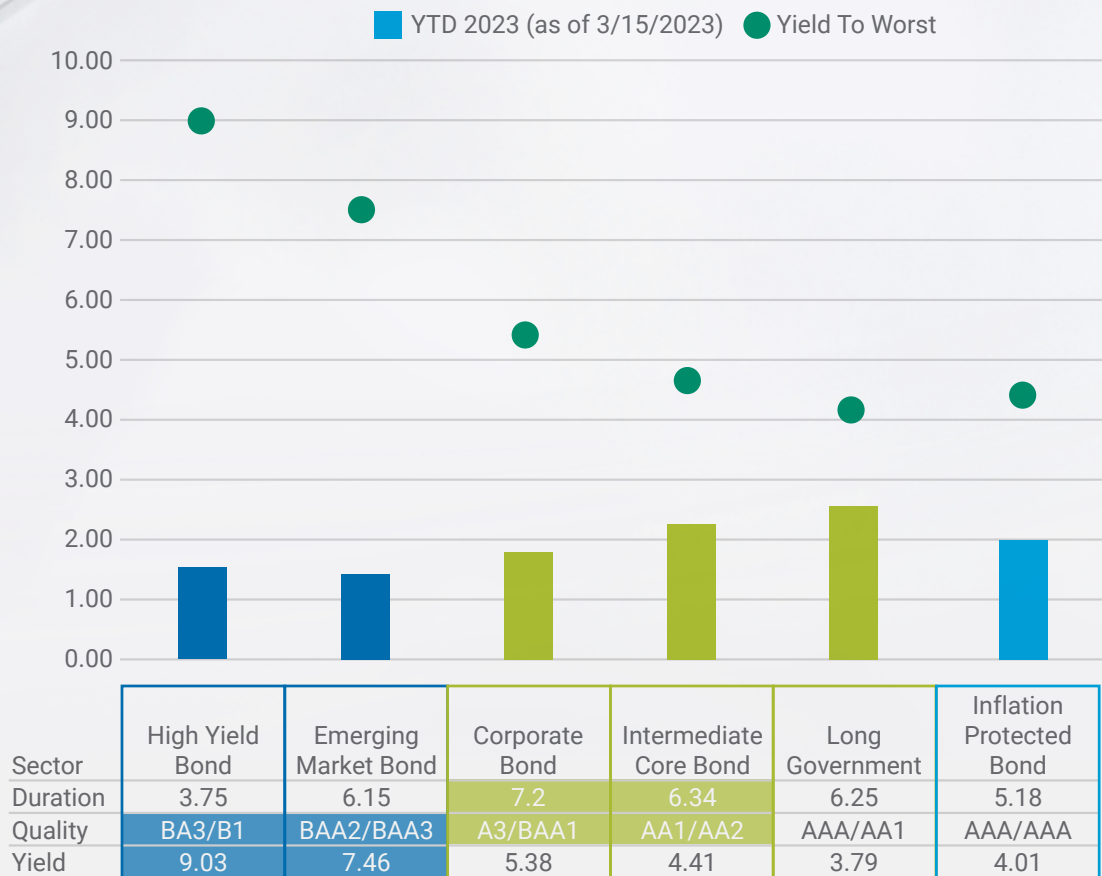
Like equity managers who can adjust their portfolios to changing markets, fixed-income managers also have levers they can use to manage risk.

Source: American Century Investments. For illustrative purposes only. The letter ratings indicate the credit worthiness of the underlying bonds in the portfolio and generally range from AAA (highest) to D (lowest).

### Examples:

- **Sector allocation.** Fixed-income managers have a wide range of bonds with different return potential and risk profiles. Deciding where to position at different points in the cycle is a key way they can add value. Within sectors, security selection is also a critical tool.
- **Duration.** When bonds get paid back is a key factor. The longer the time, the more exposed it is to interest rate changes. Typically, when rates go up, prices come down. Managers can take advantage of this dynamic by shortening or lengthening duration based on the rate outlook.
- **Quality.** This refers to how likely a bond will be paid back. A very high-quality bond will be called “investment grade”. Investors receive a lower yield because there is less risk of payment default. Non-investment grade bonds (also called high yield) are typically issued by companies that come with more risk. Investors get paid at a higher yield for taking on that risk.

## Breaking Down the Current Fixed Income Landscape



Data as of: 3/15/2023. Source: FactSet. Bond sectors represented by the following indices: High Yield Bond Bloomberg US High Yield – Corporate. Emerging Markets Bond: Bloomberg Emerging Markets USD Aggregate. Corporate Bond: Bloomberg US Corporate Investment Grade. Intermediate Core Bond: Bloomberg US Aggregate. Long Government: Bloomberg U.S. Government. Short Government: Bloomberg US Government (1-3 Y). Inflation-Protected Bond: Bloomberg US Treasury Inflation Protected Notes (TIPS).

Even though we expect inflation to fall in a recessionary environment, we still believe inflation protection could be beneficial, especially in the early innings because it could take a while for inflation to come down.

This chart demonstrates what's happening in the fixed-income environment. The bars are year-to-date performance through mid-March and the dots are the current yield to worst of each sector.

When you look at quality and yields, you can see that sectors with the highest yields often don't have the highest quality ratings. Those with lowest quality have highest risks. In a recessionary environment, quality matters within fixed income, just like within equities. Even though yields in both sectors may be attractive, rotating to higher quality parts of the market may be a consideration for investors.

**Duration** is when a bond gets paid back. **Yield to Worst** is the lowest possible yield that can be received on a bond.



## What About Cash Equivalents?



Data as of 1/31/2000 to 12/31/2022 Source: FactSet. **Past performance is no guarantee of future results**

The answer depends on the time horizon of the investment.

- Historically, inflation has been higher than the return on cash equivalents. Even as rates have gone up, inflation is still higher.
- Over the long-term, holding cash may reduce your purchasing power.

Short term there may be valid reasons to consider cash: As a hedge against volatility or as “dry powder” that you can allocate when conditions look attractive.

## Stock and Bond Opportunities Can Exist in a Recession



There seems to be a cyclical in recessionary environments. Early in a recession, riskier assets (like equities and credit) have tended to do worse. Assets like Treasuries, which are secured by the strength of the U.S. government, have tended to do better.

Then, as risk assets get cheaper, investors step back into the market, and those assets may start to perform well again.

AVERAGE MONTHLY MARKET RETURN	Recessions		Expansions		ALL MONTHS
	1 <sup>ST</sup> HALF	2 <sup>ND</sup> HALF	1 <sup>ST</sup> HALF	2 <sup>ND</sup> HALF	
U.S. Stocks	-2.51%	2.15%	1.34%	1.05%	1.02%
U.S. Treasuries	0.82%	1.21%	0.58%	0.42%	0.56%
U.S. Corporate Bonds	-0.27%	2.05%	0.81%	0.39%	0.64%

Data from 1973 – 2021. Source: Avantis Investors. U.S. stocks are represented by the CRSP U.S. Total Market Index. U.S. Treasuries and U.S. corporate bonds are represented by the Bloomberg U.S. Treasury Index and the Bloomberg U.S. Corporate Bond Index, respectively. The average number of months over the period from Peak to Trough is 10.7, and the average number from Trough to Peak is 71.9.

**Past performance is no guarantee of future results**

- Equities markets have doubled average returns in the second half of recessions.
- It's similar for corporate bonds.

**Credit spread** is the difference in yields of corporate bonds versus Treasuries (i.e., the risk premium).



## Our Current Asset Allocation Views

UNDERWEIGHT			OVERWEIGHT			
Strong	Moderate	Weak				
			Weak	Moderate	Strong	
			Stock vs Bond			
			Large Cap vs Small Cap			
●	●	●	U.S. Growth vs U.S. Value	●	●	●
●	●	●	U.S. Stock vs Emerging Markets	●	●	●
●	●	●	U.S. Stock vs Non-U.S. Developed	●	●	●
			High Yield vs Investment Grade			
●	●	●	Real Estate Investment Trust vs Stock	●	●	●
●	●	●	U.S. Stock vs Cash	●	●	●
●	●	●	Bond vs Cash	●	●	●

Source: American Century Investments. Current view of market as of 3/10/2023. Opinions and estimates offered constitute our judgment and along with other portfolio data, are subject to change without notice. The opinions expressed are those of American Century Investments (or the fund manager) and are no guarantee of the future performance of any American Century Investments fund.

### Overweight U.S. Large Cap Value vs. Growth

Both our volatility and valuation signals find value stocks more appealing.

### Overweight Non-U.S. Equities vs. U.S.:

Momentum and macroeconomic variables are strongly positive toward non-U.S. stocks.

### Overweight U.S. Large Caps vs Global Real Estate Investment Trusts (REITs):

An economic slowdown in 2023 would not favor REITs in our outlook.

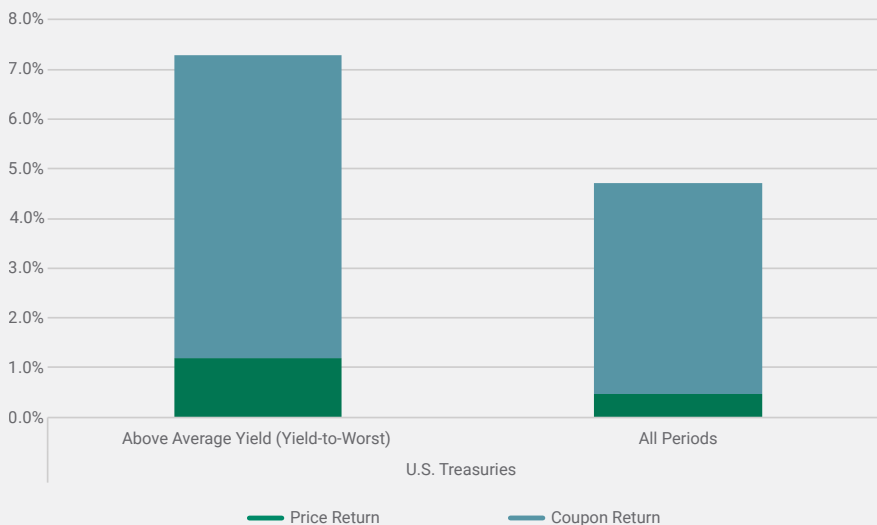
### Overweight Cash vs. Stocks and Bonds:

These are short-term signals. Higher short-term rates make cash more attractive, so we see some benefit to holding cash in the very near term.

## Our View: Attractive Income Opportunities

### Impact of Higher Yields on Fixed Income Returns

12-Month return following periods with an above average Yield to Worst Since 1991



Data from 1/1/1991 to 2/28/2023 Source: Bloomberg

Past performance is no guarantee of future results

The Fed's policy shift results in higher income potential from bonds.

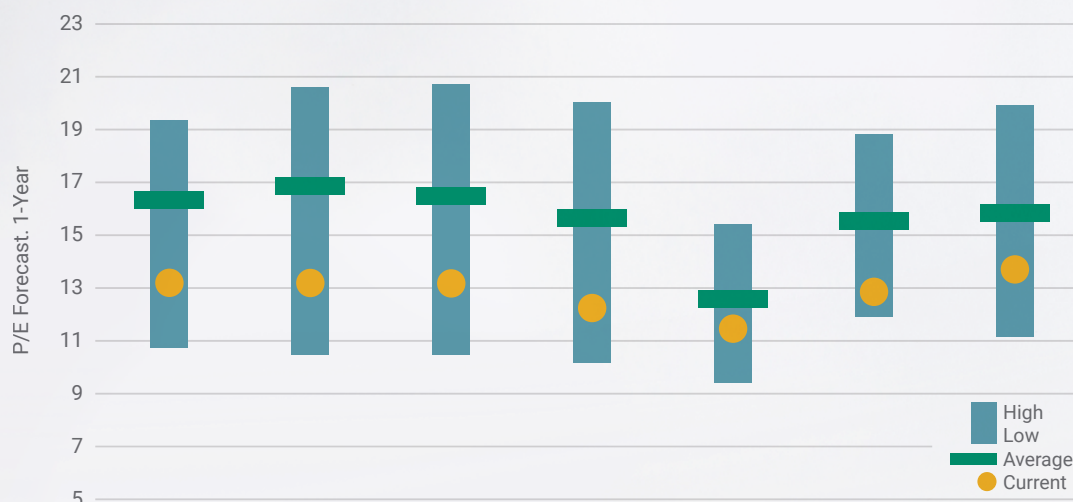
For all periods since 1991, the average 12-month return for U.S. Treasuries was just under 5%. However, in months where yields were above average, total return in the following 12 months was 7.3%.

That additional yield has historically contributed to higher overall returns.

## Current Valuations May Present Opportunities

### Current Price/Earnings (P/E) vs. 10-Year High, Low and Average

Next 12-Month Data as of 02/28/2023



**Blue bars:**

Range in valuations

**Green lines:**

Average valuation over the past 10 years

**Yellow dots:**

Where we are now

	MSCI ACWI SC	Russell 2000	MSCI Europe ex. UK SC	MSCI UK SC	MSCI EM SC	MSCI Japan SC	MSCI Pacific ex. JP SC
<b>High</b>	24.9	35.4	19.6	20.5	19.9	17.9	17.9
<b>Low</b>	13.9	16.7	12.4	10.5	10.8	9.8	9.8
<b>Average</b>	18.2	22.9	15.6	16.9	15.0	12.4	12.4
<b>Current</b>	18.1	23.2	14.6	13.2	12.8	11.5	11.5

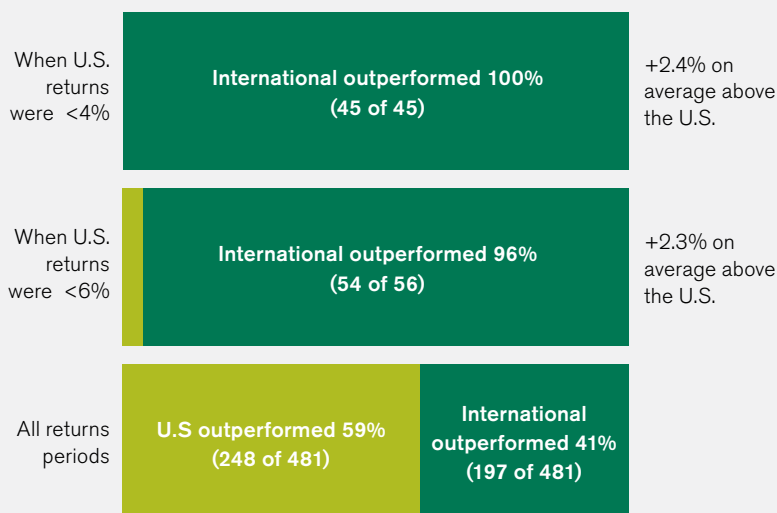
Data from 4/1/2013 to 2/28/2023 Source: Factset

The S&P 500 is trading at 18x earnings, which is much closer to its historical average. On the other hand, some areas—like international and emerging markets stocks—are trading below their 10-year averages.

## Rethink Non-U.S. Markets

### International stocks have historically outperformed in periods of lower U.S. stock returns

(10-year rolling periods, U.S. return levels vs. international, 1973 – 2022)



### “Costs” of limiting investments to U.S. markets

**Opportunity cost:** Leaves 40% of global market opportunity on the table

**Diversification cost:** Spreading investments among U.S. and non-U.S. may reduce risk

The top two charts show that when returns on U.S. stocks have been low, international markets have tended to outperform most of the time. This may indicate a good time to consider opportunities outside the U.S.

U.S. stocks represented by the S&P 500 Index and International stocks represented by MSCI EAFE Index.

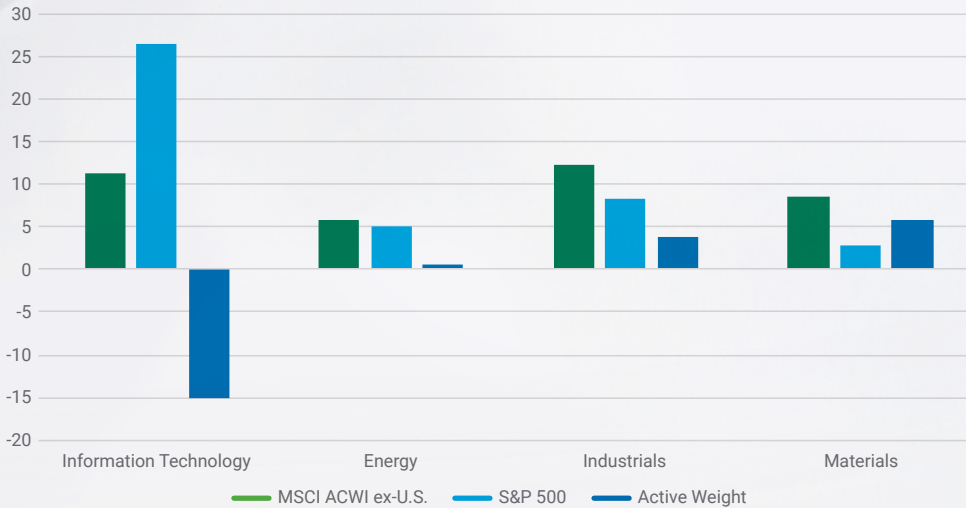
Source: Morningstar, as of 12/31/2022.

International investing involves special risks, such as political instability and currency fluctuations. Investing in emerging markets may accentuate these risks.

**Past performance is no guarantee of future results.**

# Non-U.S. Index Has Fundamentally Different Exposures

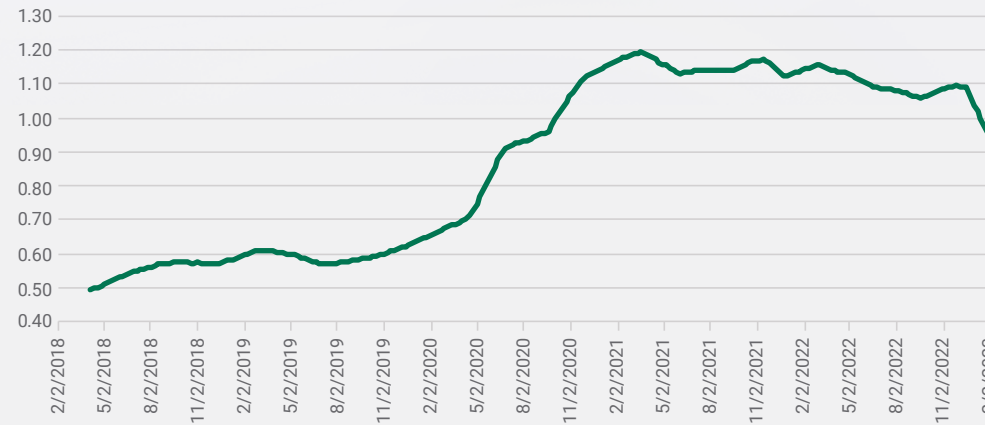
## MSCI Global Industry Classification Standard Sectors



Data as of 1/31/2023 Source: FactSet

## More Downside to Tech Earnings

FANG+ Index Earnings Per Share Growth vs S&P 500



Data from 2/2/2018 to 2/9/2023 Source: Bloomberg

References to specific securities are for illustrative purposes only and are not intended as recommendations to purchase or sell securities. **Past performance is no guarantee of future results.**

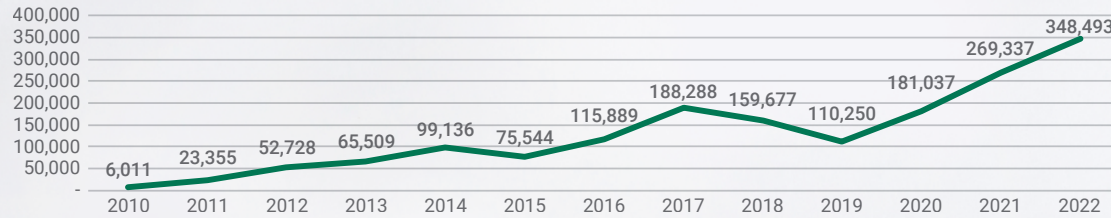
## Factors Supporting Non-U.S. Markets:

- Attractive relative valuations
- Exposure to trending sectors
- Uptick in manufacturing activity
- Lower risk of energy shock
- Greater exposure to global recovery
- One of the biggest reasons non-U.S. markets had previously lagged the U.S. was the phenomenal performance of Tech stocks. This matters because IT earnings have started to fade and its growth has started to decline, as shown in the second chart.
- On the other hand, more capital is getting allocated toward the sectors where non-U.S. markets have sizeable exposure and various governments are implementing policies that have led to investment in renewable infrastructure and new manufacturing. This is an important trend we're watching that could create global opportunities in years to come. We're seeing massing investment in renewable infrastructure and new manufacturing capacity.



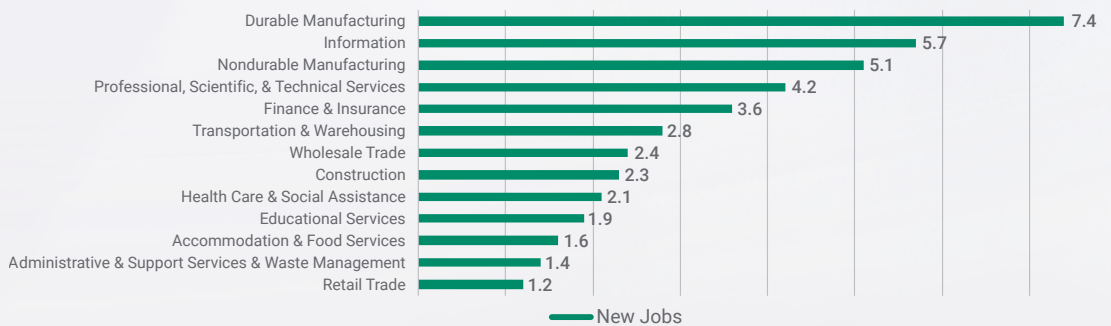
## Trends to Watch: Reshoring

### Job Announcements per Year, Reshoring + Direct Foreign Investment



Data from 1/1/2010 to 12/31/2022 Source: The Reshoring Initiative

### Job Multiplier Effect by Employment Industry



Source: Economic Policy Institute

One trend we are watching is reshoring, which is the practice of bringing manufacturing back to the U.S. This trend could potentially benefit small caps because when companies reshore they have to increase capital expenditures (or CAPEX) to buy property, plans and equipment. Historically, higher CAPEX has resulted in higher prices for small cap stocks.

## Summary and Our Outlook

- **2022:** A year of wholly macro (big picture economic trends), 2023 will see more focus on earnings.
- **Bonds:** They may be more attractive for income and risk management in a recession.
- **Recession:** Watch for quality and earnings resilience for both stocks and bonds.
- **Recovery:** Once there's clarity about the depth and length of a potential recession, we believe a market recovery could follow. REITs and Small Caps have historically outperformed in a Goldilocks environment.
- **China:** Its recovery may be the biggest single dynamic in the global economy right now.

Of course there can always be wildcards such as the continued conflict in Ukraine, what China may do in regards to Taiwan and the economy. When the economy slows down, things are prone to "break." We saw this recently with the bank failures earlier in March, so we need to remain alert for rising risks.

Our commitment to clients is to actively monitor, evaluate and react to both risks and opportunities in seeking to deliver the best results.

Are You Ready for Today's  
Real Challenges?

Let Us Help.

REQUEST A CALL



# MORE RESOURCES

## FOR YOU

### **Inflation**

- [Are Inflation Fears Contributing to Its Rise?](#)
- [What's Personal Inflation Rate and Why Does It Matter?](#)
- [Stay Ahead of Inflation](#)
- [Inflation Calculator: Inflation's Historic Impact on Investments](#)

### **Interest Rates**

- [Fed Raises Rates Again as Growth Outlook Dims](#)
- [Don't Fight the Fed](#)
- [Is There Still a Place for Bonds When Rates Rise?](#)

### **Recession**

- [Why We Think Recession Risk Is Rising in the U.S.](#)
- [What We Can Learn from Historical Recessions](#)
- [Can the Yield Curve Predict Recessions?](#)
- [Recession Spending: When Need is Really a Want](#)

### **Stocks and Bonds**

- [Is Now a Good Time to Buy Stocks](#)
- [Eyeing a Comeback for Bonds](#)
- [Are Income Opportunities on the Horizon?](#)
- [60/40 Portfolios May Bounce Back](#)

### **Markets and Economy**

- [Latest Investment Outlook from Our CIOs](#)
- [What We Know About the Collapse of Silicon Valley Bank](#)
- [The Danger \(and Drama\) of the Debt Ceiling](#)

Investment return and principal value of security investments will fluctuate. The value at the time of redemption may be more or less than the original cost. Past performance is no guarantee of future results.

Diversification does not assure a profit, nor does it protect against loss of principal.

Dollar cost averaging does not ensure a profit or protect against a loss in declining markets. This investment strategy involves continuous investment in securities, regardless of fluctuating price levels. An investor should consider his or her financial ability to continue purchases in periods of low or fluctuating price levels.

Generally, as interest rates rise, the value of the securities held in the fund will decline. The opposite is true when interest rates decline.

Rebalancing allows you to keep your asset allocation in line with your goals. It does not guarantee investment returns and does not eliminate risk.

International investing involves special risks, such as political instability and currency fluctuations. Investing in emerging markets may accentuate these risks.

Historically, small cap stocks [and mid cap] have been more volatile than the stock of larger, more-established companies. Smaller companies may have limited resources, product lines and markets, and their securities may trade less frequently and in more limited volumes than the securities of larger companies.

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## DEFINITIONS

### Asset Classes

**Adjustable-Rate Mortgage** is a type of mortgage loan where the interest rate varies.

**Asset-Backed loans** are secured by some form of collateral.

**Collateralized Mortgage Obligations (CMOs)** are a type of investment debt security where mortgages are packaged by their risk profiles.

**Convertible investments** are bonds, preferred shares or another financial instrument that can be converted by the shareholder to a common stock.

**Pass-Through Mortgage-Backed Securities** are investments where the issuer collects monthly payments from a pool of mortgages and then passes on a proportionate share of the collected principal and interest to bondholders.

**Real Estate Investment Trusts (REITs)** are securities that trade like stocks and invest in real estate through properties or mortgages.

**Treasury Inflation Protection Securities (TIPS)** are a special type of U.S. Treasury security designed to address a fundamental, long-standing fixed-income market issue: that the fixed interest payments and principal values at maturity of most fixed-income securities don't adjust for inflation. TIPS interest payments and principal values do. The adjustments include upward or downward changes to both principal and coupon interest based on inflation. TIPS are inflation-indexed; that is, tied to the U.S. government's Consumer Price Index (CPI). At maturity, TIPS are guaranteed by the U.S. government to return at least their initial \$1,000 principal value, or that principal value adjusted for inflation, whichever amount is greater. In addition, as their principal values are adjusted for inflation, their interest payments also adjust.

**Treasury yield** is the yield of a Treasury security (most often refers to U.S. Treasury securities issued by the U.S. government). For bonds and other fixed-income securities, yield is a rate of return on those securities.

### Indices

**Bloomberg Barclays U.S. Aggregate Bond Index** covers the USD-denominated, investment-grade, fixed-rate, taxable bond market. The index includes government and corporate securities, mortgage-backed securities, and asset-backed securities, with maturities of at least one year.

**Bloomberg Barclays U.S. Treasury Inflation Protected Notes (TIPS)** consists of Treasury inflation-protected securities issued by the U.S. Treasury with a remaining maturity of one year or more.

**Bloomberg Commodity Index** is part of Bloomberg's financial benchmarks designed to provide liquid and diversified exposure to physical commodities via futures contracts. It is calculated on an excess return basis and reflects commodity futures price movements.

### **Bloomberg Emerging Markets USD Aggregate**

**Bloomberg Global Aggregate Bond EX-USD (Unhedged)** is a broad-based measure of the global investment-grade fixed income markets, excluding U.S. dollar-denominated securities. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities.

**Bloomberg Global Aggregate Bond Index (USD, Hedged)** is a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities.

**Bloomberg U.S. 1-3 Year Government/Credit Bond Index** is a component of the U.S. Government/Credit Bond Index, which includes Treasury and agency securities (U.S. Government Bond Index) and publicly issued U.S. corporate and foreign debentures and secured notes (U.S. Credit Bond Index). The bonds in the index are investment-grade with a maturity between one and three years.

**Bloomberg U.S. Corporate Investment Grade** is a market-value-weighted index of investment-grade corporate fixed-rate debt issues with maturities of one year or more.

**Bloomberg U.S. 1-5 Year Treasury Inflation Protected Securities (TIPS) Index** consists of inflation-protected securities issued by the U.S. Treasury with maturities between one and five years.

**Bloomberg Barclays U.S. Aggregate Bond Index** covers the USD-denominated, investment-grade, fixed-rate, taxable bond market. The index includes government and corporate securities, mortgage-backed securities, and asset-backed securities, with maturities of at least one year.

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**Bloomberg U.S. High-Yield 2% Issuer Capped Bond Index** is a component of the Bloomberg U.S. Corporate High-Yield Bond Index, which covers the universe of fixed-rate, non-investment grade corporate debt of issuers in non-emerging market countries. It is not market capitalization-weighted--each issuer is capped at 2% of the index.

**Bloomberg U.S. High-Yield-Corporate** is a rules-based, market-value-weighted index that measures publicly issued non-investment grade USD fixed-rate, taxable and corporate bonds.

**CRSP U.S. Total Market Index** represents nearly 100% of the U.S. investable equity market and includes nearly 4,000 companies across mega, large, small and micro capitalizations.

**Dollar Index** measures the value of the dollar against six world currencies—Euro, Swiss Franc, Japanese Yen, Canadian dollar, British pound, and Swedish Krona.

**FANG+ Index** provides exposure to ten of today's highly-traded tech giants, including META, Apple, Netflix, Google, Amazon, Microsoft, Tesla, NVIDIA, Snowflake and Advanced Micro Devices.

**FTSE EPRA/NAREIT Global Index** is designed to track the performance of listed real estate companies and REITs in both developed and emerging markets.

**Global Industry Classification Standards (GICS) Sectors** is a common classification standard used by thousands of market participants across all major groups involved in the investment process and reflects dynamic interactions across world markets.

**J.P. Morgan CEMBI Broad Diversified Index** is a global, liquid corporate emerging markets benchmark that tracks U.S.-denominated corporate bonds issued by emerging markets entities.

### **MSCI ACWI ex U.S.>**

**MSCI EAFE (Europe Australasia, Far East) Index** measures developed market equity performance, excluding the U.S. and Canada.

**MSCI EAFE Small Cap** is a market capitalization-weighted index that is designed to measure developed market equity performance of small cap stocks, excluding the U.S. and Canada.

**MSCI EAFE Value Index** is a market capitalization-weighted index that monitors the performance of value stocks from Europe, Australasia, and the Far East.



**MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

**Russell 1000® Growth Index** measures the performance of those Russell 1000 Index companies (the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with higher price-to-book ratios and higher forecasted growth values.

**Russell 1000® Value Index** measures the performance of those Russell 1000 Index companies (the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with lower price-to-book ratios and lower forecasted growth values.

**Russell 2000® Index** is a market-capitalization weighted index created by Frank Russell Company to measure the performance of the 2,000 smallest of the 3,000 largest publicly traded U.S. companies, based on total market capitalization. **Russell 2000® Growth Index** measures the performance of those Russell 2000 Index companies (the 2,000 smallest of the 3,000 largest publicly traded U.S. companies, based on total market capitalization) with higher price-to-book ratios and higher forecasted growth values.

**Russell 2000® Value Index** measures the performance of those Russell 2000 Index companies (the 2,000 smallest of the 3,000 largest publicly traded U.S. companies, based on total market capitalization) with lower price-to-book ratios and lower forecasted growth values.

**Russell Midcap® Growth Index** measures the performance of those Russell Midcap Index companies (the 800 smallest of the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with higher price-to-book ratios and higher forecasted growth values.

**Russell Midcap® Value Index** measures the performance of those Russell Midcap Index companies (the 800 smallest of the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with lower price-to-book ratios and lower forecasted growth values.

**Russell Midcap® Total Return** measures the performance of the 800 smallest of the 1,000 largest publicly traded U.S. companies, based on total market capitalization.

## Other

**Consumer Price Index (CPI)** is the most commonly used statistic to measure inflation in the U.S. economy. Sometimes referred to as **headline CPI**, it reflects price changes from the consumer's perspective. It's a U.S. government (Bureau of Labor Statistics) index derived from detailed consumer spending information. Changes in CPI measure price changes in a market basket of consumer goods and services such as gas, food, clothing, and cars. **Core CPI** excludes food and energy prices, which tend to be volatile.

**Duration** is an important indicator of potential price volatility and interest rate risk in fixed income investments. It measures the price sensitivity of a fixed income investment to changes in interest rates. The longer the duration, the more a fixed income investment's price will change when interest rates change. Duration also reflects the effect caused by receiving fixed income cash flows sooner instead of later. Fixed income investments structured to potentially pay more to investors earlier (such as high-yield, mortgage, and callable securities) typically have shorter durations than those that return most of their capital at maturity (such as zero-coupon or low-yielding noncallable Treasury securities), assuming they have similar maturities.

**Earnings per share (EPS)** are the portion of a company's profits allocated to each outstanding share of its common stock. It is an indicator of a company's profitability.

**Federal funds rate (aka fed funds rate)** The federal funds rate is an overnight interest rate banks charge each other for loans. More specifically, it's the interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements. It's an interest rate that's mentioned frequently within the context of the Federal Reserve's interest rate policies.

**Gross Domestic Product (GDP)** is a measure of the total economic output in goods and services for an economy. Real GDP is adjusted for inflation.

**Next Twelve Months (NTM)** refers to financial measures such as revenue or net income that is being forecasted for the immediate next twelve months from the current date. It is used when a company's performance is cyclical, and valuations may not represent the potential value of a business. NTM is a forward multiple that provides a picture of what the company is projecting to achieve.

**Price to earnings ratio (P/E)** the price of a stock divided by its annual earnings per share. These earnings can be historical (the most recent 12 months) or forward-looking (an estimate of the next 12 months). A P/E ratio allows analysts to compare stocks on the basis of how much an investor is paying (in terms of price) for a dollar of recent or expected earnings. Higher P/E ratios imply that a stock's earnings are valued more highly, usually on the basis of higher expected earnings growth in the future or higher quality of earnings.

**U.S. Treasury securities** are debt securities issued by the U.S. Treasury and backed by the direct "full faith and credit" pledge of the U.S. government. Treasury securities include bills (maturing in one year or less), notes (maturing in two to 10 years) and bonds (maturing in more than 10 years). They are generally considered among the highest quality and most liquid securities in the world.

**U.S. Treasury 3-Month** is a short-term U.S. government security with a constant maturity period of 3 months. These are often used as a proxy for cash-equivalent investments.