

October 2024

Quarterly Market Review

Rebounding to Record Highs following a Technical Selloff

Investment and Insurance Products: ► NOT FDIC Insured ► NO Bank Guarantee ► MAY Lose Value

ELECTION INTERFERENCE? NOT THE KIND YOU EXPECT...



JULIAN QUASHA,
CIMA
Managing Director -
Investments
PIM Portfolio Manager



JAKE HARRISON,
CFA
First Vice President –
Investment Officer

With a pivotal and highly uncertain election only a couple weeks away, politics are dominating financial media. Historical returns suggest that markets may not be paying much attention, however¹. While elections are tremendously important for our democracy, this coverage lacks much market substance and distracts from the stories that are actually moving prices.

Stocks and bonds tend to react to politics by the extent that policy changes impact the real economy. With murky, yet inflationary agendas on both sides of the aisle, economic projections should be taken with a grain of salt. Even after the president's plans come into clearer focus, proposals that require Congress will take time to be enacted if they are passed at all. With divided government most likely, sweeping policy changes with broad economic effects are unlikely to receive Congressional approval.

Historically, investors who have allowed politics to interfere with the execution of investment plans have missed opportunities to share in years of remarkable prosperity for the broader US economy. In this most recent period of contentious politics, competitive US corporations, strides in technological innovation, and the resilient US consumer have served as tangible reasons for optimistic markets. In eyes of Wall Street, it is as the Clinton campaign said in 1992: "It's the economy, stupid."

Speaking of, job statistics remained weak through September, raising concern about the health of the labor economy. This softer than expected data encouraged a handful of pullbacks throughout the third quarter, most notably a downtrend that started in mid-July. That bout of volatility reached a climax on August 5th and was precipitated by the unwind of a popular "carry trade" involving the Japanese yen (more on that later). By that point of the quarter, the S&P 500 had fallen by 5%, and the two-year treasury rate fell by 0.84%². The futures market priced in a near 100% chance of a 0.50% rate cut³ despite the Fed's real-time estimate real economic growth reading a robust 2.9%⁴.

"As long as the Fed sees that pressures for large price increases will abate soon, it will be right to begin loosening even with the economy operating beyond potential or with inflation rising,' Yellen said... While Yellen didn't say just when the Fed will move to cut rates, she said that 'when the time eventually comes to ease policy, the need for such actions will not be apparent from current economic indicators, but instead will be based on a forecast of where things are headed.'"

Although it sounds as if it could have been printed last quarter, this quote is in a Bloomberg News article from 1995. That year, Amazon.com sold its first book, Hillary Clinton was the First Lady, and the Fed was cutting rates with inflation above 2% and the economy not in recession⁵. A lot has changed, but as you can see from the data we quoted, the Fed is in a similar predicament.

The 1995 vintage of rate cuts went relatively swimmingly - it is one of the few times where the Fed was able to quell inflation while avoiding a recession. This September, the current iteration of the Fed delivered a 0.50% rate cut in a bid for a soft landing of their own. From the August 5th low onwards, the S&P 500 climbed 11% on the heels of rate-cut fueled optimism, positive surprises to economic data, and continued earnings momentum. By quarter end, US stocks were up 6.0%, international stocks up 8.5%, US bonds up 5.2%, and global commodities down 0.6% - despite a climbing in oil prices amid escalating tensions between Israel and Iran⁶.

That about covers the major market highlights of the third quarter. For those interested in reading on, charts, graphs, and more detailed analysis follow this executive summary. We hope you enjoy a wonderful fall and holiday season this fourth quarter.

JULIAN QUASHA, CIMA
Managing Director - Investments
PIM Portfolio Manager

JAKE HARRISON, CFA
First Vice President – Investment Officer

¹ Presidential election years like 2024 are usually winners for U.S. stocks – Matt Sommer of Dow Jones

² As measured by the S&P 500 Index and the Generic 2-Year US Treasury Index from Bloomberg, LP with permission.

³ As measured by the World Interest Rate Probability function (WIRP <GO>) on the Bloomberg Terminal. This function uses futures market contracts to infer the market's expectation for the Federal Funds Rate on upcoming Federal Reserve policy announcement dates.

⁴ As measured by the Atlanta Fed's GDPNow forecast model. Data from Bloomberg, LP.

⁵ "This was 1995: A Pop Culture Snapshot" – Patricia Garcia, Vogue

⁶ As measured by the S&P 1500 Index, the FTSE All-World ex. US Index, the Bloomberg U.S. Aggregate Bond Index, and Bloomberg Commodity Index. Data from Bloomberg, LP with permission.

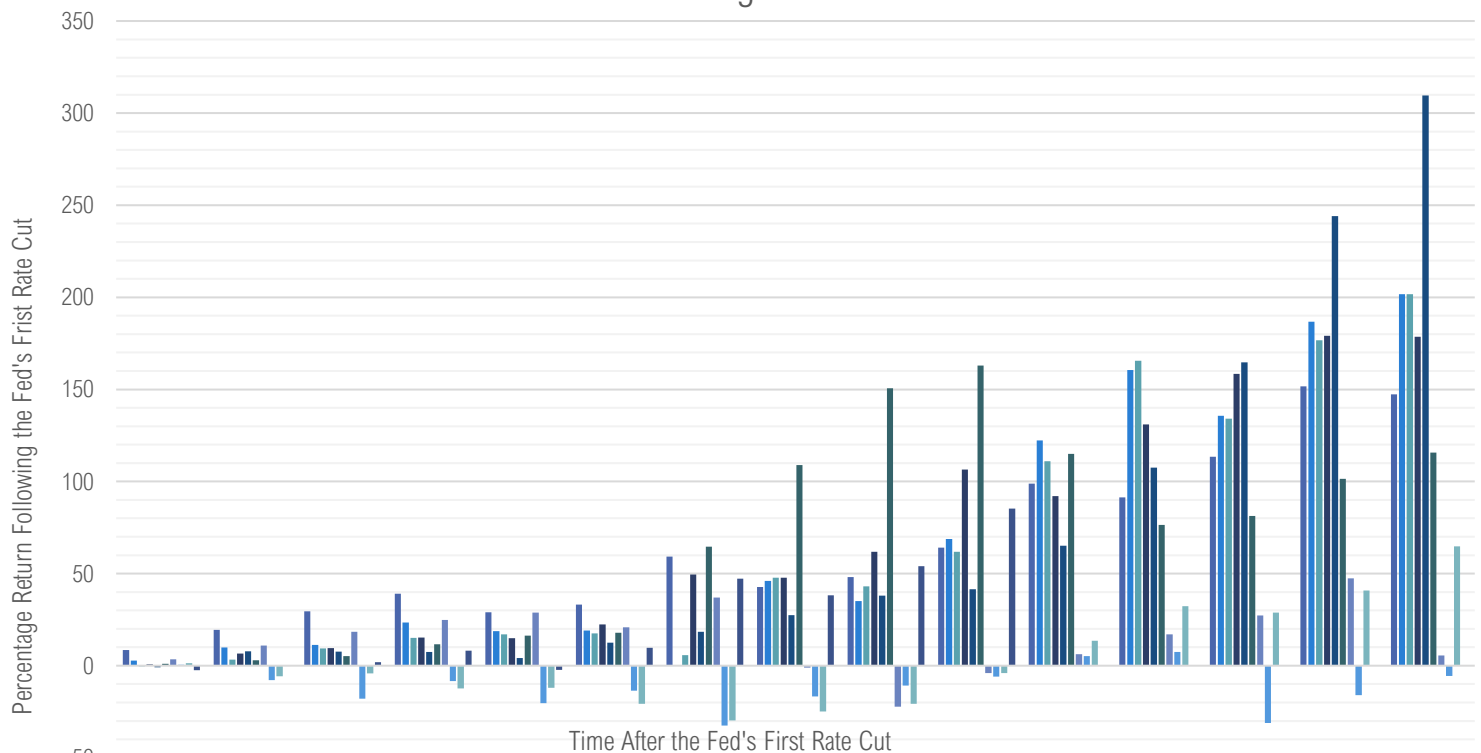
THE FED'S MID-CYCLE ADJUSTMENT

WHAT HAPPENS TO THE STOCK MARKET AFTER THE FED STARTS CUTTING RATES?

Every rate cutting cycle is unique. Past is not prologue, and history will not repeat itself. That said, the S&P 500's track record is pretty encouraging for an economy that is entering a rate cutting cycle at or near full employment with a growing labor force.

The following chart shows how the S&P 500 fared at various time horizons after the Fed's first rate cut. Each date represents the beginning of a rate cutting cycle, and the bars measure the historical returns for the S&P 500 index after a certain amount of time following the date of the first cut. As you may have expected, patient investors were rewarded: the further you get from the initial rate cut, generally the higher the returns.

S&P 500 - Returns Following the Fed's First Rate Cut



	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years
12/9/1974	8	19	30	39	29	33	59	43	48	64	99	91	113	152	147
5/30/1980	3	10	11	23	19	19	0	46	35	69	122	161	136	187	202
11/2/1981	0	3	9	15	17	17	6	48	43	62	111	166	134	177	202
11/21/1984	1	7	10	15	15	22	49	48	62	106	92	131	158	179	179
6/6/1989	-1	8	8	8	4	13	18	27	38	42	65	108	165	244	310
7/6/1995	1	3	5	12	16	18	65	109	151	163	115	76	81	101	116
9/29/1998	4	11	18	25	29	21	37	-1	-22	-4	6	17	27	47	5
1/3/2001	1	-8	-18	-8	-20	-14	-33	-17	-11	-6	5	7	-31	-16	-6
9/18/2007	1	-6	-4	-12	-12	-21	-30	-25	-21	-4	14	32	29	41	65
7/31/2019	-2	0	2	8	-2	10	47	38	54	85					

Data shows total returns for the S&P 500 Index following the date of the Federal Reserve's first rate cut in a given rate cutting cycle. Data for the S&P 500 Index and dates of historical rate cutting cycles are from Bloomberg, LP.

ECONOMICS

STARTING STONG: THE FED KICKS OFF RATE CUTTING SEASON WITH A 0.50% CUT

At their September meeting, the Federal Reserve lowered their policy rate by 0.50%. This adjustment came in response to months of disinflation and a cooling labor market⁷. The US central bank normally adjusts its rate by 0.25% increments, making this rate cut a little out of the ordinary. Fifty-basis point (0.50%) cuts typically occur when the Fed is reacting to a crisis.

This time around there was not a crisis and in fact, Jay Powell struggled to even get the fifty-basis point cut across the goal line. For the first time since 2005, there was a dissenting vote on one of the Fed's rate decisions⁸. Meeting minutes revealed that a handful of other governors shared Michelle Bowman's fears that cutting too quickly could jeopardize their progress fighting inflation⁹.

Was this the right move? Only time will tell. For now, let's analyze the decision using a helpful framework called the "Taylor" rule.

"Let me put it this way, I spend a substantial amount of my time in endeavoring to fend off questions and worry terribly that I might end up being too clear. What I have learned at the Federal Reserve is a new language which is called Fed Speak. Here we learn to mumble with great incoherence..."

Dr. Alan Greenspan on June 20th, 1995 at the Economic Club of New York

The Taylor Rule provides a model for understanding what interest rate the Fed should target¹⁰. The rule is based on the idea of a "neutral" Fed Funds rate, an interest that neither stimulates nor restricts the economy.

The neutral rate should not be too high as to stifle economic activity, nor should it be so low as to risk an overheated and inflationary economy. Theory suggests that the "neutral" rate should equal the sum of an economy's long-run growth rate and its target rate of inflation. If we use the Fed's long-run growth assumption of 1.85%¹¹ and their target inflation rate of 2%, the neutral rate should be 3.85% (e.g. 1.85% growth + 2% inflation = 3.85% neutral rate).

Taylor Rule asserts that the Fed Funds rate should be above or below the neutral rate to the degree that current growth and inflation are above or below long-run potential and the Fed's target, respectively. If we compare the Fed's growth estimate and their inflation target to their real-time GDP forecast (2.6%) and the most recent reading on core inflation prior to the meeting (2.6%), the Taylor rule would have suggested a Fed funds rate of roughly 4.53%¹². The actual Fed funds rate was a much higher 5.5% at the time of the decision.

The Taylor Rule is a simple model with significant limitations. It is only one of many tools and models that the Fed uses, but it remains relevant for the elegance with which it explains policy adjustments. Jury is out on the efficacy of the fifty-basis point cut, but our simple application of the Taylor rule suggests that the Fed had room to make a move that big.

GOLDILOCKS DATA WITH RELIEF ON THE WAY FOR CONSUMERS

Economic data in the third quarter was mixed, yet it proved to be an enjoyable cocktail for the market. Statistics did not portray an overheated economy and stoke inflation fears, nor did they depict a rapidly cooling economy and trigger recession warnings.

⁷ Minutes of the Federal Open Market Committee, September 17-18, 2024 Meeting – US Federal Reserve

⁸ "The Lone Dissenter Inside the Fed Who Voted Against Powell's Rate Cut" Nick Timiraos, WSJ.

⁹ Fed Minutes Show Robust Debate About Size of September Rate Cut - Craig Torres, Bloomberg News

¹⁰ Economics and Investment Markets – 2024 Level II Refresher Readings, CFA Institute.

¹¹ Longer Run FOMC Summary of Economic Projections for the Growth Rate of Real Gross Domestic Product - Federal Reserve Bank of St. Louis Database

¹² A simplified version of the rule's monetary policy framework is as follows: Fed Funds Rate = Neutral Rate + (1/2)*(Current Growth Rate - Long-Run Growth Rate) + (1/2)*(Current Inflation Rate - Target Inflation Rate). We use current growth as measured by the Atlanta Fed's GDPNow forecast model on 9/16, and current inflation by using the core PCE YOY Index released on 8/30, respectively. Data from Bloomberg, LP. 4.53% Target Funds Rate = 3.85% Neutral Rate + (1/2)*(2.6% Current Growth Rate - 1.85% Long-Run Growth Rate) + (1/2)*(2.6% Current Inflation Rate - 2% Inflation Target).

Inflation picked up in the most recent print for September, coming in at 3.3% year-over-year, but the stubbornly high owner's equivalent rents (which makes up just over 32% of the core CPI Index) contributed 1.7% of that total¹³. Owner's equivalent rents (OER) are the way the Bureau of Labor Statistics includes estimates of shelter costs for American homeowners in their inflation readings. Compared to recording actual rents paid, OER is a complex thing to estimate, and the methodology has faced controversy in recent years¹⁴. If you exclude that measure from the index, current price trends would have Core CPI running closer to 2.25%¹⁵. Price pressures have clearly faded for most of the core components, and headline inflation has been on a defined trend towards the Fed's 2% target. As a result, the Fed is committed to a "policy normalization" (read rate-cutting) path barring a material change to the data. Given the hotter-than-expected data to end the 3rd quarter and start the 4th (see the Economic Surprise Index¹⁶ chart below), we believe that smaller twenty-five-basis point reductions are more likely moving forward than the fifty-basis point cut we got in September.

Citi United States Economic Surprise Index

Readings above Zero Indicate Positive Surprises to Macroeconomic Data. Readings Below Zero Indicate Negative Surprises to Macroeconomic Data.



Chart reflects historical values for the Citi Economic Surprise Index - United States. Data from Bloomberg, LP.

The most direct beneficiary of falling rates will be low- and middle-income households. Many in these cohorts have endured the pain of inflation without commensurate wage gains¹⁷. Those fortunate to have access to credit have been paying historically high interest rates on credit card debt and adjustable-rate-mortgages¹⁸. Wealthy consumers have buoyed spending at the national level, but relief for these households will go a long way towards keeping soft landing hopes intact. Their effects won't be felt immediately, but rate cuts stand to reinforce an already strong US consumer.

¹³ As measured by the Consumer Price Index, published by the US Bureau of Labor Statistics. Data from Bloomberg, LP.

¹⁴ How a Key Rent Metric Can Change Path of US Inflation – Augusta Saraiva, Bloomberg News.

¹⁵ Calculated using the Core CPI decomposition from the ECAN <GO> Function in the Bloomberg Terminal and excluding Owner's Equivalent Rents.

¹⁶ As measured by the Citi Economic Surprise Index - United States. This index measures economic data surprises relative to market expectations. Data from Bloomberg, LP.

¹⁷ "Americans Are Desperate for Relief. The Rate Cut Is a Glimmer of Hope." – David Uberti, WSJ.

¹⁸ "Americans Are Desperate for Relief. The Rate Cut Is a Glimmer of Hope." – David Uberti, WSJ.

CONTINUED SOFTENING IN THE LABOR MARKET IN Q3

Although the labor market's influence on Q2 price action was material, it paled in comparison to volatility we experienced following jobs data in early August.

Initial jobless claims and the payrolls reports both surprised to the downside, stoking fears that the labor market was cooling even faster than the market anticipated. Claudia Sahm's famous recession indicator was triggered¹⁹, and traders were left wondering if an economic slowdown was inevitable. These concerns encouraged a sharp drop for interest rates and stocks. Although a negative reaction was probably inevitable given the degree of the weakness in the data, we believe the magnitude and speed of the selloff was accelerated by coincidental developments abroad.

LAND OF THE RISING INFLATION - A CHANGING TUNE IN JAPAN

Poised to emerge from a decades-long period of slow economic growth and deflationary conditions, Japan had been an afterthought for investors since the Japanese asset bubble burst in the early 1990's. Up until recently, the nation's ill-fated recovery efforts were plagued by high government debt and an aging population. Over the last few years, however, investor-friendly corporate governance reforms, the nation's exposure to high technology industries and position as a "friendshoring" alternative have helped to garner positive momentum and attract fresh foreign direct investment.

As those tailwinds materialized, global inflationary pressures caused central banks to dramatically raise their policy rates starting in 2021. Afraid of normalizing (raising rates) too early and potentially snuffing out long-awaited positive momentum in their economy, the Bank of Japan went a different direction and maintained an ultra-accommodative and unorthodox monetary policy. The central bank carried a negative interest rate target from 2016 through March of this year²⁰. This dramatic policy divergence between the BOJ and other central banks, including the Fed, put significant pressure on the value of Japanese yen versus many major currencies.

Not only did this development greatly reduce the cost of a vacation to Japan and provide another tailwind to export-oriented Japanese stocks²¹, but the weakness in the yen also led to several highly leveraged trades that were predicated on continued weakness for the Japanese currency. Those trades are referred to as a "carry trade".

MARKETS

THE YEN CARRY TRADE UNWINDS AND ROILS MARKETS

The general idea of a carry trade is to make a "leveraged" investment in an asset by using cheaply borrowed funds from a foreign market. Leverage amplifies the return on an investor's initial investment in both positive and negative directions. Consider this: if you can make the same nominal profit with less money up front, your percentage return on dollars invested is higher, and you can stretch your investments further. Borrowing to make an investment carries elevated risk, however, and leveraged trades can move against investors quickly - especially when one side of a trade is popular.

In a carry trade, an investor might borrow yen from a lender in Japan, convert that yen to a non-Japanese foreign currency (say US dollars), and invest those dollars in a higher-yielding or higher-return asset denominated in US dollars. The yen carry trade was especially popular because traders could borrow at near-zero interest rates to finance everything from crypto to AI stocks.

In a carry trade, there are two primary factors that affect the investor's return. The first component is the profit they realize from their leveraged investment (e.g. the difference between the return on the asset they purchase and the interest cost of their loan). The second is how many more or how many less yen they can buy with their US dollars. To understand why the change in currency values is critical, consider how the trader would close out their carry trade. They would need to sell their investment to receive US

¹⁹ "Today's Jobs Report Triggered a Recession Indicator. But Even Its Creator Doesn't Think There Is a Downturn." – Megan Leonhardt, Barron's.

²⁰ As measured by the Bank of Japan Unsecured Overnight Call Rate, equivalent to the Fed Funds Rate. Data from Bloomberg, LP.

²¹ "Japan's Stock Market Is Booming. It Isn't All About the Weak Yen." – Jacky Wong, WSJ.

dollars, use dollars to buy enough yen to cover the loan (hopefully at a lower price in dollars than before), and pay yen to the lender in Japan.

On the back of a surprise rate hike from the BOJ and the weak US Jobs data we discussed in the prior section, the Japanese yen appreciated by a remarkable 6.82% in a week-long span²². Currencies aren't typically this volatile, and this sharp move caused sharp losses on the "currency leg" of the trade. Traders were obliged by their creditors to buy back yen and repay their loans to prevent further losses. This made them forced sellers of the assets they purchased. Since many traders purchased some of the same investments, it triggered a cascading effect that resulted in sharp losses in unrelated markets around the globe, including the United States and the mega-cap stocks that led the market higher through the first half of the year.

From July 30th through August 5th, stocks were crushed, and bonds rallied. The S&P 500 declined 5%, the 2-year treasury yield fell by 0.84%, and the market priced in nearly five 0.25% rate cuts by year-end²³.

It was a period full of fireworks and enough drama to warrant a section of this review, but in hindsight, it looks more like a buying opportunity for stock investors than the start of something nefarious. From that point on, the S&P 500 climbed 11% to close out the quarter and bonds rallied until the economic data started to meet and even expectations toward the end of September.

S&P 500's Rebound from the August 5th Low

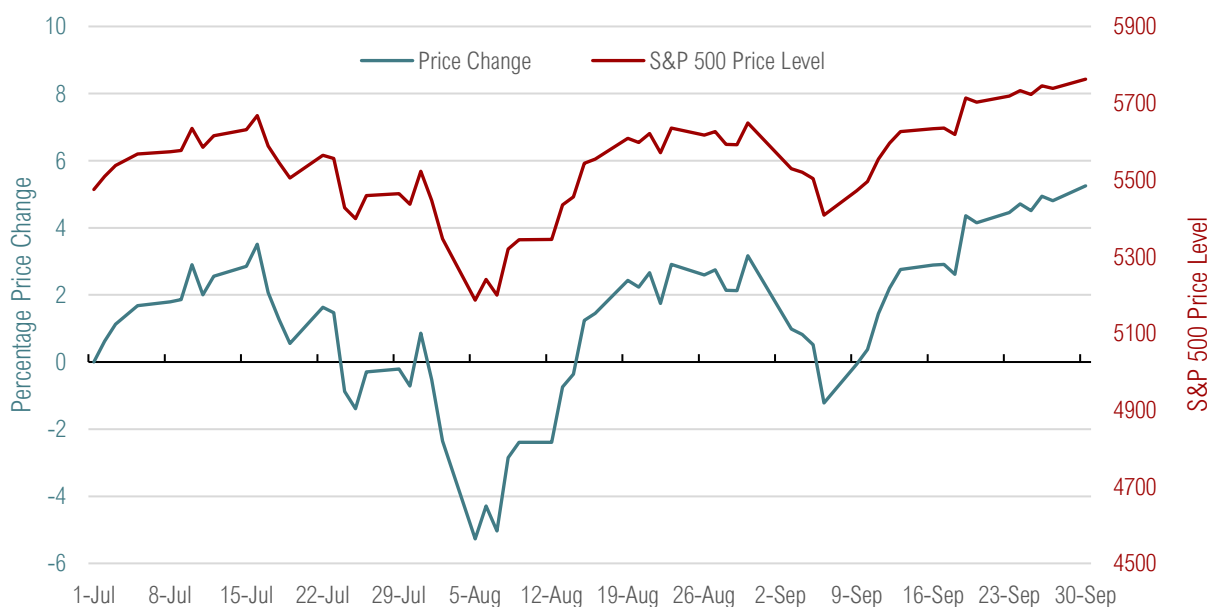


Chart reflects the historical price level and the percentage change in the price level for the S&P 500 Index from August 5th through September 30th 2024. Data from Bloomberg, LP.

TREASURIES TAKE A TUMBLE

At the beginning of the third quarter, the future market implied a 56% probability of a September rate hike and in total, less than two twenty-five-basis point cuts by the end of the year²⁴. When the quarter closed, things looked quite different: the Fed delivered a jumbo rate cut and the market went on to price in almost 0.75% in rate cuts before the start of the new year²⁵. Short term interest rates fell dramatically in response to continued progress against inflation and a weakening labor market.

²² Using the percentage change in the JPY/USD cross rate from 7/29 through 8/5. Data from Bloomberg, LP.

²³ As measured by the S&P 500 Index, the Generic 2-Year US Treasury Index and World Interest Rate Probability function (WIRP <GO>) on the Bloomberg Terminal, all from Bloomberg, LP with permission.

²⁴ As measured by the World Interest Rate Probability function (WIRP <GO>) on the Bloomberg Terminal. This function uses futures market contracts to infer the market's expectation for the Federal Funds Rate on upcoming Federal Reserve policy announcement dates.

²⁵ As measured by the World Interest Rate Probability function (WIRP <GO>) on the Bloomberg Terminal.

Longer-dated interest rates such as the 10- and 30-year treasury rates fell sharply on the quarter, offering a source of long-awaited price return for bond investors. The effects of falling rates affected other parts of the capital markets too. Cyclical stocks and equities that are sensitive to rates were among the big winners in the third quarter.

Falling US Treasury Interest Rates

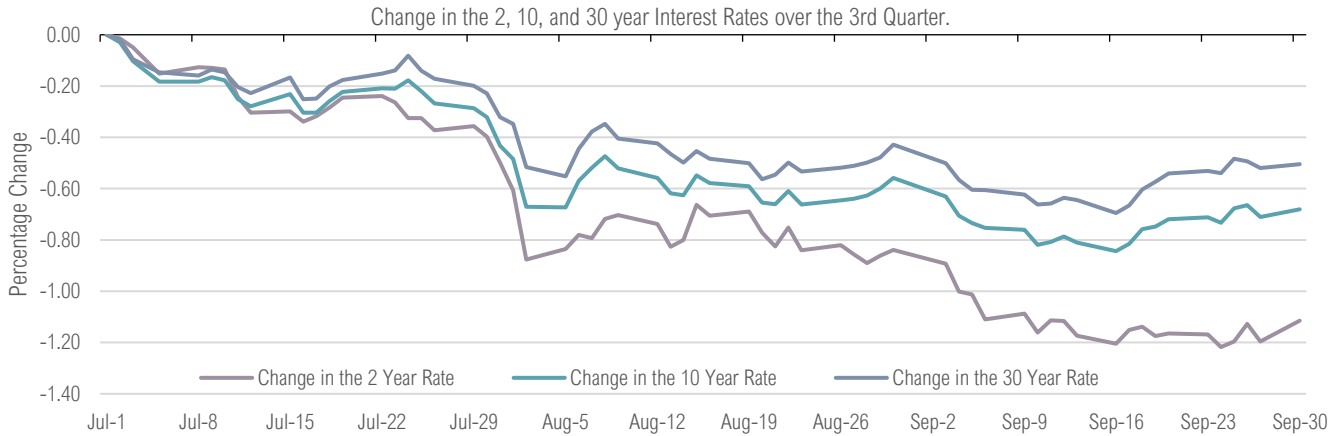


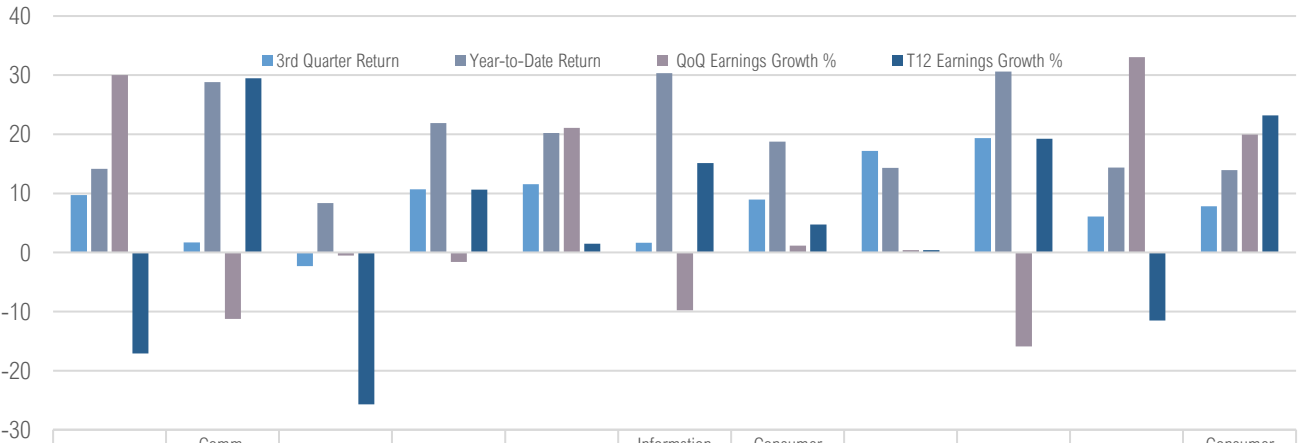
Chart reflects the change in the yield-to-maturity of the generic 2-, 10-, and 30-year US Treasury Bonds. Data uses the generic US Treasury Indices from Bloomberg, LP.

TWO YEARS INTO ITS ROMANCE WITH THE MEGA-CAPS, THE BULL MARKET WANTS TO SEE OTHER PEOPLE

The market had a yet another great quarter, but the types of names that drove the S&P 500 to all-time highs were of a different variety than most other quarters in this two-year bull market²⁶. This time around, cyclical sectors value-oriented pockets of the market shined. Middle and small market capitalization stocks, which tend to be more interest rate sensitive than their large cap peers in the

S&P 500 Performance by Sector

Measures Total Return (Includes Price Return and Dividend Return) and Earnings Growth (Quarter over Quarter and Trailing 12 Months)



	Materials	Comm. Services	Energy	Financials	Industrials	Information Technology	Consumer Staples	Real Estate	Utilities	Health Care	Consumer Disc.
3rd Quarter Return	9.7	1.7	-2.3	10.7	11.6	1.6	9.0	17.2	19.4	6.1	7.8
Year-to-Date Return	14.1	28.8	8.4	21.9	20.2	30.3	18.7	14.3	30.6	14.4	13.9
QoQ Earnings Growth %	30.0	-11.2	-0.5	-1.6	21.1	-9.8	1.2	0.4	-15.9	33.0	19.9
T12 Earnings Growth %	-17.1	29.5	-25.7	10.6	1.5	15.1	4.7	0.4	19.2	-11.5	23.2

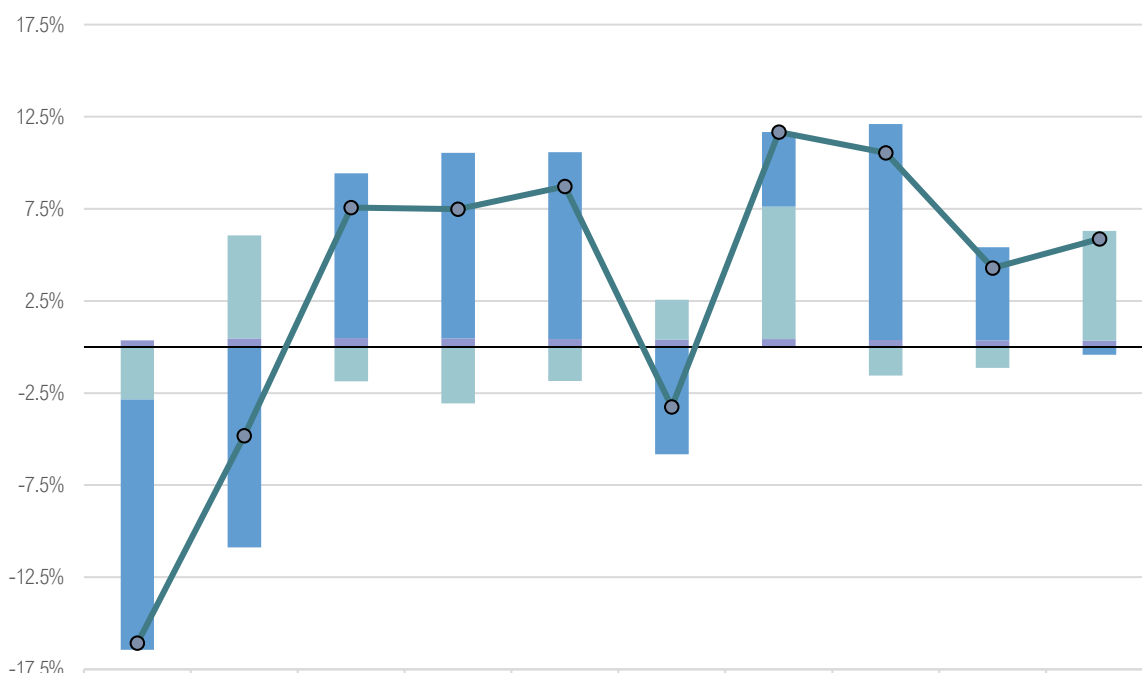
Chart reflects total returns and earnings growth for the S&P 500 Select Sector Indices. Total returns are inclusive of reinvested dividends and earnings-per-share are reflect basic index earnings-per-share. Data from Bloomberg, LP.

²⁶ "The bull market is 2 years old. Here's where Wall Street thinks stocks go next." Josh Schafer, Yahoo Finance.

S&P 500, delivered some of their best quarters in recent memory. Financials, industrials, real estate, utilities, and materials all outperformed the broader S&P 500²⁷. Value stocks had a big quarter and nearly tripled the return of growth stocks on average. All this is not to say that growth or the S&P 500 disappointed with returns of 3.2% and 5.9%, respectively.

We believe that some of the broadening in performance reflects growing conviction in an economic soft-landing and the effect falling interest rates, but it is hard to look at the earnings numbers and argue that there is not a fundamental factor driving these gains. The following chart decomposes the S&P 500's total return by source and is a staple in our market letters. Notice that the return contribution coming from earnings (or profits) is the second highest in the last 10 quarters. Year-over-year, S&P 500 earnings per share are up a solid 10.5%²⁸.

Decomposition of S&P 500 Returns



	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024
Change in Price-to-Earnings Ratio	-13.6%	-10.9%	8.9%	10.1%	10.2%	-5.8%	4.0%	11.7%	5.1%	-0.4%
Earnings Return	-2.9%	5.6%	-1.9%	-3.1%	-1.9%	2.2%	7.2%	-1.6%	-1.1%	6.0%
Dividend Return	0.4%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.3%
Quarterly Total Return	-16.1%	-4.8%	7.6%	7.5%	8.7%	-3.3%	11.7%	10.5%	4.3%	5.9%

Chart reflects decomposed total returns for the S&P 500 Index. The decomposition relies on historical earnings, dividends, and trailing price-to-earnings ratios. Data from Bloomberg, LP.

Outside of the volatility related to Japanese markets, China was the major story. After the announcement of the most generous stimulus measures since the economy entered its prolonged slump since the emergence of covid-19, Chinese assets soared and the MSCI China index climbed 23%²⁹. International stocks, which had a solid quarter as a group, with the FTSE All-World Index (excluding the US) up 8.5%³⁰.

²⁷ As measured by the S&P 500 Select Sector Indices. See sector-specific disclosures on pages 11-12.

²⁸ Using S&P 500 Index basic earnings per share. Data from Bloomberg, LP.

²⁹ As measured by the MSCI China Index. Data from Bloomberg, LP.

³⁰As measured by the FTSE All-Cap excluding the United States Index. Data from Bloomberg, LP.

Equity Markets					
	P/E Ratio	Yield	Performance (%)		
			Q3 - 2024	Q2 - 2024	YTD - 2024
United States - Major Indices					
S&P 500	24.3	1.3	5.9	4.3	22.1
Dow Jones Industrial Average	21.5	1.8	8.7	-1.3	13.9
Nasdaq 100	31.2	0.8	2.1	8.0	20.0
Growth (Russell 1000 Growth Index)	32.4	0.6	3.2	8.3	24.5
Value (Russell 1000 Value Index)	19.0	2.2	9.4	-2.2	16.7
Mid Cap (S&P 400 Index)	18.7	1.7	6.9	-3.5	13.5
Small Cap (S&P 600 Index)	19.4	2.4	10.1	-3.1	9.3
Total US Stock Market (S&P 1500 Index)	23.7	1.4	6.0	3.7	21.3
United States - S&P 500 Sectors					
S&P 500 Materials Index	23.8	1.8	9.7	-4.5	14.1
S&P 500 Communication Services Index	20.7	0.9	1.7	9.4	28.8
S&P 500 Energy Index	14.0	3.3	-2.3	-2.4	8.4
S&P 500 Financials Index	17.0	1.8	10.7	-2.0	21.9
S&P 500 Industrials Index	24.9	1.4	11.6	-2.9	20.2
S&P 500 Information Technology Index	34.7	0.6	1.6	13.8	30.3
S&P 500 Consumer Staples Index	21.6	2.5	9.0	1.4	18.7
S&P 500 Real Estate Index	41.6	3.1	17.2	-1.9	14.3
S&P 500 Utilities Index	20.1	2.8	19.4	4.7	30.6
S&P 500 Health Care Index	22.2	1.6	6.1	-1.0	14.4
S&P 500 Consumer Discretionary Index	26.8	0.7	7.8	0.6	13.9
International Markets - Major Indices					
FTSE All-World Developed ex. US Index	14.1	3.3	7.5	-0.6	12.8
MSCI Emerging Markets Index	14.0	2.7	8.8	5.1	17.0
MSCI Emerging Markets ex. China Index	15.1	2.8	4.0	4.2	12.6
FTSE All-World ex. US Index	14.9	3.0	8.5	0.9	14.6
International Markets by Region					
MSCI Europe Index	14.9	3.3	2.4	1.7	12.2
MSCI China Index	11.7	2.4	23.0	6.9	28.9
MSCI Japan Index	15.2	2.3	-6.0	1.7	14.2
MSCI Asia Pacific ex. Japan Index	15.5	2.5	10.7	6.4	20.4
MSCI Australia Index	19.2	3.6	7.9	-0.5	13.7
MSCI EM Latin America Index	10.1	5.4	3.9	-12.0	-12.2
MSCI India Index	27.6	1.2	7.9	10.3	26.5
FTSE Global Middle East & Africa Index	13.1	3.8	10.0	-1.1	10.1
Bond Markets					
	Average Duration	Yield	Performance (%)		
			Q3 - 2024	Q2 - 2024	YTD - 2024
Major Bond Indices					
Bloomberg U.S. Aggregate Bond Index	6.2	4.2	5.2	0.1	4.4
Bloomberg Global Aggregate Bond Index	6.7	3.3	7.0	-1.1	3.6
Bloomberg U.S. Treasury Index	6.2	3.8	4.7	0.1	3.8
Bloomberg National Municipal Bond Index	5.7	3.3	2.7	0.0	2.3
Bloomberg U.S. Corporate Investment Grade Index	7.3	4.7	5.8	-0.1	5.3
Bloomberg U.S. Corporate High Yield Index	3.4	7.0	5.3	1.1	8.0
Bloomberg U.S. Mortgage-Backed Securities Index	5.4	4.5	5.5	0.1	4.5

Performance measurements consist of total return for the indicated period. Total return figures assume that, if applicable, all dividends and income are reinvested in the index. Data from Bloomberg, LP. Index disclosures and definitions can be found in the appendix to this document.

LOOKING AHEAD

WALL STREET FORECASTS – S&P 500 PRICE TARGETS

Macro Strategists (Top-Down)

The average year-end forecast for the S&P 500 is 5,562, up roughly 700 points from the first quarter survey and 4.8% below the index's current level just below all-time highs³¹.

Aggregated Analyst Forecasts (Bottom-Up)

A bottom-up forecast for the S&P 500 is calculated by aggregating consensus analyst price targets for each company in the S&P 500. This “bottom-up” forecast implies a twelve-month price target for the S&P 500 of 6,324. A year-end equivalent basis for this aggregated forecast suggests a year-end price target of for the S&P 500 of 5,935³². This level is 1.6% above the current level on the index. As it was last quarter, it is safe to say the average stock analyst is more bullish than the average macro strategist.

Wells Fargo Investment Institute³³

The Wells Fargo Investment Institute sees the US economy at a turning point, with a mild slowdown likely in the months to come. They expect any potential slowdown to be short and shallow, with the economy's slide braced by easier monetary policy (i.e. falling interest rates). The Institute anticipates a solid economic recovery in 2025 with record highs reached on the S&P 500.

As of their most recent adjustment on October 21st, the Wells Fargo Investment Institute raised their 2025 S&P 500 price target and maintained their 2024 S&P 500 price target from the August update. Their projections for growth and inflation went different directions in 2024 and 2025, with a reduction in their forecast for this year and an increase for the next. Select estimates from Wells Fargo Investment Institute's October 21st update include:

2024

- S&P 500 Index Price Target: between 5,300 and 5,500
- S&P 500 Index Earnings-per-Share Forecast: \$245
- U.S. Economic Growth: 2.2%
- U.S. Consumer Price Index: 2.5% year-over-year

2025

- S&P 500 Index Price Target: between 6,200 and 6,400
- S&P 500 Index Earnings-per-Share Forecast: \$270
- U.S. Economic Growth: 2.3%
- U.S. Consumer Price Index: 3.0% year-over-year

³¹ As measured by a Bloomberg survey of Macro Strategists Across Wall Street compared with the S&P 500 index as of October 22, 2024. Data with permission from Bloomberg LP.

³² As measured the Bloomberg, LP, aggregation of sell-side analyst price targets for S&P 500 index as constituents as of October 22, 2024. Data with permission from Bloomberg LP.

³³ All Wells Fargo Investment Institute projections and forecasts can be found at <https://www.wellsfargoadvisors.com/research-analysis.htm>

GENERAL DISCLOSURES

Wells Fargo Advisors did not assist in the preparation of this report, and its accuracy and completeness are not guaranteed. The opinions expressed in this report are those of the author(s) and are not necessarily those of Wells Fargo Advisors or its affiliates. The material has been prepared or is distributed solely for information purposes and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy. Past performance is no guarantee of future results. Additional information is available upon request.

Wells Fargo Investment Institute, Inc. is a registered investment adviser and wholly-owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

FORECASTS DISCLOSURE

Forecasts are not guaranteed and based on certain assumptions and on views of market and economic conditions which are subject to change.

INDEX DISCLOSURES

Index returns are not fund returns. An index is unmanaged and not available for direct investment. Past performance is no guarantee of future results. *Index return information is provided for illustrative purposes only.* Index returns do not represent investment returns or the results of actual trading nor are they forecasts of expected gains or losses a fund might experience. Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses, or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. Past performance does not guarantee future results.

INDEX DEFINITIONS

The **Dow Jones Industrial Average** is a price-weighted index of 30 "blue-chip" industrial U.S. stocks.

The **Nasdaq 100 Index** is an unmanaged group of the 100 biggest companies listed on the NASDAQ Composite Index. The list is updated quarterly and companies on this Index are typically representative of technology-related industries, such as computer hardware and software products, telecommunications, biotechnology, and retail/wholesale trade.

The **S&P 500 Index** consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market value weighted index with each stock's weight in the Index proportionate to its market value.

The **S&P 500 Equal Weight Index** is the equal-weight version of the widely-used S&P 500. The index includes the same constituents as the capitalization weighted S&P 500, but each company in the S&P 500 EWI is allocated a fixed weight - or 0.2% of the index total at each quarterly rebalance.

The **S&P 400 Index** is a capitalization-weighted index measuring the performance of the mid-range sector of the U.S. stock market and represents approximately 7% of the total market value of U.S. equities. Companies in the Index fall between the S&P 500 Index and the S&P SmallCap 600 Index in size: between \$1-4 billion.

The **S&P 600 Index** consists of 600 domestic stocks chosen for market size, liquidity (bid-asked spread, ownership, share turnover and number of no trade days) and industry group representation. It is a market value-weighted index (stock price times the number of shares outstanding), with each stock's weight in the index proportionate to its market value.

The **S&P 1500 Index** represents the large cap, mid cap, and small cap segments of the U.S. equity market.

The **S&P 500 Materials Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Materials GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Communication Services Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Communication Services GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Energy Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Energy GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Financials Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Financials GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Industrials Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Industrials GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Information Technology Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Information Technology GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Consumer Staples Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Consumer Staples GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Real Estate Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Real Estate GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Utilities Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Utilities GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Health Care Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Health Care GICS Level 1 Sector group of the S&P 500.

The **S&P 500 Consumer Discretionary Index** is a capitalization-weighted index. The index was developed with a base level of 10 for the 1941-43 base period. The parent index is S&P 500. This Index Represents the Consumer Discretionary GICS Level 1 Sector group of the S&P 500.

The **Russell 1000 Growth Index** measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 1000 Value Index** measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The **FTSE All-World Developed ex. US Index** is a free float market capitalization weighted index. FTSE All-World Indices include constituents of the Large and Mid capitalization universe for Developed and Emerging Market (Advanced Emerging and Secondary Emerging) segments. Base Value 100 as of December 31, 1986.

The **FTSE All-World ex. US Index** is a free float market cap weighted index representing the performance of the large & mid cap stocks from the FTSE Global Equity Index Series. The index covers Developed & Emerging Markets excluding the United States. Base Value 100 as of December 31, 1986.

The **FTSE Global Middle East & Africa Index** is a free float market capitalization weighted index. FTSE Global All-Cap Indices include constituents of the Large, Mid and Small capitalization universe for the Developed and Emerging Market (Advanced Emerging and Secondary Emerging) segments. Base Value 100 as of December 31, 1986.

The **MSCI Indices**. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

The **MSCI Europe Index** currently consists of the following 16 developed market countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The Index is designed to broadly and fairly represent the full diversity of business activities in the markets detailed above.

The **MSCI Emerging Markets Index** is designed to represent the performance of large- and mid-cap securities in 24 Emerging Markets.

The **MSCI Emerging Markets ex. China Index** is designed to represent the performance of large- and mid-cap securities in 23 Emerging Markets excluding China.

The **MSCI China Index** is a free-float weighted equity index. It was developed with a base value of 100 as of December 31, 1992. This index is priced in HKD.

The **MSCI Japan Index** is a free-float weighted equity JPY index. It was developed with a base value of 100 as of December 31, 1969.

The **MSCI Asia Pacific ex. Japan Index** is a free-float weighted equity index. It was developed with a base value of 100 as of December 31, 1987.

The **MSCI Australia Index** is a free-float weighted equity index. It was developed with a base value of 100 as of December 31, 1969.

The **MSCI EM Latin America Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of emerging markets in Latin America. The Index consists of the following six emerging market country indices: Argentina, Brazil, Chile, Colombia, Mexico, and Peru. Source: MSCI. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI.

The **MSCI India Index** is a free-float weighted equity index. It was developed with a base value of 100 as of December 31, 1992.

The **Bloomberg U.S. Aggregate Bond Index** is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.

The **Bloomberg Global Aggregate Bond Index** is a flagship measure of global investment grade debt from a multitude of local currency markets. This multi-currency benchmark includes treasury, government-related, corporate, and securitized fixed-rate bonds from both developed and emerging markets issuers.

The **Bloomberg U.S. Treasury Index** measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index. STRIPS are excluded from the index because their inclusion would result in double-counting. (Future Ticker: I00054US)

The **Bloomberg US Treasury: Long Index** measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with 10 years or more to maturity. (Future Ticker: I00050US)

The **Bloomberg National Municipal Bond Index** is an unmanaged index of a broad range of investment-grade municipal bonds that measures the performance of the general municipal bond market.

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

The **Bloomberg U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt.

The **Bloomberg U.S. Mortgage-Backed Securities Index** is an unmanaged index of mortgage pools of the Government National Mortgage Association, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association.

The **Goldman Sachs MegaCap Technology Index** is an equal weighted basket of the largest US Tech companies. Stocks are selected by the GS TMT Sector Specialists and rebalanced on a quarterly basis.

The **Citi Economic Surprise Index - United States** measures economic data surprises relative to market expectations. A positive reading means that data releases have been stronger than expected and a negative reading means that data releases have been worse than expected.

The **ICI Money Market Funds Assets Index** measures total assets in money market funds for the week. The figure is a total of taxable and tax-exempt funds that reports to investment company institute.

TERMS AND FIGURES

EQUITY INDEX DATA

The **Price-to-Earnings Ratio** is the ratio of the price of a stock and the company's earnings per share. In this case, consensus next-twelve-month earnings estimates are used. Bloomberg aggregates earnings per share estimates from a survey of individual company analysts. Price-to-Earnings Ratios are given as of market close on June 30, 2023.

Yield. Dividend yield is calculated by annualizing the most recent dividend and dividing by the price of the stock. Index yield specifies the average dividend yield of constituents weighted by market value. Yields are given as of market close on June 30, 2023.

BOND INDEX DATA

Average Duration. Specifies the average modified duration of constituents weighted by market value. Duration is a measure of price sensitivity to changes in yields. It assumes cashflows do not change when rates change and does not take into account optionality (for example: callable or puttable bonds or mortgage-backed securities). Duration statistics are given as of market close on December 31, 2023.

Yield. Specifies the average yield-to-worst of constituents weighted by market value. Yield-to-worst is defined as the lowest yield of the yield to maturity, yield to call, or yield to refunding. Yields and market value will fluctuate so that your investment, if sold prior to maturity, may be worth more or less than its original cost. Yields are given as of market close on December 31, 2023.

SECTOR DISCLOSURES

Risks associated with investment in the **Consumer Discretionary** sector include, among others, apparel price deflation due to low-cost entries, high inventory levels and pressure from e-commerce players; reduction in traditional advertising dollars, increasing household debt levels that could limit consumer appetite for discretionary purchases, declining consumer acceptance of new product introductions, and geopolitical uncertainty that could affect consumer sentiment.

Consumer Staples industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, government regulation, the performance of the overall economy, interest rates, and consumer confidence.

The **Energy** sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources, and risks that arise from extreme weather conditions.

Financial Services companies will subject an investment to adverse economic or regulatory occurrences affecting the sector.

Some of the risks associated with investment in the **Health Care** sector include competition on branded products, sales erosion due to cheaper alternatives, research and development risk, government regulations and government approval of products anticipated to enter the market.

There is increased risk investing in the **Industrials** sector. The industries within the sector can be significantly affected by general market and economic conditions, competition, technological innovation, legislation, and government regulations, among other things, all of which can significantly affect a portfolio's performance.

Materials industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement and manufacturing and cost containment issues.

Real Estate investments have special risks, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Risks associated with the **Technology** sector include increased competition from domestic and international companies, unexpected changes in demand, regulatory actions, technical problems with key products, and the departure of key members of management. Technology and Internet-related stocks smaller, less-seasoned companies, tend to be more volatile than the overall market.

The **Telecommunications** sector is subject to the risks associated with rising interest rates which could increase debt service costs, competition, increased costs to providers due to potential for large equipment upgrades.

Utilities are sensitive to changes in interest rates, and the securities within the sector can be volatile and may underperform in a slow economy.

OTHER DISCLOSURES

Investments in fixed-income securities are subject to market, interest rate, credit, and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can cause a bond's price to fall. Credit risk is the risk that an issuer will default on payments of interest and/or principal. This risk is heightened in lower rated bonds. If sold prior to maturity, fixed income securities are subject to market risk. All fixed income investments may be worth less than their original cost upon redemption or maturity.

TIPS interest rate, which is set at auction, remains fixed throughout the term of the security. The principal amount of the security is adjusted for inflation, but the inflation-adjusted principal will not be paid until maturity although the adjustment will be subject to income tax in the year it was earned.

Wells Fargo Advisors is not a tax or legal advisor. Please consult with your tax or legal professional concerning your particular situation.

Investment and insurance products are offered through Wells Fargo Advisors, a trade name used by Wells Fargo Clearing Services, LLC, Member SIPC, registered broker-dealer and non-bank affiliate of Wells Fargo & Company.