

Capital Markets Snapshot

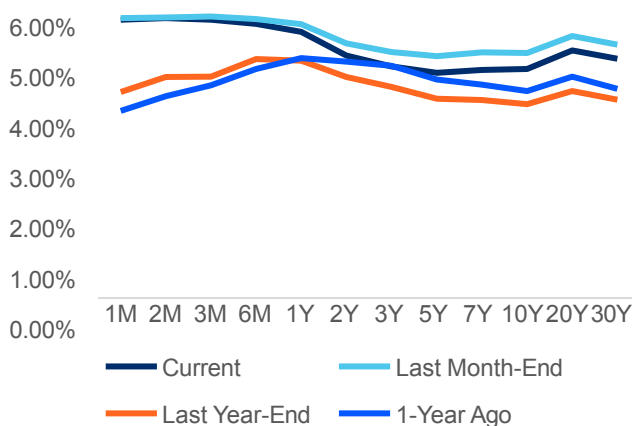
Week ending November 3, 2023

Signs of a slowing job market and a continued pause from the Federal Reserve helped the equity markets make their largest weekly gains of the year. As expected, the FOMC did not make any adjustments to the current Fed Funds rate at their meeting on Wednesday. Fed Chairman Powell continued to stress that no decision has been made on future moves but did note that job gains were slowing. That point was supported on Friday when the October Non-Farm Payroll report came in below expectations with a gain of 150,000 jobs.

Fixed Income Markets Overview

- Yields reversed from their upward trend of the past few weeks with the 2-, 10-, and 30- year U.S. Treasury yields all falling below 5% by the week's end.
- This week's economic news is leading investors to believe the Fed may be done with this interest rate hiking cycle. As of Friday, CME FedWatch Tool was only reflecting a 4.6% chance of a rate increase at the December 13th FOMC meeting.
- The U.S. Treasury announced an increase in their refunding auctions this week. The first round of auctions will raise an additional \$9 billion in extra funding, while later auctions will be increased as well.

U.S. Treasury Yield Curve



Source: Bloomberg and U.S Treasury as of November 3, 2023

Asset Class	Name	1W	YTD	3Y(Ann.)	5Y(Ann.)
Short	1-3 Year Govt/Credit	0.43%	2.73%	-0.47%	1.31%
Core Plus	Intermediate Govt/Credit	1.07%	1.49%	-2.69%	1.24%
	International Aggregate	1.93%	-1.24%	-6.84%	-1.21%
	US Aggregate	1.99%	-0.53%	-5.03%	0.46%
	US Treasury	1.52%	-0.90%	-5.51%	0.21%
	US TIPS	1.46%	0.36%	-1.49%	2.74%
	US Corporate	2.08%	0.56%	-5.07%	1.39%
Other	US Corporate High Yield	2.76%	7.20%	1.51%	3.51%
	Emerging Markets Aggregate	2.12%	1.50%	-4.35%	0.58%
Muni	US Municipals	1.88%	-0.42%	-2.03%	1.43%
	US Municipals High Yield	2.62%	0.96%	-0.59%	2.26%

Source: Bloomberg as of November 3, 2023

Interest Rates (%)				
Date	11/3/2023	10/31/2023	12/30/2022	11/3/2022
Federal Funds Rate	5.53%	5.56%	4.12%	3.75%
3 Month Treasury	5.53%	5.59%	4.42%	4.25%
6 Month Treasury	5.45%	5.54%	4.76%	4.57%
2 Year Treasury	4.83%	5.07%	4.41%	4.71%
5 Year Treasury	4.49%	4.82%	3.99%	4.36%
10 Year Treasury	4.57%	4.88%	3.88%	4.14%
30 Year Treasury	4.77%	5.04%	3.97%	4.18%
US Aggregate	5.30%	5.65%	4.68%	5.11%
US Corporate	6.00%	6.35%	5.42%	6.00%
US Corporate High Yield	8.83%	9.49%	8.96%	9.22%
US Municipal	4.23%	4.49%	3.55%	4.17%
US Municipal High Yield	6.22%	6.45%	5.83%	6.25%
Spreads Over 10-Year US Treasuries				
Date	11/3/2023	10/31/2023	12/30/2022	11/3/2022
30 Year Treasury	0.20%	0.16%	0.09%	0.04%
US Aggregate	0.73%	0.77%	0.80%	0.97%
US Corporate	1.43%	1.47%	1.54%	1.86%
US Corporate High Yield	4.26%	4.61%	5.08%	5.08%
US Municipal	-0.34%	-0.39%	-0.33%	0.03%
US Municipal High Yield	1.65%	1.57%	1.95%	2.11%

Source: Bloomberg and U.S. Treasury as of November 3, 2023

Equity Markets Overview

- As noted, all three major equity indices were positive for the week with each up by more than 5%. All eleven of the S&P equity sectors were higher, led by Real Estate, which was up by 8.4%.
- Despite the positive week for equities, October marked the third consecutive monthly loss for the three major indices.
- It was a huge week for earnings reports with positive results from Starbucks, Shell Oil, and Qualcomm. Apple reported earnings above estimates but announced that sales had fallen below expectations. Companies that reported third quarter results below expectations included Peloton, Moderna, and Pfizer.

Asset Class	Name	1W	YTD	3Y(Ann.)	5Y(Ann.)
All-Cap	S&P 1500	5.96%	13.99%	9.86%	11.34%
Large-Cap	S&P 500	5.88%	15.05%	9.88%	11.78%
	S&P 500 Growth	5.39%	19.68%	6.28%	12.55%
	S&P 500 Value	6.48%	10.00%	13.49%	9.97%
Mid-Cap	S&P Midcap 400	6.56%	3.39%	9.38%	7.59%
	S&P Midcap 400 Growth	5.77%	5.98%	5.09%	7.26%
	S&P Midcap 400 Value	7.48%	0.68%	13.89%	7.48%
Small-Cap	S&P Smallcap 600	7.49%	0.69%	9.74%	4.98%
	S&P Smallcap 600 Growth	6.01%	2.00%	6.38%	4.69%
	S&P Smallcap 600 Value	8.90%	-0.65%	13.07%	4.98%
Int'l.	MSCI ACWI ex-USA	4.27%	5.30%	2.94%	3.93%
	MSCI EM	3.12%	1.42%	-3.44%	1.47%

Source: Bloomberg as of November 3, 2023

Alternative Markets Overview

- The price of oil closed down for the week, while gold was up slightly.
- Sam Bankman-Fried, founder and former CEO of cryptocurrency exchange FTX, was found guilty of seven criminal charges this week related to defrauding his customers and investors.
- Bitcoin traded in a tight range during the week, at one point touching a 2023 high of almost \$36,000 but pulled back by Friday. For the month of October, Bitcoin was up by 27%.

Name	1W	YTD	3Y (Ann.)	5Y (Ann.)
S&P GSCI	-2.18%	2.96%	27.57%	6.25%
Gold	0.58%	9.96%	1.63%	10.11%
FTSE All Equity NAREIT	8.76%	-2.88%	3.27%	4.04%
Bitcoin	2.59%	108.25%	35.01%	40.34%
Ethereum	2.55%	51.78%	65.44%	55.50%

Source: Bloomberg as of November 3, 2023



Upcoming Week

- It will be a light week for economic news but look for U.S. Consumer Credit and Trade Balance on Tuesday.
- The University of Michigan Consumer Sentiment Index will be released on Friday. Current expectations are looking for a slight increase from the previous reading of 63.8.
- Earnings season will continue this week with third quarter results from D.R. Horton, Uber, Walt Disney, and Occidental Petroleum.

Glossary and Disclosures

This commentary is brought to you courtesy of MML Investors Services, a subsidiary of Massachusetts Mutual Life Insurance Company. Securities, investment advisory, and wealth management solutions offered by MML Investors Services, LLC member SIPC, a registered broker-dealer, and a registered investment adviser. Strategic Financial Partners is not a subsidiary or affiliate of MML Investors Services, LLC or its affiliated companies.

Past performance is not indicative of future results. Indexes are unmanaged. You cannot invest directly in an index.

This material does not constitute a recommendation to engage in or refrain from a particular course of action. The information within has not been tailored for any individual. The opinions expressed herein are those of the author as of the date of writing and are subject to change. Also, this material may contain forward looking statements that are subject to certain risks and uncertainties. Actual results, performance, or achievements may differ materially from those expressed or implied.

Neither MML Investors Services, LLC, nor its representatives, can assist with digital asset purchases or sales or otherwise provide investment advice concerning digital assets, such as cryptocurrencies. Any information provided is educational in nature and should not be relied upon to make digital asset related decisions.

S&P 1500 Index combines three leading indices, the S&P 500, the S&P Midcap 400, and the S&P Smallcap 600, to cover approximately 90% of U.S. equity market capitalization.

S&P 500 Index includes approximately 500 leading companies that covers approximately 80% of available U.S. equity market capitalization.

S&P 500 Growth Index is a stock index that represents the fastest-growing companies in the S&P 500 based on three factors: sales growth, ratio of earnings change to price, and momentum.

S&P 500 Value Index is a stock index that represents the companies in the S&P 500 with the most attractive valuations based on three factors: book value, earnings, and sales to price.

S&P Midcap 400 Index is distinct from the large-cap S&P 500 and designed to measure the performance of 400 U.S. mid-sized companies, which have differing liquidity and growth potential than large and small cap companies.

S&P Midcap 400 Growth Index is a stock index that represents the fastest-growing companies in the S&P Midcap 400 based on three factors: sales growth, ratio of earnings change to price, and momentum.

S&P Midcap 400 Value Index is a stock index that represents the companies in the S&P Midcap 400 with the most attractive valuations based on three factors: book value, earnings, and sales to price.

S&P Smallcap 600 Index measures the performance of 600 small-sized U.S. companies to reflect the small-cap segment of the U.S. equity market, which is typically known for less liquidity than large cap stocks.

S&P Smallcap 600 Growth Index is a stock index that represents the fastest-growing companies in the S&P Smallcap 600 based on three factors: sales growth, ratio of earnings change to price, and momentum.

S&P Smallcap 600 Value Index is a stock index that represents the companies in the S&P Smallcap 600 with the most attractive valuations based on three factors: book value, earnings, and sales to price.

MSCI ACWI ex-US Index captures large and mid-cap representation across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries.

MSCI Emerging Markets Index captures large and mid-cap representation across 24 Emerging Markets (EM) countries.

S&P GSCI is broad-based and production weighted to represent the global commodity market beta. The index is designed to be investable by including the most liquid commodity futures.

S&P GSCI Gold a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark tracking the COMEX gold future.

FTSE All Equity NAREIT Index contains all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property that also meet minimum size and liquidity criteria.

Bitcoin USD Spot Exchange Rate measures the last price of 1 Bitcoin in USD.

Bloomberg Galaxy Bitcoin Index is designed to measure the performance of a single bitcoin traded in USD.

Ethereum USD Spot Exchange Rate measure the last price of 1 Ethereum in USD.

Bloomberg Galaxy Ethereum Index is designed to measure the performance of a single Ethereum traded in USD.

Bloomberg Barclays 1-3 Year Govt/Credit Index is the 1-3 Yr. component of the U.S. Government/Credit index, which includes securities in the Government, which includes treasuries and agencies debt securities, and Credit Indices, which includes publicly issued U.S. corporate and foreign debt that meet specified maturity, liquidity, and quality requirements.

Bloomberg Intermediate US Government/Credit Bond Index is a broad-based flagship benchmark that measures the non-securitized component of the US Aggregate Index with less than 10 years to maturity; this includes investment grade, US dollar-denominated, fixed-rate treasuries, government-related and corporate securities

Bloomberg Barclays Global Aggregate Bond Index provides a broad-based measure of the global investment-grade fixed income markets, with three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices.

Bloomberg Barclays U.S. Aggregate Bond Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

Bloomberg Barclays U.S. Treasury Aggregate Bond Index is the U.S. Treasury component of the U.S. Government index and represents public obligations of the U.S. Treasury with a remaining maturity of one year or more.

Bloomberg US TIPS Index consists of Inflation-Protection securities issued by the U.S. Treasury.

Bloomberg Barclays US Corporate Bond Index is the Corporate component of the U.S. Credit index and represents publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements.

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

Bloomberg Barclays Emerging Markets Bond Index is broad-based with country eligibility and classification as an Emerging Market being rules-based and reviewed on an annual basis using World Bank income group and International Monetary Fund (IMF) country classifications.

Bloomberg Barclays U.S. Municipal Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market.

Bloomberg Barclays US High Yield Municipal Index is an unmanaged index of noninvestment-grade municipal debt securities, which provides a representation of the performance of US high-yield tax-exempt bonds.

Federal Funds Rate is the interest rate at which depository institutions trade federal funds (balances held at Federal Reserve Banks) with each other overnight.

U.S. Treasury Securities are issued by the federal government and are considered to be among the safest investments you can make, because all Treasury securities are backed by the "full faith and credit" of the U.S. government.

©2022 Massachusetts Mutual Life Insurance Company, Springfield, MA 01111-0001 All Rights Reserved. www.massmutual.com

MM202611-307366