Market Update

MARKET UPDATE

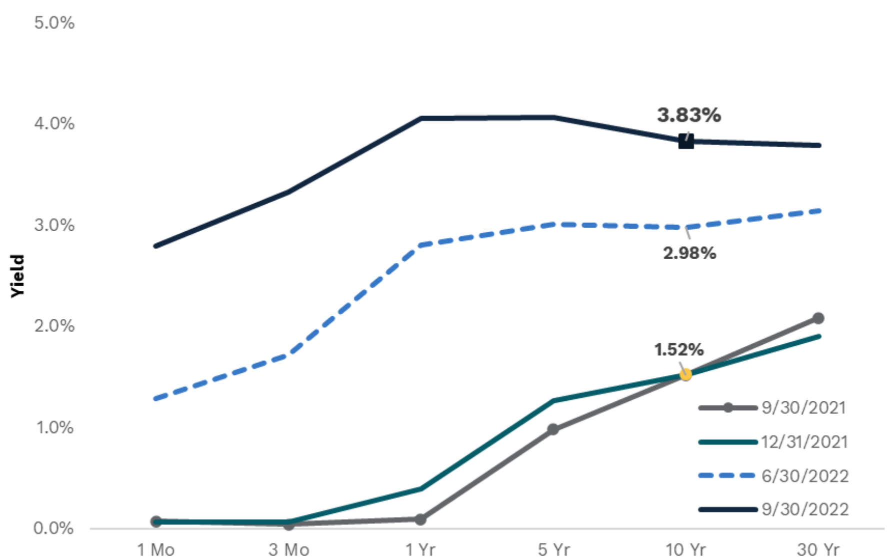
A rally in July built on the hopes that inflationary pressures were beginning to subside, came to a screeching halt mid-quarter. The market accelerated nearly 14% from July 1st to mid-August, but then spent the remainder of the quarter giving up all those gains and more, down 17%. At the epicenter of the shift in investor sentiment was the Federal Reserve which pounced on the persistently high inflation data as support for further tightening. During the period, the Federal Reserve, European Central Bank and Bank of England all raised interest rates. US markets outperformed non-US markets and emerging markets paced the decline as a stronger dollar continued to weigh heavily on investor returns overseas. The US equity market, as measured by the S&P 500 Index, posted a -4.9% decline for the period with nine of the eleven sectors pushing lower.

It's easy to find reason for concern these days. It is precisely that wall of worry where bull markets are born. We have a mid-term election on the docket in early November that will provide some clarity for the markets. Inflationary data has remained stubbornly high, but is beginning to march lower. Earnings data has remained strong despite formidable headwinds from an historically strong US Dollar. Lastly, employment data has shown little signs of slowing. Rising interest rates have pummeled fixed income investors, but for the first time in decades yields on cash reserves are approaching respectable levels. All told, while we may be in for yet another volatile and muddled period, it is precisely this shared dour sentiment which should plant the seed for patient investors to harvest in the years to come.

MARKET SUMMARY – Short- and Long-Term Index Returns

Investor sentiment vacillated wildly during the period against a drumbeat of powerful economic and geopolitical headwinds. Against that backdrop, the US stock market, as measured by the Russell 3000 Index, declined -4.5% in the quarter and is down -24.6% year-to-date. Developed markets outpaced emerging markets, small cap bested large cap and growth outperformed their value brethren.

The Fed has been under pressure to stabilize prices as a result of higher inflation. Fixed income investors took note of the Federal Reserve's continued efforts as interest rates moved higher across all maturities during the period. The US yield curve flattened as the 10-Year Treasury Yield ended the quarter at 3.83%, 85 basis points higher. The upward move in interest rates, coupled with tightening credit spreads, pushed bond prices lower. The broad fixed income market, as measured by the Bloomberg U.S. Aggregate Bond Index, dropped -4.8%, and is now down -14.6% year-to-date.

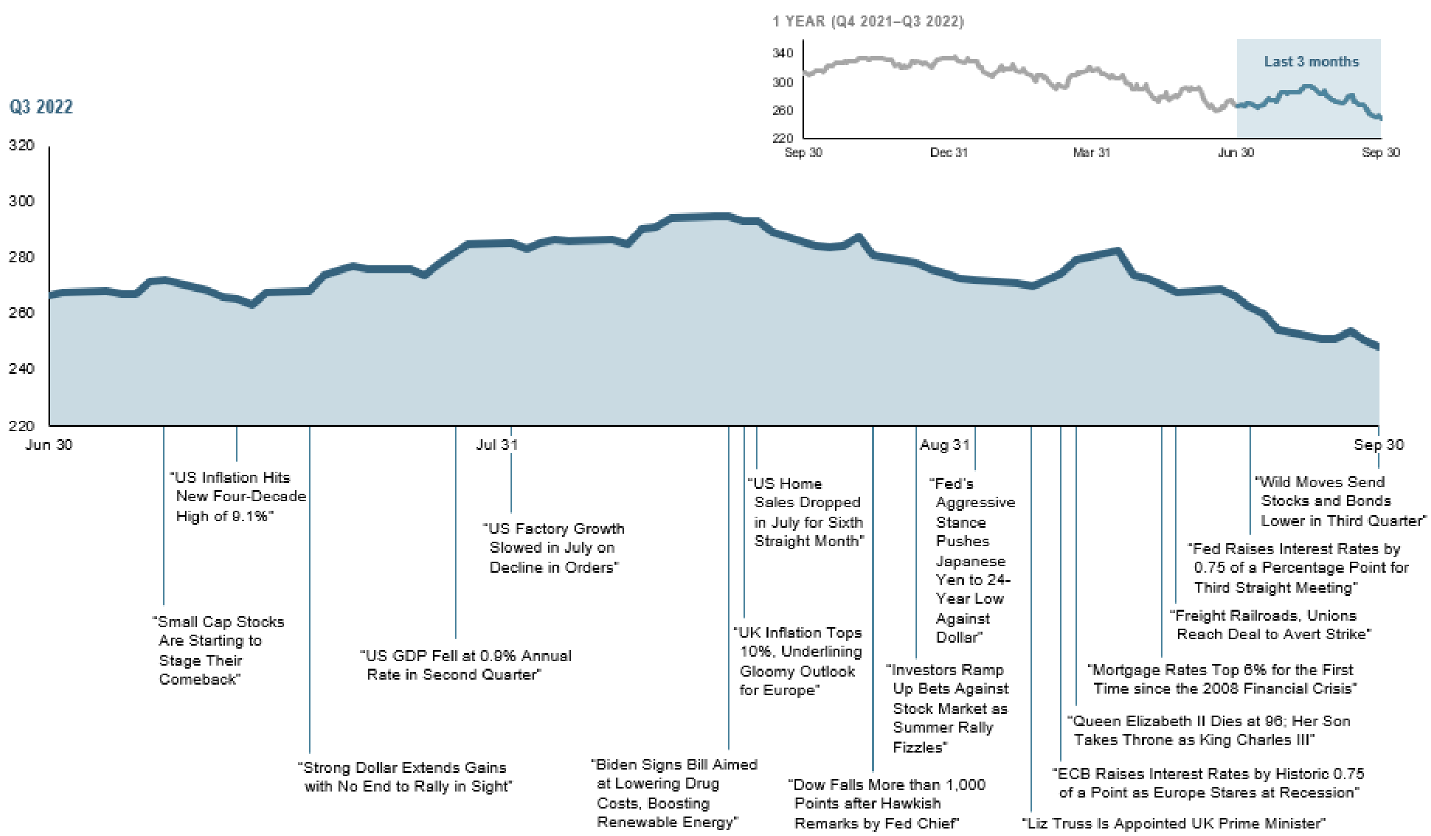


PERFORMANCE SNAPSHOT

	US Stock Market	International Developed Stocks	Emerging Market Stocks	Global Real Estate	US Bond Market	Global Bond Market ex-US
Q3 2022	-4.46%	-9.20%	-11.57%	-13.18%	-4.75%	-8.85%
YTD	-24.62%	-26.23%	-27.16%	-30.48%	-14.61%	-23.88%
1 Year	-17.63%	-23.91%	-28.11%	-27.32%	-14.60%	-24.77%
5 Year	8.62%	-0.39%	-1.81%	-3.01%	-0.27%	-4.03%
10 Year	11.39%	3.62%	1.05%	1.12%	0.89%	-2.39%

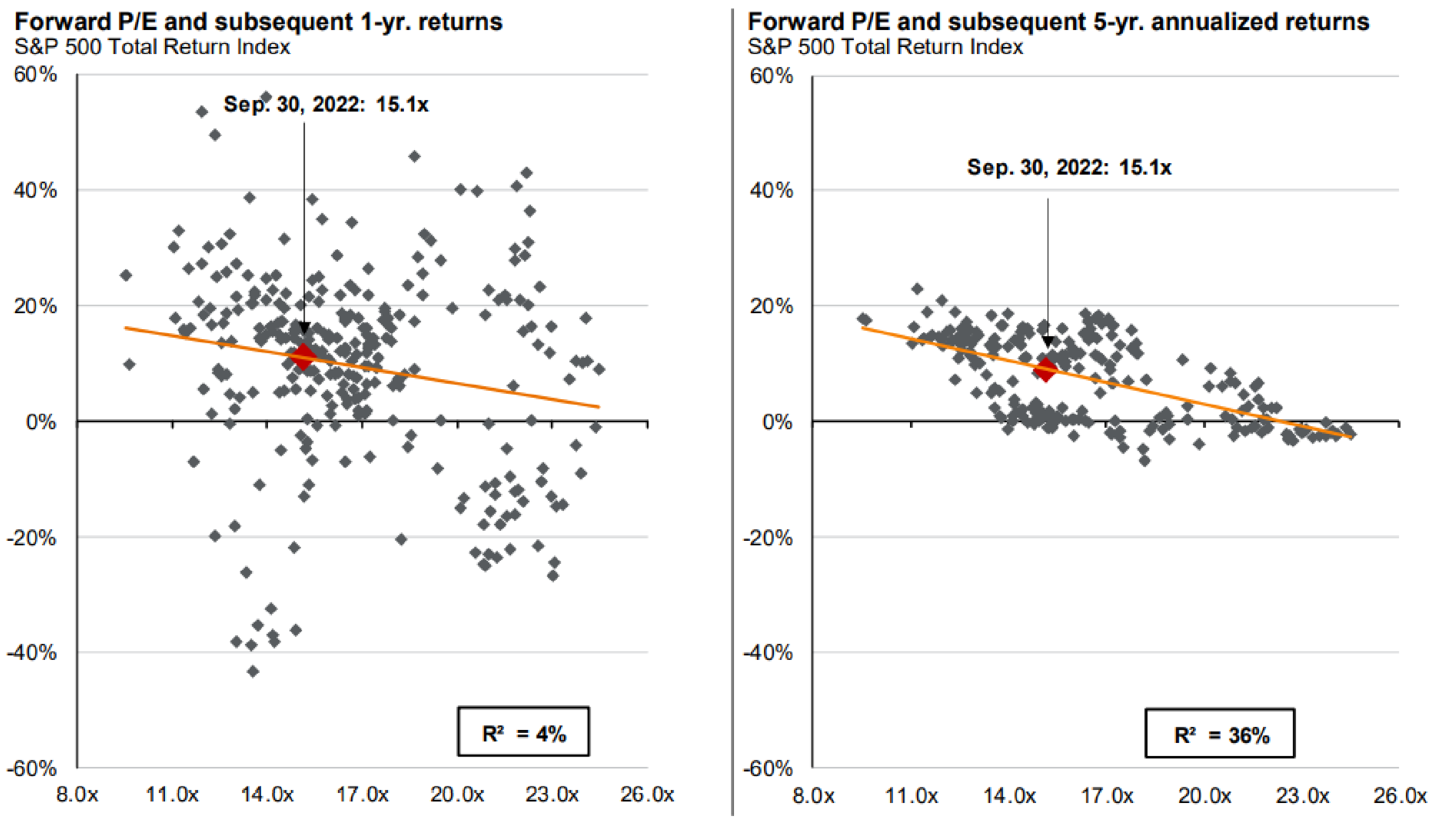
Index performance is provided as a benchmark. It is not illustrative of any particular investment. An investment cannot be made in an index. Past performance is not an indication of future results. Russell 3000 Index, MSCI World ex USA Index, MSCI Emerging Markets Index, S&P Global REIT Index, Bloomberg Aggregate Bond Index and Bloomberg Global Aggregate Bond Index ex-US. Returns as of 9/30/2022

WORLD STOCK MARKET PERFORMANCE – Selected headlines from the past 3 months



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

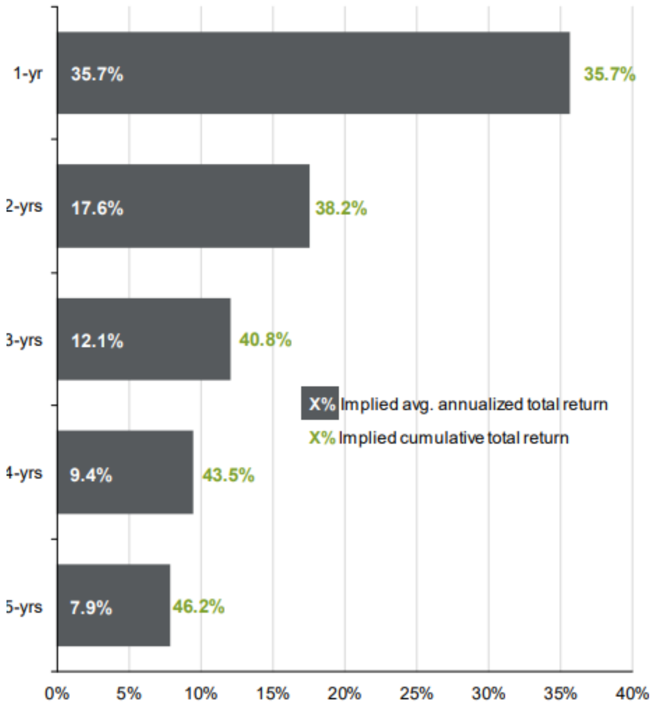
VALUATIONS MATTER – Short-term and longer-term outlook encouraging. At current valuations, the typical go-forward result is positive, especially over longer time periods.



Source: FactSet, Refinitiv Datastream, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management. Returns are 12-month and 60-month annualized total returns, measured monthly, beginning 5/31/97. R^2 represents the percent of total variation in total returns that can be explained by forward price-to-earnings ratios. Price-to-earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since January 1997 and by FactSet since January 2022. Guide to the Markets – U.S. Data are as of June 30, 2022.

SCENARIO – Now what? With the market officially falling into a Bear market, it's important to put the returns needed to recover and the typical duration of these market wobbles into context.

Return needed to reach January 2022 peak
Current S&P 500 peak is 4797



Bull markets			Bear markets		
Bull begin date	Bull return	Duration (months)	Market peak	Bear return*	Duration (months)*
Jul 1926	152%	37	Sep 1929	-86%	32
Mar 1935	129%	23	Mar 1937	-60%	61
Apr 1942	158%	49	May 1946	-30%	36
Jun 1949	267%	85	Aug 1956	-22%	14
Oct 1960	39%	13	Dec 1961	-28%	6
Oct 1962	76%	39	Feb 1966	-22%	7
Oct 1966	48%	25	Nov 1968	-36%	17
May 1970	74%	31	Jan 1973	-48%	20
Mar 1978	62%	32	Nov 1980	-27%	20
Aug 1982	229%	60	Aug 1987	-34%	3
Oct 1990	417%	113	Mar 2000	-49%	30
Oct 2002	101%	60	Oct 2007	-57%	17
Mar 2009	401%	131	Feb 2020	-34%	1
Mar 2020	114%	21	Jan. 2022**	-25%	8
Averages	**162%**	**51**	**-**	**-41%**	**20**

*Source: FactSet, NBER, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management. (Right) The current peak of 4797 was observed on January 3, 2022. The current market level as of June 30, 2022 is 3785. (Left) *A bear market is defined as a 20% or more decline from the previous market high. The related market return is the peak to trough return over the cycle. Bear and bull returns are price returns. **The bear market beginning in January 2022 is currently ongoing. The "bear return" for this period is from the January 2022 market peak through the current trough. Averages for the bear market return and duration do not include figures from the current cycle. Guide to the Markets – U.S. Data are as of September 30, 2022*

SCENARIO – Feeling gloomy about the go-forward? You are not alone. Fortunately, that general sentiment doesn't stay at these lower levels for very long. Moreover, the market returns subsequent to a trough in sentiment have been remarkably strong.