THIRD QUARTER 2022

Matt's Market Update

IN THIS REPORT

Matthew H. McPhail, CFA
Chief Investment Officer

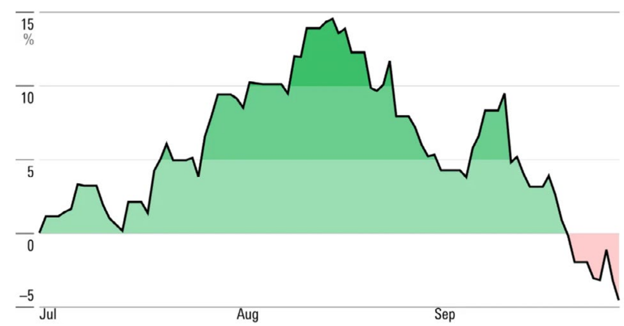
Market Review

Equities rallied to start Q3 following a historically poor first half of the year. Rebounding from deeply oversold levels, the beleaguered NASDAQ and Russell 2000 indices rallied by double-digit percentages into August giving hopes to investors that the bear market in equities was over. Unfortunately, market momentum faded in August following the Federal Reserve meeting in Jackson Hole and markets finished Q3 with declines across the board. To illustrate the rollercoaster ride that investors faced during the quarter, the S&P 500 index rallied +13.73% from the start of the quarter through August 16th, only to see a decline from there of -16.71% to close the quarter. U.S. equity indices fell by 2%-6% in Q3 depending on the index, while the declines were much worse for overseas benchmarks. The MSCI ACWI ex U.S. index declined -9.91% in Q3 as fears mounted over the growing energy crisis in Europe as tensions with Russia have escalated. In addition, the U.S. Dollar has strengthened dramatically against all foreign currencies this year causing additional pain for overseas investments.

Fixed-income markets suffered additional losses as well in Q3. The Fed implemented 75 basis point rate hikes at both their July and September policy meetings in their ongoing efforts to fight inflation. The effective federal-funds rate target finished the quarter at 3.00%-3.25%, the highest level since 2008. Current expectations are for additional Fed rate hikes at both their November and December meetings. Bonds exhibited the same pattern as stocks in Q3 with a rally to start the quarter (as yields declined) only to see a sharp reversal that led to losses. The market hopes over the summer for an early Fed "pivot" or change in current policy were effectively dashed at the Fed's September meeting where they gave every indication of their willingness to keep raising interest rates through year-end. Looking at the short end of the Treasury yield curve, the two-year Treasury note yield finished the quarter higher at 4.22%, up from 2.84% at the start of Q3.

As we discussed in the last quarterly update, the bond market remains in a condition known as the inverted yield curve. This describes a condition where short-term yields are higher than long-term yields. A comparison of two-year versus ten-year Treasury yields is the most common (though not only) way to judge yield curve inversion. An inverted yield curve typically has served as an early warning signal for an economic recession. While views are mixed as to whether a recession is officially here, there is no doubt that market sentiment to end the quarter has rarely been more negative.

U.S. STOCK MARKET PERFORMANCE IN Q3 2022



Source: Morningstar Direct, Morningstar Indexes.
Data as of September 30, 2022.

Chart Review

Here are a few of the charts that grabbed our attention in Q3.

This chart compares the YTD -26% bear market for the S&P 500 against other historical periods. While we're right near the median without a recession, history suggests we could expect more downside if we should enter into a recession.

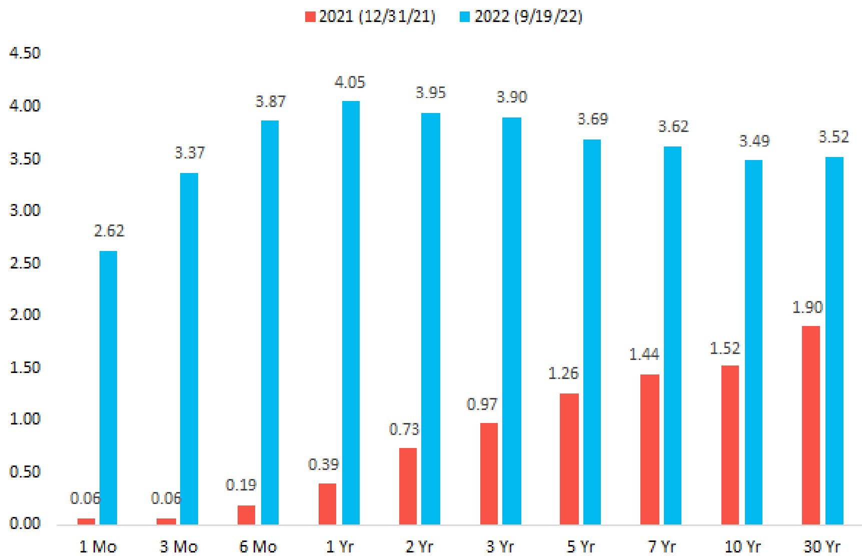
S&P 500 BEAR MARKETS (DEFINED BY 20% PEAK TO TROUGH DECLINE): 1929 - PRESENT

Bear Market Period	Length of Bear Market (Months)	NBER Recession	Length of Recession (Months)	S&P Start	S&P End	% Change
Jan 2022 to Sep 2022	8	?		4819	3584	-26%
Feb 2020 to Mar 2020	1	Feb 2020 to Apr 2020	2	3394	2192	-35%
Sep 2018 to Dec 2018	3			2941	2347	-20%
May 2011 to Oct 2011	5			1371	1075	-22%
Oct 2007 to Mar 2009	17	Dec 2007 to Jun 2009	18	1576	667	-58%
Mar 2000 to Oct 2002	31	Mar 2001 to Nov 2001	8	1553	769	-51%
Jul 1998 to Oct 1998	3			1191	923	-22%
Jul 1990 to Oct 1990	3	Jul 1990 to Mar 1991	8	370	295	-20%
Aug 1987 to Oct 1987	2			338	216	-36%
Nov 1980 to Aug 1982	22	Jul 1981 to Nov 1982	16	142	102	-28%
Sep 1976 to Mar 1978	18			109	86	-20%
Jan 1973 to Oct 1974	21	Nov 1973 to Mar 1975	16	122	61	-50%
Dec 1968 to May 1970	17	Dec 1969 to Nov 1970	11	109	69	-37%
Feb 1966 to Oct 1966	8			95	72	-24%
Dec 1961 to Jun 1962	6			73	51	-29%
Aug 1956 to Oct 1957	14	Aug 1957 to Apr 1958	8	50	39	-21%
Jun 1948 to Jun 1949	12	Nov 1948 to Oct 1949	11	17	14	-21%
May 1946 to May 1947	12			19	14	-28%
Nov 1938 to Apr 1942	36			14	7	-46%
Mar 1937 to Mar 1938	12	May 1937 to Jun 1938	13	19	9	-54%
Jul 1933 to Mar 1935	20			12	8	-34%
Sep 1932 to Feb 1933	5	Aug 1929 to Mar 1933	43	9	6	-41%
Sep 1929 to Jun 1932	33	Aug 1929 to Mar 1933	43	32	4	-86%
Average With No Recession	**12**					**-29%**
Average With Recession	**16**					**-42%**
Average All	**14**					**-36%**
Median With No Recession	**7**					**-26%**
Median With Recession	**16**					**-39%**
Median All	**12**					**-29%**

Source: @CharlieBilello
Note: Includes intra-day highs/lows

While we're all well aware that interest rates have risen dramatically in 2022, this chart really puts it into perspective.

U.S. TREASURY BOND YIELDS: 2022 VS. 2021



Source: @CharlieBilello

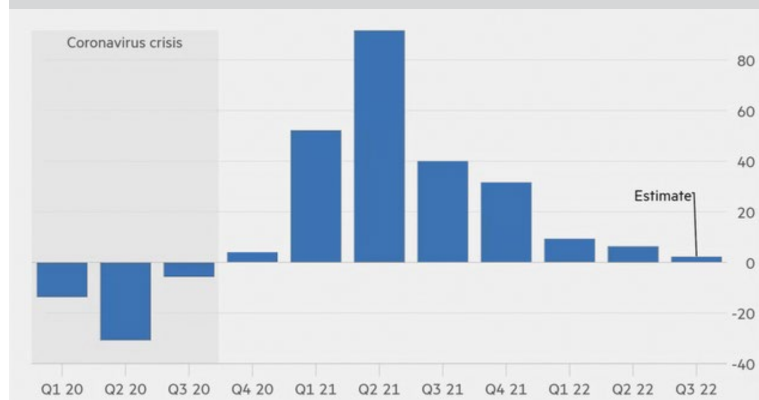
The 30-year mortgage rate reached 6.70% in early October, the highest level since July 2007. This represents the largest year-over-year jump in rates since 1980-81.

U.S. 30-YEAR MORTGAGE RATE (%)

Source: @CharlieBilello

Wall Street analysts have dramatically cut their corporate earnings estimates for Q3 and now expect year-over-year growth rates to resemble those last seen during the Covid crisis. Stock prices are following the earnings trend lower.

BIG U.S. COMPANIES EXPECTED TO POST SLOWDOWN IN PROFIT GROWTH (YEAR ON YEAR CHANGE IN EPS (%))



Source: @CharlieBilello

PLANNING FOR YEAR-END

Wealth Management Corner

James Bremis, CFP®, AIF®, CPFA®, Senior Financial Planner, Private Client Group

When markets are performing as they have been throughout 2022, we feel this urge to take action. All of us have a natural tendency to try and fix our problems, to take control, rather than do nothing. But some actions, like moving to cash, may be detrimental to portfolios during volatile markets. To draw an analogy: Imagine yourself as a goalkeeper in soccer. Studies have shown that statistically, you are more likely to stop a penalty kick by staying in the middle. That's not to say you should ALWAYS stand in the middle, but we are often emotionally geared to fix or do something when we are feeling anxious. This is what behaviorists call "action bias," or thinking that value can only be realized through action. It is the tendency to act as opposed to practicing restraint.

In times like these, we want to avoid acting emotionally when making changes to portfolios and financial plans. By taking the emotion out of investing, we're able to think more clearly and recognize the opportunities that volatile markets may present. Market volatility is largely out of our control, so it's important to focus on the things we can control.

With that, I wanted to share some key planning ideas for year-end:

1. **Rebalance your portfolio-** you want to maintain your target risk tolerance as the prices of your underlying investments fluctuate by buying more of the securities that have underperformed and selling some of your positions that have done comparatively well. For private clients, your financial planner may already be doing this for you.

2. **Tax Loss Harvesting-** over the last few years, investors have generated significant capital gains in taxable accounts and, in turn, high potential tax liabilities. If you have positions that are down, realizing those losses could potentially offset any gains you realize as well. This works well if you want to access part of your portfolio in the near future, giving you a tax-efficient way to free up some cash for new investment opportunities or to supplement your current income.

3. **Roth Conversions-** Roth conversions consistently come up when talking to clients. The hard part is finding a good time to execute them. Consider making the revisions now. If you have cash on the sideline and positions in the market, this is a good option, especially if you are uncertain about your prospects in the market over the next few months. Effectively, you would convert your positions in your pre-tax account in-kind to a Roth account, taking advantage of the lower tax bill you may have now because of the lower prices you have in your positions. Your cash on hand could be put to work without taking on volatility by paying this year's tax bill on the conversion, setting you up for potential tax-free future growth.

4. **Keep contributing to your investment portfolio-** any new money you invest now would take advantage of the current market prices.

5. **Charitable Giving Strategies-** if you have required minimum distributions and have philanthropic interests, you may want to review your charitable giving strategy. Philanthropic retirees commonly overlook so-called qualified charitable distributions, or QCDs, a direct transfer from their IRAs. Rather than counting as an itemized deduction, QCDs may reduce adjusted gross income and can satisfy yearly required minimum distributions. If you're age 70½ or older, you may use QCDs to donate up to $100,000 per year. Transfers at age 72 or older may count as required minimum distributions.

If you want to discuss whether any of these options make sense for you, please reach out to your Sentinel financial planner.

Our Portfolio Strategy & Allocation Outlook

We made no changes to managed private client accounts in Q3. We finished the quarter as we began, by being conservatively positioned across the various asset classes with plenty of dry powder in the form of short-term fixed-income that can be deployed elsewhere if opportunities arise. While we can certainly see a scenario with more downside ahead for global equity prices, the time to shift into a maximum defensive posture is probably now past in our opinion.

Here are two silver linings (one short-term and one long-term) for investors to consider as we enter the home stretch for 2022. On a short-term basis, investor sentiment has rarely been more bearish (and this is positive). With data going back to 1987, the American Association of Individual Investors (AAII) conducts a weekly sentiment survey to gauge whether investors are bullish or bearish. Think of it as taking the temperature of the crowd. Historically, the most bearish readings have come near turning points for the market. As of the end of the quarter, there have only been two times when this survey was more bearish than where it recently finished Q3. In October of 1990 and March of 2009, both instances marking the end of bear markets. Again, this doesn't mean we're at a bottom for stock prices now, but this is the type of sentiment reading that typically means investors are giving up and opportunities are at hand. In terms of a longer-term view, consider that the Wilshire 5000 index (perhaps the broadest measure of the U.S. equity market) was down 25.9% in the last 9 months, one of the worst 9-month periods for stocks in the last 50 years. Research from Charlie Billelo helps us to understand the question of whether selling your equities after a 20%+ decline in the Wilshire 5000 index is a good idea with data back to 1971. Simply put, it's too late for selling after such a decline if you believe in historical perspective. In looking at twenty instances of declines of 20% or more for the index, 19 of 20 subsequent one-year time periods showed gains for the index while all subsequent three- and five-year periods showed gains. The message is clear. Any investor with a multi-year timeframe for investment should be considering buying or holding, rather than selling equities at this point in the market cycle.

Please let us know if you'd like to discuss your personal investing and financial planning needs.

Matthew H. McPhail, CFA
Chief Investment Officer

David Batchelder, CFA, CFP®
Senior Investment Officer

James Bremis, AIF®,CFP®,CPFA®
Senior Financial Planner, Private Client Group

Market Scoreboard

Index Returns (%)	Q3 2022	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500	-4.88	-23.87	-15.47	8.16	9.24	11.70
DJIA	--6.17	-19.72	-13.40	4.36	7.42	10.45
NASDAQ	-4.11	-32.40	-26.81	9.75	10.24	13.00
Russell 2000	-2.19	-25.10	-23.50	4.29	3.56	8.55
MSCI ACWI Ex USA	-9.91	-26.50	-25.17	-1.52	-0.81	3.01
Barclays Aggregate Bond	-4.11	-14.61	-14.60	-3.25	-0.27	0.89

Source: Morningstar
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Diversification and asset allocation do not ensure a profit or protect against loss.

S&P 500 TR: A market capitalization-weighted index of 500 widely held stocks often used as a proxy for the large-cap segment of stock market.

Russell 2000 TR: Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization often used as a proxy for the small-cap segment of the stock market.

Barcap Aggregate Bond TR: The Barclays Capital Aggregate Bond Index is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S.

MSCI EAFE NR USD: Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world.

DJ US Industrials TR USD: Computed by summing the prices of the stocks of 30 U.S. companies and then dividing that total by an adjusted value--one which has been adjusted over the years to account for the effects of stock splits on the prices of the 30 companies.

NASDAQ: Measures the performance of all issues listed in the Nasdaq Stock Market and is often used as a proxy for the large-cap technology segment of the U.S. stock market.

DJ/UBS Commodity: The DJ-UBSCI is composed of futures contracts on physical commodities and is often used as a proxy for broad-based exposure to the commodity markets.

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