Foothills Asset Management, Ltd.
INVESTMENT COUNSEL

The Return of Volatility and What to Do About It

November 27, 2018 **S&P 500 Index 2669**
10-Year T-Note Yield 3.06%

EXECUTIVE SUMMARY

- Volatility is a normal part of investing
- Recent volatility has emerged after several years of relatively benign market conditions.
- A balanced portfolio (50% stock and 50% bonds) has usually, but not always produced better returns than treasury bills or money market funds.
- For investors with a 5-year time horizon, a balanced portfolio has produced better returns than treasury bills 84% of the time.
- For investors with a 10-year time horizon, a balanced portfolio has produced better returns than treasury bills 93% of the time.

Putting it mildly, the recent weakness in the stock market has been "unpleasant." It never feels good when weakness in the stock market causes a drop in one's net worth! The return of market volatility has been sudden and was not expected by many investors. We thought it would be useful to put this recent market volatility into perspective.

First, nobody likes volatility but it IS normal. According to Vanguard, the S&P 500 Index has experienced swings greater than 1%, an average of 108 days a year, since 1988. The S&P 500 Index experienced daily price changes of greater than 2%, an average of 29 days a year. Assuming 22 trading days a month, that "volatility" occurs on 41% and 11% of trading days respectively.

Recent years have been remarkable for the absence of volatility. There have been no years since 2011 in which the stock market experienced an "average" number of volatile days. In 2017 there were 0 days in which the S&P 500 Index changed by more than 2%.

Market history begs the question of what an investor should do now that volatility seems to have returned. Should investors hunker down, selling their stocks and putting money in a money market? Should they grind their teeth and live through the volatility? In order to answer these questions, we turned to historical data.

We examined year-by-year returns for the S&P 500, 5-year U.S. Government Bonds and U.S. Treasury Bills (a proxy for money market funds) from 1926 through 2017. We sought to answer the question, "How often do treasury bills produce better returns than a balanced portfolio of 50% stock and 50% bonds?" The answer to this question depends largely on an investor's time horizon.

Table 1 shows the number of years in which either a balanced portfolio or treasury bills have produced a better return.

Table 1
Years With Better Return
1926 - 2017

	Rolling Period Returns			
	1-Year	**3-Years**	**5-Years**	**10-Years**
Balanced Portfolio	67	74	74	77
Treasury Bills	25	16	14	6
Total Years	92	90	88	83

Sources: Ibbotson & Assoc; Bloomberg; Foothills Asset Management

We looked at the data for rolling 1-, 3-, 5- and 10-year periods. There have been 92 1-year periods since 1926. There have been 83 rolling 10-year rolling periods (1926 – 1935; 1927 – 1936 etc.)

For investors with a 1-year time horizon, treasury bills produced the better return just 27% of the time (25 years out of 92). For investors with a 5-year time horizon, treasury bills produced the better return just 16% of the time. Finally, for investors with a 10-year time horizon, treasury bills were the better choice just 7% of the time!

The message of this data is clear. Investors with multi-year time horizons will usually be better served with a balanced portfolio, than with treasury bills! For investors with investment horizons of 10 years or longer, the odds favoring a balanced portfolio are overwhelming!

So, does it ever make sense to invest in a money market fund? The answer is "yes" if an investor thinks it is likely that he or she will need to withdraw 10% or more of the portfolio within the next 6 to 12 months. In that case it would be prudent to set aside cash in an interest-bearing account and not worry about whether the stock market was up or down over a short period of time.

A good guideline is that investors should be able to fund withdrawals up to about 5% of portfolio value without disrupting their investment strategy. For withdrawals of 5% to 10% of portfolio value, investors should consult with their advisors. For anticipated withdrawals greater than 10% of portfolio value in any one year, investors should consider setting aside some cash so they sleep well at night.

The Securities and Exchange Commission rightly requires us to state that past performance is not a guarantee of the future. Prospective results may be better or worse than these historical illustrations. Nevertheless, we believe that stock (equities) should be part of most investors' portfolios, especially if they have an investment horizon of 5 to 10 years or longer. Equities may be appropriate for investors with shorter time horizons of 3 to 5 years as well. However, the percent of the portfolio invested in common stock may be lower than for investors with long to very long investment horizons.

Our analysis is based upon historical data but does not include transaction costs, taxes or management fees. S&P 500 returns include the reinvestment of dividend income into the index. The return for 5-year government bonds assumes a single security with a constant maturity of 5 years. We used U.S. Treasury bills as a proxy for the return on money market funds.