Bradley, Foster & Sargent, Inc.
Quarterly Market Commentary

January 2019

Understanding Investor Psychology: A Vital Component to Successful Investing

> These crowd madnesses recur so frequently in human history that they must reflect some deeply rooted trait of human nature… There seems to be a cyclical rhythm in these movements. A bull market, for example, will be sweeping along and then something will happen — trivial or important — and first one man will sell and then others will sell and the continuity of thought toward higher prices is broken.
>
> Bernard Baruch, *My Own Story,* 1957

> Part of our great strength at the company [Cramer & Co.] was the recognition that investing is almost all psychology and very little substance…We know that Wall Street is more a fashion show, short-term, than an exercise in rational pricing and capital allocation.
>
> James J. Cramer, *Confessions of a Street Addict,* 2002

> The discipline that is most important is not accounting or economics, but psychology.
>
> Howard Marks, *The Most Important Thing,* 2011

Investing in the stock market in 2018 was like riding the proverbial roller coaster. The market took off like a rocket in January, as investors were exhilarated by the prospects that the tax reform bill would cause a big jump in corporate earnings. In less than four weeks, the S&P 500 Index jumped 7.5%, hitting an all-time high. Then, the market turned on a dime. Fearing that the strong economy would cause both inflation and interest rates to rise, investors panicked and caused the S&P 500 to plunge 11.9% in less than two weeks. On one day, the Dow Jones dropped 1,500 points. Bottoming in the second week in February, the stock market then resumed a long, slow climb during the second and third quarters of 2018. The S&P 500 reached its all-time high in late September at 2,940, gaining over 10% since the year began. Then the market abruptly reversed course and dropped approximately 20% during the fourth quarter. Two of the three major indexes experienced a bear market (down 20% from peak to trough) in the latter half of 2018. The table below tells the story of the damage:

2018 Bear Market

	Date	High	Date	Low	Percentage Decline
NASDAQ Composite	8/30	8,133.30	12/24	6,190.16	-23.9%
S&P 500 Index	9/21	2,940.91	12/26	2,346.58	-20.2%
Dow Jones Industrial	10/3	26,951.81	12/26	21,712.33	-19.4%

With 2018 real GDP in the U.S. projected to exceed 3% for the first time since 2005 and a 3.7% unemployment rate in November, 2018, why did the stock market fall off a cliff in the fourth quarter?

The growth in operating earnings for the S&P 500 Index was on line to jump over 20% in 2018. Yet the market experienced its first bear market since 2009 (2011 saw the S&P 500 drop 19%). Why? Part of the reason may well have been the inordinate amount of algorithm-driven trading. Some news stories reported that as much as 80% of the trading in December, or more than $350 billion, was attributed to trend-following algorithms trading programs, most of which were decidedly bearish. But we believe that investor sentiment, or more accurately investor psychology, played a decisive role in the market's decline.

Twenty years ago, we wrote an investment commentary that encouraged investors to view the stock market as a three-legged stool. The metaphor is still valid, we believe. One leg of the stool is the growth of corporate earnings. Over the long term, the stock market tends to reflect the trajectory of earnings. The second leg is interest rates, which are most influenced by inflation and Federal Reserve monetary policy. The absolute level of interest rates is a major factor in the valuation of the stock market at any point in time. The third leg is investor psychology. Investor psychology often has major influence over market movements in the short term and great influence at market extremes. The three legs of the stool look like this:

First Leg:	**Corporate Earnings**	***Influenced by:***
		U.S. economic growth
		Global economy
		Fiscal and monetary policy
		Political climate
		Regulation
Second Leg:	**Interest Rates**	***Influenced by:***
		Inflation
		Fiscal and monetary policy
		Currency
		Political stability
Third Leg:	**Investor Psychology**	***Influenced by:***
		Greed
		Fear
		Envy
		Ignoring historical valuations
		Ego
		Crowd behavior

The seat of the stool is the stock market's valuation. Toward the end of the third quarter of 2018, the stool was at a reasonable and stable level with each leg of the stool quite firm. The S&P 500 Index was valued at a P/E ratio of approximately 17 times projected 2019 operating earnings. This was fully valued but not excessive, as it was in early 2000 when the market was trading at 27 times forward earnings! Nevertheless, some sectors of the stock market — especially information technology and social media/ communications — were at very rich valuations. But fundamentals of the U.S. economy were better than they had been in a long while with strong corporate earnings growth and low interest rates. Why then did the third leg of the stool collapse?

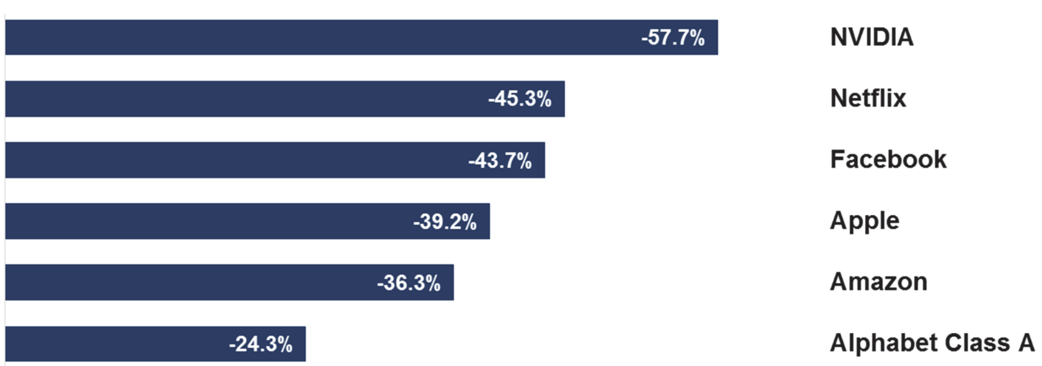
First of all, the stock market looks forward, not at present conditions or the track record of the past twelve months. And investors thought the view going forward looked worse than the view in the rear view mirror. With the economy hitting on all cylinders, this meant that the Federal Reserve would follow through with their telegraphed intentions of raising the Federal Funds rate three or even four times in 2019. Investors then foresaw that rising interest rates in 2019 could cause economic growth to slow or even bring a recession. After all, the U.S. economy had not experienced a recession since 2009. The fact that the yield curve in the bond market was flattening and threatening to invert was another warning sign about recession risk. To add to investor anxiety, a damaging trade war between the U.S. and China was a distinct possibility. Finally, the mid-term election results in November almost guaranteed that the political combat in the nation's capital would intensify. These factors influenced the outlook for both corporate earnings and interest rates, causing investor psychology to turn from positive to negative. As Bernard Baruch wrote in his book, "First one man will sell and then others will sell and the continuity of thought toward higher prices is broken."

When the market rolls over and stock prices decline rapidly, investor psychology takes over. Howard Marks in his excellent book, *The Most Important Thing – Uncommon Sense for the Thoughtful Investor,* devotes three chapters to investor psychology. Much of the discussion below is taken from this book and his more recent one, *Mastering the Market Cycle.* He writes that understanding investor psychology is critical to successful investing because human emotions are always involved in the stock market, and the range of human emotions often trump rational analysis of fundamental financial data and valuation discipline.

Greed and the Fear of Missing Out

Marks writes that one of the most powerful human emotions is greed. It is one thing to seek gain in order to fund the purchase of a house or children's education or retirement. But the human factor often translates this desire for gain to greed, which the Merriam-Webster dictionary defines as the "selfish and excessive desire for more of something (such as money) than is needed." Greed is such a powerful force that it causes many investors to throw aside caution, logic and risk aversion to chase stocks to unsustainably high valuations. In addition to greed, envy and following the crowd often play key roles in bringing markets or sectors of the market to unsustainable levels. This occurred with some of the leading information technology stocks (including the FAANG stocks) in 2018. For example, the P/E ratio of Netflix reached 160; Amazon's P/E before the stock broke in 2018 was 100. When the market turned, these stocks performed as follows:

FAANG and Information Technology Stocks
2018 Price Performance (Peak to Trough)



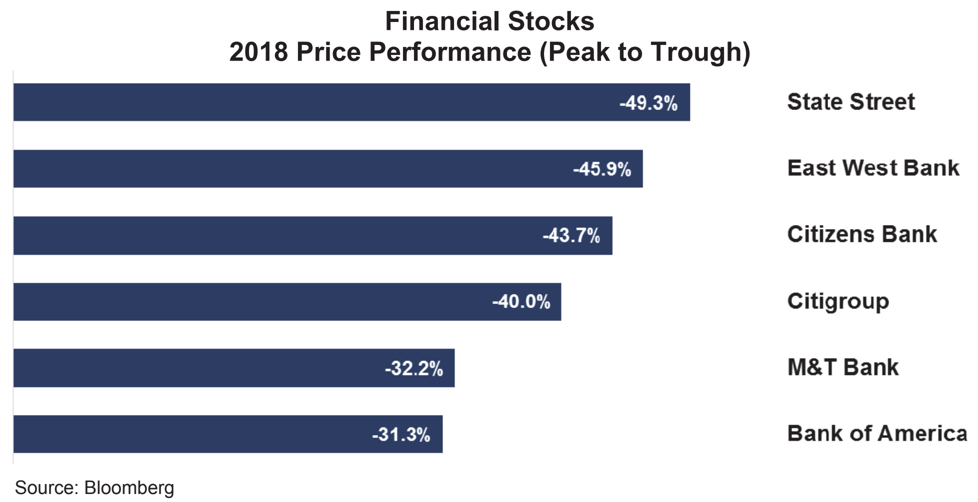
Source: Bloomberg

Fear: Selling Out at the Bottom

One of the characteristics of markets is that they tend to go to extremes. Once again, this happens because of the power of human emotion in decision-making. Thus, while the NASDAQ dropped 23.9% during the 2018 bear market, the market leaders on the previous page declined much more than the overall market. When the market turned against these social media and information technology stocks, which momentum and trend-following investors had driven to extreme levels, and their prices declined rapidly, fear overtook the owners of these stocks. With some of these stocks, fear turned to panic, causing some to sell out at the bottom. This is called capitulation, when investors finally cannot stomach the pain of loss any more, and they give up and liquidate their holdings at the very bottom. It can happen both in individual stocks and in bear markets.

At Bradley, Foster & Sargent, we have generally been able to sense when a severe correction or a bear market bottom is approaching, because the number of calls from emotional clients wishing to sell out rises dramatically. Our advice is the same as Howard Marks's: *"Exiting the market after a decline – and thus failing to participate in a cyclical rebound – is truly the cardinal sin in investing. Experiencing a mark-to-market loss in the downward phase of a cycle isn't fatal in and of itself, as long as you hold through the beneficial upward part as well. It's converting that downward fluctuation into a permanent loss by selling out at the bottom that's really terrible."*

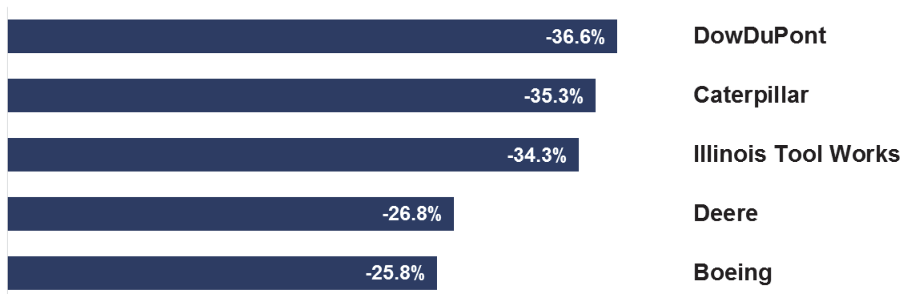
One of the sectors of the stock market that turned in double-digit negative performance last year was the financial sector of the S&P 500; it was down -14.7% in 2018. Many of the stronger, large cap banks declined much more. Investor psychology played a major role once again. The fundamentals of the banking sector have rarely been stronger. Most banks are currently very well-capitalized. They have extremely low levels of non-performing assets, and their revenues are growing and expenses declining. Nevertheless, investors focused on the flattening yield curve and the possibility that it would invert, which often signals a forthcoming recession. Market pundits increasingly talked about the likelihood of a recession in 2019. If this were to occur, it would negatively affect bank earnings. The result was a major bear market for bank (and other financial) stocks. Financial institutions, such as State Street, which have almost no credit exposure, were caught in the downdraft, as investors posited that a recession and lower stock market valuations would depress their earnings as well. As these stocks sold off, trend-followers jumped on the bandwagon. Then fear reigned. The chart below shows the damage to stocks in the financial sector:



The Stock Market Tends to Go to Extremes

Below are examples of two other stock market sectors which were powerfully influenced by negative investor psychology in 2018. Stocks in the industrial sector peaked early last year, as investors rejoiced over the tax reform package passed by Congress at the end of 2017. Then President Trump followed through on his campaign pledge to deal with China's unfair trade practices and policy of forcing U.S. companies in China to transfer their technology to Chinese joint venture partners. He placed tariffs on Chinese solar panels, steel and aluminum in the first quarter of 2018. Investors soon assumed the worst and sent stocks in the industrial sector to extremely low valuations. They panicked because they believed that a major trade war between the U.S. and China was looming. Valid concerns about the potential damage to the corporate earnings of U.S. industrial companies were then amplified by fear, as investors dumped stocks in quality companies such as those noted below. The damage to their stock prices was much worse than the Dow Jones, which was down -19.4% in the brief bear market last year.

Industrial Stocks
2018 Price Performance (Peak to Trough)

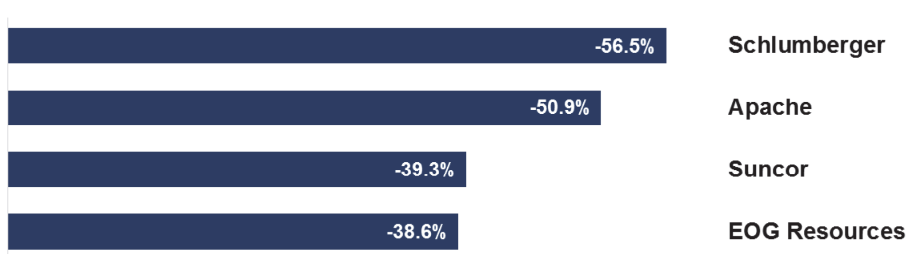


Source: Bloomberg

Investor Psychology in the Energy Sector

The price of oil was extremely volatile in 2018. It started the year at around $60 (price per barrel of WTI crude oil), and, reflecting geopolitical influences as well as forces of supply and demand, climbed during the first nine months to a high of $76. Global demand for oil increased one million barrels a day, increasing total demand to 99 million barrels per day during 2018. Nevertheless, the price of oil plunged 42% in the fourth quarter to close the year at $44. Energy stocks reflected the drop in the price of oil, with the energy sector of the S&P 500 dropping -20.5%. But investors let their emotions take over, and panicked investors severely punished the stocks of some quality energy companies as presented below:

Energy Stocks
2018 Price Performance (Peak to Trough)



Source: Bloomberg

Minimizing Emotional Investing

From the market bottom in March, 2009 through the third quarter of 2018, the price of the S&P 500 Index more than quadrupled. During this period there were six corrections when the market dropped between 10% and 20%, but within months, the market resumed its advance. The last time the stock market as a whole went to an extreme was during the Financial Panic of 2008-2009. Thus, it has been a decade since investors have experienced the stomach-churning fear of a market in freefall, which caused many to panic and capitulate at the bottom. Between December 21st and December 26th of last year, the S&P 500 declined over 6% and briefly dropped into bear market territory. Many investors experienced fear for the first time, as a considerable number of quality stocks had declined between 25% and 50% by Christmas. It is possible that at some time in the next several years investors will encounter an even more painful bear market. When this happens, the evidence will all seem to be on the side of the sellers, for the economy will likely be in recession, the credit markets will be tightening, corporate earnings will be dropping precipitously, and there will seem to be no end in sight. How should one combat the emotions that we all feel when one's portfolio is in freefall, when the crowd is all running for the exits?

The first and most important rule to remember is the quote attributed to Nathan Rothschild in 1810: "Buy on the sound of cannons, and sell on the sound of trumpets." In other words, one must have the emotional fortitude to buy when the situation appears dire, and sell when everything looks rosy. The market often overreacts to both good and bad news, and the investor needs to be ready to take advantage of opportunities that are available at the extremes. Warren Buffett's famous quote is similar: "Be fearful when others are greedy, and greedy when others are fearful." As greed is never a virtue, Buffett presumably means to buy when others are panicking.

How does one pluck up the courage to go against the crowd — especially when the market is at an extreme as in early 2000 at the apogee of the internet bubble or at the depths of the Financial Panic at the end of 2008 and 2009? One of the most important attributes is an accurate knowledge of financial history, encompassing previous market bubbles and meltdowns. This will help the investor understand that the markets are invariably cyclical, because investors are human, and the cycles reflect human emotions. The other critical factor is an accurate assessment of the facts which should lead one to a sound assessment of intrinsic value. When there is a sizable gap between the price and intrinsic value, investors then need the conviction to buy or sell as appropriate. Sticking to a pricing discipline when all around you are ignoring it — as in 1999-2000 and 2008-2009 — is very difficult, but necessary. Finally, it is good to remember that emotions usually get in the way of successful investing, and if one is unable to keep one's emotions in check, then it is best to engage an investment professional, who is better equipped to take advantage of market cycles and extremes.

At Bradley, Foster & Sargent, we were pleased to be able to keep most of our clients from selling at the bottom during the Financial Panic of 2008-2009, and our clients were therefore able to enjoy the fruits of this long-running bull market. In the years to come, we will endeavor to help our clients and friends not succumb to their emotions when markets reach extreme levels as they surely one day will.

Bradley, Foster & Sargent, Inc.

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