



“During such scary periods, you should never forget two things: First widespread fear is your friend as an investor, because it serves up bargain purchases. Second, personal fear is your enemy, it will always be unwarranted...investors who avoid high and unnecessary costs (particularly taxes) and simply sit for an extended period with a collection of large, conservatively financed businesses will almost certainly do well.”

—Warren Buffett on bear markets

January 18, 2019

A Look Back at 2018

Volatility Comes Roaring Back

During 2017, most of Wall Street’s pundits had a lot to say about the stock market’s lack of volatility. It was one of those rare years when stocks rose without a significant correction. The stock market continued its upward bias during January 2018 (if in a slightly more muted fashion), but then February arrived . . .

The second month of 2018 was easily one of Wall Street’s wildest months since 2008. First the Dow plummeted more than 3,200 points, or 12%, in just two weeks. Then stocks raced back to life, at one point recovering about three-quarters of those losses. Fittingly enough, however, February ended with still more drama as the Dow tumbled 680 points during the final two days of the month, leaving it down about 1600 points from the record high set in late January. In all likelihood, February will be remembered as the month when fear of rampant inflation made investors question the somewhat higher than historical valuations they were paying for U.S. equities, leading to a sharp selloff.

And yet it took very little time for the market to come back off these lows as investors, emboldened by a strong economy and soaring profits, once again bought the dip—a strategy that has worked quite well since the S&P 500 bottomed at 676.53 on March 6, 2009, with the Dow Jones Industrial average hitting a low of 6,443 on the same day. By the end of the 3rd quarter, all major stock market indices were solidly in the black, with the Russell 2000 (which contains only small-capitalization stocks) a notably stellar performer by having advanced 16.56%, followed by the NASDAQ at 11.51%. The S&P 500 also posted double-digit gains, having jumped by 10.56%.

October, however, proved to be a rough ride for U.S. stocks. In one of the worst months since the financial crisis, the S&P 500 lost \$1.91 trillion in market value, according to S&P Dow Jones Indices analyst Howard Silverblatt: “October volatility is legendary, and we’re not just talking about the crash in 2008—October is a much more volatile month than any of the others as far as quick declines go.”

October started off on a rocky note for stocks when Federal Reserve chairman Jerome Powell said that the central bank was a “long way” from neutral rates. The S&P 500 lost 6.9% that month, in its biggest one-month slide since 2011, when it had fallen 7.2%. November saw the index increase by 1.79%.

As we have observed in recent quarterly letters, market returns continued to be dominated by 5 companies that CNBC’s James Cramer famously dubbed the “FAANG” stocks: Facebook, Apple, Amazon, Netflix, and Google’s parent company, Alphabet. These stocks were among the hardest hit in October: Amazon ended the month down 20.2%, and Netflix lost 19.3% of its value. Facebook and Alphabet, similarly, finished the month with losses of 7.7% and 9.7%, respectively.



For the quarter, the S&P 500 and Nasdaq plunged 13.97% and 17.5%, respectively—their worst quarterly performances since the 4th quarter of 2008. The Dow, likewise, notched its worst period since the 1st quarter of 2009, falling nearly 12%. A sizable chunk of this quarter’s losses came during a violent December, and the only S&P 500 sector to report positive 4th-quarter performance was utilities, which advanced 1.4%; by contrast, energy, the hardest-hit sector, lost 23.8%.

In December, the major indices all dropped at least 8.7%, with the Dow and the S&P 500 registering their worst December performance since 1931 and their biggest monthly loss since February 2009. Various factors contributed to this dramatic decline during the final month of 2018, including concerns about a potential economic slowdown and fears that the Federal Reserve would raise interest rates too quickly. The specter of an increase in tariffs on Chinese goods also pressured stocks.

This brief description cannot fully capture just how wild a ride December was for investors watching the minute-by-minute gyrations of the major averages. At its intraday low on Christmas Eve day, the S&P 500 was down more than 20% from its record high, briefly meeting the requirement for a bear market. The Dow shed 400 points on December 24, the biggest Christmas Eve day point loss ever recorded. However, the stock market would come soaring back in the next trading session, jumping more than 1000 points on December 26—its largest point gain ever.

The major averages trimmed some of their sharp annual losses on the last trading day of the year, however. The Dow climbed 265 points and the S&P 500, Nasdaq, and the Russell 2000 all gained a little less than 1%, with most of these advances coming during the last 20 minutes of trading.

The Saga of the Russell 2000: A Decline of 27.5% From Its August 31, 2018, High

The growing economy and resilience to a stronger dollar and higher tariffs put the spotlight on smaller U.S.-focused companies. The Russell 2000 index (which consists of companies with a median market value of \$964 million) hit an all-time high on August 31, notching a 14.3% year-to-date return versus the S&P 500's 9.9% advance.

But then things got ugly. As investors fled stocks more broadly, concerns over small-caps grew particularly acute. Mounting cost pressures and concerns over slowing growth led many investors to simply lose faith in small-cap profit margins and earnings expectations. **As a result, the Russell ended 2018 with a loss of 11.01%, declining more than 27% from its all-time high, established just 4 months earlier.**

—Much of the foregoing information was sourced from a Barron's article penned by Nicolas Jasinski on December 14, 2018, as well as from internal Boyar Research data.

What Is Causing All This Volatility?

Behind the broad, swift market slide of 2018 is an underlying new reality: roughly 85% of all trading is controlled by machines, models, or passive investing formulas, creating an unprecedented trading herd that moves in unison with blinding speed.

Today, according to data from Tabb Group, quantitative hedge funds, or those that rely on computer models rather than on research and intuition, account for 28.7% of trading in the stock market—a share that has more than doubled since 2013. These funds now trade more than retail investors—and everyone else. Taking into account passive funds, index investors, high-frequency traders, and others who aren't buying because they have a fundamental view of a company's prospects, quantitative hedge funds account for around 85% of trading volume, according to Marko Kolanovic of J.P. Morgan.

Behind the models employed by quants are algorithms, or investment recipes, that automatically buy and sell based on preset inputs. Lately, they have been dumping stocks. Among traders today are computers that buy and sell based on models, as well as passive funds that seek only to hold the same securities everyone else does. Meanwhile bankers and brokers—once ready sources of buying and selling—have retreated. Today, when the computers start buying, everyone buys; when they sell, everyone sells.



Markets were remarkably placid recently even as machine trading came to dominate the trading landscape—suggesting that this type of trading might not cause problems during times of rising stock prices. One reason the dynamic might have changed: Many trading models use momentum as an input—when markets turn south, they're programmed to sell. And if prices drop, many are programmed to sell even more.

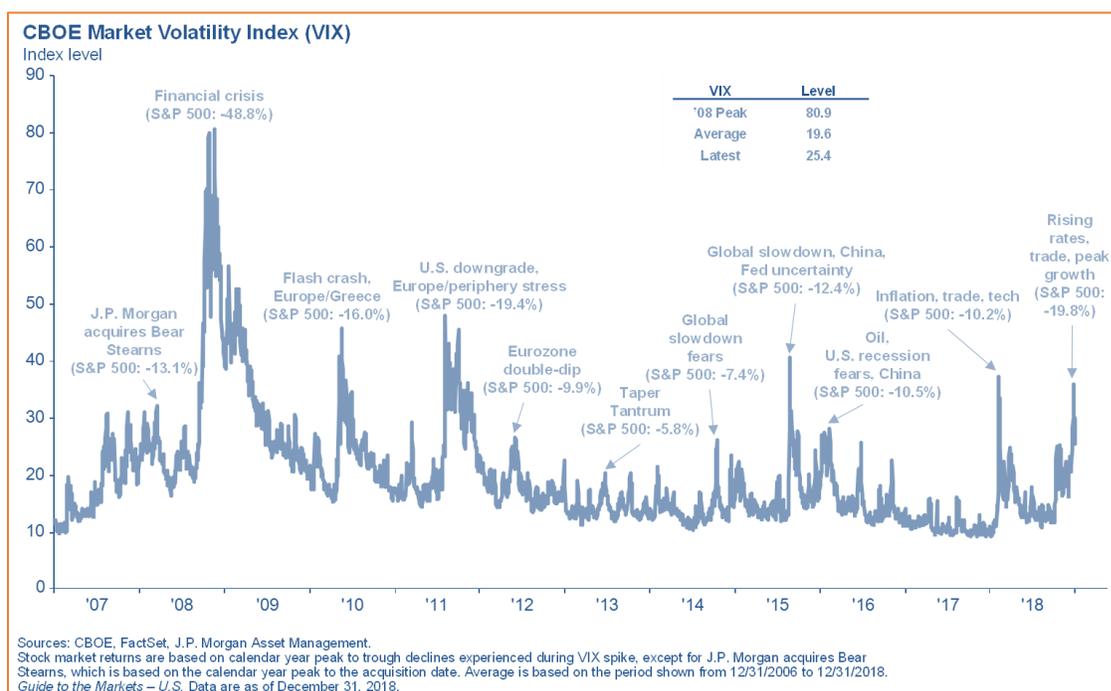
The robots didn't trigger the decline, of course, but they did devour a stew of red signals during the second half of the year:

- A slowdown in growth in the economies of Japan, China, and Europe, as well as suggestions that the U.S. might be moderating a little bit, too.
- The end of an era of low interest rates and easy money. For investors, higher rates mean something they haven't seen in years: the ability to earn money, even if only a paltry return, by holding cash.
- A decline in the growth of corporate profits.
- Erratic politics in large parts of the world. For, example, the U.S. and China are embroiled in a trade dispute and President Trump is openly denigrating the Federal Reserve. What's more, Britain is fumbling through Brexit and Italy through an economic drought—with significant potential consequences for its giant bond market.

When all these relatively new negative data are inputted into the various databases that computers use to make their buy-or-sell decisions, their market outlook can change from positive to negative. When this occurs, the models are programmed to sell—and because they use momentum as an input, selling begets more selling.

In the short run, this computer-induced negative volatility plays havoc with share prices, not to mention investors' psyche. *For patient long-term investors, however, it creates opportunity: such indiscriminate selling drives share prices to levels that in many instances are unwarranted, creating bargains in the process.*

It is also important to place the recent stock market volatility into a historical perspective. Since 2006, the average level of the VIX, a popular measure of volatility commonly referred to as the “fear index,” has been 19.6, according to J.P. Morgan. In 2008 it reached as high as 80. However, during the most recent December swoon, its high was only ~36. (It ended 2018 at 25.4, and as of January 17 it was 18.) So while the market did experience above-average levels of volatility, it did not come close to reaching crisis levels.



—Much of the foregoing information was sourced from a Wall Street Journal article penned by Gregory Zuckerman, Rachael Levy, Nick Timiraos, and Gunjan Banerji on December 26, 2018, as well as from internal Boyar Research data.

Performance Results

In 2018 virtually, every asset class lost value. The S&P 500 declined 4.38% and the NASDAQ composite dropped 3.88%, but the worst performer was the Russell 2000, which shed 11.01%. The Dow was the best-performing index, but it, too, lost ground, declining by 3.48%. Large-cap growth stocks were the best performing part of the equity market, losing “only” 1.5% on average, whereas the worst performing area of the market were small-cap value stocks, which lost 12.9% on average, according to J.P. Morgan.

The declines in the leading indices, however, masked the carnage that the average stock experienced last year: **332 of the S&P 500’s components, or 66 % of the index, fell by 10% or more from their 52-week highs, while 142 stocks were down 20% from their recent peak.** U.S. oil prices declined by 25% in 2018, while Bitcoin—which everyone was talking about when it rose to \$20,000 in late 2017—retreated from a high of \$17,234 on January 6, 2018, to a low of \$3,122 on December 15, 2018, a loss of 77%.

Some Thoughts About the Market

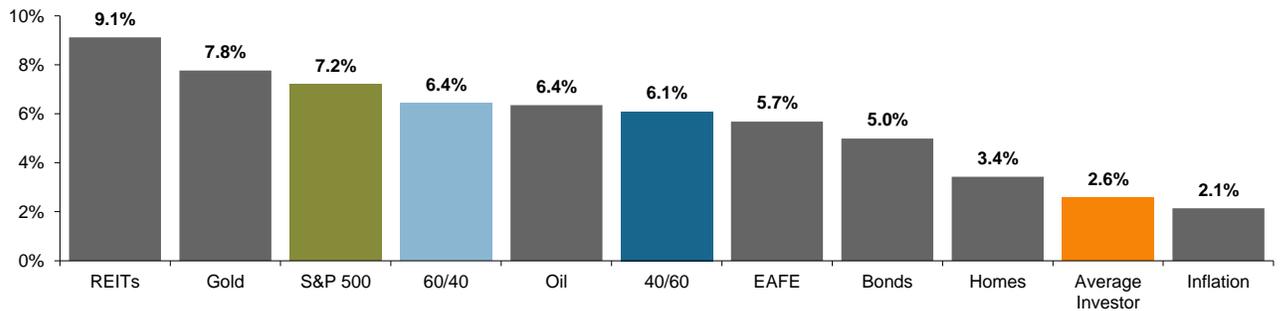
Several factors have the potential to negatively impact the market in 2019:

- A worldwide economic slowdown
- Escalation of the trade war with China
- The Federal Reserve making a policy mistake by increasing interest rates too quickly;
- President Trump is impeached;
- Escalation of tensions in the Middle East

On the brighter side, however, we believe that other factors could drive the stock market higher in 2019:

- The recent stock market decline, coupled with lower interest rates, makes the U.S. equity market more attractive than it has been for the past several years. As of December 31, 2018, the S&P 500 was selling at 14.4x (fwd.) earnings, compared to slightly over 17x (fwd.) earnings last year around the same time.
- Investor sentiment is quite negative—always a good contrary indicator—and as a result, investors have been pulling money from the U.S. stock market in record amounts. It’s worth noting that individual investors have a history of fleeing the market at precisely the wrong time. ***From 1998 to 2017, according to J.P. Morgan Asset Management and Dalbar, the S&P 500 returned 7.2% annually, but individual investors had an average return of only 2.6% annually*** (barely outpacing inflation, please see the chart below). According to a January 14 article by Liz Moyer that appeared on CNBC.com, withdrawals from stock ETFs (a popular investment vehicle for individual investors) have reached \$7 billion so far in 2019. If history is any guide, this is a positive sign: investors pulled more than 27% out of stocks in 2009, a year that saw dramatic increases in the stock market. In addition, in 2010 investors withdrew 15% out of the market, just before the S&P increased over 12%. If history is any guide, the retail retreat from equities is a positive sign for long-term investors.

20-year annualized returns by asset class (1998 – 2017)



Source: J.P. Morgan Asset Management; (Top) Barclays, Bloomberg, FactSet, Standard & Poor's; (Bottom) Dalbar Inc. Indices used are as follows: REITs: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Bloomberg Barclays U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz., Inflation: CPI. 60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality U.S. fixed income, represented by the Bloomberg Barclays U.S. Aggregate Index. The portfolio is rebalanced annually. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/17 to match Dalbar's most recent analysis. *Guide to the Markets – U.S.* Data are as of December 31, 2018.

- While S&P 500 declines are not all that rare, only four periods have seen consecutive yearly losses over the past 92 years, according to Instinet. Historically, losses such as we experienced this past year have been followed by a positive year for stocks.
- According to the *Stock Trader's Almanac*, since 1833, the final 2 years of each of the previous 45 presidential terms (counting each 4-year term individually) produced a total net market gain of 724% (10.2% average gain for the 3rd year of the term and 6.0% average gain for the 4th), versus an advance of 332% for the first 2 years of each term (3.0% average gain for the 1st year and 4.2% for the 2nd). ***In addition, since 1939, the Dow Jones Industrial Average has posted a down year during the 3rd year of a presidential term only once. Notably, however, that single negative year was in 2015—perhaps signaling a new paradigm for presidential election cycles and stock market performance.*** Stock market bulls may find further reason for optimism, however, in an article that recently appeared in the *Wall Street Journal* describing President Trump as fixated on the stock market because he sees it as an important indicator of his job performance. In this line of reasoning, Trump could be expected to do everything in his power to keep the markets happy in 2019, following the historical trend of positive performance in the years leading up to a presidential election and proving 2015's results to have been an aberration.

If you have any questions, we're always available.

Best regards,

Mark A. Boyar

Jonathan I. Boyar

Below we've included an excerpt from a New York Times article published on January 3, 2019, that we think you'll find interesting.

What Should You Do About a Falling Stock Market? Nothing

Millions of investors will receive year-end statements from their brokerages and retirement plan managers in the coming weeks, and the great majority of them will have unpleasant news: losses.

The S&P 500 finished the year down 6.2 percent, with the steepest declines recorded in the fourth quarter... While most economic data has remained strong, there are some rumblings that 2019 may be quite a bit rougher than 2018. Corporate executives are becoming more pessimistic, according to surveys, and Americans are conducting Google searches for the word “recession” at the highest rate since the last one just ended in 2009.

If it all makes you want to flee — or at least shift your 401(k) into cash — that’s understandable. It’s also a bad idea. The sensible response to this unnerving series of developments is to do pretty much anything else. Read a book. Go for a walk. Take up knitting. Or just do nothing at all, like take a nap. If you are a long-term investor (and any money you have tied up in the stock market should be intended for the long term to begin with), tumult like that of the last few months isn’t something that should cause panic. Rather, it’s the price you pay for enjoying returns that, over long-time horizons, are likely to be substantially higher than those for cash or bonds.... The recent pessimistic tone in markets is getting way ahead of the evidence. Nothing so far in either the economic data or the market indicators that most reliably predict economic swings suggests there will be anything worse than a modest slowdown in economic growth in 2019....

Moreover, an investor who moved money into cash now would be doing so just as the valuation of stocks was becoming more favorable — buying high and selling low, not the way great fortunes are made. That’s especially true when you factor in the drop in longer-term interest rates, which makes shares particularly appealing relative to bonds. In early November, investing \$100 in stocks would buy you about \$4.64 worth of corporate earnings, versus the \$3.21 in interest you would could receive by investing in 10-year Treasury bonds. Now, stocks offer \$5.25, while bonds offer only \$2.61....

Of course, if you had a perfect ability to predict how far the market would fall and when it would bottom out, it would make sense to move money in and out. You do not. There is a wide range of evidence that people are pitiful at timing the market. Even supposed investment experts lack that prescience.

Even if you turned out to be right about a continuing tumble in 2019, the great risk would be that whenever the rebound began, you would be caught out of position, unable to take advantage. Suppose you were clever enough to recognize at the start of December 2007 that a major recession was about to take place, and you moved your money out of stocks. Yes, you would have saved yourself from steep losses in 2008 and early 2009. But you have to ask yourself: Would I have also had the courage to put money back in while the economy was still in horrendous shape in 2009, with double-digit unemployment and a banking system in tatters?

If not then, when would you have moved money back in? People who simply left their savings fully invested in the stock market in December 2007 have now made a 134 percent return on that money. Would you have done better than that, or would you have missed out on a big chunk of those gains out of the same caution that led you to pull money out of stocks to begin with?

People who did not panic in the fall of 2008 — the most panic-worthy time in most of our lifetimes — and kept putting their retirement funds into stocks did indeed incur steep losses over the ensuing months. But their newly

invested funds were being put into stocks at the most favorable valuations in a generation, and thus enjoyed the full benefit of the rebound when it eventually came.

A truism of economic and financial cycles is that by the time it feels like the coast is clear and putting money into riskier investments is completely safe, the real money has already been made. People who looked at the economic chaos of early 2009 and stuck to their guns have ended up far better off than those who, convinced that a double-dip downturn was imminent, waited for years to get in.... The entire point of investing in stocks is that you get greater long-term expected returns in exchange for tolerating bigger ups and downs. Episodes like those of the last few weeks are, in effect, the price you pay for returns that are substantially higher than bonds or cash over longer periods.

Just as there are no free lunches, there are no excess returns without some volatility and risk. As individual investors, we cannot control volatility. What we can control is our own mind-set and reaction, and the more level your head, the better your long-term results are likely to be.

IMPORTANT DISCLAIMER

Past performance is no guarantee of future results. Investing in equities and fixed income involves risk, including the possible loss of principal. The S&P 500 Index is included to allow you to compare your returns against an unmanaged capitalization weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of the 500 stocks representing all major industries. The Russell 2000 is an index measuring the performance of approximately 2,000 small-cap companies in the Russell 3000 Index, which is made up of 3,000 of the biggest U.S. stocks. The NASDAQ Composite is a market-capitalization weighted index of the more than 3,000 common equities listed on the NASDAQ stock exchange. The Dow Jones Industrial Average is a price-weighted average of 30 significant stocks traded on the New York Stock Exchange and the NASDAQ. The volatility of the above-referenced indices may be materially different from that of your account(s), and the holdings in your account(s) may differ significantly from the securities that comprise the above-referenced indices. Your results are reported gross of fees. The collection of fees produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 1.50% annual investment advisory fee would be \$15,566 in the first year, and cumulative effects of \$88,488 over five years and \$209,051 over ten years. This material is intended as a broad overview of Boyar Asset Management's, philosophy and process and is subject to change without notice. Account holdings and characteristics may vary since investment objectives, tax considerations and other factors differ from account to account.