

DIRECTIONS

A quarterly publication of CLS Investments

SPRING 2018

In this quarter's Directions newsletter, CLS's Chief Investment Officer, Rusty Vanneman, CFA, CMT reports on the recent market volatility, as well as behavioral tendencies investors should be aware of. In addition, Portfolio Manager, Kostya Etus, CFA, will cover the potential benefits of market corrections and the top five investor behavioral biases.



Mr. Vanneman joined CLS in September 2012 as Chief Investment Officer. Previously, he served as Chief Investment Officer and Portfolio Manager at Kobren Insight Management (KIM) in the greater Boston area. His 11-year tenure at KIM included a 5-year span during which the firm was owned by E*TRADE Financial and he served as the Senior Market Strategist for E*TRADE Capital. Prior to working at KIM, he was a Senior Analyst at Fidelity Management and Research (FMR Co) in Boston. He was also a Managing Analyst at Thomson Financial.

Learn more about Rusty [here](#).



Every quarter in the stock market is interesting and surprising in its own way, and the first quarter of 2018 was no exception. After a year of nothing but gains, the longest winning streak in decades was finally snapped. February saw the largest monthly loss in two years, and the overall market experienced its first correction (loss of 10% or more from price low to high) in more than two years.

The nine-year bull market is not necessarily ending, but investors should expect a few changes:

- ▶ Price volatility will become more normal again. In other words, expect prices to move around a lot more than they have in recent years.
- ▶ The U.S. stock market is unlikely to post another very good year, although it could!
- ▶ Short-term losses will become more normal again, so expect more of them. The

market has moved steadily higher in recent years, but that is exceptional. Typically, the market experiences significantly more pauses and corrections.

- ▶ International markets, meanwhile, are likely to perform better than the U.S. market — even if the U.S. market languishes or moves temporarily lower.

In this edition of *Directions*, we will review each bullet above in more detail as well as five investor behavioral tendencies, for which awareness can often lead to better results than market forecasting capabilities.

Just How Exceptionally Low Has Market Volatility Been?

Market outlook isn't just about market direction. It is also about anticipating how sharply prices move around. In other words:

how volatile market prices are. While few investors will admit they are concerned with volatility or technical/statistical terms (such as standard deviation), the reality is volatility impacts investor behavior. The more volatile a market, the more likely investors will react to it. More volatility often leads to worse investor behavior, which often includes selling after prices go down or buying after prices go up.

At CLS, we expect more volatility in the months ahead. Volatility has been very low in recent years, reaching the lowest levels in at least five decades. Volatility, however, like all things in the markets, is cyclical. It's been low for a while, but it's starting to pick up, investors can expect to see more volatility going forward.

The [VIX Index](#), shown in the chart below, is often used by market commentators when discussing market volatility. While the VIX

Index is a measure of *expected* volatility, it captures the *actual* volatility environment very well. The general rule of thumb is the market experiences 20% volatility on a yearly basis. That means prices have a standard deviation of 20% around the average return. In other words, if the average stock market return is 10%, then one standard deviation around that average is 10% plus or minus 20%. So, 67% of stock market returns fall into a sizeable range of -10% to +30%. Given those numbers are indeed the standard rules of thumb for an average return and average standard deviation (both are a bit high for true long-term averages), it is worth re-reading to understand. The market is indeed very volatile, even though it offers a far superior return historically to other asset classes, such as bonds and cash.

And remember, volatility last year was *half* the long-term average. Balanced portfolios are meant to handle volatility, so investors

shouldn't have to alter their portfolios to prepare for higher volatility. Rather, being prepared is often more about emotional preparation.

Renowned fixed income portfolio manager, Jeff Gundlach, summarizes this information well, *"In hindsight, the low volatility of financial markets in 2017 will go down in the history books as truly unique. The VIX is 25 years old, and in the first 24 years the index closed below a level of 10 on only nine trading days. Last year (2017) it closed below 10 on 52 days."*

Again, we expect more volatility.

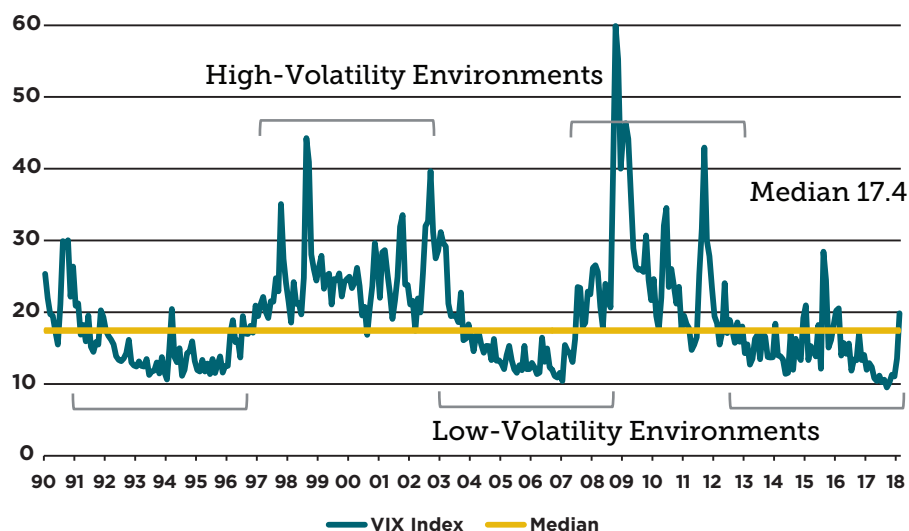
U.S. Stock Market Return Expectations

As mentioned above, the average annual return for the stock market is generally considered to be about 10%. In fact, since 1871, it's been just less than 9% per year. In 2017, the overall market was up 21% and the S&P 500 Index, which only captures 80% of the market as it does not include smaller companies, was up 22%.

Despite that average, the chart below shows the market is rarely in the 5-10% range over a trailing 12-month time frame. It has only been in that range 10% of the time! Instead, the market is above 10% more than 50% of the time (52% to be exact), and has had a loss 28% of the time. These numbers show that the market isn't steady.

The magic of the stock market, however, besides its ability to share in economic growth and have a strong positive return

VIX Index Monthly Data from 1/31/1990 to 2/28/2018



Source: Bloomberg

expectation over time, is the longer investors participate in the market, the more likely returns will converge near 10%. That's why investors shouldn't focus on short-term volatility, but rather on long-term market history.

Interestingly, the table also shows there has never been a 20% annualized rate of return over a 10-year time period since 1871.

Depending on how 2018 goes, that could change. The current bull market, which started March 9, 2009, has posted a 20% return per year. If 2018 ends with a strong return, it will be the first time the U.S. stock market has ever had an annualized 20% per year return.

It could happen, but it most likely will not. The historical chance is only 30%. The market is also

currently overvalued, and the bull market is mature. Earnings growth is strong but could be nearing a peak, and interest rates are rising, making the odds of another 20% return likely lower than the average 30%.

In sum, investors should expect lower returns and higher volatility in the U.S. stock market versus what they have seen in recent years. However, this does *not* mean they should abandon the market as it is still priced for higher expected returns than the bond market or cash.

Frequency of Historical Rolling Annualized U.S. Stock Market Returns

Since 1871	1 Year	3 Year	5 Year	10 Year
Returns > 20%	30%	13%	6%	0%
Returns between 10 and 20%	22%	33%	37%	31%
Returns between 5 and 10%	10%	20%	23%	41%
Returns between 0 and 5%	10%	18%	25%	25%
Returns between 0 and -5%	9%	10%	7%	4%
Returns between -5 and -10%	7%	3%	2%	0%
Returns < -10%	12%	3%	1%	0%

**Source: Robert Shiller, Numbers as of 12/31/2017*

Top Five Investor Behavioral Biases (And What Investors Can Do About Them)

from Chief Investment Officer, Rusty Vanneman, CFA, CMT

Recently, I listened to a presentation by [behavioral finance legend](#) Terrance Odean. He listed five primary behavioral finance investor behaviors as the most destructive to investor performance. Below are the biases he listed, what behavior it impacts, and a few points on what investors can do about them.

1. Overconfidence:

- ▶ Often due to new information, investors get overconfident and trade too much.
- ▶ Investors need to slow down. The best way to do that, which may seem counterintuitive at first, is to consume less financial media and information and to review portfolio statements less frequently. Studies have shown the more investors look at their portfolios and consume financial news, the more they trade. And the more they trade, the worse their performance.

2. Confusion about probabilities and possibilities:

- ▶ This bias causes investors to under-diversify portfolios.
- ▶ Investors should think about

the markets in terms of probabilities and possibilities. Anything can happen. Investors need to diversify.

3. Desire to reduce regret (disposition effect):

- ▶ This bias causes investors to be hesitant to sell losers (i.e., positions that haven't made any money). They are more likely to sell winners.
- ▶ Generally speaking, investors should consider currently-losing investments as sources of funds to purchase new positions. This not only reduces the negative impact of ignoring losing positions, but also helps after-tax returns in taxable accounts.

4. Limited attention:

- ▶ This bias causes investors to invest in popular, or glamour, stocks, or those highlighted in the news.
- ▶ Generally speaking, over time, glamour stocks underperform. Ideally, investors should not let news flow determine what they think and do with their investment portfolios.

5. Recency bias:

- ▶ This bias causes investors to chase performance (i.e., buying what has already gone up and selling what has already gone down). Performance chasing is arguably the biggest problem of individual investors, institutional investors, investment consultants, academics, and the financial press.
- ▶ Good investing is often about buying what has gone down in price — what's on sale — and selling what has gone up.

Thank You

Thanks for reading. If you have any questions on this material, or anything outside this article, please let me know. Thank you for your time and trust.

How Normal Are Market Corrections?

from Portfolio Manager, Kostya Etus, CFA



We knew the historically low levels of volatility could not last forever. It was not normal and bound to end. In early February, the U.S. stock market experienced a 10% correction, which created some sensational media headlines. One of the reasons for the sensationalism is because we have been in one of the longest market stretches on record without a 5% drop (400 days to be exact) and more than double that (over 800 days) since the last 10% drop. Sometimes the freight train just needs to blow off a bit of steam. It is a perfectly natural, normal thing.

How normal is a 5% or 10% correction? Very normal. The table below from Ned Davis Research shows a 5% dip in the S&P 500 has occurred, on average, three times per year since 1928, while a 10% correction occurs about once a year.

So, what is all the fuss about? Since we have been in one of the longest and strongest bull markets, which started after the financial crisis of 2008, investors have become complacent, and they have forgotten volatility is natural within markets. It also did not help that 2017 skipped 5% drops altogether. Now, hopefully,

things will get back to “normal” and there will be healthier levels of volatility – moderate volatility is better than extremely low volatility that eventually blows up.

Additionally, note the table shows a 15% correction happens about every two years and a 20% about every three years. But that does not mean they happen consecutively. There is only a 32% chance that a 5% dip turns into a 10% correction. Likewise, a 10% correction turns into 15% less than half the time (45%). Translation: A 5% or 10% correction does not typically signal a bull market peak, and

The Anatomy of S&P 500 Index Declines - (1/3/1928-2/7/2018)

	Type of Decline			
	Dip (5% or More)	Moderate Correction (10% or More)	Severe Correction (15% or More)	“Bear Market” (20% or More)
Number of Occurrences	303	96	43	25
Average Number of Occurrences per Year	3.4	1.1	0.5	0.3
Chance of Decline Moving to Next Stage (%)	32	45	58	N/A
Last Occurrence	1/26/18	11/3/15	4/29/11	1/6/09
Return to Date from Last Occurrence (%)	-6.7	27.1	96.7	186.9

Source: 1/03/1928 to 2/7/2018, S&P Dow Jones Indices. Copyright 2018 Ned Davis Research, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html. For data vendor disclaimers refer to www.ndr.com/vendorinfo/.

there could be plenty more gains to be made.

Lastly, note the bottom row shows returns-to-date from the last occurrence (the table was generated just prior to the most recent 10% correction ending

on 2/8/18). Let's remember markets are cyclical, but long-term returns are much more favorable than a coin flip. Each downturn is typically followed by a recovery and new market highs. Investors would not want to miss out on those gains by

sitting on the sidelines due to loss-aversion bias (feeling the fear of losing money more than the joy of gains). Thus, investors should stay balanced, diversified, and invested for the long run.

When The U.S. Stock Market Drops, International Markets Typically Outperform

from Portfolio Manager, Kostya Etus, CFA



The CLS research paper, ["Why International: The Case for International Investing"](#), examines why investors should invest on a global scale. It is not word-heavy and includes 27 colorful charts. We recently refreshed those charts with updated data, so if you believe a picture is worth a thousand words, this one's for you.

During the refresh, we added a new section titled "Down Market Performance," which challenges some common misconceptions

about down markets. For example, many investors believe when the U.S. market has negative returns, international markets perform even worse, (i.e., when the U.S. market sneezes, international markets catch a cold).

The international markets' downside underperformance myth is busted in the below chart, which shows the following findings:

- ▶ U.S. and international markets are both positive about 60% of the time.

- ▶ When the U.S. market is negative, international markets are remarkably still positive about 30% of the time.
- ▶ Additionally, when the U.S. market is negative, international markets are able to outperform the U.S. market more than half the time (about 57%).

Thus, international markets can serve as diversifiers for U.S. down market periods.

Down Market Performance Scenarios (1970-2017)

Scenario	% of Time
U.S. Negative	38%
Intl. Negative	41%
Intl. Positive if U.S. is Negative	31%
Intl. Outperforms when U.S. is Negative	57%

Source: Morningstar Direct monthly return data from 01/31/1970 to 12/31/2017.

U.S. Market represented by MSCI USA Index and international markets represented by MSCI World ex-USA Index.

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1390-CLS-4/4/2018

2018 Investment Themes

from CLS Chief Investment Officer, Rusty Vanneman, CFA, CMT



BE ACTIVE

There has been much ado about the move from “active investment management to passive investment management.” The real story, however, is the move from mutual funds to exchange-traded funds (ETFs). This secular trend has a long ways to go, and in large part due to lower costs for investors. A bigger reason regrettably, is that many investors are chasing recent performance. In general, passive strategies have indeed outperformed active strategies in recent years net of fees, but that relative performance should dissipate as the market environment changes. While higher costs and cash levels will still negatively impact active managers (though not as much as in years past), active management will benefit when value stocks, small cap stocks, and international stocks start to outperform domestic large cap growth stocks.



BE SMART (BETA)

Smart Beta ETFs are rules-based ETFs whose holdings aim to intentionally diverge from a broad, market-cap-weighted index. At CLS, we emphasize five equity factors and two fixed income factors when we analyze portfolios and select ETFs. Moving forward, while recognizing that all investment styles are cyclical, we believe this theme will provide a durable edge over the long haul. Historically speaking, the average equity factor has added 2% of value over the market per year; 4% a year when the stock market is down.

Equity Factors: Value, Quality, Size, Minimum Volatility, and Momentum
Fixed Income Factors: Credit and Duration



BE CREATIVE (WHEN DIVERSIFYING)

With interest rates at low levels compared to historical averages, this theme refers to the need to continue diversifying equity volatility to manage overall portfolio risk. CLS achieves this by being creative in using other asset classes to diversify risk, including the judicious use of alternative asset class strategies and commodities. Alternatives may enhance risk-adjusted performance in a variety of ways, depending on the strategy, while real assets such as commodities may help performance particularly when inflation or inflation expectations are rising.