WHEN 2-1 ≠ 1: PROSPECT THEORY AND THE JOURNEY OF INVESTING

The S&P 500 reached not one, but six all-time highs in 2018. To put this in perspective, it took more than seven years after this index's all-time high in 2000 for it to reach its zenith again in 2007. Its next all-time high wasn't reached until almost six years later, in 2013. In short, this doesn't happen frequently.

One thing for sure, the performance path the U.S. stock market took in 2018 exacerbated the feelings most investors have about their portfolios. By September 20th, the U.S. large cap stock market was up more than 9%. Elation, euphoria, jubilation, exultation. Then things went south. Between September 28th and Christmas Eve, the S&P 500 fell by more than 19%. Ebenezer Scrooge was getting his way.

While there were plenty of headlines during that short period – trade tensions with China, Democrats took the House (but not the Senate), another partial government shutdown, key personnel turnover in the White house, a fourth Fed rate hike – we would argue that none of these, even in their aggregate, should have been enough to cause the magnitude of the decline.

Although “Nowhere to Run” was not Jean-Claude Van Damme’s best film, it would have made for a decent subtitle for 2018’s Investment Year in Review:

Everything in 2018 was down – or flat. U.S. large cap stocks: the S&P 500 was down 4.4%. U.S. small cap stocks: the Russell 2000 lost 11%. International developed stocks: the EAFE lost 13.4%. Emerging markets stocks: the MSCI EM fell 14.2%. Non-equity asset classes disappointed as well. The U.S. bond benchmark Bloomberg Barclays Aggregate returned 0.0%. High yield bonds, as represented by Bloomberg Barclays Global High Yield Index, lost 4.1%. REITS and commodities generally were no safe haven either, with the NAREIT Equity Index down 4% and the Bloomberg Commodity Index down 11.2%. Everything but cash and high-quality investment grade bonds closed 2018 in the red.

A ONCE-IN-40-YEARS OCCURRENCE

The last time investors experienced such a poor set of investment opportunities was more than 40 years ago. 1972, to be exact.

We won’t pontificate further on how unusual these 2018 results were without first stressing that 2017 was equally unusual – but to the upside. Combine 2017 and 2018, and things look “normal” again.

With virtually no exception, every major asset class in 2017 was in the black. From U.S. large cap stocks (S&P 500 up 21.8%), to U.S. small cap stocks (Russell 2000 up 14.6%), to international developed stocks (EAFE up 25.6%), to emerging markets stocks (MSCI EM up 37.8%), to U.S. bonds (Bloomberg Barclays Aggregate up 3.5%), to high yield bonds (Bloomberg Barclays Global High Yield up 10.4%), to REITS (NAREIT Equity up 8.7%), to a basket of commodities (Bloomberg Commodity Index up 1.7%) – this was the kind of year that we wish we saw more often.

Thus, in spite of the fear-mongering so prevalent in the 4th quarter of 2018, over the last two years, investors have been rewarded for taking on risk.

Sometimes, though, it just doesn’t feel that way.

PROSPECT THEORY

We think it’s useful to discuss a phenomenon that describes human behavior called Prospect Theory to help give context to 2018’s year in review. The theory was first presented in 1979 by Daniel Kahneman and Amos Tversky. Kahneman was awarded a Nobel Prize for this work in

2002 (in Economics, though he is a psychologist). If Tversky hadn't passed away in 1996, he probably would have shared the prize.

With Prospect Theory, Kahneman and Tversky developed a groundbreaking framework for showing that people make decisions based on the potential value of losses and gains rather than the final outcome. For most, losses carry greater emotional impact. Thus, in a nutshell, the emotions attached to gains and losses are not solely based on what you end up with, but also the path it took to get there.

PROSPECT THEORY

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AN ILLUSTRATIVE THOUGHT EXPERIMENT

Take two three-year-olds. Give one a piece of candy. Give the other two pieces of candy. Spend a few minutes doing your best to measure how much happier the one with two pieces of candy is.

But then take away one piece of candy from the child with two pieces. Now, re-measure the happiness levels of both. Both have one piece of candy, but we all know that the child who had two to begin with will likely be experiencing a negative emotional response (frustration, anger, disbelief, full-blown Chernobyl-like melt-down). Their emotions are the result of how they ended up with their one piece of candy – not their identical end-result.

Emotional responses to gains and losses are not symmetrical. How this translates to investors: The pain of a loss is estimated as two times greater than the elation of a similar gain. This fact drives poor decision making, especially in investing.

This phenomenon is often referred to as "myopic loss aversion." Prospect Theory helps to explain why the three-year-old who got her second piece of candy taken away will not be nearly as happy as the other, even though they both ended up with the same amount.

For kid number two, $2-1 \neq 1$. We're all feeling like that second kid now.

WHERE THINGS STAND NOW

As we write, most major global economies are doing well. And, despite global stock markets' Q4 performance, most indicators do continue to look up. U.S. cyclical sectors such as residential investment, business fixed investment, motor vehicle sales, and changes in private inventories are not reflecting the type of irrational exuberance that normally presages a recession.

> What primarily changed in the 4th Quarter was momentum.

Corporate profitability – what investors really care about – is still strong, given the boost from a lower corporate tax rate. And, while unlikely to continue at the torrid double-digit expansion rate of 2018, corporate profits should raise the "floor" of earnings moving forward. Further, U.S. consumers should get a boost from lower gas prices, strengthening wages, and improved employment trends.

That's not to say that there hasn't been some recent weakness in trends, particularly in manufacturing, most notably in China and Taiwan. As well, concerns that have developed around an obstinate and/or politically minded Fed, a "hard" Brexit, Italian political uncertainty, and the U.S.'s trade negotiation techniques. However, global trade remains robust as world trade volume continues to grow year-over-year while the world's major economies continue to produce positive real-GDP growth.

What primarily changed in the 4th Quarter was momentum. Momentum investors have the dubious task of attempting to time their entry into markets after gains have been made, but before those gains are lost to a change in temperament. These speculators created opportunities for investors as the market quickly priced in the challenges referenced above. Moving forward in 2019, fundamentals look much more attractive, while those entities influencing the pace of growth in our financial system – not least, central banks and politicians – may take a more dovish tone.

PRUDENT INVESTING – AND NON-CORRELATED RETURNS

We understand that clients may look to a year like 2018 with frustration, expecting that professionals should know what's going to happen in the market and make proactive changes to side step negative outcomes. While we empathize with the frustration, we cannot and do not make assurances to clients that we know with absolute certainty where markets are headed.
True, at any given time, we likely have a good understanding of where we are in the cycle, and perhaps even where markets are trending, but that doesn't mean that we should risk your money on hunches. As one's investment knowledge increases, there is a commensurate increase in the awareness of how much is unknown – including how much irrationality should be taken into account. Wild changes in allocation or strategy are a form of hubris that belie prudent investment management, and frequently create more problems than they solve.

This is not to say that we ever rest on our laurels and hope that the "market" does all the work. We have taken measured risks in our portfolio beyond the traditional 60/40 stock/bond portfolio allocation. [Feel free to take a deeper dive into our previous Commentaries, "The Death of the 60/40" and "A Bed of Nails," to revisit some of the tactics we pursue.] With historically low bond yields and (previously) high asset prices, we recognized that investor outcomes could be improved by allocating a portion of clients' portfolios to non-correlated returns.

We stress, though, that non-correlated does not mean negatively correlated. In other words, there should be no expectation that when equity markets zig, these non-traditional parts of our portfolio will zag. They could zig, they could zag, or they could meander. The point of these types of investments is that they have positive expected returns based on business profits and are less dependent on the typical drivers of capital market risks in a portfolio.

Non-correlated simply means that movements between assets are unrelated. For example, take two assets that have a 70% probability of going up in any given year (like the stock market). If they have no correlation to each other, then in combination, we would expect there to be only a 9% chance of both having a negative return in any given year (.3 x .3). That's about one in 10 years: Like we said before, 2018 looked like a 1-in-40 kind of year.

SOME GOOD NEWS

In spite of 2018 calendar-year performance outcomes, the zig, zag, and disorderly waffling of major asset classes this past year provided our traders with ample opportunities to harvest tax losses in taxable accounts. These losses can be used to offset gains now or in the future. If you don't have the capital gains to offset now, you can use $3,000 of those losses against your ordinary income.

While not a consequence of market volatility, another after-tax improvement effort we actively pursue is the avoidance of capital gain distributions. In the 4th quarter of this year, for clients with taxable accounts, we proactively sold investments we knew would be paying a capital gain. On a client-by-client basis, we compare the tax and costs associated with selling (and rebuying) the position and will only proceed in those instances where material after-tax benefits can be realized.

Assuming you pay your taxes with monies outside of your investment account, these avoidance strategies do not result in a "better performance number" on your statement. They do, however, positively impact what really matters: how much money you have.

Of course, should markets continue their slide, we'll reiterate that back in June 2018, our International Equities Moving Daily Average (MDA) signal triggered us to raise cash in a majority of our client accounts by selling a portion of our international stock positions. In October 2018, our U.S. Equities MDA signal similarly triggered a sale of a portion of our U.S. stock positions.

These two MDA trades, combined with our 3rd Quarter move out of infrastructure stocks to a new private commercial real estate fund, removed as much as 30% of our clients' equity exposure before much of the 4th Quarter volatility occurred.

While the long-term success of these recent trades is yet to be determined, we successfully muted a 4th Quarter peak–to-trough decline of ~17% in both the international and U.S. equity markets. For our clients with the moving average sleeve, we continue to hold cash proxies (at the time of publishing) and will reenter these markets when positive market momentum returns.

THINKING LONG TERM

Any single-year calendar period can be great, good, bad, or ugly. 2018 may have been bad, but it was far from ugly. It may have felt ugly, we understand, but that's the result of Prospect Theory: It's counterproductive to anchor on some high watermark that was only a reality for a short period. What matters is the end result, not so much the journey.

Single calendar-year returns in the S&P 500 have ranged between +47% and -39% since 1950, but rolling five-year returns (e.g., 1950-1955, 1951-1956, etc.) have ranged between +28% and -1% per year. During these same five-year rolling periods, a simple 50/50 portfolio of stocks and bonds had a range of returns between +21% and +1%. Said differently, for a 50/50 portfolio, all rolling five-year periods had positive return outcomes.

Focusing on any one year can drive investors crazy. Focusing on the longer term makes for a much more palatable range of outcomes for investors.

The purpose of this market insights piece is not to lay out all the pros and cons of the specific investments in your portfolio. Nor does it attempt to address your specific needs, wants, or wishes. We empower your Regional Director and Wealth Advisor with the resources to explain, in whatever detail you'd prefer, how these investments work and the successes (and challenges) present in your portfolio – and in your life. We also hope that putting 2018 into a broader perspective will ease the "pain" of the recent journey.

We encourage you to speak up if you're concerned about market volatility, or if you have questions about any matters related to your portfolio or other financial outcomes. Our objective is to help you have financial peace of mind, and to make sure you feel understood, supported, and confident about your future.