"Money is made by sitting, not trading." – Jesse Lauriston Livermore

First Quarter 2018 Update

Mr. Livermore was born in 1877 and was the inspiration behind the book "Reminiscences of a Stock Operator" by Edwin Lefèvre, which was published in 1923. Many of the simple lessons in that book ring true today, preaching patience, thoroughly researching your ideas, and avoiding following the crowd when investing. These are principles we also embrace at Disciplina. While the book offers many valuable insights, it does not appear that Mr. Livermore always practiced what he preached, declaring bankruptcy on three occasions during his lifetime. Pursuing a more modest lifestyle might have also helped prevent this, but we digress.

While making tactical tilts has been a successful part of our investment process over the year, we do acknowledge that quite often the best course of action is no action. Investors often get caught reacting or even overreacting to the noise surrounding the markets and not drilling down on what truly matters. There is *a lot* of noise surrounding the markets right now with a tremendous amount emanating from our nation's capital. Within this quarter's note, we aim to help our clients sift through the myths and reality of what drove market volatility in the first quarter and discuss our views moving forward. We will wrap up by debunking the misconception that a passive 60/40 strategy is the ideal asset allocation strategy for institutional investors. In short, you get what you pay for.

<u>Did Trade, Tweets and Inflation spark the Q1 selloff?</u>
Opening 2018, global equity markets picked up right where they left off in 2017, rallying over 7%, partly fueled by passage of the tax plan on December 17. Things quickly took a turn for the worse in late January. The sell-off accelerated in early February after January payroll data showed wages grew sharply, stoking fears that the Fed may need to tighten more than markets had been anticipating. Concerns were exacerbated by a simultaneous changing of the guard at the Federal Reserve with Jerome Powell replacing Janet Yellen as the 16th Chairman of the Federal Reserve. For the record, we find Powell to be a very capable leader with an approach towards monetary policy very similar to Yellen. The S&P 500 wound up slightly in the red by the time the quarter ended.

While there were plenty of other issues that garnered headlines to start 2018, such as inverse VIX ETFs, spiking LIBOR and various geopolitical issues, we believe a ratcheting of inflation fears was the primary catalyst for the volatility in the first quarter. Another challenge entailed recalibrating and fulfillment of higher growth expectations. Global economic growth expectations were consistently exceeded in 2017, pushing markets higher throughout the year. However, once the calendar flipped to 2018, economists ultimately raised their forecasts higher, establishing higher expectations and thus higher hurdles for global economies to clear. Recent data has been released that has failed to clear these hurdles. While this does not mean the economy is getting weaker, perhaps it did signal that the market was getting a bit ahead of itself. Nevertheless, we are encouraged as U.S. and Chinese economic data is still holding up relatively well versus expectations, despite softness in the Eurozone. The upshot is that the European Central Bank will likely continue to be very patient as is it pares back from its accommodating monetary policy.

None of these issues crept up on us overnight, but the markets have finally acknowledged their relevance. In 2017, we had only 10 days where the market moved more than +/-1% and zero with a move +/- 2% or more. The market also hit all-time highs 64 times in 2017, which accounts for ~25% of the total trading days in the year. 25%! What a charmed existence we all had! With one quarter in the books in 2018, we anticipate a shift from complacency to a more normal market environment.

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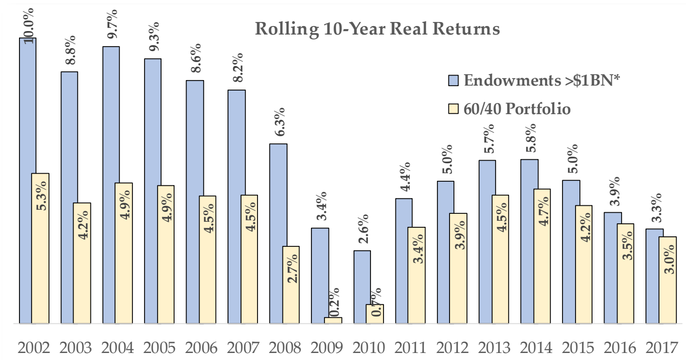
Daily Moves in Russell 3000 Index			
Year	>1%	>2%	New Highs
2013	39	4	68
2014	39	7	50
2015	75	9	17
2016	51	11	26
2017	10	0	64
Through March 2018	23	6	13
Average (1979-2018)	**60**	**14**	**26**

The 60/40 Portfolio - Not for the Faint of Heart

The drumbeat behind passive investing has grown louder over the past few years as investors consider its highly marketed merits. The 60/40 equity/bond portfolio has generated impressive returns of late, particularly behind a multi-decade deflationary trend which began in the 1980's. Dating to 1976, a 60/40 passive mix between the MSCI All Country World Index and the Bloomberg Barclays US Aggregate Index has gained about 9.0%. This looks to be a reasonable return for an institutional pool of capital, providing a 5.2% real return over this period. So, why not adopt this philosophy given it is *passive, inexpensive and easy to implement*?

Active or Passive Decision? Adopting a 60/40 portfolio is not a passive decision. Deciding to own a portfolio of 2,500 globally listed stocks mixed with the largest issues of fixed income debt may not be an attractive proposition in light of the dynamic nature of markets. Investors who adopt such a philosophy are making an "active" decision that should be revisited regularly; ***allocation***. Research shows an equal-weighted S&P 500 index has outperformed its market cap-weighted cousin by about 1.5% over the long-run. Why not adopt this approach? Careful, this is another active decision. Other opportunities to add value to your portfolio such as this abound.

Inexpensive? On the cover, a 60/40 passive portfolio may appear inexpensive, costing less than 0.10% to buy and hold, but its true cost is much higher if the strategy fails to deliver an institution's investment objective. With non-profit institutions distributing ~5% of their assets each year, real returns of at least 5% are required to preserve purchasing power over time. The 60/40 portfolio has not fulfilled this real return objective consistently. For instance, the last 10-year period the 60/40 portfolio provided more than a 5% real return was 2002, as noted in the chart below. It has been our experience that the expense of passive management in the form of opportunity cost is often under-represented.



By comparison, the average large endowment[1] has generated 10-year real returns in excess of 5% in 11 of the past 16 reporting periods. In their most recent endowment update, Yale University reported that the top ten endowments' 20-year nominal returns averaged 11.0% while the 60/40 index gained about 6.0% in value. This equates to an 8.9% real return versus a 3.9% real return. **In nominal dollar terms, this approximates $282 million in lost growth and spending over a 20-year period for a $100 million endowment.** While the resources of these large institutions are not readily available to all, the efficacy of the "endowment" model is real, warranting discussion for solutions that capture at least a portion of these gains. Ultimately, the future of our institutions may rest upon this decision.

[1] A proxy for well-resourced institutions = Endowments >$1BN as per annual NACUBO-Commonfund Study of Endowments, 2002-2017.

Easy to implement? The novelty of a 60/40 passive portfolio is "set it and forget it." Right? We agree, particularly within U.S. Large Cap. The S&P 500

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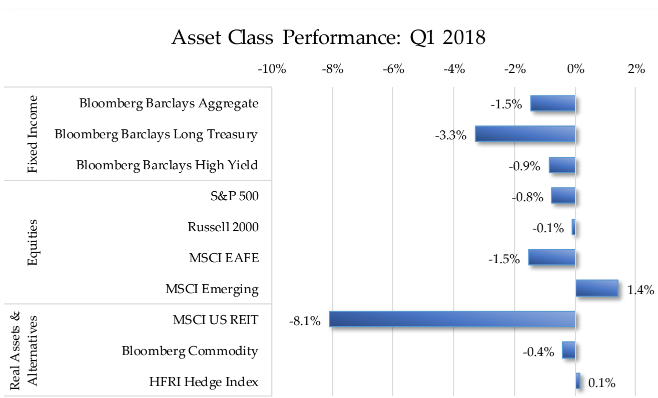
provides a low cost, disciplined framework for individuals, particularly when you have a long-term time horizon and limited use for these funds. However, institutions should consider a more bespoke approach if they

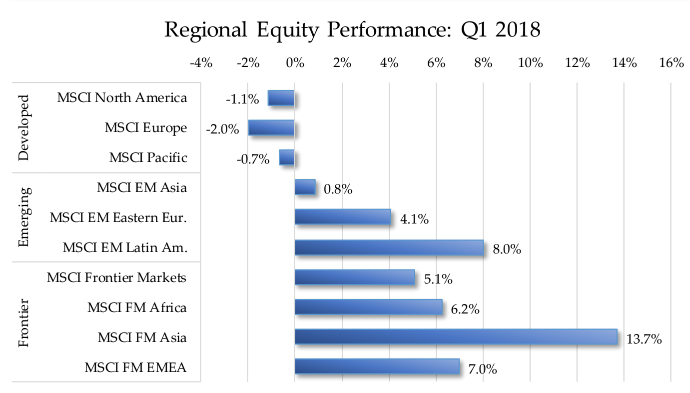
- Need to access these funds for sustainability and thus require a more dynamic approach
- Need to manage risk in light of increased market volatility and less accommodative monetary policy
- Need for greater stakeholder education and insights
- Need for greater returns and guidance on allocation

Market Update

After a strong year in 2017, most equity markets continued to post gains in January, only to stumble heading into February. A brief recovery in stocks in the latter part of February was interrupted again in March by concerns over a trade war between the U.S. and China. Large Cap U.S. Equity markets finished the first quarter down -0.8% and while small cap U.S. stocks fell -0.1%. Developed international equity markets declined -1.5% while emerging markets gained +1.4%.



Fixed income rebounded somewhat in March as yields dropped following a large increase in February. Nonetheless, The Bloomberg Barclays U.S. Aggregate Bond Index lost -1.5% for the quarter. Long-term Treasuries rallied in March, yet lost -3.3% for the quarter. High-yield bonds declined -0.9% for the quarter.



U.S. real estate markets were weak, losing -8.1% for the quarter. Commodities were mixed during the quarter, finishing down -0.4%. Energy commodities posted strong gains led by oil and natural gas, while metal and agricultural commodities declined.

Firm Update

While the first quarter proved turbulent after a steadily rising, but placid 2017, our client portfolios were well positioned with a diversified mix of active, passive and tactical tilts towards strategies with limited exposure to financial markets. Clients engaged with Disciplina in multi-asset class, long-term endowment style accounts[2], outperformed their benchmarks in the first quarter, experiencing roughly half the downside their benchmarks did, net of fees. Clients engaged with Disciplina's Cash Plus strategy[3] generated positive returns and also outperformed by a measurable amount, net of fees.

Performance Note: Performance refers to Disciplina's track record of managing:

[2] Fully invested discretionary client capital at Disciplina Capital Management for university endowments engaged in similar endowment-style investment strategies.

[3] Fully invested discretionary client capital at Disciplina Capital Management for all clients engaged in Cash-Plus investment strategies.

Fully invested accounts are those with cash allocations within 5% of their cash target allocations. All composites are asset-weighted and net of all underlying manager fees and expenses, including any advisory fees charged by Disciplina Capital Management. For all periods, there can be no assurance that these, or comparable results, will be achieved. Past performance is not indicative of future results.

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