Q1 2017 Market Review & Outlook

Morgan Creek Capital Management

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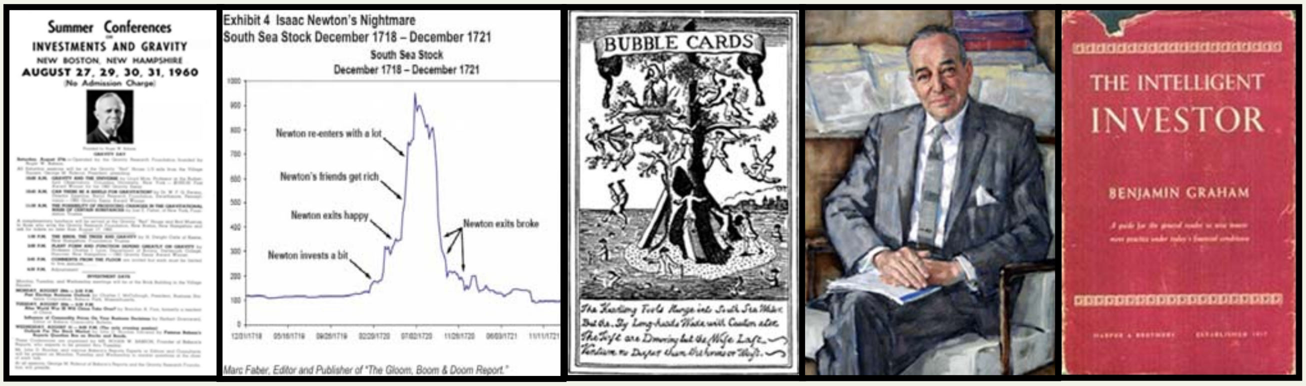
Letter to Fellow Investors

Not So Intelligent Investors: #GravityRules



Source(s): Newbostonhistoricalsociety.com, Businessindsider.com, CFAInstitute.com, Wikipedia.com

The protagonist of our letter last quarter was Roger Babson, the acclaimed entrepreneur, investor and philanthropist, who was the first financial forecaster to call the 1929 stock market crash and subsequent economic Depression. Babson reluctantly attended MIT and studied Engineering. His reluctance came from his belief that University instruction *"was given to what had already been accomplished, rather than to anticipating future possibilities."* The one thing he did value from his time at MIT was his study of the British scientist and mathematician, Sir Isaac Newton, and, in particular, his Third Law of Motion that states, *"For every action there is an equal and opposite reaction"* and his discovery of the laws of gravity. In addition to Newton, Babson was inspired by the book *Brenner's Prophecies of Future Ups and Downs In Prices,* written in 1884 by Samuel Brenner (described on the title page as "an Ohio Farmer") that laid out a cyclical model for the variation in commodities prices (that has been astonishingly accurate over the past century in identifying market peaks and troughs). Babson was particularly struck by a quote from the book that he linked to the Newtonian constructs of action and reaction and gravity, *"There is a time in the price of certain products and commodities, which if taken by men at the advance lead on to fortune, but if taken on the decline leads to bankruptcy and ruin."* Babson concluded that prices could deviate from their normal levels only for so long before the law of gravity would bring them back to earth. Babson was so intrigued by Newton and his theories that he titled his own autobiography, *Actions and Reactions,* and he incorporated Newton's Third Law into all of his inventions and business endeavors. One such invention was a proprietary economic assessment technique called the "Babsonchart," which became famous when he used it to predict the Great Crash in September of 1929. Later in life, Babson became somewhat obsessed with gravity and even penned an essay titled *Gravity - Our Enemy Number One*, where he stated that his desire to find a way to overcome gravity was catalyzed by the childhood drowning of his sister. He described the event, saying *"she was unable to fight gravity, which came up and seized her like a dragon and brought her to the bottom, where she suffocated from lack of oxygen."* Babson was convinced that *"old man Gravity"* was directly responsible millions of accidents and deaths each year, directly due to the people's inability to counteract gravity at a critical moment. The breaking point came in 1947 when Babson's grandson tragically drowned and he became completely obsessed with *"the weakest fundamental force."* While an average eccentric might be content to wallow in self-pity, Babson was a man of action and he reacted in the only way he knew how, as an entrepreneur and a businessman. He hated gravity so he decided to do something to attempt to get rid of it.

Babson established the Gravity Research Foundation in 1948, ostensibly to study gravity and to sponsor research that might help people learn to combat the forces of gravity, specifically to discover a means of implementing what Babson referred to as gravitational shielding (he envisioned a sort of suit someone could wear to counteract gravity, particularly when swimming). The Foundation also ran conferences, like the one highlighted in the picture above, that would bring together thought leaders in the field of gravity and investments. A curious aside, the Foundation's headquarters was established in New Boston, New Hampshire, which Babson chose for a very interesting reason, he believed that New Boston was far enough away from the major metropolitan cities that it might survive a nuclear war if WW III were to commence (interesting that talk of WW III has arisen again recently) and created a tourist destination as the Gravity Center of the World. As part of the Foundation operations he also bought Invention Incorporated, which seconded three full-time investigators to the U.S. Patent Office to sort through all incoming patent proposals with a mission *"to constantly be on the watch for any machine, alloy, chemical or formula which directly relates to the harnessing of gravity."* Babson believed that a gravity harness, in the form of a metal alloy that would act as a partial insulator, could lead to the development of a conductor (like a waterwheel) that would harness the natural waves of gravity and create a perpetual motion machine. Babson believed that harness could solve the world's dependence on non-renewable fuels and would be *"a great blessing to mankind"* (again, an interesting parallel to today's energy market discussions). The Foundation sponsored an annual contest for scientific researchers to submit essays on topics related to gravity. Though the contest awarded cash prizes of $500 to $4,000, a seemingly small sum, the contest has had a very material impact on the field of study and the contest has been won by a number of people who later went on to win the Nobel Prize in physics (for example, Stephen Hawking, who has won six times, George Smoot, Gerardus t'Hooft and Bryce DeWitt). Steve Carlip, a UC Davis physicist whose essay won in 2007 was quoted on the impact of the contest, saying *"it encourages people working in the field to step back a little and give a broader overview of their research and it is nearly universally known among people working in gravitational theory."* Unfortunately, the Foundation ceased activity after Babson's death in 1967, but the contest continues to this day and is run by George Rideout, Jr., the son of Babson's business partner. Historians have written that the contest forever changed the field of gravitational research and has reinvigorated the age-old quest to understand gravity. Roger Babson would be disappointed to know that there still is no gravitational shielding device (although we will discuss later how investors may beg to differ), but he would be pleased that the interest in gravity has been renewed and maintained (well, at least in the scientific realm, if not in the investment world…more on this later).

Roger Babson would probably wholeheartedly agree with two statements from Investopedia. *"Serious physicists read about Sir Isaac Newton to learn his teachings about gravity and motion. Serious investors read Benjamin Graham's work to learn about finance and investments."* It turns out Babson was not the only person to have an interest in Sir Isaac. In an updated and annotated version of Benjamin Graham's 1947 classic *The Intelligent Investor* (called *"The best book about investing ever written"* by Warren Buffett), Jason Zweig of the Wall Street Journal included an anecdote in the Foreword of the Revised Edition (issued in 2003) about Newton's adventures (or should we say misadventures) with investing in the South Sea Company. The South Sea Company was a unique "business." Founded in 1711, the company was promised a monopoly on trade with South Sea colonies (South America) by the British government in exchange for assuming the government debt accumulated during the War of Spanish Succession. The Company listed on the British stock exchange and began trading in 1718. Investors were lured to invest by the idea that the Spanish colonies in the South Seas were willing to trade jewels and gold for wool and fleece (like Rumpelstiltskin spinning straw into gold). In January 1720, when the company's shares stood at £128, the Directors discovered that the trade concessions were less valuable than hoped, they circulated false claims of success in the colonies and spun yarns of South Sea riches, pumping the shares to £175 by February. Using a modern lens (as the term was not invented until 1929), the South Sea Company represented a giant Ponzi Scheme (similar to Bernie Madoff) in that the company proposed to pay dividends not from profits but from sales of new shares for cash (sounds a little like Tesla here…). Our protagonist, Sir Isaac, enters the story here when he invested around £3,500 (about $800k today). In March, the company convinced the government to allow it to assume more of the national debt in exchange for its shares (sounds a little like QE here…), ironically beating a rival proposal from the Bank of England (they would get their chance to buy overvalued assets later). As investor confidence mounted (and the mania began to grow) Newton sold out in late April at around £350, having doubled his money to £7,000 (intelligent trade). If the story ended there, we wouldn't have a theme for our letter.

The South Sea Company was not the only speculative venture being offered at the time, as there was a flurry of speculation in the British stock market. Richard Dale points out in his book *The First Crash: Lessons from the South Sea Bubble*, *"Life expectancy in 18th Century England was just 21 years old, owing to smallpox, typhus and other killer diseases, and an endless variety of wars. Who needed a long-term investment plan when no one ever reached retirement age? A career committed to the laborious acquisition of wealth over time was perhaps less appealing than taking a chance on some get-rich-quick commercial venture."* Newly floated firms were springing forth like tulips and 1720 actually became known as the "bubble year" when in June, Parliament (at the urging of the South Sea Company) passed the Bubble Act requiring all shareholder-owned companies to receive a Royal Charter. The South Sea Company received its Charter, a perceived vote of confidence from the government (as opposed to an anti-competitive device acquired through lobbying), and the price began to rocket higher. As the shares began soaring, they were pumped up by rumors spreading as investors had to rely on coffee-shop "grapevines" and the press for share price information. The biggest problem was that the press was interviewing the coffee-shop gossipers so the bubble became reflexive, feeding on itself as it grew (sounds familiar…). Newton had cashed in his stake for a very nice profit, but he watched with anguish, as his friends who had stayed invested were "getting rich," so he dove back in at twice the price he had exited and this time invested his entire life savings of £20,000 (about $4.5 million today) at £700 a share. In the words of Lord Overstone, *"no warning on earth can save people determined to grow suddenly rich."* As the dog days of summer approached, the shares went vertical and the mania turned to a delusional, speculative frenzy as investors from all walks of life begged, borrowed and stole to get money to invest in the South Sea Company. The share price quickly rose toward £900, which prompted some investors to sell, but the company instructed their agents to buy the shares to support the price and the shares surged to £1,050. The bubble finally burst in September (as all Bubbles are prone to do; interesting that it seems to always happen in the fall) and by mid-October South Sea shares had quickly tumbled back to their January price. One thing to keep in mind is that all of this activity was for a company that wasn't profitable (no prospects for profits either, again sounds like Tesla) and, worse still, its trading activities (only source of potential revenue) had been suspended. The South Sea Company didn't go bankrupt in the modern sense, but rather suffered a liquidity crisis because it was spending so much money to support the share price (sounds really familiar…). Given the ties to the government, it eventually had to be bailed out (again familiar) through a combination of debt forgiveness and liquidity injections by the Bank of England (history rhymes).

Sir Isaac had finally had enough and he exited in October and November, losing nearly his entire life savings and prompting him to famously quip *"I can calculate the movement of stars, but not the madness of men."* It is said that for the rest of his days he forbade anyone to utter the words South Sea in his presence. We can learn a lot about human nature observing the scientist responsible for the law of gravity being sucked into a speculative foray that for a time seemed to defy gravity (in the end, Gravity Rules). Greed is an amazing phenomenon, clouding the judgment of even one of the smartest people on the planet. The perilous journey of the inventor or calculus into the South Sea Company is a reminder of how even the most intelligent people can be transformed into not so intelligent investors when they allow the irrationality of the crowd to overwhelm their reason. Graham described this phenomenon saying, ***"Even the intelligent investor is likely to need considerable willpower to keep from***

following the crowd. For indeed, the investor's chief problem, and even his worst enemy, is likely to be himself. Individuals who cannot master their emotions are ill-suited to profit from the investment process." One of the most disconcerting parts of these stories is how the participants find ways to rationalize their behavior. John Martin, a prominent banker in Newton's day who also lost a lot of money in the South Sea Company, was quoted as saying, *"When the rest of the world are mad we must imitate them in some measure."* Similarly, during the Global Financial Crisis it was Chuck Prince (former CEO of Citigroup) who said a month before the collapse, *"As long as the music's playing, you've got to get up and dance, and we're still dancing."* We would argue that you don't. You can believe that gravity exists and choose not to chase the bubble and destroy your wealth. Investors have been looking for the easy way to get rich for centuries and they have been chasing bubbles since the travails of Sir Isaac in the 1720. The South Sea Company was one of the greatest investment bubbles in history. In fact, it was the first time that the word "bubble" was used to describe a speculative run and subsequent crash in an asset. Sir Isaac taught us that every action has an equal and opposite reaction and the bigger the speculative excess, the worse the crash on the other side. Roger Babson spent decades unsuccessfully trying to defeat the laws of gravity and legions of investors are trying once again to defy gravity in the equity markets today, but they might be wiser to heed the quote on the Bubble Card (issued after the South Sea Bubble debacle) above *"The headlong Fools plunge into South Sea water, but the sly long-heads wade with caution after. The first are drowning but the wise last. Venture no deeper than the knees or waist."* In other words, only fools abandon caution and blindly invest in things simply because they are going up. Wise investors always buy with a Margin of Safety. Graham described it this way, ***"The function of the margin of safety is, in essence, that of rendering unnecessary an accurate estimate of the future. That margin of safety is counted on to protect the investor against loss or discomfiture in the event of some future decline in net income. The margin of safety is always dependent on the price paid."*** Remember, there is no investment good enough that you can't mess up by paying too high a price.

Jason Zweig included the story of Sir Isaac and the South Sea Bubble to draw a very real and tangible contrast between not so intelligent investing and the definition of intelligent investing that Ben Graham espoused in the book that Zweig felt so honored to re-introduce. Benjamin Grossbaum was born on May 9, 1894 (as an aside it is kind of fun to share a birthday with the father of Value Investing, so perhaps I come by my Value bias honestly) in London, England to Jewish parents. When he was just a year old his family immigrated to New York City, and they changed their last name to Graham (to try and mitigate the impact of discrimination against Jewish immigrants). Graham's father died when he was very young and his family experienced significant poverty, which motivated him to become a serious student so he could contribute to supporting the family. Graham excelled in the classroom and attended Columbia University ahead of most of his peers, actually completing his graduation at twenty. Remarkably, given his challenging family life, Graham was awarded the Salutatorian title, which at the time was awarded to the second highest graduate of the entire class of college graduates in the United States. Like Roger Babson, he was offered a position as an instructor in English, Mathematics, and Philosophy, but declined in order to go to Wall Street where he joined Newburger, Henderson & Loeb as an assistant in the bond division where he earned the princely sum of $12 a week. At the time, common stocks other than Railroads and Utilities were considered speculations and there were very few positions dealing in equities, thus this period was virgin territory for securities analysis.

Graham made his mark in 1915 with an analysis of an arbitrage opportunity in the liquidation of Guggenheim Exploration Co. by going long the holding company and shorting the underlying copper producers (an early hedge fund trade). Graham wrote a series of three papers titled *Lessons For Investors* in 1919 (rather bold for a 25-year old) espousing the benefits of buying sound common stocks at reasonable valuations. One of the more notable lines in the papers was, ***"If a common stock is a good investment, it is also an attractive speculation,"*** a comment that would come back to haunt him a decade later. Graham was made a partner of the firm in 1920 and his rise in prominence on Wall Street during the Roaring Twenties Bull Market was nothing short of spectacular. In 1923, Louis Harris lured Graham away from Newburger, Henderson & Loeb to open a partnership with $250,000 (about $3.6 million today), Grahar Corporation, where Graham would be paid a salary of $10,000 (about $145k today) and investors would earn the first 6% return and then the partnership would be entitled to 20% of the profits above that (the first hedge fund). Grahar primarily made arbitrage trades and purchases of common stocks that appeared to be undervalued. After two and a half years, Graham had produced strong returns and some friends convinced him they could bring new accounts with a 50/50 profit split, so Graham proposed a new fee structure to Mr. Harris, who politely declined and they dissolved Grahar. On January 1, 1926 the Benjamin Graham Joint Account was opened with $450,000 (about $6.1 million today) of capital from friends and family. Jerry Newman joined Graham later that year and would become a colleague and partner for the next thirty years (until Graham retired in 1956). The partnership made 26% in the first year and then doubled the assets in 1927 to finish at $1.5 million. During the final year of the Bull Market in 1928, the partnership was up 51% and Graham's take was an astonishing $600,000 (about $8.5 million today). The legendary Bernard Baruch summoned the young Graham (now all of 34) to his office and offered him the opportunity to become a junior partner, telling him *"I'm now 57 and it's time to slow up a bit and let a younger man like you share my burdens and my profits."* Tragically, Ben Graham believed (like Sir Isaac in the South Sea Bubble) that gravity no longer applied to him and that there was no reason for a "near-millionaire" (his words) to work for someone else, even the eminent Bernard Baruch.

Coming into 1929, the Benjamin Graham Joint Account was fully invested in many non-traditional equity positions (read *highly speculative*) and a large number of arbitrage positions involving equity and convertible bonds. The capital of the partnership had grown to $2.5 million (about $35.6 million today), but with short securities proceeds and margin, the total capital was $4.5 million (almost two times leverage). As the market continued to roar higher during the summer months of 1929, Graham and Newman lost their discipline to fully hedge the arbitrage positions (they believed they were giving up too much profit from the losses on the shorts) and the net position of the fund grew larger. When "Babson's Break" came in early September, Graham was clearly in the Irving Fisher camp believing that the markets had reached a permanently higher plateau, and they did not sell positions even as they declined. The partnership ended the year down (20%), not much worse than the (15%) loss of the DJIA. In early 1930 there was a small recovery in stock prices (the "Return to Normal" phase that occurs during the first phase of the Crash following every Bubble in history) and confidence returned to Wall St. and investors were convinced that despite the extreme valuations, it was a return to business as usual (despite growing storm clouds in the economy). That January, Graham met a gentleman on a trip to Florida, John Dix, a 93 year-old retired businessman, who told him *"Mr. Graham, I want you to do something of the greatest importance. Get on the train to New York tomorrow. Sell out your securities. Payoff your debts and return the capital to the partners in the Joint Account. I wouldn't be able to sleep at night if I were in your position."* Graham thought the advice was preposterous and headed back to New York completely dismissive of Mr. Dix's wisdom. 1930 would turn out to be the worst of Graham's career as the Joint Account lost (50%) versus the DJIA (29%) decline as he scrambled to reduce the margin debt. Given the high degree of leverage, it was actually impressive that the entire equity was not wiped out. The next two years were down as well (although Graham managed to lose much less than the market), but over the four-year period, the Benjamin Graham Joint Account lost (70%) compared to the DJIA decline of (74%). The Laws of Investment Gravity proved true for Graham, and it turned out that for every action (bubble) there is an equal and opposite reaction (crash).

By the end of the year, Graham had adjusted the Joint Account to a less leveraged position and began searching for lessons to be learned from the Crash. In June of 1932, Graham wrote three articles for Forbes magazine titled, "Is American Business Worth More Dead Than Alive?" At the time, over 40% of NYSE listed stocks selling at less than net working capital and many were selling below cash assets. Graham believed the stock market now placed an inordinately low valuation on corporate America. Back in 1928 Graham had begun teaching at his alma mater, Columbia Business School, and after learning his hard lesson about risk, he began to refine his ideas and theories about Value Investing. Graham decided to write a book about his what he had learned during the Crash and collaborating with colleague David Dodd produced *Security Analysis* in 1934. That tome (it is 735 pages) has become the Bible for investment professionals, and made the iconic duo of Graham & Dodd synonymous with the discipline of Value Investing. Living through the Crash had fundamentally changed Graham and the book discussed the process necessary for a true investor to evaluate and form an assessment of a business simply from a thorough analysis of the financial statements of the company (to remove oneself from the emotion of the markets). Throughout his early financial writing and during his investment career Graham had been highly critical of the *"greatly altered and irregular financial reporting"* produced by corporations, which he believed made it challenging for investors to understand the true nature of the businesses' financial dealings. One of Graham's most impassioned views was that companies should not keep all of their profits as retained earnings, but pay out regular dividends to shareholders (focusing on dividend paying companies is one fundamental tenet of Value Investing). Graham was also very vocal following the Crash in criticizing financial advisors who had urged clients to purchase stocks at any price so long as there was a belief that stock prices would continue to appreciate (like the South Sea Company). The book's primary theme was that sound financial management was rooted in fundamental and comprehensive analysis of companies' actual financial condition (not promises of growth in the future). Most importantly, the book described the disposition of an investor necessary to perform well over the long-term was one focused on making purchases of securities in order to gain satisfactory returns, but to never have meaningful risk of financial losses. Specifically, Graham wrote, ***"You must thoroughly analyze a company, and the soundness of its underlying businesses, before you buy its stock. You must deliberately protect yourself against serious losses. You must aspire to "adequate," not extraordinary, performance."*** Graham went on to differentiate between Investing and Speculating when he said, ***"An investment operation is one which, upon thorough analysis, promises safety of principal and an adequate return. Operations not meeting these requirements are speculative. It is proper to remark, moreover, that very few people are consistently wise or fortunate in their speculative operations."*** Graham himself had no moralistic position on speculation, but rather believed it to be hazardous to the average investor's financial health, saying, ***"Outright speculation is neither illegal, immoral, nor (for most people) fattening to the pocketbook."*** *Security Analysis* was ultimately about discipline and process, and legions of investors over the decades have credited their success to systematically following the dogma of the Graham & Dodd philosophy. To take the essence of 735 pages into a single sentence, Graham believed an investor should ***"Purchase securities at prices less than their intrinsic value as determined by careful analysis, with particular emphasis on the purchase of securities at less than their liquidating value."***

That same year, given that the losses in the Joint Account were so severe and the high water mark was so far away (Graham and Newman had also not earned any fees for five years and lost most of their fortunes), several investors agreed to restructure the fund with a more traditional fee structure where the duo could earn 20% of the profits going forward. In a rather extraordinary fashion, over the next two years all previous losses were recovered. But in 1936, the IRS ruled that the Joint Account was not truly a partnership, but an operating company, so Ben and Jerry (not the ice cream guys) had to convert the fund to the Graham-Newman Corporation. Graham spent the next few years honing his investment style to profit from buying undervalued stocks (rather than leveraged speculation) with an emphasis on managing downside risk (by buying companies below their liquidation value). After the experience of the Crash, Graham was determined to use investors' collective fear and greed to his advantage and to have the discipline to buy $1.00 for $0.50 when investors were fearful and securities were put on sale. The new corporation performed well, compounding somewhere near 20% (records are a bit sparse for this period) and Ben & Jerry moved the fee schedule to a more favorable level by 1946 where they received base salaries of $30,000 each (about $400,000 today) plus 12.5% of the dividends paid and 10% of the profits (roughly equivalent to 20% to 25% carried interest). The corporation had grown to $4.5 million in assets (about $60 million today), and things were going well for the partners. Graham continued to teach at Columbia Business School, and had become a prolific writer (like Roger Babson) contributing articles to newspapers, trade journals and began his second book.

Graham wrote *The Intelligent Investor* in 1949, which was considered equally as groundbreaking as *Security Analysis* upon its release. The book was highly acclaimed, and today it is widely regarded as one of the best investment books ever written. Graham's creative genius inspired the construction of an allegory to personify the Stock Markets. Mr. Market was a very obliging fellow who turns up at the shareholder's door every day offering to buy or sell their shares at a different price. Most often, the price offered by Mr. Market seems plausible, but sometimes it seems rather ridiculous. The shareholder is free at all times to either agree to the offered price and trade with Mr. Market or to ignore him completely. Mr. Market doesn't mind either way and will always be back the following day to quote another price. The point of the story is that an intelligent investor should never regard the whims of Mr. Market as the determining factor in the value of the shares they own. An intelligent investor should concentrate on the actual performance of the companies, by focusing on dividends received and the actual financial results reported by the company rather than be concerned with Mr. Market's irrational behavior in quoting prices based on fear and greed. The most important point is that that an intelligent investor can say "No" to Mr. Market at any time. Graham wanted people to understand that investment should be dealt with in a professional and business-like manner, and by treating investment in such a manner makes investment activities more intelligent.

Two years earlier a young Warren Buffett had enrolled at Columbia and came to study under Graham after reading *The Intelligent Investor*. Buffett became one of Graham's favorite students and the two developed a very close relationship. When Buffett graduated in 1951, he moved back to Omaha and took a job selling securities. Over the next few years he would send ideas to Graham (Buffett described it as pestering him) and eventually Graham responded with a letter saying, *"Next time you are in NYC, come see me."* In 1954, Buffet took that trip and Graham offered him a job at Graham-Newman Corp. Buffett picked up and moved to White Plains, New York, with his pregnant wife and daughter to work for his mentor. Two short years later (when Buffett was only 25) Graham told Warren that he was going to retire, and that he wanted him to be his successor and junior partner of the fund with the Jerry Newman's son Mickey as the senior partner. By 1956, the fund had grown to $7 million (about $65 million today). More importantly to Buffett at the time, it had become one of the most famous funds on Wall Street, and he had the opportunity to step into the shoes of his hero (Buffett even named his first son Howard Graham Buffett). Buffett described the decision as *"traumatic"* but he wanted to move back to Omaha. He had turned the $9,800 (about $95,000 today) he had when he graduated into $127,000 (about $750,000 today), and he had determined that he and his family could live off of the interest ($12,000) and he was going to *"retire."* Buffett famously quipped to his wife, *"compound interest guarantees that I'm going to be rich."* He painfully told Graham that he was going to leave Graham-Newman and the rest, as they say, is history (this sequence of events has been referred to as the $50B decision). Buffett went on to become a practicing disciple of Ben Graham and has said often that, *"No one ever lost money following Graham's principles."* Like the old investing saw, *"If you take care of the losses, the gains will take care of themselves."* Focusing on managing risk is the very essence of being an intelligent investor.

Let's take a look at some of the incredible accumulated wisdom contained in Ben Graham's books and discuss how by following his principles, we too can become Intelligent Investors. First and foremost, Graham believed that when you purchase a security you are really buying a piece of a business (so you should think like an owner). ***"A stock is not just a ticker symbol or an electronic blip; it is an ownership interest in an actual business, with an underlying value that does not depend on its share price."*** The key point here is that the value is something inherently different than the current price. We have written in previous letters how George Soros always began from the premise that the current price was wrong (whereas most begin from assumption that current price is right), and that prices are actually continually moving from undervalued to overvalued and rarely spend much time at fair value. Graham referred to securities transactions as "operations" saying, ***"An investment operation is one that can be justified on both qualitative and quantitative grounds. The quantitative factors lend themselves far better to thoroughgoing analysis than do the qualitative factors. The former are fewer in number, more easily obtainable, and much better suited to the forming of definite and dependable conclusions."*** Graham wanted to emphasize focusing on the things we know, that which we can analyze because it has been reported in the financial statements, and is far better than trying to synthesize the myriad opinions and qualitative assessments that result from human emotions and interpretations. The focus then is to determine the intrinsic value (fair value) of the company and then compare this with Mr. Market's current offering price to determine where the opportunities exist to buy (or sell). ***"In all of these instances he appears to be concerned with the intrinsic value of the security and more particularly with the discovery of discrepancies between the intrinsic value and the market price. We must recognize, however, that intrinsic value is an elusive concept."*** Graham makes the point that even when the analyst performs exhaustive diligence of the data there is still the potential for error in calculations, omission of critical information or other variables that might make our determination of intrinsic value less than optimal. He went further to say that one way to combat against this potential for error is to remain focused on factual data, not future forecasts. ***"Analysis is concerned primarily with values which are supported by the facts and not with those which depend largely upon expectations. Analysis of the future should be penetrating rather than prophetic."*** In the event that analysis of the future must be entertained, that process should be even more diligent and rigorous and must steer clear of being predictive or reliant on speculation.

Importantly, ***"Security analysis does not assume that a past average will be repeated, but only that it supplies a rough index to what may be expected of the future. A trend, however, cannot be used as a rough index; it represents a definite prediction of either better or poorer results, and it must be either right or wrong. While a trend shown in the past is a fact, a future trend is only an assumption."*** The human brain is hardwired to look for patterns in data, and Graham is telling us that a good securities analyst must be able to resist the urge to extrapolate current trends into the future or assume that patterns that have existed in the past will necessarily repeat in the future. We have all been warned over time what happens when you assume (you make an @#$ out of you and me). He reminds us that we must also resist the urge to think that some new environment will exist in the future and that our analysis should hold up under normal conditions, not just ideal conditions. ***"Security analysis, as a study, must necessarily concern itself as much as possible with principles and methods which are valid at all times or, at least, under all ordinary conditions."*** Graham rails against one of the most common constructs of investment analysis, the idea that the current earnings are representative of future prospects, and considers the idea that one can have precision in arriving at intrinsic value based on some multiple of current earnings to be absurd. ***"The whole idea of basing the value upon current earnings seems inherently absurd, since we know that the current earnings are constantly changing. And whether the multiplier should be ten or fifteen or thirty would seem at bottom a matter of purely arbitrary choice."*** Alternatively, he recommends using a normalized earnings concept (average of past earnings over a market cycle) to arrive at a more appropriate valuation. ***"Security Value = Normalized Earnings × (8.5 plus twice the expected annual growth rate)"***. Having been victimized by speculative companies during the Crash, Graham refined his technique for identifying potential companies for purchase with a list of criteria. "***Seven Statistical Requirements: 1) Adequate size 2) A sufficiently strong financial condition 3) Continued dividends for at least the past 20 years 4) No earnings deficit in the past ten years (No loss) 5) Ten year growth of at least one third in per-share earnings 6) Price of stock no more than 1.5 times net asset value 7) Price no more than 15 times average earnings of the past three years."*** While there are many who would say this unnecessarily restricts an investor from participating in growth stocks, Graham would somewhat agree as he had many reasons why investing in Value was preferable to Growth.

He begins by stating that, ***"It has long been the prevalent view that the art of successful investment lies first in the choice of those industries that are most likely to grow in the future and then in identifying the most promising companies in these industries. Obvious prospects for physical growth in a business do not translate into obvious profits for investors."*** Clearly there are many stories of incredible fortunes being made by buying into a new growth company early in its life and holding on while the story unfolds, creating untold riches (MSFT, AAPL, AMZN, etc.). That said, ***"Perhaps many of the security analysts are handicapped by a flaw in their basic approach to the problem of stock selection. They seek the industries with the best prospects of growth, and the companies in these industries with the best management and other advantages. The implication is that they will buy into such industries and such companies at any price, however high, and they will avoid less promising industries and companies no matter how low the price of their shares. This would be the only correct procedure if the earnings of the good companies were sure to grow at a rapid rate indefinitely in the future, for then in theory their value would be infinite. And if the less promising companies were headed for extinction, with no salvage, the analysts would be right to consider them unattractive at any price."*** While there is no question that buying into great growth companies early on can be very profitable, the main point is that there is a point at which investors abandon discipline, believing that they can pay any price for a company. History is replete with examples where this is clearly not true and has been disastrous for financial well-being (Sir Isaac's second foray into the South Sea Company comes to mind, as does CSCO in 2000). The problem for market participants is that ***"The more a stock has gone up, the more it seems likely to keep going up. That commonly held belief is, unfortunately, flatly contradicted by a fundamental law of financial physics, the bigger they get the slower they will grow. A $1B company can double its sales fairly easily, but where can a $50B company turn to find another $50 billion in business?"*** It seems that investing and physics have many things in common and that Newton's Laws are applicable in many areas of the markets.

Graham came to the conclusion over time that, ***"There is really no way of valuing a high-growth company, in which the analyst can make realistic assumptions of both the proper multiplier for the current earnings and the expectable multiplier for the future earnings."*** His value-orientation was rooted in the construct that the more one deviated away from the facts and figures of the current business (the things we know) and focused more on expectation and forecasts (thinks we think we know, but do not), the more unlikely we are to arrive at any sort of useful valuation. ***"The more dependent the valuation becomes on anticipations of the future, and the less***

it is tied to a figure demonstrated by past performance, the more vulnerable it becomes to possible miscalculation and serious error." Humans are optimistic by nature and they are prone to make assumptions that the future will be better than the past. Valuations of growth companies are, therefore, likely to always be skewed away from the actual intrinsic value. The longer the time horizon of the extrapolation, the worse these errors becomes and the more potential for meaningful loss for the investor if events do not turn out as anticipated. Axiomatically, ***"If the share price advances, it is because most investors expect earnings to grow."*** That said, extrapolating that growth well out into the future is dangerous, as it has been shown that ***"Extremely few companies have been able to show a high rate of uninterrupted growth for long periods of time."*** Capitalism works, and when there are excess profits in a particular area, competition arises (barring regulatory barriers that create or preserve monopolies) and lowers the expected growth rate of the incumbents. A telltale sign of impending danger is when it becomes easy for companies to raise capital. ***"The public would do well to remember that whenever it becomes easy to raise capital for a particular industry, both the chances of unfair deals are magnified and the danger of overdevelopment of the industry itself becomes very real."*** Excess development in an industry will reduce future profits, full stop. Think of the myriad examples over the years like the massive overproduction in U.S. Shale in 2014 (resulting in collapse in oil prices and share prices) and perhaps the potential for an unwinding in Tesla at some point given the public's willingness to give Mr. Musk as much capital as he wants despite not showing any capacity to convert it into profits for shareholders. Graham was very exact on this point, saying, ***"People who habitually purchase common stocks at more than about 20 times their average earnings are likely to lose considerable money in the long run."*** While there is no question you can make money in the short run trading in high valuation securities, Graham would differentiate that activity (speculating) from investing as we will see below.

Another point that Graham makes about growth companies is that an undue amount of faith must be placed in the management since there can be so little hard evidence to analyze. He states that ***"Objective tests of managerial ability are few and far from scientific. In most cases the investor must rely upon a reputation which may or may not be deserved."*** It is very difficult over short periods of time to differentiate between skill and luck, and oftentimes the reputation of a management can be the result of the latter where the former is preferred. The bigger problem is that ***"The investment world nevertheless has enough liars, cheaters, and thieves to keep Satan's check-in clerks frantically busy for decades to come."*** There are many promoters, storytellers and actual fraudsters that would like to separate investors from their hard earned money, and it can be challenging to tell the good guys from the bad guys because they all sound good (they don't have the ones that sound bad make presentations). Only through very thorough analysis of data can you protect yourself from these bad actors. Alas, there is one tiny problem (that Graham railed against his entire career). There are accounting tricks and gimmicks that can obfuscate the true results, making a story seem much better than it actually is, but there are some warning signs to look out for. ***"Among the things that should make your antennae twitch are technical terms like "capitalized," "deferred," and "restructuring" and plain-English words signaling that the company has altered its accounting practices, like "began," or "change."*** In the end, deep analysis can protect investors from many problems. Graham suggested to look beyond the Income Statement, saying ***"Astute observers of corporate balance sheets are often the first to see business deterioration".*** If you believe in Graham's fundamental assertion that investing is all about buying a piece of a business, then buying and owning real assets is a great place to start securing a margin of safety.

One of Graham's most fundamental teachings is the difference between Investing and Speculating. The primary challenge for Investors is to remember that security prices are not determined by analysis, but rather by emotion, and, hence, cannot be the starting point for an Investor. ***"Security prices and yields are not determined by any***

exact mathematical calculation of the expected risk, but they depend rather upon the popularity of the issue." Securities are priced by Mr. Market, the collective opinion of all market participants and ***"The recurrent excesses of its advances and declines are due at bottom to the fact that, when values are determined chiefly by the outlook, the resultant judgments are not subject to any mathematical controls and are almost inevitably carried to extremes."*** As the pendulum swings back and forth between undervaluation to overvaluation the arc will be amplified by the emotion of the humans interacting in the markets and will be driven by the overall levels of fear and greed. That emotional element creates a problem for an investor in that ***"The concept of safety can be really useful only if it is based on something more tangible than the psychology of the purchaser."*** The ability to ascertain the intrinsic value of a security therefore will be dependent on the investor ignoring the current price and focusing solely on the financial information of the business. Hence, ***"The individual investor should act consistently as an investor and not as a speculator. This means that he should be able to justify every purchase he makes and each price he pays by impersonal, objective reasoning that satisfies him that he is getting more than his money's worth for his purchase."*** There is one issue here, which is that Graham believed ***"The average person knows the price of everything, and the value of nothing."*** He was implying that the average market participant would not do the proper amount of work to determine the value of the assets, but rather simply observe the current price and be prone to buying if the price was rising and selling if the price was falling. ***"An investment is based on incisive, quantitative analysis, while speculation depends on whim and guesswork. Operations for profit should be based not on optimism but on arithmetic."***

Graham said the better response to the movement of prices is indifference. "***The investor with a portfolio of sound stocks should expect their prices to fluctuate and should neither be concerned by sizable declines nor become excited by sizable advances. He should always remember that market quotations are there for his convenience, either to be taken advantage of or to be ignored. They need pay attention to it, and act upon it, only to the extent that it suits their book, and no more."*** Ignoring Mr. Market, that person who shows up every day incessantly imploring you to act, is very challenging (particularly in a 24/7 financial news and social media world), but the ability to *"don't just do something, sit there"* is a fundamental key to long-term investing success. ***"Thus the investor who permits themselves to be stampeded, or unduly worried, by unjustified market declines in his holdings is perversely transforming his basic advantage into a basic disadvantage. That investor would be better off if their stocks had no market quotation at all, for they would then be spared the mental anguish caused by other persons' mistakes of judgment."*** A true investor never surrenders their power to Mr. Market, but rather maintains control by having the willpower to simply ignore the current market price. That willpower comes from doing the work to understand the intrinsic value of the security and having the discipline to tune out the noise. Graham would say to ***"Invest only if you would be comfortable owning a stock even if you had no way of knowing its daily share price."*** Focusing on the value of an asset as opposed to the price of an asset provides the owner with an amazing advantage over other market participants and keeps the operation, as Graham would call it, business-like and unemotional. Removing emotion from the process facilitates a longer time horizon and helps mitigate one of the challenges of participating in the securities market, that ***"In the short run, the market is a voting machine but in the long run, it is a weighing machine."*** Graham was adamant in his view that ***"The stock investor is neither right or wrong because others agreed or disagreed with him; he is right because his facts and analysis are right."*** Opinions are less valuable than facts, so maintaining a focus on security analysis, rather than market sentiment, keeps you squarely in the investor camp rather than the speculator camp.

Short-term price fluctuations have the potential to cause the most trouble for investors and Graham says very clearly that ***"The most realistic distinction between the investor and the speculator is found in their attitude toward stock-market movements. The speculator's primary interest lies in anticipating and profiting from market fluctuations. The investor's primary interest lies in acquiring and holding suitable securities at suitable prices."*** Differentiating between trying to anticipate the action and reactions of others and maintaining a discipline to acquire securities below their intrinsic value is what separates investors and speculators. In the end, ***"investing isn't about beating others at their game. It's about controlling yourself at your own game."*** The ability to remain dispassionate about the wild gyrations of the markets and immune to the constant nagging by the proverbial salesman at your door allows an investor to disengage from playing against others and focus on controlling their own emotions, thus allowing the efficient and effective execution of your investment plan. One of the most important distinctions between investors and speculators is the time horizon in which they operate. That said, Graham has an interesting perspective on this, saying, ***"It's time for everyone to acknowledge that the term "long-term investor" is redundant. A long-term investor is the only kind of investor there is. Someone who can't hold on to stocks for more than a few months at a time is doomed to end up not as a victor but as a victim."*** Investing is basically time horizon arbitrage, and the equity markets are the transmission mechanism that ruthlessly transfers wealth from the active to the patient. After his experience during the Crash, Graham came to appreciate the significance of taking advantage of the power of time and quipped that investors should ***"Plant trees that other men will sit under."*** Present in each of these quotations is the takeaway that the longer the time horizon, the better the returns. Buffett took this construct one further saying an investor should buy quality companies and hold them indefinitely (and even better to lever them up with negative cost of capital from insurance float, pure genius).

Graham talks about one of the perils of short time horizons is that it necessarily leads to higher levels of activity (taken to the extreme with day trading), making a distinction between a "securities" analyst and a "market" analyst and what that means with regard to levels of activity. ***"The cardinal rule of the market analyst [trader] that losses should be cut short and profits should be safeguarded (by selling when a decline commences) leads in the direction of active trading. This means in turn that the cost of buying and selling becomes a heavily adverse factor in aggregate results. Operations based on security analysis are ordinarily of the investment type and do not involve active trading."*** If one performs securities analysis in order to own parts of businesses then one is an investor and if one performs market analysis to determine the direction of prices then one is a trader (speculator). ***"Much as the investor would like to be able to buy at just the right time and to sell out when prices are about to fall, experience shows that he is not likely to be brilliantly successful in such efforts and that by injecting the trading element into his investment operations he will disrupt the income return on his capital and inevitably shift his interest into speculative directions."*** He goes on to say that there is a fundamental problem in the business of securities (Wall Street) that unfortunately pushes people toward market analysis and away from the security analysis. ***"We cannot help thinking too, that the average individual who opens a brokerage account with the idea of making conservative common stock investments is likely to find himself beset by untoward influences in the direction of speculation and speculative losses."*** Wall Street makes money on trading volume and the idea of occasionally buying securities and, worse yet, holding them for long periods of time (perhaps indefinitely) does not align well with their primary means of deriving revenue. ***"Nevertheless, since a stockbroker's business is to earn commissions, he can hardly avoid being speculation-minded."*** Graham does not begrudge the brokers' objectives, but rather points out that it is an unavoidable outcome of the misalignment of the compensation system. The investor makes money by sharing in the profits of the business over the long term, while the speculator makes money from capturing profits from active trading around price movements. The speculator is a much more profitable client for the broker. He says it very clearly,

"People who invest make money for themselves; people who speculate make money for their brokers." This line brings to mind the image of the cover of the infamous book, *Where Are All the Customers' Yachts?*

Graham learned the hard way (as did Newton) that there are meaningful, perhaps even biological, differences between Investors and Speculators. Seth Klarman (another Graham disciple and subject of our letter last fall, *The Value of Value*) says that Value Investors are genetically predisposed to investing in that particular way, they are born with it. He even goes so far as to say that any other approach to the markets feels like gambling. ***"It is the essential character of the speculator that he buys because he thinks stocks are going up not because they are cheap, and conversely when he sells. Hence there is a fundamental cleavage of viewpoint between the speculator and the securities analyst, which militates strongly against any enduring satisfactory association between them."*** Investors focus on value and Speculators focus on price. Given that the two constructs rarely spend any appreciable time at the same level (think pendulum swinging) it is logical that there would be an intellectual and psychological tension (or more like a magnetic polarization) between the two. ***"The stock speculator does suffer, in fact from a well-nigh incurable ailment: The cure he seeks, however is not abstinence from speculation but profits. Despite all experience, he persuades himself that these can be made and retained; he grasps greedily and uncritically at every plausible means to this end."*** Graham is (perhaps) a little extreme in equating speculative urges to a disease, or addiction, but he truly believed (again, having learned the hard way) that buying securities simply because of their price was moving was hazardous to your health (both financial and physical). After spending a great deal of time speaking to the negative aspects of Speculation, Graham does offer an olive branch to those who would veer off the straight and narrow path of investing toward the crooked road of speculating, saying that it is possible to have "intelligent speculation," but immediately offers three things that are clearly unintelligent (the theme of our letter). ***"There is intelligent speculation as there is intelligent investing. But there are many ways in which speculation may be unintelligent. Of these the foremost are: (1) speculating when you think you are investing; (2) speculating seriously instead of as a pastime when you lack proper knowledge and skill for it; and (3) risking more money in speculation than you can afford to lose."*** The second two points go to our Three Buckets Rule of Investing – everyone should have three allocations for their capital, the Liquidity Bucket, the Get Rich Bucket, and the Stay Rich Bucket. Wealth owners (individuals or institutions) should put 10% to 15% in the Liquidity Bucket to cover two years of their spending requirements (doubling the average spending rate of 5% to 7%), 10% to 15% in the Get Rich Bucket (Speculation), and the balance in the Stay Rich Bucket (Investment). We always say that the Get Rich Bucket it is designed for things like hot stock tips and friends' business ventures, so *"keep it small, because you are likely to lose it all."* However, it is the first point of the three that is the theme of the letter since it is what always gets people in trouble, conflating Speculating and Investing and worse, not knowing the difference. ***"The risk of paying too high a price for good quality stocks (while a real one) is not the chief hazard confronting the average buyer of securities. Observation over many years has taught us that the chief losses to investors come from the purchase of low quality securities at times of favorable business conditions."*** When market participants lose discipline to focus on value and buy stocks at any price (particularly low quality ones), simply because the prices are rising, is what makes those participants Not So Intelligent Investors (read *Speculators*).

When it comes to building a portfolio, Graham has a lot of wisdom. We begin with a truism that we refer to around Morgan Creek as Rule #1 of Investing, ***"An Investor should never buy a stock because it has gone up or sell one because it has gone down. They would not be far wrong if this motto read more simply: "Never buy a stock immediately after a substantial rise or sell one immediately after a substantial drop."*** The key word here is substantial because it implies that the Speculators have temporarily taken control of the price, in other words Mr. Market becomes particularly irrational, and an Investor must resist the temptation to act based in the same direction of the movement of price. In fact, an Investor should be motivated to act in opposition to the direction of current price moves. If price is declining, the security is becoming more attractive as it moves toward or below fair value (cheaper), and if the price is rising, the security is becoming less attractive as it moves toward or above fair value (more expensive). Graham says the ***"Principle for the securities analyst: Nearly every issue might conceivably be cheap in one price range and dear in another. Buy cheap and sell dear."*** The critical assumption here is that the Analyst has done the work and understands fair value in order to make these determinations. Graham was a proponent of deep analysis and focus on a relatively small number of opportunities (he would argue there are not that many truly great businesses an Investor would want to own), and actually taken to the extreme offered that ***"It is undoubtedly better to concentrate on one stock that you know is going to prove highly profitable, rather than dilute your results to a mediocre figure, merely for diversifications sake."*** He backs away from the extreme of the single stock portfolio (although we know from history that all truly great fortunes came from highly concentrated positions, individual stocks, businesses, real estate assets, etc.), and provides a range of acceptable diversification. ***"There should be adequate though not excessive diversification. This might mean a minimum of ten different issues and a maximum of about thirty."*** All things in moderation (even moderation) should be the mantra, as concentration in a smaller portfolio of thoroughly researched ideas executed at prices below fair value should produce the best returns over the long-term. To summarize, ***"It always seemed, and still seems, ridiculously simple to say that if one can acquire a diversified group of common stocks at a price less than the applicable net current assets alone (after deducting all prior claims, and counting as zero the fixed and other assets) the results should be quite satisfactory. They were so in our experience, for more than 30 years."*** (We might be a stickler for details here and say the twenty-four year period from 1933 to 1956 produced the satisfactory results, but whose place is it to nit-pick with an Investment Legend?)

Another important point that Graham makes is that an Investor need not wait for a market crash in order to build positions in a portfolio. ***"It is far from certain that the typical investor should regularly hold off buying until low market levels appear, because this may involve a long wait, very likely the loss of income, and the possible missing of investment opportunities."*** The point here is that there are always company specific opportunities to investigate and ultimately purchase regardless of how high or low the overall market level happens to be at the current time. The old saw, it is a market of stocks rather than a stock market applies here, and the good securities analyst can always uncover things to spend time on and allocate capital toward. Even in a raging Bull Market (where many, if not most, securities would be overvalued, perhaps like today), Graham says "***If an Investor wants to be shrewd they can look for the ever-present bargain opportunities in individual securities."*** One of Ben's favorite words is bargain, which implies a stock that is selling materially below its intrinsic value, offering the purchaser a significant Margin of Safety (room to be wrong in the actual analysis). Bargains arise due to the collective behavior of market participants that is the opposite of speculation (or rather the fallout of such practices), where holders of a security lose faith when the price falls and sell, pushing the price down. Graham says that at this moment "***Issues appeared to be worth more than their price, being affected by the opposite sort of market attitude, which we might call "underspeculation," or by undue pessimism because of shrinkage in earnings."*** He goes further to say that there are limited buyers in these situations because ***"People are constitutionally averse to buying into a troubled situation."*** Human beings tend to extrapolate current trends, and have a difficult time seeing how, or why, a situation (bad or good) will change. In business and investing there is an automatic self-correcting mechanism that begins to work when the pendulum swings too far to one side (gravity would be the force on the pendulum) and brings the extreme situation back toward equilibrium. In essence, ***"Abnormally good or abnormally bad conditions do not last forever."*** In business, capitalism eventually wins out, and ***"The absence of new competition, the withdrawal of old competition from the field and other natural economic forces may tend eventually to improve the situation and restore a normal rate of profit on the investment."*** The most important point to remember here is that an Investor makes the most money when things go from truly awful (abnormally bad) to simply bad.

Graham would argue (and Buffett has been quoted in agreement) that a disciplined approach to buying bargains allows an Investor to participate in the stock market without the fear of losing money (big statement). Graham posited the actual question (and provided an answer) ***"Can you really make money in stocks without taking a serious risk? Yes indeed if you can find enough bargain issues to make a diversified group, and if you don't lose patience if they fail to advance soon after you buy them. Sometimes the patience needed may appear quite considerable. But most of the bargain issues in our experience have not taken that long to show good profits."*** Graham touches here on one of the most fundamental character traits of true Intelligent Investors, patience. Having the patience to allow the purchases to revert to their fair value is critical to the success of an Investor. Further, there is another character trait, which is equally necessary for success, courage. ***"Traditionally the Investor has been the man with patience and the courage of his convictions who would buy when the harried or disheartened speculator was selling."*** Courage is the ability to keep your head when everyone around you is losing theirs and the willingness to act when the opportunity arises. Graham says that, ***"One must have the means, the judgment, and the courage to take advantage of opportunities that knock on his door."*** Having the means implies that there is capacity in your portfolio to add new positions and for the best Value managers over time that has meant having meaningful levels of cash on hand to be prepared to pounce when opportunities present themselves. Legendary Investors like Buffett, Klarman, Robertson and Soros would always have large pools of cash, but what really separated them from other investors is that they would raise cash as market prices rose, while the speculators became increasingly invested as the market grew more and more expensive (chasing prices, insuring they have the maximum exposure to the market at precisely the wrong time). When the inevitable crash comes (the equal and opposite reaction to the action of the growing bubble), the Intelligent Investor has the means (cash), the judgment to act, and the courage to buy the bargains as they appear. ***"In the world of securities, courage becomes the supreme virtue after adequate knowledge and a tested judgment are at hand."*** Once the positions are taken, great Investors have the ability to trust their work as an analyst and hold those positions regardless of market price fluctuations (even buying more should the price fall after initial entry).

One of Graham's most important distinctions is made between securities and markets. As described above, he believed that those who buy securities are Investors and those who try to time the market at Speculators. ***"Note our basic distinction between purchasing stocks at objectively low levels and selling them at high levels (which we term Investment) and the popular practice of buying only when the market is 'expected' to advance and selling when it is 'due' to decline (which we call Speculation)."*** He goes further to make the point that there is actually a predominance of the latter, which he says is a good thing for the securities business. ***"It is fortunate for Wall Street as an institution that a small minority of people can trade successfully and that many others think they can. The accepted view holds that stock trading is like anything else; i.e. with intelligence and application, or with good professional guidance, profits can be realized. Our own opinion is skeptical, perhaps jaundiced. We think that, regardless of preparation and method, success in trading is either, accidental and impermanent, or else due to highly uncommon talent. Hence the vast majority of stock traders are inevitably doomed to failure."*** Graham says that most of success in Speculation is due to luck and that there are a very select few that have the talent to consistently win the loser's game. He makes another important point in noting that the business attracts individuals of above average intelligence (like Sir Isaac) but that this intellectual capacity can oftentimes actually be a liability rather than an asset. ***"It is no difficult trick to bring a great deal of energy, study, and native ability into Wall Street and to end up with losses instead of profits. These virtues, if channeled in the wrong directions, become indistinguishable from handicaps."*** Learned people (Graham actually wrote doctors were the worst offender) believe they can perform well in the markets simply because of their intelligence, but the vast majority come to learn that it is Intelligent Investing (from discipline, process and experience) that is more important than intelligence itself. Graham himself was an example of this during the Crash in 1929 as the Salutatorian of the Class of 1919 nearly lost everything because he believed he was smarter than the markets.

Graham also speaks to the folly of the production of "research" on Wall Street designed to predict how a particular sector, industry or security will perform relative to the markets. ***"Aside from forecasting the movements of the general market, much effort and ability are directed on Wall Street toward selecting stocks or industrial groups that in matter of price will 'do better' than the rest over a fairly short period in the future."*** He argues that much (if not most) of this activity is a waste of time and should be categorically ignored by true Investors. ***"Logical as this endeavor may seem, we do not believe it is suited to the needs or temperament of the true investor, particularly since they would be competing with a large number of stock-market traders and first-class financial analysts who are trying to do the same thing."*** The challenge of competing against other very talented analysts and investors is that there is a sort of math problem in that ***"As in all other activities that emphasize price movements first and underlying values second, the work of many intelligent minds constantly engaged in this field tends to be self-neutralizing and self-defeating over the years."*** The focus on price movements rather than fundamental value pits large numbers of highly talented individuals against one another in an attempt to anticipate the anticipations of others and those activities become like sine waves of various frequencies that effectively cancel each other out and produce little gain for the participants. Graham doesn't mince words here saying, ***"It is absurd to think that the general public can ever make money out of market forecasts."*** The problem he says is that the average person would rather do what is easy rather than what is hard and are always in search of a get rich quick angle (again harkening back to Newton's time). ***"Market analysis seems easier than security analysis, and its rewards may be realized much more quickly. For these very reasons, it is likely to prove more disappointing in the long run. There are no dependable ways of making money easily and quickly, either in Wall Street or anywhere else."*** Imagine that, there are no get rich quick schemes that actually work. To that end, when someone (like Charles Ponzi or Bernie Madoff) promises you a way to invest and make money that seems easy (and too good to be true), don't walk, <u>run</u> away, because it probably <u>is</u> too good to be true. The Intelligent Investor would rather do what is hard yet dependable.

Graham also speaks to the psychology of market forecasts and speculation saying that, ***"The processes by which the securities market arrives at its appraisals are frequently illogical and erroneous. These processes are not automatic or mechanical but psychological, for they go on in the minds of people who buy and sell."*** The idea of investing in the realm of the collective emotion of market participants (where irrationality frequently dwells) pales in comparison to the idea of investing in well-researched companies (where rationality and logic frequently dwell). Graham says that investing is best when it is most business-like and that mechanical and disciplined focus is a much more likely way to generate superior returns. ***"The mistakes of the market are thus the mistakes of groups or masses of individuals. Most of them can be traced to one or more of three basic causes; Exaggeration, Oversimplification or Neglect."*** We know that the madness of crowds is a pervasive problem in the investment markets and that humans are prone to going to extremes based on 1) their belief in the exaggerated claims of the promoters of a business, 2) the use of overly simplistic heuristics to avoid having to do real analytical work, and 3) the lack of effort on most market participants part to diligently follow through on ideas and monitor investments on an ongoing basis (to catch changes as they occur in real time). Graham believed that given these handicaps the likelihood that individuals could be successful in timing that market was quite low, saying, ***"Catching the swings on a marginal basis is impracticable."*** The best argument that he made for not attempting the folly of being a market analyst was that there was little room for error and that ***"In market analysis there are no margins of safety; you are either right or wrong, and if you are wrong, you lose money."*** Almost like betting on red or black, the odds of beating the house (making consistent return), where the house is the collective irrationality of multitudes of emotional market participants are very low indeed.

Graham provided a great deal of insight on the characteristics that lead to successful outcomes for Intelligent Investors over time, things like discipline, rationality and consistency. ***"The disciplined, rational investor neither follows popular choice nor plays market swings, rather he searches for stocks selling at a price below their intrinsic value and waits for the market to recognize and correct its errors. It invariably does and share price climbs. When the price has risen to the actual value of the company, it is time to take profits, which then are reinvested in a new undervalued security."*** Maintaining a focus on buying securities below their fair value is half of the story, but having the discipline to sell the security when it recovers and approaches fair value is the area where the average investor fails most often. So much of the investment industry is focused on the buy side, trying to ascertain which securities to buy and when to buy them, that establishing, honing and consistently executing an intelligent sell discipline become an afterthought for most investors. The key to success (on both sides) according to Graham is the ability to remain focused on value rather than price. In fact, an Intelligent Investor uses price extremes simply as an trigger to initiate or eliminate positions such that ***"Market movements are important to an investor in a practical sense, because they alternately create low price levels at which he would be wise to buy and high price levels at which he certainly should refrain from buying and probably would be wise to sell."*** Once again it is critical to understand (and have calculated) fair value of the security in advance of the price move so that the proper trigger levels can be assigned to the security. Once the price targets are known, the investment operation becomes very business-like, disciplined and free from emotion. Graham stressed that ***"The intelligent investor realizes that stocks become more risky (not less) as their prices rise and less risky (not more) as their prices fall. The intelligent investor dreads a Bull Market, since it makes stocks more costly to buy. And conversely (so long as you keep enough cash on hand to meet your spending needs), you should welcome a Bear Market, since it puts stocks back on sale."*** An investor likes to buy assets at cheap prices and sell assets at dear prices whereas a speculator does precisely the opposite (and hence routinely loses money). Graham believed that ***"To achieve satisfactory investment results is easier than most people realize; to achieve superior results is harder than it looks."*** The key difference is that a solid process can produce satisfactory returns, but it takes talent, skill, wisdom and extraordinary discipline to achieve truly outstanding results, but like most things in life ***"All things excellent are as difficult as they are rare."***

The challenge for Intelligent Investors is that the markets spend a greater percentage of the time in irrational states and are constantly moving from extremes in one emotional state (fear) to the other (greed). Graham described this as follows ***"Most of the time stocks are subject to irrational and excessive price fluctuations in both directions as the consequence of the ingrained tendency of most people to speculate or gamble, to give way to Hope, Fear and Greed."*** Human nature trends toward these extremes and causes the markets to spend inordinate amounts of time in the overvalued and undervalued states. ***"The market is a pendulum that forever swings between unsustainable optimism (which makes stocks too expensive) and unjustified pessimism***

(which makes them too cheap). The intelligent investor is a realist who sells to optimists and buys from pessimists." Great investors simply remain dispassionate and focused on the intrinsic values of securities, happily agreeing to sell to Mr. Market when he becomes ebullient and buy from him when he becomes despondent. Speculators constantly fluctuate between the extremes of optimism and pessimism because they have no grounding in value to enable them to remain objective; thus, they swing wildly from buyers to sellers at precisely the wrong times. To be successful as in Investor, Graham says one needs two things, "***There are two requirements for success in Wall Street. One you have to think correctly and secondly you have to think independently."*** An Intelligent Investor does the work as a security analyst so that they can think clearly and correctly (based on the facts and data), and they have the ability to separate from the herd and think differently from the crowd. Having a variant perception is the key to making meaningful returns over time as when everyone is thinking the same there is not much thinking going on and there is not much alpha to be gathered. Graham believed that ***"Wall Street people learn nothing and forget everything,"*** so they were prone to make the same mistakes over and over again, and that an investor with discipline, courage and cash could capitalize on these mistakes as they arise. ***"It requires strength of character in order to think and to act in opposite fashion from the crowd and also patience to wait for opportunities that may be spaced years apart."*** Particularly in the day and age of instant gratification, this last point may be one of the toughest tenets the Intelligent Investor, having to wait for long periods of time for the fat pitch to come. Jeremy Grantham says that a great investor really only needs one or two great ideas a year, and Warren Buffett says one of the great things about investing is there are no called third strikes, so a hitter can stand at the plate with the bat squarely resting on their shoulder until the meatball pitch comes right down Broadway just begging to be hit out of the park.

One of the biggest threats to investors is the cyclical nature of markets that leads them to move to extremes in valuation and, in some extreme cases, into bubbles. George Soros says that every bubble begins from a reasonable state that moves to an extreme based on a misperception. Graham describes the phenomenon similarly (with a little less delicacy) saying, ***"Very frequently, however, these appraisals [the value of a share] are based on mob psychology, on faulty reasoning, and on the most superficial examination of inadequate information."*** It is said that people go mad in crowds and markets have forever fallen victim to the herd mentality that exists as price begins to take precedence over value and speculation begins to crowd out investment. As the prices continue to rise ***"The market [makes] up new standards as it [goes] along, by accepting the current price (however high) as the sole measure of value. Any idea of safety based on this uncritical approach [is] clearly illusory and replete with danger."*** The construct of Margin of Safety quickly becomes "old fashioned" and fundamental notions of value, discipline and process are relegated to the dust bin (temporarily) and prognostications of new paradigms and choruses of "it's different this time" become the norm. Mathematically, the higher the price, the greater the danger, but as speculative fever overtakes the majority of market participants, the self-reinforcing behavior actually creates a belief (albeit completely wrong) that risk has been reduced because of some new, new thing like technological advancements, central bank largesse or government intervention. ***"With every new wave of optimism or pessimism, speculators are ready to abandon history and time-tested principles, but we investors cling tenaciously and unquestioningly to our prejudices."*** Having the courage of your convictions to toe the line and stay the course (mixing metaphors, we realize) is critical in these times of speculative excess to protect ourselves from the risk of ruin. Graham summarizes saying that ***"While enthusiasm may be necessary for great accomplishments elsewhere, on Wall Street it almost invariably leads to disaster."*** Disaster may sound overzealous but history has shown time and again that the result of not following Graham's rules does indeed result in disaster for those who become Not So Intelligent Investors. The worst part of these late stages of a bubble (where we believe we are today) is that as confidence rises (it always peaks at the end of expansionary cycles), speculators utilize ever-increasing amounts of margin debt to turn their easy money into big money. Graham makes a note of a small problem in this pursuit. "***The outright owner can afford to buy too soon and to sell too soon. In fact, he must expect to do both and to see the market decline farther after he buys and advance father after he sells out. But the margin trader is necessarily concerned with immediate results; he swims with the tide, hoping to gage the exact moment when the tide will turn and to reverse his stroke the moment before. In this he rarely succeeds, so that his typical experience is temporary success ending in complete disaster."*** The worst possible outcome for a speculator is to get lucky early (have a good outcome after a bad decision) as it emboldens them to go back for more. This is the phenomenon that sunk Sir Isaac in the South Seas misadventure. His temporary success turned into complete disaster (from which he never truly recovered) as he learned once again of the laws of gravity.

Graham summarized the key characteristic of Intelligent Investors very succinctly, emphasizing their focus on the goals and objectives of their financial plan (spending needs, asset growth needs). He also clearly separates success from beating some arbitrary market index return. In the end, the behavioral discipline to execute your plan with an eye toward preserving capital (avoiding losses) first, and growing capital second, is a superior way to measure success. ***"The best way to measure your investing success is not by whether you're beating the market but by whether you've put in place a financial plan and a behavioral discipline that are likely to get you where you want to go. In the end, what matters isn't crossing the finish line before anybody else but just making sure that you do cross it."*** The risk of permanent impairment of capital (risk of ruin) is the primary risk that Intelligent Investors fear, not volatility of returns, or trailing some capital markets index over a random time period. Graham would argue (and we would agree wholeheartedly) that risk management is more important than return management, and that compounding capital over the long run should achieve superior returns by controlling downside. ***"The investor who buys securities only when the market price looks cheap on the basis of the company's statements and sells them when they look high on the same bias, probably will not make spectacular profits. But on the other hand, he will probably avoid equally spectacular and more frequent losses. He should have a better-than-average chance of obtaining satisfactory results. And this is the chief objective of intelligent investing."*** George Soros said that investing was supposed to be boring, and that if it was exciting you were probably doing it wrong. Graham agrees with that sentiment and places consistent generation of solid (if unspectacular) returns over time as the primary goal of intelligent investing. Graham believed (as did his student, Warren Buffett) that ***"Investing is a unique kind of casino, one where you cannot lose in the end, so long as you play only by the rules that put the odds squarely in your favor."*** This is a very strong statement indeed, but one that has been proven over the decades by disciples of the art of intelligent investing.

The importance of Graham's work cannot be overstated in the environment we find ourselves in today as investors. There are striking similarities in the political, social, economic and investment environment between today and 1929, and it is interesting how our study of "Babson's Brilliance" last quarter led us to the brilliance of Benjamin Graham this quarter. Babson was the first to warn us of the imminence of the bubble getting ready to burst in the fall of that fateful year. We find it interesting that he utilized an indicator based on the Laws of Action and Reaction pioneered by his hero Sir Isaac Newton. It is of the utmost importance that we realize that both Newton and Graham learned difficult (and costly) lessons about the power of gravity to collapse a bubble that has formed due to excessive speculation in the markets. We see evidence that a similar type of bubble is forming in the U.S. equity markets today, and that market participants are ignoring the wisdom of the father of Value Investing. Market participants today are speculating on price, instead of focusing on value, leads us to classify them as Not So Intelligent Investors. Mark Twain said that *"History doesn't repeat, but it rhymes,"* and Graham had a similar quote, ***"I am more and more impressed with the possibilities of history's repeating itself on many different counts. You don't get very far in Wall Street with the simple, convenient conclusion that a given level of prices is not too high."*** Wall Street is incented to promote the idea that stocks can only go up and that investors should buy them. The Central Banks around the world have been frantically trying to repeal the Law of Gravity since the Global Financial crisis by pumping liquidity into the system in order to revive growth and profits. They have failed miserably on both fronts. Global GDP growth has continued to decline (Demographics is Destiny) and profits in the U.S. have been the same since 2012. Equity markets have continued to rise, simply because of the belief held by Speculators that when interest rates are low one can pay a higher multiple for earnings. Nearly the entire gain in the S&P 500 since 2012 has been due to the P/E rising from 15X to 26X. We expect that some time very soon we will be reminded that while Sir Isaac may not have been such a great investor, he was a brilliant physicist and mathematician, and his Laws are immutable. Roger Babson spent the later years of his life trying to find a way to combat Newton's Law of Gravity, but he never did find that elusive gravity-shielding device. We don't believe that those buying stocks today at these crazy valuations (second worst next to 2000) have found the solution either and we will all learn once again that #GravityRules.

First Quarter Review

At the end of 2015 we created our #2000.2.0 thesis (now renamed #2000Redux because the dots mess up the hashtag in Twitter), which posited that the period from 2016 to 2018 would resemble the period of 2000 to 2002 in the U.S. equity markets. In writing the letter last quarter, we looked back and compared the path of 2000 to the path of 2016 and found that for the first ten months of the year there were some striking similarities. We wrote about the specifics of the paths as follows, *"In 2000, the S&P 500 was down hard in the first six weeks of the year, falling (9%) by mid-February, while in 2016 the drop was (11%). In 2000, the market rallied halfway back in March and was mostly flat during the summer leaving the index down (3%) coming into Election season, while in 2016 the markets rallied all the way back by April, suffered a setback during Brexit, but rallied back to up 2% on the eve of the election."* The similarities ended there, however, as in 2000 the markets sold off sharply after the election to finish down (9%), but after the surprise victory by Mr. Trump, the narrative quickly shifted from Doomsday to Boomsday and the S&P 500 surged to finish the year up 12%. Given the dramatic divergence, we went on to write, *"A legitimate question to ask is does the positive market reaction post-election negate the #2000.2.0 thesis? For now, we will say "Not yet" as there are still signs that economic growth is slowing (Q4 GDP just disappointed) and should there be a 2017 Recession (like 2001) equities could catch down in a hurry."* In 2001, it became apparent that the economy was slowing quickly as Q1 GDP came in down (1.3%), but there was not much talk about recession because Q4 had been strong, up 2.3%, and the conventional wisdom at the time was that you needed two negative quarters in a row to have a recession. Curiously, that view was disproved later in the year as Q2 GDP was up 2.1% and Q3 was down (1.1%) and NBER finally called the recession in November saying it started in March (ironically, they later said it ended in November). Q1 GDP in 2017 was very disappointing at only 0.7% (subject to two more revisions), but it wasn't negative and we will have to see how the balance of the year unfolds on the growth front. We concluded this section last quarter by introducing a new idea that perhaps the U.S. election surprise had stimulated a new path for the markets, saying, *"All of that notwithstanding, there is an alternative scenario that actually could be developing in real time that we will discuss in the 10 Surprises section below, in that perhaps Mr. Trump turns out to be the second coming of Herbert Hoover and 2017 will look more like 1929 than 2001 and #2000.2.0 gets replaced with #WelcomeToHooverville,"* and we provided color on how that sequence of events might unfold. So let's dive in to the Q1 results and see if we look more like 2001, 1929 or perhaps another path altogether.

The U.S. equity market in Q1 was the mirror image of Q4 as the ebullience surrounding the hope trade based on the Trump trifecta (tax reform, deregulation & fiscal spending) began to fade as investors saw that the actual implementation of Mr. Trump's proposals might be more difficult than anticipated. We wrote last time that during the final couple months of 2016 investors had decided to completely ignore economic reality as *"concerns about declining global growth, moribund trade volumes, falling margins in the U.S., the threat of rising rates, declining liquidity and extremely lofty valuations gave way to enthusiasm for a more pro-business agenda in Washington and the delivery of the trifecta of tax reform, regulatory relief and fiscal stimulus."* In the weeks following the election, small cap stocks surged, value stocks crushed growth stocks and anything even remotely related to infrastructure soared on the expectation of a trillion dollars of fiscal stimulus somehow immediately being spent in 2017 (we will bet 2018 at the earliest, if it ever happens), but that excitement began to fade as we penned that letter. The S&P 500 rally stalled a bit in the first few weeks of the New Year, but as soon as the Republicans introduced a plan to repeal and replace Obamacare, markets shifted back into rally mode in February and stocks were up another 6% for the first two months of the quarter. A funny thing happened during the restart of the rally, breadth disappeared and investors began to focus intently on a handful of large cap technology companies and were willing to pay any price to get back into the #FANG stocks (FB, AMZN, NFLX and GOOGL) which surged 22%, 18%, 16% and 5%, respectively, while the S&P 500 was flat in March and finished up a more modest, but still very strong, 6.1% for Q1 (for comparison in 1929 Q1 was up 3% and in 2001 was down (10%)). What is so funny about the Tech move is that these were the exact same stocks investors had shunned in the weeks following the election (on fears of rising rates hurting valuations of growth stocks) taking them down (8%), (5%), (1%) and (3%), respectively, while they pushed the S&P 500 up 5% and the Russell 2000 up an astonishing 14% (as we mentioned last time the thesis here is that small-cap stocks will benefit disproportionately from tax reform, assuming it happens). The panic buying in the #FANG names was so strong that these stocks rose nearly twice as much in Q1 as they did in all of 2016 when they were "only" up 10%, 10%, 8% and 2%, respectively. Another big tech name ran hard as well in Q1, as AAPL jumped 24% during the quarter and while the media tried to come up with all kinds of stories for how Apple could surge so strongly (the same media left AAPL for dead last year after what was described as a disappointing iPhone 7 launch), but there was a very simple explanation. AAPL is now the largest market cap company in the world ($750B) and makes up 3.7% of the S&P 500 Index, so record flows into passive indices and ETFs have prompted huge flows into AAPL. Looking quickly at the trailing twelve months, the overall market has had a very strong bounce off the February bottom, with the S&P 500 up 17.2%, the DJIA up 19.9%, and the R2000 up 26.2% (amazingly more than half of that in Q4). As we mentioned above, Q1 was pretty close to the inverse of Q4 and across all these indices they completely reversed that order in 2017, rising 6.1%, 5.2%, and 2.5%, respectively.

While the hope trade clearly was a factor in the strong returns for the S&P 500 in Q1, there was also some evidence that corporate earnings were likely to rise during the quarter for the first time since September 2014 and equities tend to move higher when EPS are rising. The tougher question to answer is whether those higher earnings are already in the price, as rather oddly, stocks rose despite falling EPS over the past three years. Simply, the P/E multiple expanded (a lot) and investors became willing to pay more for a dollar of earnings over time. The P/E of the S&P 500 expanded from 17 to 25 over that period (up nearly 50%) which accounts for the majority of the rise in the index. We asked last time, *"Why would investors pay more for companies that aren't growing earnings? The narrative is that interest rates are falling so investors can pay a higher multiple for future earnings. The problem is that interest rates were dead flat over the five years leading up to Election Day. The narrative really breaks down post-election, as rates have backed up 30% (higher discount rate should mean lower prices in absence of EPS growth) while P/E ratios expanded yet again."* We couldn't find a logical answer last quarter and we still struggle to see where truly meaningful EPS growth is going to materialize given the tepid economic growth during Q1. To provide a sense of how bad the slowdown has been, the Atlanta Fed GDPNow indicator began the quarter with an estimate of Q1 GDP of 3.5% (crazy talk) and over the past few months that estimate has been revised downward all the way to 0.2% (logical talk). For comparison, the NY Fed also does an estimate, but they use more "soft" data like surveys and they are predicting 2.7% (more crazy talk). The first estimate for Q1 was 0.7% (will likely head lower in 2nd and 3rd estimates), so once again hard data beats soft data. The one ray of hope that everyone is clinging to has been that the recovery in energy earnings will drive S&P 500 EPS to a high single digit growth rate in Q1 and perhaps stocks reflected that development in their 6.1% move. Perhaps some additional tailwinds came from the abrupt about face in interest rates as the 10-year Treasury yield reversed its entire move since the election, falling from 2.43% to begin the year right back to 2.14% on April 1st (the precise level it was on November 1st).

We want to take a minute here to go back to something we pointed out last quarter about the absolute lunacy going on in small cap stocks. We wrote, *"One last point here is that as scary as the surge in the S&P 500 P/E ratio has been, it barely registers on the crazy scale compared to what is happening in small-cap land. The R2000 Index P/E was 108 one year ago and now is listed as "nil" because there are so many companies with negative earnings they have decided not to calculate the ratio."* Let that sink in for a minute. There a so many companies with negative EPS in the R2000 Index that the WSJ can't calculate the P/E ratio. At the end of April, the WSJ's trailing P/E ratio for the R2000 was 104, but what most resources show is the Forward P/E (using forward/ fantasy estimates and excluding negative numbers) which makes small cap stocks appear to be almost a bargain at 25X next year's pro-forma earnings (#EarningsBeforeBadStuff). Back in Q4 no one seemed to care about valuations as investors scrambled to buy the most out of favor sectors (and individual stocks) to try and capitalize on the Trump trifecta hope trade. We wrote that, *"Investors don't seem to care much as the R2000 has surged 18% in the three months since the election. Clearly our caution seems to have been unwarranted, particularly over the past three months (in keeping with the theme of this letter), but harkening back to our Shakespeare letter, in matters of great importance (like protecting capital) "better three hours too soon than a minute too late."* Interestingly, the R2000 rally occurred over four short weeks following the election and the index finished Q1 almost precisely at the 2016 peak of 1388 reached on December 9th (was 1386 on 3/31) and has been dead money for the last four months. Another interesting note is that flows into the R2000 ETF (IWM) peaked at $8 billion in December and have now turned the other way and most recently there was a ($4 billion) outflow (a net $12 billion turnaround) as investors are beginning to question how much of the Trump trifecta actually gets done in 2017 (Twofecta, Onefecta, Nofecta?).

If we examine the Style index returns in Q1 we see the reversal of the Value dominance over Growth all across the capitalization spectrum in Q4. We discussed in the Q2 letter that, *"it is possible that there is a meaningful shift underway in global equity allocations to favor more value and cyclical names. While this shift doesn't fit exactly with a slowing global economy and stress in the financial sector, this trend will be worth monitoring very closely in the months and quarters ahead."* In Q4, that trend continued as Value trumped Growth (pun intended) after the election, but it appears that more logical heads are prevailing again and the reflation trade has suddenly fallen out of favor with Growth retaking the lead. The RTop200G surged an amazing 9.6% versus the RTop200V up only 3.1%, the RMidG was up 6.9% versus the RMidV up 3.8% and the R2000G was up a solid 5.4% versus the R2000V actually falling (0.1%). The spread between Large Growth and Small Value was about as large as we have seen in recent memory at 10%. If we look at the trailing twelve months, Value kept the upper hand over Growth as the RTop200V surged 19% versus the RTop200G up 16.2%, the RMidV jumped 19.8% versus 14.1% for the RMidG and the R2000V climbed 29.4% (that number is right) while the R2000G was up 23%. As we predicted might happen when we said *"history is written by the winners, so we will hear a lot about how obvious the small Value trade was in many year-end letters, but back in February when High Yield spreads were blowing out and many of these companies were teetering on the precipice of bankruptcy it was not obvious that there would be a lot of great outcomes"* and there were plenty of letters touting how clear it was to be overweight Small Value. The truth is that it was far from clear for the first ten months of the year and, most importantly, there was almost no time to reposition a portfolio after the election as much of the big moves in the small-cap trifecta sectors occurred over a matter of hours and days.

Looking at the performance of industry sectors in the S&P 500 during Q1 it was again a complete reversal from the last quarter of 2016. We described the post-election euphoria in the last letter saying *"in Q4 it was* *the same sectors that were rallying and falling, but for a completely different set of reasons (new Narrative) as investors shifted (at an astonishingly rapid pace) from fear of a Trump victory to enthusiasm for the Trump victory as all things physical soared on the prospects for Fiscal Stimulus (disregarding the reality that it will likely be 2018 before any money is actually spent…) and Financials launched into the stratosphere on expectations that President Trump and his Cabinet full of ex-Goldman guys will repeal Dodd-Frankenstein and rig the system (even more than it already is) in favor of the Banksters."* One thing that was similar to Q4 was that a number of sectors had a great year (returns that most would be happy with over a year) in the first three months of 2017. Technology was up a very strong 12.6% on the back of the #FANGS (as we discussed above), but also on a number of semi-conductor companies that have been completely en fuego, as NVDA rose another 7% (on top of 225% in 2016), AVGO jumped 23%, MU surged 28% along with AMD (the long suffering whipping boy for INTC which has reinvented themselves yet again). AMD was the leader of the pack in 2016, up 300%, so with another 28% jump it is now up 410% for the last fifteen months (very gaudy returns indeed, but recall what we wrote last time about what often happens after gaudy returns). Just for some fun perspective, in the nine years leading up to Q1 2016, AMD was down 90% while INTC was up 65%, but over the past year the alligator jaws have closed hard and AMD is now down just 10% over the decade while INTC has been frozen at up 65% for the ten years. There are a number of people who are very excited about the prospects for semi-conductors in the coming years as the Internet of Things (IoT), autonomous vehicles, home robotics and other forms of technology become more integrated into society. There is one futurist group that has calculated that today there are four microprocessors active for every person on the planet and they estimate that this number could rise to 1000 over the next few decades. Sounds a bit fantastical, but when we think about what it means to have truly automated and connected functionality, the demand for semi-conductors will indeed grow exponentially. It only takes a couple handfuls of doublings of capacity to get to very large numbers (4, 8, 16, 32, 64, 128, 256, 512, 1024…).

The other sector that had a great "year" in Q1 was Consumer Discretionary, up 8.5%, which may sound a little funny given all the negative headlines about how bad retail has been and how AMZN is turning the big box retail business into roadkill. We have discussed the huge opportunity on the short side in traditional retail for a number of quarters and have a material short position in our discretionary portfolios in the department stores and general retailers. Names like JCP, TGT, M, DDS, KSS were pounded during the quarter, falling (26%), (24%), (16%), (16%) and (20%), respectively, while JWN managed to keep losses to (2%) and GPS actually eked out a small gain at up 3%. One would think with these kind of horrible numbers that the Consumer sector would have been down, but when you dive in a little deeper into the makeup of the ETF you find that it has a lot of technology exposure in names like CHTR, CMCSA and PCLN (which rose 15%, 9% and 20%, respectively) and some of the core names like DIS, HD and MCD also has strong quarters jumping 7%, 9% and 8%, respectively, but it was the crazy weighting of AMZN at 14% of the index that drove the great returns as Amazon soared 18% during the quarter (remember that most of that was making up for the (11%) drubbing in Q4, so over the six months only up 5%). These results point to one of the dangers of ETFs (and mutual funds) insofar as many of them have holdings that are not fully consistent with their names. For example, if an investor had an inkling that they wanted to be short (or long) the retail sector and didn't want to use single name shorts, they would be challenged with the two choices in the SPDR ETF family, XLY (Consumer Discretionary) and XLP (Consumer Staples) as both were up smartly in Q1 despite many of their components being down big, but capitalization weighting and lack of choices (only 10) make tactical investing difficult as the instruments are too blunt to truly express many tactical views. Speaking of Consumer Staples, it was one of the three worst performing sectors in 2016 (along with Healthcare and Utilities) as investors shunned anything with the slightest hint of defensiveness in the last few weeks of the year as the Pavlovian salivation for all things Trumpian induced selling of stable sectors in favor of buying all things material (Energy, Industrials, Materials) and Financials. We wrote in the 2016 review in January that, *"safety was punished for the full year and Healthcare brought up the rear, down (2.7%) and was the only sector with a negative return (beautifully setting up a worst to first trade for 2017…),"* and those words turned out to be a bit prophetic. As we keep saying, Q1 was the anti-Q4 and the Trump Pump suddenly turned into the Trump Dump in March and quietly Healthcare, Utilities and Staples became three of the top five performing sectors for the quarter, rising 8.4%, 6.4% and 6.4%, respectively. Healthcare didn't quite make it all the way back to first in Q1, but there is still a lot of year left and we think the valuations in Healthcare continue to be very attractive (particularly in Biotech and Specialty Pharma) so there is plenty of upside left in this sector. Now because there were two solid months before the Trump Dump began, even a few of the laggards in Q1 put up solid returns as Materials rose 5.9% and Industrials were up 4.6% (but both were up 7% on March 1st and have faded more in April). Another Trump Pump darling, Financials, was up the most in the first two months, surging 7.5%, but then collapsed along with the AHCA (and interest rates) to finish only up 2.5% (the sector is now down a couple percent through April). At the bottom of the barrel we find Telecom, down (4%) on troubling earnings declines, and Energy, down (6.7%), right in line with oil price declines (U.S. production increases have dampened the impact of OPEC production cuts) and completing another perfect first to worst Q1 transition (very common for best sector in prior year to come under selling pressure in Q1 as investors push gains into the next tax year).

Thinking about the U.S. equity market as a whole, we wrote last time that *"in a world of flat overall earnings growth and the prospect of higher interest rates, it does seem aggressive to only have one sector with a negative return in 2016 and the vast majority of sectors be up double digits. Again it comes back to P/E multiples expanding and the 22% increase in the P/E of the SPX over the past twelve months does justify the moves, but the math says expanding multiples simply pull return forward and future return expectations fall (indicated by Wall Street estimates for year end 2017 SPX targets being around 2350, almost where we are now)."* In Q1, the P/E of the S&P 500 again increased from 24X to 25X (3.6%) and accounted for more than half of the rise in stocks, but at least it appears that there was some underlying earnings growth this time. The real problem will be whether that EPS momentum can be maintained as economic growth has come crashing down during the quarter and companies are slashing earnings forecasts at an alarming rate. More alarming is that the slashing of revenue growth is even more dramatic as accounting tricks can make EPS look better (like stock option expensing and stock buybacks), but it is really tough to fake revenues and without solid revenue growth it is hard to see from where the big earnings jumps are going to come. Perhaps that is why the pundits' forecasts for 2017 returns for 2017 were so muted. There is still one consistent tailwind for equities that also contributed to returns in Q1 which we again discussed last time when we wrote, *"perhaps one of the most interesting things that impacted U.S. equity markets in 2016 (that no one seemed to talk about) was the continuation of bond purchases by the Fed, despite the publically announced end of Quantitative Easing (QE). The Fed claims that reinvesting in the maturing securities in their portfolio is somehow different than buying bonds in the open market, but we don't see the difference. No matter what you call it, the Fed removed around $220 billion of bonds from circulation during 2016 and that liquidity continued to find its way into financial assets (read stocks)."* This thesis comes from the great work of Larry Jeddeloh at TIS Group (one of our favorite research providers; if you don't read Larry's daily note, you should) on how QE impacts the equity markets. Larry developed a model that showed how, "*every $100 billion of QE has translated into 40 S&P 500 points.*" By Larry's math, the Fed's purchases (it is not QE, definitely not QE) during the year accounted for half of the S&P 500 returns in 2016 (220 times 40 equals 88 of 195 points). The Fed schedule of bond reinvestments (don't call them QE purchases) shows a total of $194 billion for 2017 so with about $50 billion of transactions in Q1, there should have been about 20 S&P points of equity tailwind during the quarter. The Index rose 124 points during Q1, so if we attribute 20 points to QE (we still call it QE) and 75 points to multiple expansion, that leaves about 29 points that came from EPS growth (which seems about right as earnings begin to roll in).

The other big event that should have impacted equity returns in Q1 was the acceleration of the Fed's schedule for raising the Fed Funds rate. Despite an abundance of evidence to the contrary (GDP growth estimates collapsing, Citi Economic Surprise Index falling off a cliff) the hawks at the Fed have convinced The Dove in Chief (Ms. Yellen) that there is a "risk of an overheating" (actual phrase from Fed speech) in the economy and they bumped rates 25 basis points again on March 15th after raising them in December for the first time in a year. We wrote last time that, *"history would argue that an increase in the discount rate (absent a large increase in profit growth) should put pressure on equity multiples and put equities at risk of a correction,"* but the markets took the December bump in stride and kept the party going into the first couple months of the New Year. We can't seem to get the Shakespeare line *"Beware the Ides of March"* out of our heads lately as the S&P 500 took on a little different tenor when it became clear that the Fed was going to go ahead and raise rates again at the March 15th meeting (indexes peaked on March 1st). Perhaps the more sluggish trajectory could also be attributed to some geopolitical concerns (Syria & North Korea) or to the fact that GDP estimates and EPS estimates are being slashed seemingly daily, but for whatever reason there seems to be some doubt creeping into the hope trade and maybe everything is not as awesome as QEeen Janet would have us believe. We discussed this conundrum a couple quarters ago saying, *"the biggest challenge for the Fed is that despite many claiming that they are behind the curve and must raise rates, it is really tough to see how a tightening bias makes sense in a world where the world's largest economy continues to languish below stall speed (2% GDP growth).* With the Q4 GDP number coming in well below expectations and the full year of 2016 GDP growth clocking in at what can only be described as an anemic 1.6% pace, the myriad arguments being trumpeted by all sorts of members of the Trump Administration that the U.S. economy is accelerating is comical. The Growth Narrative has shifted into overdrive and the Trumpkins are all saying that the grand vision of Trumponomics will deliver yuge growth, yuge profits and (according to a member of the Trump team on CNBC) Dow 25,000 in 2017. We will take the under on the GDP growth (2017 will struggle to be above 1%) and while the DJIA did indeed take out both the 20,000 and 21,000 levels during Q1, we expect the ultimate trend to head back down later in the year and we are more likely to get to use those #Dow20000 hats again before we use any #Dow25000 hats.

When it comes to reflecting on international equity returns, we said last time that it is critical to, *"think beyond just the dimension of returns from the underlying businesses and include the return from currency translation over the course of the time we own the security. For any global investor that means having a view on the relative attractiveness of your home currency versus the other currencies in which you may invest your capital."* With every investment decision you make there is also an embedded decision on which currency you want to have (or not have) exposure to throughout the duration of the investment. The investor can choose how to manage that risk/exposure through hedging (or not hedging). This issue has become front of mind for many investors in the recent past given the status of the dollar as the world reserve currency and the impact of global currency wars (race to the bottom) that were raging as many countries attempted to devalue their currencies to win export business. We went so far last time as to say, *"Getting the dollar right might be the most important investment decision we could make during the year. The reason for the hyperbole on the Greenback (beyond my normal hyperbolic style) was that so many of the other market opportunities had become so tightly correlated to the dollar and if you got the dollar call right you could make better returns in equities, bonds, commodities and (obviously) currencies."* On top of the traditional impact of currency on global investing, the surprise victory by Mr. Trump in the election has unleashed a whole new set of fears and concerns for dollar-based investors as many of the policy proposals (like the border adjustment tax and trade and energy policies) being discussed by the new administration could have profound implications for the dollar. Interestingly, the rhetoric from the Trump camp has softened dramatically since Q4 and they have backed down from labeling China a currency manipulator (resulting in a very stable USDRMB cross rate, basically unchanged since a week after the election). We have also heard multiple spokespeople say that the administration favors a weaker, not stronger dollar (presumably because it helps U.S. exporters; but wait, isn't that what we were so mad at China for doing?). We discussed last time how there is some misperception in just how strong the Greenback has been in the past couple of years and wrote, *"what has been interesting about the dollar since the beginning of 2015 is that after the 25% surge in 2H14, the DXY peaked at 100 and was locked in a channel between 95 and 100 right up until Election Day last year."* The channel continued to hold in Q1 as DXY gave back all of the Trump Bump (it peaked at 103.25 on 12/20/16) and fell from 102.21 at year-end to 100.56 on 3/31. We have been one of the very few dollar bears in the past year, as we have had one of our Ten Surprises focused on USD in 2016 and 2017. Last year it was King Dollar Dethroned and this year it was King Dollar's Last Stand and while DXY did recover from the dramatic decline from 100 to 92.5 last May, given the broad consensus that DXY would rally, having it be right where it started fifteen months later (and the same since 3/9/15) feels like a win. The danger zone for the Dollar is if DXY breaks below 99 (as it recently did…), as there is not a lot of support below that level and it feels like the downward trend could accelerate fairly quickly.

As we discussed in the U.S. equity sector section above, Q1 was the inverse of Q4 as the hope trade subsided and the initial failure of the Obamacare repeal plan created some doubt in investors' collective mind about how effective the new administration would be. The dollar was no different as the DXY fell (1.6%) after surging 7.1% in Q4. An important thing to keep in mind about DXY is how the index is dominated by the Japanese yen and the euro (even more euro than yen) and that there are other more diversified currency indices as well (e.g. trade weighted) which have different return profiles. For example, the trade weighted basket fell twice as much as DXY, down (3%), on the strength of EM currencies (which completely defied the consensus belief that EM would get killed when the Fed raised rates). This matters for tactical investors who might see a big move in the dollar versus some other currency (Brazilian real or Russian ruble) and try to use the DXY as a hedge only to be disappointed because the USDEUR cross didn't move in the same magnitude. We discussed how hedges for specific markets (particularly Japan) needed to be more focused in the last letter when we wrote, *"if you invested just in Japanese equities over the past few years hedging may have been critical since it began and ended the period around the same level of 115, but the gyrations between 100 and 120 have been brutal. I say 'may have' because the second important point is that holding period dictates demand for hedging. Take the ten example, if you bought Japanese equities in June of 2014 and held them to today you would have no currency impact, but if you have traded them over shorter periods of time in between the FX impact could have been monstrous."* Those monstrous gyrations were on full display in Q1 as the Trump strong dollar wave that pushed the USDJPY from 101 to 118 in the weeks following the election reversed on a dime on 12/15 and during the first three months of 2017 the yen defied the prognosticators and rallied from 116.9 to 111.4 (and continued upwards in April to 109), up 5% for Q1. Kuroda-san has done his best to jawbone down the yen in recent months, but the safe haven trade has trumped the hope trade so far in Japan. There will be much more to be written on the yen story in coming quarter, but suffice it to say here that Japan turns to Kuroda-san to weaken the yen the same way Princess Leia turned to Obi-Wan Kenobi in the original *Star Wars* movie saying, *"save us Obi-Wan, you are our only hope"*. It seems the hope trade runs rampant all over the world. The largest component of DXY, the euro, was basically flat for the period, down (0.3%). The DXY falling as global markets began to fret about lack of progress in U.S. politics and sabre rattling in the Middle East and on the Korean peninsula is intriguing given the dollar has historically been the safe haven currency, but perhaps times are a changing. Other Asian currencies also surged as the president gave up on labeling China a currency manipulator and the RMB rose 1%, while the Korean won made back almost everything it lost in Q4 (another Q1 reversal), rising 8.1% and the Taiwan dollar jumped 6.7%. Mr. Trump's favorite whipping boy, Mexico, starting hitting back in the growing trade war posturing and the peso shocked everyone (well everyone except a new macro fund we know led by a former Brevan Howard PM who previously ran a large macro book and the Argentina Fund; he was super long with options and cleaned up) and surged 10.7% (reversing more than half of the past year's losses). Turkey's President Erdogan continued to win support for his constitutional changes and solidify his power, so the lira fell an additional (3.1%) on top of its (14.8%) loss from Q4. Turkey is starting to look pretty interesting, as prices have fallen to very cheap levels. After being forced to devalue the pound by (51%) in Q4, Egypt stabilized and a number of our favorite managers have been picking through the rubble there to search for bargains. Our King Dollar's Last Stand Surprise is looking pretty solid so far in 2017, as the Brazilian real was up 4.2%, the Russian ruble continued to pound the dollar, rising a very strong 9.4% and even India got in on the fun as the rupee jumped 4.9%. We said last time that, *"currencies matter and in a world of political uncertainty and volatility in which we seemingly have plunged into, they will continue to matter even more so being sure to have a sound hedging plan will be critical to investment success,"* and those words really rang true in Q1.

Last fall we wrote about a trio of countries in the EAFE Index that were largely ignored by investors because they were relatively small, inextricably tied to the commodity cycle and not well covered by research houses and the media: Canada, Australia & New Zealand (CAN for short). One of the common characteristics of these markets is that they have historically been inversely correlated to the dollar and have been prone to episodic booms and busts depending on the strength of the dollar relative to their currencies. The correlation is so strong that the CAN countries are often referred to as the Commodity Countries and their currencies are referred to as the Commodity Currencies. We wrote about how that correlation to the dollar could hamper returns saying, *"There was one risk that we wrote about last time which was that if a counter-trend rally in the dollar were to occur there could be a pause in their bull runs and these markets could struggle."* Q1 results for the CAN trio were mixed as there could have been significant volatility given the weakness in oil and gas prices, but that was partially offset by the surprising weakness of the dollar which helped the commodity currencies during the period. The TSX in Canada rose a respectable 2.5%, Australia benefitted from some strong economic momentum that began in Q4 and surged 11%, and New Zealand recovered somewhat from the (10.9%) drubbing in Q4 and clawed back 2%. Despite the mixed results in Q1, the CAN-do markets were solid investments over the past year rising 14.8%, 21.1% and 8% respectively. We continue to think that despite their small size, these markets are worth paying attention to, because as we wrote last time, *"if a new Commodity Super Cycle has* *begun (which we agree with (13D Research) that is has) then these small markets will be big money makers. Further, we believe the dollar has hit a secular peak and will decline for many years to come which should provide a tailwind for these countries over the long-term."* Indeed, if our Surprise #7 (King Dollar's Last Stand) turns out to be right and the unfolding structural changes in global currency markets continue to put pressure on the USD, the Commodity Country equity markets will punch well above their weight in global equity indices in the alpha generation category.

Last year, it seemed that just about every quarter an event in Europe threatened the very existence of the European Union, whether it was another crisis (Greece), another referendum (Brexit) or another "do or die" ballot initiative (Italy), there was no shortage of excitement in the markets on the far side of the pond. We wrote last quarter about the overarching issues that were plaguing the Continent saying, *"Populism was on the rise, economies were stagnating, leadership was disappearing (voluntarily and involuntarily), the ECB was waffling (hinting about tapering), the currency was struggling and many observers and prognosticators were predicting that the entire EU experiment was crumbling (not really new idea, been talking about it since 2011)."* The uncertainty, volatility and surprises were too much for investors in 2016 as the European equity markets basically marked time and finished flat, but there was a feeling that if things didn't actually blow up there could be an element of coiled spring action in the New Year. True to form, the MSCI Europe Index jumped 7.4% in Q1and the gains were widespread (there was not a single Developed Market country with a negative return in Q1). The best performing markets in Europe were Spain, up a very robust 14.8%, Austria, up a strong 9%, and Germany, up a solid 8.4% for the quarter. Even concerns about the impending elections in France couldn't dampen investor enthusiasm for European stocks as the French market jumped 7.3% (it appears that Ms. Le Pen is not going to win, so the worst case scenario for France is off the table, for now). While 1.4% of the return for U.S. dollar investors was from euro strength (USD weakness), a 6% surge in equity returns in a quarter is a welcome arrival after all the turbulence over the past year. Laggards were in very short supply in Q1, but Norway managed only a 1.4% gain, Ireland was up 3.8% and the U.K. gained 5% quarter. Over the trailing twelve months, the leaders in Europe were Austria (relief rally post-election), up 21.9%, Spain (economic recovery), up 18.4% and Germany (because it's Germany), up 14.2%, which were all in line with the best performers in Developed Markets globally. The less fortunate EU members were Denmark (rate moves), down (9.8%), Belgium (politics), down (0.4%) and Ireland (Brexit fallout), up a scant 0.6%. Mr. Draghi has been noticeably absent in the past couple of quarters and we posited last quarter that perhaps he is keeping his head down because, *"there is a growing chorus of people making the case that Europe is recovering rapidly and that inflation is surging to the point that not only will Draghi have to taper, but he may have to raise rates soon"* and even Super Mario would not be immune to the bullets that would be fired by global investors if he were to take away the ECB punchbowl just as the party was starting to get good again.

We ended the Europe section last quarter by saying that we see, *"signs of life in parts of the region, and we do think there are pockets of opportunity to make money in Europe … so it will be interesting to write about the EU in the coming quarters."* Indeed there was an opportunity in Q1 to capture a very strong 7.4% gain. That gain was a long time coming, however, and we have discussed over the past year that one of the primary differences between the U.S. and Europe had been how QE had found its way into stocks in the U.S., but not across the pond. We summarized the dilemma last time saying, *"the fact remains that the Euro Stoxx 50 Index has not moved up since the beginning of the ECB program (and is actually down (13.7%) since the peak on April 2015 right after purchases began) and could not manage any return again in 2016 despite large volumes of* *bonds being purchased by the ECB."* So despite hundreds of billions of euros of QE, Super Mario was unable to perform the levitation magic that QEeen Janet had been able to produce in the States. We believed that there should be a correlation between QE and equities that was similar to the U.S. and we had attempted to come up with our own version of the TIS Group model to predict Euro Stoxx 50 moves, but had been thwarted as the markets didn't want to cooperate with the "*for every 100B Euro of purchases you get 20 Euro Stoxx 50 points"* metric in 2016. The ECB consistently bought $80B a month of bonds last year and even extended the program from government bonds to corporate bonds and it all seemed for naught as the index didn't budge point to point from the beginning to the end of the year (but was quite volatile in between). We summarized our frustration last quarter saying that the ECB *"[had increased their] Balance Sheet by $1.5T (yes, that is Trillion) over last couple of years, stocks have gone nowhere (but they have been volatile). Based on the model and the expected ECB purchases, the Euro Stoxx 50 Index should have risen around 200 points to 3500 from the starting point of 3,268 at the end of 2015."* It turns out we were only off by 91 days as the Euro Stoxx 50 Index finished on March at 3,501. So perhaps there is some lag in the system and the €180 billion of purchases in Q1 will produce returns in Q2 and we get those 36 Euro Stoxx points in the coming months. We will keep our eye on the ECB for signs of tapering, but for now there will continue to be some tailwind of liquidity for European equity investors and we will see if our model holds up better this year than it did in 2016. We discussed an important point about the whole issue of QE in the last letter saying, *"If the ECB can't buy prosperity for Europe and generate excess returns for European equity owners, what will it take to get European equities back on track? As we said above, it is likely to take a good old-fashioned economic recovery and better profits for European businesses. The challenge is that these will be lofty ambitions given the Killer Ds of poor Demographics (10,000 people turn 65 every day in Europe), too much Debt and the ongoing specter of Deflation."* There were some hints of a recovery in GDP growth on the Continent in Q1 and even some signs of rising inflation early in the year that triggered some "animal spirits" and were likely responsible for the strong gains in stocks during the quarter. That said, as the transitory impact of the oil price recovery last year began to fade and CPI numbers began to roll over, the Deflation bogeyman reemerged and volatility returned to the Euro Stoxx 50 Index in April, but the Index did jump 1.7% for the month to finish at 3,560 (so we got those 36 points from the Q1 QE in April alone). Actually, European stocks were falling swiftly in the first part of the month (down almost (3%) in first three weeks) and all of the gains came after the apparent defeat of Ms. Le Pen in France on 4/23, which triggered a ferocious two day rally (short-covering) on the prospect that the EU was saved, but if the hard data continues to come in less positive there is potential for the fundamentals to swamp the sentiment and technical momentum that emerged in Q1.

Japan piled on the trend of Q1 being the anti-Q4 as after what we described last time as truly spectacular moves in equities and FX, the first quarter was very boring for equity investors and only a little more exciting for currency traders. As we said in the dollar section, the USDJPY was up 5% (reversing about 40% of the Q4 decline) and the Nikkei up nearly flat, down (1%) in local currency, but hedging the ten proved costly in Q1 as USD investors made 3.7% had they not hedged their yen exposure (probably the bulk of investors fit in this camp). After the scorching returns in Q4, when the Nikkei rose nearly 15%, we expected a pause that refreshes. We discussed last time how the BOJ's summer meeting had triggered what looked like an important inflection point saying, *"Importantly, the momentum that was initiated by the BOJ Comprehensive Review last fall became reflexive and began what appears to be a virtuous cycle again."* We expect that virtuous cycle to continue, but we also appreciate that much of the moves in Japanese equities will be dependent on the BOJ's successful efforts to keep weakening the yen. We wrote last time that, *"We are back in the Kuroda-san fan club, so much so that Surprise #3 for this year is Kurve It Like Kuroda and we are back in the Yen to 130, and the Nikkei to 22,000, camp."* Q1 didn't help us much toward those targets as the USDJPY slipped back to 111 and the Nikkei slipped back to 18,909, but a much better April has pushed the Nikkei back to 19,197 (up slightly from where is started the year at 19,114). As we mentioned in the last letter, it should not go unappreciated how powerful a move from the Trump Election Day panic low this rise has been as the Japanese index has surged 18.1% over the past six months. To put that move in context, the S&P 500 is up about 10% and even the hedged Japan ETF (DXJ) is up 15%. The big mover has been Japanese Financials, which are up 20% since the election. We discussed last time how *"the Megabanks finally began to move in the last couple months of the year,"* and reiterated what we have said on multiple occasions — that these banks were very attractive. The basket of SMFG, MTU and MFG were up smartly in Q4, rising 12% on average, but again Q1 was the anti-Q4 and SMFG fell (6%) while MTU and MFG managed to gain 2% (and were roughly flat in April). There were a few bright spots in Japan during the quarter. Sony continued to shine and SNE surged 20% in Q1 on the strength of product wins in camera sensors and some hits in the entertainment business. Softbank continued on their global technology and telecom shopping spree and SFTBY rose 7%. Trend Micro (TMICY), the largest security software company in Japan, soared 25%, as investors were frantic to buy shares of companies that could help defend against global cyber-warfare. Japan was in many ways like the proverbial duck on the lake during Q1 as it appeared calm and serene on the surface, but was furiously churning underneath, as foreign investors continued to sell, local investors (particularly the Government Pension Fund) continued to buy, and there were a number of sectors with some major losers (autos, electronics, retail) and a few sectors with some major winners (technology, healthcare), but, on average, there wasn't much to write home about.

Emerging Markets were not supposed to be the best performing markets in 2016 (but they were) and they certainly weren't supposed to be the best performing markets in Q1 either (but they were) given all the fear about rising Fed Funds rates (which they did in both December and March) causing stress in the developing world. We have discussed on many occasions how Sir John Templeton always said that to make the best returns you should look for markets where there is great misery and George Soros quipped often that, "The worse a situation becomes, the less it takes to turn it around, the bigger the upside." A year ago things were awfully miserable in EM and investors were throwing in the towel and selling in droves, just in time to miss a great run as growth surprised to the upside and currency markets settled down after a tumultuous 2015. We wrote last year that, *"we had at least begun to recognize that the depth of the bear markets in these areas might be reaching an exhaustion point,"* and we began to rebuild positions in EM as prices had reached very attractive levels. We made some mistakes in terms of which regions we were overweight and underweight as we based our view on being positive the commodity consumers and less positive on the commodity producers (since oil prices had fallen so much), but as we wrote last quarter, *"In hindsight, we should have taken Soros not just figuratively, but literally, as it was the B and the R of BRIC where the most misery was and Brazil and Russia trounced India and China in 2016."* Our emerging markets-focused portfolios still had a great year, rising double digits, but we left some money on the table by focusing solely on fundamentals and not paying enough attention to the huge sentiment and momentum shift in the most beaten down markets. The Emerging Markets recovery was in full swing over the eight months leading up to the election and we described what happened next in last quarter's letter, saying, *"The [Emerging Markets] got sucker punched and went to the mat hard, falling almost (10%) in a couple of days. They tried to get up off the canvas in the second half of November, but were hit again in December when Janet really did raise rates and the dollar surged. The old saying goes 'you can't keep a* *good man down,' and EM got back up in the last week of the year and clawed back more than half the loss to finish down (4.2%)."* Like all the other markets we have discussed thus far, Q1 was the anti-Q4 in EM as well and the recovery rally was back on in 2017 as the MSCI Emerging Markets Index was up a spectacular 11.4% for the quarter (nearly double an incredibly strong S&P 500 return of 6.1%).

The first quarter was so strong in the developing markets that the normal dispersion we see within the EM Index nearly vanished and only three of the twenty-five EM countries had negative returns. Starting with those laggard markets, Russia was down (4.6%) in USD as tensions with the U.S. rose and oil prices were unstable during the quarter. Greece also struggled during the quarter as concerns about whether the Troika would provide debt relief or not kept investors on their toes all quarter and the index fell (3.5%). Sentiment has clearly improved of late, as the IMF has made noises that they are on board with the proposed plan and the Tsipras led government seems to have made the necessary concessions to get the third bailout and the Greek Index surged 11.3% in April. The final laggard for Q1 was Hungary, which barely counts as negative coming in at (0.6%) for the quarter. Over the trailing twelve months, the worst three markets were again examples of how bad leadership destroys wealth as Turkey, the Czech Republic and Egypt fell (16.6%), (4.5%) and (4.3%) respectively (Americans should take note of how leadership can impact equity markets). Repeating something we wrote last fall, *"the common thread with these three is the poor leadership and we could see continued weakness from these regions (and others with poor quality leadership) in the coming quarters. The rising Nationalism, Populism and Protectionism trends are hurting global trade and if those trends accelerate some of the Developing Markets countries could suffer disproportionately."* Forewarned is forearmed and should Developed Markets' leaders continue paths similar to the Terrible Trio, our markets could suffer similar fates over the coming years. It is always much more fun to talk about the winners and the leaders for Q1 were Poland (new leader getting better), India (strong leader getting stronger) and South Korea (sketchy leader being indicted), which surged 17.8%, 17.1% and 16.9% respectively. Poland benefited from foreign buying spurred by the Trump comments on foreign aid as well as a stronger currency. India has seen an incredible rebound from the nightmare in markets induced by the surprise demonetization move last year, and Prime Minister Modi gained more power in recent elections. South Korea was a surprise in that the travails of President Park might have been a negative for many countries, but like with the impeachment of President Dilma Rousseff in Brazil last year, investors are cheering the crackdown on corruption at the highest levels of government. South Korea was also helped by a very stiff tailwind in the won strengthening and making up half of the equity returns in USD. GMO Chairman and EM team leader Arjun Divecha has taught us that, *"You make the most money when things go from truly awful to merely bad,"* and the Emerging Markets that have jumped the most over the past year are great examples of this. If you had asked anyone in early 2016 which markets to avoid in EM, they would have quickly named Brazil & Russia (and perhaps no one would have said Peru), but these markets provided great returns for investors surging 42.8%, 27.6% and 29.3% respectively.

Taking a closer look at Russia, there are a fair number of pundits and strategists that say Russia is not investable and because of the concentration of power around Putin, it is not a safe place for U.S. investors to put capital. There are also a huge number of people who think the Russians somehow tampered with the U.S. election so they pile on the negativity toward Russia as an investment destination as well. We have a variant perception on Russia, as we believe the assets there are very cheap, the markets are quite liquid and the economy has been recovering well since the trough in oil prices last February. In fact, we noted last time that, *"Russia was one of the best performing markets in 1H16 and the positive returns continued in* *the 2H as Russian equities surged on the surprise election results in the U.S. and soared 54.8% for the year (sounds pretty investable)."* We went on to discuss how our favorite managers in the region were pounding the table on the attractiveness of the opportunity, encouraging us to invest additional capital and they were absolutely right. Fortunately we did increase our exposure and we also allocated additional capital to our EM best ideas portfolio where one of the best performing stocks was Sberbank (the largest Russian bank), which soared an astonishing 100% for the year. In the three months since we wrote the last letter, the Russian Bear went back into hibernation (as the negative rhetoric around Syria and election tampering increased) and RSX fell (2%), while SBRCY was up 2% (for perspective EEM was up 7.5% and SPX was up 4.5%). The one area that did show some resilience (after a tough Q4) was retail, as a couple of the leaders X5 and Dixie jumped 5% and 7.5% respectively. Turning to the situation in Turkey over the past year it has been amazing to watch President Erdogan effectively create a power structure very similar to Putin's position in Russia. With the latest vote to eliminate the position of Prime Minister (even one upping Putin who still has to manage the ceremonial PM, Dmitry Medvedev), Erdogan has solidified his position in such a way that there actually could be some positive momentum in the economy and markets. We wrote in the Q2 letter that, *"some EM observers have been saying that Turkey is beginning to look a lot like Russia during the early phase of the sanctions and that stocks are looking cheap,"* but we felt it was still a little early and indeed Q3 and Q4 were not good in the Turkish equity markets. Last time we also discussed GMO's research that showed how countries with poorly functioning institutions (read high levels of corruption) underperform and wrote, *"Their findings showed that the better a country is at improving the quality and effectiveness of their institutions, the better the returns to shareholders (makes sense as when there are good institutions there is less "leakage" to the family majority owners). Arjun said that while the quantitative models love Turkey (really cheap) they are hesitant to buy since the QOI score is collapsing (removing judges, jailing political rivals)."* Howard Marks has said that, "there are few assets so bad that they can't be a good investment when bought cheap enough," and perhaps Turkish equities hit that level at the end of 2016 as TUR (Turkey ETF) was up 14% in Q1 and another 12% in April to be us a very attractive 27% in 2017. Since we are on the topic of uninvestable markets, Greece continues to be a place where global investors fear to tread and fears about the Troika debt relief deal breaking down rose sharply in Q1. We have said in past letters that the banks represent the best way to play Greece and that we favored, *"Alpha Bank, National Bank of Greece, Eurobank & Piraeus, in that order of riskiness, as they will be a leveraged play on the recovery."* Once again Q1 was the anti-Q4 as the bank stocks crashed down (12%), (4%), (12%) and (20%) after surging 28%, 27%, 35% and 55% respectively in Q4. Just to keep things exciting, as news leaked that the IMF was leaning toward a resolution in April, the banks rallied again, jumping 16%, 28%, 19% and 15%, putting their CYTD returns at 3%, 13%, 13% and (8%) respectively. We are likely to get a final resolution of the bailout terms in Q2, so we will likely be writing about some big returns from Greece over the summer.

When it comes to China, we have marveled for many years at the negativity toward the country and their capital markets that emanates from the western press, the western investment banks and western governments. We summarized this issue last time, saying that it seems that, *"All global citizens seem to suffer from a common affliction, Home Market Myopia, which drives people to think that all the smart people live where they live and all the great investment opportunities are in their home market (investors around the world are always overweight their domestic market). Clearly neither of those beliefs is true, but that doesn't stop us from believing them."* That myopia is enhanced by the cultural divide between the West and the East, fomented over the past few decades by western media as the economic, political and military power of China has expanded. The real trouble (as we see it) stems from the fact that China focuses on long-term planning and execution and the western Developed Markets continue to get increasingly more focused in the short -term. Perhaps it is the advent of the Internet, social media and ubiquity of information that is shortening our attention spans and time horizons, but whatever the reason the effect is that China seems to be playing a different game than the rest of the world, they are playing Go (an ancient Chinese strategy game of incredible complexity) while the rest of us are playing checkers. We said last time that these biases were creating a problematic disconnect between beliefs and reality, saying, *"the balance of the world's population (particularly those in investments) continue to struggle with the cognitive dissonance between the popular narrative that China is due for a hard landing any moment and the continued improvement in the economic data."* If one were to simply listen to the press and western social media it would appear that China was on the verge of total societal collapse as excess debt, poor financial institutions and corrupt leadership drag the country into the abyss. Rather than debate with the zealots, we suggested last time that we, *"go to the scoreboard (actual data) and see where things stand."* The China bears say that the majority of the China numbers are wrong (although they offer no evidence of why they are wrong or what the "right" numbers might be) and that despite the fact that the numbers say the Chinese economy is humming along (in fact, recently getting stronger), they "know" that the wheels will come spinning off at any moment. So let's look at the numbers for Q1. China macro data was the one place where the data was not the opposite of Q4, but rather more of the same positive trends. Chinese GDP grew a little faster than expectations at 6.9% (unsurprisingly in the communicated target zone of 6.5% to 7%). March retail sales growth was a 10.9% yoy increase. Manufacturing PMI is still firmly above 50 (expansion) at 51.2. Non-Manufacturing PMI is even stronger, at 55.1 (perhaps the most important number as China transitions toward a consumer economy). Industrial Production expanded strongly, up a very robust 7.6%. In order to maintain high levels of growth, China must continually expand credit and money supply and the PBoC continues keep the pedal to the metal and M2 money supply growth was 10.6% in the past year (on a 12% target). Both imports and exports are growing very quickly and actually accelerated dramatically over the past quarter, as imports surged 20.3% and exports climbed 16.4%. The relationship between these growth rates shows the transition from "Made in China" to "Made for China" that is underway as the Chinese economy transitions and also shows why it will be very challenging for Mr. Trump to wage a trade war with China now that U.S. companies will benefit even more from open borders. In the past few year one of the challenges for corporate profits has been the persistent deflation in China, but that trend has completely reversed and PPI went from being negative last year to a positive 7.6% today (actually was below zero for nearly five years). Chinese equity markets struggle when the PPI is negative and do well when PPI is positive, so the current surge in PPI likely foretells positive returns in Chinese equities in 2017.

Leaving the macro to look at the micro developments for the beginning of 2017, we are right back to Q1 being the anti-Q4 as after a significant slump to close out 2016 (in the aftermath of the EM sell off after the surprise Trump victory) China equity markets surged to erase the losses of the prior quarter. The MSCI China Index was up sharply, rising 12.9% (after falling (7.1%) last quarter), the MSCI Hong Kong Index jumped 13.4% (versus a (9%) decline last period) and the MSCI China A-Shares 50 Index managed a 6.2% gain (versus a tiny loss of (0.8%) in Q4). For the trailing twelve months, the returns are quite strong with the indexes rising 19.7%, 16.6% and 8.5% respectively. One of the important things about the Chinese equity markets is that they remain very cheap (even after these rallies) and we wrote last time how *"the steep correction in Q1 pushed P/E ratios in China to silly levels and even with a 20% recovery from the February bottom, valuations China continue to be extremely attractive. History has shown that* *investors with patient capital have been amply rewarded when buying Chinese equities at these levels (MSCI China P/E is 13X trailing and 11.4X forward)."* Even after the strong performance of the indices in Q1, the MSCI China P/E is still only 15X and the forward P/E is only 12.3X, in line with the MSCI EM Index P/E levels of 14.9X current and 12.1X forward earnings. The most compelling point is how attractive China remains relative to the ACWI Global Index where the P/E is 21.9X and the forward estimate is an unattractive 16.3X. We understand that many investors have remained on the sidelines, fearing an RMB devaluation that would wipe out any gains they were able to capture in the equity markets. We continue to believe that these fears are misguided and that investors are missing out on a tremendous investment opportunity in China today by listening to the growling of the China bears. We said last time that *"the good news is that waiting for 2016 to pass has not had a large opportunity cost (but we think that is about to change in 2017),"* and it appears from the early results in the New Year that this prognostication worked out pretty well in Q1. One of the most important events for China in 2016 was the inclusion of the RMB in the IMF's SDR basket and we believe that this inclusion makes the goal of currency stability even more critical to achieve. We were adamant last year that there would not be a meaningful depreciation of the yuan in 2016 or 2017 and actually laid out a thesis presented by GMO at their annual meeting in October that supported that premise. We wrote about the two pillars of the thesis in the Q3 letter, "*1) fears of the NPLs in the banking system were unfounded because SOEs (manufacturers and banks) are on both sides of many of the loans (one as liability and one as asset) so they cancel out (so require no bailout that would drain FX reserves) and 2) President Xi would not allow such a significant event in advance of the 19th National Party Congress in 2017, as he has too much at stake in his plans to consolidate power."* We also touched on the point last time that a number of the managers we met with in Hong Kong in January said the RMB was actually more likely to strengthen than weaken in 2017 (a truly variant perception) due to the trade balances that favored the RMB over the dollar. The currency is likely to be very stable ahead of the Party Congress so the 1% rise in Q1 probably doesn't have much information content and is actually more about dollar weakness than yuan strength. Looking at the industry groups we like for the long-term (as China transitions toward consumption) and which have been overweight in our portfolios -- e-Commerce, Healthcare and Retail -- the returns over the past year have been quite volatile, but outstanding overall. Going back to the Q4 results for a moment illustrates the point. We wrote, *"Q4 was not pretty in China as FXI was down (9%), EWH fell (12%), ASHR dropped (5%), HK:1515 (Phoenix Healthcare) tumbled (28%), HK:700 (Tencent) dropped (12%), JD was down (2%), VIPS skidded (25%) and BABA dropped (17%)."* As you might expect, Q1 was the inverse as most of these names surged on the prospect of higher growth and rising profits with the index ETFs FXI, EWH and ASHR up 10%, 12% and 5% respectively, the e-Commerce companies Tencent, JD, VIPS and BABA jumping 17%, 20%, 18% and 22% respectively and the only laggard was Phoenix Healthcare which was flat. As great as these returns are (and have been) we are actually finding even more compelling opportunities in these three sectors in the private markets and we are organizing a fund dedicated to taking advantage of these emerging growth companies.

Frontier Markets had a difficult year in 2016 as the MSCI FM Index rose only 2.7%, but like most averages of a very disparate group of things (it's tough to get more varied than the collection of countries in the FM Index), there were some incredibly strong performers and some completely terrible performers. Q1 was much different than last year and the MSCI FM Index jumped a very healthy 8.9% to bring the TTM return to a respectable 12.1%. Within the index there were nine countries that surged more than 10% during the quarter and the top three that soared more than 20%. Bahrain was up 24.8% during the quarter as the oil price recovery trickled down into Middle Eastern corporate earnings. Kazakhstan had a similar tailwind and was up 27.9%. The big winner (and one of our favorite markets over the last two years) was Argentina, which screamed higher, rising 34.8%, as excitement grew about Macri Administration policies, the recession grew less severe and anticipation of the MSCI Index inclusion attracted more foreign capital. Argentina has been an amazing story over the past few years as they have transitioned from a country trapped in the past being exploited by a despot, to a rising star in the international community trying to recapture their position of prominence from a century ago. While the index returns have been very strong, there have been a number of individual companies that have had even more powerful runs that we have discussed on many occasions in the pages of these letters in past quarters. PAM (electric utility), BMA (bank), GGAL (bank) and YPF (oil) make up a Fab Four that had a simply spectacular Q1, rising a stunning 50%, 25%, 34% and 40% respectively. Perhaps the primary reason that Argentina has been such a great place to invest in recent years is the market has not been crowded. We described why investors were not participating in Argentina last winter, saying, *"Fears about past defaults, currency devaluations and corruption have made global investors skittish about re-engaging with Argentina. However, there was a silver lining in the reluctance of global investors to come back quickly to Argentina as it has extended the investment opportunity (so far, so good) and we expect to see meaningful opportunities to make excess returns in this market for many years to come."* Another benefit (that many would see as a drawback) is that the global capital markets had been closed to Argentinian corporations for a long time so the equitization of the country (total equity market cap divided by total GDP) was only 13%, which translates into a situation where there are just not that many options for investors. We have said before (and basic economics confirms) that excess demand and limited supply is a recipe for rising stock prices. Despite all the positive things going on in Argentina last year, the Trump victory in November sent shock waves across all Emerging and Frontier Markets and the land of the Tango was not immune to the risk-off move and the Merval fell (12.2%) in Q4, setting up Q1 perfectly for the spectacular outcome that ensued. Perhaps one of the funniest things to observe as a global investor is how the masses view all countries in a particular region the same way. So, when President-Elect Trump threatened Mexico all South American countries fell in sympathy despite the fact that any actions against Mexico would not harm (and in many cases would help) other LatAm countries. Just to close the Q1 chapter on Argentina, we wrote in the Q3 letter that PAM was, *"our favorite stock (in fact I tweeted in July of 2015 if forced to own one stock for the next five years this would be it),"* and since then PAM has soared 300% while the SPX is up 15% and the ARGT (Argentina ETF) is up 45%. Viva Argentina!

Unlike last year when making money in the Frontier Markets was all about finding the few countries that did well during a challenging market environment, during Q1 twenty-two of the thirty countries were up and over the past year twenty-one produced solidly positive results. Over the trailing year, the same three countries ruled the Frontier, but in a slightly different order than in Q1, as Kazakhstan was up 40.1%, Bahrain was up 31.6% and Argentina was a close 3rd at up 30.5%. One other country outside the top three that deserves some attention is Ukraine, which stood out last year as one of the Templeton Misery Index candidates (along with Brazil in EM) where things looked so dark a year ago that it was very likely they would be good places to search for investment value. Sir John was constant in his insistence that investors steer clear of opportunities that everyone is flocking toward (consensus) and to seek out those places where no one wants to go (variant perception). Ukraine fit that bill and investors with courage were rewarded handsomely in Q1 as the market surged 17.9% to bring the TTM return to 26%. Buying what is on sale has always been a good money making strategy and Lord Rothschild told us that the best time to buy is when, *"the blood is running in the streets,"* but that said, there are very few investors (including ourselves) with the courage to consistently run towards markets where real bullets are flying and real blood is flowing. We did own a little Ukrainian debt through one of our favorite specialty EM managers, but we can't take credit for being brave enough to go bargain hunting in the Ukraine last year. We have written on numerous occasions about the MSCI Index inclusion trade that tends to have a dramatic impact on EM and FM markets and discussed a few countries that were up for inclusion last time, saying, *"the real story for Pakistan and Vietnam may develop in 2017 as they are both candidates for inclusion in the MSCI EM Index and history shows that markets included in the Index rise between 60% and 120% in the year leading up to the actual inclusion (see UAE, Qatar and Dubai as recent examples)."* We found out last quarter that MSCI affirmed their decision to move Pakistan into the EM Index and the equity market in Pakistan surged 16.2% in Q4 and was up 40.4% in 2016. We also learned that they decided not to include Vietnam, which proceeded to drop (10.4%) in Q4, erasing earlier gains and finished down (7.8%) in 2016. As we noted the power of index creators, *"There could be great news for Argentina and China A-Shares as they are both up for inclusion in May, but bad news (the hits just keep coming) for Nigeria, as they will be removed from the FM Index this year."* In Q1 the Inclusion Club had mixed results, Pakistan took a pause and was down (2.1%), while Vietnam made back the losses from Q4, rising 10.1% (perhaps someone knows something about MSCI changing their mind again), Argentina was clearly great, China A-Shares were up only 6.2% (likely going to have to wait another year) and Nigeria was flat, up 0.4%, as the bad news was already in the stock from the 2016 drop.

We have previously discussed one other country that to be up for inclusion in 2017, and wrote last time that Saudi Arabia, *"has been rumored to be included in the EM Index in 2017 and we believed this was one of a number of tailwinds that were creating tremendous opportunity for investors in the Saudi market in the coming year."* One of the reasons for the belief in the Saudi inclusion (despite no indication from MSCI) was the sudden, sharp rally in Q4 as the Tadawul Index surged 27%, which converted a difficult (13%) loss through 9/30 into a respectable 10.3% gain for the full year. Some doubt crept into our collective minds in Q1 as Saudi stocks consolidated their huge Q4 gains and the index fell (1.2%) during the period, but there continue to be some positive signals from the MSCI group as they have visited with Saudi officials multiple times in recent months. We wrote last time how, *"There is still plenty of skepticism about whether Saudi Arabia can emerge from being an oil dependent Kingdom to become a modern global economy, but there are positive signs emerging. The largest positive sign is their plan to take parts of ARAMCO (the Saudi oil company) public and use the proceeds to create a vehicle for funding the projects that will be necessary to create a new future for Saudi Arabia."* During Q1 there were reports of significant progress in the ARAMCO stock offering and there are valuations being bandied about of over $1 trillion (some say that is down from original estimates, but it still would be the largest company and IPO ever). Sometimes the problem with a big event, like MSCI inclusion, is that it diverts attention away from other developments in the market that in many cases are equally if not more important. Such is the case with Saudi Arabia today, as all eyes are on MSCI, the Kingdom has stabilized its budget with a recent debt issuance (which was significantly oversubscribed), the recovery in oil prices has bolstered the government budget and the youthful leadership of the country has rekindled confidence and enthusiasm that has become palpable in the markets. We discussed last quarter how, *"After a couple of years of being overrun by the bears, the bulls have taken over in Saudi Arabia, and the positions we built in our portfolios last summer have been beneficiaries of the surge in positive momentum. Given how little foreign capital is invested in Saudi Arabia, the bulls could be loose for a while and should MSCI give the green light for inclusion in the EM Index there will be a mad dash into Riyadh."* On the other hand, a no vote from MSCI would be a short-term blow for the Saudi markets, but the margin of safety in many of the core companies (which sell at meaningful discounts to their global peers) offers some downside protection. We have positioned our portfolios to benefit from a run in Saudi stocks, but we believe that we can wait a little longer to see the actual outcome as we will be able to move faster than those starting from scratch should the inclusion decision in June be a favorable one.

The Q1 story in fixed income was similar to the Q1 story in equities and while the Trump Bump (rally) in equity markets faded in early 2017, the Trump Thump (bruising) in bond markets faded as well. We observed last quarter that, *"What is interesting is how quickly the narrative changed from Deflation to Inflation and the threat of negative interest rates to the end of the bond bull market."* The energy supporting that narrative faded in Q1 as U.S. interest rates fell marginally with the 10-year Treasury moving from 2.45% to 2.39% and the 30-year moving from 3.1% to 3%. All the media talking heads crowing about how the Trump trifecta was going to stimulate massive GDP growth (contrary to the simple math that shows GDP is almost certainly going to be sub-2% in 2017) and trigger a reflationary wave that would crush bond investors went really quiet as the quarter progressed. The administration's spokespeople (Spicer, Mnuchin & Cohen) keep flapping their jaws about how all of the Trump plans were going to energize the economy and markets and while the equity markets bought the story for two-thirds of the quarter, the bond markets were having none of it. If equities deal in dreams and bonds deal in realities, then the direction of Treasury yields was a great indicator that GDP growth was going to disappoint in Q1 (it did, coming in at 0.7% versus an original estimate of 3.5% in January) and that bond market returns might not be as poor as everyone was saying they would be. The other indicator that was important to pay attention to, the net short position of speculators betting against bonds, was at all-time highs (always a contrarian signal) and it was likely that rates were due for a turn back down. We referenced the great work of Raoul Pal of the Global Macro Investor letter last quarter saying that the "Chart of Truth" is the 10-yr Treasury bond and the trend is down until such time as the yield passes the previous cycle high, saying, "*Further, until such time as the 10-year breaks above that 3.01% level, the current trend is still down. We continue to side with Van Hoisington and Lacy Hunt who believe that the secular low in rates is ahead of us, rather than behind us*." Q1 reversed a little bit (about twenty percent) of the damage done to bondholders as the Barclay's Aggregate Index rose 0.8% for the period and the Barclay's Long Treasury Index rallied 1.4%. For some perspective on the long end of the curve, at the beginning of July last year, TLT (a long bond ETF) was up 20.5% while the S&P 500 was up 3.8% and bonds were thumping stocks (contrary to the consensus pundit view for 2016), but by election week that gap had closed to TLT up 9.5% and S&P up 5.8% and then, boom, the bottom fell out for bonds and TLT finished the year up 1.4% and the S&P rallied all the way to up 12%. The Trump Thump trend continued for most of Q1 (right up to the day before the Fed meeting in March) as SPX was up 5% and TLT was down (2.5%), but then the failure to pass the AHCA caused market participants to doubt the timing of the Trump trifecta and TLT surged and SPX fell through Tax Day (4/18) and TLT actually overtook SPX, up 4% to up 3.5%, before the Administration leaked more Hopium into the markets saying they would release their tax reform plan (which turned out to be a one page memo light on details and heavy on wish list items that have little chance of passing) and SPX regained the lead, up 5.5% to up 2.5% at the end of April. We stand by our call that TLT will beat SPX for 2017 and it will be very interesting to watch the battle during coming quarters.

Continuing to add fuel to the "End of the Bond Bull Market Narrative," the Fed raised rates another 25 basis points at their March meeting (on top of the 25 basis point increase in December), but curiously the 10-year yield actually peaked two days later and has fallen over the past two months. We said earlier that we would let the roller coaster analogy rest, but we need it pull it out of retirement to describe the bond markets in 2017. Curiously, 10-year yields peak around the day of the Fed hike and then proceed to fall to lower lows until the rumor of the next hike. The TBondcoaster looked like this with yields hitting 2.6% on 12/15 (Fed meeting), careening down to 2.3% on 1/17, hitting a whoop-de-do back up to 2.5% on 2/15, falling back down to 2.3% on 2/24, riding the chain lift back up to 2.63% on 3/14 (day before Fed meeting), swooshing back down to 2.18% on 4/18 and then some Administration jawboning pushed them back to 2.28% on 4/28. Two rate hikes, lots of Trumponomics claims and Treasury yields fall more than 30 basis points since mid-December (another thing that makes you go "hmmm…"), someone didn't get the "Reflation is back, the Bond Market is Dead" memo. We have discussed why we think the Fed moving forward with raising rates is a mistake saying, *"We say ill-advised because all the economic data that we see is pointing to a fairly serious slowdown in economic activity and it appears to us that a tightening of liquidity would be a policy error at this point."* The bond market seems to agree with this perspective as the yield curve steepening that was supposed to be a sure thing (and was a key component of the case for why Financials were screaming upwards) has not only not materialized, but instead has gone the other way (Bank stocks gave up almost all their gains for the quarter after the 3/15 hike). 30-year Treasury yields are also down from 3.18% back in mid-December to 2.95% today despite 50 basis points of Fed hikes. We talked last time about one of our favorite managers in London who has a spectacular long-term track record and was very heavily weighted in long bonds in Q4 and got pounded as they shed (11.7%) during the Trump Thump. We wrote last time that, *"he remains steadfast that the economic data will continue to disappoint and the Fed will be forced to reverse course in 2017."* With the first quarter GDP data being so horrible, retail sales falling two months in a row and the Citi Economic Surprises Index literally falling off a cliff in March, it appears that he may turn out to be right. We outlined our position on the Fed and bonds last quarter saying, *"The Fed Dot Plot (and broad consensus on Wall Street) says they will raise rates four times in 2017 and that it will be a bad year for bond investors. We will take the under on the number of rate hikes and will take the contrarian position that bonds will outperform stocks as volatility rises and bonds again serve as a safe haven trade at some point during the year."* Given that the Fed surprised us in March (we thought there would be no hikes until December again) some would say we have no chance on the under four forecast, but we will see. As things get dicier in the economy it will take serious commitment on the Fed's part to go through with additional hikes, so perhaps it will simply be the timing changed, but the number will still be low. On the second part of the forecast, if the economy really does slow and markets begin to really struggle, long bonds will once again become the safe haven trade and protect investors if we end up headed down the road to Hooverville.

Switching to the global bond markets, we talked last quarter about how we thought it was interesting to watch President Xi quote Dickens at Davos to defend the assault on globalization during 2016, saying, "it was the best of times, it was the worst of times." We provided the rest of the Dickens quote saying, *"it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity,"* and we said that this quote aptly describes the actions of the bond markets around the globe. We also wrote that, *"investors had left the age of wisdom (must be paid to lend money to a government) and plunged headlong into the age of foolishness (actually paying governments to hold their money, negative interest rates) based on being ensconced in an epoch of belief in the omnipotence of Central Bankers since the depths of the Global Financial Crisis that suddenly turned to an age of incredulity as some bond investors began to awaken from their stupor."* Actually the most important age today is the age of financial repression when central bankers have artificially held interest rates down in order to encourage speculative activity and hopefully trigger a wealth effect. The problem is that the transmission mechanism in the economy is broken since there is so much leverage already in the system there is little demand or additional credit (bank loan origination crashed in Q1). So the low rates just end up punishing savers and rewarding the Banksters who lever up by borrowing from the Fed and buying risk-free bonds at a spread. So there were a few bond investors who awoke from their zombie slumber and sold bonds in Q4 causing global yields to rise and the Barclay's Global Bond Index to fall (7%) in Q4 (wiping out nearly the entire 2016 gain earned in the previous nine months), but financial repression forced many investors back into a sleep-walking state of yield chasing and global bond yields rolled over and the index rose 2.5% in Q1. Granted some of that return was actually dollar weakness, but there was definitely a sense that the reflation narrative was losing its luster and that some yield now was better than no yield later.

Using the roller coaster analogy (we promise for the last time) the European rides were gut-busting, vomit inducing terror tracks in Q1, as the volatility was simply unbelievable. The German Bundercoaster (10-year Bund) has been a thrill a minute in 2017 as the Bund entered the year at 0.21% (the decimal point is in the right place), but caught the Trump Track upward in January cresting up almost 1.3X higher at 0.48% (doesn't seem like a big move, but investors can make huge returns in the futures markets due to the embedded leverage) on 1/26, then careened down the hill to a lower low at 0.19% on 2/24, ratcheted right back up to 0.49% by 3/10, screamed down to an even lower low (notice the trend) at 0.16% on 4/18 and coasted back up the final hill into the starting house at 0.32% on 4/28. These are simply crazy moves over the course of four months, but such is life in the amusement park that the global markets have become. The BTPcoaster in Italy had a similar nausea inducing ride path careening up and down from 1.8% to begin the year to a peak of 2.4% twice on 2/6 and 3/10 and troughs of 2.1% on 2/28 and 3/29 before finally settling in at 2.3% at the end of April. The GILTcoaster in the U.K. was a bit less bumpy, but there was one blood curdling drop from 1.52% on 1/26 to 1.08% a month later on 2/24. But over the course of the four months it only moved from 1.24% to 1.09%. The OATScoaster in France was fairly wild as well given the political gyrations surrounding the election, but the moves were slightly less exaggerated and the overall direction of yields was higher (perception of greater risk due to uncertainty) and yields rose from 0.69% on 12/30 to 1.12% on 3/20 only to finish at 0.84% on 4/28. Perhaps the ride we should all be most concerned about is the Samuraicoaster in Japan where JGBs had fought back from negative interest rates to begin the year at 0.05% (yes a measly 5 basis points, but it is positive…) to a high of 0.12% on 2/2 only to plunge down the hill back toward NIRP land and hit 0.01% on 4/17 before bouncing slightly off that bottom to eke out another basis point by the end of April to finish at 0.02%. The fact that JGBs are flirting with negative numbers again is a sign that deflation is rearing its ugly head again and the reflation trade may be turning into just another hope trade and you know how we feel about those. Hope is not an investment strategy. We wrote last time that, *"we continue to hear about how this recent move in rates in the "End of the 35 year bond bull market" and we even wrote in Q3 that "there is a rising cacophony that this time is the big one" and everyone says that foreign government bonds are the short of a lifetime, but we contend that until we surpass the 0.92% 2015 high on the Bund, the downward trend remains intact."* The Bundercoaster got a little over half way there, but the series of three lower lows is very concerning as those types of events are strong indicators that the primary trend in yields is down. Let's review our checklist of criteria to see if we can determine the likely path of global rates. In other words, what has changed in a positive direction that would cause rates to increase? First, is European and German GDP growth better? Not really, EU GDP is stalled at 0.4% and German GDP has fallen back slightly to 0.4% as well, the same level as a year ago. Second, has European inflation emerged? EU CPI definitely jumped last year from 0.2% in June to 1.8% in January, but now has stalled at 1.8% for four months, as it appears that much of that rise was a transitory impact of the recovery in oil prices and will now reverse. Third, are European politics stable and supportive of better growth? Clearly we would have to say that rising protectionism and nationalism are growth negatives and given the fact that we are still talking about the EU breaking up (albeit less with Macron emerging victorious over Le Pen in France), that can't really be considered a tail wind. Fourth, have European demographic trends improved? The answer to this one is an emphatic no as Europe still has a rapidly aging population and the anti-immigration rhetoric makes the trends even worse. Fifth, are European banks extremely healthy and rapidly growing new loans? There is some light at the end of the tunnel on this one as the banks have recapitalized and they are attempting to make loans, it is just that loan demand is challenging. We clearly don't have an abundance of yeses here, but there are some positive signs in the EU that may support somewhat higher global bond yields. That said, we repeat what we said last time that, *"We still lean toward the Hoisington thesis that the final trough in global bond yields is ahead of us, but we won't fight the data in the short run."*

We said last time that we were running out of superlatives to describe the credit markets so we borrowed the speed continuum from the movie *Space Balls* movie as high yield markets had gone from Insane to Ludicrous last year and were now approaching Maximum Plaid (the highest speed indicator on the space ship throttle). We noted just for fun that, *"Elon Musk of Tesla is also a fan of Space Balls as he has two modes for his Model S cars, Insane Mode (0-60 mph in 3.2 seconds) and Ludicrous Mode (0-60 mph in 2.8 seconds) and has hinted that in the new roadster there would be a Maximum Plaid Mode."* One of the conundrums in the high yield space is that the adjective high doesn't seem appropriate any more as junk bond yields have collapsed from 6.2% to end last year to 5.65% today. Just for the record, there is a reason they are called junk bonds – many of them finance really bad businesses and don't actually pay the money back. The idea of lending money to companies that may not have the capacity (or willingness) to pay it back and only extracting mid-single digit returns as compensation seems suspect at best and unintelligent at worst. Some might make the argument that the origination of the actual loans is at a higher rate and it is the crush of money from institutions and individuals desperate for yield that pushes the price of the bonds up (and yields down), so the yield of the index doesn't reflect the true underwriting risk analysis. While we are sympathetic to that argument, we repeat what we said last quarter when we quoted Dark Helmet (parody character of Darth Vader in *Space Balls* played by Rick Moranis) when he says, *""what have I done? My brains are going into my feet!'" which is exactly what it seems to us that would be required to buy high yield bonds here."* That said, the bulk of investors don't agree and they kept buying Not So High Yield (NSHY) bonds during Q1 and the Barclay's High Yield Index rose another 2.7% (which puts the trailing twelve-month return at an eye-popping 16.4%). NSHY has been oblivious to fundamentals slowing down in other markets and spreads keep tightening due to the global grab for yield. This caused Option Adjusted Spreads (OAS) to collapse from 4.22% at the end of Q4 to 3.92% on 3/31 and they fell further in April, reaching a stunning 3.78% (remember this is the spread to risk-free Treasurys). We discussed last time that, *"The most ludicrous thing that has happened is that the junkiest company bonds have become the most prized and CCC rated bonds (remember they are rated CCC because 50% default within four years) are well into Maximum Plaid speed and surged more than twice as much as the HY Index, soaring a truly astonishing 36.5% in 2016."* A reasonable investor might assume that buying bonds with a 50% chance of getting paid back is a rather risky undertaking and that as prices surged and yields plunged taking that risk becomes less attractive (not more). But despite falling yields, investors couldn't get enough CCCs in Q1 and pushed the index up another 5.2%. One point to ponder here is that the monster return in the HY market last year places 2016 as the third best in two decades. Given that the first and second best years were 2009 and

2003 when the economy was recovering from big recessions and huge defaults, perhaps it is possible that there was a stealth recession in 2015/2016 (would have been right on schedule in the normal business cycle) but it was just never called. When we go back and look at the massive spike in yields in February of last year when the HY index got to 8.9% (and CCCs were well above 20%), some of the recent returns seem more appropriate.

Our MCCM Surprise #9 is titled Willie Sutton was Right and refers to his famous response to being asked why he robbed banks, "that's where the money is," which we use to explain our affinity for Emerging Markets - that's where the growth is (and ultimately the money as they are the creditors to the over-indebted Developed Markets). As we continually survey the global landscape for investment opportunities we have discussed previously the significant development in the quality and depth of the markets for Emerging Markets debt and the evidence over the past few years of the asset class even taking on some of the role of safe haven during crises. One might logically ask how that is possible given the Western perception that EMD is simply debt issued by a bunch of banana republics to fund infrastructure projects where the proceeds are stolen by corrupt dictators and the bonds eventually default. My how times have changed. Today, the vast majority of EMD issuers are very high quality companies and the governments, in most cases, are in meaningfully better financial condition than their DM counterparts, so the risk in EMD has fallen dramatically over the years. To push this point further, when comparing EMD head-to-head with DM HY it would be a challenging case to make that there was not better value and upside in EMD. When going toe-to-toe with DM sovereign debt it would be nothing like the *Thrilla in Manilla* (Ali vs. Frazier III, won by Ali in 14 rounds) and much more like *Once and For All* (Tyson vs. Spinks, won by Tyson in 91 seconds) as the upside/downside is far better in EMD than DM sovereign debt. We talked last quarter about how EMD was chugging along during 2016, up 12.8% for the first three quarters, before Donald Trump sucker punched emerging markets with a Tweetstorm of threats against Mexico and China and EM equities. The Tweets caused EMD to hit the mat hard in Q4, and many said they were down for the count. Being firmly in the EM corner, we had a different perspective and wrote that, *"given our view that the Trump Bump in the dollar will be short-lived (has actually almost fully reversed in January), we remain more bullish on EMD than other forms of debt as there is higher growth, better cash flows, lower leverage and higher average quality across these markets versus the Developed Markets."* Champions drag themselves up off the mat, dust themselves off and come out swinging, and EMD showed the heart of a champion in Q1, as the JPMorgan EM Bond Index surged 3.9% during the quarter (more than erasing the (2.6%) loss in Q4), bringing the trailing year return to 8.8%. EM corporate bonds performed well too with the JPMorgan CEMBI rising 3%, but the heavyweight champ in Q1 was the local currency sovereign debt where EM FX rocked King Dollar back on its heels and the JPMorgan GBI-EM surged 6.5% (3% of that coming from FX gains). The primary reason we favor EMD in the current environment is that we are comfortable holding the assets because we believe they are reasonably priced and we aren't stretching to buy low quality assets to achieve a desired yield. We discussed the danger of the global yield grab last time saying *"The problem with any investment decision is when you shift from buying an asset that you feel is undervalued or has substantial investment income to generate return to a decision to buy an overvalued asset because you expect some "greater fool" will pay an even higher price in the future, you move from the realm of investment to speculation."* There are clearly plenty of greater fools in the markets today willing to keep paying prices well above fair value for assets of all types, but we prefer to focus on finding assets at or below fair value. In the liquid debt markets, that means focusing on EMD over NSHY and traditional fixed income and that said, we will repeat our advice from last time that, *"we would favor other forms of income oriented assets over all of these and would* *rather focus on BDCs and MLPs for more consistent cash flow and lower risk of capital loss in the event that interest rates do actually rise,"* (we still think rising rates are unlikely, but when you get a free hedge, take it).

When looking at the yield related assets, particularly the REITs & MLPs, it is likely safe to assume that most investors believe these assets generate similar returns (since "yield is yield") and we will admit there is some logic in thinking that both asset types would rise and fall in a similar fashion as interest rates move. What we have observed over the past couple of years is that this assumption breaks down (sometimes quite dramatically) as we discussed in the Q3 letter saying, *"not all yield assets are created equal; different structures, different leverage levels, and different underlying asset quality "should" produce different return streams. The problem lies in those times when investors ignore all the differences and simply buy the yield of what they consider to be comparable assets (REITs and MLPs)."* The differences were abundantly clear again in Q1, as REITs were flat (caught between the hope of better growth and the threat of rising rates) while MLPs rose with recovering oil prices (and rising drilling activity and production volumes). The S&P U.S. REIT Index was up a scant 0.6%, while the Alerian MLP Index rose a hearty 4%. When we look at the trailing one-year numbers, the disparity is even more pronounced with REITs up just 2.6%, while MLPs soared 28.3%. Before we get too excited and declare that MLPs are far superior to REITs remember that over two years the numbers are 3.4% vs. (6.5%), over three years 9.9% vs. (5.2%) and over five years 9.7% vs. 2.6% (that little hiccup in late 2015 caused a capital loss that erased many years of income). We wrote a few quarters ago that, *"the most impressive thing about REITs is that, interestingly, they have outperformed equities over nearly all trailing periods during the past twenty years, so perhaps there is something to this yield construct after all."* How quickly things change. The S&P 500 has now regained the lead over REITs in all but one of the trailing periods over the past twelve years (the eight year period off the 2009 bottom) and while REITs dominate most of the trailing periods out to twenty-five years, the gap has nearly closed, as for the quarter century REITs compounded at 10.9% while the S&P 500 grew at 10.3% per year (maybe REITs really are stocks rather than real estate after all). Sixty basis points doesn't seem like much, but due to the magic of compounding, $1 invested in REITS would have grown to $1.90 more ($13.40 vs $11.50) than $1 invested in stocks over the period (real money). We wrote in Q3 that, *"we can't help but feel that this is not a particularly good time to put new capital to work in REITs as it is beginning to feel a little like 2007 (when we made a lot of money for clients going short REITs along with short Subprime) where investors seem to be willing to pay any price for real estate related assets. When the margin of safety disappears, usually forward returns disappear."* We followed that up last time with a discussion of the myriad *"headwinds for many property types like office (shrinking working age population) and malls (AMZN road kill) and we could point to the crazy valuations in multi-family as supporting evidence for why to avoid this particular yield asset, but we will keep it short and sweet and say that the risk/reward is unattractive and there are plenty of better places to deploy capital (although we can't help but think shorting mall REITs like SPG, GGP and MAC is a really good idea)."* Since we penned those words three months ago, the REIT Index was able to eke out a small gain of 2.5%, but SPG, GGP and MAC got smacked, falling (10%), (13%) and (9%) respectively, looking like #AMZNRoadKill indeed.

Coming back to the MLPs, with the Alerian Index jumping 4% in Q4. MLPs continue to be not only the best yield asset, but nearly the best total return asset over the past year as only small-cap value stocks (with the tailwind of hope on tax reform) had a higher return and that margin of victory was slim at 29.4% vs. 28.3%. We got excited about commodities and MLPs in Q1 of last year as it appeared the bear market that began in 2011 was finally nearing a crescendo and the destruction that had come to the MLP market in the wake of the collapse of oil prices in late 2014 appeared to have reached a nadir. All of that said, we have discussed many times the perils of trying to catch falling knives and our preference (learned from the experience of losing a few fingers along the way) to let them hit the ground and come to rest before picking them up by the handle. We wrote last time that MLPs followed this pattern in 2016 saying, *"but then the knives actually did hit the ground, they did bounce around a bit and they did actually come to rest allowing smart value investors to make "generational" purchases. In February prices got so low that investors were discounting no growth in hydrocarbon production ever again in the U.S. and we made the case that buying core assets like ETE, PAGP and WMB would provide investors with outstanding returns going forward."* That strategy clearly worked well in 2016 as ETE, PAGP and WMB were up an impressive 250%, 135% and 130% from their babies thrown out with the bath water phase in February (awfully good compared to the AMLP Index ETF up 60% and the S&P 500 up 23% for the same period). One reason we were so enthusiastic about these particular pipeline MLPs was the result of the crossover benefit we gain from being invested in the private markets as we had insight into the large production volume increases that were occurring in our private portfolio of energy assets in the Permian Basin. We wrote last time about how in spite of the big moves in the MLPs, they were still well below their peaks from 2015, so there could be further upside, saying, *"AMLP is still down (22%) from the peak of eighteen months ago. Going forward, we see a confluence of events that could further stimulate MLP gains, including: 1) a less environmentally sensitive Trump Administration likely to accelerate drilling and pipeline projects (would be huge win for ETE) 2) technological advances continue to defy pundits who conclude depletion of existing wells must reduce volumes, and 3) a rapid recovery in rig counts in the Permian as $50 oil makes E&P companies extremely profitable in the basin (much to OPEC's chagrin)."* Curiously, the last few months have not gone according to that plan as despite a number of positives on the policy side, energy prices (oil and natural gas) have been stuck in a rut and MLP returns have been mixed as AMLP and PAGP gave up a little ground, down (3%) and (8%), while ETE and WMB have continued to rise, up 4% and 6%. There may be some uncertainty on oil prices given the tug of war between OPEC and the U.S. shale producers, but one thing that is not uncertain is that more rigs are activate, more wells are being drilled and more hydrocarbons need to be transported, so we expect continued upside from the MLPs.

Turning to commodities we have made the point over the years that the cyclicality in the commodity space has to do with the reflexive nature of the production and use of commodities. When prices are high companies want to produce a lot, but user demand falls and when prices are low companies want to produce less, but user demand rises. We summarized that primary point last year in our MCCM Surprises #9, The Cure for Low Prices in Low Prices, saying, *"it turns out that capitalism works and high prices bring on new capacity that eventually collapses prices and then low prices lead to shuttering of capacity they eventually allows prices to move back up."* That is exactly what happened in 2015 and into 2016; capacity was shut-in (and user demand grew at lower prices) which set the stage for a strong bull market in commodities last year. After a very strong recovery from the February lows, the S&P GSCI struggled in Q3 and the first half of Q4, which prompted us to write about some wisdom from one of our favorite market commentators, saying *"as Kiril Sokoloff has written many times, primary trend moves will have a series of "tests" early on which will throw off many investors resulting in the largest (and best money making) portion of the recovery being captured by the smallest number of participants (there is a reason that the average investor underperforms the markets over the long term)."* When looking at the GSCI from a technical perspective last quarter we observed that the primary recovery trend was intact and that the index continued to make higher lows (five at that point), was locked in a series of three higher highs and looked poised to take out the June 2016 peak. What a difference a quarter makes. In Q1, Kiril looked prophetic as commodities were smacked down hard, falling (8%) through 3/27, before being rescued (temporarily) by an oversold rally to finish the quarter only down (4.5%). That respite, didn't last long as the volatility in GSCI continued in April leaving the index only fractionally above the 3/27 low, down (8%) CYTD. The Sokoloff Test is now testing the resolve of commodity investors big time, as all of the momentum indicators have shifted to negative with GSCI having now made three lower highs (bad sign), crossed below the 50dma and the 200dma (bad sign) and also now on the verge of breaking the series of higher lows (last straw?). Once again refreshing the numbers on the GSCI since the beginning of the commodity bear market in August 2011, GSCI is down (60%) and down the same (55%) from the peak in oil prices in June 2014, so there is plenty of headroom for this index to recover if we have indeed changed the primary trend to positive. Since the fall of 2011, the S&P 500 and the GSCI make a giant alligator jaws pattern with SPX up 145% and GSCI down (60%). One thing history has taught us is that eventually all alligator jaws will close, the tough part is getting the timing right. We will write a lot more about commodities in the coming quarters and we will see if the Sokoloff Test shakes out the weak hands in the near term with one last cathartic down turn or whether the first half of 2016 was just a short-covering rally resulting in a false breakout and the primary trend is still lower as deflation creeps back into the system.

Looking back at the end of 2016, oil prices broke out in Q4, charging hard in December to close the year at $53.72, up a solid 11.4% for the quarter. A curious thing about that move was that it was counter to the normal seasonal pattern of oil that we described in the Q3 letter, saying, "*we do know that November, and the first half of December, are seasonally weak periods for oil (with an average decline of 7%) followed by a little rally into year-end and another seasonally weak period in January and February so it could be a wild ride over the Holidays.*" We discussed in January that the Chinese Year of the Monkey (known for surprises) foiled that conventional wisdom and oil was strong from the post-election trough on 11/12 through the end of the year (rising 21% during that period). We commented that *"The most intriguing thing about the late November and December rally is that it occurred while the dollar was surging 3% (normally a contrarian indicator for oil) as the narrative shifted toward how strong the U.S. economy would be in 2017 as the trifecta of lower taxes, reduced regulation and huge fiscal spending will all boost growth (and therefore demand for oil)."* We said we would take the under on all three elements of the Trump trifecta (so far, so good after the first 100 days) and that, *"the pesky fact that oil supplies have been stubbornly high (contrary to the promises from OPEC to cut production)* would put pressure on oil prices. We had incorporated that view into our MCCM Surprises #4, When OPEC Freezes Over… saying, *"After the ceremonial show of OPEC unity in November, where members agreed to production cuts to attempt to firm up oil prices, it turns out that members of Cartels actually cheat and excess supply continues to dog the oil market. In hindsight it becomes clear that the agreed upon "cuts" were merely normal seasonal production declines and 2017 brings a chorus of "you cut first, no you cut first…" Global crude inventories remain stubbornly high and prices fall back toward the bottom of the New Normal, $40 to $60 range, before bouncing back to end the year at $60."* Oil was stable during the first two months of 2017 and then showed some major volatility in the next two months of the year (again defying normal seasonality). WTI prices were essentially flat during January and February, before tanking (12%) in the first three weeks of March to finish Q1 down (9%). The rally from the trough on 3/24 lasted until 4/11 and recaptured almost all of the losses until some bad inventory data came out and prices fell to finish down (11%), CYTD through April. $49 is still a ways from $40 and the dollar weakness could help buffer oil prices in the near term, but the ramp-up in U.S. shale production appears to be gaining momentum so the big inventory draws that the oil bulls are relying on for higher prices seem more like hope than reality at this point. We want to reiterate here that, *"we have been spending an disproportionate amount of time with our private energy managers this year (that is an indication of how attractive we think the opportunities are) and every time we talk to one of the teams in the oil patch we come away even more excited about the potential to make outsized returns in the private oil & gas markets."*

Oil and gold get all the media glory, but there are many other commodities that are not only headline worthy, but have proven to be sources of outstanding returns for investors as well. We discussed last time how natural gas, copper and iron ore were examples of commodities we should pay attention to and seek to profit from over time. We wrote last time about how the industrial metals are correlated with global and specifically Chinese GDP growth. Given the strong economic numbers coming out of China recently (GDP growth (6.9%), manufacturing and non-manufacturing PMI, retail sales and M2 growth), it appears the predictive power of the industrial metals has been proven once again. Natural Gas was an example of an investor's dream last year and we wrote last time that the recovery from the March trough of $1.64 to close the year near $4 resulted in a 59.2% gain for the entire year (remember, the (12%) Q1 drawdown was tough). The best part about the recovery was that it didn't have the normal volatility associated with that kind of climb (that shakes investors out at every little downturn). In getting ready for the winter, we said in the Q3 letter that, *"there are some very interesting developments with the transition from El Nino to La Nina that could make this winter particularly interesting in the natural gas world."* We meant interesting in the sense that predictions of colder than average weather would lead to better prices for natural gas, not that warmer than average weather would lead to outrageous volatility. We wrote last time that, *"With an unusually warm winter so far it appears that we got the baby sister version of La Nina and natural gas prices have weakened dramatically in January, falling a brutal (21%) from the $3.93 late December peak to $3.11 at 1/31. If the temperature remain unseasonably mild, natural gas prices could stay under pressure and the level to watch now is the $2.62 low on 11/11 as if that level is breached the bullish trend reverts to a bearish trend and that could be bad news for natural gas prices, meaning $2.00 could happen in a hurry given the continued high production levels in the Marcellus and Utica basins."* The weather did stay unseasonably warm and natural gas prices continued lower in February, but the $2.62 low held, not once, but twice, on 2/21 and 2/27 when prices hit a 2017 low of $2.69 and then bounced right back up for the rest of the quarter (and continued into April). So for Q1, natural gas was the only thing chilly during winter 2017 as it fell (17%), but with continued recovery it is now only down (11.6%) year-to-date through the end of April. We wrote in January that, *"Something to keep an eye on is many of the natural gas equities that had been star performers in 2016 (SWN, RRC, COG, RICE, where prices were up between 40% and 160% through September) have turned down hard (telling us something?), and are down between (15%) and (30%) over the past four months."* As it happens, they were telling us something and natural gas did indeed correct, but an interesting thing happened over the past three months in these names. There was a bifurcation between the lower quality (SWN, RRC) and higher quality (COG, RICE) companies (quality based on acreage and leverage). SWN and RRC continued to fall, down another (16%) and (18%), while COG and RICE rallied 8%. We have a couple of managers who are beginning to get bullish again on natural gas so it will be interesting to see how things develop if/when La Niña actually causes some extreme weather.

We have described copper as the proverbial ball rolling down a flight of stairs over the years during the great commodity bull market as there were a lot of bounces along the way down, but the destination was a bad place. Most commodity markets turned in February of 2016, but Dr. Copper wasn't released from the ICU until October. The long-time patient came out of the hospital feeling very frisky and went on a run from $2.10 to a peak of $2.80 in mid-February of this year (a surge of 33%). We wrote about the ferocity of the rally and its 13% move during November and December to end the year last time. We also mentioned the telltale sign that this type of move is imminent is a contraction of the range of movement over a period of time, like molecules vibrating faster as they are about to change form. We wrote about this in great detail in our letter on George Soros and reflexivity and summarized last time saying, *"Soros has said this phase shift phenomenon and how it was one of the tools he used to find inflection points, times when it made sense to break from the herd and take a contrarian position (in fact, he said you should never fight the primary trend until this phase shift occurs)."* On the surface, Dr. Copper kept the party going in Q1, rising 5.5% during the period, but that number masks some serious volatility during the quarter as the reflation versus deflation debate reappeared as some of the promises made by the Trump Administration didn't actually occur during its first 100 days and doubt began to creep into the collective minds of investors who had piled into commodity and infrastructure stories in Q4 and the beginning of Q1. Copper rallied 12% from $2.50 on 12/31 to a peak of $2.80 on Valentines' Day, then turned down just as sharply and fell (7.8%) over the next three week to finish at $2.58 on 3/10 and recovered 2% of that back to end the quarter at $2.63. After a quick rally over a couple days back to $2.70 to start April, the bottom dropped out and Dr. Copper started looking a little green again, falling (6.3%) to $2.53. But when China reported Q1 GDP growth above expectations (6.9%), everyone was feeling great again in the commodity ward and copper surged 2.8% over the final week to close at $2.60. Despite all the volatility, it appears that the copper markets are simply consolidating the huge gains from the end of last year. So long as the patient doesn't regress below the $2.53 level, the primary trend is still upwards and there are a number of positive developments in terms of capacity coming off-line and demand ticking up that should help keep Dr. Copper from having a relapse. All that said, we will be watching this market closely as it appears to have reverted back to its former useful self as a primary indicator of global GDP growth and the unwinding of the Chinese rehypothecation programs that were biasing the copper data appear to have been completed.

The copper related stocks didn't have as much fun in Q1 as they did in Q4, but they were quite strong for the most part as SCCO (Southern Copper) surged 11%, FM.TO (First Quantum) was up 5%, GLEN.L (Glencore) jumped 10% and UK:AAL (Anglo American) was up 5% and only FCX (Freeport-McMoRan) slipped a bit, falling (3%). Given that the returns from Q4 to the end of January were a stunningly good collection of numbers at 46%, 51%, 53%, 40% and 53% respectively, we will cut them some slack for "only" delivering single digits on average in Q1. These stocks have been so strong since the commodity cycle turned last February, we wrote last time that, *"Perhaps there is a reason that we chose copper for the official MCCM color as the Fab Five put up some staggering numbers over the past year (since the trough last January), soaring 75%, 475%, 315%, 475% and 320% respectively."* With those types of gaudy numbers there was bound to be some sort of consolidation and we may be in the midst of that right now. Over the past three months through the end of April, the Copperline Corp has taken a breather with SCCO down (8%), FM.TO down (21%), GLEN.L down (7%), UK:AAL down (18%) and FCX down (24%). Kiril warned us that primary trends will be tested to try and shake out the weak hands, so until the facts change on supply or demand trends, we will aspire to remain strong hands and buy what is offered at a discount. That said, it is possible that economic growth is rolling over as the Citi Economic Surprises Index (CESI) has fallen off a cliff lately. We will be watching Dr. Copper closely in the quarters to come to see if the reflation trade can resume or whether it was simply a 2016 China stimulus induced hope trade. The surge in iron ore last year makes the copper jump appear to have feet of clay as the triple play of China shutting in excess capacity for the first time, increasing fiscal stimulus and pushing the One Belt, One Road (OBOR) project pushed prices up over 100%. Iron ore kept right on surging into the New Year and had soared from $79.50 at year end to $94.50 by the third week of February (a quick 18% jump). It hit a little air pocket over the next couple of weeks, falling (9.7%) back to $85.30 on 3/9 and then surged to $92.60 a week later the day after the Fed meeting on 3/15. "Beware the Ides of March" took on a whole new meaning in the iron ore market this year as suddenly the bottom fell out and round tripped all the way back to $79, basically flat for Q1. Iron ore kept falling in April to a low of $61.50 on 4/18, down a stunning (35%) in eight weeks, but caught a slight bid in the final two weeks after China reported strong GDP numbers to finish the month at $68, now "only" down (14.5%) year-to-date. After a spectacular Q4, iron ore related equities were mixed in Q1 with VALE up 18% (much of that FX and index flow related as Brazil had a strong quarter), AU:FMG up 5%, BHP down (1%), RIO up 5% and CLF down (5%), which we can forgive after rising a stunning 44% in Q4. The crash in iron ore prices crushed the stocks in April as the group fell (10%), (15%), (2%), (2%) and (18%) respectively. The big question now is whether this is a pause the refreshes, or the beginning of a broader trend in the rolling over of the reflation trade. We are sticking with our wingman (Kiril Sokoloff) on this story for now, as it does appear that there have been fundamental positive changes in the supply/demand balance across the commodity complex (less supply, more demand), but as an increasing amount of hard data comes in weaker than anticipated there is certainly a possibility that the deflationary forces unleashed by demographics and debt (the Killer D's) cannot be contained as easily as anticipated over the past year and the commodity cycle recovery gets cut short.

Turning to the precious metals, we wrote right before the election that *"one wildcard worth considering is what would happen to Gold prices in the event of a surprise upset in the election as many of the elements of the Trump platform would seemingly be good for gold."* In fact, the general narrative was that a Trump victory would cause chaos in markets and, as a result, huge safe haven demand for gold. That actually did happen, for about three hours. We wrote last quarter that, *"It was amazing how quickly the narrative changed and how quickly gold began to drop, plunging (11.3%) from Election Day to the trough on 12/22. Something changed again in the precious metals markets in late December and gold has rallied 7% and silver has rallied 11% over the past five weeks (we will write more about that next quarter)."* So here we are in the next quarter and things definitely changed. Like most markets we have discussed thus far (with a few notable exceptions) Q1 was the anti-Q4 and in the precious metals markets the differences couldn't be more dramatic. In Q4, gold was down (12.8%), silver was down (16.9%), platinum was down (12.1%) and even palladium fell (5.5%). Conversely, in Q1, gold gained 7.5%, silver surged 12%, Platinum picked up just 1%, and Palladium piled on 12%. Some turmoil in the global economy, like missile strikes in Syria and tensions in North Korea stoked significant volatility in April as the metals moved in unpredictable ways to bring CYTD returns to 9.5% for gold, 6% for silver, 16% for palladium and still just 1% for platinum. With continued weakness in the dollar, we continue to see a positive environment for precious metals and should markets get a little more volatile in the summer or fall, safe haven demand could pick up and drive more capital in search of stores of value. One wild card in the precious metals story is the emergence of the crypto currencies (Bitcoin, Ethereum, Ripple, etc.), which are gaining in popularity as alternative currencies (long the sole role of precious metals) so it will be interesting to watch developments in this area and we may have to start tracking the performance of the cryptos in future letters. Just for fun, Bitcoin started the year at $968 and while there has been a lot of volatility ($775 on 1/11, $1,291 on 3/3 and $934 on 3/24), the current price is $1,414, a gain of 46% over four months (not too shabby).

In precious metals investing, the options are to invest directly in the actual metals or to invest in the companies that unearth, process and distribute the metals. There has also been an interesting cyclicality to the relationship between the two segments as when the miners outperform the metals it has usually been a bullish sign, and vice versa. We wrote last time that, *"the six weeks following the Trump victory were challenging for investors to hold conviction on the precious metals. But a funny thing happened on 12/22 and both the metals and the miners are surging again and staying constructive has been rewarded, with GLD up 7%, SLV up 11%, GDX up 25%, GDXJ up 34%, SIL up 24% and SILJ up 33%, through the end of January."* We went on to repeat something that we have written on a few occasions over the years that when looking at the precious metals markets, *"historically when gold miners and silver are outperforming the gold metal that has been confirmation of a bullish trend. Based on that criteria clearly the bull is loose in the precious metals shop."* What we should have written was that those returns were "gaudy" as those types of moves shouldn't happen in five weeks (but they did), and we should have reminded ourselves of something we wrote in Q3, *"Note to self for future letters, when you use words like gaudy to describe returns it is time to think about the other side of the trade. We have always liked the old saw, "if a trend is unsustainable it will not be sustained."* Those types of moves are clearly not sustainable and it should come as no surprise that the metals and the miners took it on the chin in the past three months. GLD was able to eke out a 4% positive return, but SLV surrendered (2%), GDX gave up (7%), GDXJ ground down (15%), SIL sank (9%) and SILJ sloughed off (17%). Again, we should have taken our own advice from the amended rule when we wrote, *"we will update the rule even further this time saying that if one uses a word like gaudy to describe returns the right answer is not just to sell, but go short."* Now even with the challenging period since the last letter, given how strong January was, the CYTD returns are not that bad at 9%, 6%, 2%, (4%), 3% and (4%) respectively, but the incredible volatility is quite disquieting. Something doesn't feel right in this sector as the miners are incredibly cheap, capacity has been rationalized, costs have fallen (as oil prices have stabilized at much lower levels than 2014) and global demand for precious metals continues to rise (individuals and central banks), but as we have written in this section before it just doesn't appear that the miners can find their "natural buyer" and they have been relegated to the momentum trading crowd, which is not great for us long-term investors.

Shifting to hedge funds, we opened this section last time with some thoughts on how the business had changed in a ZIRP (Zero Interest Rate Policy) world and why we believe that the forward returns over the next decade are likely to be much more favorable for hedged strategies (expect T-Bills + 5%) than long-only equity strategies (expect T-Bills + 3%) and fixed income (expect T-Bills + 2%). We wrote, *"According to the media headlines, hedge funds as a group (although we rail all the time against calling them a group since the term is as meaningless as mutual fund) finished their seventh consecutive year of underperformance relative to equities in 2016. Everything in investing is cyclical and we have seen these lean periods in the past (like 1994 to 2000) and they have always been followed by prosperous periods and we would expect the next seven years to look more like 2000-2007 when traditional equities struggled and hedged equities excelled."* So as we begin what we believe is year one of that cycle, let's see how the various hedge fund strategies fared in Q1. The HFRI Equity Hedge Index was up a very healthy 3.8% during the quarter, as the gale force headwind that had been buffeting long/short managers (on the short side in particular) began to abate, correlations within equities fell to levels not seen in over a decade (a positive for active management) and there were clear signs of dispersion between the winners and losers in various industry groups (like retail and technology). My, what a difference a quarter makes as the horrific Q1 of 2016 rolled off the trailing one-year performance the twelve month number went from 0.1% in 2016 to 11.5% for the TTM. Q1 of last year was the worst quarter since Q1 2000 as it was one of only a handful of periods in market history where the best companies performed the worst and the worst companies performed the best. To put come numbers around the craziness that was early 2016, the top 50 holdings of the leading hedge funds (one could safely assume these are high quality companies with long track records of success based on historical results) were down (10%) relative to the S&P 500 being flat (safe to say an anomaly). But as bad as that was, the short side was even worse. Remarkably, the bottom quintile of stocks in terms of profitability (those you could safely assume should underperform the markets over the long term), were up a stunning 28%. Perhaps needless to say, being short those companies was very painful.

2016 was a trying year in the hedge fund space and we asked ourselves (and wrote in the Q1 letter), *"Have managers lost their Edge?"* We followed that up in Q3 saying, *"We spend a lot of time thinking about, identifying, analyzing and monitoring manager edge and we would NOT conclude that the fundamental approach utilized by active long/short managers is no longer effective."* And finally, we wrote in Q2, *"There have been plenty of incidences over the decades where active management has underperformed passive management, where traders beat fundamental analysts and where long only has trumped long/short strategies. In every one of those instances mean reversion has occurred and to paraphrase Sir John Templeton again, it won't be different this time."* We discussed last time how, similar to Roger Babson's now famous warning about the perils of the stock markets in 1929, just because we were early (some would say wrong) in predicting when the mean reversion in performance of long/short strategies would begin, that does not impact whether we would be correct or not when making a similar forecast today because they are independent events based on new and different information. We based our view on the fact that, *"as the effectiveness of QE programs globally has waned, we see increasing opportunities for managers to generate returns on both the long and the short side and we would expect the Alpha of these strategies to compound at a much higher rate in the coming quarters."* Clearly we were early/wrong by one quarter (Q4 was challenging for hedged strategies after the surprise Trump victory), but the environment has shifted dramatically in the past few months as the euphoria about the Trump trifecta has faded and the reality that governing is harder than campaigning sets in for the Republicans. Last quarter we said, *"perhaps 2017 will turn out like 2001 after all and then we will be writing from a different perspective (long/short > long-only) in the coming quarters and years."* One swallow does not make a spring and one quarter does not make a trend, but there are signs that point to sunnier skies ahead for hedged equity. Coach K has taught us that the great players (investors) always focus on the next play, not the last play, and the best long/short managers who have stuck to their discipline of buying great companies and shorting bad companies have generated solid (but clearly not spectacular, yet…) results over the past year. We wrote in Q3 that, *"we believe that alpha generation across long/short equity managers has troughed at levels we have witnessed only a few other times in history (most recently in 2000 and 2008)"*, but we were a quarter early. Alpha was back in Q1, and it was strongest in the long/short equity space. Here's to the Next Play.

Activist strategies have taken a lot of bruising in the media in recent years as a number of high profile managers have had some big mistakes (like VRX) and the image of the corporate raider has been reinvigorated as more boardroom battles have taken place in high profile companies. Activist managers, however, have put their collective heads down and put up some respectable numbers over the past year as the HFRX Activist Index had its fourth consecutive solid quarter, rising 1% to bring the trailing twelve-month return to a very nice 13.3%. The broader HFRI Event Driven Index also continued its winning ways during Q1, rising another 2.2% (after 3.7% in Q4) to bring the trailing one-year return to a very solid 13.8% (rapidly closing the gap with long-only equities). A critical point that we have made over the past year is that a very supportive credit environment has been a tailwind for these strategies and we wrote in Q3 that *"Event Driven strategies also benefitted from the continued tightening of credit spreads and the ability of many highly leveraged companies to get debt relief as the banks continue to "extend and pretend."* We discussed in the credit section above that the HY market has been completely "en fuego" over the past year and using the *Space Balls* analogy, yields were moving from Ludicrous to Maximum Plaid, so event driven managers did have a brisk tailwind behind them to help returns. We don't believe that this trend of tightening spreads can continue forever (or even much longer) so we will be a tad more discerning when looking at opportunities in this segment as the future environment is likely to be a bit less hospitable. On the plus side, we wrote last time about an upstart manager we follow who has put himself in exactly the right place at precisely the right time with a strategy focused on buying only highly leveraged companies where he believes cash flows can support debt reduction (essentially replicating an LBO strategy in the public markets). We noted last time that, *"His portfolio was up a stunning 40% for the year, benefitting from the surge in small-caps and the decline in credit spreads."* We continue to be nervous about where we are in the credit cycle and the potential for rising defaults. Despite his youth and relative inexperience, the manager made a compelling case for why the oil supply shock has modified the default cycle (extended it like in the mid-1980s) and he has boldly (some might say arrogantly) predicted their portfolio could enjoy similar gains in 2017 should defaults ease from current levels. We wrote last time that, *"Like the scene from Top Gun when Viper asks if Maverick thinks his name will be on the Top Gun trophy and he replies 'Yessir,' Viper says, 'that's pretty arrogant considering the company you're in', Maverick replies, 'Yessir,' and Viper says, 'I like that in a pilot.' Confidence = #Edge."* They say that it's not arrogance if you can back it up and the manager put up another 10% quarter in Q1 (brings TTM return to a stunning 53%), so we will now only refer to him as Maverick.

We wrote last time that, *"Bankruptcies and defaults actually subsided somewhat (for now), but we believe they will accelerate again in 2017, as economic growth continues to disappoint."* While our concerns about the weakness of the economy seem well placed given the very weak Q1 growth number of 0.7%, our concerns about the potential for rising defaults in the credit markets seem completely off base. After a brief rise in mid-2016, defaults have fallen back and there have been a much lower level of bankruptcies in 2017 versus 2016. Hedge fund managers playing in the distressed credit sandbox have had a field day over the past year and while the HFRI Distressed Index was up a rather pedestrian 1.7% in Q1, for the trailing year, the Distressed Index surged an astounding 19% (edging out a 17.2% gain for the S&P 500). We say astounding because usually you only get these types of returns in distressed debt coming off bottoms after recessions when you can buy good assets at cheap prices as the bad balance sheets get unwound. There actually wasn't any real distress last year (other than in the energy space) and prices haven't gone from cheap to fair value, but rather from overvalued to extremely overvalued. Our fear is that some distressed managers frustrated by the lack of distressed merchandise have ventured into "other credit" (a new line item on some manager reports) and may be buying assets with no margin of safety (in direct violation of the spirit of value investing). In fact, we can't resist repeating what we said a couple times last year during the non-stop rise in HY credit, *"We can't help but be reminded that this ferocious rally feels like the last gasp rally in 2001 within the Telecom sector before companies like WorldCom and Qwest defaulted (and then disappeared, taking huge piles of investors' money with them). There were some tremendous opportunities to make big returns buying the good assets from the bad balance sheets in 2002 and we would expect those opportunities to come again, but not until 2017 or 2018."* While it is always good to make returns when you can get them, there is real danger that buying assets at prices well above fair value will lead to less robust returns in the future. Without question Central Bank liquidity and ZIRP have provided a lifeline to many companies that should have disappeared over the past few years and there is a lot of "soon to be bad" debt on corporate balance sheets that will eventually find its way into distressed managers' portfolios. We said last time that, *"Gravity always wins and there will come a day in the not so distant future where the opportunity set for distressed debt will get even better and the returns could be quite substantial."* We look forward to that day and we would expect to allocate significant capital to this space then, just like we did in 2009.

Absolute return oriented strategies have struggled in the Age of Central Bankers as the ZIRP has made it challenging for market neutral players who rely on cash returns for a meaningful percentage of their returns. The extreme choppiness of the market has made life extremely difficult for trend followers. One of my friends has a great line about this unusual epoch in our history, "I remember a day when I didn't know the names of the central bankers and I long for those days to return." In Q1, the HFRI Market Neutral Index was finally able to eke out a positive return, rising 1.4%, as the ability to extract alpha from both the long and short side was a welcome respite from the unidirectional markets in 2016. However, one decent quarter doesn't make a decent year and the Index was only up 3.1% over the trailing twelve-months thanks to a very challenging market environment in the middle of last year. Until short rates normalize, market neutral arbitrage will be a very tough way to make a living unless you apply significant leverage (perfected by groups like Citadel, Millennium and Balyasny) to the underlying portfolio. The HFRI Merger Arbitrage Index had another meh quarter, rising 1.1%, as the vast amount of liquidity chasing these deals (and the ubiquity of trading models provided by the prime brokers to move product) has squashed premiums and made merger arbitrage another challenging way to make a living. For the trailing year, the index was only up 4%, which compared to bonds (a relevant comparison from a risk perspective) was a good outcome, but likely below most investors' expectations. There are two ways to attempt to boost returns in merger arbitrage today. One is to make investments in "anticipated deals" (deals you think could happen, but have not been announced, and in some cases you may help instigate) and the other is to use more leverage than normal. The best alternative in our view is to adjust expectations lower (while rates are close to zero) and be comfortable with merger arbitrage as a fixed income substitute rather than an equity substitute.

Switching over to the more systematic strategies, the HFRI Macro/CTA Index was down (0.2%) and the HFRX Systematic CTA Index was down (1%) in Q1 capping a very disappointing trailing twelve months where both strategies produced negative returns, falling (0.8%) and (5.2%) respectively. These poor returns might seem to run contrary to the headlines about how the quant funds are taking over the world and some of the media headlines about how the legendary funds like Renaissance and Two Sigma put up very good numbers (rumored to be above 10%, but they don't report to the indices), but it actually points to two issues in the systematic business that are likely to become increasingly problematic in the future. First is the dispersion between the "Haves" and the "Have Nots" (this is actually a big problem in all of asset management) as the "Institutionalization" of the alternative investment business drives increasing amounts of capital into the largest firms/funds and causes wide disparity of opportunity and outcomes. Second, that concentration of capital coupled with the rise of high frequency trading is causing increasing levels of choppiness in the equity markets, which is causing traditional trend following strategies to underperform. Another issue we raised last time was the role of Macro/CTAs as portfolio hedges, saying *"In the past we have made a case that Macro/CTAs could be an attractive addition to portfolios given their protective nature during market dislocations (like 2000, 2008), effectively making them a low-cost form of insurance against dislocations."* Given our view that we were headed toward a #2000Redux environment and that 2017 and 2018 could resemble 2001 and 2002 in terms of volatility, we thought that Macro/CTAs could play an effective role in portfolios as disaster protection. The quantitative argument for including them in a portfolio was that they could generate modest returns in normal markets but provide meaningful returns in big drawdowns (like they did in 2008). We wrote last time that, *"Unfortunately that argument has broken down over the past year as the premiums just went up as the strategy generated negative returns for 2016. There are lots of explanations for why the effectiveness of CTAs is waning ranging from the impact of high frequency trading to excess liquidity from the central banks precluding normal price discovery, but whatever the reason, the cost/benefit equation has changed and we need to rethink how we utilize these strategies."* The other potential fly in the ointment is that in the absence of a "normal" correction, it could turn out that the environment has changed so much (capital moves so fast) that traditional trend following models have been rendered obsolete. Finally, the big risk that no one wants to acknowledge is something we have talked about on a number of occasions in the past. There has been a tidal wave of capital that has rushed into risk parity strategies (essentially a leveraged 60/40 portfolio of stocks and long bonds) and should those strategies have to deleverage during a correction, the unwinding of this trade (#RiskDisparity) as we said last time, *"'could exacerbate the moves on the long end of the curve and cause the historical relationship between stocks and bonds to diminish.' In that type of environment, the models that created the CTA trading programs would no longer be valid and there would actually be a potential scenario where these strategies dramatically underperform just when you need them to outperform the most."*

To close the absolute return section, we will repeat a couple paragraphs from the last letter (without italics to make it easier to read), that we think help make the case that despite lackluster recent returns there continue to be excellent reasons to include A/R and hedged equity strategies in your portfolio. Most importantly, we expect A/R strategies to meaningfully outperform bonds (and perhaps even beat stocks) over the next market cycle (seven years) and will dramatically outperform in the event interest rates begin to rise toward a more normal level (i.e., where Fed Funds equals the Nominal GDP growth rate). If rates were to rise, bonds would suffer significant negative returns from capital losses (as we have said before, the reason buying bonds for capital gains is a fool's errand) while absolute return strategies should provide acceptable returns from the combination of the alpha of the strategy and the better return provided by higher rates on the core cash. Importantly, A/R has a positive correlation to interest rates while traditional fixed income has a negative correlation and after a thirty-five year bull market in bonds, it is a logical construct to hedge some portion of that portfolio with A/R strategies. Going further, given the recent volatility in the bond markets, it is critical to reiterate an important point that we have written about on numerous occasions over the past couple of years. Historically, the primary purpose of fixed income in a diversified portfolio has been to counterbalance the volatility of equities which are necessary as the core of the portfolio in order to generate returns in excess of inflation. Given current conditions, traditional bonds are unlikely to deliver returns adequate to warrant their inclusion in portfolios (despite their risk reduction benefits) because the opportunity cost is too high. Now, more than ever, we believe that substituting a diversified portfolio of hedge fund strategies for traditional fixed income exposure will prove to be beneficial to portfolios over the coming years. The primary benefit of substituting alternative investments for traditional bond exposure is lower overall portfolio volatility with higher expected returns (particularly at current valuations). When valuations are above average and there is a high level of uncertainty, volatility is usually close behind. Going forward the environment is such that alpha will likely outperform beta (by a significant margin in our view). Unfortunately, we expect that environment to persist for many years. Alpha is a precious and scarce commodity and it turns out that it is not found in quiet, safe and stable environments, but rather in chaotic and unstable environments where it takes courage, in Ben Graham's words, "to be greedy when others are fearful." Given the challenging performance of these types of strategies in the recent past, we appreciate how difficult it is to consider rotating away from the short-term best performing strategies (passive) toward strategies that have performed the less well (active).

On the hedged equity side, we spoke in the final section of the last letter on how the reports of the demise of active management (and hedge funds) had been greatly exaggerated and talked about the importance of having courage in your convictions to stay the course with a diversified, active strategy. There are a few principles we believe in wholeheartedly. We have great conviction that hedged equity is the best way to gain exposure to the equity markets over the long term. We have great conviction that putting capital in the hands of the most talented portfolio managers is a winning strategy. We have great conviction that the investment environment is nearing an important inflection point and that we are inching ever close to another Babson Break when having a core exposure to hedged equity will be critical to preserving capital. We met with an interesting manager recently (a Tiger Grand-Cub spun out of one of the original firms that spun out of Tiger) with a focus on healthcare who had a challenging year in 2016. The manager said in his year-end letter that when things don't go as expected (like hedge funds in 2016 or Tom Brady in the first half of Super Bowl LI) there are four possible explanations; 1) We don't know what we are doing and we never did, 2) We know what we are doing and we stopped following the play book or lost discipline, 3) We knew what we were doing, but have lost the edge or 4) Perhaps there was an aberration in the markets (e.g. political challenges in healthcare). We think this is a great summary of what investors must attempt to discern when outcomes don't meet expectations. We have great conviction that we, and our managers, indeed know what we are doing. We have great conviction that while there were some small lapses in discipline (allowing net exposure to drift too low) we have stuck to the core of the original (and long term successful) play book. We have great conviction that the team has not lost the edge and in fact is stronger than ever (we learn from our mistakes). Therefore, by process of elimination we are left to conclude that 2016 was an aberration in the equity markets, a year punctuated by an anomalous series of events where shorts went up more than longs and low quality companies outperformed high quality companies. Looking at the scoreboard, with 8 minutes left, trailing 28-3, one might be compelled to pull the QB and change the game plan. Nothing could be further from our minds and we are confident that our team will rally like the Patriots behind Brady and bring home the championship in 2017 (so far, so good on that score after the first four months).

When thinking more about our opening question about whether 2017 will be more like our original thesis of #2000Redux (and be like 2001) or whether that thesis has been "fired" by Mr. Trump and we are now on the path of #WelcomeToHooverville (more like 1929) we find it very surprising that after the big shocks in Brexit, the U.S. election and the Italian referendum, which were all supposed to be market killers, the equity markets kept rolling along. We wrote last time that, *"throughout 2016 the pundits all said that if any one of these three events were to happen, there would be trouble in the capital markets. Heaven forbid that all three should happen because then there would be total chaos. The reality turned out quite differently than the pundits' worst fears."* The biggest fears came from a growing concern about the rise and spread of populism. All eyes were focused on the 2017 European election calendar that was chock full of far-right candidates foaming at the mouth to ride on Trump's coattails into office and shake up the establishment. In 2016, the, *"markets shook off every piece of 'bad' news and surged higher on hopes that political movement away from the elites who had been in control for the past decades would* *yield more pro-growth policies (the one wrinkle is that history has shown that 'better together' actually works and that globalization has created enormous economic prosperity)."* In 2017, the most populist candidates have been defeated and, naturally, markets are embracing those events with gusto (highly illogical, but it seems we are more tilted toward emotion than logic today in capital markets) and rallying on the status quo narrative (heads we win, tails we win). We can lean into the idea that not breaking up the EU (Ms. Le Pen's stance if she won in France) is a superior position for global equities so perhaps the risks we discussed last time will not loom as large in the near term. We discussed how *"the risks in the global capital markets as movements toward populism, nationalism, isolationism and protectionism have historically led to less robust growth, destruction of wealth and lower standards of living for all. Over the course of history, these ideas have unfortunately led to conflict and what begins as trade disputes devolves into trade wars and ultimately into armed conflict."* Unfortunately, there has been more than a little sabre rattling (and a few missiles launched) in recent weeks, so we may not be completely out of harm's way yet on this front (hopefully we don't have to write about real war fronts in future letters). We closed this section last time talking about how close we may be to an inflection point, saying *"in the investment markets, we are at a very delicate point today (perhaps even at a tipping point) and with very high valuations of assets in many markets around the world it would not take much of a catalyst to create a very unpleasant situation for global investors. In fact, there is a series of events that could unfold that would create a first class ticket to Hooverville, or what might then affectionately become known as Trumptown."* We are certainly hopeful that this is a journey we won't have to write about in the future, but we remain cautious and defensive to be prepared for what could be a challenging road ahead.

Howard Marks says, "You can't predict. You can prepare." One of our favorite Chinese proverbs is "precaution averts perils." With those nuggets of wisdom as an appetizer, we leave you with the main course, the indelible words of the hero from the last letter, Roger Babson, from his speech to attendees of the Babson National Business Conference in September of 1929 where he said:

> "I repeat what I said at this time last year and the year before, that sooner or later a crash is coming which will take down the leading stocks and cause a decline of 60 to 80 points in the Dow Jones Barometer (it was 381 at the time). Fair weather cannot always continue. The Economic Cycle is in progress today as it was in the past. The Federal Reserve System has put the banks in a strong position, but it has not changed human nature. More people are borrowing and speculating today than ever in our history. Sooner or later a crash is coming and it may be terrific. Wise are those investors who now get out of debt and reef their sails. This does not mean selling all you have, but it does mean paying up your loans and avoiding margin speculation. Sooner or later the stock market boom will collapse like the Florida boom. Someday the time is coming when the market will begin to slide off, sellers will exceed buyers, and paper profits will begin to disappear. Then there will immediately be a stampede to save what paper profits then exist."

The first quarter of 2017 was a good one and the path of markets has traced since the November election is remarkably similar to late 1928 and early 1929. There are myriad similarities in the political, economic and market environment from policies aimed at protectionism and tariffs to slowing economic growth. Parallels from overleveraged companies and consumers to extreme levels of optimism and a belief in new paradigms and commentary that echoes the equally famous (albeit for all the wrong reasons) words of Irving Fisher that, "stocks have reached a new, permanently higher plateau." Roger Babson spent the later stages of his life trying to beat the power of gravity and one thing we know for sure is that Gravity Rules.

Market Outlook

US

So let's begin our Around the World tour in the good old U.S. of A and take a peek at how both the economy and the markets are shaping up for the balance of 2017. We know from history that economic growth and equity market returns are not absolutely correlated and they can deviate from one another quite dramatically over both the long and short term. For example, from 1966 to 1983 the economy grew 75% in real terms and the equity markets were dead flat, while from 1983 to 2000 the economy grew 75% in real terms and the equity markets were up nearly eleven fold. That said, there is one time when there is a high correlation between economic activity and equity market returns, actually a quite negative correlation, and that occurs around the beginning of Recessions. When a Recession occurs in the U.S., the equity markets drop (30%) on average (closer to down (40%) if we exclude the two War-aided periods where markets actually rose). The range of drops is quite wide with the best (least bad) being down (15%) in the 1960 to 1961 period and the worst being down (84%) in the 1929 to 1933 period. There are many reasons (which we will highlight) why we should be considering the probability of a Recession and how we should think about positioning portfolios in advance of that event. We highlighted last quarter that it is important to *"remember [that] we don't need another GFC to have a bad outcome in the markets as the very shallow Recession in 2001 (which is what we expect in 2017) triggered the 'normal' market correction of (38%) and given that the median stock today is actually more overvalued than back then (overvaluations in 2000 were extremely narrow) it is not unreasonable to expect that the correction this time could be of equal (or larger) magnitude."*

The current economic expansion is the third longest in history at 95 months, trailing only the 105 month period during the 1960s boom and the 119 month period during the Tech Bubble (that ended in 2001), so it is hard to make the case that the economy is anywhere but late in the cycle. There is an old market saw that says *"Bull Markets don't die of old age,"* but given that economic expansions actually do and market corrections occur coincidently with the end of those expansions, we might beg to differ with that conventional wisdom. There is also some newer conventional wisdom (we might argue non-conventional thinking that is not very wise) which we discussed last time saying *"there is a strong consensus that courtesy of the Fed's largesse (constant Monetary stimulus, aka the Greenspan/Bernanke/Yellen Put) that the Business Cycle has been eradicated and that Recessions are a relic of a less sophisticated time in financial history."* As anyone who has read these letters in the past will know, our perspective on these *"It's Different This Time"* views is in concurrence with Sir John Templeton who said that those are the four most dangerous words in investing (over the long-term cycles repeat and history rhymes). One other aspect of economic history applies today having just come through an election. We touched on this in the last letter when we wrote, *"when a 'fresh faced' President (defined as the opposite party following an eight year term) enters the White House (which has happened seven times since 1900) the U.S. economy falls into Recession during the new President's first year. There are plenty of reasons why this phenomenon is likely to occur; for instance, eight years is simply pretty close to a normal Business Cycle, the outgoing President has tried hard (albeit unsuccessfully) to keep their party in power by passing legislation that pulls demand forward into their second term to juice growth and it fades in the new term, that about 2,000 positions in the Administration have to be rotated during a Party change creating a lull in work and the economy stalls, or the Fed (in an attempt to keep their job) waits too long to raise rates (tap the brakes) and falls behind the curve and has to tighten in the new term. All of these reasons probably play some role, but suffice it to say that economic activity is cyclical and after a long expansion, gravity eventually takes over and brings growth down to earth."* Once again, our primary theme surfaces and the laws of nature eventually take over.

Right after the election there was an interesting phenomenon that occurred with respect to economic indicators as the result of the dramatic shift in sentiment as the narrative changed from "a Trump victory would be the end of the world as we know it" to "a Trump victory means everything will be even more awesome than before." In fact, to quote the "Hyperbolist in Chief," everything (from economic growth, to job creation, to corporate profitability) will be *Yuge.* The promise of the #TrumpTrifecta of Regulatory Reform, Tax Reform and Fiscal Spending did actually create a short-term boom in the markets and we noted in January how *"the 'Trifecta Trade' that began within hours of Trump's election win ran hard for four weeks, taking materials stocks up as much as 80%, financial stocks up as much as 35%, energy stocks up 15% and the S&P 500 up about 8%, but those stocks have gone nowhere since the first week of December, as market participants try to decide if the Trifecta Policies really have a chance of coming true in 2017."* There was one other thing that boomed in the weeks following the election, confidence. The Consumer Confidence indices exploded higher (both the U. Michigan and the Conference Board) to levels that we haven't seen since the peak of the euphoria during the Tech Bubble in 2000. The NFIB Small Business Optimism Survey had the largest one-month gain ever, exploding higher to levels not seen since the ebullience of the recovery following the invasion of Iraq in 2004. In fact, the Expectations for Growth sub-Index also had its largest move in history, surging to a level that implied a surge in GDP growth would be 7% in 2017. This data series has been very highly correlated to GDP growth over time, but it appears that there will now be an anomaly in the data, as it is mathematically impossible for GDP growth to achieve those lofty heights (particularly in light of Q1 coming in at a dismal 0.7%). The dramatic movements in many of the economic surveys came as a stark contrast to the hard economic data that continued to trend negatively, with the biggest example being the poor Q4 GDP number that capped off a very poor 1.6% rate for the full year in 2016. Morgan Stanley research recently created a composite of economic indicators and broke out the soft (sentiment) and hard (data) elements, which showed a stunning reversal in the soft indicators moving from zero to +2 (on a scale of -2 to +2) while the hard indicators remained flat.

We discussed last quarter how there were signs that things were getting worse for the economy and that rather than a big rebound we could actually see an acceleration of the downtrend and potentially even a Recession sometime this year due to the contraction of liquidity resulting from the shift toward a more restrictive Monetary Policy stance. We wrote, "*QEeen Janet Yellen has maintained interest rates at crisis-level low levels throughout the current economic cycle, yet U.S. GDP growth has continued to disappoint (and confound Fed forecasters). With the current shift toward a tighter Fed Monetary Policy stance, growth in commercial bank credit & the monetary base has slowed to zero (from an average of 7% over past 60 years) which portends a rapid deceleration in growth in 2017 resulting in a Recession (right on schedule for our [#2000Redux] theme).*" We contended that taking away the proverbial punch bowl of free money and zero interest rates was highly likely to cause a slowdown in economic activity and that it would take a lot more than promises from Mr. Trump (like actually working with Congress to get some legislation passed) to counter the evolving negative trend in economic activity. One of the biggest challenges of managing an economy is the lag effect between having an idea, drafting legislation, working to pass that legislation and implementing the programs to make in impact on economic activity. We warned last quarter that the *"Citi Economic Surprises Index (CESI) has hit a cyclical inflection point and says economic growth will slow in 2017 and remember that 2016 GDP growth was 1.6%, so how much slower can we go (without hitting stall speed)?"* Three short months later we have our answer, not much. The CESI absolutely collapsed in Q1 and has now given back the entire gain it experienced in Q4 as the hard data literally began to fall off a cliff, with the result being Q1 GDP clocking in at a terrible 0.7% (versus expectations of over 2%, and estimates as high as 3.5% in January).

The big issue for the U.S. economy is whether the growing negative momentum in the hard data can be arrested (and even better, reversed) by the making progress on any of the promised reforms in the #TrumpTrifecta. Perhaps part of the problem in the near term is that the Administration has run down the rabbit hole of Healthcare Reform (in a spectacularly unsuccessful fashion) rather than tackling the important economic policy agenda that market participants anticipated. The longer these steroid shots take to apply to the patient, the more likely the economy could slip into Recession. We highlighted last time some of the promises that have diverted attention from focusing on the Trifecta programs and here is an update on them; 1) to build a Wall (Congress said no funding, Mexico, shockingly says not paying either), 2) to get rid of Obamacare (Tried to get Bill through House, failed, second draft pronounced DOA by Senate), 3) to save Medicare, Medicaid and Social Security (no plan, no action), 4) to rid the world of Radical Islamic Terrorism (fired 59 cruise missiles at air base in Syria), 5) to ban all Muslims from entering the country (softened to a travel ban from six countries), 6) to deport all illegal immigrants (started trying to deport some), 7) to Drain the Swamp (actually added more elites and insiders to Cabinet), 8) to create at least 25 million jobs (taking credit for jobs created despite no policies enacted), 9) to revive the steel, auto, coal and basic manufacturing industries (Reflation Trade coming off the rails), 10) to pick Supreme Court Justices who are "great legal scholars" (Got Gorsuch), 11) to stop spending money on space exploration (Budget draft actually tried to cut all kinds of programs), 12) to strengthen the military (no progress) and 13) to get rid of Dodd-Frank (lots of talk, no action, bring back Glass-Steagall while you're at it). As we hit the First Hundred Days, no Policy decisions to help achieve the Trifecta, but people still want to believe in the Narrative, although the markets ceased grinding higher after the first day of March. There is also relentless positive spin about how strong many economic indicators are today, like Consumer Confidence, Auto Sales and Unemployment rates, and the Bullish argument is that these things must be signs that the economy is strong. We wrote last time to *"think about this one for a minute, at which part of an economic expansion would you expect to have high levels of confidence, high levels of auto sales (and all consumption) and low unemployment rates, at the beginning of the cycle or the end of the cycle? History provides the answer (as does logic), confidence is low at the beginning of an economic cycle and high at the end, car sales trough at the beginning of the cycle and peak at the end and unemployment is high at the beginning of the cycle and low at the end."* The more the talking heads pump up the volume on this type of data, the stronger the case becomes that we are getting ever closer to a Recession. To that point, auto sales have plummeted in the past two months and the rate of change in payrolls growth has turned negative, both of which are leading indicators of near term economic weakness.

The entire tenor of the U.S. equity markets changed on March 1, as there was one last cathartic burst upwards in the S&P 500 and the markets have been dead flat for the past two months. There is a saying that bonds live in the land of reality and stocks live in the land of dreams. This dichotomy has become increasingly apparent over this period. Treasury bond yields have been locked in a down trend since mid-December last year and have fallen (10%) from that peak and were giving clear signals that economic growth was slowing, not accelerating, and that the reality of the Trifecta happening any time soon was highly unlikely. Equities had been surging on the dream that the Trifecta would be completed swiftly, but then came to an abrupt halt when some of that reality began to set in when the Healthcare Bill was defeated. The biggest change in the equity market was the rapid collapse of the Reflation Trade that had run so hard in the weeks following the election and a shift toward the sector of the market that could tell the best stories about dreams, Technology. The sectors most tightly linked to the Reflation Narrative actually had a bifurcated reaction as the Industrials and Materials groups simply stopped rising while the Energy and Financials sectors have been pounded. However, the calm displayed by the broad sector ETFs, XLI and XLB, masks some serious deterioration of specific sub-sectors within the markets like Autos and Commodities. There is a meaningful rotation of capital occurring within the broad equity markets as serious doubts about the ability of the Trump Administration to get things done grows and there are suddenly signs of unraveling in some of the commodity related sectors in China. Some of the moves were big and fast as the Auto related companies - GM, F, ALLY (Ally Bank) and SC (Santander Credit, sub-prime lender) – fell (10%), (12%), (14%) and (17%), respectively, in the two months. Things have been much worse in Commodity land as Steel was smashed and AKS was down (34%) and X was down (45%), Copper got crunched and FCX fell (16%), CA:FM dropped (21%), SCCO dipped (12%), UK:GLEN fell (14%) and UK:AAL slumped (22%) and Iron Ore melted down with VALE off (24%), BHP down (12%), RIO dipped (10%), AU:FMG dropped (27%) and CLF plunged (42%) over the nine weeks. The Energy sector fell (7.5%) and again there was some real damage done underneath the surface (that we will discuss in the Oil section) as so much of the XLE portfolio is made up of the big energy conglomerates (like XOM) that are not as sensitive to energy price moves and so fell much less (only down (1%)) than the more traditional E&P companies and energy services companies. Perhaps the biggest shift was in the Financials where the decline in rates stirred up fears of lower Net Interest Margins and some poor data on loan growth caused XLF to shed (5.5%) over the past couple of months.

We talked a little more in depth about the Financials in the 10 Surprises section of the last letter as we believed that there was linkage between our view that interest rates would resume their downward trend (part of Surprise #1). We said that *"one of the biggest surprises in the aftermath of the election in the U.S. was the rapidity at which the Bull Market in Financials erupted once the rumors of more Goldman Sachs appointments to the Cabinet were likely and that the Dodd-Frank regulations had become Public Enemy Number One of the new Administration. This move shouldn't have come as a surprise to anyone as Financials always rally hard when rates rise suddenly (as they did during the Taper Tantrum), but again the media frenzy about this move was much more frenetic than normal and the moves were much sharper."* It really was amazing how everyone jumped on the bandwagon that the thirty-five-year Bull Market in Bonds was now officially over and that Trumponomics was going to be highly inflationary causing interest rates to soar and taking the Financials to new heights. Everything was actually going according to that narrative in the first few weeks following the election and we wrote, *"For perspective, the Fab Four (or not so Fab Four if you look at the fact that they have made no money for fifteen years), C, JPM, BAC and WFC were up a dazzling 20%, 23%, 36% and 21%, respectively, in the five weeks following the election."* In the #ATWWY Webinar in January we actually presented a number of slides that begged the question whether there could actually a durable move in the U.S. bank stocks, or whether it was simply another Hope Trade like the Reflation Trade that would be subject to meaningful risk if the Administration couldn't actually follow through on the promises. Curiously, since that mid-December peak, the bank stocks had been stuck in a tight channel and we wrote that *"we are concerned that there is a great deal of air between what has been promised and what is likely to be delivered in coming months, so we would not be adding to U.S. financials here and there is actually a reasonable case to be made for shorting them as their correlation to the 10-year Treasury rates have been very high and if our Surprise comes true on rates, the banks could wind up as collateral damage."* As is usually the case, we were a few weeks early, but interest rates did continue to fall after the March Fed meetings and the bank stocks have gone from being longs to shorts, with C down (2%), BAC and JPM both down (7%), MS and WFC both down (8%) and GS down (10%) in March and April. We see continued problems for the Financials as slowing growth exacerbates all of the challenges they face in a declining interest rate environment.

So, if Reflation is smashed and Financials are collapsing, does that mean that investors are piling into the Defensive sectors like Healthcare, Utilities, Telecom and Consumer Staples? The answer is not so much. While these sectors are some of the best performers for the year, they are basically flat over the past two months. The problem for Utilities, Telecom and Staples is that valuations in these sectors are far from cheap and in some cases are just as unattractive (and dangerous) as the other bubbly segments of the market. In fact, we are finally starting to see some sanity creep back into investors' behavior as companies with declining sales volumes like General Mills (GIS), Campbell's Soup (CPB) and Hormel (HRL) have shed (5.5%), (3.5%) and (1.5%), respectively, since the beginning of March. The one defensive area that did see interest, and is likely to continue to surge, is Defense as the continued saber rattling and geopolitical stress in the Middle East and on the Korean Peninsula generate more revenue for the arms dealers. Just as an example, replacing the missiles launched at Syria will likely put close to $100 million in the coffers of Raytheon, so it should come as no surprise that RTN cruised up 3% in the past couple of months. GD was up 2%, NOC was up 1% and BA was up 0.5%, slightly outperforming the flat markets. Healthcare, on the other hand, continues to be the whipping boy of the Administration to pick up popularity points by tweeting about how drug prices are too high any time Trump's approval ratings decline (which has been increasingly often of late). What we continue to find odd though is something we wrote about last time in that the proposals talked about for lowering drug prices *"require an act of Congress and the dirty little secret no one seems willing to talk about (or factor into prices) is that Congress is controlled by Republicans and Republicans are funded to a large degree by the Pharma lobby so the likelihood that any of the proposals would see the light of day in the Capitol seems like a stretch."* Our primary view is that healthcare, generally, will get released from sick bay (Surprise #8) and be one of the top performing sectors for 2017, but we also think there are sub-sectors that could have breakout performances should investors begin to focus on fundamentals again. One of those sub-sectors is Specialty Pharma and we have discussed how there is a bifurcation between *"good companies (read companies with real products that are not bilking the system) like HZNP, HRTX, RTRX and AVDL and bad companies (read companies with fraud and/or are bilking the system) like ENDP and VRX (everyone's favorite to hate)."* The upside potential has continued to go undiscovered by investors in 2017 and we would expect to see significant gains over the course of the year as more milestones are hit and more positive earnings are released. One new development is that ENDP and VRX have continued to get pounded this year, crushed down another (35%), and the words of Howard Marks are beginning to ring in our ears, *"there is no investment bad enough, that you can't fix by paying a really low price."* It's not that there is no bankruptcy risk in these names (there is), but managements are incented to not let that happen and to get the share prices higher (they have options like asset sales, etc.), so it might be time to consider covering the shorts and getting long (for perspective, since the HRC tweet, ENDP is down (88%) and VRX is down (96%)). Another sub-sector where we see significant upside is Biotech. We wrote last time that *"the innovation that is going on in Biotech is nothing short of miraculous and we expect to see some very large fortunes created from areas like immuno-oncology, gene therapy with CRISPR, CAR-T therapies and Biosimilars in the coming years."* That said, investors don't seem to particularly care about the future of healthcare right now and the while the highest quality names like AMGN, CELG and BIIB have been able to keep pace with SPX the past few months, some of the more speculative names like GERN, TRVN, ACAD were down another (5%). We singled out GILD last time as an anomaly where the company has a drug that cures a disease (Hepatitis-C), makes money, sells at a stupid cheap 7X P/E, but continues to be punished for not having a better pipeline, falling another 6%. The good news is that GILD didn't make a ninth lower low (although it did make a ninth lower high) and perhaps there will be some interest in this company again soon.

Given that equity is about dreams, the companies that can tell the greatest stories will be the most amply rewarded. They will be given the highest multiples of earnings (if they have earnings) and when they are losing money they will be given lots of leeway to burn up investors' capital so long as they can spin fantastic tales about how they are addressing some huge TAM (total available market), gathering huge numbers of DAU (daily active users) or Uber-izing some industry. Clearly Technology and Consumer Discretionary are the place to look for such fabulous storytellers and history is replete with P.T. Barnum-esque promoters who could convince investors to willingly suspend disbelief and pile into stocks with very little inherent underlying value. To be fair, there are plenty of these stories that eventually work out and have happy endings, but the one issue is that history is always written by the winners. We hail the victors but never do the accounting on the myriad losers that crash and destroy investors' hard earned capital. Yes, Apple was started in a garage, but so were hundreds of other companies that we have never heard of (and never will) that weren't fortunate enough to have great leadership, ran out of capital before they could perfect an idea, got outflanked by new technology or any number of other reasons for business failure. All of that said, when the Technology sector of the market is running hard it is a thing to behold and we find ourselves in one of those periods today. The NASDAQ index has now surpassed the highs of 2000 (let that sink in for a minute, it is seventeen years later, but more on that later) and Technology has become the go-to sector for investors in 2017. XLK is up more than double SPX for the year and, more importantly for this section, is up 3.5% versus the market being flat since the beginning of March. But wait, there's more! In every Euphoria phase of a Bull Market we reach a point where there are a group of stocks that become the "must own at any price" names and investors pile into these companies regardless of valuation (mostly because everyone else is) and new narratives (some might call them rationalizations) are created for why old fashioned concepts like valuation and Margin of Safety are no longer relevant because we have entered a New Paradigm. In the late 1960s it was the Nifty Fifty (a relatively broad basket by today's standards) where the biggest Consumer brands companies and Industrials were the best in the world and you could not go wrong owning these great businesses no matter what the price. We know how that ended in the Recession of the early 1970s (really badly) and the old saying is an old saying for a reason, *"The bigger they are, the harder they fall."* We saw a similar phenomenon during the Tech Bubble when a smaller group of companies became the buy at any price favorites and companies like CSCO, MSFT, ORCL and INTC pushed the NASDAQ index to a peak of 5,048 on March 24, 2000 (astonishingly up from 1,500 in October of 1998). In 2007, it was another Feb Four, GRAAPLDU (GOOG, RIMM, AAPL and BIDU) that went vertical as investors just couldn't get enough of the BlackBerry craze (does anyone still have a BlackBerry?) Today, it is the FANG stocks (FB, AMZN, NFLX and GOOGL) that are leading the parade in Technology and they have screamed up in the past nine weeks, jumping 9%, 9.5%, 10% and 11%, respectively, making AAPL's very nice 6.5% return in a flat market seem quite ordinary. Stepping back a bit to see the mania a little better, over the past two years these stocks have run up an astonishing 90%, 120%, 95% and 75%, respectively, versus the SPX up 15% and NASDAQ up 22%. The buy at any price mentality shows through in the P/E ratios hitting 38X, 175X, 205X and 31X, respectively.

With the NASDAQ Index having just hit a new record of 6,100, clearly there must more going on inside Technology than #FANG and it is true that there are other Story Stocks like Tesla that have been surging and make the FANG's look like Utilities in terms of returns. TSLA is up 42% in 2017, and up 23% since the March, as the Teslarians (the devoted followers of Elon Musk or #ElonAlmighty, as I like to refer to him on Twitter) continue to pour money into the EV/ Battery/Data/Solar/Space/Tunnel company and sing the praises of how Elon can lose nearly as much money as Jeff Bezos in a quarter (the badge of honor in the mania phase). Modifying the Bezosian quote for Tesla, Musk is saying in so many words that they lose money on every car, but make it up on volume. It appears that losses are the new profits in the Everything Bubble. We could probably write an entire letter on the craziness of a car company (they sell cars, which are depreciated assets and have no network effect) trading with a software company valuation, or how the capital intensiveness of the business doesn't provide scale benefits like a consumer electronics company and therefore they will not generate profits or positive cash flow (even with funky accounting), but that would not be a prudent use of time. Suffice it say that we believe we are close to the End Game in the TSLA saga, which means that while there have been reports about all the money that short sellers have lost betting against TSLA in recent years (one report said $3.5B this year), we think the table is turning and we would bet against this particular bean stalk. One other area to touch on in Technology is the Semiconductor space and we have commented in the past that we think this is one area where the future is extremely bright as we head toward the interconnected world and the Internet of Things. This sector has been hotter than hot in the past year and semi stocks have been surging with MU, AVGO, NVDA, LRXX, AMAT and XLNX up 15%, 5%, 1%, 26%, 14% and 6%, respectively, over the past couple of months. While we think there is a lot of upside long-term in this area, there are a lot of high expectations built into the prices, as AMD reminded us recently. AMD reported Q1 EPS that were in-line with projections and that showed strong growth, but they didn't meet investors' expectations for beating EPS by enough and the stock was trashed, falling (20%) in a day and down (32%) while all the other semi companies have been rallying. This type of price action is an example of the risks of investing in very narrow markets where everyone owns the same stocks and when there is disappointment, things can go from really good to really bad really quickly.

So, with the sector discussion as the baseline for our outlook, the big question we have to answer for U.S. equities is whether the past two months are a pause that refreshes in a Bull Market or the beginning of a topping process to usher in a Bear Market. We discussed at length in the last letter (Surprise #10) that we believe there is a real chance that we end up in a #WelcomeToHooverville scenario in the U.S. where a confluence of events creates and economic and market environment similar to 1929. We wrote last time that *"the first step in getting a [#1929Redux] scenario would be to have equity market valuations run from their current level of 'silly' to 'stupid' between the Inauguration and Labor Day (in 1929, P/E ratios surged from 17X to 21X over this period to a level not seen since 1860)."* Using this jump in valuation as a model, the question is what would drive the markets from the silly valuation level of 25.4X today (higher than all periods except the 2000 Tech Bubble) toward the stupid levels of 31X (seen only once in history)? We noted last quarter that *"the standard response today is that 'Animal Spirits' have been revived by Trumponomics and there will be a sharp acceleration in GDP growth (which is fairly close to impossible mathematically as we have explained in other parts of the letter), a surge in corporate profits as tax rates and regulation are slashed and a giant windfall gain from repatriation of foreign cash hordes and fiscal spending."* In other words, everything hinges on the #TrumpTrifecta being completed, or at least on market participants believing that it will be completed. When looking back at the 1929 period, the DJIA surged 24% after Hoover's Inauguration to a peak of 381 on September 3rd and should history repeat, the S&P 500 would surge to around 2,800 by Labor Day. We discussed how that type of Bubble Top could form in the #WelcomeToHooverville Surprise section, saying *"for that Euphoria to occur, market participants (using this term intentionally because you lose your status as an 'investor' when you knowingly buy assets with no Margin of Safety) must believe that President Trump will deliver on all the promises that Candidate Trump made and (more importantly) they must believe that the fulfillment of these promises will in some way lead to higher growth, higher profits and ultimately higher equity prices."* We went on to discuss how Seth Klarman reminded us of the wisdom of Ben Graham in our *The Value of Value* letter when he says that when someone buys an asset with no Margin of Safety they leave the realm of investor and enter the realm of speculator. We talked specifically about how *"Bubbles are formed when market participants move from Optimism (things are getting better) to Excitement (things are really getting better) to Thrill (things are great) to Euphoria (things couldn't get any better), and it is at that precise moment where you have the point of maximum financial risk (and perversely the point of maximum risk seeking behavior)."*

The problem becomes worse when market participants begin to accelerate their use of borrowed money to buy stocks and we have seen new records set in both margin debt and corporate indebtedness in the past month. Speculative fever is alive and well and we are seeing the same type of mania activity that we witnessed in 1929 (and a few other times as well) when any consideration of fundamentals is discarded because the expected holding period is too short for fundamentals to apply. As we discussed last time, when this occurs *"markets become locked in a Reflexive virtuous cycle of new money pushing prices higher that attracts new money that pushes prices higher, lather, rinse, repeat, and the speculative fever turns to a fear of missing out (FOMO) and a fear that "everyone else is getting rich so I better get in there" (didn't their mothers ever tell them about the jumping off the bridge thing?)."* What is interesting is that the exuberance does not begin as irrational, but rather builds from normal enthusiasm to a more dangerous speculative fever and ultimately to an irrational mania that ultimately becomes lethal to investors' wealth. George Soros says it best, "Stock market bubbles don't grow out of thin air. They have a solid basis in reality, but reality as distorted by a misconception. Under normal conditions misconceptions are self-correcting, and the markets tend toward some kind of equilibrium. Occasionally, a misconception is reinforced by a trend prevailing in reality, and that is when a boom-bust process gets under way. Eventually the gap between reality and its false interpretation becomes unsustainable, and the bubble bursts." We noted that Historian Charles Geisst described the period leading up to the 1929 Crash this way, *"Excessive speculation was creating an inflated wealth and a sense of prosperity built upon borrowed money."* We also noted that *"in the decade leading up to the peak in 1929, speculators accumulated $8.5 billion of margin debt with which they were buying stocks (sounds like nothing, but was 10% of total market cap, equivalent to $2.5 Trillion today, inflation is a thief). One piece of data to ponder here is that corporate America has issued nearly that precise amount of debt (approximately $2.4 trillion over the past five years) to buy back stock, which in a sense is not very different than individuals buying on margin"* (and yes, individuals now have the highest margin debt balances ever today too at just over $540 billion). The final phase of an asset Bubble is something to behold as the rationality of market participants drains away at an accelerating rate and prices begin to spiral higher in one final parabolic move. When the Euphoria finally reaches a crescendo the buzz in the markets is frenetic, value investors are ridiculed as being old fashioned, and all attempts at prudent behavior (read hedging) in managing portfolios is met with cries of derision by clients and the media.

With all of this as backdrop, if the S&P 500 were continue to track the Hoover Bubble from 1929, the index would run from the current level of 2,400 to 2,800 by the end of the summer, another 17% increase (keep in mind, that is starting from all-time highs already). If that were to occur, get ready for the #FANG stocks at P/E ratios of 50X, 205X, 420X and 37X, respectively and the S&P 500 at an astonishing 31X (meaningfully higher than 1929 and not much below that absolute insanity of 2000). When we hear people use the 2000 levels of valuation to justify that the S&P 500 is still "cheap" we think it sounds like a driver who is pulled over for drunk driving who says to the officer "I am not nearly as drunk as those guys passed out in the back seat. Who else was going to drive?" The reality is (obviously) is no one has to drive (call a Lyft), and there is no one that says investors have to be all-in at these levels of valuation, but, alas the data says that investors are indeed fully invested and actually getting more so for Fear of Missing Out. Will share a few stats to show the level of ebullience. There is 20X (read that again, 20X) more money invested in levered long ETFs than levered short ETFs, which shows that the average investor sees no reason to be hedged (for perspective that ratio usual fluctuates between 2X and 4X). The ratio of II Bulls/Bears is 3.3, above two standard deviations above average, and has a very high correlation to equity corrections (highest ever is 5 in 1987 so actually could get more Bullish). The CBOE Put/Call is at 1.6, right on the long-term average neutral level, so there is plenty of room for more euphoria here. The percentage of stocks in the S&P 500 above their 200-day moving average is now 80%, having peaked in February at 89% (65% is the level at which to get nervous). Equity Mutual Fund cash holdings remain around 3% (well below normal) and are at about as euphoric a level as we have ever seen. Finally, U.S. household exposure to financial assets is the highest it has ever been (ratio of financial assets to income), exceeding both the peak during the Tech Bubble and the Housing Bubble.

The premise of the #WelcomeToHooverville Surprise is that sometimes the situation one finds themselves in exceeds their experience level and talent and rather than press a bad position, sometimes it is better to withdraw and live to fight another day. We wrote last time that *"the road to hell is paved with good intentions and while Hoover and the Republicans had all the best intentions when they came to office, a lethal combination of hubris, inexperience and inflexibility led to the greatest collapse our country has ever experienced."* Today, there are plenty who don't believe President Trump and the Republicans actually do have good intentions (but rather lots of self-interest), but as recent events have shown, there is plenty of hubris, inexperience and inflexibility to go around in Washington today. So while we are not ready to say we are headed for another Great Depression, there are growing signs that some of the same mistakes that occurred in 1929 are being made again. For now, the momentum is still strong in the markets and there is still a lot of confidence (struggle with why given the first 100 day circus) that the Trifecta will be achieved and everything is going to be great. We remain unconvinced and believe it will pay to be hedged as the year unfolds. We know Roger Babson was right in 1929 and we believe his immortal words should be headed again today.

Shifting over to the Bond markets ever so briefly (as no one ever wants to talk about bonds) there is likely to be a direct link between the direction of interest rates and GDP growth in the U.S. (we could debate endlessly which is the chicken and which is the egg) and given our view that the Trifecta will continue to be elusive, both will likely be lower than expectations in 2017. We are already seeing lots of signs that point to slowing growth and falling inflation and those trends should produce better than expected returns for bond investors over the full year. The best segment of bonds for investors is likely to be the long end of the Treasury curve (TLT) as the longer duration produces more return when rates fall. As an example, TLT has outperformed SPX since the beginning up March (up 1.5% versus flat) and had even taken a lead in the CYTD returns in mid-April before rates backed up a little bit on more Hope that there would be progress on Tax Reform. When it comes to the continued Hope trade on growth, we wrote last time that *"the most serious problem with* *the big promises of higher GDP growth in the U.S. (and all the Developed Markets) is the horrible trend in Population Growth (not enough babies being born) and the Working Age Population Growth (WAPG), in particular (too many people aging out of the work force)."* In the end, Nominal GDP growth is simply a math exercise and we know the inputs are WAPG and Productivity, so we know the output with a fair bit of precision (which makes it all the more amazing that the Fed in zero for 240 in GDP growth estimates…). Since we know that both of these elements are in secular decline at least through the mid 2020's, it seems odd that so many people in the Administration continue to make promises that GDP growth will be 3% to 4% and that any losses in revenue from tax cuts will be made up for in higher growth (it just can't happen). We discussed this dilemma last time, saying *"the punch (literally the knock-out blow for the "Growth Hopers") line is that Nominal GDP is highly correlated with WAPG rates and therefore the forecast is for growth to fall to 1% through 2030, rebound back toward 3% by 2040 and then fade back toward 2%."* Given the long-term trend in down, it is highly likely that by the end of the year TLT could be back in front of SPX in terms of returns.

With that said, we asked a question last time that still applies *"so if growth is going to stay extremely low and Demographics are going to remain a headwind for many decades into the future, why have global interest rates surged so much since last summer and why are all the Bond Bears declaring the end of the Great Bond Bull Market again?"* The answer is that people want to believe that somehow someone can do something to change the trend. What about all the benefits of reducing regulatory red tape and reversing all the burdensome regulations that were enacted in the previous Administration? This makes for great narrative, but there is very little evidence that there has been much reduction in economic activity due to regulation and there is even an argument that profits are higher (we know margins have risen) because higher regulatory burdens restrict new business development and encourage consolidation (cost savings from M&A) and lead to more monopolistic profit levels. We can see this phenomenon in many industries, so tough to make the case that there is much benefit to be had from those potential policy changes. On Tax Reform, the "plan" (more of a wish list than a plan) that was released looks to be simply a tax cut for the wealthy with no way to increase revenues, which will increase the Deficit and slow future economic growth (as and aside the self-interested is appalling, specifically exempting Trump's RE operating structure and abolishing the Estate Tax are worth huge sums to the Trump family). Finally, even if there was some movement on Fiscal spending, we know that government spending has a negative multiplier and that it will result in higher debt levels and lower GDP growth. When all is said and done, it is simple to determine if the Bond Bull Market is still intact, we wrote about the criteria last time saying *"this move in rates has been smaller than the move during the Taper Tantrum in 2013 and despite rising to just over 3% on the 10-year, rates made new lows below 1.5% within a couple of years. That 3% number is very important as it defines the last lower high (Bonds have made a very long series of lower highs and lower lows that define the downward trend) and when we look at the "Chart of Truth" (the downward channel in rates over the past few decades) we can see that until rates break out past 3%, the primary trend down remains intact."* Bond yields have touched 2.6% a couple times since the Election, which is still a long way from the magic 3% level and at 2.35% today the downward trend is still in place. We know from history that the Commitment of Traders data has been a very good contrarian indicator of future returns (people buy/sell what they wish they would have bought/sold). As you would expect, pessimism in Bond Markets reached highs in December and again in March (almost precisely on the days of the peaks in rates) and with the recent poor GDP report those positions have completely switched to net long. What this likely means is that we should see increases pressure on rates in the near term as the hope (and maybe even some real data) appears that Q2 growth will be better than Q1 (it will) so it may mean that we see bond yields slowly creep back up while the equity bubble fully inflates over the summer and we reach the breaking point in the fall. Given the recent bout of extremely poor economic data, it would not surprise us at all to get a few less bad numbers that people will interpret (again) as good and they will infer that the inflection point in Bonds is at hand (again). No reason to fight against the short-term momentum, but better to accumulate cash and wait for a better entry opportunity. My good friend Grant Williams (writer of Things That Make You Go Hmmm, @ttmygh) has a perfect simple rule for times like these, "Prepare, Persevere, Pounce," and we will follow that sage advice over the coming months.

Let us offer some very quick thoughts on High Yield (or as I like to refer to them today Not So High Yield, NSHY) bonds. In a very Roger Babson-like fashion we will repeat what we said at this time last quarter, and the quarter before, (obviously unnecessarily) that NSHY bonds look unattractive, specifically we said, *"Despite the fact that corporate debt levels are at all-time highs and there are many companies with suspect balance sheets issuing bonds, sure enough, since the bottom in February, there have been record inflows into HY bonds. Normally this kind of rush into an asset class has been a contrarian indicator for future returns, but not so far in 2016 as HY Bond prices keep getting larger and the yield in "high yield" keeps getting smaller."* We have been early (euphemism for wrong) on HY going all the way back to the beginning of last year (we looked smart for about six weeks in Jan and early Feb) and our abundance of caution was costly as this segment of the market generated very strong returns in 2016 and the first two months of 2017. Like most other risk assets, the return over the past two months has been less robust, with HYG falling (1%) and while this is not much of a turn, we keep coming back to what we wrote in the *The Value Of Value* letter where *"we discussed a number of examples of what can happen when investors pile into an asset class (or specific investment) with no margin of safety, years of paper gains can vanish quite quickly."* Paper gains are a very dangerous thing, as they tend to cloud your judgment and give you a false sense of security that you are playing with house money (this phrase never makes sense to us as if you take it off the table it is your money and in a casino invariably if you leave it on the table it returns to the house). Overconfidence makes people do things they might not otherwise do and ignore warning signs, as we said last time the biggest problem with that approach to the markets is that *"sometimes when markets get truly and extremely overvalued, they hit the wall with no skid marks."* We will quote Bernard Baruch (again) here who frequently said *"I made all my money by selling too soon"*.

Europe

As we travel around the world today it has gotten increasingly difficult to find assets that are fairly priced, let alone that are cheap, but Europe has been an exception. There are actually plenty of cheap securities on the Continent courtesy of an elusive economic recovery and the ECB QE Program not having the same impact on stocks as the Fed QE induced Bubble (all about transmission mechanisms). Europe had been stuck in a Bear Market for many years and while the U.S. markets keep making new highs, European markets are still well off their highs (in some cases still down double digits). We discussed last time that *"on top of the improvement in fundamentals, Super Mario delivered his usual summer boost by hinting at tapering and the hope of higher rates, which was quite bullish for European stocks, particularly the Financials."* Looking back to last July, Super Mario's jawboning worked wonders once again as the Euro Stoxx 50 surged 28% (double the quite strong 14% of the SPX) and EUFN (European Financials ETF) soared 43%. It actually wasn't just Draghi's words this time as we noted in the last letter that *"one of the things that helped push European market momentum back to positive was the end of Negative Interest Rates across most countries and the emergence of some inflation (after a very long hiatus) in response to the massive balance sheet expansion stimulus by the ECB."* In the first couple months of 2017, European equities tracked the U.S. markets and even into the beginning of April there was not much separation in return (at the index level, there were some countries that were doing well, particularly the PIIGS), but with the victory of Macron over Le Pen in the French election, European markets jumped 5% and some countries soared, Greece up 8%, France up 11%, Spain up 15%, Italy up 11%, Portugal up 9%, Germany up 6.5% and Ireland up 6% over the past two months (while the S&P 500 was flat). With the French election behind us, and the veil of uncertainty lifted, it is likely that there will be a torrent of money into Europe. The EU breakup risk premium will vanish in the coming months and the Euro will likely strengthen as well (extra benefit for USD investors) as global investors who have been underweight have to reallocate capital to the Continent. Germany will benefit from being the largest member (but there will be some headwinds from a stronger Euro for their exporters), France will benefit from being an outcast during the past year while investors fretted about a Le Pen victory, the Nordics could suffer a little from volatility on oil prices and the PIIGS will benefit the most as they are working off the lowest bases and any incremental flows will push process up disproportionately.

Our Surprise #5 posited that European Financials could be one of the best places to make money in 2017. We went so far as to write that *"we believe that European Financials could actually be the "Commodities of 2017" and some of the returns available to intrepid investors could be "generational" just like last year in iron ore, copper, steel, MLPs and E&P companies."* There were places where severe dislocations had occurred (Italy, Portugal and Greece) and we went further to say that *"not only were Euro Banks cheap, the attitude toward them was classic Soros' First Law material, as investors considered them completely untouchable."* Soros' Law says that the worse a situation becomes, the less it takes to turn it around and the greater the upside and there were few places around the world coming into 2017 that looked worse than European Financials. When things look terrible, there is usually good value to be found and intrepid investors will be amply rewarded for taking the intelligent risk of buying the bargains that emerge when those markets go on sale (Saldi, Saldi, Saldi was the title of the Surprise). The combination of the macro effects of a general positive tailwind from the reversal of Narrative on Europe (from dissolution to acceleration) and micro effects of the emerging signs of more positive growth and stable inflation on company profits could lead to significant gains in coming quarters. There is one place that could get another extra boost as well which we discussed last time saying *"we have talked about the Greek banks in the past and we were early (read wrong) a couple years ago, but we believe now they will reach an agreement with the Troika and the upside potential in Alpha Bank, Piraeus Bank, Euro Bank and National Bank of Greece is truly outstanding."* Should the Troika approve the debt restructuring (expected, but not assured) and should the ECB actually include GGB's in the QE Program, the stage could be set for a very powerful rally in these shares (and all Greek equities as well).

Japan

When Prime Minister Abe came into office in 2012 he set out a very ambitious plan to stimulate the Japanese economy and equity markets, known as Abenomics. The plan elegant in its simplicity (and theoretically easy to implement); weaken the Yen to create competitive advantages for Japan Inc., ramp Fiscal spending to drive domestic economic growth and initiate regulatory reform to spur innovation, business formation and employment. In late 2012, Governor Kuroda at the BOJ ramped up his purchases of JGBs, the Yen fell, the Nikkei surged and everyone was convinced that Abenomics was genius. Now four years later there is less universal agreement on the success of the plan as it has been challenging to maintain the momentum from those early victories. We came into 2017 convinced that Japan was going to join the "whatever it takes" crowd and were committed to reigniting the momentum in both the currency market and the stock market. Surprise #3 this year was titled Kurve it Like Kuroda, named after the head of the BOJ's plan to pin the front end of the yield curve at zero and steepen the overall curve in order to continue to weaken the Yen and stimulate growth. As a result of this plan, we said that it would be a surprise to the markets if *"the Yen continues to weaken (with USDJPY approaching 130) corporate profits surge to new record highs and Japanese equities rally hard (particularly the Mega-Banks). The Nikkei finishes the year at 22,000."* Sometimes the best-laid plans don't go according to plan would be an understatement for the first three and a half months of the year in Japan. The currency markets were having none of the weakening Yen story as the USDJPY started the year at 118 and fell all the way to 108 by the middle of April. In the equity markets, while the rest of the world partied in the first two months of the year, the Nikkei actually sold off in January, recovered in February to be flat compared to global markets up 5% to 6%. Then the bottom really fell out and the Yen strength triggered a wicked (6%) sell off through the middle of April. When all looked bleakest, the Yen finally turned and stocks followed, bringing the markets basically back to flat after the first third of the year.

Quo Vadis? Where do we go from here is the question on global investors' collective mind? Economic growth has stabilized in recent quarters and while it is not strong, it is positive and trending in the right direction. Profits are very strong in Japan Inc. and the equity markets are quite cheap on a P/E basis, so further upside seems like a likely path. We talked last quarter about one thing that has hampered Japanese equities saying *"another interesting point for investors is that Japan remains very much out of favor for foreign investors (usually a good contrarian indicator). In fact, foreigners have been net sellers of Japanese stocks over the past year, while local Japanese investors have become large net buyers."* Clearly a surplus of sellers is not a good thing, but the track record of the foreigners in Japan is that they tend to be net sellers right before the markets turn and net buyers after the markets have run (typical). The silver lining in the dark cloud is also that the BOJ has basically stepped up and said that they will be the buyers of last resort (they have been huge buyers of ETFs and REITs over the past few years) and clarified their intent, saying that they will buy more equities if the economy continues to strengthen or if the economy softens, so having the Central Bank committed to being a buyer of stocks likely makes for a solid market for the near term. Kuroda-san also came out publically and reaffirmed his commitment to the Yen arrow of the Abenomics plan. We wrote last time that the *"Japan investment strategy is fairly straightforward today, buy Japanese stocks (hedged) that benefit from a declining currency (banks and exporters) as they truly have no way out but to appreciably devalue the Yen over time given their massive government debt burden and horrible demographics. One thing people forget is that it wasn't that long ago (30 years) when the Yen traded at 300 to the Dollar, so the idea of the USDJPY moving to 135 or 150 would only be half way back."*

When writing about the Surprise, we said that it was very clear that *"Kuroda-san must be successful in keeping the upward march of the USDJPY going in order for us to hit our target for the Nikkei in 2017. While we do have confidence that he will eventually succeed, we are also wary that the move from 100 back to 118 in the back half of last year was very abrupt and that there will likely be some consolidation before we go higher. What this means is that we can pick our spots to enter the market and don't have to be in a rush to put all the money to work at once."* From that point in January the USDJPY did indeed strengthen even more, falling from 112 to 108 by the middle of April, but has turned back up sharply to get back to that 112 level in just a couple of weeks, so we would say in it time to start deploying capital into the Japan markets now. As we think about ways to invest in the Japan markets, we recognize that there are some very interesting companies in the Technology and Services area that are attractive single name plays (Nintendo and Sony for two), but as we said last time *"the primary play in Japan today is more Macro than*

Micro at this point, so actually this is one market where a good ETF (like DXJ or DXJF) can be an appropriate option to capture the upside." The important thing about DXJ and DXJF is that they are hedged, so as the Yen weakens you don't get hurt as a USD investor. The other alternative is to buy the local shares directly in Japan and hedge the currency directly. We mentioned this last time in talking about the banks saying *"we also continue to like the Mega-Banks, SMFG, MTU and MFG (these are the ADRs) but you then need to hedge the currency, which can be achieved by buying YCS (double short Yen) in a 2:1 ratio with the ADR holdings or selling short FXY in a 1:1 ratio (or you can hedge FX directly in other ways too)."* Finally, we want to reiterate something that we discussed in the last letter that in the event that global equity markets get nasty in the fall, all of Kuroda-sans best efforts won't be enough to stop the Yen from strengthening as the global carry trade unwinds. We wrote specifically that *"another wildcard is that if we do get a really bad #2000Redux or #WelcomeToHooverville correction, the Yen is still considered a safe haven (why we are not quite sure) and it will strengthen in the heat of the down turn so equity correlations will rise (even though based on relative valuation and EPS growth they should fall) and there will be a lower entry point if, and when, that occurs."* So while Japanese stocks are the cheapest in the Developed Markets, they would not be immune to a decline if a real Bear Market were to develop in the U.S. and global liquidity declined.

Oil

Our view on oil rally hasn't changed that much over the past few months other than there has been more data (and subsequent price action) that has affirmed our primary thesis. In Surprise #4, we said that oil prices would be range bound in 2017, saying specifically, *"global crude inventories remain stubbornly high and prices fall back toward the bottom of the New Normal, $40 to $60 range, before bouncing back to end the year at $60."* One of the core elements of the construct was that the likelihood of the OPEC members sticking to the agreed upon production cuts was, let's just say, not high. In looking at the data three months hence it is very clear what actually happened was a game of ramping production in the last months of 2016 only to "cut" back to levels that are well above what is needed to balance the oil market. From a base of 32mm barrels a day, the OPEC members ramped up to 33.4mm barrels and then "cut" to 32mm barrels which makes it appear that they beat their own agreed upon target (1.4mm versus 1.2mm), when in reality they are still pumping at a level that is as high as they have ever produced in history. These numbers also don't take into account that the members routinely produce above their reported numbers, so it is highly likely that there is even more excess supply in the markets than reported. We also thought that even if OPEC would really production there was a high likelihood that they would ramp production back up after the seasonal maintenance was complete. We described this tactic in more detail from the Saudi perspective, saying *"another issue that seems likely to rear its ugly head is that Saudi Arabia has to take the lion's share of the cuts and there is some evidence from past seasonal declines during maintenance season that they can talk a good game about restricting production, but they have continually ended up with a higher level of production in each of the past five years despite the protestations that excess supplies were harming prices."* That scenario played out exactly as anticipated as Saudi cut in January and then increased production in both February and March. So despite the trumpeted success of the OPEC program, the impact on actual supply has not materialized, as they would have hoped, thus we have seen falling (rather than rising) oil prices.

We described what seemed to be a rather elegant move by OPEC to try outmaneuver the U.S. Shale producers saying *"another very interesting development is that by OPEC unexpectedly agreeing to the supply restrictions at the last minute, they had the impact of raising the front month oil contract much more than the out months (flattened the futures curve), which is an important strategic move. A flatter* *curve could cause some of the most highly leveraged U.S. E&P companies to not be able to hedge forward adequate production and raise new capital to expand overall production, thereby taking some of the U.S. supply competition off line. Immediately after the announcement, the forward oil curve moved to a degree of flatness that we had not seen since the GFC. The plan was elegant in its execution, but once again the resilience of the U.S. Shale oil producers (particularly in the Permian basin) has been much greater than the Saudi's anticipated. In fact, one thing that OPEC clearly did not anticipate was that U.S. Shale producers would actually be able to ramp production at the current price levels."* After U.S. production declined to a trough of 8.3mm barrels a day in June of last year, the Shale players figured out how to aggressively cut costs and started to ramp production again (defying all the predictions based on declining rig counts) and finished the year at 8.9mm barrels. Additionally, given the greater depth of the oil futures markets, producers have become much better at hedging future production. We have shown a great chart in our #ATWWY Webinars that shows how at $50 WTI, U.S. production would be 8.3mm barrels this year and at $60 WTI, U.S. production would surge to 9.6 million barrels (offsetting more than half of the OPEC cuts). Given that oil stayed in the mid-50s throughout most of Q1 it was not surprising to us (but clearly was to OPEC) that U.S. production ramped to 9.3mm barrels, completely defeating the Saudi plot to flatten the futures curve. As we described last time *"Saudi made a huge miscalculation in their analysis of the price it would take to shutter production in the U.S. and they seriously miscalculated the innovation that has been going on in the oil patch to extract more hydrocarbons from the same amount of surface area acreage."*

Saudi wasn't the only one to underestimate the Shale drillers as the oil Bulls have argued for a while that the collapse of the U.S. rig would have a huge negative impact on U.S. production, but they missed the creativity of the oil patch. As we highlighted last time *"one example is that producers found that if they crammed four times more sand down a well they could double production. This is great news for sand companies (which have been on a tear) like SLCA, FSMA, EMES and HCLP, but not such great news for rig owners as producers can get more output with fewer active wells."* However, something very strange happened in the sand companies in Q1. They were bobbing along with the price of oil in January and most of February (except for EMES which was up 90%) and then suddenly on February 22nd the mines caved in and sand was no longer the new gold as the Fab Four became the Fearsome Four and fell (30%), (59%), (45%) and (35%) respectively through the end of April. These are stunning drops and don't synch at all with what we hear from our managers in the Texas who have data showing sand usage soaring and likely to only go higher as completion techniques continue to improve. As we have said many times before, investing is the only business we know that when things go on sale, everyone runs out of the store. We are doing our best to stay in the store here and buy the discounted merchandise, but we will likely wait a little bit to let those falling knives (or spinning drill bits) come to rest on the floor before we go over and pick them up. We also mentioned last time that the Shale revolution *"is really, really bad news for offshore-related companies as it is much cheaper to produce onshore than offshore and being short the ultra deep-water drillers and service companies that support the offshore industry has been a great trade (and is likely to continue to be a great trade). Companies like RIG, SDRL, RDC, and ATW are just a few examples of companies that are being dramatically impacted by the stunning technological advances in U.S. Shale production."* The bad news just kept coming for the offshore drillers as over the past three months those stocks dropped another (21%), (63%), (21%) and (35%) respectively. The damage has been so great to these names that some deep value oriented players are beginning to make noise on the long side and there is even some take private risk (might happen at a premium) in staying short, but our favorite manager still sees more downside so will stick with them (until the trend changes).

We discussed last time how we recognized that we were a little bit "out there" with our view on oil, saying *"there are a lot of very smart oil traders, oil industry analysts and oil company executives who are jumping on the bullish oil bandwagon, calling for $65 to $70 oil in 2017 and $85 or more in 2018. We even saw someone make the dreaded $100 call for 2018."* We also acknowledge routinely in this section that *"we are by no means oil experts and many of the people we talk to, and invest with, have forgotten more about oil than we will ever know"*, but when we look at the hard data (not the headlines coming from OPEC), we still don't see how oil markets get back to supply/demand balance any time quickly. With huge oil surpluses in the U.S. (highest ever), stubbornly high global crude stocks (highest ever) and now reports of slowing in storage construction in China, we can't see how a small supply cut can bring the market back into balance. It seems to us that without a dramatic increase in oil demand the data seems to indicate that oil markets won't balance before late 2017, early 2018. On top of that, there is rising risk that some sort of global economic slowdown could cut the demand projections even further. We described the straw that broke the camel's back for us last time saying *"another troubling factor for the uber-bullish camp is that traders are already at their highest net long exposure to oil futures since the 2014 peak (so where will the buyers come from?), we know from history that the COT futures data is a tremendous contrarian indicator for oil prices."* As usual, this indicator worked like a charm and oil prices have weakened in recent months. Interestingly, the COT data now shows speculative long positions have declined somewhat, but remain at twice the long-term average (as a percentage of total inventories).

Our last concerns about oil prices came from the currency markets and we discussed how *"there is the troubling alligator jaws pattern that developed between the Dollar and oil prices in the days following the OPEC Agreement. For many years the Dollar and oil prices were highly inversely correlated (Dollar up, Oil down; Dollar down, Oil up) and you could get a good sense of where oil prices were headed by the primary trend of the Dollar. Looking at the long-term correlation charts, with the DXY around 100, oil should be in the $30's (rather than $52)."* DXY has actually fallen just a touch to around 99, so the chart would probably place oil prices in the high $30's now, and with the recent fall to $47 (after hitting as low as $45 briefly) the gap is closing. We also discussed the correlation with the Euro saying *"the other indicator that has tracked oil prices very well has been the USDEUR with a six week lag and with the Euro at 1.07, oil should be somewhere around $40."* The Euro actually fell as low as 1.05 (oil in the $30's), but has rebounded back to 1.09 (and likely headed higher with the Macron victory) that could bode well for oil prices in the summer. Two new concerns have entered the mix this week having just returned from spending time with Raoul Pal at his GMI Roundtable event (if you are looking for something to subscribe to for Macro insights this is one of two we would recommend) and he presented a compelling case for $20 oil using a combination of the recent break in twenty-year trend line and an analysis of the real (inflation adjusted) price of oil over the last century. He also references the huge imbalances in the COT data and says that a break below $45 means it is time to "look out below". Lastly, there was a ruckus in the oil markets last week as rumors were swirling that one of the large oil traders was liquidating their long positions. It has been confirmed that Pierre Andurand did indeed sell his long positions in keeping with his risk management discipline to scale out of positions (long or short) when the markets run against them. Pierre remains bullish over the long-term for oil prices and one thing we have learned over the years is to never mess with the Andurand (play on don't mess with the Zohan movie) as there are very few oil traders in the world as skilled as Pierre, so while he may be having a down period this past quarter, history says to allocate capital to someone with a spectacular long term track record who has just had a tough short-term period. So with all those inputs, we will stick with our "New Abnormal" range of $40 to $60 for WTI and as we wrote last time *"we would expect to see oil prices near the $40 bound at least once this year and would expect prices to drift back toward the $60 bound by the end of the year."* We may be in the midst of that trip toward $40 right now, so as we get closer we will likely expand our exposure. We repeat our advice from last time *"from a Macro perspective be a buyer of oil at the lower end of the range and be a seller at the upper end and from a Micro investment perspective we continue to like the Permian producers like RSPP, FANG, PXD, PE and the MLPs that have pipeline assets serving the Permian like ETE, ETP, PAA & PAGP."*

EM

We came into 2017 (as we had left 2016) very positive on Emerging Markets for a number of reasons ranging from better growth dynamics, lower valuations (always great when you can buy better growth at lower prices), strong momentum from a robust recovery in 2016 and what we believed was a temporary downturn (EM went on sale) in the aftermath of the U.S. election where the rhetoric from Team Trump had spooked EM investors. We were also quite excited about the potential for EM because very few other investors were positive on these markets due to fears about the Fed raising rates and geopolitical risks around the world and we always like to find places where there are fewer fisherman in the stream. Our 10 Surprises try to create scenarios that we believe are out of consensus and that we expect have a better than 50% chance of occurring (as Steinhardt says, make all the big money from Variant Perceptions that turn out to be right), so we made EM the subject of Surprise #9, titled *Willy Sutton Was Right* and said "*The positive momentum spreads beyond just the commodity producing countries that surged in 2016 and the rising tide lifts all boats across Emerging & Frontier markets."* We told a story last quarter about one of our original client meetings where the patriarch of the family said his method of creating wealth was to buy land in the path of progress and wait (simple enough to create a multi-hundred million dollar fortune over a lifetime) and we believe the same is true in investing. We said last time that, *"If you can get in front of major trends and you have patient capital, you will outperform dramatically versus most other strategies. The real key to making large, long-term, returns is having patience (and a cast iron stomach) to whether the inevitable ups and downs in the price of an asset over time as the view of Mr. Market (volatile) moves away from Fair Value (quite stable)."* Little did we know that this letter would be about the creator of the Mr. Market construct and that Graham's philosophy of patience and discipline would be such a critical component of our current emerging markets outlook. The problem for most Emerging Markets investors is that they are an *"asset with fantastic long-term potential, but also high degrees of volatility, so the average investor never gets to realize the benefits of the path of progress and growth because they overtrade and sell after every big drawdown (and worse buy back in after the big run up)."* Being able to follow Graham's discipline to only buy bargains (when things go on sale) is much harder to execute that it is to recite and we discussed last time that an alternative approach might make sense too, when we wrote *"maybe the best answer is buy great companies that focus on capturing EM growth early and just lock them in a drawer and don't look at them (even better buy them in the private markets and hold on to them after they go public)"* (should readers have interest in the private markets, we can help with that given our extensive experience and relationships in the emerging markets).

Why would it be that most investors had a difficult time buying and holding great companies for long periods of time? Perhaps the biggest challenge is that the long-term upward trend in Emerging Markets has been divided into meaningful periods of time where investors favor EM over DM and periods where they favor DM over EM. We have observed that there is a cyclical rhythm to this flow of sentiment that plays out over a past fourteen year period with nearly perfect symmetry of a classic Kindleberger Seven Year Boom/

Bust Cycle. Beginning with the recovery that began at the end of Q1 last year, we would expect to see EM outperform DM over the coming six years. Buying things when they go on sale is very satisfying (not to mention more fun). As we have written many times over the years, *"we have always been Value investors at heart and we like to buy things below their Fair Value and even better, when they are really cheap."* The great news today is that EM as a group is the cheapest major market in the world with a forward P/E of 12.1X (stupid cheap) relative to Japan at 13.8X (silly cheap), Europe at 14.9X (cheap) and the U.S. at 18X (not cheap). Importantly, we discussed last time how *"on top of being cheap, the growth rate of earnings is much higher, so you get the double benefit today of buying faster growth at cheap prices (which is nice)."* Valuation is an interesting investment tool as it is actually quite predictive of future returns over long periods of time, but not really great over short periods of time. The problem is that in the short-term, cheap things can get cheaper and expensive things can get more expensive. One of the best long-term predictor of returns (and maybe the worst short-term predictor) is the CAPE ratio (Cyclically Adjusted P/E), which looks at trailing ten-year earnings in order to remove the volatility of the current year earnings (which can be very cyclical). One other caveat is that the CAPE ratio is more effective on regions and countries and less effective for individual companies.

Looking at current CAPE ratios around the world today paints an ugly picture for DM investors. The U.S. is the most overvalued of the major markets with a 3/31/17 CAPE of 27.5, which implies a forward return over the next decade of 3.6% (with a 50% confidence interval of 1.6% and 5.6%, meaning there is a 25% chance the return could be outside that range). Japan (contrary to some other short-term indicators) is not much better with a CAPE of 24.9 and an expected return of 4.4%, while Europe looks modestly better at 17.6, that implies a 6.8% expected return for the decade. The PIIGS have significantly lower CAPEs and much better return expectations (they are cheaper) with Spain at 13.4 and an expected return of 8.7% and Italy at 13.9 and an expected return of 8.5%. Hong Kong is on the fringe between the DM and the EM (gateway to China) and the CAPE of 16 implies a forward return of 7.5%. The fun starts when we look at EM, as the BRICs look quite attractive with CAPE ratios for Brazil at 10.7, Russia at 5.3 (the lowest in the world by an order of magnitude), India at 20.3 (always looks high due to heavy tech weight in Index) and China at 14.4. These below average CAPE ratios imply above average returns for EM investors over the next decade, as India should compound at the lowest rate of 6.1%, but China should be closer to 9.5%, Brazil should come in at 10.6% and Russia should beat everyone with a 15.5% return for the next ten years (turns $1 in to $4.22). To reiterate, these forecast returns are not useful over short periods of time (one to three years), but they have been very accurate over the decades. There logic that is difficult to debate that buying at a low valuation will yield a better return than buying at a high valuation (absent a dramatic difference in growth rates). Unfortunately for DM investors (Hopers), both revenue and earnings growth is unlikely to surprise to the upside (poor demographics), so EM should have a significant comparative advantage and likely tailwind in that regard as well.

There are a number of other indicators pointing to potential for positive returns in EM equities in the coming quarters and years. These indicators have proven to be very reliable predictors of relative strength over time and including the Citibank Economic Surprises Index (CESI), overall Liquidity provided by financial institutions through lowering/raising interest rates (tracked by CrossBorder Capital), Inflation, the U.S. Dollar and Commodity Prices (within the broader Commodity Cycle). There has been a lot of discussion of the CESI in recent quarters centered around whether the Index is actually a leading or lagging indicator and to what extent the sentiment components can swamp the hard data components over time. The data is mixed and it also varies by region (likely due to quality and sophistication of the data) so the jury is still out, but our experience with the EM CESI is that it does tend to be a leading indicator and it exploded higher last year and has correctly forecast strong returns in EM over the past year. The one downside in the near term is that the CESI is consistently cyclical (what goes up must come down), so there is some likelihood that the brisk tailwind turns to a bit of a head wind in coming quarters. Overall liquidity is perhaps one of the most critical components of equity returns in any markets as it is tough to "fight the Central Bank" and when banks are withdrawing liquidity (raising rates) returns will be lower and when banks are supplying liquidity (lowering rates) returns will likely be higher. Across the Developing Markets we see ample liquidity in the markets already and additional impetus for EM & FM Central Banks to continue to cut rates going forward. The CrossBorder Index levels are as high as they have been since 2004 and they tend to run in seven-year cycles, so we could see this tailwind persist for a meaningful period of time. Inflation is one of those Goldilocks indicators as you need to have the "just right" amount, not too much to cause Central Bank tightening and not too little to worry about slowing growth and deflation. The good news in EM & FM is that Inflation is in that perfect zone in most regions and countries (with a few notable exceptions like Venezuela) and most importantly the deflationary readings in the PPI that had plagued China for the past few years have finally reversed and that has historically been very good for EM returns. We discussed last time how *"EM equity has been inversely correlated to the Dollar and positively correlated to commodity prices over the long term and there has been a strong cyclicality to these assets over time (follows the seven year cycle)."* The Dollar has weakened since peaking a few weeks after the election as market participants have realized that the Trump Trifecta was not imminent, the Border Tax Adjustment Plan was DOA and just about every member of the Administration has come out in favor of a weaker Dollar (ostensibly to pander to the base about saving jobs, despite fact that with 70% consumption weak Dollar is bad for them…). There is also growing evidence that we have reached the end of this cyclical increase in the Dollar and we will revert back to the secular decline that began in the 1970s (this is the third peak that has made a lower high). Finally, the EM currencies were obliterated during the 2011 to 2016 Bear Market, so they are set up nicely to strengthen in the coming years as the growth differentials expand. Weaker Dollar equals higher EM equities, all else equal, so we like the tailwind here. A weak Dollar also has been correlated to higher commodity prices and we believe that a new upturn in the Commodity Super Cycle is beginning. Rising commodity priced have been good for EM historically, but as many EM economies move away from production and manufacturing toward consumption this direct linkage will not be as strong, so we will have to be more discriminating about choosing between EM countries as this cycle unfolds.

Last quarter we described a very interesting technical pattern that had emerged in the EM index and discussed how it appeared that the momentum had shifted positively in favor of continued gains. We wrote *"when we look at the EM Index over the past year, despite the strong recovery in 2016 there has been volatility around the uptrend and that volatility has created a falling wedge pattern (technical pattern) that normally indicates that a dramatic move is about to happen. The only problem is that the move can be up, or down, and breaking the trend line in either direction can trigger that strong move. Right after the Trump surprise, the Index headed for the bottom of the wedge and (fortunately for our view) bounced right off the bottom and has now burst through the top of the wedge here in January, which should be a good confirmation of the uptrend."* EEM continued that trend over the past three months and surged 7.5%, well ahead of other global equity markets. As we looked around the EM universe in January we divided the world into compelling stories and places to avoid and much of that distinction was based on the leadership of the respective countries. Our thesis was that good leadership was generating strong returns (Argentina, India, and Russia) and bad leadership was destroying value (Philippines, Nigeria, Turkey). We described the problem as follows, *"the places to avoid in EM share one thing in common, bad leadership (maybe another reason to avoid the U.S., more on that below) and there can be other challenges as well ranging from currency woes (current account problems), potential trade issues (if Trump picks a fight) or economic malaise, but the bulk of the problems can always be traced back to bad leadership."* We saw some very strong returns from the places with strong leadership as India surged 16% and Argentina jumped 12% over the past three months, but oil price declines and the Syria tensions sunk Russia, which fell (2%). But a funny thing happened in the bad leadership markets, Turkey actually soared 18%, the Philippines was up 4% and only Nigeria stayed locked in the downtrend, falling another (4%), also a victim of lower oil prices. We commented that there was an emerging risk of this kind of melt-up last time when we wrote *"one caveat to always remember (especially in EM) is that when things go bad and prices really get hammered, there does come a time when the discount to Fair Value is so great, and the Margin of Safety becomes so large, that even though it seems dangerous it is time to buy. Lord Rothschild said the time to buy is "when blood is running in the streets" and Sir John Templeton frequently reminded those who asked him "where is the best place to invest?" that they were asking the wrong question, that they should ask "where is it the most miserable?"* Ben Graham was right again, when the bargain is so great, it is time to remember you are buying stakes in a business and when you can buy those stakes at a monster discount, so long as there is no going concern risk, you have to back up the truck. Contrary to all the media coverage of how Erdogan is a bad guy (he is), people in Turkey continue to use the banking system, eat in restaurants, talk on the phone and use the utilities, so the old saw that you make the most money in EM when things go from truly awful to merely bad came true again.

When we look around the EM world today and compare these markets to the DM markets, which have been flat since March, we see some places where momentum has turned up sharply and we would expect continued gains as prices move back toward fair value. Mexico is a great example as the market has surged (up 10% in past two months) on the back of softer rhetoric out of Washington and a sudden recovery in the Peso. Korea is another example where the turmoil around the ouster of their President on corruption charges has spurred an impressive rally (up 5%) and we would expect to see even better returns as they move toward electing a new President, the N. Korea tension dissipate and the semiconductor market continues to rock along. Taiwan is another market that has caught a tailwind as the Apple upgrade cycle has strengthened demand for components and that is the specialty of many of the Taiwanese listed companies (Index actually trades like a U.S. technology proxy). India continues to knock the cover off the ball as an incredibly strong long-term plan in taking root and producing a massive reintegration of the black markets into the traditional economy thanks to the biometric ID program and Demonetization, so the huge injection of liquidity into the banking system should spur growth for years to come. After another 8% run in the past two months, don't be surprised by a pause that refreshes, but buy every dip in this market, particularly in the financial service sector. Frontier markets have also been very strong and there are lots of stories within FM that are exciting, from the benefits of OBOR to places like Pakistan (don't forget MSCI Inclusion here too), to the most miserable places that are due for a recovery like Egypt and Nigeria (which has actually begun to recover, jumping 5%), to Saudi that could explode higher should they actually get included in the next round of MSCI Index consideration. We have talked about the Saudi story on many occasions and today it really does come down to the Inclusion decision. So with a positive overall view on EM & FM, we reiterate a point we made last time, that *"there is one spoiler alert in EM that we have to pay attention to and that is should there be a meaningful dislocation in the Developed World (a surprise in European elections, a* *spat between Trump and Mexico, or worse Iran, Recession it the U.S. etc.) EM equities will struggle in the short term (correlations do go to one in down turns) and it might be better to ease into positions and save some cash to buy at cheaper prices."* We are in that seasonal segment of the year where equities have struggled historically (May to October), so continuing to focus on buying what goes on sale during the summer should be the optimal strategy in the coming quarter.

We have been constructive (pun intended) on China for a while and with the commitment to the One Belt, One Road project, the path of progress will run squarely through the Middle Kingdom for many years to come. We discussed OBOR in Surprise #6 last time when we wrote "*China has embarked on a historic infrastructure program, the One Belt, One Road (OBOR) project that will recreate much of the ancient Silk Road trade routes all across Europe, Africa & S.E. Asia. This massive undertaking will trigger Bull Markets in stock markets all across the region, as well as in industrial commodities needed to complete these enormous construction projects."* The Chinese always think long-term and they always think big, so it is no surprise that they have undertaken a project of such epic proportions (these are the same people that built the Great Wall after all) and they have always understood the need to build infrastructure ahead of the growth and urbanization in order to boost economic growth, create jobs and foster trade. They also understand very clearly how to creating strong political and economic relationships with the countries in the region will cement their power base and expand their addressable markets. We have often written about how the Western Media (and Western Investors) have consistently underestimated the will of China to become a (someday the?) global Super Power and we specifically wrote last time that *"one of the most interesting things to us about China today is how much negativity there in the Western media and how the Narrative is always that China is on the verge of economic, financial and societal collapse (despite all evidence to the contrary), yet China just keep plugging along focused on their long term goals and plans (they think in decades while the rest of the world thinks in months and years)."* So while the China Bears complain that the data isn't real, the Chinese are not as sophisticated as Westerners and that China is perpetually on the precipice of a crash (hard landing thesis), we continue to focus on the resilience of the GDP growth, retail sales growth, industrial production strength and, most importantly, the rising strength of the services sector as they transition the economy from manufacturing to consumption. One of the most notable developments this year is how an Index of Chinese economic data (electricity usage, car sales, exports and imports etc.) constructed by a U.S. research house to try and show how the Chinese were overstating their GDP growth actually turned out recently to show that the China GDP number might be materially understated! The thesis is that perhaps the Chinese don't want to show the actual growth accelerating for fears of fanning the flames of the China-doubters who will say that faster growth (just like they said slower growth) is a sure sign of imminent collapse. In the end (just like on Twitter) Haters are going to hate.

We also discussed last time how the OBOR project will have collateral effects on the rest of the region from Southeast Asia to Africa and Europe and that markets like India, Vietnam, Pakistan, Russia and Saudi Arabia would be positively impacted by the new growth as the project kicks into gear. There clearly have been meaningful increases in a number of these markets and we would expect the trickle-down effect to continue for many years to come. We also discussed how a project of this scale and scope would be massively positive for the commodities markets and we wrote that *"clearly one asset class that will (actually has already) benefit greatly from a massive infrastructure project is Commodities. China has set new records for imports of Iron Ore, Copper and Oil in recent months and in what might be one of the most important changes in Chinese Policy in many years, they actually have shut down capacity in China where production of certain commodities (iron ore,* *coal, etc.) where the companies were not competitive and losing money."* The 2016 recovery on commodities can easily be linked to the China stimulus programs and increased spending on OBOR and we saw very robust recoveries across many of the industrial metals markets as we came into the New Year. We also talked about how these moves can become Reflexive as the rising prices stimulate demand (buy now before prices get too high) saying *"one of the things that happens in commodity markets is that many trend following systems and technical analysis systems will see these moves as buy signals and that increased demand will reflexively feed on itself and create a virtuous cycle of rising demand as the rising prices attract new buyers (which raise prices, which attracts new buyers…). In other words, we may be on the verge of another Commodity Super Cycle beginning."* One development that bears watching very closely is how in recent weeks these industrial commodities prices have reversed very sharply and given back all the gains they made in the weeks following the U.S. election. It appears (and there is some data leaking out of China to confirm this) that a wave of Chinese money was placed into commodity futures markets (some of it through the Wealth Management Products channel) in October and November and Coal, Iron Ore and Copper prices surged. The Narrative of the Global Reflation Trade became very loud and lots of capital flowed into commodity markets and commodity related equities. In the last few weeks, all of those trends reversed with severe damage inflicted across the commodity complex. There is one school of thought that the large credit impulse and stimulus package that the PBoC instigated last year has been like a pig in a python and you never want to be near the tail end at the end of that process. While we think this is a short-term phenomenon, it could be ugly for a little while before the long-term focus returns.

The final point we made last quarter was that *"Chinese equities are compellingly cheap and the H-Shares (Hong Kong) are the cheapest of all of the exchanges. What is missing is a catalyst to trigger the rerating. One thing to remember is that the Chinese A-Share market (locally listed in RMB) is the second largest equity markets in the world ($8.2 Trillion market cap) and has a zero (yes, you read that right) weighting in the MSCI Indexes. That will change. It could change as early as this year (but more likely 2018 for political reasons). The time is now to make plans for how to integrate this market into portfolios."* Since then the Chinese markets have been relatively strong with Hong Kong up 9%, FXI up 5% and only the A-Shares have lagged, basically flat over three months. A-Shares investors are still waiting for MSCI to get off the dime and include the second largest equity market in the world in the Indices (for political reasons might not happen in June so will have to wait another year). Our favorite sector, e-Commerce has been completely on fire as investors finally acknowledged that consumer growth is very different than industrial growth and the margins in these businesses are huge, so names like BABA, JD and VIPS surged 14%, 24% and 22% respectively and we would expect to see more gains in this space as growth becomes harder to come by around the world. These are clearly not Value names and Ben Graham might roll over in his grave for even thinking about owning names at these valuations, but there is always room for a little growth exposure in a portfolio.

So to summarize our world view quickly we would begin with the premise that the current investment climate is such that Cash in King and having a high level of cash will be very useful to acquire assets at lower prices in the future, in other words, the option value of cash is very high today (like in 2000 and 2008). We also believe that there will be continued downward pressure on interest rates as the Killer D's of Demographics, Debt and Deflation continue to suppress economic growth and therefore holding some position in long duration treasuries should prove to be an effective store of value and overall market hedge. When looking at equities broadly, we favor Emerging Markets, Europe, Japan and the U.S. in that order and would reverse the current capitalization weightings from the MSCI ACWI Index to skate to where the puck is going as the developing markets continue to grow their market capitalization in relation to their share of global GDP. We continue to believe that the best place for investors to make outsized returns is in the private markets (private equity, VC, private energy, private RE and private Debt) and that whatever weight an investor has been comfortable with for a private weighting, double it. It is also a time to get hedged and we believe that hedge funds will cease to be a dirty word over the coming decade as returns on traditional investments (Beta) will be very poor (likely near zero), while the returns to Alpha will continue to be significant (likely 5% or more above cash).

Since this letter is about Intelligent Investing it seems appropriate to reprint the section on our Bonus Surprise from last time that addressed why we think Active Management is about to make a serious comeback (a la Tom Brady in the Super Bowl). So simply cut and pasted from the last letter (no full italics so easier to read) here it is.

Bonus Surprise: Demise of Active Greatly Exaggerated

For the 4th time in my career (and I am not that old) Active Management (and Hedge Funds) has been declared "Dead," as Passive strategies outperformed again in 2016. Similar to previous periods of Central Bank largesse, the math of capitalization weighting, exacerbated this time by "Dumb" (read rule based) Beta ETF strategies, favored passive momentum strategies since QE began in 2009. People always "buy what they wish they would have bought" and poured record amounts into Index Funds & ETFs in 2016 (#PeakPassive), just in time for Active Management (and HF) to outperform in 2017 (just like 2001).

We opened that Q3 section on Hedge Funds with the following paragraph and it seems to set the stage very well for this Bonus Surprise. Over the long-term the hedge fund managers have historically outperformed (by almost a 2:1 ratio over four decades), primarily we will argue because the nature of every industry is that the most talented professionals migrate to the place where they can maximize their compensation. The best doctor, lawyer, football coach or basketball player always makes the most money. Capitalism works. Professionals produce superior results because they have an Edge. They practice more, they have better coaching or they have better equipment, whatever that edge may be. We discussed last time how Edge in the investment management business can come from many different places, better technology, better analytics, better process, better people, better networks or some combination thereof. We also wrote that *"Edge does not come cheap and the genius of the Hedge Fund model (propagated by A.W. Jones and discussed in our letter titled A.W. Jones Was Right) was it provided superior levels of fees which allowed hedge funds to acquire the best talent and resources, develop the best networks and build the best systems."* We are such staunch proponents of the hedge fund asset management model because we believe it aligns the interests of the manager and the client insofar as the incentive is not to raise huge assets to gather huge fees (as size is the enemy of Alpha), but to limit size and charge an incentive fee structure so that when the client wins, the manager wins. There will always be examples of where this relationship breaks down (either manager doesn't acquire edge to generate Alpha or gathers too many assets and dilutes ability to generate Alpha) but, the client can always choose not to maintain capital with that manager. Periodically (as noted above) we go through a period of time (like today, usually caused by Central Bank easing) where hedge fund strategies underperform and a cacophony builds that they have lost their Edge, *"that they have become "rich and complacent", that "Active Management is dead", that there is "too much money chasing the same ideas" and myriad other negative "explanations" for why the high fee strategies are underperforming the low fee strategies and why everyone should immediately fire all the high fee managers and only buy Index Funds and ETFs."* We are there now and what we know from nearly three decades of allocating capital to managers, these are the best times to maintain discipline and allocate to managers who have strong long-term track records (demonstrated Edge), but have just had a difficult short-term period. The key to success it to *"do the opposite of what the media reports that the big Pensions are doing. They hired hedge funds after the Global Financial crisis (chasing their strong relative returns) and are selling now to buy Passive strategies (chasing their CB steroid induced strong relative returns)."* As we like to say, we've seen this movie before and, spoiler alert, it ends badly.

If you are looking for Despair, Despondency and Depression in the investment universe (where Soros says you should look to buy bargains), you need to look no further than Active Management and Hedge Funds (and in particular Long/Short Equity funds) as they just finished one of their worst years ever relative to the Passive benchmarks and trailed for the seventh consecutive year. If you read the popular press today you might think this is the first time this has happened (it isn't, it is the fourth such cycle in the past 30 years) and that things have never been this bad for Active Managers' relative performance (it has been on multiple occasions). There is a natural cycle (about seven years) to markets where they rotate between periods that favor Active Management and periods that favor Passive Management. In the most basic terms, Active (and Hedge Funds) tends to outperform when markets are challenging (flat or down) and Passive tends to outperform when markets are ebullient (rising, and Passive wins the most when the Fed is stimulating the economy). The simplest explanation is that Passive strategies are "Dumb" (meaning they are rules based, not unintelligent) and they must buy the assets in their Index/ETF list regardless of valuation (they are not allowed to think or use judgment) and the capitalization weighting structure of most Indexes makes it even worse (they are forced to buy more of the most overvalued assets). The momentum nature of Passive nearly ensures victory over Active when markets are rising, but as the markets get increasingly more dangerous at the tail end of the bull market they also ensure that the losses during the inevitable correction will be much worse (Active managers are allowed to think and retreat from the most egregiously overvalued assets before they go over the cliff). As you might expect, investor were singing the praises of Active Management in 1970, 1982, 1995, 2004 and 2009 (the Crash Troughs), while they were singing the praises of Passive in 1976, 1991, 1999, 2007 and 2016 (the Bubble Tops). If we look back over the entire 30-year period (my investment career) Active has beaten Passive (defined as more than 50% of managers beating the Index I that year) about 60% of the years (expected when think that market rises about 2/3 of the time) and while the strings of outperformance are longer for Passive (average 7 years) and shorter for Active (average 4 years), the most interesting element of the performance is that over the whole period Active beats Passive in generating cumulative gains (it is just math, avoiding losses helps long-term returns more than winning in the up years). The very best managers outperform over the entire period by a significant margin and when we look at Hedge Fund performance over the entire period relative to the long -only Index the margin of victory is almost 2:1 (you end up with twice as much wealth by limiting the volatility of performance over time). It turns out that the old adage is true, if you take care of the losses, the gains will take care of themselves.

But investors (as a group) don't seem to see the strategy cyclicality and they continually fall into the trap of buying what they wish they would have bought (and selling what they are about to need) and pour assets into whatever strategy has just had a hot period (chasing the hot 3-year dot), which explains why the average investor's returns are so much lower than the Indexes (and much, much lower that the best Active managers and Hedge Funds). Case in point, after the best five year period in the history of U.S. equity markets from 1995-1999 (the Tech Bubble), investors poured a record amount into Index Funds (ETFs weren't really a factor then), peaking at a massive $260 billion flow in Q1 2000 (almost to the day of the peak on 3/24). On the flip side, not only was Active Management declared dead, but investors actually killed off a number of the best Hedge Funds (including one of the greatest of all time, Tiger Management) by redeeming en masse. Of course, we know how that story ended, the next decade, the S&P 500 compounded at (1.7%), while the best Hedge Funds (like Baupost and others) compounded at 17%. Active Management and Hedge Funds were declared dead again in 2007 right at the peak of the Housing Bubble and the losses for investors who poured into Passive and Index Funds were even worse this time as the equity market fell nearly (60%) peak to trough. So what did people do at the bottom of the Global Financial Crisis in March of 2009, they actually sold equities and bought Hedge Funds, just in time for them to begin their seven year cycle of underperformance. There has been a lot of press about how this cycle seems to be much tougher for Hedge Funds and that observation would be right in one specific sense, the ability to generate significant nominal returns has been impacted by the Zero Interest Rate Policy that has been artificially suppressing interest rates for the past seven year. We discuss this in more detail in the Hedge Fund section in the Q4 Review above, but the short version is when a manager is long and short, there is a significant amount of cash that is held as collateral and in the "old days" a manager would earn 5% on that cash and the Alpha they generated would be additive. When rates are at 0%, even with meaningful Alpha generation it is tougher to make high absolute returns.

So how have investors reacted to the lean seven years for Active managers and Hedge Funds? They have begun to vote with their feet. The flow of capital out of Active Managers (in the Mutual Fund space) started as a trickle in 2009 and has turned into a torrent as nearly $1.2T has left the Active Mutual Funds for Passive Indexes and ETFs over the period ($400 billion to Index Funds and $800 billion to ETFs). The crescendo was another $260 billion (history rhymes) going into Vanguard Funds in Q3 of last year. The surge in Passive has been nothing short of breathtaking, as the number of ETFs has trebled since 2009 from 600 to over 1800 and the AUM has more than trebled from $700 billion to $2.4 trillion. In fact, today nearly 40% of equity market assets are in Passive strategies. There is a Reflexivity to this movement in that the more money that has shifted has driven up a narrow group of stocks, which has attracted more capital, which drives up the price even more, which attracts more capital, and so on… One big problem is that a reflexive virtuous cycle can turn into a reflexive vicious cycle when things finally do turn (they will turn, the economic cycle is not dead) and the real problem will be that the safety valve mechanism that Active managers play (they buy the values at the bottom) will be less robust since there is less money in Active. If this all sounds circular, you are hearing it right, because it is circular. The other big problem is that the rise of Passive has led to the "Turkey Problem". The turkey on the farm thinks they have the greatest life ever as they are constantly fed, doesn't have any responsibilities other than eating and resting and getting portly and, in fact they do have the greatest life ever, for precisely 364 days (day 365 is a downer). The same thing will be true for investors during #PeakPassive when the day of reckoning finally arrives.

Take the example of our favorite strategy to poke fun at "Smart Beta" (and in particular Low-Volatility Smart Beta). Consider the silliness of the phrase for a moment. Beta, by definition is "Dumb" (again rules based) because it IS the market. You either get market exposure or you don't. It was amazing marketing, but a really bad way to invest for the long-term (Alpha is much better). Worse yet is the absolutely nonsensical idea of Low-Vol ETFs, where the sole criteria for buying a stock is the volatility of its price (no fundamentals, just a line on a chart), when low, buy, when high, sell. Think about the danger of this craziness for a minute. When you buy a lot of a stock (money flows into ETFs) the volatility goes down and the formula says to buy more, which lowers the Vol, which triggers the algorithm…lather, rinse, repeat. What this does is drive stocks like Exxon Mobile (XOM) to levels of ridiculousness that seemed impossible only a few short years ago. For more than forty years, the industrial conglomerate that is Exxon Mobile (some think of it as an oil company, but they have dozens of businesses and as many make less when oil goes up as make more) traded like an industrial conglomerate should, between 12X and 15X earnings (it is a cyclical company so should have a lower multiple). Every time it got to the high end of the range the Hedge Funds would short it and when it got to the low end of the range the Value managers would buy it. The problem began when these silly Smart Beta strategies began to buy XOM at any price (because it had low vol, because they were buying it…) and today the company sells at 40X earnings. This might be one of the best shorts we have ever seen in our career. Not that XOM will crash any time soon, but you can be short this for the next five years and use the proceeds to finance a great long and make Alpha on both sides of the trade. Speaking of volatility, there is another insidious thing going on that will make the pain much more acute when the new Babson's Break occurs and that is the gigantic structural short on VIX that has been propagated by Insurance Companies (using it for Annuities hedging) and now even being sold to Pension Funds by (unscrupulous) investment banks as a means of enhancing the yield of their Funds since they have chronically underperformed their actuarially assumed rates. The total net short interest against VIX has never been higher and when this Alligator Jaws snaps shut there will be some huge damage done to investors.

So there must be some reasons to think that the tide could shift in favor of Active Management and Hedge Funds in the near term, right? We think so and we think it happens in 2017. First, equity correlations (rolling 65-day) have retreated from the highs of 2015 when they were 75% to a new ten-year low of 39%, and low correlations have always favored Active Management and stock picking. Second, cross-asset correlations have finally come down from near record levels last year, falling from 45% to 20% and this has historically been associated with strong returns for tactical allocation (long/short equity and macro hedge funds). Third, equity sector spreads have widened in recent months, as there has been more dispersion in performance as the amount of Fed largesse has slowed (total QE per month has halved since 2015). Fourth, capital flows have begun to turn negative for Hedge Funds (although modest, only \$100B out of \$3 trillion last year) and that has been a strong contrarian indicator for a turnaround in relative Hedge Fund performance. Fifth, the sizeable inflows into Passive products (both Indexes and ETFs) have reached a level that has been associated with poor relative performance over the next three years. Sixth, Federal Reserve tightening cycles have historically created an environment that favors long/short strategies over long-only strategies. Finally, when the AFC wins the Super Bowl (as the Patriots just did in spectacular fashion) the S&P 500 has had a poor year, which would favor long/short over long-only (the Super Bowl indicator has been right 40/50 times and while there are many who would claim it is impossible that this could be a useful indicator, 80% is a pretty good stat to bet on).

Speaking of the Super Bowl, one of the things about the Q4 letter is that we are always writing it during the weekend of the big game and the event never fails to provide material for the Letters. We have had everything from themes for the entire letter, *Defense Wins Championships,* to small trivia items like the Super Bowl Indicator above to anecdotes that support one of our core investment constructs, like how great players/investors focus on the next play rather than the last play. This last point is relevant for our topic this year, but only as a side note to the primary theme that Talent Wins (in sports, in life and in investing) and that a poor period of performance by a hugely talented athlete (or manager) is precisely when you want to bet on them (not pull them out of the game). So let's set the stage for our theme. The New England Patriots have been to the Super Bowl more times (9) than any other team and are tied for second for most wins (5) (Pittsburgh has won 6). They were the first team to ever overcome a 10-point deficit to win the Super Bowl (51 games). They were the only team in either the playoffs or the Super Bowl to come back from being down 19 points after 3 quarters (93 games). They were the first team to overcome having a pick-six (12 games). They were the first team to win the Super Bowl in overtime (1 game). So how did a team trailing 28-3 halfway through the third quarter come back and win the biggest game in professional sports? Two words Talent and Leadership. The Patriots are led by arguably (not very arguable, but everyone has their favorite) the greatest quarterback that has every played professional football. Tom Brady has won more Super Bowls than any other quarterback in history (5), has been the MVP of the Super Bowl more times than any other player (4) and holds eleven Super Bowl records including most games played (7), most touchdowns (15) and most yards passing (2,071). Granted, Brady has only the third highest passer rating in NFL history at 97.2 (the range is 0 to 158.3), trailing Russell Wilson (99.6) and Aaron Rogers (104.1), but we can safely say at this point that his total body of work would make him the G.O.A.T. (Greatest of All Time) in our book.

For purposes of an analogy, if Tom Brady were an Investment Manager, he would clearly be a top tier Hedge Fund, lots of talent, highly compensated and wins big over the long term. Brady's opponent for the Super Bowl was the Falcon's Matt Ryan. Ryan is a solid (actually very solid) quarterback whom, after a slow start to his career, has come on strong in recent seasons to be ranked only two spots behind Brady on the all-time passer rating (greater than 1500 attempts) with a 93.6. But Ryan is only 3-5 in the post-season, has only been to one Super Bowl and has lost in the first round of the playoffs three times in his nine seasons (while Brady has won the AFC Championship 7 of last 16 years). If Ryan were an Investment Manager, he would be an Index Fund. We will posit here that the first half of Super Bowl LI was like 2016 in the investment world (great for Index Funds and bad for Hedge Funds) and that the second half is how 2017 will play out. It would be hard to imagine Tom Brady having a more miserable first half (like it would be hard to imagine Hedge Funds having a worse year) going 15-25 for 179 yards with no touchdowns and an interception to yield a miserable QB passer rating of 65.2 (interesting factoid is Brady has never scored in the first quarter of any of his 7 Super Bowls, comes out a little too hedged?). Right before halftime, Brady set one of the Super Bowl records he probably wishes he didn't have, most interceptions (31) in the post-season (bright side have to be in post season a lot to set it) to put his team down 21-3 going into the locker room. Ryan on the other hand could not have had a better first half (literally) as he went 17-23 for 284 yards and two touchdowns (no interceptions) for a perfect passer rating of 158.3 for the first time in Super Bowl history. We have a theory on this that perhaps the adrenalin of being in the biggest game of his career fueled his other-worldly performance and was the equivalent of the Central Bank stimulus injected into the markets after Brexit and the Hopium injected into the market after the Trump victory fueled the Indexes. Ryan wasn't done there, he came out after halftime and drove the length of the field on his first possession (8 plays in 4 minutes) to put the Falcons on top 28-3, and viewers all around the world were changing the channel because this game was over (Hedge Funds are Dead).

So at that point coach Belichick had to make a decision. Should he pull Brady (fire the Hedge Funds) or should he stick to his strategy that has made him the one of the most successful coaches in history (most Super Bowl wins (5) and 7 rings overall)? What would you do? What are many Investment Committees (CalPERS, NY Common etc.) doing? Belichick could have panicked and changed his game plan (and many investors do just that), he could have complained that the refs weren't calling holding on the Falcons defense (like saying the Algos and HFTs have rigged the game against Hedge Funds), he could have blamed the receivers who weren't catching the passes the way they normally do because some of his guys were out hurt (Gronkowski), but instead he stayed calm and called plays that put the ball in the hand of his best player a record number of time (62 pass attempts). Talent Wins. In the last 27 minutes (8 minutes in Q3, 15 minutes in Q4 and 4 minutes in OT) Brady was nearly perfect, engineering two touchdown drives and two 2-point conversions, finishing with Super Bowl records completions (43), attempts (62) and total yards (466). Maybe Hedge Funds aren't dead after all. Now there is one thing to contemplate which is that Defense Still Wins Championships, because as great as Brady was, had the Patriots Defense allowed even a field goal over that stretch, the Falcons would have won. The Patriots D completely stifled Ryan in the last part of the game and showed once again that when the markets get rocky, Index Funds will underperform. We believe we are on the verge of just such a time (for all the reasons we have laid out in the other Surprises above) and that 2017 will be the year where Active Management and Hedge Funds rise up and regain their championship status in investors' portfolios. It would be tragic if investors pulled their MVP QB right before he was about to go on an epic run. There is another investment QB that people think is the G.O.A.T. and his long-term performance is truly Hall of Fame worthy (19.7% compound return since inception, more than double the S&P 500), but even he has had some really poor halves over his career (but taking the ball out of his hands would have been a mistake). Warren Buffett was down (50%) over a year (equivalent of a half in a season of 49 years), not once but twice over a decade from 2000 to 2010. Berkshire lost half its value from 1999 to 2000 (when people said the game (Tech) was passing Buffet by) and again in 2008 to 2009 (when being leveraged long stocks was a bad idea), but you rarely hear people saying Berkshire is Dead. It is funny that Buffett had the equivalent of much worse performance than Brady did in the first half of the Super Bowl, or that Active Managers or Hedge Funds had in 2016, but for some reason investors focus on his long-term performance and stick with the game plan. Maybe that is a good strategy for Active Management and Hedge Funds right now.

We wrote last time that, "*Ferris Bueller was right, **"Life moves pretty fast."** A year ago it seemed like the election would never get here and two weeks ago it couldn't get here fast enough and now it has been over for a week it has been a blur of shock, awe, media frenzy, market gyrations, global discourse, political posturing and lots and lots of forecasting, predicting and handicapping what is likely to happen in the coming months, quarters and years. Our job in the investment business is to look at all the pertinent facts, form hypothesis and execute investment strategies to try and capitalize on opportunities that we see. Investing is all about taking intelligent risks, those risks you are compensated correctly for taking. In order to make decisions on which risks to take, you must have conviction about your ideas and your strategies."* We have great conviction that hedged equity is the best way to gain exposure to the equity markets over the long term. We have great conviction that putting capital in the hands of the most talented portfolio managers is a winning strategy. We have great conviction that the investment environment is nearing an important inflection point and that we are inching ever close to another Babson's Break where having a core exposure to hedged equity will be critical to preserving capital. I was meeting with a very interesting manager last week (a Tiger Grand-Cub, spun out of one of the original firms that spun out of Tiger), they are focused on healthcare and had a challenging year last year and he said in his recent letter that when things don't go as expected (like Hedge Funds in 2016 or Tom Brady in the first half of Super Bowl LI) there are four possible explanations; 1) We don't know what we are doing and we never did, 2) We know what we are doing and we stopped following the play book or lost discipline, 3) We knew what we were doing, but have lost the edge or 4) Perhaps there was an aberration in the markets (e.g. political challenges in healthcare). We think this is a great summary of what investors must attempt to discern when outcomes don't meet expectations. We have great conviction that we (as coach), and our managers (as players), do indeed know what we are doing. We have great conviction that while there were some small lapses in discipline (allowing net exposure to drift too low) we have stuck to the core of the original (and long term successful) play book. We have great conviction that the team has not lost the edge and in fact is stronger than ever (we learn from our mistakes). Therefore, by process of elimination we are left to conclude that 2016 was an aberration in the equity markets, a year punctuated by an anomalous series of events where shorts went up more than longs and low quality companies outperformed high quality companies. Looking at the scoreboard, with 8 minutes left, trailing 28-3, one might be compelled to pull the QB and change the game plan. Nothing could be further from our minds and we are confident that our team will rally like the Patriots behind Brady and bring home the championship in 2017.

[Update: The first quarter of 2017 started off well for the home team as the Hedge Fund strategy scored a touchdown, rising around 6% (something astonishingly Tom Brady has actually never done in a Super Bowl) and got the extra point in April to put up a very solid 7% return]

Update on Morgan Creek

We hope you have been able to join us for our Global Market Outlook Webinar Series entitled "***Around the World with Yusko***." We have had many interesting discussions in the last few months including: *March Madness: Fuel to Inflate the Equity Bubble* and *April Fools: Hope is not an Investment Strategy*. If you missed one and would like to receive a recording, please contact a member of our Investor Relations team at IR@morgancreekcap.com. Mark your calendar now for our **May 19th** webinar **at 1:00pm EDT.**

We are also a proud sponsor of The Investment Institute, a newly formed Educational Membership Association for Institutional & Private Investors and Managers in the Southeast. The date of the next program will be **May 22nd-23rd, 2017** at **The Umstead Hotel & Spa, Cary, NC**. For more information on how to become a member and join this elite group please visit www.theinvestmentinstitute.org.

As always, It is a great privilege to manage capital on your behalf and we are appreciative of your long-term partnership and confidence.

With warmest regards,

Mark W. Yusko

Mark W. Yusko
Chief Executive Officer & Chief Investment Officer

General

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Risk Summary

Investment objectives are not projections of expected performance or guarantees of anticipated investment results. Actual performance and results may vary substantially from the stated objectives with respect to risks. Investments are speculative and are meant for sophisticated investors only. An investor may lose all or a substantial part of its investment in funds managed by Morgan Creek Capital Management, LLC. There are also substantial restrictions on transfers. Certain of the underlying investment managers in which the funds managed by Morgan Creek Capital Management, LLC invest may employ leverage (certain Morgan Creek funds also employ leverage) or short selling, may purchase or sell options or derivatives and may invest in speculative or illiquid securities. Funds of funds have a number of layers of fees and expenses which may offset profits. This is a brief summary of investment risks. Prospective investors should carefully review the risk disclosures contained in the funds' Confidential Private Offering Memoranda.

Indices

The index information is included merely to show the general trends in certain markets in the periods indicated and is not intended to imply that the portfolio of any fund managed by Morgan Creek Capital Management, LLC was similar to the indices in composition or element of risk. The indices are unmanaged, not investable, have no expenses and reflect reinvestment of dividends and distributions. Index data is provided for comparative purposes only. A variety of factors may cause an index to be an inaccurate benchmark for a particular portfolio and the index does not necessarily reflect the actual investment strategy of the portfolio.

Russell Top 200 Value Index — this measures the performance of the mega-cap value segment of the U.S. equity universe. It includes those Russell Top 200 Index companies with lower price-to-book ratios and lower expected growth values. Definition is from the Russell Investment Group.

Russell Top 200 Growth Index — this measures the performance of the mega-cap growth segment of the U.S. equity universe. It includes those Russell Top 200 Index companies with higher price-to-book ratios and higher forecasted growth values. Definition is from the Russell Investment Group.

Russell 2000 Value Index — this measures the performance of small-cap value segment of the U.S. equity universe. It includes those Russell 2000 Index companies with lower price-to-book ratios and lower forecasted growth values. Definition is from the Russell Investment Group.

Russell 2000 Growth Index — this measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 Index companies with higher price-to-value ratios and higher forecasted growth value. Definition is from the Russell Investment Group.

Russell Midcap Value — this measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell Midcap Index companies with lower price-to-book ratios and lower forecasted growth values. Definition is from the Russell Investment Group.

Russell Midcap Growth — this measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell Midcap Index companies with higher price-to-book ratios and higher forecasted growth values. Definition is from the Russell Investment Group.

Russell 3000 Index (DRI) — this index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market. Definition is from the Russell Investment Group.

MSCI EAFE Index — this is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. Morgan Stanley Capital International definition is from Morgan Stanley.

MSCI World Index — this is a free float-adjusted market capitalization index that is designed to measure global developed market equity performance. Morgan Stanley Capital International definition is from Morgan Stanley.

91-Day US T-Bill — short-term U.S. Treasury securities with minimum denominations of $10,000 and a maturity of three months. They are issued at a discount to face value. Definition is from the Department of Treasury.

HFRX Absolute Return Index — provides investors with exposure to hedge funds that seek stable performance regardless of market conditions. Absolute return funds tend to be considerably less volatile and correlate less to major market benchmarks than directional funds. Definition is from Hedge Fund Research, Inc.

JP Morgan Global Bond Index — this is a capitalization-weighted index of the total return of the global government bond markets (including the U.S.) including the effect of currency. Countries and issues are included in the index based on size and liquidity. Definition is from JP Morgan.

Barclays High Yield Bond Index — this index consists of all non-investment grade U.S. and Yankee bonds with a minimum outstanding amount of $100 million and maturing over one year. Definition is from Barclays.

Barclays Aggregate Bond Index — this is a composite index made up of the Barclays Government/Corporate Bond Index, Mortgage-Backed Securities Index and Asset-Backed Securities Index, which includes securities that are of investment-grade quality or better, have at least one year to maturity and have an outstanding par value of at least $100 million. Definition is from Barclays.

S&P 500 Index — this is an index consisting of 500 stocks chosen for market size, liquidity and industry grouping, among other factors. The index is a market-value weighted index – each stock's weight in the index is proportionate to its market value. Definition is from Standard and Poor's.

Barclays Government Credit Bond Index — includes securities in the Government and Corporate Indices. Specifically, the Government Index includes treasuries and agencies. The Corporate Index includes publicly issued U.S. corporate and Yankee debentures and secured notes that meet specific maturity, liquidity and quality requirements.

HFRI Emerging Markets Index — this is an Emerging Markets index with a regional investment focus in the following geographic areas: Asia ex-Japan, Russia/ Eastern Europe, Latin America, Africa or the Middle East.

HFRI FOF: Diversified Index — invests in a variety of strategies among multiple managers; historical annual return and/or a standard deviation generally similar to the HFRI Fund of Fund Composite index; demonstrates generally close performance and returns distribution correlation to the HFRI Fund of Fund Composite Index. A fund in the HFRI FOF Diversified Index tends to show minimal loss in down markets while achieving superior returns in up markets. Definition is from Hedge Fund Research, Inc.

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MSCI Emerging Markets Index — this is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The MSCI Emerging Markets Index consisted of the following 23 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

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