



Q4 2015 MARKET REVIEW & OUTLOOK

Morgan Creek Capital Management



MORGAN CREEK CAPITAL MANAGEMENT

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LETTER TO FELLOW INVESTORS

EXPERTS ONLY



Source(s): steepchutes.com, flickr.com.

On the last day of my family ski holiday between Christmas and New Years my daughter and future son-in-law took me on a run called AMF Gully (AMF is an abbreviation for a not so politically correct way to say goodbye, Adios...). My daughter and her beau are really good skiers and as we pulled up to the entrance to the run I couldn't help but notice the long warning sign detailing all the hazards that existed on this particular trail and the extra yellow and red sign saying that *"Hazards Exist That Are Not Marked"* (the unknown unknowns). My favorite part of the warning sign was the last sentence that said *"it is suggested that some device be attached to your skis to help you find them if they are lost in the powder snow"* (funny there was no kiosk selling such devices at 12,000 feet). I was also introduced for the first time to a fifth rating category for ski trails (I always thought there were only four), Double Black Diamond EX, where the EX stands for Extreme Terrain. The traditional rating system for ski trails is shown in the picture above. Green Circle marks the easiest slopes on the mountain where trails are wide and well groomed with slope grades ranging from 6% to 25% (a 45 degree angle has a 100% slope grade). Blue Square marks the intermediate difficulty slopes on the mountain that are generally groomed, with grades ranging from 25% to 40%. Blue Square trails make up the bulk of pistes (original French word for ski trail) at most ski areas, and are usually the most heavily trafficked runs. Black Diamond marks the more difficult slopes on the mountain where the trails are generally fairly steep, with grades of 40% and up, and may or may not be groomed. Double Black Diamond trails are the most difficult on the mountain due to exceptionally steep slope grades as high as 150% to 200% (angles approaching 60%), and other hazards such as narrow trails, exposure to wind, and the presence of obstacles such as steep drop-offs or trees. They are intended only for the most experienced skiers (shortened to Experts Only). The very best alpinists can manage slope angles in the low to mid 60 degrees, but on anything steeper, it becomes very difficult to maintain the ski's contact with the snow. In fact, snow's "angle of repose," the maximum tilt at which snow can stick to a slope is 75 degrees. As we have said many times before, at some point gravity takes over.

So imagine my surprise at learning there was now another level of difficulty to manage, EX. After a little debate in which the younger members of this ski party assured me that I could handle the terrain, away we went. The run is appropriately named. Standing on the edge of the AMF Gully, I was struck by the perceived steepness of the slope (always looks worse from the top than the bottom), but more struck by the abundance of "unmarked hazards" (read, rocks) that were clearly visible to me (which is why I guess they didn't need to be marked) and significantly increased the stress I was feeling at that moment. I am a competent skier (but have never thought of myself as an expert), so there was some trepidation in making that first turn and dropping into the chute. Clearly, since I am typing this letter, everything turned out fine, and after the initial nerves, the run was actually quite exhilarating and enjoyable (we went back for second and third helpings later). Of course one might expect me to say it was great as the skier code states that *"when it comes to skiing, there's a difference between what you think it's going to be like, what it's really like, and what you tell your friends it was like"* (this clearly applies to investing since it appears that all investors only make money). That said, on the way down the run there was an ever present feeling that even one small mistake could lead to losing my skis' edge and having gravity take over, which would have been a most unpleasant experience. Skiers say that *"gravity is love and every turn is a leap of faith,"* and there were some other faith exercises going on at that moment. In the end getting down the run was all

about focusing on the fundamentals. Keep your body pointed down the slope (turn the skis, not the hips), look down the hill (not right below your feet) and have a plan on how to self-arrest should something happen and you find yourself horizontal instead of vertical. The construct of “expect the best, but plan for the worst” is critical when managing extreme terrain, as the margin for error is small and the consequences can be large. Famed extreme ski filmmaker Warren Miller sums up a situation like this best, ***“gotta use your brain, it’s the most important part of your equipment.”***

I recently witnessed the importance of this construct up close. Last weekend I went to Taos, NM for my brother-in-law’s 50th birthday ski weekend (part of the reason for the tardiness in this letter is I lost one of my writing weekends, and sincerely apologize for the delay), and a couple of events reiterated the theme of this letter (the fact that the mountain is now owned by hedge fund manager Louis Bacon was not one of those things, but a fun connection nonetheless and linked to our view on the need for being hedged). The locals say that Taos is a four letter word for steep and I will concur, as not only are more than 50% of the runs at Taos Ski Valley Black Diamond and Double Black Diamond, but there are a number of areas that have many additional warning signs (including a life size dummy called Slim Slidell showing the proper self-arrest technique right under the offloading ramp of one of the chair lifts) all over the mountain telling skiers that particular runs are truly only for expert skiers. As my nephew and I were riding the chair to get to the chair to take us to the top of the mountain (Kachina Peak, elevation 12,451), we watched something truly horrifying occur. As we gazed up the mountain trying to decide which of the multiple chutes plunging down from the ridgeline that we were going to attempt, we watched a snowboarder take a fall near the top and begin tumbling down the slope. He tried (unsuccessfully) to self-arrest but the steepness of the slope and the huge moguls were too much and gravity pulled him down faster and faster in cloud of snow spray and flailing arms (his feet were locked into the board). In the end, he slid down about 1,000 vertical feet (probably twice that distance on the ground) and finally came to rest a few hundred yards from the lift line, motionless. All of us onlookers feared for the worst, but fortunately he was able to make a positive hand signal and the ski patrol was able to get there quickly to manage the situation. While I don’t have any details of the eventual outcome, he was able to sit up after a while and the ski patrol was able to take him down the mountain by sled and snow mobile. While we don’t know exactly what happened up at the top to precipitate the fall, we can safely assume (having taken the same run the day before) that he lost his edge by hitting one of the giant moguls wrong (or perhaps hitting a rock) and gravity took over. Given all the warnings on the entrance to the lift, we might also safely assume that he had a high level of skill, but oftentimes these types of events occur when intermediate skiers/boarders ignore the warning signs and enter terrain where their skill don’t match the challenges of the run. In skiing, like investing, ignoring the warning signs can clearly be hazardous to your health. Watching the event unfold actually brought to mind a comment made by writer Dave Barry, ***“Snowboarding is an activity that is very popular with people who do not feel that regular skiing is lethal enough.... I now realize that the small hills you see on ski slopes are formed around the bodies of forty-seven-year-olds who tried to learn snowboarding.”***

Had we been going up to the peak for the first time, witnessing a fall like that might have made us think twice about continuing up the mountain. However, our group had safely navigated the chutes the day before and the snow was so much better at the higher elevations that we continued on to the summit, although I will admit a famous quote from Erma Bombeck did run through my mind, ***“I do not participate in any sport with ambulances at the bottom of the hill.”*** My nephew is 16 and a strong snowboarder and while the moguls on the Kachina Peak slopes were above average in size (making boarding tougher) he is a classic teenager and was raring to go. We got to the peak, took a couple pictures in front of the elevation sign and started our run. About a third

of the way down, a scary déjà vu moment occurred when my nephew hit a mogul the wrong way, fell and began to tumble down the chute. I was above him, so all I could do was watch him begin to accelerate downwards, but after just a couple hundred feet, he was able to flip over and performed a perfect self-arrest and stopped sliding. Relieved, I skied down to him, checked that he was ok (he was great) and we made our way down the rest of the run. After a couple more runs (where we did actually move toward the more open mogul field and away from the rocks, good risk management) it was time for lunch and we headed back down the mountain to the house. Expecting the best, but planning for the worst, was critical in this situation and being able to execute that plan, without panicking, is what separates a small fall from a horrific descent. Even the very best alpinists fall, but knowing how to fall, and knowing what to do when you fall, is critical. In fact, a famous ski racer once quipped, ***“If you aren’t crashing, you aren’t skiing.”*** The same is true in investing. Having a plan and executing that plan during turbulent times is critical to preserving wealth and, as Julian was fond of saying, *“living to fight another day.”* Markets will fall from time to time and being able to manage those declines effectively is what separates an expert from an average investor. Lord Mancroft famously quipped ***“There are really only three things to learn in skiing: how to put on your skis, how to slide downhill, and how to walk along the hospital corridor.”*** We would argue that there are tools and techniques that will help skiers/investors to avoid the hospital the majority of the time. Accidents do happen, but they happen less frequently when you are disciplined, pay attention to the environment, heed the warning signs, and know when to press and when to retreat.

One of the interesting things about skiing terrain is that moguls are actually created by the skiers themselves (though not in the way Dave Barry described), which in many ways resembles how the collective actions of investors make up the markets. When snow falls on a slope it is essentially flat (subject to underlying terrain), but as skiers begin to make turns down the run, patterns emerge and subsequent skiers tend to follow the patterns. As each turn is made, some of the snow is pushed to a new place and that snow builds into mounds and the continued repetition over time results in the iconic mogul field pattern of mounds separated by grooves and valleys (like a quilt). In the absence of new snow, those grooves can become quite deep and the moguls can become quite high, increasing the difficulty of the run and making it more likely that skiers will experience an event that will result in a fall. This phenomenon is again similar to markets in that the actions of the investors themselves ultimately create hazards over time. When markets are inexpensive (new snow), only a few intrepid investors (the experts, or powder hounds) will venture into the market and they get the bargains (carve the first tracks). As other investors (the black diamond skiers) see certain sectors, regions or securities begin to rise, they venture into the market and push valuations higher (moguls start to form). Over time the masses (the blue cruisers) follow and overwhelm the run (while the powder hounds move onto other sections of the mountain, or may even have to go off-piste, into the backcountry, to find fresh powder) and push valuations to dangerous levels (moguls that look like VW Bugs). At the lower grade slopes, the ski resort can take a snow cat on the mountain and groom the run (cut down the moguls) so the green circle beginners have a place to ski, but the problem is that on the higher slope runs, the snow cats can’t operate so the moguls just keep getting bigger. The real problem occurs when those investors (skiers) who don’t have the requisite skills (are not Experts) to manage an untoward event that will occur at some point when valuations reach extremes (moguls get huge) just can’t take it anymore and see “everyone else doing it” so they jump in the market (hop on the chair) ignoring all the Experts Only warnings. One of the biggest challenges for investors is that while ski trails are well marked, and the grading system is quite good at classifying what terrain is appropriate for which type of skier, the markets don’t come with any such grading system. They don’t post Blue Squares and Black Diamonds in the WSJ or on CNBC to advise investors when they should rush out to the slopes or when they should stay in the lodge and get a massage. Some observers actually think it is worse than that and they would cynically say that Wall Street exists to sell securities to investors and therefore their forecast is always 32

and sunny with all perfectly groomed slopes on Mt. Market, so slap on the boards and get out there. We would argue that one of the most critical aspects of investing is to pay attention to the warning signs and avoid situations where your skills don't match the terrain.

Skiing is a fantastic sport and there are many parallels to investing. Both skiing and investing are activities that can be enjoyed for a lifetime and the more you participate in the activity, the better you get. In both disciplines the more experience you have the more challenging situations you can master. Edward Whymper (the English mountaineer who made the first ascent of the Matterhorn in 1865) made an observation about mountains, ***“The thing to be wished for, is not that the mountains should become easier, but that men should become wiser and stronger.”*** In skiing and investing, human nature is such that we want to conquer the most challenging terrain, but we need experience and wisdom to be successful in that pursuit and accumulated experience (surviving and learning from mistakes) is a huge advantage for both activities. Interestingly, one of the best attributes of the two activities is that at the core, skiing is very simple, “turn left, turn right, repeat as necessary,” and investing has the same elegant simplicity, “buy low, sell high, repeat as necessary.” At the same time, it is not easy to master either discipline (some might say mastery is an unattainable goal), but one can continually improve with good coaching and deliberate practice. However, even with great mentors and lots of accumulated experience, one of the most challenging aspects of skiing/investing is that the environment in which you engage is ever changing, and a number of variables that impact the environment like terrain/valuation and weather/sentiment can be highly unpredictable. Ski racer Mikaela Shiffrin (the youngest ever Olympic Slalom Champion) sums up this point well saying, ***“It’s like getting down a tough race course. Things you don’t expect come up and you have to adapt. You can’t let it throw you off. You have to cope. Those are all really valuable skills, in life and racing.”*** Other similarities are that over time the equipment for skiing and investing has changed dramatically, improving the experience for all levels of participants, but we will make the case that perhaps some of the advancement has been too good, leading to a false sense of security that can result in untoward outcomes. In skiing, just because you can buy an “all mountain” ski, doesn't mean a beginner should try to ski the whole mountain. Likewise, just because the average investor can buy an Index Fund or ETF and easily get cheap exposure to the markets doesn't necessarily mean they should invest in the markets at all times. An unknown author wrote, ***“Skiing is a dance, and the mountain always leads,”*** and the same can be said about investing as a dance and the market always leads, but in the end, gravity (and valuation) always wins. We made the argument in the Q3 letter (and a couple other times over the past year) that we might have entered a time when it might be better for most investors to stay in the lodge (hold more cash), or at least stay on the groomed runs (get hedged) as there were more warning signs than usual suggesting that the skiing/investing conditions were more Double Black Diamond EX than Green Circle. As Greg Child, author of *The Other Side of Luck* wrote, ***“The mountains are beautiful but they are not worth dying for.”***

The markets are not worth dying for either and while we have said that there are no trail markers giving us a single signal of the degree of difficulty of the current investment environment, there are warning signs that we can pay attention to when deciding which run to take. We created a list of the ***Not So Nifty Fifty*** reasons why it was time to get hedged in early November and have updated the indicators to reflect current data. The bottom line is that things are still not so nifty and it remains time to be hedged.

1. Welcome to the *New Abnormal*. We coined this phrase a few years ago as we thought there was nothing normal about the equity market environment since the extremes of 2000. From 1983 to 1999 the MSCI World Index almost never went down (2/17 of the years), compounded at 14.8% and the intra-year drawdowns were a

manageable (10.5%). From 2000 to 2015 the World Index has gone down a lot (one third of the years) and has only compounded at 3.5% while experiencing average drawdowns of a gut wrenching (17.3%).

2. Post-Crisis Deleveragings are measured in decades. There have been four great unwinds, the U.S. in 1873, the U.S. in 1929 (there's that year again), Japan in 1989, and the U.S. since the 2008 trough, and it takes 14 years on average to reach trough long-term interest rates which tend to settle between 1.5% to 2%. We are currently in year 9, so 2021 looks like the trough.
3. Global Trade has not grown since 2008 and is declining at an accelerating rate. Low levels of global exports have historically indicated imminent global Recession.
4. Industrial Production always turns down ahead of Recessions and has now declined for six consecutive months (and twelve of the last thirteen). We have never had six consecutive monthly declines without having a Recession follow within a year.
5. Even if a 2016 Recession were a shallow one like 2001 (two slightly negative quarters that weren't even consecutive) the market impact would likely be significant given the level of current valuations and the average correction during a Recession is (38%).
6. ISM ticked down again in January to 48.2 and now firmly in the contractionary sub-50 zone. Historically, an ISM of 48 indicates a 75% chance of a Recession within the next year.
7. Leading Economic Indicators have been declining and point to the ISM dropping well below 50.
8. Q4 GDP growth came in at a very disappointing 0.7% (likely will be revised even lower) which points to an ISM reading well below 50.
9. Regional Fed Surveys have been consistently awful and are now all pointing to a mid-40s ISM.
10. S&P EPS and Cash Flow growth rates have turned negative which points to an ISM below 50.
11. The Durable Goods Orders growth rate has collapsed, pointing to an ISM as low as 40.
12. When S&P 500 Forward EPS peak and begin to decline (as they did in Q3) there has been 100% probability of a Recession within the following year.
13. Consumer Confidence has rolled over to levels normally found in Recessions.
14. Retail Sales growth is trending down at an accelerating pace, heading toward Recessionary levels.
15. There is no Inflation anywhere and both CPI and PCE are well below the Fed target of 2%.
16. PPI is at levels only seen in the depth of the Global Financial Crisis in 2008.
17. U.S. GDP continues to be weak with Q1 currently trending at sub-2% according to the Atlanta Fed GDP Now indicator.
18. Increasing Inventory levels could become problematic and have historically been a Recession trigger as the inventory cycle turns from destocking to restocking.
19. Forward Inflation Expectations (5 yr./5 yr.) have absolutely collapsed to 1.1%, a reading well below previous levels where QE was triggered (in sharp contrast to Fed jawboning about raising rates today).
20. Long Bond rates have collapsed to below 2.5% and are urgently signaling that Deflation is a much larger risk than Inflation.
21. History actually indicates that the Fed should raise Fed Funds to 3% now (historically FF equals nominal GDP growth rate), but the Fed must believe that the economy is much weaker than history to keep rates at a near zero level.
22. Contrary to popular belief, the Fed has not eradicated the Business Cycle and that might be the fat man (Harry Caray) singing for the 7th inning stretch...
23. Fed tried to leave ZIRP (Zero Interest Rate Policy) too early in 1937 and we had a bad outcome (respectfully called the Great Depression). There is actually a case to be made that the Fed has lost control and there is no way out, just like in the 1930s.

24. When the Fed is not expanding the Balance Sheet, U.S. equities have struggled (actually made no return) over the past four years. With no more QE, where will equity returns come from?
25. Is it possible that faith in the global Central Banks is waning? European and Japanese stocks have given back all of the gains triggered by the last rounds of QE and QQE.
26. U.S. equities remain at extreme levels of valuation, 77% above their long-term regression.
27. U.S. equity TTM P/E and Adjusted P/E ratios are the third highest they have ever been.
28. The Buffett Indicator of the ratio of Market Cap/GDP is second highest ever, only worse in 2000.
29. The Q Ratio (valuation vs. replacement cost of corporate assets) is near record levels.
30. Margin Debt (the rocket fuel for the rally since 2009) has begun to roll over (down sharply in recent weeks) and when it turns down it tends to decline very rapidly, leading stocks lower.
31. Inflation Expectations levels have historically been highly correlated with forward P/E ratios and the collapse in inflation expectations argues for much lower equity multiples (lower by 40%).
32. GMO Forecasts poor returns for traditional assets over the next seven years including an approximately 2% nominal compound annual return for U.S. equities.
33. Another longer-term equity model used by a number of asset managers (created by Butler-Philbrick) also predicts a slightly negative return for U.S. equities over the next decade.
34. The December 2014 Barron's cover could be an example of Front Page Syndrome. When comparing the 2009 to 2014 move in equities to the move from 1995 to 2000, the current rally should have ended last spring (peaked in April). Welcome to #2000.2.0.
35. The Strategas Equity Trend Model turned negative in Q3, just like it did in 2000 and 2008.
36. Market Crises are highly correlated with Dollar surges like the one we have just experienced over past eighteen months. The question is whether we're more likely to see an environment like 1998, 2000 or 2008?
37. Equity market cycle highs usually occur in Q4 of the 4th year of the Presidential Cycle (last year) and cycle lows usually occur in Q1 of the 1st year (Q1 2016) or the Q2 of the 2nd year (Q2 2017) which aligns nicely with the #2000.2.0 playbook of a Recession in 2016 and market trough in 2017 matching up nicely with the 2001 to 2002 period.
38. Small-cap weakness (lagged large-caps badly in Q4) is a sign of deteriorating market fundamentals.
39. There is huge dispersion in valuation and margins across equity market sectors, which has historically been a target rich environment for long/short investing.
40. The current equity market advance is becoming increasingly narrow (without FANG – FB, AMZN, NFLX and GOOGL - the S&P 500 was down (5%) last year).
41. Only the largest Technology and Consumer companies are leading in the current rally (FANG).
42. The extreme of the narrowness can be seen in the Consumer sector where returns are completely dominated by three names (NFLX, EXPE, and AMZN) and the rest of the sector index is actually negative.
43. The trend in the Consumer sector has deteriorated dramatically in the past year and only two sub-segments still have positive momentum.
44. Energy sector fundamentals have absolutely collapsed and there is real risk of bankruptcies in the sector as overleveraged companies are shut off from additional capital.
45. The infamous Hillary Tweet caused one of the worst sector crashes ever recorded in the Healthcare sector showing how fragile equity markets are in the current environment.
46. Biotech, in particular, is looking increasingly vulnerable to a valuation correction.
47. The Four Horsemen of the #Growthpocalypse (copper, Korea, oil, rates) are all pointing to slower growth and potentially lower stock prices. Dr. Copper has been looking sick which has normally been a leading indicator of slowing growth.

48. The KOSPI Index has been declining, which has historically been a good leading indicator of slowing growth in the U.S. (and lower equity prices) given high tech components weighting.
49. The collapse in oil prices over the last year correlates well to periods of slowing growth and potential deflation, which has historically been a challenging environment for equities.
50. The 10-year Treasury rate has been stubbornly low (in contrast to the predictions that they would rise above 3% by year end) which is a sign of deflation risk and slowing growth.

For every one of the aforementioned concerns there is an argument on the other side (that is what makes markets), but we do think that the level of risk in the markets has risen dramatically in the past few quarters. To that point, on New Year's Eve (I was in a hotel en route to watch my Irish play in the Fiesta bowl, not a good outcome for Irish fans) I tweeted a picture of my daughter and me about to enter the AMF Gully with a caption that caution was warranted in the markets because one of my best manager friends had texted me earlier in the day that he was afraid that the markets could go "straight down" in January. His insight turned out to be quite prescient, as it proved to be one of the most difficult Januaries in market history (the first five days were the worst ever to begin a year), but it also led me to more deeply evaluate some of the biggest risks facing the markets in 2016 in anticipation of creating my 10 Surprises (highlighted below in the Market Outlook section). The subject of the Q3 letter was Alfred Winslow Jones (the father of the modern hedge fund) and we discussed how he reached the conclusion that utilizing a hedge "D" equity strategy was superior to traditional investment approached and we wrote *"one of the conclusions from his forecasting article research was that market direction could not be reliably forecasted, but individual companies could be reliably analyzed. Jones said, **The logic of the idea was very clear. It was a hedge against the vagaries of the market. You can own more good stocks without taking as much risk as someone who merely buys.**"* The average investor hedges those vagaries by reducing exposure to equities in their portfolio, either Structurally (moving to a 60/40 or 70/30 stock/bond mix), or Tactically (opportunistically shifting stock/bond mix or going to cash) and both strategies have historically resulted in returns that were lower than equities (a mathematical certainty in the absence of market timing skill). Risk, as measured by standard deviation, was usually reduced, but at the expense of meaningfully lower long-term returns." Given the difficulty of consistently predicting the direction of the markets (again, no actual trail markers), we have long made a similar case that shifting long-only equity exposure toward long/short equity exposure would add significant value to client portfolios.

Mikaela Shiffrin expressed a similar philosophy to A.W. Jones, *"it is still about the process of a ski race. No matter what else was happening, I kept thinking that I had to keep my skis moving down the hill. Keep going, don't quit, don't stop."* Bode Miller (another Olympic and World Champion) made a very interesting observation that applies to the perils of not being fully invested (so to speak) when he said, *"When you back off, it's easier to make mistakes. For me it's better to ski fast."* Jones believed the same thing as these two incredible ski racers, that to win you have to keep going and keep going fast (be fully invested); in other words, to have a system that allows you to always keep your skis pointed downhill toward the finish line. On the surface, skiing fast seems more aggressive and using a leveraged strategy might also appear to be more aggressive but, as we described last quarter, the true Jones Model portfolio actually turns out to be more conservative. We wrote last time that *"Jones view was that to be successful **the fund's capital must be both leveraged and hedged. The leverage arises from the fund's use of margin, while the hedge was provided by short positions,**" and it was critical to have both in place at all times. There is a huge structural advantage to always striving to make money on both sides, since no matter what the market environment, there are always some stocks that are rising and other stocks that are falling. Whereas a traditional equity investor must sit idly and absorb losses during a market downturn, or*

worse, sit and hope for a market upturn (remember that hope is not an investment strategy, in investing, it is a four letter word), the Jones Model strategy is able to remain fully invested in all market environments and extract returns from both rising and falling stocks. Jones summed it up best when he said **“hedging, was a speculative tool used for conservative purposes. Without it, I would not have been able to sleep so well at night.”**

Lindsey Vonn, the gold medal winning U.S. downhill ski racer said, **“I feel like, with ski racing, you need to have a short memory. You crash all the time, and sometimes it's a really bad one. But sometimes it's not so bad. When you fall, get right back up.”** Investing is the same, there will be lots of mistakes along the way and there will be lots of “crashes” in the markets, big ones and not so big ones, but you have to be able to forget the past and remain focused on the future. A.W. Jones was steadfast in his belief that their success was not dependent on any one investment or trade, but rather on their capacity to limit the damage from any one loss in the portfolio by the structure of the approach, and, more importantly, to have a model that allowed them to recover quickly from setbacks and remain focused on finding the best companies to own in the portfolio. We wrote **“Jones was consistent in his belief that it was the overall model that was the edge, not any one component, or single trade on either the long or short side. While they strived to find great businesses to buy and bad businesses to short, in the end the math favors owning more great companies than the original capital could have afforded by financing them with the proceeds of the short portfolio.** Lindsey Vonn also said something that Jones would echo, **“I want to keep pushing the limits to see what's possible. That's the nice thing about ski racing, no one is stopping you from going faster.”** To that point, last quarter we wrote **“An interesting question raised in the article was “isn't there a danger of becoming so preoccupied with selling short that buying opportunities are missed?” to which Jones provided one of his greatest insights (which we can corroborate from working with many of the world's greatest equity managers over the decades), “something else has emerged, people who learn how to sell short seem to have better judgment on what stocks to buy.” The data here is incontrovertible. The greatest long-term track records in the business belong to practitioners of the Jones Model art of portfolio management.”** Great investors, like great skiers, want to produce the best possible results and making sure you have the best strategy/approach for the current environment affords you the chance to win that gold medal.

One of the greatest things about skiing is that you have to go to a beautiful place to partake and once you are on the slopes, there is a natural rhythm to the carving of making turns that can be quite meditative. In any sport, the very best athletes talk about being “in the zone” (like a baseball player who can see the writing on the ball as it leaves the pitcher's hand) when they are at peak performance. Skiing and investing are no different. To be great in either discipline you have to have knowledge and technical proficiency (the analytical or left-brained component) and accumulated experience or gut instinct (the intuitive or right-brained component). On this point, Delores LaChapelle (a pioneering mountaineer and renowned powder skier) said, **“Some people can never learn to ski powder snow without exerting tremendous effort and strength because they allow their rational, left-brain hemisphere to control the entire situation.”** In investing, some people can never be comfortable in the markets because they are entirely focused on the analytical approach to making decisions. They are continually focused on the backward looking data and they don't trust their intuition when it comes to evaluating what is likely to happen in the future. The final picture in the series of trail markers up above shows a sixth level of difficulty, even beyond the Double Black Diamond EX, the true Experts Only warning sign and we think this is the time to really pay attention to what the sign is trying to tell us. We wrote last time that **“Long/Short investing strategies provide protection when you need it most and outperform most during stressful periods like 2000 and 2008. At this point we don't see things devolving into another Global Financial Crisis (but we reserve the right to change our minds if there is a Policy Error), but we do believe that we have entered a three-year period starting this past April that will**

resemble the period from April of 2000 to April of 2002. A. W. Jones was right. It is time to get hedged.” The first few weeks of 2016 have been challenging (to say the least) and it wouldn't be a Q4 letter if we didn't mention the Super Bowl (which has actually been a theme in the past), which once again proved that “Defense Wins Championships” as the number one Defense (Denver) triumphed over the number one Offense (Carolina). The Actor David Hyde Pierce (Niles Crane on the sitcom *Frasier*) had this to say about skiing, ***“We can't control what the ratings will be. It's like, if you're going to go skiing, do you hope you'll have a good day of skiing? Yes. Do you hope you won't break your leg? Yes.”*** In investing as well, we can't control what the ratings will be, but we can observe them (the list above) and we can choose to pay attention to the warning signs (particularly when they resemble the Experts Only sign above) and follow a strategy that will keep us compounding our wealth, rather than nursing a compound fracture.

FOURTH QUARTER REVIEW

We opened this section of the letter last quarter with a comparison of Q3 equity market activity to a roller coaster ride and wrote *“summertime is often a time for heading to the Amusement Park to spend some time eating great American foods like hot dogs and cotton candy, playing carnival games and riding the rides. Q3 was the embodiment of the proverbial roller coaster ride for global equity investors as fears about Greek Debt and Capital Controls, the PBOC's (People's Bank of China) decision to weaken the RMB and the Fed's inability to communicate a cogent plan for beginning to raise the Fed Funds rate in the U.S. caused significant volatility in global equity markets.”* Perhaps it was the impact of El Niño that kept summertime temps around a little longer, or maybe it was the inability of any of the Central Banks to effectively communicate solutions to the issues mentioned above, or perhaps the equity markets were just finally getting the message from weakening credit markets and beginning to anticipate a global slowdown; whatever the reason, the roller coaster ride continued in Q4 and the Beach Boys *Endless Summer* soundtrack became the theme music for global investors. The Sell in May and Go Away challenges are supposed to end by Labor Day and, actually, it did appear as we penned the last letter that things were looking up for equity investors, as a ferocious October rally was leading to lots of talk about the impending Santa Claus rally and getting back to new all-time highs. However, the carnival ride was not quite over and the last three months have been more Anti-Claus

than Santa Claus. After a flat November followed by a slightly negative (highly unusual) December, the New Year ushered in the worst first week in U.S. equity market history and the 9th worst January of all time in the (interestingly tied with 2000 – more on that later).

Let's take a quick tour of the global equity roller coasters over the past three months. In the U.S., the S&P 500 started off on 10/31 at 2,079 and had a quick series of whoop-de-dos, rising 1.5% to 2,110, falling (4.1%) to 2,023, gliding back up 3.9% to 2,102 and falling (4.6%) to 2,005 on 12/18 (two days after Ms. Yellen finally went full Lucy and raised rates). The markets reacted with an inverse “Sell the Rumor, Buy the News” reaction and pushed the coaster up the last hill of the year to peak at 2,078 on the 12/29 before the fun really began. The real thrill ride started the next day and the S&P careened almost straight down for three weeks, falling (12.8%) to an intra-day low on 1/20 of 1,812 when, out of nowhere, some able-bodied Carnie pulled an emergency brake and the coaster surged back upwards 2.5% to close the day at 1,859 and then rose another 4.4% (inclusive of a short squeeze induced up 2.5% on 1/29) to finish the month at 1,940 (to complete the ride down only (6.7%) over the three months). Perhaps someone knew that Super Mario Draghi would (once again) say he would “do something” on 1/22 and extend the ECB QE Program beyond 2016, or perhaps it was Pierre Andurand switching from Bearish to Bullish on Oil the day before (allowing oil to find a temporary bottom at \$26.55 and surge 26% over the next week), but clearly something changed and the panic subsided (at least

temporarily). The Euro Coaster was even a little scarier as the Euro Stoxx 50 started the ride at 3,418 and climbed a small 2.6% to 3,506 on 11/30 before plunging (10.5%) to 3,139 by 12/14, jumped smartly after the Fed decision, rising 5.6% through year-end on 12/29 before careening back down (13%) to 2,883 by 1/20 and has since jumped 5.6% back to 3,045 (including the final day rise of 2.2%, still down (10.9%)). With two double digit drops and a double digit decline over the three months, something doesn't seem right on the European track. The Samurai coaster was even more extreme as the Nikkei began at 19,083 and crept up 4.9% to 20,012 by 12/1 before dropping (7.2%) over the next two weeks to 18,566 on 12/15, then quietly rose 4.3% over two days before careening down a truly motion sickening (17.2%) to 16,017 on 1/21. On roller coasters, bigger drops mean bigger rises and the Japanese ride followed the pattern surging 9.4% over the last few days of the month (including an up 2.8% last day) to finish at 17,518 (still down (8.2%) from three months ago). Nearly as scary as Japan was the Emerging Markets ride where EEM ended October at 34.4, rose a slight 3.3% to 35.5 to 11/3 and started a very bumpy downward ride, dropping (7%) to 33 on 11/13, a short ride back up 4.7% to 11/20 and then zipped down a big hill falling (10.2%) on 12/11, surged 6.6% back to 33.1 over two weeks to 12/23 before being the first market to begin the big drop, zooming down (14.7%) to trough along with everyone else on 1/20 at 28.3, before jumping 8.2% (up 3.2% on the last day) to finish the month at 30.6 (an uninspiring (10.8%) lower than where the ride started on Halloween). However, the award for scariest coaster goes to China this time, as it has been a wild ride indeed over the past few months. Sentiment about China has shifted at an incredible rate as concerns about the risks of an RMB devaluation overwhelmed slight improvements in economic data. The Shanghai Composite Index ("SHCOMP") started off at 3,383 and was the calmest ride around for most of Q4 as the index rose 7.8% to 3,648 on 11/25 before a sharp two day drop of (5.8%) to 3,436 and then resumed the calm ascent back up 6.3% to 3,652 on 12/22. Just when things were

looking good for Shanghai riders, the PBOC suddenly moved the RMB peg ever so slightly (only about 1%), but investors panicked and the coaster swooped downward a truly frightening (27.3%) over the next five weeks to trough at 2,656 on 1/28. The SHCOMP did actually participate in the 1/29 global melt-up and rose 3.1% back to 2,738, but the Index finished January down (19.1%) over the past three months.

The continual ups and downs of the equity markets over the past year might give one a sense of déjà vu and when looking at the ride of the equity markets above, that sense grows very strong (and is actually quite appropriate) given how 2015 has been extremely similar to 2011. We wrote about the similarity between the two years in our last letter when discussing how Super Mario had come to the rescue last fall (just as he had done four years ago). We described the fragility of markets after the August collapse and said *"things were looking a little precarious. Then in a very déjà vu moment harkening back to 2011 (it has actually felt like 2011 all year with Greek Crisis 2.0), Mario "Whatever it Takes" Draghi threw the Bulls a lifeline and said that the ECB would increase their QE program within the next six months."* It was quite interesting to watch the full spectrum of sentiment in real time during September, as investors celebrated the ECB commitment to keep the liquidity spigot turned on (markets surged) and then panicked when QEen Janet decided not to raise rates later in the month (markets dropped). In an almost schizophrenic crescendo, global equity investors then abruptly (and collectively) changed their mind and we described the shift (and the eerie similarity to 2011) as follows; *"Investors then began to decide that the Fed not raising rates was actually a good thing (meant multiples could expand a little more since sales and EPS keep falling) and equity markets around the world went up nearly every day in October, pushing gains to the best month in since, you guessed it, October 2011. The similarities with 2011 are amazing, in both years the market peaked in May, had an initial trough in August and then had the final bottom 5 days apart, September 28th this year and*

October 3rd in 2011. In 2011, the S&P 500 rallied 14.5% from the October bottom and so far in 2015 the Index has rallied 11.5% off the bottom.” The balance of the years in 2011 and 2015 were very similar for the S&P 500 with both years having another downturn and a final rally to finish the year essentially flat. 2011 was precisely flat, (up 2.1% with dividends), while 2015 was down (0.7%), (up 1.4% with dividends). The similarities didn't stop with the S&P. The Russell 2000 was nearly identical, falling (4.2%) in 2011 and (4.4%) in 2015. International equities lagged the U.S. (although not as badly in 2015) with EAFE down (12.1%) in 2011 and only (0.8%) in 2015 and it was a very similarly challenging year for Emerging Markets with the EM Index down (18.4%) in 2011 and (14.9%) in 2015. There were two notable differences, however, NASDAQ was down (1.8%) in 2011, but FANG (FB, AMZN, NFLX and GOOGL) held the Index up in 2015, rising 7% and (most notably) the bond market returns were vastly different as the Barclay's Aggregate Index was up a very strong 7.8% in 2011 and only managed a scant 0.6% gain in 2015. Mark Twain famously quipped that “History doesn't repeat, but it rhymes” and 2015 was clearly singing out of the 2011 capital markets hymnal.

We have discussed on many occasions over the past few years that there has been a strong correlation between Central Bank bond purchases (QE) and subsequent increases in equity markets. We have referenced Larry Jeddelloh of TIS Group multiple times, who had shown how “*historically every \$100 billion of QE has translated into Forty S&P 500 points.*” We have pointed out that the equation had been quite accurate in determining the potential increase in stocks during the QE Era. We wrote last quarter that “*a year ago, when Ms. Yellen said that the Fed would cease the QE Program in the U.S., we asked an important question in our Q4 2014 letter; given U.S. equity markets have been driven by the QE equation since 2009, the cessation of QE this month does beg the question of what happens in 2015?*” We have also pointed out on numerous occasions over the past year that nearly every valuation indicator for the

S&P 500 including Yield, P/B, Market Cap/GDP, CAPE Ratio, Tobin's Q and P/E Ratio (and plenty of others) have been at levels exceeded only by the craziness of the 2000 Tech Bubble, which did not bode well for equity returns. Reiterating the construct after Q1 last year, we said that, “*with no QE to boost liquidity and the reality of falling earnings thanks to currency losses from the strong Dollar and revenue declines due to collapsing global growth, the larger question is, again, how would equities continue to rise?*” With the final results for 2015 now in, we have the answer: generally speaking, they won't. One of our original #MCCMSurprises was that 2015 would confound the consensus and be the first down year in seven years by saying “*we reiterate again what we wrote in January in our MCCM Ten Surprises List (Surprise #4, Here's to you Mr. Kindleberger), that “contrary to all the positive market trend data, 2015 would turn out to be the first negative year for the S&P 500 since 2008.*” While the S&P 500 did eke out a slight gain of 1.4% (thanks to 2.1% of dividends), the preponderance of evidence shows there was more negative than positive in the U.S. equity markets in 2015. Most notably, without the top 10 stocks, the S&P would have been down (5%), in small-cap land the Russell 2000 was down (4.4%) and when looking at the markets more broadly, the average stock was actually down double digits.

It was a tumultuous year in European equity markets as the Q1 euphoria (up 11.6% in Euros, but only 3.5% in USD) of the ECB Asset Purchase Plan gave way to the Q3 fears (down (7%) in Euros, and (8.7%) in USD) of a global economic slowdown and Q4 was somewhere in between as the MSCI Europe Index rose 5.2% in Euros and only 2.5% in USD. All throughout the year Mr. Draghi did his best to devalue the European currency (essential to keep the Mercantilism dream alive) and for the year European equities were one of the better performing markets in local currency, rising 4.9%, but U.S. based investors who didn't hedge the Euro actually lost (2.8%). Interestingly, the mantra of “Don't Fight the ECB” did not pay investors as well as most had anticipated, as

there was an increasingly large gap between the expected impact of the ECB Stimulus Plan and the actual results in the markets. Perhaps the lack of a true monetary union in Europe limits the effectiveness of the Central Bank (relative to the BOJ and Fed), or perhaps there is some “Central Bank Fatigue” coming to the fore around the world, or perhaps the stimulus only works in the equity markets if the money actually finds its way into stocks. In Japan, the BOJ buys REITs and ETFs (it now owns 50% of the ETF market!) directly and in the U.S., rumors have swirled that the large commercial banks are borrowing from the Fed and buying stocks onto their balance sheets. We have never actually understood how a Central Bank buying government bonds was supposed to prop up stocks. Clearly it has worked in Japan and the U.S., but it is seemingly working less well in Europe. As evidence, we tried to quantify the impact of ECB bond purchases last summer in saying, *“the European Central Banks have purchased \$240B of bonds and the Euro Stoxx 50 Index has rallied 280 points. If we extrapolate an essentially 1:1 ratio for the balance of the year, we might expect to see the Index rally another 360 points, or precisely 10% from its current level of 3600.”* It became apparent that perhaps we didn't have enough data to draw a good conclusion when looking at the poor performance last fall when we wrote *“clearly there has been a slip between the ECB QE and the Euro Stoxx 50 Index during Q3 and even with the strong rally in October, we would need to see a little more than a 15% move over the next two months to achieve the 3960 target by year end. Santa Claus rallies of that magnitude are not unheard of and in talking to some European managers on a recent trip to London there was serious bullishness about European equities, so it will be interesting to watch these markets in the weeks ahead.”* Unfortunately, the Anti-Claus non-rally extended to Europe and the Index fell from 3,413 in October to 3,267 to finish the year, so clearly the original formula had almost no predictive power. Looking back, it is clear that the ebullience right after the ECB announcement skewed the data and with nearly a full year of asset purchases completed we can recast the formula that for every

100B Euro of purchases you get only 20 Euro Stoxx 50 points (significantly smaller than the original calculation). Given that Super Mario has recently reaffirmed his commitment to the bond purchases at 60B Euro a month through (at least) March of 2017 that would equate to roughly 140 Euro Stoxx 50 points for 2016, only a 4.3% increase (not very super at all).

Taking a quick tour around Europe, it was a very uneven quarter as some countries fared quite well while others languished. Belgium led the way, up a very robust 13.6%, Finland was up a solid 9.6%, Germany jumped 7.7%, Ireland extending its winning streak, up 7%, Denmark rose 6.7% and Portugal was up 4.2%. On the other side of the ledger, Spain continued to struggle (despite having very strong economic performance) falling (2.6%), Italy shed another (2.3%), Norway was off (0.5%) as the oil price collapse continued to bite and the U.K. managed only a scant 0.7% increase. Looking at the full year, the dispersion was even wider. Denmark (on the back of continued rate cuts) led the way surging 23.4%, Ireland put up a surprising 16.5% gain (first PIIG to take the medicine, first to recover), Belgium was up a solid 12.1% and Austria managed to best the Index slightly, up 3.5%. There was some real pain on the downside as Spain shed (15.6%), Norway lost (15%), the U.K. was off (7.6%), Sweden fell (5%) despite cutting rates and mighty Germany was actually down (1.9%) for the year. Noticeably absent from the quarter and year leader board were France and Switzerland, which basically ran in place all year, up 1.7% and 2% for Q4, respectively, and down (0.1%) and up 0.4% for 2015, respectively. Emerging Europe was a disaster in 2015 and we will cover that in the EM section below.

Looking at Japan, we began this section last quarter by saying that things had surprisingly turned down in Japan and wrote, *“BOJ chief, Haruhiko Kurodo, seemingly lost his grip on the QE baton and the market which we had begun to refer to as the “Land of the Rising Stocks” struggled mightily and the MSCI*

Japan Index fell (11.8%) and gave back nearly all of the gains from the first half, finishing us a scant 0.2% for the CYTD.” In Q4, the Rising Sun market was back and the MSCI Japan Index surged 9.3% to make Japan the best performing major market in 2015, up 9.6%. Despite meaningful outflows from foreign investors (historically a contrarian indicator), local pension fund purchases and some emerging signs of domestic investors beginning to move toward equities helped the bull market reemerge. The biggest driver of equity price gains in Japan has been continued improvement in ROEs and quarter after quarter of record earnings, as the benefits of Abenomics (lower Yen, increased fiscal spending, and reduced regulation) continue to inure to Japan Inc. Add a newfound appreciation by Japanese management teams of Stock Buybacks and the continued unwinding of cross shareholdings and you have all the ingredients of a healthy equity rally. We summarized the goals of the Abenomics plan earlier in the year, saying *“the implementation of Abenomics has finally removed the specter of deflation after two long decades and has led to a virtuous cycle of rising inflation expectations, rising earnings and rising asset prices.”* Unfortunately, a proverbial fly in the ointment appeared last quarter as the impact of collapsing oil prices put pressure on Japanese CPI and pushed the index well below the BOJ’s 2% target, which in turn pushed Kuroda-san into a less dovish posture and he, unfortunately, holstered his bazooka and didn’t deliver another Halloween (or any other Holiday) surprise of increased QQE. The combination of a less active BOJ and higher volatility in global equity markets arrested the Yen decline and the USDJPY actually rose 0.5% for the quarter.

With the final numbers in, we were clearly a little bit overenthusiastic when we wrote early in 2015 that, *“we think the party is just getting started in Japan and that there are more significant gains ahead. MCCM Surprise #9 says that Japan has No Way Out other than to weaken the Yen and drive up asset prices. There will be some resistance along the way, but the Yen could reach 140 by year-end and the Nikkei could*

hit 22000.” Things looked good at mid-year and those predictions looked achievable with the Yen at 123 and the Nikkei at 20,236, but Kuroda-san’s unwillingness to supply further stimulus capped the rally and the Yen slipped back to 120.5 to end the year and the Nikkei dropped back to 19,033. The Japan market looks very cheap and the Yen looks set to weaken more in 2016, so we would expect to see something close to our original forecasts above in 2016. Unfortunately, January went the other direction as global equity market turmoil made the Yen “safe harbor” trade attractive and the USDJPY had surged all the way down to 116.99, before regaining some ground during the relief rally over the last week of January. Then, in a surprise move on the last day of January, Kuroda-san shocked the world with a Negative Interest Rate Policy (NIRP) to try and force the banks to lend excess reserves into the economy and “break the grip of the deflationary mindset.” The Yen responded quickly, falling 2% overnight, pushing USDJPY back up to 121. Kuroda-san loves the element of surprise and we would expect to see one more surprise (more QQE) up his sleeve as the fiscal year end approaches in March. Unfortunately, there was some collateral damage to the NIRP decision and that was some significant losses for the Japanese banks. The banks had been volatile all year and we wrote last time that *“SMFG, MTU and MFG finally showed the promise we began to write about in Q4 of last year as they jumped an impressive 14%, 14% and 22%, respectively, in Q2, but what the markets gave in the summer, the markets took back in the fall as the Big Three Banks shed what they gained in the previous period, falling (14%), (16%) and (14%), respectively.”* That volatility continued in Q4 with a small loss of (0.5%) for SMFG and gains of 2% for MTU and 9% for MFG, but the volatility accelerated in January and the NIRP decision crushed the trio causing losses of (13%), (18%) and (18%), respectively. Our favorite managers in Japan are getting increasingly excited about Japanese equities, but the BOJ induced volatility has certainly caused some stress so far in 2016.

Looking more closely at performance within the U.S. equity markets in Q4, despite the positive outcome for the overall market as measured by the S&P 500 Index, there were a number of areas of relative weakness which make the case that the Bulls are not completely in charge of equity markets. The equity markets continued to narrow in Q4 as large-cap growth stocks (Russell Top200 Growth Index) continued to outperform the broader indices, surging 8.6% versus the R3000 Index gain of 6.3%. When looking at the other end of the liquidity spectrum, small-cap stocks (R2000 Index) managed only a 3.6% gain. The R2000 was noticeably weaker in the last two months of the year and was actually down (5%) in December (that weakness in lower liquidity names was certainly a harbinger of things to come in the New Year). If we look at the complete opposite side of the market from large-cap growth, small-cap value, we see the disparity was even more pronounced as the R2000 Value Index was up only 2.9% in Q4. 2015 has been a year of total dominance of Growth versus Value all across the capitalization spectrum of the markets. Large-cap value (RTop200V) gained 180 basis points less than growth in the quarter, up 6.8%, and was actually down (3.4%) for the year versus a very robust 8.2% gain for the RTop200G. Mid-cap growth rose less than large-cap during Q4 and Growth beat Value in this segment by 100 basis points, up 4.1% versus 3.1%. For the full year, both mid-cap segments were down, but Value trailed Growth by a wide margin, falling (4.8%) versus (0.2%). The dispersion was even more acute in small-caps as the R2000G was up 4.3% for Q4, versus the R2000V up only 2.9% and both segments were negative for the year, down (1.4%) and (7.5%), respectively. The huge spread between large-cap growth (up 8.2%) and small-cap value (down (7.5%)) indicates that there is significant stress in the equity markets and that a defensive posture would be advisable in the months ahead.

If we examine the performance of the sectors of the S&P 500, the headline numbers of Q4 mask the overall trend in the markets that was made abundantly clear again in December. In Q4, four sectors handily

outperformed the markets and, looking just at those results, one might be lulled into a false sense of security that the Bull market was back. Materials was up 9.7%, Technology was up 9.2%, Healthcare was up 9.2% and Industrials were up 8% and compared to the S&P 500 return of 5%, everything looked great. The problem with that view is that when looking at the full year data a very different picture emerges, and the December data shows an abrupt transition back to a very weak market. For the year the best sectors were primarily defensive, with Healthcare up 6.9%, Staples up 6.6% and Technology up 5.9%, while Materials, Energy and Industrials were smacked, falling (8.4%), (21.1%) and (2.4%), respectively. There were two outliers from the Defensive theme in 2015, Consumer Discretionary was the best sector (hope springs eternal) rising a very surprising 10.1% and Utilities (normally defensive) were hit in Q4 by fears of rising rates and finished 2015 down (4.8%). Most importantly for the sector data was the shift in momentum in December when all of the Defensive sectors were back on top with Staples, Utilities, Healthcare and Telecom rising 2.9%, 2.2%, 1.8% and 1.7%, respectively, while there was real damage inflicted in the Consumer, Materials and Energy sectors, falling (2.8%), (4.2%) and (9.9%), respectively. That trend was exacerbated in January as the Bulls lost control of the equity market and the Defensive sectors surged while the Growth sectors were severely punished. In a month where the S&P 500 was down (5.1%) and was saved from being the worst January ever by a 2.5% short covering rally on the last day of the month, it was all about Defense as Telecom, Utilities and Staples were up 4.9%, up 2.9% and down (1.4%) while Technology fell (8.1%), Industrials fell (8.3%), Financials fell (11.4%) and Materials shed (13.1%).

For all the talk about the strength of the U.S. Dollar in 2015, there has really been almost no movement in the DXY Index since the massive 9% gain in Q1. DXY fell (2.5%) in Q2, managed only a scant 0.8% in Q3 and finished the year with a 2.5% gain. Q4 was actually quite volatile for the Dollar as DXY was down as

much as (2.5%) in October and up as much as 4% in November, before settling down in December. We wrote last quarter that, *“the talk about King Dollar reached a fevered pitch in Q3, as everyone was certain that the Fed would raise rates in September and Emerging Markets currencies were pummeled during the period. That talk has certainly faded and with the lack of Fed follow through on raising interest rates (and the obsession with the rising Dollar in the Fed minutes) the momentum in USD has clearly shifted.”* We had said since mid-2014 that, *“getting the Dollar right in 2015 may be one of the most important portfolio decisions an investor can make”* and the impact of the Dollar on commodity and equity markets in Q4 shows how that sentiment continues to be the case. While the Dollar strength was muted in Q4, when looking at the International Index returns during the period currency headwinds continued to dampen returns as the ACWI ex U.S. rose only 3.2%, EAFE was up only 4.7%, MSCI Europe was up only 2.5%, MSCI EM Index managed only a 0.7% gain and only the MSCI Japan Index was able to buck the strong USD trend, rising 9.3%. For the full year, these same Indices were down (5.7%), down (0.8%), down (2.8%), down (14.9%) and up 9.6%, respectively. The Dollar decision will continue to be critical as the Central Bank drama continues to unfold and we see in the coming months whether the intention of the Fed to diverge from the easing path of the ECB and BOJ is achieved or whether the overall global malaise pushes the Fed to reverse course and continue the stimulus of the past six years.

Emerging and Frontier Markets clearly didn't participate in the Q4 jubilation experienced by other global equity markets, but rather had quite a volatile ride over the course of the quarter as the Fed tried to decide what to do with interest rates and currency fluctuations again caused stress in a number of markets. We discussed the FX issue last quarter and said, *“in many cases the damage was primarily currency related, so there was some reason to believe that those markets could turn just as quickly to the upside if there was a resolution to the Fed interest rate*

decision” and indeed there were a few snap back rallies in Asia following the Fed finally making a decision to raise rates. The most extreme example was Indonesia, which was the strongest performing EM in Q4 rising a very robust 20.8%, but the damage of the first three quarters was huge, so the market was still down (19.5%) for the year. Malaysia was another market where currency losses had beaten down equity markets during the first three quarters and a strong 7.9% rally in Q4 brought returns to down “only” (20.1%) for 2015. Korea rallied 5.4% and Taiwan was up 1.2% while India was essentially unchanged, down (0.9%) and Thailand couldn't catch a bid, falling another (6.2%) to bring YTD losses to (23.5%). Latin American countries did not fare as well during Q4 and the negative equity and currency trends actually accelerated downwards resulting in some truly terrible performance. Brazil was the worst of the bunch falling another (3.3%) in Q4 to finish a truly horrific year, shedding nearly half its value, down (41.4%). Columbia was a close second, down (9.4%) for the quarter and (41.8%) for the year. Peru was challenging as well, dropping (8.1%) in Q4 and down (31.7%) for the year. Chile and Mexico managed to keep losses at acceptable levels in Q4, falling (1.1%) and (1.2%), respectively, but they both underperformed for the year, down (17.7%) and (14.4%), respectively, for 2015.

The Emerging Markets that have historically been dependent on oil production in the Middle East and North Africa had a tough Q4 as oil prices continued to decline. Countries like Qatar, UAE and Egypt were down (10.2%), (12.6%) and (7.8%) during Q4, bringing full year losses to (19.5%), (17.9%) and (23.7%), respectively. The country most negatively impacted by continued currency weakness was South Africa, which fell another (10.6%) in Q4 to finish 2015 down (25.5%). The only place within EM where there were a small number of bright spots was Eastern Europe. Hungary had a fantastic quarter and year, rising 11.4% and 36.3%, respectively, and Russia confounded the skeptics that assumed that market would struggle in a year where oil fell so dramatically,

having a tough quarter, down (4.1%), but managing to have a solid year (compared to other developed markets), up 4.2%. Overall, the bulk of EE markets struggled as Turkey was down (0.3%) for Q4 and dropped (31.9%) for the year and Greece brought up the rear in EM falling (19%) for the quarter and a stunning (61.3%) for 2015 as the process of bank restructurings decimated the equity markets. We have made the case over the last couple of quarters that it might be getting close to the time to buy what is on sale in EM and said that we could “hear Sir John’s words *“Bull Markets are born on Pessimism”* and we can feel that pessimism in the markets. Sir John says to buy at the point of *“Maximum Pessimism”* and we might not be there just yet, but we are likely getting close.” After another quarter where the collective pessimism of market participants toward Emerging Markets continued to grow, we are reminded of another great quote from legendary investor George Soros who says, “The worse a situation becomes, the less it takes to turn it around, the bigger the upside.” There is likely one last cathartic move down, but we are also more likely to be closer to the end of this down cycle in EM than the beginning.

China is again worthy of its own section as the volatility continued in Q4, but the Bulls were back in charge in Shanghai as the MSCI China Index rose 4% and the MSCI China A-Shares 50 Index surged 13.1%. With the wild roller coaster ride throughout 2015, both Indices finished in the red for the year, falling (7.8%) and (5.4%), respectively. We discussed last quarter how “we were clearly caught off guard by the PBOC decision to allow a small “adjustment” in the RMB as they negotiate with the IMF for gaining inclusion in the SDR. The achievement of “Reserve Currency Status” for the Yuan is very important to the Chinese Leadership and they have been moving with purpose toward that goal” and described how that small adjustment had led to significant losses in the equity markets as investors fled in fear of a larger “devaluation.” We then went on to ask the question “why is it when the Fed, ECB or BOJ weaken their currency by 20%, 30% or 40% it is labeled effective

Central Bank management and when the PBOC moves the CNYUSD band a few percent it is deemed a crisis?” Most prognosticators will simply say that the rest of the devaluation is coming imminently, so investors should avoid investing in China and clearly that advice looked pretty good in January as despite only a fractional move in the RMB, Chinese equity markets got clobbered. We continue to take the glass half full view, and with the further correction in early 2016, the CSI300 Index fell back toward 9X forward EPS, which has historically been a very good buying opportunity for long-term investors. We can find lots of very smart managers who have made big bets against China and the Chinese currency (largest being the recent report that Hayman has 85% of their capital positioned short China and HK equities and currencies), but we also feel like this trade has become consensus and markets rarely take the path of least resistance in these situations (they rather take the path that causes maximum pain for the majority of investors). While the early 2016 returns in China have been poor, on the eve of the lunar New Year, the forecasts for the Year of the Monkey indicate that there will be a meaningful rally in the Chinese equity markets in the second half of the year. We wrote last time that “the focus of analysis in China should shift to the Quality of GDP growth, not the Quantity of GDP growth as they undergo the same type of transition that the U.S. experienced over the past 40 years.” Maintaining a long-term view on how powerful the shift toward consumption in a country of 1.4 billion people can be is essential for capitalizing on some of the best investment opportunities available in the coming years. Volatility in the SHCOMP was dramatic in 2015 and we expect volatility will continue, but will dampen over time and we see tremendous opportunity in Chinese equities, particularly in the sectors of e-Commerce, retail, staples, healthcare and alternative energy. To quote Sir John Templeton again, “Bull Markets grow on Skepticism” and with the rampant skepticism amongst global investors on the prospects for China, we see plenty of fuel to feed this nascent Bull Market and help it grow over time as the elements of the

Third Plenum continue to play out.

Frontier Markets had a challenging Q4 and the MSCI FM Index fell (1.2%). The range of outcomes across the individual countries was quite divergent as the oil exporting countries suffered along with oil prices while some of the European markets were stable and Argentina exploded upwards after elections resulted in a new pro-business President. The GCC markets were hit hard in Q4 as Kuwait fell (3.9%), Oman dropped (7.5%) and Bahrain slumped (16.4%) to bring YTD results to (16.7%), (9.4%) and (21.3%), respectively. Africa was hit hard as well with oil prices dropping and while Kenya was only down (1.9%) for the quarter, Nigeria shed (9.7%) and 2015 returns were weak for both countries, down (18.3%) and down (20.2%), respectively. There were a few Eastern European markets that held up during Q4 as Croatia managed to gain 1%, Estonia rose 4.1% and Slovenia rose 5.3% bringing YTD returns to down (7.6%), up 11.7% and down (5.2%) which were all significantly better than the broad Indices. One dark spot in EE was Ukraine, which after some positive performance in Q1 (after the CB raised interest rates) fell off a cliff in the second half of 2015, falling (25.5%) in Q4 and finishing down (39.8%) for the year. One of the Frontier Markets we thought had promise in 2015 was Saudi Arabia and we wrote in Q2 how *“Saudi has been a favorite market where we thought investors were missing the emerging consumer story and we discussed last quarter another benefit was the inclusion of Saudi Arabia in the Index. The Saudi market has indeed been solid all year (in anticipation of the move) finishing up 11.9% for the first half of 2015.”* Saudi did open their markets (kind of) to foreign investors in June and it was not a fun experience for investors who intrepidly moved into the Kingdom. After a tough Q3, Saudi was down another (6.8%) in Q4 to bring the full year loss to (12.7%). Clearly the decline in oil prices has spooked investors in the region despite the fact that most of the listed companies have nothing to do with oil. We have been wrong on investors’ ability to differentiate between the commodity story and the domestic

consumption story, but believe that there will be solid returns to be earned in this market over time.

We have mentioned on numerous occasions how *“Argentina has been one of our favorite markets since early 2014. Unfortunately, the holdout issue was not resolved and speculation is that now it will not be settled until after the election. We continue to see tremendous opportunity in Argentina, believing it will be one of the best performing markets over the coming year.”* We went further last quarter saying that, *“we would anticipate further gains as we reach a conclusion of the election process in December”* and while there was a short drawdown after the primary, a very strong rally ensued in anticipation of a Macri victory. Interestingly, the Argentine market followed the “buy the rumor, sell the news” path and there was some consolidation of gains after the Macri victory in December. Despite the volatility, Argentina was one of the very best performing markets in the world in Q4, surging 25.7%, leaving the market roughly flat for the year. We expect continued gains in Argentina in the New Year as the hold-out issue is settled and markets recover from the post-election currency devaluation that sets the stage for a very robust economic and market recovery in the coming years.

U.S. Fixed Income markets continued along their volatile path in Q4 as the on again, off again, on again, uncertainty about when the Fed will raise the Fed Funds rate finally came to a conclusion with QEen Janet finally doing her best Lucy Van Pelt and pulling the liquidity football away with a 25 basis point increase in December. The Bond Bears were back on top in Q4 as the Barclays Aggregate fell (0.6%) and the Barclay’s Long Treasury Index dropped (1.4%), erasing the gains made by the Bond Bulls in Q3 and leaving the Indices nearly unchanged for the year, up 0.6% and (1.2%), respectively. We said last quarter that *“there continues to be a great deal of debate on what the Fed should/shouldn’t do about interest rates and while we actually believe that there could be a positive “Signaling Effect” (help investors to be more confident) if the Fed were to actually normalize rates*

(get them back toward the Nominal GDP growth rate), we will take the Over on how much harm will be inflicted on the economy (and the financial markets) if Ms. Yellen decides to tighten liquidity in an economic environment looking more and more Recessionary. Fixed Income markets caught a little tailwind in October on the heels of the Fed decision not to raise rates, but began to struggle as it became apparent in November that the Fed would indeed go ahead with a Fed Funds increase at their December meeting. We said in last quarter's letter that, *"we wrote in the MCCM Ten Surprises in January that the Fed would confound the pundits this year and not raise rates. Our rationale was that economic growth would not rebound enough to support higher rates and all the recent data seems to confirm a pronounced slowing in growth in the U.S. (and globally as well)."* I guess technically we got this one wrong since Ms. Yellen did actually raise rates in the third week of December, but given that the consensus was that she would raise rates in March, then June, then September, we think the Surprise actually occurred since rates were zero for nearly the entire year.

Looking at global fixed income markets, the investment environment in Q4 was not very hospitable as fears of rising rates and a rising dollar caused losses in the Barclay's Global Bond Index, which fell (1.2%) for the quarter. The Index was down (2.6%) for the year and most of that loss was due to the currency impact of the strength of the Dollar. Across credit markets, Q4 was mixed as the problems in High Yield came to a head around a liquidity crunch in a HY Bond Fund run by Third Avenue Advisors who had to suspend redemptions in December (nicknamed the Third Avenue Freeze Out for fans of the Boss), while Emerging Market Bonds became a form of safe haven for investors still desperately searching for yield. The Barclay's High Yield Index was down (2.1%) for Q4 and lost nearly a whole year of interest payments for the year, falling (4.5%) while the JPM EM Bond Index rose 1.6% in Q4, pushing the full year return to 1.2%. We wrote last quarter about a comment we made in the Q2

letter that, *"it is tough to make good long-term returns when the risk/reward environment is such that you can lose an entire year of coupon income in three months, but that has indeed been the challenge when investing in credit markets over the past couple of years."* The challenge of owning bonds in the current environment is that three things can happen and two of them are bad; 1) you hold them and inflation chews up your returns because yields are so low, bad, 2) you hold them and rates rise and you actually lose money, worse, 3) you hold them and rates fall and you make money, good (but then we may have other issues to deal with since falling rates are a sign of economic weakness).

One area of HY deserves some special attention here. Back in January there were loads of managers trying to raise money to go buy distressed bonds in the energy patch because prices had fallen 15% and everyone "knew" that oil prices were headed back up (remember that not one Wall Street analyst had a YE price target for oil below \$60). We wrote about the risks of this strategy in April saying, *"As we write the letter today, oil prices have collapsed back to the March lows and these high yield bonds are collapsing right along with commodity prices. The cash flow analysis is not pretty for many of these companies and having just spent some time with one of the best oil traders in the world (on my recent trip to London) who thinks oil prices are going MUCH lower (approaching \$30), we finally may get our fire sale prices on these bonds which bodes ill for HY Index returns in the rest of 2015."* Not a bad prediction as it turns out, as the energy sector within high yield really struggled again in Q4 falling (12.8%) and really, really struggled for the full year, plunging (23.6%). Those bonds have continued to drop in the New Year as it becomes increasingly apparent that many of the most overleveraged energy companies will go bankrupt and default. The essential problem with the idea back in January was that investors were rushing into the energy debt space with a "Buy the Dip" mentality (had worked so well in other assets since 2009), but there was a problem, the fundamentals of the industry were

actually still deteriorating. In describing what occurred in Q1, we said, *“there was, as you might expect, a reflexive response to the flood of money into the segment and prices did lurch higher for a while (and investors celebrated), but oil prices faded due to the reality of oil supply continuing to exceed demand and HY prices began to reverse.”* As oil prices went into full Bear mode later in the year, the losses accelerated and the potential for impairments, and ultimately, losses grew rapidly. We went further to say *“restating the case for the opportunity in this area from the January letter here, there is a lot of concern that some large percentage of the massive \$550 billion of debt issued by energy companies during the Shale Boom will default as oil prices have halved, but we expect that only a small percentage of issuers will go bust as many operators have done a good job hedging production and have bought themselves time to cut costs and restructure. One segment that is particularly vulnerable are the energy services companies as the E&P company cuts in cap-ex are a cost reduction, but are a revenue reduction for service companies. We expect to see some tremendous opportunities to buy fantastic assets at fire-sale prices in the coming months. All the money that went chasing energy debt in Q1 is now nursing some meaningful losses and we actually think these markets will get worse before they get better.”* As we begin 2016, it appears that we are getting very close to those fire-sale prices and it may make sense to begin nibbling on a few issuers where there are good assets trapped in a bad balance sheet and we have begun to explore ways to have fresh capital available to capitalize on those opportunities.

During 2015 there was a surprising divergence in yield assets, as REITs had another positive year and MLPs were decimated. The surprising part is that it might seem safe to assume that assets which investors purchased primarily for yield would move together depending on the rate environment (would rise with falling rates and fall with rising rates). The breakdown in that thesis is that the source of the yield may be impacted by different elements of the environment

and an asset could not follow the pattern in the event that business fundamentals changed more rapidly than the change in the rate environment. While Q3 was the most extreme example of that breakdown, Q4 saw a similar pattern of disparate returns. When the Fed made it clear that they would actually raise interest rates, investors flocked back to REITs and the S&P REIT Index posted an extremely strong return, rising 7% for the period. That big move erased all the losses incurred by REITs during the first three quarters and left the REIT Index up 2.5% for the year (nearly twice the return of the S&P 500). They say (I always wonder who “they” are...) that “those who avoid the pain of discipline will have to deal with the pain of regret” and the yield markets prove over and over again that investors who fail to follow the discipline of selling when yields get too low (or buying when yields get too high) live to regret those decisions. No place has the regret been more acute than in the MLP space as investors who stayed fully invested as yields plummeted last year are feeling some real pain. While the Q4 pain in MLPs was a small fraction of the destruction of Q3, the Alerian MLP Index was still down (2.8%) versus an astonishing (22.1%) during Q3, bringing the full year loss to a stunning (32.6%). We wrote last quarter that, *“the breadth and depth of the decline in MLPs has been breathtaking, exacerbated by the rapid unwinding of leveraged mutual funds, which were forced to sell and pay down debt as margin calls came fast and furious during September. These fund structures were created in an attempt to manage the unattractive tax consequences of MLPs for individual investors (essentially double taxation), so the theory was that by leveraging up the portfolios, the extra returns could effectively pay the tax and the net return to investors would be higher. As is always the case with leveraged investments the theory works great when markets are calm and rising, and can be disastrous when markets are volatile and falling.”* The losses accelerated into year-end and continued unabated in the New Year as the selling pressure has intensified and hydrocarbon prices continued to fall. As we said last time, *“there are some great assets being*

thrown out in the oily bathwater, but also some assets that should never have been put into the MLP structure (more cyclical businesses) that will likely fall much further,” and it appears that investors are not yet ready to differentiate between the two. In fact, the higher quality assets have actually fallen more than the lower quality assets as holders have been forced to sell “what they can” rather than “what they want to” given the illiquidity in certain segments of the market. There will be some generational opportunities in this space in the coming months, but trying to catch falling knives is a dangerous sport and the best strategy is to let the knife hit the ground, bounce around a bit, come to rest and then go pick it up by the handle (lose fewer fingers that way).

Commodity markets in Q4 were, in a word, ugly, as investors decided that the Fed was serious about raising rates in December and that the Dollar therefore had to strengthen (contrary to the historical evidence that the Dollar peaks when the Fed raises rates). We wrote last quarter that *“much of the discussion in the commodities markets focuses on the impact of the strong Dollar and thus the consensus belief that the Fed would raise rates in September should have led to a much stronger Dollar and lower commodity prices.”* The most confusing thing about Q3 was that when the Fed decided not to raise rates in September, the Dollar essentially didn't move, but commodities got crushed anyway. In Q4, commodities got crushed again with GSCI down (16.6%), but at least this time there was some semblance of a Dollar move, as DXY was up 2.5%. A smallish move in the Dollar (in theory) shouldn't have produced double digit losses in commodities, but continued fears of a hard landing in China (despite no real evidence, but lots of conjecture), a slowdown in developed markets and even more rapid deterioration in growth in emerging markets led to continued selling of commodities. There is one more potential reason for the commodity crush in the past year, which is that there are increasingly loud rumors about one (or more) of the big commodity trading houses (Glencore, Trafigura, Noble Group, Mercuria, and

Vitol) are on the verge of bankruptcy and are having to liquidate huge inventories of commodities (most notably copper) and those non-economic sales are putting undue pressure on commodity prices. The rising net short positions in the Commitment of Traders (COT) reports lends some credibility to that theory as investors love a good squeeze and the pack of jackals can get very aggressive when they smell blood.

Oil once again made the most dramatic move in Q4, with WTI falling (17.9%) and Brent plunging (23.3%). The spectacular (perhaps short squeeze induced) 25% recovery from Q2 is but a distant memory and YTD returns and now solidly back in Bear Market territory at down (30.5%) and down (36.3%), respectively. Going all the way back to the 2014 peak of \$107.26, the damage is quite extreme; with WTI prices at \$37 to end the year, the peak-to-trough return is an extraordinary (65.5%). Given the severe moves in oil in 2015, we wrote last quarter that *“it makes sense to revisit again our Q4 2014 commentary where we wrote “there have been lots of pundits, media personalities and oil executives calling a bottom in oil since the mid-70s (quite unsuccessfully obviously as we sit at \$48...) and there is unanimity in the investment community that there will be a sharp bounce in oil prices this year.”* We have said on many occasions that there were simply too many bottom callers for there to be a bottom and we also reiterated what we said in our 10 Surprises from last January, *“that there was not one Wall Street analyst that had a year-end price target for WTI Crude Oil below \$60 and that most of the public E&P companies were still discounting \$70 oil prices.”* The problem with all these forecasts in our mind was that they collectively seemed to be missing (not sure why, as it seems pretty clear) that this is a Supply Shock, not a Demand Shock, and history tells us that prices tend to stay #Lower4Longer after the former and have more of a V-Bottom in the latter. Based on the views of our favorite energy managers and the commodity experts we talk to through our normal diligence and monitoring activities, we have developed a view that

oil would show continued price weakness into early 2016 (with prices dropping to \$26, so far, so good). In the new 10 Surprises below we highlight our forward-looking perspective for oil markets for the balance of the year.

Contrary to the amount of popular media coverage, there are other commodities besides oil and they were, again, all taken to the proverbial woodshed once again in Q4 for their periodic beatings. Starting with Natural Gas, the big story has been the development of a monster El Niño in the Pacific which has produced well above average winter temperatures in the U.S. just as we thought might happen when we wrote last quarter that *“in October, prices completely collapsed as a warmer fall led to lower Nat Gas usage and we are in danger of reaching the dreaded \$1 handle again.”* Demand for Natural Gas did indeed plummet in Q4 and prices hit the dreaded one-handle, falling (30%) at one point in mid-December to \$1.75, before a short blast of arctic air and some good old-fashioned short squeezing triggered a 33% rally in the last two weeks to leave prices down only (6.6%) for the period. Supply growth continues to completely overwhelm demand growth in Natural Gas as new technologies have revolutionized production in basins like the Marcellus and Utica and prices have been essentially in free fall since 2013. For the year, Natural Gas plunged (22.8%) and peak-to-trough losses are a staggering (62%). Last summer we did an Around the World Webinar titled *The Four Horsemen of the #Growthpocalypse*, and discussed four indicators of a pending U.S. Recession; Copper prices, 10-year Treasury rates, the KOSPI Index (Korean equities) and Oil prices. Dr. Copper (as it has been called for its uncanny ability to predict growth slowdowns) has been one of the best early warning signs of changes in the direction of the economy. In the context of the precipitous decline since 2011 from \$464 to \$213 at year-end (and \$206 as of January 31), just another (8.8%) drop in Q4 seems quite tame, but the continued slide in our favorite colored metal (MCCM has a copper line as part of our logo) seem to be telling markets that the GDP growth story is looking

increasingly challenged. We wrote last quarter that *“Dr. Copper may be in the Infirmary for a while longer”* and there doesn't appear to be any miracle cure available at the moment, so until we get some resolution on the health of the big trading companies, the shorts/Bears may stay in control of copper. Precious metals have been poor performers all year and Q4 was more of the same as Gold fell (4.8%), Silver dropped (4.6%), Platinum slipped (1.7%) and Palladium plunged (13.7%). These declines brought 2015 losses to the ugly quartet of down (10.4%), (11.9%), (26.2%) and (29.4%), respectively. Finally, Agricultural commodities have been quite volatile due to weather, growth and Dollar concerns, and Wheat, Soybeans and Corn fell (9.5%), (3.7%) and (10%), respectively, in Q4 to add to their Q3 plunge of (19.9%), (10.7%) and (10.5%), bringing YTD losses to (24.1%), (14.8%) and (16.4%). Given the extreme volatility in the Ags this year, what we wrote last quarter applies again *“the grains might be considered “untradeable” and we have spent very little time in this area as the wild gyrations related to changing weather forecasts and production surprises have not lent themselves to solid fundamental analysis. Perhaps these markets will revert back to a more consistent trend following pattern, but until then, we will leave them to those with higher levels of short-term trading acumen.”* The most important factor to watch in commodities over the past year has been the Dollar and the consistent strength in anticipation of a Fed rate increase. When QEen Janet channeled her inner Dove and didn't raise rates in June and September there were short respites in the Dollar up, commodities down trend, but in the end, Lucy came out in December, hiked Fed Funds and left these Charlie Brown assets flat on their back. We anticipated this in the last letter, saying *“there could be some continued Dollar strength so the commodity headwind would not subside quite yet, but all cycles turn and given the decimation across the commodity complex, some of the moves off the eventual bottom will create tremendous investment opportunities,”* and we have turned that view into one of the 10 Surprises for 2016 (#9) below as eventually there is

always one truism in commodity markets, the cure for low (high) prices is low (high) prices. It turns out 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 upwards.

Throughout my career I have always been amazed at the level of negativity in the media toward hedge funds and hedge fund managers. I could never reconcile why, given the substantial outperformance of hedged strategies over long-only over the long-term, there was always a negative slant in the media. It took a young journalism student at UNC to explain it to me years ago. She asked two simple questions; 1) “if you are going to write a story to sell papers, do you write a positive story or a negative story?” and 2) “if you are going to write a negative story (answer to question #1), are you going to write it about your largest paid advertisers (mutual funds), or about people who by law can’t advertise?” Bingo, we had the answer. The second eureka moment came when a friend and I were talking about a particularly vicious attack on a famous manager, and he said, “People want you to do well, just not that well.” Whenever someone who is successful (in any business) has a stumble, everyone will pile on. The never-ending torrent of negative headlines on hedge funds reached a crescendo in January with a level of unprofessional journalistic license that I had never seen. The headline read “Hedge Funds have worst year since 2011,” but when one actually read the article it turns out that the story was about a very small sub-set of hedge funds (\$300 million out of \$3.2 trillion) that focus on commodities, and while their return was indeed the worst since 2011, the average was down only (5.1%) compared to most commodities (details above) falling (10%) to (40%), so limiting losses to (5%) is actually quite a positive outcome.

The piling on phenomenon was also out in force last year (and into January) as some very high profile hedge fund managers had terrible years (double-digit losses) and there were hundreds of stories pointing

that out (with no reference to the long-term track records which are still quite good). A very important point is that it wasn't the hedge “D” funds that struggled in 2015, but rather the long-only, Activist managers (which arguably shouldn't be called hedge funds, despite charging incentive fees) that suffered from over-concentration in areas like healthcare. Overall, it was not the best year for hedge funds as the HFRX Global Hedge Index was down (0.5%) in Q4 and down (3.6%) for the year, which is modestly below expectations when compared to the loss of (2.4%) in the MSCI ACWI Index. Looking at the U.S., the results in Q4 were a little better (not much, but a little) and the HFRX Equity Hedge Index was up 0.8%, which looks poor relative to the S&P 500 increase of 7%, but when looking at the whole year the HFRX Index was down (2.3%) falling right in between the S&P 500 increase of 1.4% and the R2000 decline of (4.4%). We reiterated something that we wrote in the summer last quarter in saying “*we will continue to make the case for utilizing hedged strategies rather than long-only strategies in the equity markets as we have been for that past year. While we were slightly early, we expect to see the relative performance advantage of hedge funds continue to expand as 2015 winds to a close and the tougher period of 2016 to 2017 begins (in our 2000 to 2002 déjà vu scenario).*” While we were indeed early (as the relative performance was not as strong as expected), we continue to make the case (now even more vehemently) that hedge “D” equity strategies will significantly outperform long-only equities in the quarters and years ahead as #2000.2.0 continues to play out in the economy and markets.

As was the case in Q3, the true pain in hedge fund land in Q4 was felt by the Activist funds as many of the large brand name funds fell another (5%) to (10%) to bring 2015 losses to (20%+). Anyone with exposure to Activist names struggled and The HFRX Event Driven Index fell another (0.5%) for Q4 and underperformed dramatically for the year, falling (6.9%). Our portfolios have mostly avoided the Activist space (because they have little-to-no hedging)

and while we believe that there are a few groups (like ValueAct) that have generated outstanding returns over time, we have not seen the level of Alpha we require to warrant paying hedge fund fees. The built-in Beta of activist strategies has been increasingly apparent (perhaps as more and more money has entered the space) and it has been challenging for managers to operate effectively as true activists in a 24/7 media world. Jumping over to credit, it appears that Uncle Carl Icahn was right when he did his *Danger Ahead* video last fall and the debt markets have been treacherous in the past few months. The HFRX Distressed Index had a very difficult Q4, losing (6%) as credit spreads continued to blow up to levels not seen since the last Recession and we began to see the first wave of bankruptcies and defaults. For the year, the Distressed Index was down (11.1%) and there is likely to be additional tough sledding ahead in 2016. We noted last quarter that, *“one area that was hit particularly hard was the energy space as the collapse in oil prices in Q3 put renewed pressure on overleveraged E&P companies. We warned earlier this year that all the money being raised to chase after the energy debt markets might be premature given our view on oil prices was that they would be #Lower4Longer.”* While there was a very brief rally in these credits in Q2, energy debt crashed Q3 and crashed even harder in Q4 as the reality began to set in for investors that there was simply too much debt raised for marginally economic drilling projects which have now been rendered non-economic by Saudi’s decision to raise production, lower prices and take back market share. We said last quarter (and still believe wholeheartedly) that *“the distressed debt sector will provide some compelling investment opportunities, but not until later in 2016 and 2017,”* so it will be best to wait for these knives to fall completely to the floor before attempting to buy. We read recently that one large firm predicted that the lowest quality bonds will need to yield closer to 25% in order to clear this \$1 trillion market, which is a material difference from the current yield of 15%.

The best (read least bad) performing hedge fund

strategies in Q4 were those that had been written off as irrelevant in a world where consensus believed that Macro and Absolute Return could not produce meaningful returns in a QE juiced Bull Market. We have said on many occasions over the years that, *“the key to long-term wealth creation is the avoidance of losses. If you take care of the losses, the gains take care of themselves.”* Q4 was clearly a positive one for the markets, but the end of the quarter was less robust and there were many signs that these words would be very important in coming quarters. The HFRX Absolute Return Index managed a 0.3% gain for the quarter, which brought YTD returns to a positive 2.9% (more than double the S&P 500 return). Those gains are nothing to write home about, but given how Absolute Return strategies (Merger Arb, Market Neutral) have been fighting a brisk headwind of Zero Interest Rate Policy, the generation of Alpha during an inhospitable environment is noteworthy. The true standout performer on 2016 was Merger Arbitrage as the HFRX Merger Arb Index was up 3.4% for Q4 and up a very solid 8.4% for 2015 as the lack of top line growth forced companies to grow through acquisition and M&A activity hit new record levels. Making a little bit of money each month and avoiding big losses has been the secret to the success of the Absolute Return strategies over the past year. Importantly, should the #2000.2.0 scenario play out in the coming years, we should recall that equity investors lost (40%) over the 2000 to 2002 period while Absolute Return investors made nearly 20%. When we do the math on that scenario an investor ends up with twice the wealth at the end of the period (\$120 instead of \$60 for every \$100 invested). In Macro, headlines were worse than the results and the HFRX Macro/CTA Index was down slightly, falling (0.4%) and was only down (2%) for the year (if you read only the headlines you might think Macro was down (20%) or more). With global equities down (2.4%) for the year, these are acceptable returns and, more importantly, the very low correlation of Macro returns to traditional assets is an attractive feature of these strategies, which never makes the headlines. Macro funds provide a great counter balance to portfolios as they have historically

provided very strong protection during difficult markets (best example was in 2008), which may be highly prized in the New Year.

We continue to believe that one of the best portfolio moves today is to reduce traditional fixed income exposure (except for long bonds which people should hold as a Deflation hedge) and replace that exposure with hedge funds. The primary purpose for bonds in a portfolio is to offset the volatility of equities, which are required to generate significant real returns. In the current environment, fixed income is unlikely to provide adequate return to warrant their inclusion for risk reduction purposes when a diversified basket of hedge fund strategies can provide similar diversification benefits with significantly higher expected returns. In an overvalued, volatile world, Alpha will outperform Beta and we would expect that to be the case in the coming years. The challenge is finding managers with good security selection Alpha, as they will generate consistent, strong returns, even in a difficult investing environment. Perhaps a greater challenge is managing through periods when the worst companies will actually outperform the best companies (when Central Bank liquidity artificially inflates prices like from 1995-2000 and again from 2009-2014) as during these periods, investing in hedge fund appears to be a really bad idea. In fact, toward the end of those periods, it seems like an awful idea. As is usually the case in investing, that is precisely the time when it is the most critical to increase exposure to the strategies (despite the urge to reduce). We can make a compelling case that long/short investing is a superior strategy to manage equities in all environments, but understanding the reticence of some to have hedge funds as their core investments, investors should increase exposure to hedge “D” strategies when valuations are high and growth prospects are diminishing (like they are today).

Overall, Q4 was a tale a two periods, the euphoric October rally in risk assets after the decision by the Fed not to raise rates in September and the emergence of aversion toward risk assets after the Fed actually did

raise rates in December. Investors became increasingly nervous as the quarter progressed and December returns gave a little glimpse over the edge of the ski slope that lay ahead in the New Year. Looking at the whole year, after all the roller coaster volatility during 2015 the ending point was not much different from the beginning point in most developed markets equity and fixed income markets. The same could not be said for the emerging markets, which experienced dramatic losses, much of which came from currency losses, the result of a rising U.S. Dollar and the continued rout in the Commodities markets. The performance at Morgan Creek was mixed in Q4 as our hedged positioning limited our participation in the October melt-up. In conclusion, as we look toward the New Year, perhaps the most important theme is what we have stated in past letters, *“we believe that the 2015 to 2017 investment environment will be very similar to the 2000 to 2002 environment and that successfully navigating these challenging times will require an alternative flight plan to the traditional portfolio model.”* 2015 was very similar to 2000 (what turned out to be the calm before the storm) and we expect those similarities to accelerate in the next two years.

MARKET OUTLOOK

To open this section we want to reprint a big section (next three paragraphs) from the opening of the Q3 letter as after reading it again we think there is some possibility that a similar situation to the one described could be unfolding (in fact, our Surprise #5 has eerie similarity). What we are not saying is that precisely the same series of events will occur and lead to a full-fledged panic, but given the similarities between then and now, particularly with the role of the commodity markets (copper) and the leverage in the banking system (back then in the U.S., today in Europe), it makes sense to at least consider what could happen. There is no question that the financial markets are deeper and more complex today (both good and bad) and that the 1907 events resulted in the creation of the Central Banks, which at least in theory were designed

to protect us from the actual run on the bank that occurred at the Knickerbocker Trust. The ending line of the section is critical in that financial systems are based on faith and trust and when those are impaired things can get a lot worse, a lot faster, than most participants would anticipate. Normally we italicize excerpts but given the length of this segment, we will leave in normal font.

From *A.W. Jones Was Right: Time to Get Hedged*: 1906 was a tumultuous year in the U.S. financial markets as the DJIA had peaked in January and had been locked in a modest correction for most of the year, exacerbated by the impact of the great San Francisco earthquake in April. Stocks had fallen (18%) by summer, but had recovered half of the losses as the October baseball classic began. In July, the Hepburn Act had been passed which gave the Interstate Commerce Commission the right to regulate railroad pricing (sound eerily familiar to all the recent jawboning about drug price controls) and railroad stocks declined rapidly leading to another (17%) decline from September through March of 1907 (referred to as the Rich Man's Panic). Many stocks began to decline, but securities related to commodity related businesses fell even more rapidly as they had been used as collateral for lending by the rapidly expanding National Trust business. These non-Bank lenders had seen explosive growth in the early 1900s, fueled by prominent members of the New York financial circles who used the Trusts to expand leverage on their equity holdings. One trust in particular, Knickerbocker Trust, became the namesake of the Panic of 1907 (Knickerbocker Panic) that would nearly take down the U.S. financial system one year hence. Earlier in the 1906, Augustus Heinze (a copper magnate from Butte, Montana) had moved to NYC and formed a relationship with notorious banker Charles M. Morse. Heinze and his brother, Otto, had a plan to corner the copper market through their holding company, United Copper and went with Morse to Knickerbocker Trust in search of financing. Charles T. Barney (the son-in-law of famous financier William Collins Whitney) had built Knickerbocker to

the 3rd largest Trust in NYC and developed broad relationships with operators like Morse and Heinze. Although Barney declined to lend into the Heinze brothers plan, Otto pushed ahead with the plan and began to buy shares in United Copper to try and squeeze the shorts. While the initial squeeze worked, unfortunately, Otto underestimated the depth of market and United stock turned down hard, falling from a peak of \$60 to \$10 from October 14th to the 16th and the Heinze brothers were wiped out.

The initial response to the collapse of United Copper was limited to the bankruptcy of a brokerage firm and a Montana bank controlled by the Heinze brothers, but slowly began to spread to banks and Trusts that had lent money to the scheme, or where the Heines or Morse had affiliations. These financial institutions began to experience "Runs" where depositors rushed to withdraw their money in fear of mounting losses, as the leveraged transactions were unwound. The contagion began to spread more quickly the following week and the Board of Knickerbocker Trust actually forced Barney to resign due to his associations with Morse and the Heines on October 18th and J.P. Morgan Bank pulled their support as clearing house resulting in a full-fledged bank run that forced Knickerbocker into insolvency. Over the course of the next few days a wave of Trust defaults occurred culminating in a run at the Trust Company of America and on October 22nd the president of the TCoA made a call to J.P. Morgan himself for help. Morgan conferred with the two other large banks in NYC and the Secretary of the Treasury and declared "*this is the place to stop the trouble then.*" Morgan then convened the presidents of the remaining Trusts and organized a group of loans to shore up the balance sheet. The Treasury deposited \$25 million into a number of banks and John D. Rockefeller deposited \$10 million into National City Bank (today Citibank). Finally, Rockefeller (the richest man in America) called the Associated Press and issued a statement that he would pledge half his wealth to "*maintain America's credit.*" However, despite the cash infusions, banks were reluctant to lend and the

regional stock exchanges began to close as credit disappeared. The NYSE was on the verge of closure on October 24th when Morgan told Ransom Thomas that an early closure of the Exchange would be catastrophic and again summoned the bank presidents and raised \$23 million in ten minutes to keep the NYSE open. One of the challenges at the time was that there was no Central Bank to infuse liquidity into the system so the Treasury and the City of New York had to step in to provide a backstop to restore confidence. With the New York Clearing House issuing \$100 million of loan certificates for the banks to trade a sense of order was restored by the following week.

Unfortunately, while the Trust Panic had been quelled, there was imminent danger of a number of bankruptcies, primarily resulting from excessive lending by brokerage firms against commodity related businesses like Tennessee Coal, Iron & Railroad Company. The economy had also slipped into a severe Recession in May of 1907 that would last into 1908 and the stock market fell (50%) from the peak in early 1906. During the last days of the crisis there were a number of events that led to a rapid consolidation of economic power across a small number of financial elite. After consolidating control of the remaining Trust companies in J.P. Morgan Bank, U.S. Steel (controlled by J.P. Morgan personally) was allowed to take over TC&I despite significant anti-trust concerns. As the crisis eased in the following year, Senator Nelson Aldrich, father-in-law of John D. Rockefeller, Jr., established and chaired a Federal Commission to investigate the causes of the Panic of 1907 and propose future solutions. Senator Aldrich spent two years traveling to Europe to study their Central Bank model and upon returning convened a secret meeting of the nation's leading financiers at the Jekyll Island Club in Georgia (ironic name for the hatching of what has become such a controversial institution) to help draft legislation that led to the creation of the Federal Reserve System. The report of the Commission was delivered in January 1911 and after nearly two years of heated debate in

Congress the Federal Reserve Act was passed on December 23, 1913. Notably, during the process, J.P. Morgan was summoned to testify to the Pujo Committee in 1912, which was investigating the role of the "Money Trust" (the powerful group at the center of the Panic of 1907) and had the following conversation with special counsel Samuel Untermyer:

Untermyer: "Is not commercial credit based primarily upon money or property?"

Morgan: "No, sir. The first thing is character."

Untermyer: "Before money or property?"

Morgan: "Before money or anything else. Money cannot buy it. A man I do not trust could not get money from me on all the bonds in Christendom."

The essential message from this exchange is that financial systems are based on a very ephemeral thing, trust, and the loss of that trust, can happen swiftly and have very significant consequences.

When credit becomes abundant and the cost of capital plunges, increasingly poor collateral is taken against loans. The real danger lies in the risk that an adjustment in the price of that collateral leads to margin calls and an unexpected unwinding of leverage. The deleveraging can quickly become disorderly when the system is too interconnected. We have seen this scenario play out many times over the last century, most recently during the Tech/Telecom bust in 2001-2002 and during the Global Financial crisis in 2007-2008. In 2001, it was "square inch real estate" (fiber optic cable) and in 2007 it was subprime mortgages. In the most current debt boom it was commodities again (primarily copper and oil) that became the collateral for explosive lending in the U.S. (shale oil & gas), China (copper) and Europe (commodity trading companies). Credit booms eventually lead to credit busts and we have heard warnings from some of the best investors in the world, including Carl Icahn's infamous video released last year entitled *Danger Ahead*, which discussed the impending perils of high yield debt (much of it backed by commodities). Because of these concerns (among

others) we wrote last quarter that *“we have been leaning toward the cautious side since late last year when we wrote Highway to the Danger Zone as we saw some of the brightest investors in the world getting increasingly more defensive. George Soros, Julian Robertson, Seth Klarman, John Burbank, Russell Clark and a number of others were moving to more hedged positions and a few of them were even moving to net short positions.”*

We began saying last April that we are in a period where it would eventually pay to be hedged and we went into great detail in the third quarter letter about A.W. Jones’ invention of the modern hedge fund and made the case for why he was “Right” and that it was indeed time to get hedged. The plunge in the markets during the first six weeks on 2016 have given us a glimpse of what might lie ahead should the next two years play out like 2001 to 2002, but there is still a lot of doubt in the marketplace about the usefulness of hedge funds. We have seen this movie before. Whenever there is an ebullient period in the markets (like 1995-2000 or 2003-2008), investors collectively decide that hedging is no longer important (right about the time they are going to need it most). We wrote last quarter that even A.W. Jones admitted to getting caught up in the euphoria of Nifty Fifty era as stocks soared to new heights every day, *“In a turn of phrase that was nearly heretical, Jones said **“I began to wonder whether our hedging strategies, which had always been aimed at softening the effects of a potential market decline, but which held back our gains in bull markets, might not have been misguided; perhaps it would have been smarter to have run at full risk all the time, thus taking maximum advantage of the general upward trend of the market.”** Another manager referenced in the article, John Hartwell (who worked for a time for Jones), whose short-selling experience was quite extensive, summed up the challenge of being a hedged equity manager in a runaway bull market in saying **“hedging is vastly overrated as a concept. People argue that there is psychological comfort in having a short position. I used to believe it, but I don’t***

any more. I stopped believing it after we got bloody and beaten from short selling.” If we disguised the names, one could pass these words off as having been written in the past year, as there have been myriad articles and papers questioning the value (and perhaps the sanity) of following a hedged strategy. In fact, the largest pension fund in the U.S., CalPERS, decided to liquidate its hedge fund portfolio (which gives us even more confidence that hedge funds will outperform in the coming years).

Another reason to embrace the hedged approach to investing today is that the structure itself allows investors to press winners, both long and short, which takes advantage of the Reflexive nature of price momentum. We wrote last time that Jim Grant made a compelling observation in an article in 1998 entitled *The Missing “D”*, and said, *“the model protects against overall market movement, but against psychology too, as one must find shorts in rising markets and find longs in falling markets!”* The great insight here is that similar to John Burbank’s famous saying *“Price is a Liar,”* most superior investment opportunities arise by taking the opposing view of the current price of a security, focusing on the fundamentals and having the courage to break away from the herd to take a contrarian position. We also wrote that, *“Jones also makes the point that **“Some people are not congenitally equipped to sell short. It goes against their psychological makeup.”** Most people are optimistic by nature and they want to focus on companies with positive stories, rapid growth, expanding profits and rising stock prices. Who wants to traffic in companies with bad business models, shrinking markets, declining profits and falling stock prices? Investors who want to play in a less crowded sandbox and have a greater ability to gain an analytical edge, that’s who. In reflecting on the challenges of short selling, Jones said **“I have never known a speculator who sold short and didn’t hope to make money on it.”*** In the markets, gains usually happen slowly, and losses usually happen quickly, and therefore the average bull market is much longer than the average bear market (about five times longer at 97

months versus 18 months) so it is even more important to always be looking for the long opportunities during the brief corrective periods. To reiterate a point we have discussed in prior letters, *“the essential problem that we highlighted last quarter is that when it comes to bubbles and crises, you can be a few hours early, but you can’t be one minute late.”* We believe strongly that a superior solution is to follow A.W. Jones, to always be hedged and benefit from the superior methodology to gain exposure to the equity markets. The benefit of substituting long/short for long-only is that over time you get equivalent (or even greater) return and all you have to give up is volatility and risk. Most importantly, lower volatility removes the emotional roller coaster that causes average investors to sell at the bottom (crystalizing the loss) and impair the power of compounding over time.

Normally we would stop here and take our usual Around the World Tour to look at the most compelling investment opportunities today. However, we have the luxury of having just completed our 10 Surprises ATWWY Webinar and our overall views are covered quite well across the Surprises outlined below. While they are not necessarily predictions, we have offered commentary with each one that gives a sense for where we believe the opportunities align more with the consensus or with the Variant Perception. Our overall Market Outlook is for a global investing terrain that is rated Double Black Diamond EX (Experts Only), where the primary message is that it is time to be hedged. Just like in other challenging times, there are compelling opportunities all over the globe. The rising risks to the global economy call for a shift toward a portfolio dominated by strategies (and positions) that favor Alpha over Beta, Manager Skill over Passive Indexing & ETFs and those that capture illiquidity premiums rather than relying on rising public market valuations. There are a large number of great organizations like GMO, Research Affiliates, AQR and even Vanguard saying that the traditional 70/30 stock/bond/cash model will not return more than low single-digits over

the coming decade – returns that will clearly not meet the needs of institutions, wealthy families and individuals. We clearly need a better trail map. We have labeled this environment #2000.2.0 (2015 = 2000, 2016 = 2001, 2017 = 2002) and, just like in 2001, there are plenty of places to explore where solid returns can be found but they require skiing a little “off piste,” beyond the groomed trails of traditional investments and venturing into the backcountry of non-traditional and alternative strategies. For most investors, like most skiers who encounter the Experts Only trail marker, the right decision today is to head back to the lodge, move to the safety of hedged equity strategies and raise cash to have dry powder to deploy when the environment is more hospitable. There will be another snowfall (correction) that fills in the deep ruts in the mogul fields of the capital markets, but like predicting the weather, knowing precisely when is challenging. The best thing to do when confronted with an Experts Only environment is to leave the investing to the experts, those hedge funds and private investment firms who make schussing down a 60 degree, mogul filled, chute look like they are carving turns on a corduroy bunny hill.

TEN SURPRISES FOR 2016

Our January ATWWY Webinar was entitled “Channeling Byron: 10 Potential Surprises for 2016” (with a nod to Byron Wien, the former Morgan Stanley Strategist who originated the annual 10 Surprises idea). When talking about Surprises it is important to clarify that Surprises are intentionally non-consensus ideas and have some reasonable probability of not occurring (they are not necessarily predictions). The unlikely nature of a true Surprise fits in perfectly with the famous Soros quote about how meaningful returns are made by *“discounting the expected and betting on the unexpected.”* Michael Steinhardt was famous for saying that *“we made all our big returns from Variant Perceptions that turned out to be right.”* To his point, the definition of a Surprise is a Variant Perception (an idea that is materially different from the Consensus) that we

believe has a better than 50% chance of occurring in the current year. The key point here is that a Variant Perception must be *materially* different than consensus to be valuable. One other important point to be mindful of is a year is a long time, things can change (sometimes dramatically) and we need to remember the wisdom of John Maynard Keynes who famously quipped, “*when the facts change, I change my mind, what do you do, sir?*” We will remain vigilant during the year to track the progress of each of these Surprises and look for opportunities to capitalize on them in the portfolios, but we will also be ready to change our minds (and our positioning), should the facts change.

Surprise #1: There Goes the Boom...

Despite massive Central Bank stimulus programs around the world, economic growth continues to surprise to the downside as the rising costs of aging populations weighs on the Developed Markets. One (or more) of the U.S., Europe and Japan slip into Recession and global interest rates continue to plumb new lows.

Global economic growth has slipped over the past year, but consensus continues to be that a growth recovery is “just around the corner” and the Pundits continue to forecast rising growth in the developed world despite the headwinds of the Killer D’s (Demographics, Debt, Deflation). An interesting development this year is that the 2016 forecasts from the Economist are, for the first time in many years, not universally Bullish. While the majority of the Economist forecasts are for a YoY decline in GDP growth, none of their forecasts call for a Recession. Developed Markets growth has been decelerating for over a decade and there appears to be a secular trend downward as the pressures of aging populations have seemingly become a larger drag than can be reversed by Monetary and Fiscal stimulus. One of the most worrisome signs is that global trade is collapsing and there has been a very strong historical correlation between global trade and global GDP (makes sense that it would be the case). Another worrisome

indicator is that the IMF calculates annually the Recession risks of each major market and all of those probabilities have increased in 2016 (granted none of the percentages are above 50%). Finally, the Bloomberg Economic Conditions Index has turned down in both the U.S. and Europe (and is actually negative in Europe).

Looking at global PMIs (which are a consistently good predictor of future global growth), the European and Japanese economies are still in expansion mode (PMI > 50), while the U.S. has collapsed to a contractionary level (PMI < 50). Another U.S. indicator that is pointing down is the ISM Manufacturing Index, which has fallen to 48.2 and that level correlates to a 75% chance of Recession within the next year. The most troubling indicator for the U.S., however, is that YoY Forward EPS of the S&P 500 has turned negative and when that has occurred in the past there has been a 100% probability of Recession within the following year. The high yield bond markets are putting their two cents in as well and current Option Adjusted Spreads indicate a 50% chance of a Recession in the next twelve months (also predicting defaults rising to 5%+ which bodes well for Surprise #10 below). Looking directly at GDP, the Q4 first estimate came in at 0.7%, a very anemic level and one that is likely to be revised downward in the coming months. Additionally, Q1 has been seasonally weak and Wall Street estimates for Q1 GDP have been plummeting in recent weeks. An important point to remember is that there doesn’t have to be two consecutive negative quarters of GDP growth to have a Recession. In 2001, Q1 & Q3 were negative and there was still a Recession (and a really nasty Bear Market, more on that in Surprise #6 below).

Over in Europe, the Leading Economic Indicators are falling rapidly and are currently pointing to European GDP growth falling back to zero. It wouldn’t take much to push that growth negative when running so close to flat. The recent economic data has been so poor that the ECB has reduced their own estimates of European GDP growth and while their numbers are

still positive, we know from history that they (like the Fed) are always far too optimistic on their growth forecasts. All that said, perhaps the most important indicator to watch is the huge percentage of European government bonds that trade at a negative interest rate. Historically, high rates are a sign of economic strength and low rates are a sign of economic weakness. If low rates signal economic weakness, negative rates must signal something worse and let's hope that it is something short of economic collapse. The second half of this Surprise is that global interest rates continue to plumb new lows and negative rates in Europe (and now Japan) would clearly qualify for plumbing new lows. Interest rates have a very high correlation with nominal GDP growth and with growth slowing in all markets there will be continued pressure on rates until such time as one of the governmental extraordinary measures actually has a positive impact on growth. So far, QE & Project Twist in the U.S. and QQE & purchases of REITs and ETFs in Japan have not seemed to deliver on that front.

Very low rates on long-term government bonds all around the world are signs that investors fear Deflation much more than Inflation and also may indicate that investors are beginning to lose faith in Central Banks' omniscience and omnipotence and have begun to make Policy Errors. While the early signs point to a tailwind for this Surprise in 2016, there are two potential spoilers that indicate how despite the slowing in global economies, there is not a high likelihood of Recession in the near term. First, lower oil prices normally are linked to Recessions, but that is because the lower oil prices have usually the result of falling demand. In an oil supply shock, prices fall because supply exceeds demand (without demand shrinkage) and those lower prices actually become a tailwind for consumers and GDP growth actually accelerates. This is the scenario that played out in 1986 (last Saudi supply shock) so it is possible that the slowdown we are seeing is a mid-cycle correction and not the beginnings of a Recession. Secondly, the economy Bulls cling to the fact that there has not been an inversion in the yield curve, so

there can't be a Recession. The logic of an inverted yield curve makes sense in normal times (the Fed pushed up short rates to slow the economy), but given that the short end of the curve has been artificially manipulated lower during the ZIRP period we can make a case that if Fed Funds had been allowed to be at its long-term average (equal to nominal GDP, which is 3.5%), the yield curve would be quite inverted with 30 year rates at 2.5% and this Recession warning would be blinking bright amber.

Surprise #2: Two Wrongs Won't Make it Right.

After trying to flex their muscles by raising rates in December, the Fed realizes the (policy) error of their ways, acknowledges that they missed the window to raise rates in 2013 and puts further increases to the Fed Funds rate on hold for 2016. In a total about face, discussions of QE IV begin in the 2H of the year as economic growth continues to disappoint.

The Fed Open Market Committee stated very clearly in a recent meeting a summary of the dual mandate of the Federal Reserve and when they should raise interest rates. "The committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen **further improvement in the labor market and is reasonably confident that inflation will move back to its two percent objective** over the medium term." So, let's take a look at these two criteria and determine if this is an appropriate time for the Fed to raise rates. On the first objective of employment, the Fed can raise a Mission Accomplished banner as the U-3 and the U-6 unemployment rates have hit levels normally associated with full employment (in fact they are at levels where Recessions normally start). On the second objective of Inflation, it's not even close. The PCE (Personal Consumption Expenditure Index, the Fed's chosen Inflation gauge) is stuck in a downtrend and currently sits at 0.4%, well below the Fed's 2% target level. Even the Core PCE (which excludes food & energy) is well below the Fed target at 1.3%. Historically, the Fed had never (read that again, *never*) raised rates when the PCE was below 2%, so

this is the first part of our case for why QE Janet's decision to turn into Lucy Van Pelt and pull the football away in December was a Policy Error. The tougher thing to understand related to raising rates and Inflation is that five-year inflation expectations have been a good indicator of Deflation fears and have been a good signal for the Fed to do QE. When expectations fell to 1.2% in 2010, the Fed did QE II and when they fell back to 1.5% in 2011, the Fed did QE III. Today, expectations are back to a record low 1.1% and the Fed wants to raise rates? Does not compute.

One of the most interesting things about the Fed's QE Program is that it has not had any impact on GDP growth despite an expansion of the Fed balance sheet by an astonishing \$3.7 trillion. One would think that some portion of that huge sum of money (remember that \$1 trillion is a dollar a second for 31,710 years) would have found its way in to the real economy, but it has simply languished on commercial bank balance sheets in the form of excess reserves and monetary velocity has collapsed. That said, all that liquidity did find its way someplace as banks (and governments) sold huge amounts of Treasuries to Uncle Ben and Auntie Janet and turned around and bought equities with the proceeds, resulting in the second best five-year period in U.S. equity market history from 2009 to 2014. So if there is a secret (well, maybe not so secret) third objective of the Fed to raise equity markets (to create a Wealth Effect), then they can raise a Mission Accomplished banner for that one as well. However, there is one little glitch in that system, when there has been no QE over the past six years, there has been no increase in equity markets. The Fed put a halt to QE III in October of 2014 and the S&P 500 has lost (4%) since then.

Within a few days of the cessation of QE, the chatter began about when the Fed would finally begin to "normalize" interest rates. The consensus was that it would be in March 2015 – didn't happen. Then the consensus was sure it would happen in June – didn't happen. Then the consensus was absolutely sure it

would happen in September – didn't happen. You get the picture. This was actually one of our Surprises from last year that the Fed (contrary to the consensus) would not raise rates in 2015. The Fed finally did raise the Fed Funds rate by 25 basis points in December and, while technically that was in 2015, we still think we got that Surprise right given the strength of the consensus for earlier (eleven and a half months trumps two weeks). What is most interesting, though, is that all throughout 2015, despite the fact that QE Janet kept "disappointing" markets by not raising, the market actually did the dirty work for her by tightening liquidity as if a rate increase of almost 100 basis points had already happened. Markets do a pretty good job front-running Central Banks (see how European equity markets rose before the ECB actually did QE and fell afterwards) and the Bond Vigilantes did their very best to get positioned ahead of what they expected (based on the Fed jawboning) to be a string of rate increases over the coming year. The problem arises now that the markets did their job too well and the GS Financial Conditions Index (a measure of financial liquidity in the markets) is at levels seen in 2001 and 2008 that call for Easing, not more tightening.

Arguably, the Fed is behind the curve (yet again) and they missed their window to raise rates in 2013 when inflation expectations and employment were adequate to move rates to a level that would have "reloaded" the gun to allow them to ease at the next slow down (which may be occurring as we type...). The Fed Funds Futures curve indicates that the markets doubt that the Fed will follow through with its communication of four rate increases in 2016. History shows us that the Fed Funds rate has approximated the nominal GDP growth rate, and the ten-year Treasury yield, as they are usually around the same level during normal economic environments. However, given that Treasury yields have already begun to decline again as fears of Deflation have resurfaced, there is not a lot of room for the Fed to raise rates before they would invert the yield curve even if they do decide to go ahead with the ill-advised

rate increases. One of the biggest challenges for the Fed is how to justify raising rates during an economic slowdown. The Fed did that once before many years ago (in 1937 to be precise) and it didn't work out so well (understatement) and that decision turned a nascent recovery into the Great Depression. Finally, there are some who would argue that the Fed (and other CBs) has lost control and it doesn't really matter what they do as the Killer Ds of bad Demographics, excess Debt and rising Deflation risks will plunge the economy into a deep Recession/Depression no matter what they do. So with all of the economic arguments stacked against her, we expect Ms. Yellen to channel her inner Dove and shelve the plans for further rate hikes this year. Furthermore, the last part of this Surprise is that the Fed will realize they have no alternative than to throw the Hail Mary and start QE IV this fall as the evidence of an economic slowdown becomes increasingly apparent and the stress in the equity markets (which always anticipate such events) proves too much to maintain the normalization course (particularly in an election year).

Surprise #3: Save Us Kuroda-san. You're Our Only Hope.

BOJ Governor Kuroda surprises everyone at the end of the Japan Fiscal Year and pulls out another bazooka to weaken the Yen and stimulate the economy and markets. The Yen falls dramatically, with USDJPY hitting 135. Corporate profits surge to new record highs and Japanese equities rally hard, finishing the year at 21,000.

Since Prime Minister Abe was elected in November of 2012, the Japanese equity market (in local currency) has been the best performing major market in the world, beating the S&P 500 and the Euro Stoxx 50 in Europe thanks to an aggressive reform agenda nicknamed Abenomics. The Abenomics plan was simple, weaken the Yen (to boost Japan Inc. profits and raise inflation), increase fiscal spending to boost growth and reform regulations to encourage investment and innovation. There are many who have said that Japan had no choice but to attempt these non

-traditional strategies given their massive debt load and their chronic inability to break the back of deflation over the past three decades. The key to the success of the plan was the cooperation of the central government and the Bank of Japan and things were going along swimmingly for the past three years. The BOJ had implemented an aggressive plan of Quantitative and Qualitative Easing (QQE) and had expanded their balance sheet to an awe-inspiring 75% of GDP which resulted in a doubling of the monetary base and a dramatic weakening of the USDJPY from 78 to 125 (a 38% devaluation). This move alone had a dramatic impact on their equity and debt markets as both the Nikkei and Japanese Government Bonds (JGBs) rallied. The Nikkei surged from 8,661 to 18,982 (a 119% gain) from Abe-san's election through the end of 2015 and, perhaps even more impressively, the P/E ratio of the equity market actually did not change as corporate profits rose to new record levels.

Many observers of Japan have concluded that even these dramatic measures won't be able to reverse the deflationary mindset in the culture and that the BOJ's effectiveness has been diminishing over time (like the other CBs). The economic data suggests otherwise as CPI has finally moved back to positive and, more importantly, inflation expectations are solidly above 2% (the only major economy where that is true) and appear to be in an upward trend. The equity Bulls will argue that corporate attitudes toward shareholder friendly programs like stock repurchases, mergers, divestitures and extended dividends are clear evidence that the culture is changing in Japan as a result of the new Administration's focus on growth. ROEs have been rising dramatically, not just in the exporters (who are helped by a lower Yen), and the reduction in cross-shareholdings has been unlocking additional value for shareholders. Japan has been labeled the Land of the Rising Stocks over the past couple of years and there has been strong momentum in the equity markets right up until the end of 2015. The core of this Surprise is that Kuroda-san (BOJ Governor) would expand the QQE program in 2016 (much like his famous Halloween treat in 2014) and accelerate

the depreciation of the Yen and stocks would continue their ascent on the heels of that move. There was one potential spoiler to the Surprise, which was that there was a risk that the BOJ already had purchased as many JGBs (and ETFs and REITs) as they could and that there were not another bazooka to fire.

We didn't realize how quickly that spoiler alert would come true. As of this writing, things have clearly changed and the momentum has shifted dramatically to the negative as Kuroda-san did indeed surprise the markets, but in an amazingly negative way. After telling the world that a Negative Interest Rate Policy (NIRP) was off the table during his January briefing, he reversed course and announced a NIRP plan a few days later and triggered a massive run on the bank in both the Yen and the Nikkei. Our idea was for Kuroda-san to fire another bazooka to keep the Abenomics program on track, but instead he seemingly shot himself in the face with the bazooka instead. The Yen has strengthened from 122 to 112 in a matter of weeks and the Nikkei has collapsed from 19,000 to 15,000 (a 21% decline) and has entered Bear Market territory. Needless to say, this Surprise has its work cut out for it and it will take a heroic effort by Kuroda and Abe to turn this around. There is a lot of time left in the year and there will be many twists along the way, but with the turmoil in the global equity markets creating additional demand for Yen as a safe-haven, it will be very difficult to achieve any material weakening of the USDJPY. Additionally, without the tailwind of the declining Yen, foreign investors have been voting with their feet and selling Japanese equities at record levels and there is not enough domestic demand (even with the Pension Funds buying) to halt the decline in stocks.

Surprise #4: Saudi Is Not Fracking Around.

Realizing the end of the Hydrocarbon Era is approaching more rapidly than anticipated, Saudi abdicates their role as swing producer within OPEC and recommits to maximizing their production and grabbing market share. The resumption of Iran oil trading and short-term storage concerns push the

market into steep Contango in Q1 and oil hits a multi-decade low in the 20s, but in the second half of the year the impact of cap-ex cuts and production declines push prices back toward \$50.

Oil has been the topic du jour for the last eighteen months as everyone from Wall Street analysts to television commentators to oil executives and investors have relentlessly tried to call a bottom in prices so they can go Buy The Dip (BTD) in energy stocks and MLPs (which have been destroyed). The need for calling a bottom in prices arises from the complete collapse in pricing since June of 2014 as the debt fueled boom in U.S. oil production finally caused a bust when Saudi Arabia abdicated their role as swing producer on Thanksgiving Day 2014. Historically, when prices got to an extreme, Saudi would increase/cut production to balance the markets and maintain some level of price stability. There are many theories on why the Saudis decided so abruptly to change course, from a desire to punish the Russians for Crimea to punishing the Iranians for political reasons to wanting to bankrupt the U.S. Shale oil industry to worrying that the end of the era of hydrocarbons was approaching faster than anticipated due to rapid advances in alternative energy (solar and wind). Whatever the reason, the decision not to cut production plunged the oil market into chaos and prices collapsed from a peak of \$107 to a low of \$26 and has caused extreme losses in energy equities and MLPs. The decision to effectively disband OPEC and create an every man for himself production glut has created a Supply Shock that resembles the 1986 event that left oil prices depressed for over a decade. The bad news is that over the first year and a half, this decline has been far greater than the 1986 episode as prices have defied the pundits' predictions for a sharp recovery. What the pundits (and banks and economists and investors) seem to have forgotten is that Supply Shocks are dramatically different from Demand Shocks and they don't end with V-bottoms. Part of the problem seems to be a lack of historical memory that shows that during Bear Markets there will always be large surges in prices (on good news or

perceived good news that result in short squeezes), but those surges are quickly erased as the data continues to disappoint in the short-term.

Part of the problem for oil markets is that it is not just Saudi that is not fracking around. Iraq actually increased production last year nearly as much as Saudi, and Iran has said they plan to ramp production up one million bpd once sanctions are lifted. Without a big demand response to the lower prices, the supply glut will actually get worse before it gets better. The International Energy Agency (IEA) recently said that the problem was that the world was again awash in oil and it would take longer than originally forecast for the markets to return to balance. The other problem is that it appears Saudi misjudged that price at which Shale producers in the U.S. would get shut down and domestic production has only fallen marginally (from 9.6 mbpd to 9.2) as many companies had significant hedges in place at much higher prices and the banks have yet to reduce the credit lines of even marginal producers. This has meant that E&P companies are incented to keep producing so long as the incremental production covers the interest expense on the debt. The other development is that the producers have done a good job squeezing costs out of new wells (not great for energy services companies) and in the core basins (like the Permian) the cash cost of production has fallen to \$15 a barrel. That said, much of the hedges begin to roll off in 2016 and if prices were to remain under \$50, U.S. production would decline toward 8.2 mbpd, which would go a long way toward helping to balance the oil markets. One wrinkle here is that much of the debt of the oil companies is not due until 2017, so it is possible for banks to extend and pretend and hope for an increase in oil prices to bail them out (hope is not an investment strategy, it is a four letter word). The last issue is that with all of the cheap storage already full there needs to be a steeper contango in the oil futures curve (spot price below future price) to incent investors to store the excess oil in the more expensive storage (like supertankers). That steep contango is the primary reason this Surprise anticipated that oil would fall into the \$20s in

Q1 before recovering in the second half of the year as cap-ex cuts began to curtail production, and ultimately, supply. The wildcard on the slope of the recovery in the second half of 2016 is the impact of slowing global growth on oil demand (particularly important to watch gasoline demand in China and the U.S.). Weaker than expected demand growth could lead to a #Lower4EvenLonger scenario.

We know that in commodity markets the cure for low/high prices is low/high prices (more on that in Surprise #9 below) and that as prices remain low there is a wave of capital expenditure cuts, large projects get cancelled and the seeds of lower future supply are sown. There will be an increasing number of bankruptcies in the U.S. oil patch and the lack of access to the capital markets (aside from the very best companies) will ultimately lead to lower U.S. production. That lower production coupled with some demand response from lower prices (unless there is a global Recession) could push the markets back into balance in 2017. Markets anticipate and it is likely that oil prices would begin to recover ahead of the actual fundamental improvement and prices could begin to move back toward \$50 in the second half of the year. Add the risk of a geopolitical event (like a Syrian escalation) or a sudden reversal of the OPEC splintering leading to a coordinated cut in production and the balance of risks in oil shifts from further downside to an upside surprise. You always hear the extreme forecasts near the inflection point. When oil was over \$100 in the summer of 2014, there were predictions that it could easily rocket to \$300 and today with oil in the \$20s there are predictions that it could go as low as \$10. In 1998, the *Economist* said the world was awash in oil (same term as the IEA) and that prices would fall from \$11 to \$5 (and could perhaps one day be free). That cover story proved to be the bottom and oil prices peaked nearly thirteen-fold higher in 2008 and ten-fold higher in 2014 (albeit with plenty of volatility). Those same types of headlines are occurring again and it is certainly possible that the risks to the upside are just as significant should the combination of capex cuts and

accelerating depletion rates cause a more rapid decline in supply than is currently the consensus.

Surprise #5: The Black Swan Alights in Europe.

The relentless bear market in commodities since 2011 comes to a head with a messy bankruptcy of one (or more) commodity trading companies (Glencore, Trafigura, Vitol, Nobel Group, and Mercuria). The resulting unwind of complex derivatives positions causes huge losses within the European banks, pushing one or more of them to the brink of insolvency.

Despite a repeat of the Grexit Crisis in early 2015, there was little impact in European markets as the ebullience about the ECB finally finding a way (or promising enough to Chancellor Merkel) to do QE drove equities to big gains in the first half of the year. However, in the summer, the perfect storm of concerns about Deflation in Europe, concerns about China devaluing the RMB and the continuing rout in commodity markets resulted in European equities turning down sharply and surrendering all their early gains. One of the curious developments was that after a very strong start to the year, European banks began to slump very dramatically and actually began to accelerate downward in Q4. In looking closely at what might have triggered the fall, a very interesting correlation appeared between commodity prices (particularly copper) and the bank stocks. Normally a decline in copper prices is an indicator of a potential economic slowdown and there was mounting evidence that the European economy was beginning to lose steam. However, the decline in the price of copper looked more severe than normal and coincidentally the share prices of a number of the large trading firms (listed above) began to collapse and rumors began to fly about liquidations, margin calls and potential bankruptcies. The poster child for this storyline was Glencore, the monster in the industry whose summer 2011 IPO coincided nearly perfectly with the peak in the commodity super-cycle (similar to the Blackstone IPO marking the top of the Global Financial Crisis). Glencore stock went into free fall in

May and fell nearly (80%) through the end of the year. As the collapse unfolded, another rumor began to emerge that a large European bank (later confirmed to be Credit Suisse) could have a very large (rumor was \$100 billion) exposure to Glencore and that if there were a bankruptcy it would threaten the viability of the bank.

Fast forward to the present day and the drawdown in the European banks has accelerated and there are increasing discussions of how broad and deep the losses could be within the banks given their exposures to these (and other) commodity players. The problem with Black Swans is that no one sees them coming, and given how many very smart people we know were actually increasing their exposure to European financials over the past year, this event clearly would qualify for “it is the bullet you don't see that kills you.” To make things worse, a new risk factor has emerged in recent weeks, which is putting even more pressure on the bank stocks. During the 2011 European Crisis the banks issued a new type of security to shore up their balance sheets called Contingent Convertibles (CoCos). Basically, these securities allow the owner to convert to equity at a trailing period price, which serves to protect the owner from dilution in during bad economic environments. The idea was that these hybrid securities were cheaper than equity and in a recovery environment where prices are rising, the risk of hitting the conversion price would be limited and CoCos would act more like debt than equity. Unfortunately, in a falling price environment (like the one we find ourselves in today thanks to the concerns about commodities) these securities can create very large dilution and because they can be redeemed at an increasingly attractive conversion ratio (prices fall, but the conversion price is based on trailing average) and they resemble securities issued in the 2002 U.S. downturn that were (not so affectionately) nicknamed Death Spiral Converts. The issue is playing out in real time and will have significant implications on just how big the Black Swan becomes and how much havoc it might wreak on European equity markets.

Surprise #6: Déjà Vu, Welcome to #2000.2.0.

The U.S. economy and equity markets have entered a challenging period resembling the unwinding of the Tech Bubble from April 2000 to April 2003 and 2016 closely resembles 2001 with the S&P 500 down in the low teens. Economic growth falters, corporate profits fall and equities begin a relentless decline that will last through the end of 2017.

Contrary to popular belief, the Business Cycle has not been eradicated, and despite the best efforts of the Fed to attempt that feat, we have entered the beginning of the end of the current economic expansion and the beginning of the transition to the next Recession. The déjà vu for this Surprise comes from the uncanny resemblance of the current cycle to the cycle from 1995 to 2003. The five-year period leading up through April of 2000 was the best five years in S&P 500 history, fueled by Fed stimulus intended to ward off the expected ill effects of Y2K (when computers would all crash because they didn't have enough digits to handle the year 2000). All the excess liquidity had to go somewhere and it went into stocks and venture capital (the time of the first \$1 billion VC funds) and valuations of the S&P 500 reached levels never before seen (and likely never to be seen again). The financial media trumpeted a new era of permanently higher stocks thanks to the invention of the Internet (the New, New Thing, actually invented in 1969, but finally caught on in late 90s) and investors would pay any price for companies in technology, media and telecom (TMT). All a company had to do was add ".com" to their name and valuations would surge multiple times and traditional valuation metrics (like P/E and P/B) were discarded (too old fashioned to handle the new age technology) and replaced with metrics such as eyeballs and page views. Investing was easy. Just buy the biggest TMT companies (regardless of valuation) and watch your wealth multiply. Even better, just buy an Index Fund because they had to own mostly TMT thanks to capitalization weighting and old-fashioned concepts like hedging and active management were completely disdained. There were record flows into index funds and huge volume of articles on the death

of active management and hedge funds. M&A activity boomed, HY debt issuance soared and companies foolish enough to worry about antiquated concepts like cash flow and profits were relegated to the dustbin. Credit was king and money was cheap and one of my favorite lines about investing came from a Fed Senate briefing when Dr. Greenspan said (perhaps the only thing he said that I agree with) "when the cost of capital goes to zero, the return on capital goes to zero." As prescient as that sentence turned out to be, it was Jeremy Grantham who stirred up the most controversy when he forecast that the S&P 500 would have a negative return of (1.9%) compounded over the ensuing decade. The vitriol about the heresy of such a prediction during the Great Tech Boom was crystalized when my Board Chair at UNC said I was not "allowed to use the letters, G, M, or O in a sentence," ever again when I presented the GMO forecasts at our February 2000 meeting.

The interesting thing about the 2000 to 2002 period is that 2000 was not the worst year for the markets despite being labeled as the "Tech Wreck." While it is true that March 2000 was the peak, after an initial decline, there was a strong summer rally that left the S&P 500 mostly unchanged in September. From that point, the steady decline over the next two and a half years began, but 2000 finished down only (9%) and there was plenty of talk that this was a bottom and that everything would be fine in the New Year. Unfortunately, 2001 turned out to be very different than the Pundits' collective forecast and a Recession (that no one saw coming) began at the end of Q1 and triggered another wave of selling that reached a crescendo after the tragedy of 9/11. The Fed stepped in with more liquidity and the market did actually rally through year-end to finish down (12%). Throughout 2001, economic indicators eroded across the board and when Industrial Production collapsed, corporate profits followed and the markets went into a free fall in April of 2002 (exacerbated by the liquidation of record margin-funded portfolios) that lasted until the Iraq invasion in Q1 of 2003. By the end of 2002, the S&P 500 had fallen (22%) and the

peak-to-trough drawdown over the three years was a very painful (38%), equivalent to the average for declines related to Recessions. The drop in the S&P 500 actually masks the real pain felt in NASDAQ (where most of the TMT stocks were listed), which declined nearly (70%) over the period. Interestingly, the Recession of 2001 was non-traditional in that there were not two consecutive quarterly declines in GDP (Q1 & Q3 were negative) and growth for the year was close to 1%, but the impact of the Recession on equities was large because valuations were so high and because there was so much bad debt related to TMT that had to be restructured and written off. Dr. Greenspan was right (once) that giving free money to companies to build redundant telecom infrastructure would lead to returns of zero for investors. As is usually the case in the period leading up to crises, all the warning signs were there; excessive valuations, excessive debt, very narrow markets and excessive IPOs of companies with no earnings, but all these warnings (and others) were ignored, rationalized away or dismissed as not relevant in the “New Economy” and, again like all good crises, markets hit the wall with no skid marks.

Mark Twain famously quipped that, “History doesn't repeat, but it rhymes” and the similarities between 2000 and #2000.2.0 are quite remarkable. On the economic front, there are a number of indicators that are predicting Recession in 2016 (or 2017), which we highlight above in Surprise #1. We know how equity markets react around Recessions and given how equity markets are normally leading indicators, the softness in the S&P 500 over the past year likely has some predictive power. The most troubling indicator for equity market Bulls has to be the decline in YoY Forward EPS of the S&P 500 which has been 100% accurate in predicting economic downturns when the number turns negative (as it did this past quarter). The Bulls make the case that if you remove the Energy sector then earnings aren't so bad. I am not even sure how to respond to this nonsensical argument. If I didn't have those four double bogeys, I would have shot par. If you don't include your MLP, small cap

and EM holdings, your portfolio was up last year. If you don't count the piece of cheesecake, then you had a healthy dinner. Earnings before bad stuff is just a ridiculous way that investors try to rationalize stupid valuations and make themselves feel better about not having the discipline to step aside and not participate in markets when the current price signals a negative expected future return. If we remove the TMT, then 2000-02 wasn't so bad. If we remove Financials, then 2007-08 wasn't so bad. Just silly. They say you can experience the pain of discipline or experience the pain of regret. Those investors who had no discipline and bought CSCO at \$100 in April of 2000 because all the index funds were buying (they had no choice, they are dumb, meaning they are rule-based, they must buy regardless of price) and because the WSJ said it would be the first \$1 trillion market cap company (it was \$500 billion then) are experiencing the pain of regret today at a market cap of \$127 billion. While valuations in 2015 didn't reach the peaks of 2000, they did register the second highest in history (above 1929 in third place) justified by things like TAM (Total Addressable Market) and Active Users, just updated synonyms for eyeballs and page views and they will look just as silly (with the benefit of hindsight) when we look back at them at the end of #2000.2.0 in April of 2018.

The cyclicity of markets is very consistent over time, interrupted on occasion by extreme measures taken by policy makers, and one of my favorite charts shows how closely correlated the periods of 1995-2000 and 2009-2014 have been. If we create a box on the historical S&P 500 chart, sized as the duration of the uptrend in the 90s by the magnitude of the rise, and then superimpose a similar box over the most recent period (adjusting the height to reflect the same percentage increase starting from a higher level), we see that the end of the Bull Market should have fallen around the end of Q1 last year. Why these cycles go from April to April, I am not certain (perhaps the annual Q1 euphoria of hope springs eternal has to wear off), but symmetry between the two periods is quite clear. We also see evidence from the

Presidential Cycle that supports the correlation with the 2000-2002 period. The data shows how equity market cycle highs occur in years three and four of Presidential terms (2015 or 2016) and Recessions begin in years four and one (2016 or 2017). There were also a couple of very compelling technical analyses from last year that showed a dramatic similarity between 2015 and 2000 that projected the same up and down pattern culminating in around a (10%) loss for the year. When overlaying the actual price action of the S&P 500 on those charts, there is a few weeks lag between the two and if we add the first few weeks of January to the 2015 returns, we get a high, single-digit loss.

Some market wisdom is that “as goes January, so goes the year” and January 2016 was shaping up to be the worst January in market history before a short-covering rally in the last few days pushed the S&P 500 back to a loss of only (5%). The first five days of the year were actually the worst first five days in stock market history and we know that the First Five Days indicator has an uncanny 87% accuracy in predicting the likely direction of the equity markets. Should 2016 keep pace with the #2000.2.0 playbook, the S&P 500 should be down between (12%) and (21%) depending on whether the 2001 analog stands on its own or if we include the residual losses from the first few weeks of January as the 2000 portion. Either way, any negative outcome would be a huge Surprise given that the Wall Street consensus was once again calling for an 8% to 10% gain in the markets in 2016. It seems very unlikely that equity markets will be able to mount a comeback given today’s significant fundamental and technical headwinds. Fundamentally, with margins and earnings rolling over hard, and with 2016 EPS estimates about to cross the 2015 actual number (a YoY decline), it would be an abnormal outcome not to have a negative year in the equity markets. From a technical perspective, the odds are even more negative. The overall market Trend Model is negative (similar to 2000 and 2008) and all of the S&P sectors other than Consumer Staples have negative momentum. The S&P 500 is

below its 200dma and there was just a Dow Theory signal of a Bear Market when the DJIA confirmed the DJ Transports recent lows. The number of companies in the S&P 500 below their 200dma is nearly 75%, which has historically been one of the best indicators for moving to the sidelines and avoiding market downturns. We know that when all these indicators line up like they have in recent quarters, it is best to reduce long equity exposure and switch to hedge “D” equity strategies. During the 2000-2002 period, equity markets declined (38%), yet hedge funds actually rose 10% on average (and many managers did significantly better). The same strategies will be winners during #2000.2.0 and there is still time get hedged, as the really difficult equity market environment is ahead in 2016 and 2017.

Surprise #7: Dragons & Tigers Beat Bears, Oh My!

Emerging Markets divide into two very different groups based on whether they are commodity producers or commodity consumers. Producers (Brazil and Russia) continue to struggle with budget deficits and pervasive currency weakness, while Consumers (China and India) enjoy the tailwinds of lower inflation and higher growth courtesy of lower commodity prices and the Dragon and Tiger markets beat the Bear and finish up for the year.

The drumbeat of negative headlines about Emerging Markets has been deafening in recent years, and given the poor performance of the asset class since 2011, much of the negativity has been warranted. The funny thing is that the headlines in 2011 were actually universally positive and the projections were for continued “decoupling” of EM and DM on the back of the Commodity Super Cycle. Media does a great job reporting what has happened and a less than stellar job predicting what is likely to happen in the future. We are all familiar with the “Cover Jinx” that says when some trend makes the cover of an important magazine, or newspaper (now Blog or Website), that trend is likely just about over. In EM, the famous cover of the Jesus statue in Rio on the cover of the *Economist* trumpeting how Brazil had finally become

the country of the future (right at the top) and the subsequent spoof of the cover showing the statue becoming a rocket headed for a crash landing. There have been countless cover stories about China and India over the years and they predominantly have gotten the timing wrong and a better investment strategy would be to do the opposite of what the covers say. It would be tough to think of a time in recent memory when the media coverage of China (and India to a lesser extent) has been more negative as every day you can read about the imminent economic hard landing, the blow up of the Chinese banking system, the impending devaluation of the RMB or any number of other crises that are about to erupt in the Dragon market. Sometimes it is useful to step away from the avalanche of information that assaults us every time we pick up our smart phone and try to evaluate the actual data before we draw a conclusion (one of the hardest things to do is to wait to reach a conclusion until after we review the facts).

One of the most surprising outcomes in 2015 was that despite the barrage of negativity about China and the massive volatility in the Chinese equity markets, the SHCOMP actually outperformed all the major markets (U.S., Japan and Europe) and crushed the other Emerging Markets which were nearly universally negative (always inconvenient when the facts get in the way of a good story). Even more interesting is that the Leading Economic Indicators ("LEI") for China (and India) are rising while the LEI for the U.S., Europe and Japan are falling (which could explain part of the divergence in performance last year). The LEI for China actually point to rising GDP growth in the coming year, which is in stark contrast to the media and Wall Street consensus that China is collapsing, could be in Recession or even be on the verge of total collapse (a la Japan 1989) depending on which level of negativity one selects to read. Sticking to the facts, we know that EM equities have outperformed DM equities since 2000 although some would argue that the long-term returns are not relevant today because Fed Policy has changed since 2009, which has created and insurmountable

headwind for EM going forward. For EM as a group there could be some credence in that argument. It is true that the countries that are reliant on commodity production and exports (who suffer dual deficits of budget and current account) have struggled since the advent of QE, as their currencies have come under increasing pressure. However, China and India are commodity consumers, not producers, and there is a compelling argument that these Central Bank Programs have given Chindia an advantage by lowering their import/input costs since commodity prices have collapsed. To that end, China will spend \$500 billion less on commodities in 2016 versus just a few years ago and that savings will inure to the benefit of companies and consumers in China (the India number is likely equally meaningful, but was not readily available).

In the long run, economic growth (particularly consumption led economic growth) leads to corporate profits which lead to stock market capitalization, and 2016 is the year of living divergently when looking at China and India relative to the rest of the world. While the developed markets are all mired in low growth environments battling aging demographics and too much debt, China and India are the two fastest growing economies in the world (with India set to surpass China this year) and while the U.S. has its mind set (at least a few of the Fed minds are set...) on tightening liquidity, both China and India continue to ease Monetary and Fiscal Policy to support growth. When looking at Chindia relative to the rest of the world it looks like a comparison of U.S. Business School (Harvard & Stanford and everyone else who thinks they are #3) or Venture Capital hubs (Palo Alto, Boston and everyone else who thinks they are #3), as there is no other country even in the same zip code as the Dragon and Tiger markets. In fact, the commodity producing countries like Brazil and Russia are actually in meaningful Recessions that show little signs of abating as oil and iron ore prices continue to make new lows (clearly that could change if Surprise #9 happens). When investing it pays over the long-term to buy companies/countries with faster growing

earnings and it pays even more if you can buy that growth at a lower price (as measured by P/E). Given the sharpness of the correction in EM since 2011, an investor can buy more growth at a lower price in EM versus DM. EM earnings are growing at 13.2% versus only 10.8% for DM, yet the P/E for EM is only 12.9 versus 17.4 for DM. China and India are cheaper still, with China selling below 10X 2016 EPS and India at 15X (which looks high, but is due to the tech-heavy makeup of the Sensex which averages in the low 20s).

In the Dragon market, we know that the Chinese Leadership has committed to transforming the economy from one dependent of Fixed Asset Investment (FAI) to one dependent on Consumption. We have seen this movie before and we know that over the past 40 years in the U.S. as the American economy was transitioned from Manufacturing to Consumption, there were five sectors that performed extremely well and drove massive equity market wealth creation: Technology, Consumer Staples, Retail, Healthcare and Energy. We know how the movie ends and with the added tailwind of e-Commerce and Alternative Energy to supercharge those segments, we would expect the investment opportunities in China across these five sectors to be plentiful and sizable. The transition in the makeup of GDP in China has already begun with FAI dropping from 52% of GDP in 2008 to 43% today while Consumption grew from 45% to 58%. It is critical to remember that when it comes to GDP growth, Quality is more important than Quantity and the quality of Chinese GDP is clearly improving (even if the quantity in the eyes of Westerners remains in question). So the long-term story in China is strong, but this Surprise is based on 2016 and how will Chinese equities outperform? There are a number of positive developments that support the Bull case that are being completely drowned out by fears of an RMB collapse and an economic hard landing. First, property prices have reversed course and are rising again and it is always tough to be too bearish when real estate markets are recovering or strong. Second, after a short decline last summer, auto sales have

recovered sharply and set a new record in December. Again it is tough to be too negative when consumers feel confident enough to make major asset purchases. Third, outbound tourism from China is absolutely booming (particularly in Asia) and it is tough to argue that economic growth is collapsing if the citizens of the country have enough disposable income to travel abroad. Finally, the PMIs have stabilized and while Services has remained above 50 (expansion), Manufacturing had fallen below 50 (contraction), but recently moved sharply back toward 50. This Surprise was created at the beginning of the year and we now have a few weeks of data that clearly create a challenging (perhaps an understatement) environment since the Dragon has been beat up by the Bear so far in 2016. With the SHCOMP down (22%) CYTD, it might be a tough climb back to get back in the “right” column on this one. That said, Soros says it best, “In investing, it is not whether you are right or wrong that matters, but how much money you make when you are right and how much money you lose when you are wrong.” The good news is we do not have meaningfully large positions in Chinese equities today, but investing is about the future and from this point forward, buying the Dragon market looks like an attractive risk/reward proposition.

In the Tiger market, many of the same arguments that argue in favor of China ring true in India with some additional benefits. Not only is GDP growth high, but it is accelerating, and the composition is also rapidly shifting toward Consumption. Inflation is under control and the only issue has been a resumption of the depreciation of the Rupee over the past year after a year of stability following Rajan taking over as Central Bank Governor (currency losses account for a large part of the poor returns recently). Looking at the equity markets overall, Indian stocks are cheap relative to their history and are very attractive relative to the expected EPS growth rate this year of 12% (followed by an expected 20% surge in 2017). The market cap/GDP ratio (the Buffett Indicator) is very attractive at 74% (70% to 100% is average, and for comparison, the S&P 500 is at 115%). While the Modi

honeymoon period has clearly ended and investors are expecting more action from the government in terms of the execution of its reform agenda, there has been slow and steady progress toward the primary objectives. Modinomics is a long-term plan (similar to the time horizon of the Chinese 5-year plans) and there is significant evidence that the Indian economic environment is becoming more pro-business, which should support faster EPS growth in the future (which we see in the above estimates). So if things are so good in the Tiger market, why are foreign investors taking our money at the fastest rate in years? Investment by foreign institutional investors (“FII”s) has a long history of ebbing and flowing over time, but the irony of the flows is that they tend to be exactly incorrectly timed as they ebb in after the market has surged and they flow out after a correction (the opposite of what you would do if you wanted to buy low and sell high). Total FII flows turned down again in 2015 and history has shown that the Indian market has doubled (or better) in the years following the last three incidents of low/out flows (2002, 2008 and 2011). When looking at this Surprise, again it might appear to be tough to have a positive outcome given how the Bear is clearly smacking the Tiger around so far in 2016, but it is a long year and we believe investors will begin to appreciate the significant advantages of the Tiger market relative to other equity options going forward.

Surprise #8: King Dollar Gets Dethroned.

Contrary to the powerful narrative that the U.S. Dollar must continue to appreciate in the face of the Fed taking a different monetary policy course (or at least threatening to take a different course) than the ECB & BOJ, the old saw “Buy the Rumor, Sell the News” turns out to be true once again and the USD peaks and actually begins to weaken against other global currencies. The surprising Dollar weakness takes some pressure off of the Chinese to further weaken the RMB and the Yuan continues on a path toward becoming a World Reserve Currency.

When the U.S. Dollar suddenly began rising in June of

2014 (coincidentally, or maybe not so coincidentally, at the same time as Russian sanctions were levied and oil began to collapse), the Greenback surged by 25% over nine months and was anointed King Dollar by the financial media. Over the past year, the Dollar (using DXY as a proxy) has been stuck in a trading range between 94 and 100 (currently at 96), and despite the near-term weakness, the consensus remains steadfast that the Dollar is still King and that it will continue to strengthen against other world currencies (particularly the EM currencies) and that trend will accelerate when (we would say if) the Fed continues to raise rates. The problem here, like many of the consensus positions we have discussed thus far, is that it would make a far better story if the data actually supported the narrative. The problem for the Dollar Bulls is that history shows us that the majority of the time markets anticipate the moves of the Fed (front running) and the Dollar actually strengthens ahead of the actual rate increases and then tops and then begins to decline once the Fed actually raises rates. In looking for the closest analog to the current environment, one might look at the 1986 rate hike cycle when we were in the midst of an oil supply shock (sounds familiar) and the Dollar actually accelerated downward in the face of rising rates. There is never one perfect analog period because we have never had the current combination of near zero rates in the U.S. and negative rates in Europe and Japan and China was not even a blip on the radar in 1986 versus being the second largest global economy today. Looking at the current DXY chart, it looks increasingly like King Dollar wants to abdicate the throne as a number of failed rallies to try and exceed the levels from last April coupled with a rapid decline below recent support makes the technical situation tenuous at best (and negative at worst).

When it comes to consensus, it has been a long time since there was such unanimity of thought around a macro construct as the idea that the Chinese RMB must devalue and that the only real question is one of magnitude. Will it be a minor disruption or a global calamity? There are a number of high profile

managers around the world touting the short RMB trade and reportedly one such manager had close to 85% of their capital allocated to trades either directly short the Yuan, or indirectly linked to the thesis (short HKD or short other Asian currencies). The theories on why the RMB devaluation is a foregone conclusion are quite elegant (in economic theory terms), but we can't help but notice a striking resemblance to the elegant theories about why investors had to get short JGBs in Japan ten years ago, five year ago, three years ago, last year (you get the picture) and JGB yields just kept falling and anyone who dared to be short was carried out on a stretcher (trade was not called the Widow Maker for nothing). Betting against desperate governments has rarely been a profitable venture as they tend to play by a different set of rules (or perhaps just throw away the rule books) as their only incentive is to stay in power and they will do whatever it takes (where have we heard that line before?) to make sure they do, even if it means doing things that seem non-economic when analyzing what "must" happen to some security based on the economics text books. China has an added benefit in this battle (currency war). As a Command Economy, they can make up the rules as they go along since there is no pesky Democracy to appease. It has been said that a country needs economic stability before it can have political stability and perhaps the Chinese Leadership is actually smarter than the rest of us and has a long-term plan to create economic stability (read wealth and power) before moving along the path of political reform (we know, crazy talk).

So while everyone leans to one side of the boat and bets that the RMB must devalue against the almighty Dollar, what if the Chinese actually don't really care about the Dollar at all and have a totally different agenda? What if the Chinese have a plan to balance their trade relationships with their largest trading partners through a mild currency adjustment (4.8% in 2015) and they are focused on a trade-weighted basket of currencies in which the U.S. Dollar is only a small part (only 17% of China's exports go to U.S.)? What if the real goal is to have the Yuan be included in the

IMF Special Drawing Rights (SDR) Basket and the ultimate goal is to be considered a World Reserve Currency (with the real ultimate goal to be THE World Reserve Currency)? If those were indeed the goals, then the primary objective is to minimize the volatility of the currency as it gradually revalues downward to help aid the competitive position of China in global trade and balance exports. But what about all the capital flight out of China and all the reserves that the PBoC is having to spend to defend the RMB against the evil hedge fund speculators (fingers pointing at George again), doesn't that prove that the Yuan is on the verge of collapse and all the shorts are going to make huge returns like sub-prime in 2007? While \$130 billion of outflows a month over the past few months is nothing to brush off, given the size of the total FX reserves at the PBoC's disposal, they clearly have plenty of ammunition to fight the global currency wars for a while and they have significantly better resources than any of the other Asian countries engaged in the battle. The Chinese Leadership has shown again and again a propensity to be better prepared than most China observers think and time after time over the years the massive blow up that was a foregone conclusion has not materialized. All the big money is made on discounting the obvious and betting on the unexpected, true Variant Perceptions, so in 2016, the biggest Surprise of all might be that the Dollar falls and the RMB rises and the Panda takes the crown from Uncle Sam.

Surprise #9: Cure For Low Prices Is Low Prices.

The severe Bear Market in Commodities that began in 2011 destroys sufficient industry market capitalization spurring companies to dramatically slash capital spending, cancel large swaths of projects and reduce productive capacity to a point where commodity prices begin to find a floor and some generational investment opportunities arise amidst the bankruptcies and restructurings in places like MLPs, Miners and Exploration & Production companies.

In May of 2011 three interconnected events occurred that marked the peak in the Commodity Super Cycle

and the beginning of what has become a brutal Bear Market in the commodities sector. After a two-year stimulus (QE & PBoC) induced rally of over 80% off the bottom in March 2009, the CRB Index peaked almost to the day that the Dollar ended a Bear Market of similar duration where DXY shed 20% of its value and the largest commodity trading company, Glencore (an acronym for Global Energy Commodity Resources), went public in a \$10 billion IPO (largest IPO in London Stock Exchange history and one of top 20 Global IPOs). While with the benefit of hindsight we can see clearly that the May 19th IPO was the top for commodities and the phrase “sell in May and go away” needs to be amended to say “for good” as Glencore never again regained the first day price and is now down (80%) from the peak (and perhaps in deeper trouble as we discussed in Surprise #5). But for the three years from 2011 until June 2014, it was less clear that there was a Bull Market in the Dollar and a Bear Market in commodities as the former was only up 8% and the latter was only down 10% and both moves were dwarfed by the 50% surge in the S&P 500. However, over the past eighteen months the Bears seized firm control of commodity markets and the CRB Index is down (55%) from the 2011 peak, while the Bulls took charge of the Dollar and DXY is now up 28% from the 2011 trough. Simplistically, much of the damage has been inflicted by the advent of essentially free money for commodity production through the ZIRP of the Fed and the massive stimulus by the PBoC. With unfettered access to capital, commodity producers did what they do best, they spent money to develop capacity and they produced more commodities, so much more that prices of everything started to decline. Looking back over the past couple of years, the declines in commodity prices have been nothing short of astonishing, Iron Ore down (75%), Silver down (55%), Steel down (65%), Oil down (70%), Copper down (50%) and Gold down (20%). Many commodities are at the extremes of undervaluation relative to their history and the CRB Index has been making new lows just about every month.

One thing we know about commodities is that prices stimulate activity. High prices (like in 2011) encourage investment in additional capacity and low prices (like today) encourage divestment and cancelation of projects. The problem is that these changes take place with a lag as it takes time to bring on capacity (acquisition, permits, construction etc.) and it takes time (albeit less time) to shutter capacity and reduce supply. The other glitch in the adjustment process is that producers can now hedge production in the capital markets, which has a smoothing effect on pricing and allows some producers to over-produce during times of excess capacity, thereby actually making the situation worse. The disarray in OPEC is an example of this divergence in incentives as each member state is now misaligned with the group as a whole because of the dramatic decline in oil prices means that the only way for the smaller members to have a chance to balance their government budgets is to produce above their quota to attempt to capture market share (at the expense of other members, classically destabilizing). While adjustments occur more slowly, they do actually occur, and we are seeing evidence in areas such as coal, steel, iron ore, gold etc. where the decline in prices has led to bankruptcies of significant players which leads to capacity coming off-line. Given the extreme levels of debt that were made available to some industries, the bankruptcies will accelerate as the hedging programs wear off and that reduction in supply can quickly lead to a reversal in prices. The other factor at play is the demand side of the equation where the drop in prices can elicit a rise in demand, which can accelerate the balancing of the market and move forward the inflection point in commodity prices.

Investors tend to be herd animals and they tend to drive trends to extremes and also tend toward irrational decisions at the extremities of those trends – i.e., as prices continue to move lower, the pain of losses in their current positions becomes so great that they sell in a convulsive way right at the bottom. George Soros says that you can spot a change in trend

because the volatility rises dramatically and explains that it makes sense given that the trend followers (much of capital playing in commodity markets) become confused and exaggerate the short-term swings. They say that a Bear Market is a market that goes down most days, but goes up sharply on good news or perceived good news (Bull Markets are the opposite, up and down). That description would fit commodity markets over the past five years and would very much describe the most recent volatility in everything from oil to gold to copper. The large-scale liquidations have been a recurring event over the past eighteen months, but the selling pressure has begun to abate in some areas and there are even technical signs in some commodities of the formation of a base from which a new break out could occur. All that is required for the end of a Bear Market is an absence of sellers, you don't need buyers right away as they will come once the trend shifts and will accelerate as the trend is established (most will wait too long and buy near the top). Commodity markets have that feel to them today and with no one left to sell, there are seemingly some generational buying opportunities across the commodity complex in places like gold miners, iron ore producers, coal producers, oil and gas companies and perhaps even MLPs (this is more complex given the complex capital structures and high levels of debt). Should some buyers emerge this year looking for bargain values, this Surprise could look "obvious" with the benefit of hindsight this December. Who knows, maybe even Glencore will make it through this bankruptcy scare and turn out to be a fantastic buy (emphasis on maybe).

Surprise #10: The Bus Stops Here...

Uncle Carl Icahn is right and there is Danger Ahead in the credit markets around the world. Excess Central Bank liquidity has created a bond bubble across myriad sectors and there are abundant opportunities to short credit in emerging markets, high yield (particularly energy) during this new distressed debt cycle.

The concept of deleveraging that became one of the

top themes in a post-Global Financial Crisis world has seemingly become a quaint notion that is only applied by companies that don't understand the benefits of Financial Engineering and Shareholder Value Maximization (SVM). In a world where debt is essentially free (QE and ZIRP), it is only logical to issue as much debt as possible to leverage your corporate earnings potential. Even better, in a world devoid of top-line revenue growth that makes it difficult to have rising EPS to justify the extreme multiples placed on stocks thanks to those same low interest rates (rather circular), a smart CFO simply issues debt, buys back stock, and voilà, instant EPS growth. Clearly anyone with a firm grasp of math could see that no real earnings have been created (in fact, total earnings have declined due to the new burden of higher debt service payments), but for some unknown reason, that firm grasp of math has been elusive in the past few years as investors clamored to own the companies that were buying the largest swaths of their own stock. The questions that no one seems to be asking is what happens when all the debt comes due and what happens to equity of a highly leveraged company in the event of a market or economic dislocation that impairs that company's ability to grow? The answers to these questions is right over the horizon as we enter a more challenging economic environment and we are beginning to see some cracks in the foundation of the cult of SVM (for a great overview of the myth of SVM, see James Montier's rant at the GMO website).

The real problem (that no one seems to be the least bit concerned about) is the breadth and depth of the debt explosion and the potential for real losses should the economy turn down. We know from history that there is a four year lag between spikes in HY issuance and HY defaults and the peak in U.S. HY issuance was in 2012 and 2013 which says that we should begin to see those defaults pick up this year and next. Those who have been conditioned to Buy The Dip are salivating at the HY market in recent weeks as the yields have risen back to levels that could almost be considered high. We would argue that the yields are

not nearly high enough given the erosion of issuer quality over the past few years and the contagion effect that will certainly arise from the impending collapse of a large swath of bonds in the Energy and Commodities space. The many investors who believe the problems are contained in the Energy sector should review some history on the 2000 to 2002 cycle when everyone thought the risks were confined to the Telecom sector and the 2007 to 2009 cycle when everyone was sure the risks were confined to the mortgage markets. In both cases, the defaults have a ripple effect and there are many peripheral sectors that will be impacted by problems in the Energy sector (like the banks that lent them huge amounts of money). Carl Icahn did a video last year entitled Danger Ahead where he outlined the risks in the HY debt markets and predicted a significant crash. While the decline over the past two quarters has been very orderly, there are signs that things could get ugly in a hurry. The biggest problem is liquidity (or lack thereof) and we have seen two examples of how challenging the environment is today for credit investors. The Third Avenue Funds had to suspend redemptions in one of their HY funds (the Third Avenue Freeze Out) because of inadequate liquidity to sell positions to meet redemption requests. Secondly, I spent some time on the trading desk of one of our managers and he showed me bond after bond after bond with “No Bid.” When I asked what that meant exactly, he said just what it says, there are no buyers. When I asked him how you mark a bond like that, he said “at the last traded price” and that means there are some huge air pockets in valuation in these markets that could produce very considerable gains for intrepid investors who are willing to short the bonds of bad companies (or good companies with bad balance sheets). Another place where distressed investment opportunities look robust is in Emerging Markets where the explosion in debt issuance has created a huge supply of corporate credit that will likely default in the coming quarters and these can be both interesting shorts on the way down and then become very interesting long opportunities after the dust settles and the debt can be acquired as way to

play the reorganized equity (this strategy will be great in the U.S. too over time, but not quite yet).

Bonus Surprise: Unicorns Have Ten Lives.

Contrary to the drumbeat of negativity that too much money went into venture backed start-ups in 2015 pushing up valuations to levels triggering the mocking moniker “Unicorns,” disruptive innovation continues to emanate from Silicon Valley and Route 128 in Boston and late stage venture generates superior returns for investors.

Silicon Valley is the center of the Universe today as the amount of innovation and wealth creation is truly dazzling. The whole region works on the principle of Increasing Returns (Paul Romer at Stanford created this concept and may someday win a Nobel Prize for his contribution to economic theory), the idea that the more of something that exists, the better the outcome (think about why all the car dealerships are in the same place or why Target is always near Walmart). The network effect is real and explains why there is exponentially more value in one billion smart phones connected together by the Internet than one million. Over the past five years, there has been a surge in the creation and funding of disruptive companies surrounding the Mobile Net and many of those companies have surged to extraordinary valuations that have been derisively labeled Unicorns, since observers think the gains will be ephemeral. What is missing from this analysis is that truly disruptive innovation (or even better, obsoletive innovation) has staying power and many of the most exciting technologies and companies still have very large opportunity sets ahead. One such example is Uber/Lyft in the ride-sharing segment. When viewed as simply a taxi hailing service, these companies might appear to be overvalued, but when viewed through the lens of true disruption and the redefining of the transportation industry, the potential becomes quite extraordinary. The best confirmation of this construct is the fact that GM (the disrupted) made an investment in Lyft in the latest round (at 2.5X the valuation where we invested) and Hertz has made a

deal with the company to provide special rates for drivers who want to rent a car on a periodic basis to drive for Lyft. One of the hardest things to do in investing is to hold onto the big winners. Human nature wants to lock in profits and the brain struggles with exponential math so it is hard to imagine that a company that has risen ten times can go up ten times again (100X for original investor, less dilution), but every ten-bagger was once a two-bagger that someone had the courage to hold. To misquote Mark Twain, the reports of the death of the Unicorns are premature. Moreover, Unicorns go one better than cats and have ten lives, plenty of time to make outstanding returns.

Appendix: 2015 10 Surprises Review

We had some fun generating our list of 10 Potential Surprises back in January of last year and it is always good to take a look back and see how things played out. Depending on how one keeps score, it looks like we got 7/11 correct in 2015. What the score really means is that last year was more volatile than normal since consensus is usually a simple extrapolation of the current trend, so a year where the Surprises occur at a lower rate would indicate a less volatile, but likely more positive, year in the markets.

Surprise #1: The Lula Pivot. In a déjà vu experience harkening back to the 2002 Brazil elections, the radical Syriza Party wins the Greek Election (was still a potential surprise since wrote before election), but Alexis Tsipras turns out to not be as extreme to the left as expected (just like Lula) and the Greek equity market surges (just like Brazil did for next five years), turning out to be one of the best performing markets for 2015.

WRONG

We got this Surprise approximately right, but precisely wrong. It turned out that Prime Minister Tsipras did indeed do an amazing pivot to the center (so much so that it cleaved off the radical left from the

Syriza party), there was no Grexit, and the EU eventually agreed to a third bailout package. That said, the EU decided to play hardball and make an example out of Greece in order to discourage Spain (and any others) from getting any ideas about challenging the Troika. They withheld emergency assistance from the banks during the final stages of the negotiation and forced Greece to impose capital controls, close the banks and close the equity markets. Things were actually looking pretty good for Greece up to that point in June, but the EU checkmate move resulted in another restructuring of the banks and made Greek equities the worst performing market in 2015. A couple small positives are that we still believe people are overreacting to the risk of a GGB default and GGBs will turn out to be a solid investment over time and there are some serious babies being thrown out with the bank bathwater like GR:OPAP (gaming company), GR:AEGN (Aegean Airlines), GR:HTO (Telecom company), GR:EXAE (Hellenic Exchange) and GR:PPC (Public Power Co.) that are likely to provide solid returns from this point forward.

Surprise #2: Turning Japanese, I Really Think So. Despite the BOJ and the ECB picking up the QE baton from the Fed and committing to purchase \$80 billion and \$65 billion of government bonds each month, respectively, Deflation reemerges as the primary economic challenge in the developed world, GDP growth stalls and global interest rates continue to fall.

RIGHT

Global growth continued to disappoint in 2015 and there was continued pressure on global interest rates throughout the year. The Greek Crisis created a flight to safety that reversed an early upward move in interest rates (hope springs eternal for growth to rebound every year) and then all eyes shifted to the Fed and when they would finally decide to raise rates. The Fed head-faked in September and rates began to rise again, but Lucy (Ms. Yellen) finally yanked the ball away and the global flight to quality accelerated and global rates continued their downward journey.

One thing that has slipped by many market participants in the ongoing Deflationary impact of a strong U.S. Dollar and it is highly unlikely that interest rates rise much when inflation expectations are falling and developed markets CPI gauges are stuck around the zero bound. European interest rates actually went negative (how silly that we all thought they couldn't go lower than zero...) in response to the plunging inflation expectations and that trend is likely to increase in the New Year.

Surprise #3: Let's Do Limbo Now. Contrary to the Fed Dots (new, new thing), the preponderance of Economists' predictions (just like in 2014) and the continually upward sloping Fed Funds futures curves (since 2009), the Fed does not raise rates in 2015 and long bond rates take out the 2012 lows in yield.

MOSTLY RIGHT

This Surprise looked pretty prescient over the first eleven and a half months as there was broad consensus at the end of last year (and all throughout the year) that the Fed would raise interest rates in March, or at the latest, June, or at the very latest September. But there we were in December and finally Ms. Yellen pulled the trigger and acted counter to her Dovish tendencies. While we still contend that the economic data is still terrible and that raising rates and reducing liquidity will be viewed (with the benefit of hindsight) as a significant Policy Error, the momentum shifted toward a belief that the Fed had to do "something" in order to maintain any sense of credibility (some might ask if they ever had any?). The long bond did take out the 2012 lows of 2.5% and got all the way down to 2.25% before spiking a quick 100 bps back to 3.25% before settling back into a downward trend and finishing the year at 3%. We can't take full credit for this surprise since Lucy did actually pull the ball away in calendar 2015, but given how everyone was certain it would happen in Q1, it feels like a win.

Surprise #4: Here's to You, Mr. Kindleberger. Confounding the conventional wisdom that the convergence of the third year of a Presidential Cycle (average 21% return since WWII) and the fifth year of a decade (no down years since 1905) virtually guarantees a positive return for U.S. equities, the S&P 500 breaks the string of six consecutive up years and suffers its first losing year since 2008.

MOSTLY RIGHT

In a normal year three of the Presidential Cycle the U.S. Equity market would be up 16% and given the strong trend and momentum indicators coming into 2015, the probability of the S&P 500 delivering low returns was very small. The broad consensus was that the Bull Market would continue and most Wall Street Pundits were calling for double-digit gains for the year. Usually when everyone goes to one side of the boat, the boat lists and lurches back the other way and 2015 was no exception. During the summer a number of technical indicators broke down in the equity markets and things looked good for this Surprise. The number of stocks below the 200 dma went to levels normally associated with corrections, the DJIA fell well below the 200 dma, and the S&P 500 finally breached the 200 dma as well. The biggest problem for the Bulls, however, was fundamental. There simply was not enough revenue and earnings growth to justify the high multiples and when the only support holding up the market, low interest rates, got pulled in December, things began to look increasingly worrisome for equities. All that said, while the S&P 500 did finish down fractionally, dividends of 2% pushed the total return on the market positive, so technically, the Surprise didn't happen, but given how high expectations were for returns, a measly 1.4% seems like a win for Mr. Kindleberger.

Surprise #5: TMI Writ Large. Despite an ongoing military conflict in Ukraine, the impact of coordinated global economic sanctions, rapidly falling oil prices, reduced government tax revenues, a collapsing currency and a looming economic downturn and

downgrades of their government debt and consensus that Russia is simply “un-investable,” Sir John Templeton turns out to be right that Bull Markets are born on Pessimism and Russian equities turn out to be one of the best global markets in 2015.

RIGHT

For the first four months of 2015, the Russian markets were performing right in line with the Surprise, decoupling from oil prices and riding a wave of positive momentum created by the strengthening Ruble resulting from the Russian Central Bank raising rates dramatically in December. Suddenly, in May, the equity markets recoupled with oil and as WTI slid (29%) over three months, Russian equities followed. Russian equities were up double-digits for most of the year and while the markets surrendered a portion of the gains after the Fed raised rates, it was still one of the better performing markets in the world in 2015. Continued pressure on oil prices also dampened this Surprise and future returns will depend on whether investors focus on the extremely attractive valuation of Russian assets or the historically high correlation to energy markets.

Surprise #6: All That Glitters. The acceleration of the Global Currency War reignites the demand for the ultimate currency, Gold, and the Barbarous Relic surges to new highs in 2015, carrying the miners along for the ride.

WRONG

After a truly dazzling first three weeks of the year where GLD was up 10%, SLV was up 15% and GDX & GDXJ were up 20%, the real Surprise here has been just how truly awful these assets performed over the subsequent eleven months. The metals complex went into free fall and produced dismal returns of negative (10.4%), (11.9%), (25%) and (20%), respectively. Fundamentally and technically, gold and gold related equities broke down and the combination of a strong Dollar, continued pressure on commodity prices and

lots of forced selling from big Funds resulted in a scenario that was unlikely to have a positive outcome. Even the Buy The Dip crowd abandoned the Gold trade in 2015, as every time investors would say, “it can’t go any lower,” it did. There are plenty of true believers around who are still arguing that the “ultimate currency” must eventually revalue, as paper currencies devalue and that gold miners must recover at some point because the price remains above the cost of production. The real problem for gold equities is that there are no natural buyers of these stocks today, but we know that the cure for low prices, is low prices, and perhaps prices will reach that inflection point in 2016.

Surprise #7: Water Finds Its Level. Central Banks in the Emerging Markets are forced to stimulate their economies in response to the massive BOJ and ECB bond purchase programs and the resulting expansion of liquidity unlocks the extreme value in Emerging Market equities leading them to outperform the developed markets for the first time since 2012.

WRONG

My, what a difference a quarter makes. In Q1, this Surprise was looking great and the 10:1 ratio of return in EEM versus return in the S&P 500 seemed to be signaling another decoupling for the Developing Markets. As Lee Corso of ESPN is fond of saying, “not so fast, my friend.” After the stunning 14% advance in March and April (made even more impressive given the headwind of a 9% rise in the Dollar), EM turned on a dime, and “Sell in May and Go Away” would have been great advice. EEM collapsed (25.3%) from the peak on 4/28 to be down (14.9%) for the year and, once again, underperformed the Developed Markets in 2015. Clearly some of the volatility arose from fears about a China slowdown and the PBoC decision to weaken the RMB in August, which caught market participants off guard. Much of the losses in EM resulted from local currency weakness and there have been huge capital outflows from these markets. It will take real courage to be

greedy while others are being fearful here but, on a multi-year time horizon, we continue to believe that building your house with BRICS Plus the Frontier Markets will produce strong long-term returns.

Surprise #8: No Fracking Around. Contrary to the current consensus that Oil prices have bottomed and will rebound back to \$70-\$80 by year-end, continuing liquidation of speculative long futures positions drives Oil down close to the 2008 lows (\$30) and prices stay in the \$40-\$50 range much longer than expected as structural challenges in the U.S. and OPEC make it difficult for market participants to move supply/demand back into balance.

RIGHT

This Surprise played out most closely to what we anticipated, yet during the spring melt-up in oil prices, we were close to changing our minds on this Surprise as there was some evidence that U.S. oil production was beginning to slow (marginally) and there were some reports of rising oil demand globally that could have moved the oil market closer to balance. That said, we dug deeper into the data and talked to a lot of managers and consultants in the oil patch and came away with greater conviction that our original Surprise view was the right perspective. With the price of WTI having fallen from the \$61.43 June peak to finish the year at \$37 it appears that our fundamental view of the oil markets was corroborated. The deal with Iran puts increased pressure on global oil markets and we stayed aligned with Pierre Andurand who believed that the mid-20s for WTI was likely in the New Year (it hit \$26). The implications of sub-\$50 oil for an extended period of time are quite profound and there will be lots of investment opportunities on both the long and short side that will be created by this environment.

Surprise #9: Only Way Out. Kuroda-san and the BOJ pull out the bazooka again in 2015 taking aim at a USDJPY level of 140 in an attempt to stimulate profits of Japan Inc. so they will raise wages, triggering a

virtuous circle to break deflation and achieve the 2% target inflation rate. Japanese equities tag along for the ride and the Nikkei reaches 22,000 by year-end.

WRONG

During 2013 and 2014 Japan had become the Land of the Rising Equities thanks to the one-two punch of Abenomics and Kurodanomics (easy money from the BOJ in form of QQE). With the Nikkei cresting at 20,868 in June (on the back of the USDJPY at 126), the target levels of 22,000 and 140 for the Surprise looked quite reachable. But, alas, Kuroda-san never did brandish his bazooka and increase QQE (perhaps they have bought all the bonds they can buy?) so the Yen took a pause on its depreciation path and the Nikkei was volatile in the second half of the year to finish 2015 at only 19,034. While the Japanese equity market was one of the best performers in the world (which is something), we will have to be content with being directionally correct, but perhaps only getting the Surprise half right for the year.

Surprise #10: Goats Climb Mountains. In spite of the cacophony of bad news about slowing GDP growth, an impending economic hard landing, a potential currency collapse, a looming banking crisis and a pervasive real estate bubble, coupled with fears that huge returns in the Shanghai market in 2014 have pushed equity markets too far, too fast, China officially enters a new Bull Market and equities (both Hong Kong and Shanghai) rally strongly again in 2015.

MOSTLY RIGHT

The Year of the Goat began perfectly for this Surprise as the Chinese equity markets surged and created a huge mountain pattern, rising and astonishing 60% from 3,235 to 5,166 on June 12th. From that point on volatility became the watchword in China (most of it downside) and it would have been very profitable for investors in the Chinese equity markets to move to the sidelines. The Chinese Government tried a number of

things (limits on short selling, limits on all selling...) to arrest the decline and “encouraged” Firms/Funds to buy equities to support the markets. Unfortunately, not much of the measures were very successful and the SHCOMP was down (32%) to finish the year up a respectable 10% (one of the best performing markets in the world). Going forward, we see that some of the best companies in the A-Share market have become quite cheap again (the market as a whole is also relatively cheap). We still believe that The Year of the Goat ushered in a new, long-term Bull Market and companies in sectors focused on the consumer will generate very attractive returns in the years ahead. That said, there is a rising cacophony of concern about an imminent RMB devaluation that could create some challenging volatility in the Year of the Monkey.

Bonus: Surprise #11: Little Luxuries Not Enough.

In contrast to the powerful narrative, the huge windfall for U.S. consumers from lower gasoline prices fails to materialize as some of the savings are applied to reduce debt and increase savings and the loss of jobs from the economic downturn in the Oil States counteracts the positive impact of the balance. U.S. Real GDP growth hovers around 2% (for the sixth consecutive year) and talk of QE4 begins in the fall.

RIGHT

U.S. GDP came in well short of consensus expectations in 2015, once again failing to achieve even a 2% overall growth rate (despite predictions of 3% to 4% to begin the year). The continued weakness in the numbers indicates a slowing economy that is beginning to look anemic enough to have people start talking about the “R” word (Recession). Given first half GDP growth averaged 1.45%, there had to be 2.55% growth (on average) for the second half just to get to the Surprise prediction of 2% (which was materially lower than consensus) and the second half average of 2.3% was close, but not close enough. It was actually kind of funny to watch everyone lower their 2015 forecasts in Q4, as the 3% to 4% numbers

that were thrown around last December became mathematically impossible. Interestingly, the projected huge gas savings windfall never did occur as wholesale gasoline prices troughed in January at \$1.11 and ran all the way back to \$3.40 in July before settling back down below \$2 (averaged \$2.40 for the year, second lowest since 2009). However, as we anticipated, U.S. Retail Sales came in flat or negative most of the year as consumers used the windfall from lower gas prices to pay down debt and add a little bit to savings. Finally, there was increased talk of QE IV and as GDP continues to disappoint that chorus is likely to become louder in 2016.

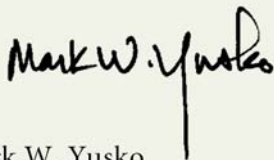
UPDATE ON MORGAN CREEK

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: *A.W. Jones Was Right: Time To Get Hedged* and *Queen Janet or Lucy? Will the Real Ms. Yellen Please Stand Up*. 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 **February 23** webinar at **1:00pm EST**, *The Fed Coin Flip: Heads We Lose, Tails We Lose*.

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 Investment Institute is in the process of renewing its members for 2016. The date of the next program will be May 23-24, 2016 at The Umstead Hotel in Cary, NC. For more information on how to become a member and join this elite group please visit www.theinvestmentinstitute.org or contact Andrea Szigethy at andrea@annualconnect.com or Donna Holly at donna@annualconnect.com.

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
Chief Executive Officer & Chief Investment Officer

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There can be no assurance that the investment objectives of any fund managed by Morgan Creek Capital Management, LLC will be achieved or that its historical performance is indicative of the performance it will achieve in the future. 2005-2014 results are audited. 2015 performance data is not yet audited and is subject to change upon audit. Monthly performance numbers are not individually audited and only a fund's annual financial statements are audited. Performance may differ based upon New Issue eligibility, individual dates of admission and actual fees paid. All performance reflects reinvestment of dividends (if any) and all other investment income (which should be evaluated when reviewing performance against other indices). The performance data set forth in this presentation is based on information provided by underlying managers and is believed to be reliable but has not been independently verified by Morgan Creek Capital Management, LLC. MCOF performance is shown for a New Issue eligible Series A investor, since inception (07/01/05), net of all fees and expenses including operating expenses, 1% annual management fees and accrued incentive allocation of 10% of total net profits. The incentive fee is based upon fund performance exceeding a 5% annualized hurdle rate. MCOF—Series B (Morgan Creek Direct) performance is shown net of MCOF fees which are representative of a New Issue eligible Series B investor, including operating expenses, 1% annual management fees and accrued incentive allocation of 20% of total net profits. The incentive fee is based upon fund performance exceeding the MSCI World annualized hurdle rate. BRIC Plus performance is shown for a New Issue eligible investor invested since inception (07/01/06), net of all fees and expenses including operating expenses, 1% annual management fees and accrued incentive allocation of 10% of total net profits. The incentive fee is based upon fund performance exceeding a 5% annualized hurdle rate. Please note that as of April 1, 2013, the return data for Morgan Creek BRIC Plus Fund, LP reflects only the liquid portion of the portfolio which remains following the March 31, 2013 transfer of all illiquid assets to a Special Purpose Vehicle. *Past performance is not indicative of future results.*

Morgan Creek Direct

"Morgan Creek Direct" consists of "Morgan Creek Direct Top 20" and "Morgan Creek Direct Qualitative Top 5". Morgan Creek Direct Top 20 is a basket of 20 equally-weighted equities and reflects the top long positions in the underlying portfolios of the current managers in the Morgan Creek Global Equity Long Short Institutional Fund. The basket is constructed using regulatory filings and manager-provided transparency reports on a quarterly basis and rebalanced every six weeks. Morgan Creek Direct Qualitative Top 5 is a basket of long or short equities sourced from the underlying portfolios of the current managers in the Morgan Creek Global Equity Long Short Institutional Fund. The basket is comprised of no more than five, 1% long or short positions.

BRIC Plus Direct – The portfolio consists of a basket of 24 securities that are grouped into five 20% buckets: Brazil, Russia, India, China, and Plus. The Brazil, Russia, India, and China buckets each consist of 4 equal-weighted securities, while the Plus bucket is comprised of 8 equal-weighted securities. The larger number of Plus securities is intended to provide a wider range of geographic exposure given the larger footprint the bucket encompasses. The Top 24 portfolio is constructed using manager-provided transparency reports on a quarterly basis and is rebalanced every 90 days. As a result, the portfolio reflects the highest-conviction long positions from our highest-conviction managers. It should be noted that investors cannot directly make investments into this portfolio and as such, should not place undue reliance on the performance information provided. The data does not take into account transaction costs and are gross of Morgan Creek's fees.

Forward-Looking Statements

This presentation contains certain statements that may include "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical fact, included herein are "forward-looking statements." Included among "forward-looking statements" are, among other things, statements about our future outlook on opportunities based upon current market conditions. Although the company believes that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. Actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors. One should not place undue reliance on these forward-looking statements, which speak only as of the date of this discussion. Other than as required by law, the company does not assume a duty to update these forward-looking statements.

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.

No Warranty

Morgan Creek Capital Management, LLC does not warrant the accuracy, adequacy, completeness, timeliness or availability of any information provided by non-Morgan Creek sources.

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.

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.

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. As of November 2012 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.