



## THE WEIGHT OF THE WAIT

As a preview, this commentary aims to briefly revisit the active/passive debate, an issue that is currently de rigueur, even if incredibly one-sided. We will then continue with our current obsession with measurement, first expanding on the value of time and then delving into the concept of weight. Finally, misguided measurement of risk continues to be a yardstick of market inefficiency and of opportunity for patient long-term investors. Discussions will address:

- The weightings within the market (a defense of **active management**, at a seemingly indefensible time, benefitting from measurement of time and size)
- The price of being early (a defense of **ex-U.S. investing, value investing, and asset-based investing**, at a time of maximum unpopularity. "An unconventional investment profile requires acceptance of uncomfortably idiosyncratic portfolios, which frequently appear downright imprudent in the eyes of conventional wisdom." – David Swensen)
- Weights of measure (obligatory mention of gold, post the recent correction)
- The weight of the market (a defense of **stock investing**, at seemingly indefensible valuations for the indices)
- The investment **return on patience** (a defense of **public equities**, at a seemingly indefensible time)

As we delve into the concept of weight, it seems appropriate to reference Milan Kundera's incomparable book, "The Unbearable Lightness of Being." The book is extremely thought-provoking and quite enjoyable, as well. Not considering ourselves to be especially intellectual, we've turned to Wikipedia for assistance on the interpretation front: "*Challenging Friedrich Nietzsche's concept of eternal recurrence (the idea that the universe and its events have already occurred and will recur ad infinitum), the story's thematic meditations posit the alternative: that each person has only one life to live and that which occurs in life occurs only once and never again – thus the "lightness" of being.*" It further adds, "*the concept of eternal recurrence imposes a 'heaviness' on life and the decisions that are made – to borrow from Nietzsche's metaphor, it gives them 'weight.'* Nietzsche believed this **heaviness could be either a tremendous burden or great benefit depending on the individual's perspective.**"

Kopernik believes that there is wisdom to be gained from both philosophers. Clearly we only get one chance at this. Humans do not have the ability to go back in time and see how things would have worked out had they made a different decision. There are infinite moving parts and *each decision will elicit differing behaviors from others*. This is one of the important reasons **that the investment industry's attempts to model risk, future cash flow, and other factors that are highly dependent upon human behavior, are so fraught with peril**. It is said that this industry suffers from a case of physics envy. The fact that human behavior is far less predictable than, say, the orbit of a planet around a star, hasn't stopped economists and academics from trying to model it. Risk apparently is no longer defined as the prospect of economic loss, but rather the output of a formula calculating volatility over some time period in the past! The cost of capital of a business, they tell us, is no longer dependent upon the price being offered for that incremental capital; it is now the output of a formula that factors in, not the price of the business, but how that price correlated to the price of other businesses over some past time period. Sadly, we're not making this up.

But, while the past can never be repeated, it can be extremely helpful in the decision making process. As all value investors and historians know, Nietzsche is not wrong about the cyclical nature of human behavior. Each generation seems to want to relearn the lessons on their own. For this reason, **simply knowing that "this too shall pass" has always been a much more successful investment practice than has predicting the future**. As the old adage says, "buy low, sell high." But, as we all know, human behavior makes this action much easier said than done. For one thing, it comes with considerable "career risk." In this area, maybe we can be of some help. **Arbitraging risk via our willingness to shoulder 'career risk' in order to drastically lower our clients' risk of permanent loss of purchasing power is an important competitive advantage**, we believe.



Turning from quoting authors to a more typical, for us, quoting of musicians, we offer the wisdom of Robbie Robertson. *"Take a load off Fanny, take a load for free. Take a load off Fanny, and you put the load right on me."*

## Everything Has a Season! The World is Cyclical

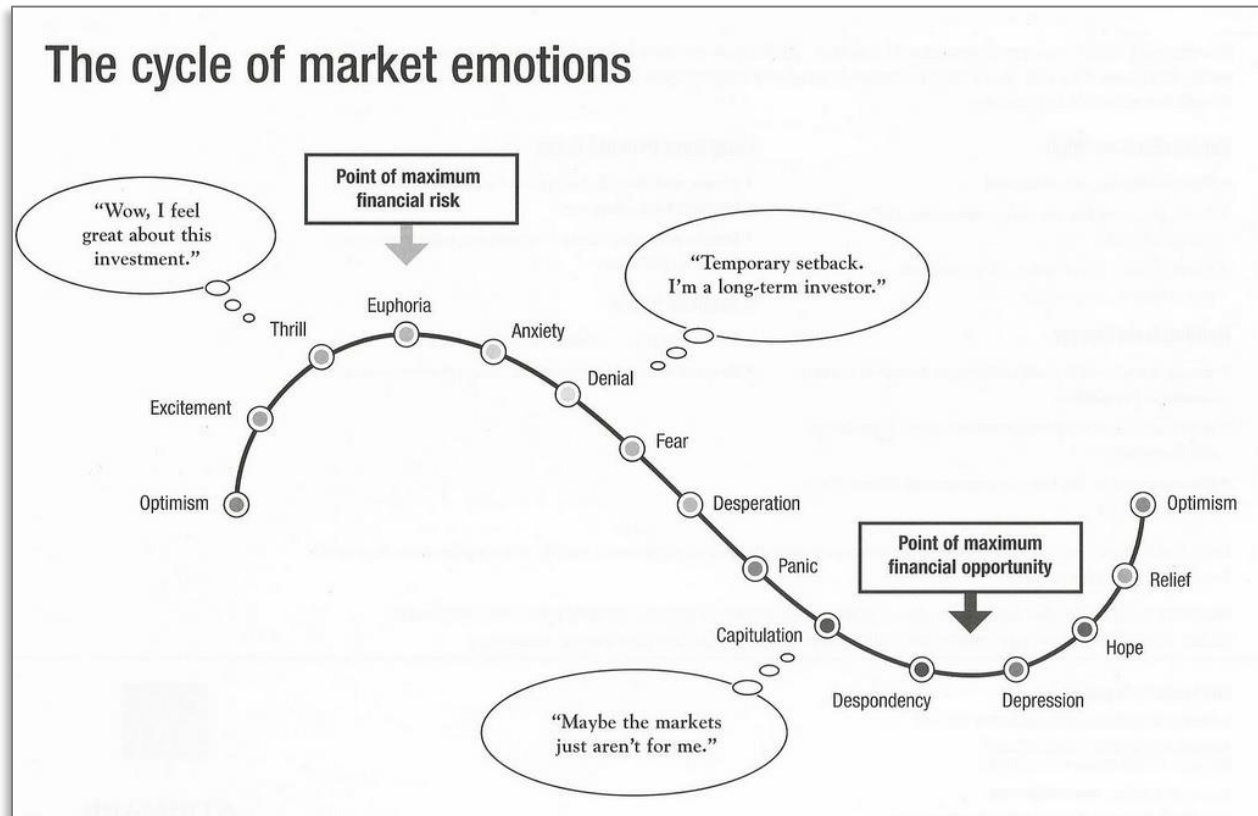


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While agreeing that life is linear, and there are no 'do-overs' or 'mulligans' for our decisions, the investment markets are demonstrably cyclical. The phases of the market can be depicted in many ways, as this Commentary will illustrate. A strong case can be made that we are in the euphoria stage for certain asset classes. Might we suggest passive funds, growth stocks, U.S. domiciled investments, and many bonds (claims on fiat currencies)? As these 'assets' peak, their antithesis on the charts arguably reach a deep nadir. Thankfully, January of 2016 may prove to have been the capitulation stage for many emerging markets and natural



resources. While other parts of the current market still look particularly frothy and perilous, a little analysis can unearth some potentially lucrative investment prospects.



It is often said that the markets are currently harder to beat than ever. It is said that since there are more people picking stocks, smarter people picking stocks, people armed with more data, better data, and unbelievably good technology, the market is now more efficient than ever. In our humble opinion, this presumption is complete BS. We're not arguing with the contention that investors are smarter and more numerous, nor the part about abundant data and mind-blowing technology. That seems true enough. It is the market efficiency part that is misguided. Kopernik views the current market as one of the least efficient markets in modern history, surpassing even those beacons to market inefficiency - 1999, 1972 and 1929.

The Efficient Market Hypothesis Fallacy doesn't theorize that markets are efficient because people are increasingly knowledgeable, or intelligent, or industrious. Nor does it postulate that the efficiency results from more data, better data, or from wonderful technological proficiency. No, **it speculates that people are rational!** It also assumes that all investors are diligently analyzing the data (data to which, incidentally, they are *assumed* to have equal access) and are endeavoring to derive an accurate fair price based upon all currently available information. It doesn't mention how leprechauns, unicorns, and fairy godmothers factor into the equation. Regarding the hypothesis' first assumption, we doubt that anyone truly believes that people are rational. If you're unsure, consider watching the crowd at a soccer game or rock concert. Check out the fashion sections of the newspaper over time. The reams of studies by the proponents of behavioral finance are highly instructive. The old classic, "Extraordinary Popular Delusions and the Madness of Crowds," is a must read. James Montier's "The Little Book of Behavioral Investing" is also very well written, informative, and well worth the read.





*"I picked up my bags, I went looking for a place to hide  
When I saw old Carmen and the Devil, walking side by side"*  
-The Weight, by The Band

Regarding the supposition that people are equal in their access to and analysis of data, might we refer you back to last summer's commentary entitled – "The Passenger." It is said that the road to hell is paved with good intentions. As the Passenger argued, when everyone is diligently doing their homework and reacting logically to knowledge gained, a few passive investors can gain a free ride, drafting off of the peloton of the diligent masses. But when the masses all attempt to take a free ride, and very few still bother to perform fundamental analysis, the ship is rudderless. As the saying goes, "Be careful when you follow the masses ... sometimes the 'M' is silent."

Markets in which the masses are pouring into un-researched companies, via passive funds, can be viewed in many ways, but efficient is not one of them. Does anybody else find it odd that \$21 Trillion has been put into funds that don't do any fundamental analysis? Funds that don't even pretend to care about the cost of the securities that they are buying? Yes, that is trillion with a "T". By way of reference, every stock in America could have been cumulatively purchased for a fraction of a trillion dollars in the early 80's.



Does it seem dangerous that Vanguard is receiving \$2B on average, every single business day, for "investment" in equity funds that have complete and total disregard for the price being paid for securities? Once again, for perspective, if over the next eight days, Kopernik received Vanguard's average inflows, we would immediately close the firm to new business. Why? Because, at a size much above that level of assets it would become increasingly difficult to invest without adversely affecting prices, and thus hurting investment returns. In Vanguard's defense, they have never claimed to care about the reasonableness of the price being paid.

### What's value got to do with it? Partial list of passive money (all figures in \$ bns)

Federal Reserve (securities portfolio)	\$4,253
European Central Bank (securities portfolio)	2,439
Bank of England (loan to asset-purchase facility)	484
Bank of Japan (gov't & corp. bonds, ETFs, REITs)	3,913
Swiss National Bank (stocks, bonds)	683
China foreign-exchange reserves	3,009
Worldwide exchange-traded funds	3,500
Indexed mutual funds—U.S. only	2,848
<b>Total</b>	<b>\$21,129</b>

sources: The Bloomberg, Federal Reserve, Bank of England, Bank of Japan, Swiss National Bank, European Central Bank, Investment Company Institute, ETFGI LLP

Source: Grant's Interest Rate Observer

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...SOMETIMES THE **"M"** IS SILENT!

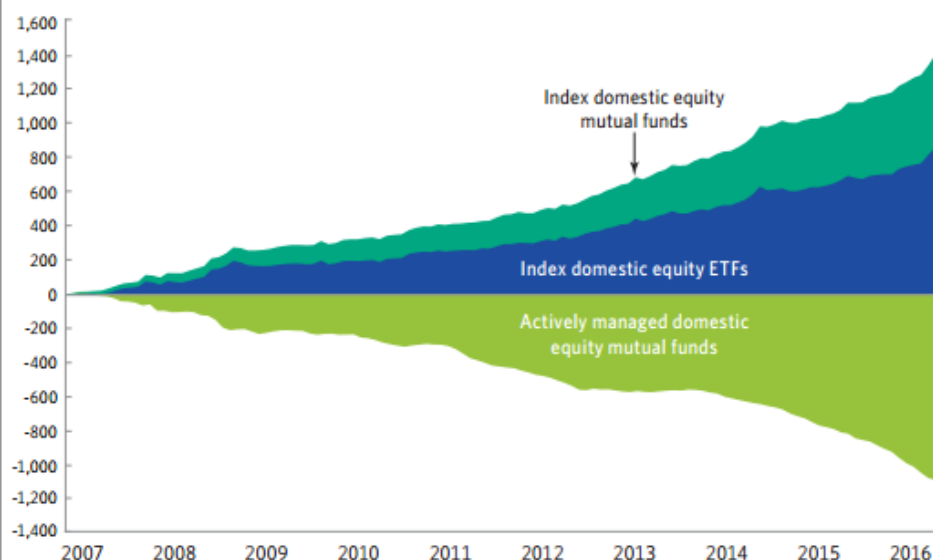


Which leads us back to one topic of last summer's Commentary - price discovery. Is it coincidence that just short of a decade after the Fed masked the price discovery mechanism in the bond market, the majority of "investors" no longer care about the price being paid in the U.S. equity market? This commentary addresses the opportunities being created by some of the theoretical fallacies that we believe are currently being made by academics and practitioners alike. We will continue to argue strongly that of the errors, the one at the forefront pertains to the merits of a passive versus active approach to investing. This discussion will be followed by discussions of interest regarding the merits of: value vs growth stocks? U.S. vs International (non-U.S.) stocks? Gold vs Paper money? Real Assets vs Financial Assets? Interestingly enough, the answer

to every one of these choices is the same: **It depends on the price being paid!** We find it fascinating that the one thing that really matters is the very thing that few people even care about anymore! If you doubt that, think about it. Do you hear anybody asking, "At what price would I prefer passive to active management?" Or, rather, are they making a more matter of fact statement along the lines of "passive is superior!"? When was the last time you heard someone say, "the U.S. is worth X% more than other markets?" They don't say that, do they? They say, "The U.S. markets are better" (or worse). Price/valuation appropriateness isn't a consideration. With the bull market in equities well into its ninth year, no one seems to care about prices being paid. How great! The longer the bull, the less people care, but *the more they should care.*

## Some of the Outflows from Domestic Equity Mutual Funds Have Gone to ETFs

Cumulative flows to and net share issuance of domestic equity mutual funds and index ETFs,\* billions of dollars; monthly, January 2007–December 2016



\* Prior to October 2009, index domestic equity ETF data include a small number of actively managed domestic equity ETFs.  
Note: Equity mutual fund data include net new cash flow and reinvested dividends. Data exclude funds that invest primarily in other funds.

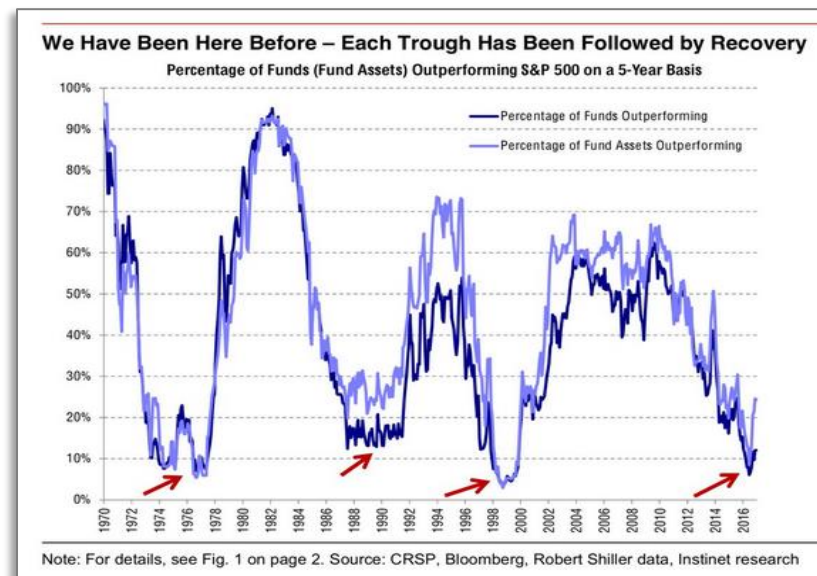
*"The fact that there's a highway to hell and only a stairway to heaven says a lot about anticipated traffic numbers"*

-Bill Murray

## Active vs Passive Management

*The Unbearable Lightness of "Helium" Investing*

Time to delve into the specific cycles, the extent of the current market inefficiency, and the extremes of these various market cycles. The last few paragraphs have already highlighted the magnitude of the passive rage and identified it as a major contributor to the current, heightened level of market inefficiency. It isn't necessary to spend more time on the passive/active tug-of-war, which has yet to reach its point of inflection. But you may agree that the following graph illustrates this story as good as any.



Assuming these charts, the passage above, and last summer's commentary – "The Passenger," suffice, let's move on to Growth/Value situation.

## Value vs Growth

It always takes courage, conviction, and a whole lot of patience to be a value investor. This is especially true at times like now. The show, *Silicon Valley*, is great satire on the exuberance in the tech arena. High prices for growth companies have been spilling over from the venture capital market place into publicly traded equities. I remember all too well the last time value investors were tested to their limit; the last time they were pronounced DOA. Doonesbury, for one, did an excellent job satirizing that era. Following are several other articles that were not meant to be satirical, but from a historical perspective appear so. First up, an article from the LA Times on March 22, 2000, i.e. just as the NASDAQ had peaked: "After a five-year slump, capped off by big money-losing bets on beaten-down stocks such as Mattel (ticker symbol: MAT) and Philip Morris (MO), Robert Sanborn got the hook Tuesday. The head of the Oakmark Fund becomes the highest-profile "value" manager to date to be ousted. But analysts don't think he'll be the last, especially if value stocks don't make a sustained comeback soon. Unlike Sanborn, who steadfastly refused to invest in technology stocks at current nosebleed valuations, Nygren recently held 16% of Oakmark Select in tech."



Philip Morris (now Altria) is up 36 times (3600%) since then (w/ dividends reinvested), but Sanborn was let go for the cardinal sin of refusing to buy technology stocks at nosebleed valuations.





Two months prior to that, an article addressed the departure of Fidelity's Star Value manager, George Vanderheiden. From Investment News (Jan. 17, 2000): *"George's reluctance to incorporate the new economy into the overall scheme of his investment discipline has clearly hurt him," says James Lowell, editor of Fidelity Investor. "This is a cautionary tale of a manager that seems to be unwilling to change his stripes in the face of a market that has clearly changed its stripes." "Among stocks the new managers are likely to ditch -- or at least prune -- is Philip Morris Cos. Inc."* And perhaps the best part, *"Despite his recent problems, Mr. Vanderheiden's long-term track record is among the best in the industry."* To repeat, this 29 year veteran had one of the best track records in the industry, including the bad spell, but made the unforgivable sin of being "unwilling to change his stripes in the face of a" mania. An article in the New York Times from three days earlier pointed out that his fund was up 19.3% annually for twenty years. It quoted a prediction of his that turned out to be prescient: "Mr. Vanderheiden said he thought a value revival might be just around the corner, noting that the end of other investing crazes -- the run-up in the Japanese stock market during the 1980's, the biotechnology craze of 1991 and the rise of the Nifty 50 in 1972 -- all fizzled around the start of a new year."

Around this same time, Warren Buffett was trashed on the front page of the Wall Street Journal for sticking with value, and Julian Robertson closed the second most successful hedge fund in history. In his excellent letter to investors in March 2000 (notice these stories have all centered on Q1, 2000), Mr. Robertson persuasively made the case for value investing, including, "I have great faith though that, this, too, will pass. We have seen manic periods like this before and I remain confident that despite the current disfavor in which it is held, value investing remains the best course." But talk about *the weight of the wait*, he concludes that, "there is no point in subjecting our investors to risk in a market which I frankly do not understand." The market was turning as the letter was being penned.

Seventeen years later, investors who believe that valuation matters are once again being crucified for their "reluctance to incorporate the new economy into the overall scheme of (their) investment discipline." This rehash of manias past, is meant to set the stage for a discussion of the current growth vs value dislocation, including an attempt to answer a question that a handful of clients have been asking: What do we think about "the recent figurative waving of the white flag by famed value investor Jeremy Grantham?" Let's start by acknowledging that we admire him greatly, as we do Julian Robertson. We respect Mr. Grantham, look forward to reading his opinion pieces, and agree with most of his views, including many of his recent thoughts. We are not sold on his conclusion, however. Will it really be many years before margins and valuations return to normal? Maybe. Let's examine some of the key points.

First, kudos to Mr. Grantham. A good while back, when most value managers were bunkered down with 20% to 40% cash weightings in their portfolios, awaiting the inevitable crash, Grantham predicted that the market had a good bit more to run. In fact, he targeted 2300 on the S&P 500, a target that is now well in the rearview mirror. He has made many good long term calls over the past half-century. In November he penned 'Not with a Bang but a Whimper,' in which he hinted that he may not turn bearish when the market hit 2300, a target that he had suggested was a 2-sigma event, which he explained should be expected to occur on average only once every 44 years, and signifies that a bubble is probably at hand. As he had previously hinted, in Part 2 of the Commentary he did back away from calling the 2300 level a bubble and, much more noteworthy, proclaimed that value investors should prepare for frustration because **it may be years if not decades before value investing starts to work again**. Because clients have asked, and because Mr. Grantham writes in Part 1, "I am asking you -- especially you value managers -- to think through with me some of these varied possibilities and their implications," and because these are thought-provoking ideas that almost mandate consideration and response, we hereby offer the following comments.

We recommend reading the past several commentaries by Mr. Grantham. We don't have the space to do justice to them, but will try to quickly touch on the key points. For starters, Jeremy observes that "for value managers the world was, for the most part, convenient, even easy for decades. Then things changed." Jeremy, who normally agrees in cyclical reversion to the mean, is now, like Kundera, doubting the sanctity of the cycle, believing that seven years is an adequate time frame. When things persist for several decades, he posits that it is time to consider the fact that things may have changed. He includes a series of graphs that show that over the past twenty years levels are higher for P/E ratios and for profit margins (both as a percentage of sales and of GDP). They all continue to fluctuate, but do so around a "much higher mean, 65% to 70% higher." Importantly, "we have actually spent all of six months cumulatively below trend in the last 25 years." Point taken. While margins and multiples have been trending up, interest rates have gone the other direction, they "have never been at such low levels in history as they were last year." And, another very important, and non-coincidental change is central bank policy around the world. In his words, "my old bugbear -- the modus operandi

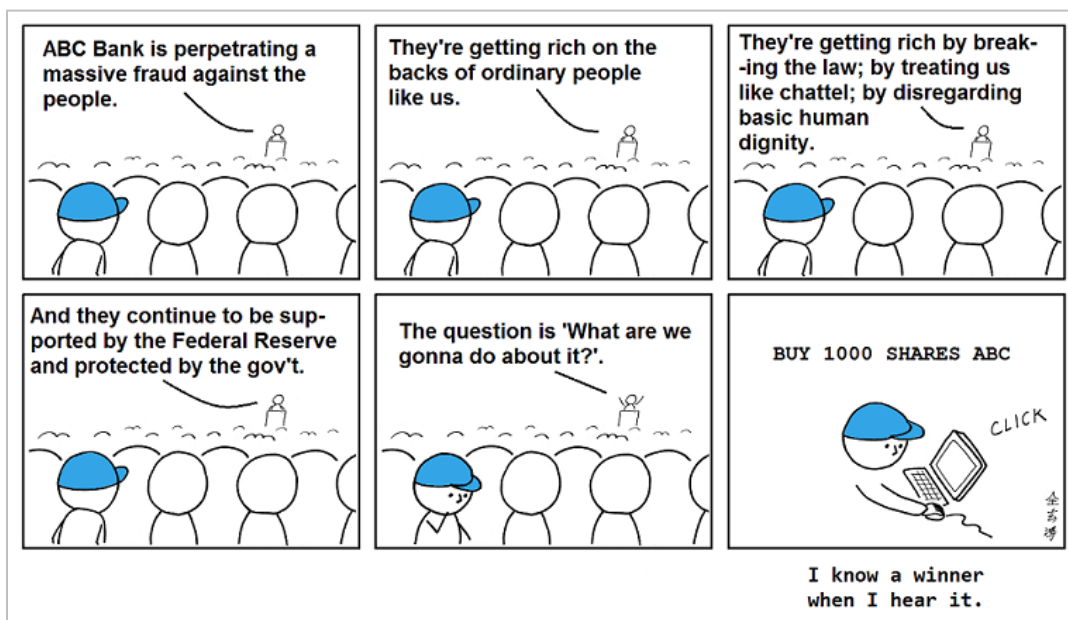


of the Federal Reserve and its allies is very different in its 22-year persistent effort to work the highs and lows of the rate cycle lower and lower.”

Now this is all fine, but where we believe his analysis gets quite interesting is the next step. Economic theory would suggest that the benefits of lower interest rates, better technology, etc. should be competed away; passed onto the consumer. Yet, “to summarize, stock prices are held up by abnormal profit margins, which in turn are produced mainly by lower real rates, the benefits of which are not competed away because of increased monopoly power, etc.”

Monopoly power!! This isn’t coming from a member of proletariat. Mr. Grantham backs up this non-bourgeois sentiment thus:

- “Steadily increasing corporate power over the last 40 years has been, I think it’s fair to say, the defining feature of the U.S. government.”
- “New regulations proliferated, they tended to protect the large, established companies and hinder new entrants.” (He includes a chart backing this up. New entrants have plunged over past 40 years).
- Regarding “corporate power ... management was blessed by the Supreme Court, whose majority in the Citizens United decision put the seal of approval on corporate privilege and power over ordinary people.”
- “Lack of action from the Justice Department.” (Certainly a big change from the 20<sup>th</sup> century)
- He summarizes that “if they had materially more monopoly power, we would expect to see exactly what we do see: higher profit margins; increased reluctance to expand capacity; slight reductions in GDP growth and productivity; pressure on wages, unions and labor negotiations; and fewer new entrants into the corporate world and a declining number of increasingly large corporations.”



We find the concentrated corporate and political power argument absolutely convincing.





*Per Wikipedia:*

*"Corporatocracy /ˌkɔːrpəˈrɒkrəsi/, is a recent term used to refer to an economic and political system controlled by corporations or corporate interests. It is most often used today as a term to describe the current economic situation in a particular country, especially the United States. This is different from corporatism, which is the organisation of society into groups with common interests. Corporatocracy as a term is often used by observers across the political spectrum.*

*Economist Jeffrey Sachs described the United States as a corporatocracy in The Price of Civilization (2011). He suggested that it arose from four trends: weak national parties and strong political representation of individual districts, the large U.S. military establishment after World War II, big corporate money financing election campaigns, and globalization tilting the balance away from workers.*

*This collective is what author C Wright Mills in 1956 called the 'power elite', wealthy individuals who hold prominent positions in corporatocracies. They control the process of determining a society's economic and political policies.*

*The concept has been used in explanations of bank bailouts, excessive pay for CEOs, as well as complaints such as the exploitation of national treasuries, people, and natural resources. It has been used by critics of globalization, sometimes in conjunction with criticism of the World Bank or unfair lending practices, as well as criticism of "free trade agreements."*

As they say, "If the shoe fits..." That interest rates, profit margins and valuations will all take many years to return to the neighborhood of previous levels is worthy of thought. That large companies' competitive advantage is large is clear enough. Yet, Mr. Grantham famously used to believe strongly in the concept of reversion to the mean and had previously espoused the view that the current market level of 2-standard deviations from the norm represents a potentially dangerous bubble. This, too, deserves some thought. Have 'laws' that govern the universe really changed that much? Does he truly believe that this current age of increasing political and corporate corruption power, and the resultant mal-investment, no longer mean that, figuratively, we're 'on the eve of destruction'? It always has in the past.

*"I can't twist the truth it knows no regulation  
Handful of senators don't pass legislation  
And marches alone can't bring integration  
When human respect is disintegratin'  
This whole crazy world is just too frustratin'*

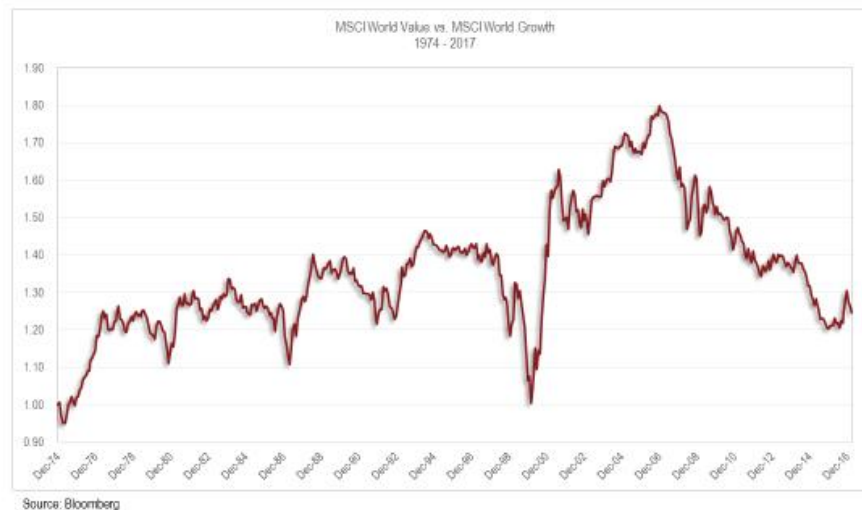
*And you tell me  
Over and over and over again my friend  
Ah, you don't believe  
We're on the eve of destruction"  
-Barry McGuire, Eve of Destruction, 1965*

We also believe that this is not the 'eve of destruction,' but do suspect that owners of long bonds and some of the particularly bond-like stocks may look back to this analogue as having been apropos. It's noteworthy that the song is from the 1960s, the last time Wall Street was exuberant even as the 'man on the street' had a divergent view and the 'anti-establishment' movement was getting going in earnest.

Mr. Grantham seems to be unloading the 'unbearable weight' of Nietzsche's 'eternal return' and opting for the 'lightness' of Kundera's view – maybe the stock market isn't condemned to revisiting the same cycles perpetually. Maybe it is linear, or at least linear for sufficient periods of time that it should not be evaluated based upon the past. Beginning with an acknowledgement that he may be correct, we suspect that the obstacles are too great. The first obstacle is aptly illustrated by the following chart. Regardless of how favorably the market admittedly views growth companies, if there is a price for everything, at what price is the price for growth too high?



## The World is Cyclical – Value vs Growth Stocks



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Secondly, in addition to price, there are reasons to not be sanguine. Jeremy, himself, states in his letter, “*Is there anything that really matters in investing that is not different? (Actually, I have one, but will save it for another discussion: **human behavior**.)*” Bingo! We look forward to that discussion. So much of economics seems to be about mapping human behavior. No one has had much success with that. Erratic behavior is no reason to assume persistence of that behavior.

Thirdly, the economy has its challenges, which should pose as hurdles to the markets. That the current recovery is long in the tooth is well-documented. Compounding the potential problems, we’ve just touched on the idea that, a la the 1960s, the market is ignoring the fact that society is deeply divided, and anti-establishment ire runs high. Certainly the Gini coefficient (measure of inequality) is a warning signal (higher in the U.S. than in Russia, India, China, and most of the developed world). Also, the voters across the West are sending some sort of message. Perhaps more importantly, the world’s central bank-induced mal-investment peril hangs over us like the sword of Damocles. These central banks have succeeded in spades on executing their stated goal of getting people to go out further on the risk curve.

*“I’ve got four hundred/month rent to pay  
And I can’t find a dollar  
Let me tell you time tough  
Everything is out of sight, it’s so hard  
Time hard  
Everything is growing higher and higher  
**Good times was leading the bad times**  
But now the bad times take over”  
-Time Tough, by Toots and the Maytals*

The idea that, because the powers that be will be doing everything they can to make the current low interest rate and high profit margin world last a long time, *it will be* so, is questionable, at best. While confessing that we didn’t believe the era of perceived central bank infallibility could last nearly this long, we continue to have severe doubts about its mortality. If central bank and



government bureaucrats were really omnipotent, it wouldn't have taken them until the 21<sup>st</sup> century to meet with success. Easy money is not an elixir. George Washington put it this way, "Paper money has had the effect in your State that it ever will have, to ruin commerce – oppress the honest, and open a door to every species of fraud and injustice." Certainly a different spin on the 'attributes' of artificially low interest rates. Keynes had this to say, "Lenin was certainly right. There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency. The process engages all the hidden forces of economic laws on the side of destruction, and does it in a manner which no one man in a million is able to diagnose." We've used this quote plenty in the past. Certainly it is appropos to the current discussion.

While low interest rates will prove to be no elixir, neither will corporatocracy prove to be manna for corporate profit margins. It will certainly help in meaningful ways, but it is interesting that corporate and political power are **simultaneously the excuse for high valuations in the US and low valuations in the Emerging Markets**. Is it a Godsend or a disease? The market drastically changed its mind over the past three decades regarding these attributes in Japan. It has certainly changed its mind over the past half-dozen years regarding the BRICs (Brazil, Russia, India and China). Won't they come to realize it won't work any better in the States? Corporate profits, it must be remembered, are a junior claim on the economy, meaning that **stockholders receive what is left after the lenders, workers, and governments all take their share of the economics**. In most of the world, the government continually claims an increasing piece of the pie. This can be measured as a percentage of GDP, by taxation, and by increases in debt (i.e. future taxation). Loss of purchasing power of a governments' currency should properly be viewed as a tax, as well. Bondholders also have a senior claim on economics. Their claim has been getting larger and larger, and now is at record levels in most every country. For the past 35 years, bondholders have altruistically lowered the economics that they receive for their huge slice of the pie. Altruism is another human trait that shouldn't be counted on for consistency. Rates will rise someday, to the detriment of corporate profits. Admittedly, the central banks are determined to screw the bondholder, to the benefit of equity holders. Still, the potential senior claim is breathtakingly large. Labor represents another senior claim that has become much diminished in recent decades. Wages have drastically lagged the cost of living. Due to globalization and computerization/robotics there is a strong argument that this trend will continue. Yet, using 'ruler' based analysis to extend trends into the future can be dangerous. Unrest is perhaps more prominent than it has been in many decades. Bury your head in the sand at your own peril. So government, bold holders, and labor *may* continue to passively cede their share of the economy to equity holders for another decade or two, but students of history will remain on guard.

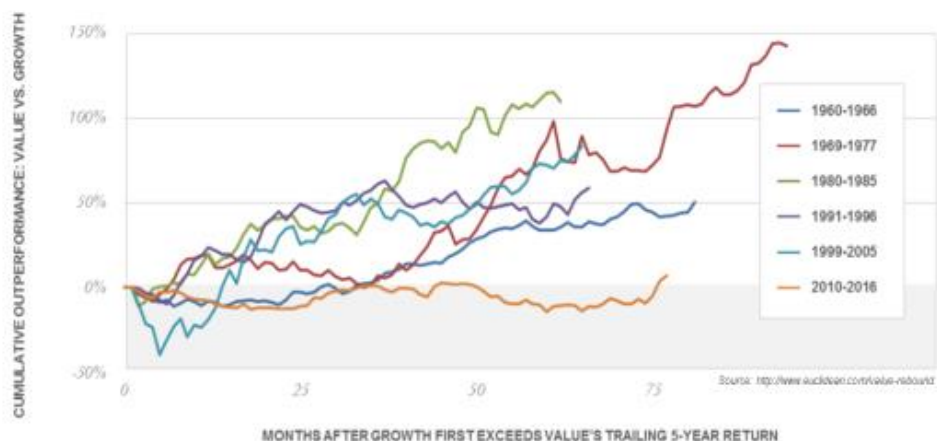
We will make three more important points pertaining to Granthams comments and the growth/value debate. This entire lengthy discussion may all be moot, because, first of all - valuation does matter. Mr. Grantham acknowledges that prices have run to a point where **future returns will be poor, whether or not his prediction is correct**. Whether the poor returns come consistently or in a highly volatile way may matter only to traders as opposed to long-term investors.

The second, equally noteworthy point - giving up on value now may conceivably prove to be correct, but is a risky strategy. The following chart shows that **value tends to do after periods of underperformance**. We have no intention of trying to time this and thereby risk missing the inevitable, powerful reversion.





## Post 5 Years of Underperformance



All performance information is hypothetical and not the actual performance of an investment fund. Historical performance is not necessarily indicative of future performance. The data used in this study is publicly available and can be accessed at: [http://mba.tuck.dartmouth.edu/pages/faculty/ken\\_french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken_french/data_library.html)

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And finally, as we segue to the outlook for ex-U.S. portfolios, we believe that we, Mr. Grantham, and his business partner James Montier, all agree with another partner of theirs, Ben Inker, who stated in the recent commentary that, "There are certain things that seem pretty clear to us. Whether or not the world has changed – and non-U.S. stocks look a lot cheaper than U.S. stocks – it's hard to believe that things have permanently changed for the U.S. and have not changed for the rest of the world. Or that they will not change in a similar direction in the rest of the world. That would be a weird leap to take. So our view is that even if you take a more sanguine view than we do of the U.S. stock market, it doesn't mean you should buy a lot more U.S. stocks. It means **you should be buying non-U.S. stocks – because they're a better deal.**"

Mr. Inker makes some highly valid points. We, at Kopernik, remain firmly entrenched in the value camp. The potential upside is certainly more than worthy of the wait. In addition to Ben Inker's thoughts, the counsel of the great musician Tom Petty is particularly apropos:

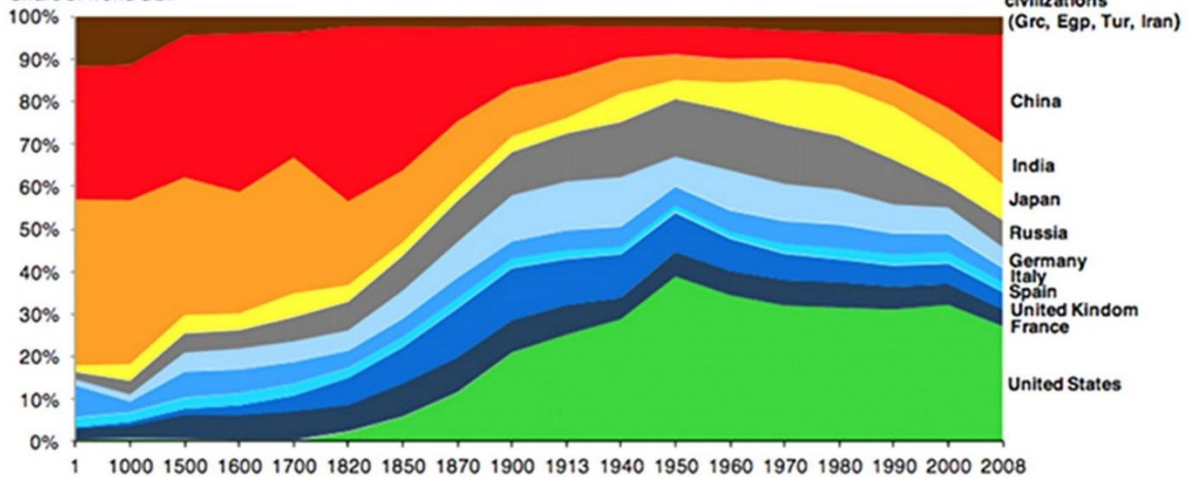
*"The waiting is the hardest part  
Every day you see one more card  
You take it on faith, you take it to the heart  
The waiting is the hardest part  
Don't let it kill you baby, don't let it get to you"*  
-Tom Petty

We've devoted an inordinate amount of time to this one particular over-extended trend, but these are unordinary times. We share Jeremy's pain, and value his thought process, but come to a different conclusion. Time will tell. But, this is but one of so many surreal trends in the current environment – we best move on. Next up, for those of us residing Stateside, Mr. Inker is correct this is a particularly bad time to be Xenophobic. The valuations of stocks in the United States, relative to their brethren trading outside the States, should be top-of-mind for all investors.

## Non-U.S. vs U.S. Stocks

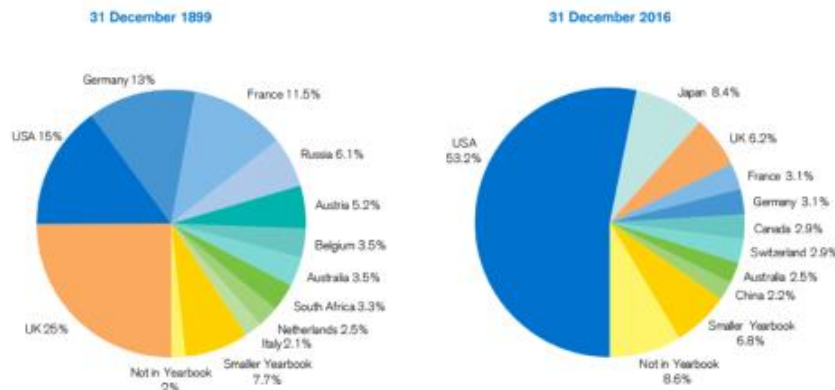
*"I'd go the whole wide world  
I'd go the whole wide world just to find her"*  
-Wreckless Eric

**Economic history of China and other major powers**  
Share of world GDP



## The World is Cyclical – Domestic vs International

**Chart 1: Relative sizes of world stock markets, end-1899 versus end-2016**



Source: Elroy Dimson, Paul Marsh, and Mike Staunton, *Triumph of the Optimists*, Princeton University Press 2002, and FTSE Analytics FTSE All-World Index Series, December 2016.

*"Be fearful when others are greedy, be greedy when others are fearful"*  
-Warren Buffett



Regarding the first chart, we anticipate the feedback, “You guys are including a chart going back a dozen centuries? I wish I could get my clients to lengthen their time horizon to a dozen weeks!” We understand. We’re often in the same boat. But, it is a pretty impactful chart. As China and the rest of Asia grow rapidly, it is interesting to note that they made up  $\frac{3}{4}$  of the world’s economy one millennia ago. Focusing on a shorter time frame, it is meaningful that over the past half-century, the U.S.’s share of the world’s economy has shrunk from more than a third to about a fifth. This trend will undoubtedly continue. Additionally, these two countries currently have a third of the world’s citizens. Yet, as the second chart shows, while the U.S. share of the world economy trends down, its share of the world’s market capitalization has defied gravity, so to speak. It now represents 53% of the ACWI. In other words, one country is being valued at more than the rest of the world put together! It is apparent that this, too, represents another over-extended cyclical trend.

It’s tough looking for undervalued stocks, especially this late in a long bull-market cycle. Why limit oneself to a single country’s market? To an expensive country’s market? When looking for scarce bargains, we suggest following Wreckless Eric’s guidance from the mid-seventies - ‘go the whole wide world just to find (them).’ We could now insert a series of tables showing how cheap non-U.S. stocks are relative to the U.S., and in many cases, inexpensive in their own right, as well. But, since there are so many ways to value stocks, we will leave that exercise to the reader. Almost any way you go about it, the conclusion should be the same. So, in the interest of time, it’s best to move on to the next uber-extended trend – real vs financial assets.

## Real vs Financial Assets

*“Gravity is a contributing factor in nearly 73 percent of all accidents involving falling objects.”*

*-Dave Barry*







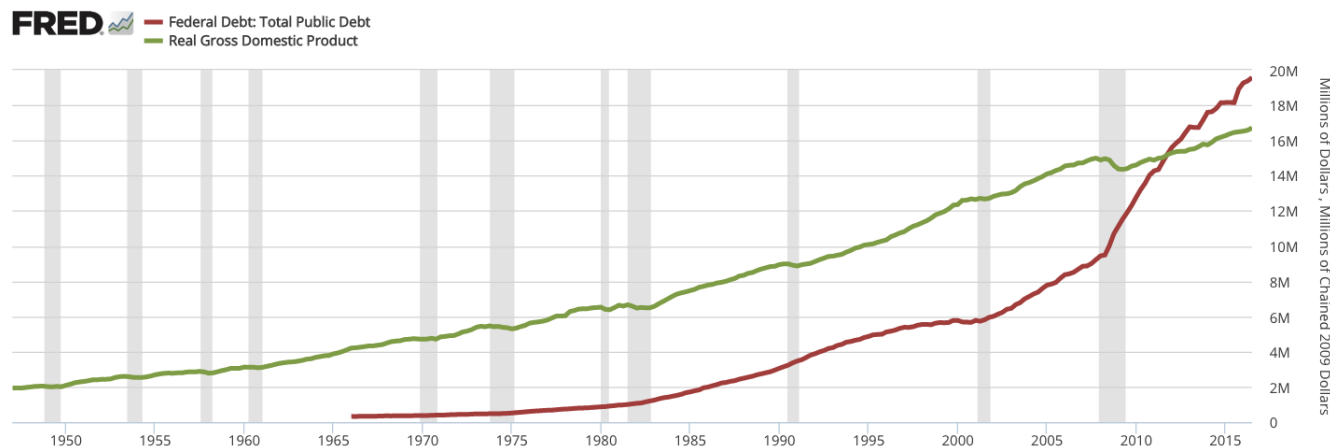
One must wonder why gravity, figuratively, has caused tangible assets to be so ‘unbearably’ heavy while asset-lite (and many earnings-lite companies) have been immune to its powerful, downward pull. The market’s dancing weightlessly, even as ‘Main Street’ suffers; brings to mind Yeats’ *The Stolen Child* - “To and fro we leap, and chase the frothy bubbles, while the world is full of troubles, and anxious in its sleep.” It also brings to mind Isaac Newton’s Theory of Gravity. In particular, Newton’s second law, which states, among other things, that:

$$\text{Momentum} = \text{Mass} \times \text{Velocity}$$

Newton’s second law shows how an object will be affected if an external force acts upon it. This law states that the rate of change of momentum of a body is proportional to the resultant force acting on it. Will the weight of very few assets or earnings figuratively exert a gravitational pull on the NASDAQ? Will tangible weight eventually be viewed as a virtue? Will leverage inevitably serve as a downward pull rather than a jet fuel? Now, we know that Newton was a student of the markets, having first made, then lost, a considerable fortune on the South Seas Company. That was also a time when investors ebulliently plunged into a very narrow group of stocks, causing a manic boom. It was followed by a colossal bust. He famously opined, “I can calculate the paths of heavenly bodies, but not the madness of crowds.” What would he think of the current madness, one where the crowd assigns little weight to companies that are heavily endowed with assets and latent value, yet weight their portfolios heavily to exciting, trendy companies that are downright anorexic in terms of real assets?

The most obvious example of inflated esteem for financial assets is, of course, the bond market. Rates paid on the U.S. 10-year Treasury bond have dropped from virtually 16% in late 1981 to a hair over 2% currently. It’s perhaps an unfair example, given the gross undervaluation of bonds in the early 80s, but, if rates instantaneously fell from 16% to 2%, a 10-year bond would triple in price! It would appreciate 209%. And people say they are having trouble identifying symptoms of inflation. A \$12 trillion market has tripled.

To give a quick example of the peril this presents, if rates were to return to 16%, the price of the bond would drop by two-thirds. This is not a prediction, and rates won’t rise this much instantaneously, if at all, but see the problem for the Fed, and for the economy. Lest anyone mistake the drop in yields over the past 35 years as reflective of improving fundamentals, the following data should set things straight. In 1980, the U.S. Federal debt was \$0.7 trillion (yes the 7 is to the right of the decimal point). Now it is \$14 trillion! No one expects it to shrink, it has increased for 60 straight years (The government has reported a surplus in 5 of those years, but in reality never ran a surplus. The debt increased every year). Back in 1980, the public debt was one-quarter of GDP and everyone was freaked out about it. Now it exceeds three-quarters of GDP and most are complacent. As the chart below shows, total (including intragovernmental holdings) public debt well exceeds GDP. It will keep growing. It seems that one of the few things that Congress and the President can all agree on is the need for MORE spending. To paraphrase President Nixon, we are all neo-Keynesians now.



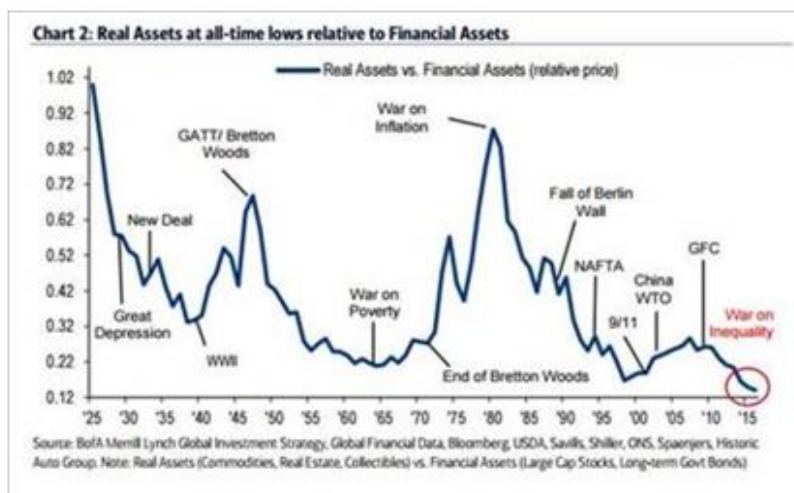


As chilling as the U.S. financial situation looks, much of the rest of the developed world is in even worse shape and offers even less yield. Surreal indeed. Canada, the U.K., Belgium, France, and the formerly infamous PIGS (as Portugal, Italy, Greece, and Spain were irreverently categorized not long ago) all have a higher ratio of debt to GDP than the States. Japan is in a league of its own with a ratio three times higher than that in the U.S. Yet, with the exception of Portugal and Greece, all of these countries have 10-year yields below 2%. Most are below 1%. Japan, with perhaps the worst financial position, has a yield near zero. What would Sir Isaac's scientific mind think of Switzerland's negative yield? How to compound minus 0.2%? In hindsight, the Dutch Tulip Mania doesn't seem so outrageous.

While stocks and real estate seem like screaming bargains compared to bonds, it is worth pointing out that stocks have appreciated 22.5 times since the beginning of 1980 (60 times if dividends were reinvested), as measured by the S&P 500 index. Real Estate has, likewise, kept pace. Whether real estate is a real asset as its name implies or a financial asset since it is generally mortgaged, priced via a cap rate, and subject to changes in interest rates, is a matter of debate. We believe that properties in which the value is more attributable to the buildings than to the land are probably more akin to a financial asset than to a real asset. Properties like raw farm land are more real asset-like in nature. And, as alluded, it seems clear that the more mortgaged a sector is, the more exposed to interest rates it is. We are not real estate experts, but have noticed that real estate, like the stock market, has become a popularity contest. Unpopular pockets of value can be found in an otherwise overvalued marketplace.

While it seems evident that Jim Grant's witty observation that bonds offer 'return-free risk' is on target, the chart below should offer solace that real assets vis a vis financial assets represent opportunity to investors in the form of yet another over-extended trend.

## The World is Cyclical – Real Assets vs Financial Assets





In general, several key points warrant mention. Real assets are extremely cheap relative to financials. Secondly, as suggested above, within real assets, unpopular categories offer much more value than popular ones. Importantly, great assets with uncertain cash flow are much cheaper than so-so assets with certain expected cash flow. We find it interesting that scarcity, for the moment, isn't valued. As debt, cash, and people multiply, Kopernik is pleased to find bargains on hard to replicate assets. It was only a half-dozen years ago that the market coveted farmland, cell phone networks, transportation franchises, mineral mines and oil wells, and utility monopolies. We still do, and in some cases the values have never been better. We have many examples (past and present) forthcoming. What better place to start than with real money.

## Gold vs Fiat Currency

*"Catch a cannonball now to take me down the line  
My bag is sinking low and I do believe it's time"*

-The Weight, by The Band

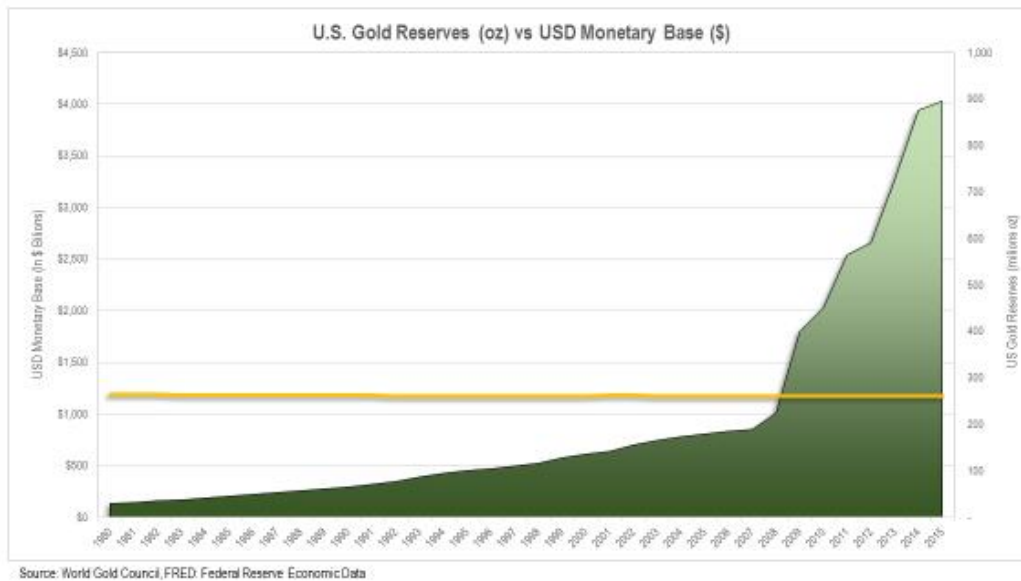


We won't spend much time on this subject since, God knows, we've already given it plenty of attention in recent years. It is worth repeating that gold has been money for thousands of years, that fiat money has always lost value at a meaningful rate, that bonds (the abundance of which was addressed previously) are claims on currency, requiring either more currency to be conjured or else eventual default, and that as the chart amply testifies - the quantity of gold relative to the quantity of currencies has never been scarcer.





## The World is Cyclical – Specie vs Fiat Money



16

The price required to incentivize new production, at a rate sufficient to replace existing production, is estimated to be in the neighborhood of \$2,000 per ounce. A theoretical return to a Bretton Woods monetary system would require a price closer to \$3,700 per ounce. In addition to gold trading at a large discount to its theoretical value, the gold mining companies trade, on the stock market, at a steep discount to the value of the gold they own as reserves, even post-2016's strong gains.

Cryptocurrencies merit a brief mention. We're not experts, but find them intriguing. They offer ease of transacting, get around the problems of 'the system,' and purportedly prevent future devaluation since quantity is managed and semi-fixed. But - there's always a but - fiat currency would be wonderful, too, if only promises to maintain scarcity were honored. They never have been. Will these promises be honored in the crypto-world? Concerns should be heightened now that ICOs exist. An ICO, it turns out, in an "Initial Coin Offering." So much for scarcity. And new currencies keep appearing. And all are conjured out of thin air, a la fiat currencies. If gold didn't exist, we'd probably migrate toward cryptocurrency, much preferring it to fiat currency. But gold does exist. It continues to be scarce, to be proven over millennia, to be nobody's liability, and nowadays – readily available for a discount on Wall Street. In the long-run, per Ben Graham, "the market is a weighing machine." While the market sorts things out, it is worth the wait.

*"And once in a night I dreamed you were there  
I cancelled my flight from going nowhere  
It's all I can do  
To keep waiting for you"*  
-The Cars



## WEIGHT LIMIT INFORMATION

### Sector Seasonality

Gold is only one element. Natural resources, in general, are unloved in the marketplace, despite their scarcity and their usefulness to mankind. The chart below shows that over time, love for resources, and for many other sectors, has waxed and waned. At the end of the 1970s, resources – as represented by energy and materials – exceeded 40% of the S&P 500 index. At one point it, approached 50%. Truly patient investors were rewarded when, 20 years later, resources could be accumulated at values representing less than 10% of the index. Investment paid off handsomely, when these sectors soared during the decade. As the chart further testifies, in 2017, investors have been given a second chance. Once again these sectors are in the proximity of 10% of the index.

### The World is Cyclical – Sectors

Sector	Historical S&P 500 Weightings (as of Feb 28, 2017)								
	1977	1980	1985	1990	1995	2000	2005	2010	2017
Consumer Discretionary	16.5%	10.6%	15.6%	12.8%	13.0%	10.3%	10.8%	10.6%	12.1%
Consumer Staples	11.1%	7.7%	10.4%	14.0%	12.8%	8.1%	9.5%	10.6%	9.4%
Energy	15.9%	27.1%	12.8%	13.4%	9.1%	6.6%	9.3%	12.0%	6.6%
Financials	6.1%	5.0%	7.3%	7.5%	13.1%	17.3%	21.3%	16.1%	14.8%
Health Care	4.7%	6.5%	6.2%	10.4%	10.8%	14.4%	13.3%	10.9%	14.1%
Industrials	9.0%	8.7%	10.7%	13.6%	12.6%	10.6%	11.4%	11.0%	10.2%
Information Technology	10.7%	13.0%	15.7%	6.3%	9.4%	21.2%	15.1%	18.7%	21.5%
Materials	12.2%	13.7%	8.5%	7.2%	6.1%	2.3%	3.0%	3.7%	2.8%
Telecommunication Services	7.4%	4.5%	7.2%	8.7%	8.5%	6.5%	3.0%	3.1%	2.4%
Utilities	6.5%	4.2%	5.6%	6.2%	4.5%	3.8%	3.4%	3.3%	3.2%

Source: us.spindices.com, Bloomberg

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The chart shows that sectors are yet another area where crowd psychology causes cycles and extremes. Notice financials rising from 6% to 21% of the index before bowing to the weight of the oversupply and malinvestment that go hand-in-hand with too much capital. Financials reached one-third of the ACWI index. Likewise, information technology went from 10% of the index to 22% before it was massacred in the early 2000's. While tech has admittedly become a very important part of the global economy, it is worth



noting that it has reached the levels of 1999, yet again. Healthcare has also reached levels that proved problematic in the past. Market cyclicalities merit your attention.

*"Time is not kind to everything."*

-Robbie Robertson

## Publicly Traded vs Private Equity

Lastly, please read on as we put forth the case that public equities (select public equities, not the popular indexes by any stretch of the imagination) are not only better than cash, but better than private equities and most other investment options. And yes, we are aware that we're in the midst of one of history's great manias, and we could end up eating our words.

Defending the merits of equities versus bonds is easy. With yields circa the lowest in the history of the human race, it is not worth the ink. Defending them against cash at a time when U.S. equities are at new all-time highs and are near the highest valuations ever, is less easy. For those with a short-term time horizon, we won't even attempt to make the argument. Stay in cash. But for those who have a long-term time horizon, a set that we believe comprises 100% of **true** investors (short-term 'investors' are really speculators, whether or not they've admitted it to themselves), might we refer you back to our Commentary from several years ago, titled, "The Saddle Ridge Hoard." If that doesn't suffice, in the appendix you'll find an excerpt from Charlie Rose's interview with Warren Buffett back in November 2009 (yes the same Warren Buffett who professes to not like gold). The first sentence is – *"Well, cash is always a bad investment."*

Bonds, as claims on future cash, are doubly bad, as articulated earlier. We have no problem with alternative investments, including hedge funds and private equity. Long/short equity funds are likely a very good substitute for the role bonds used to play in investment portfolios, back in the days when they offered a real yield. Private equity forces a longer term time horizon, which serves as a big advantage. It usually offers more influence on strategic management and the ability to optimize the capital structure. Investors may need to worry about the plethora of capital being directed to private equity, the prices currently being paid, the often aggressive fee structures, and the possibility that, rather than being optimized, capital structures are being stretched. Investors can, and should, choose their managers wisely.

Given proper management, and economics, we like alternatives. But, in this environment, quality active management in the public equity space should prove superior. Actively managed public equities are unpopular, arguably less efficient than ever, and offer timing advantages. The advantages being offered require that managers not be large, have tremendous conviction, be willing to buy unpopular companies, and have the utmost patience. Opportunities are not in abundance but are enticing. **In a nutshell, private equity has the advantage of forcing upon investors the important benefits of discipline and of a long-term time horizon, but at the cost of lost ability to quickly take advantage of emotion driven mistakes by the investing public. Public equity offers this opportunity, in spades, but investors must provide their own discipline and lengthy time-horizon.** This is a very important attribute. We now offer a few examples, past and present, of where the fear, panic or apathy of the crowd presented opportunities to investors in the *public equity markets*. We also attempt to put the concept of patience into perspective.

## Emotion-Driven Equity Opportunities

*"Patient opportunism – waiting for bargains – is often your best strategy."*

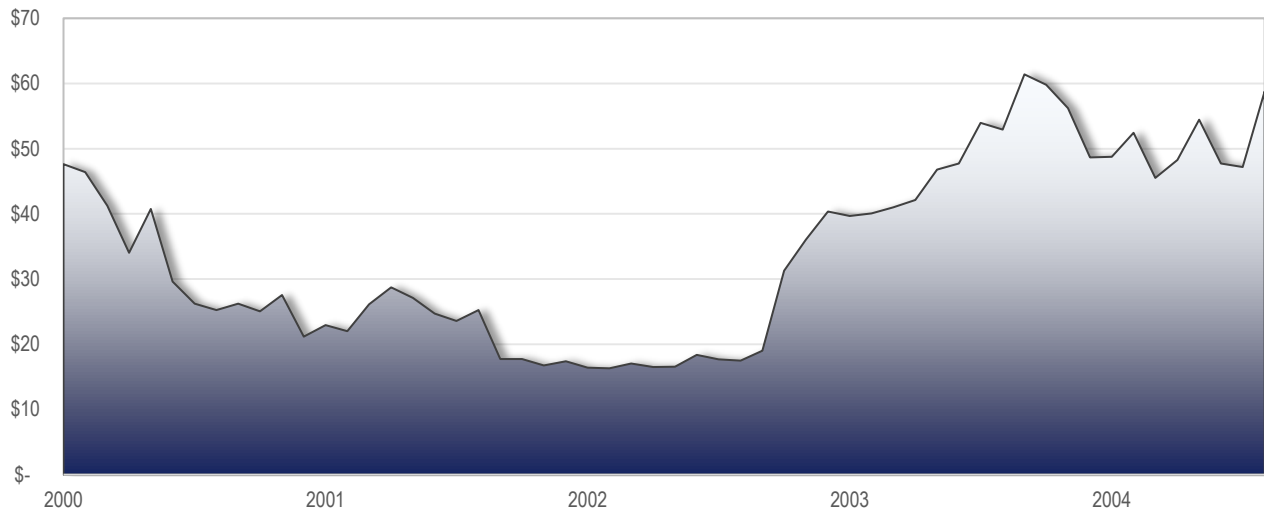
-Howard Marks

Let's start with examples from the past; with areas in which we've only invested periodically. When it comes to tech and biotech, literally thousands of companies duke it out for a share of the bountiful treasure that goes to the winners. The vast majority fail. Patient investors don't have to enter the dog-eat-dog free-for-all. Avoiding the numerous casualties, they can wait to see who wins; then wait a little more for a chance to buy for a song. This was the case for Genentech in the 80s and again in 2002, as pictured below. Similarly, Amgen sold at prices reflecting fear around 2008.





GENETECH INC. (Mar 2006 - June 2017)



Source: Bloomberg

When it comes to being patient, aiming to capitalize on fear and greed in the marketplace, few industries rival shipping. Because it is highly capital intensive, and has few other barriers to entry, it is highly cyclical, leading to exhilarating profits at the top of the cycle and intolerably painful losses at the bottom. As a result, 'Mr. Market' who is willing to pay many times the value of underlying ships for shipping companies when things look good, is subsequently willing to sell that position at a small fraction of the underlying value. The losses at the bottom of the economic cycle become painful. The chart for Teekay Shipping, which we've owned off and on in the past, is representative. We own a handful of others now.

TEEKAY CORPORATION (May 1997 - May 2017)



Source: Bloomberg



Moving on to the next example of where, once again, panic and fear presented bargains. From a CNN Money article on January 17, 2002:

## Asbestos fears hit 3M again



January 17, 2002: 11:19 a.m. ET

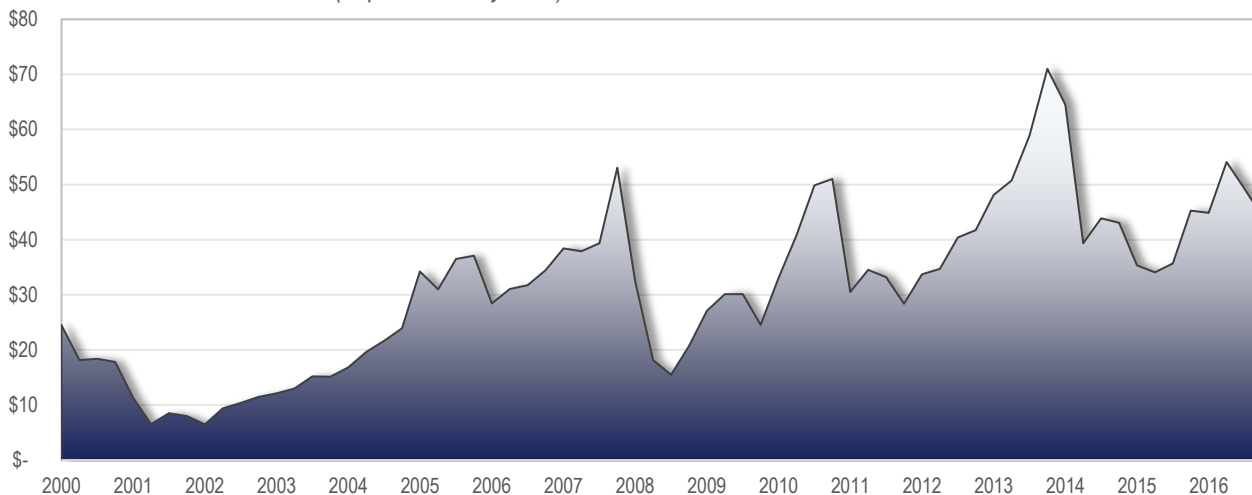
**Shares fall for second straight day on worries about exposure in 20,000 suits.**

*"Anybody with any hint of asbestos exposure is getting taken down. It's a witch hunt,"*  
ABN AMRO analyst David Begleiter told Reuters Wednesday.

A number of U.S. companies have suffered recently from worries about their exposure to asbestos lawsuits, including Dow Chemical Co. (DOW: up \$0.10 to \$24.65, Research, Estimates), PPG Industries Inc. (PPG: down \$2.01 to \$44.58, Research, Estimates), and Halliburton Co. (HAL: down \$0.09 to \$10.16, Research, Estimates).

Asbestos was bad news, and so were the lawsuits. We have a lot of heartfelt sympathy for the victims of asbestos. If only the facts could have been recognized sooner. But, when companies started losing many billions based upon ownership of businesses that they had owned before the ill-effects were known, and businesses of which they had long since dispensed, it was time to suspect that the issue had become an unsustainable craze. At any rate, it was time to look for solid companies with the financial strength to persevere. There were many opportunities. 3M proved to be a good one. Some of the drug companies as well. We chose Halliburton at the time.

HALLIBURTON CO. (Sept 2000 - May 2017)



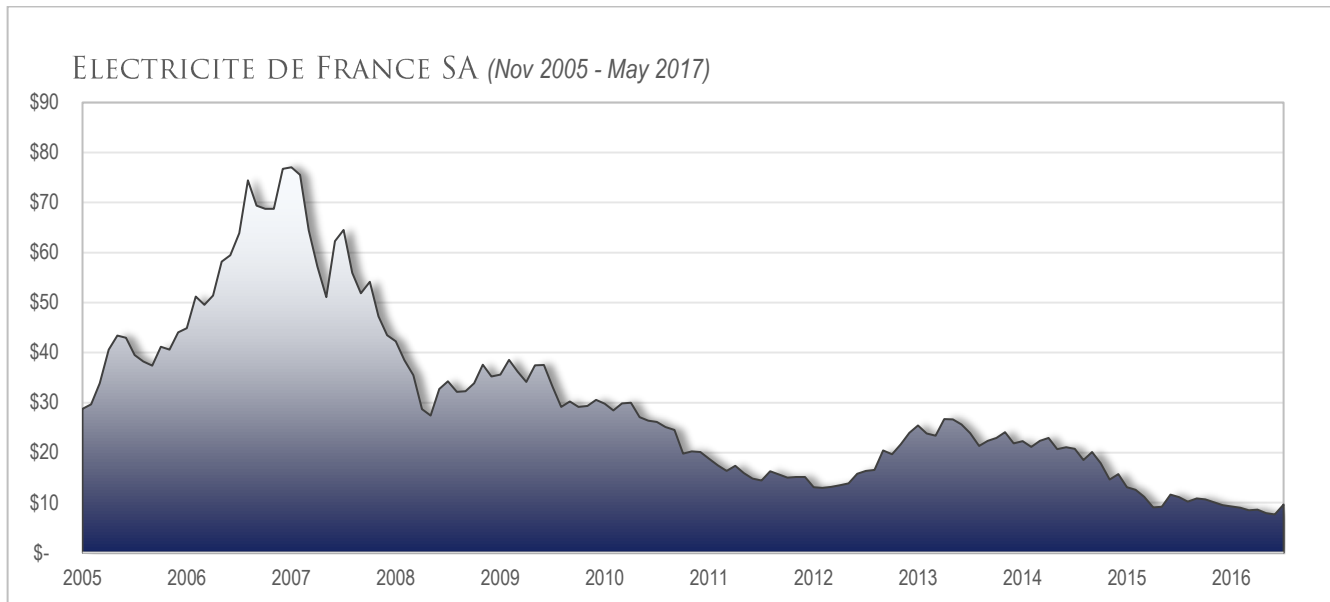
Source: Bloomberg

*"You never know what could be interesting tomorrow."*

- Robbie Robertson



Now, as we move on to more current examples, we'll repeat – one of the great things about investing in the public equity markets is the ability to take advantage of the fact that - *Crowds are extremely moody*. The patient person can wait for what Ben Graham referred to as Mr. Market's mood swing from a greedy disposition to one of fear. Over the past decade the market has lopped 90% off of the price per share of this dominant provider of cheap, clean electricity. Sure there are significant hurdles to overcome, there always are at the bottom. Good things come to those who wait.



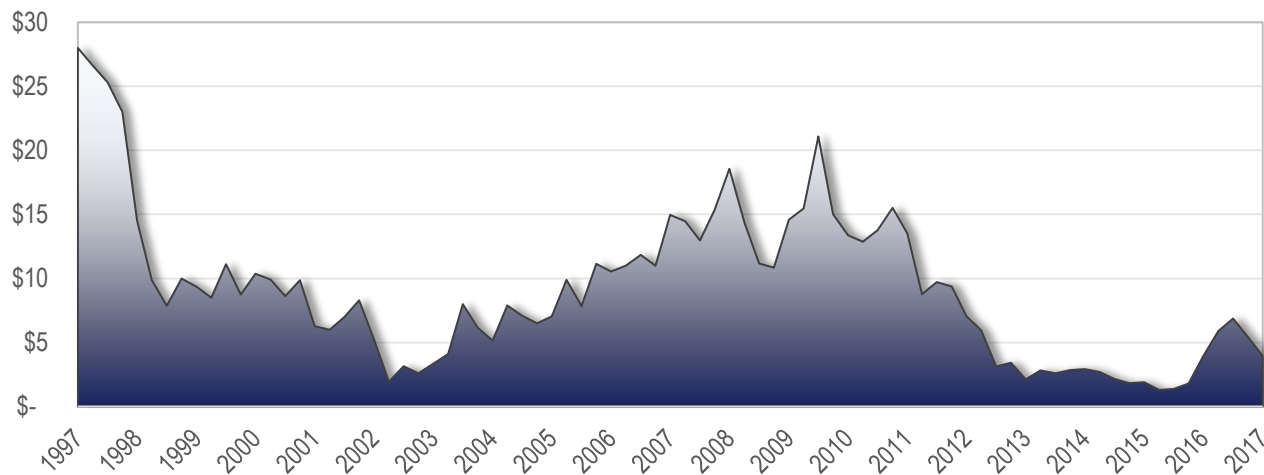
Source: Bloomberg

The great thing about nuclear power is that it is clean, emits virtually no greenhouse gases, costs next to nothing in variable fuel costs, is extremely hard to permit and build. As such, finished, operational plants are at significant competitive advantage over most other forms of electricity generation. Whether anyone should choose to build new plants is a matter open to debate. In addition to the obvious downside of working with hazardous materials every day and safely storing them post utilization, they are very difficult to build. They require tremendous amounts of capital and the ultimate building costs have a tendency to catapult to levels well above initial estimates. Part of the reason is that they are very unpopular, with a reputation that is figuratively lightyears away from actual experience. This results in government meddling on top of government meddling. And before one can even choose the arduous task of building a plant, they must endure years of politicking, planning, battling, designing, and financing. NIMBY (not in my back yard) is a major obstacle. Without a doubt, building a plant is a daunting task, not for the faint of heart.

So, owning an operating plant is a fortuitous place to be, but building one is arguably too high an admission price. For those who succeed, the rewards can be handsome. Take, for example, the owner of the world's largest fleet of nuclear generation plants. After over a half-century of planning, hassling, and building, they have 58 plants and a value that the accountants estimate at 280 Billion Euros. At current construction costs, it would likely cost much more today to replace the franchise. After subtracting all of the liabilities, the accounting book value is over 40 billion Euros. And, as could be expected for a company which endured, to build a superior, cost competitive, monopolistic franchise, the market rewarded them with a princely valuation. Since then, Mr. Market has drastically changed his mind. The price fell by more than 90%.



CENTRAIS ELETRICAS BRASILEIRAS S.A. June 1997 - May 2017



Source: Bloomberg

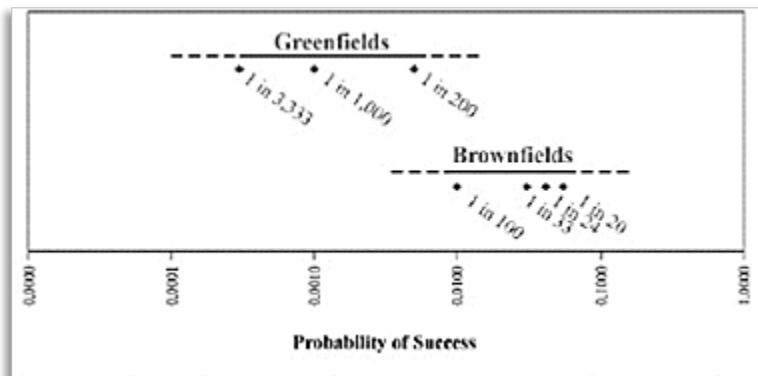
Even more so than with nuclear, generating electricity is simple, clean, cheap, and absent problematic greenhouse gases. But, also like nuclear, building a dam requires a labyrinth of politicking, capital, engineering and battling the NIMBY phenomenon. To own a monopoly that provides a basic need at a competitive price is a fortuitous position to be in. To borrow substantial sums to build out an impressive infrastructure, only to have the government force you to sell electricity at a significant loss is anything but fortuitous. Hence the 95% drop in the stock price to 13% of book value and an even bigger discount to replacement value. A hydro dam is a valuable asset that should last a century. Political views tend to have much shorter lives. Once again, patience is required.

*"I think the record shows the advantage of a peculiar mind-set – not seeking action for its own sake, but instead combining extreme **patience** with extreme decisiveness"*

-Charlie Munger

The natural resource business is brutal. Perhaps no area requires more patience or offers higher returns on patience. Over the years, the easy to find resources have been found and extracted. Much of what is left must be hard to find. When found, it is hard to turn it into a commercial mine/well. The recent movie, Gold, starring Mathew McConaughey, didn't do too well at the box office, but it did provide a glimpse at what the life of a prospector can be like: searching the globe, often in inhospitable places, dealing with people at all ends of the spectrum in terms of work-ethic, knowledge, wealth, reliability, and integrity. Certainly, Gold, was in part, the story of a conman. The odds of finding a reasonable prospect are slim. Once you do, don't celebrate. Per –Gerardo Del Real\*, "In 2007, Kennecott Exploration and Rio Tinto (from their 2006 annual business report) estimated that of 1,000 greenfield targets—not properties—targets, approximately 1 became a profitable mine and only 1 target in 3,333 became what they referred to as a world-class deposit." So, to repeat, **of the very few, incredibly lucky individuals who actually find a prospective property, 999 out of every 1000 will fail to ever turn it into a profitable mine.** Of those impossibly lucky, blessed mine owners, less than one in three will achieve world-class economics. We at Kopernik have absolutely no interest in prospecting for resources. Building mines is pretty low on our list as well.

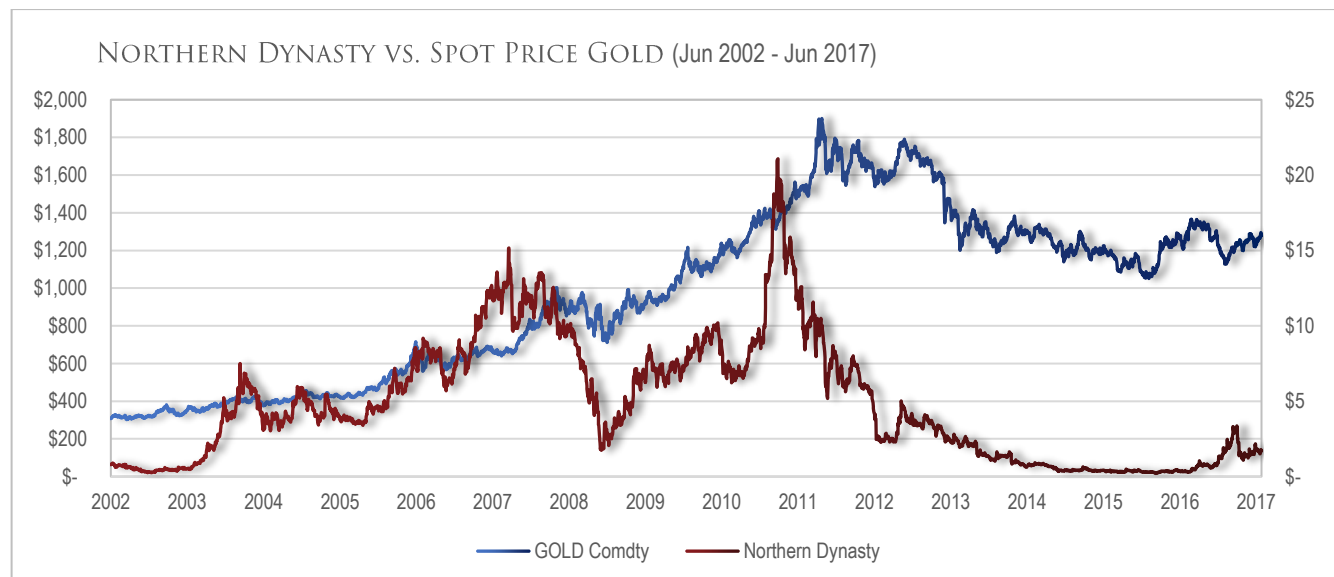




\*Increasing the Odds of Exploration Success: *Why the top 5% of junior exploration companies consistently outperform the bottom 95%* - By Gerardo Del Real: Tuesday January 13, 2015

Don't take that to mean that we are throwing in the towel on miners. Au contraire! Because many resources are useful, necessary, and scarce, mines are extremely valuable assets, and we are extremely interested in owning them. Others can use their skills in exploration, drilling, lawyering, lobbying, financing, building, chemistry, geology, tenacity, and management, etc. We prefer to employ another skill, one that we are coming to understand is also increasingly quite scarce: *patience*. Despite the miracle required to develop a successful resource reserve, bipolar Mr. Market will occasionally sell them for next to nothing. There is a plethora of examples. The case of The Pebble prospect is a wonderful analogue. Testing began in 1987, and it is still years away from being a mine. A brief description of the history of this property is in the appendix.

Highlighting a few parts here - of all the luck required to find a resource, a company by the name of Northern Dynasty ended up with one of the best mineral resources in the history of mankind. Some of the world's major mining companies (Rio Tinto, Mitsubishi, and especially Anglo American) poured **\$3/4 Billion** into the project (yes, with a B). Unlike many resources that are located in difficult, third-world countries, **this property is in the United States**. The chart below shows that as should be expected, 'Mr. Market' handsomely rewarded the stockholders from 2002 through 2011. The company estimated the resource at \$300 billion in recoverable reserves in 2010.



Source: Bloomberg



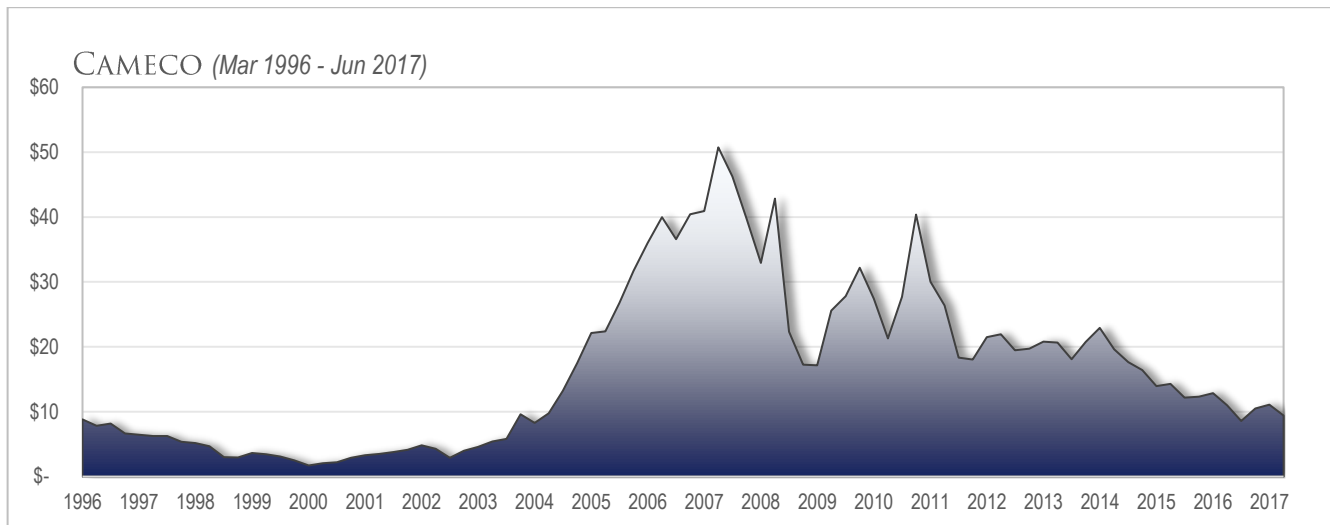
To reiterate the point: the return on patience can be extreme. From 2010 through early 2016, the stock fell from over \$21 per share to \$0.28 (U.S. Dollars). Yes – that is a 98.5% drop. A property with sunk costs of over \$3/4 billion (with a B) was trading at around \$60 million!

For those interested in larger, more liquid, and less controversial companies, let's move on. If ending up with a profitable gold mine takes miraculous good fortune, imagine ending up with the biggest collection of reserves and world-class producing mines in the history of mankind. Not surprisingly, the stock of the world's largest gold miner performed well for many years, going from \$4 in 1987 to over \$53 in 2011. The price of gold went nowhere during the 80s and 90s but soared from 2001 through 2011, reaching \$1,900 per ounce. By January of 2016 the price had corrected to \$1,050. Though this price was still four times the price of 2001, the price of Barrick stock went from \$53 to \$6, a level of less than half the level of 2001 when gold sold for \$255! The market cap was about equal to the money that they had already invested in Pascua-Lama, a still unfinished mine that is not a huge part of their portfolio. The stock has since bounced back to \$16, which is a market cap of \$19 billion and enterprise value of \$27 billion. To add a little perspective in this insane market, the *increase* in Apple's market cap during just the month of May was \$47 billion. Enough said.



Source: Bloomberg

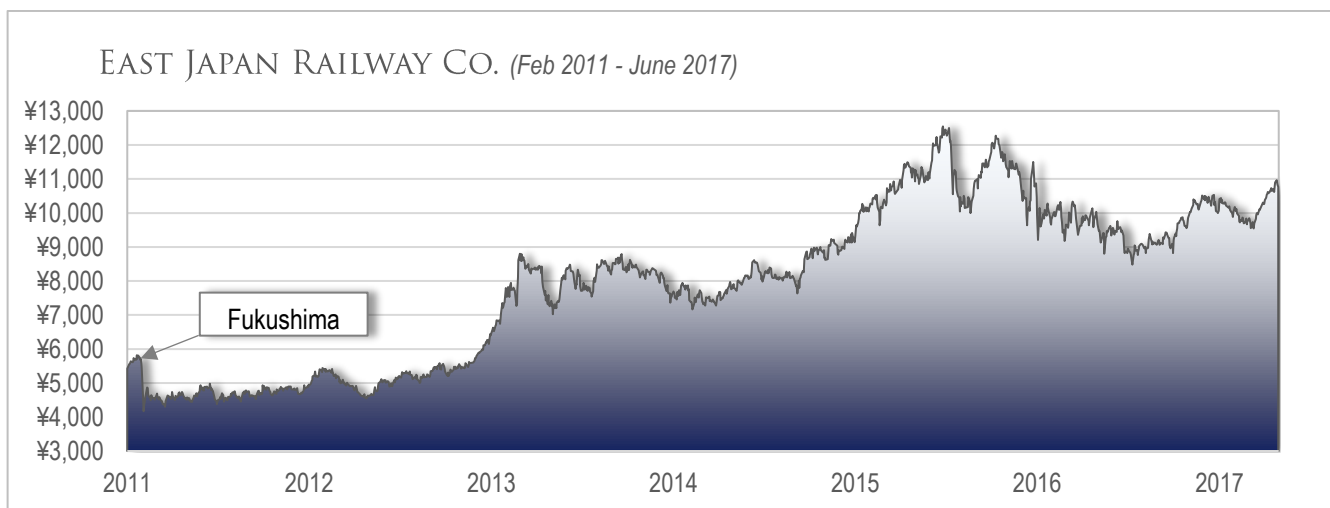
If mining gold isn't enough of a challenge, one might try uranium. Fundamentals for uranium are among the best of anything that we are aware of. The world's largest publicly traded uranium miner has seen its stock fall more than 80%. It trades below book value versus more than six times in 2006. It is likely at a meaningful discount to in-situ value. Their *second* largest mine took more than three decades and \$2.2 billion to build. The entire company is now selling for \$3.6 billion. The price of uranium needs to go up three to four times to incentivize new production and 6 times to get back to its level of the last decade. The patience of its investors has already been tested intensively. We remain unwavering.



Source: Bloomberg

*"[There] is the need for **patience** if big profits are to be made from investment. Put another way, it is often easier to tell what will happen to the price of a stock than how much time will elapse before it happens."* -Phil Fisher

Japan is well regarded for its railroad system. When the price of one of its best rail companies fell forty percent from 2008 through 2011, it became very attractive. It would be nice if tragedies never happened, but they do. They are awful, and the effects can be devastating. Fortunately, mankind is resilient. For good or bad, panic and fear lead to depressed valuations in the market. Note the 25% drop in march of 2011 before tripling over the next four years.



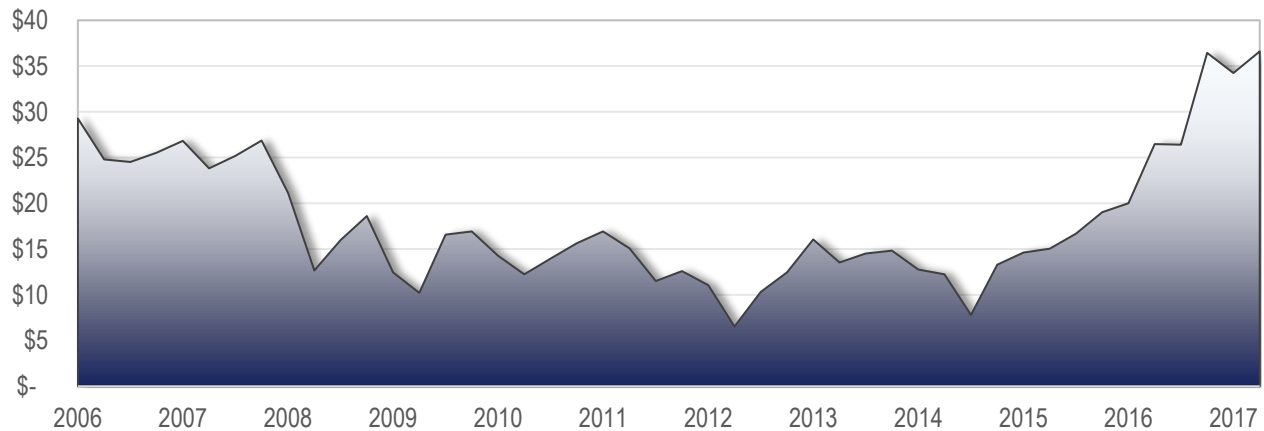
Source: Bloomberg

You know an industry is out of favor when, none other than Warren Buffett famously said that, "if a farsighted capitalist had been present at Kitty Hawk, he would have done his successors a huge favor by shooting Orville down." He was right about the past. But, the industry adds value. In fact, it arguably makes peoples' lives far better off. And surely industries can evolve, and certain companies can develop strong market niches and competitive advantages. The charts show one leader that, not once – but twice, saw its price fall to 25% of book value. Like airline passengers sometimes, airline investors need patience.

Mr. Buffett has since changed his mind, investing billions into the major airlines.



SKYWEST INC. (Mar 2006 - June 2017)



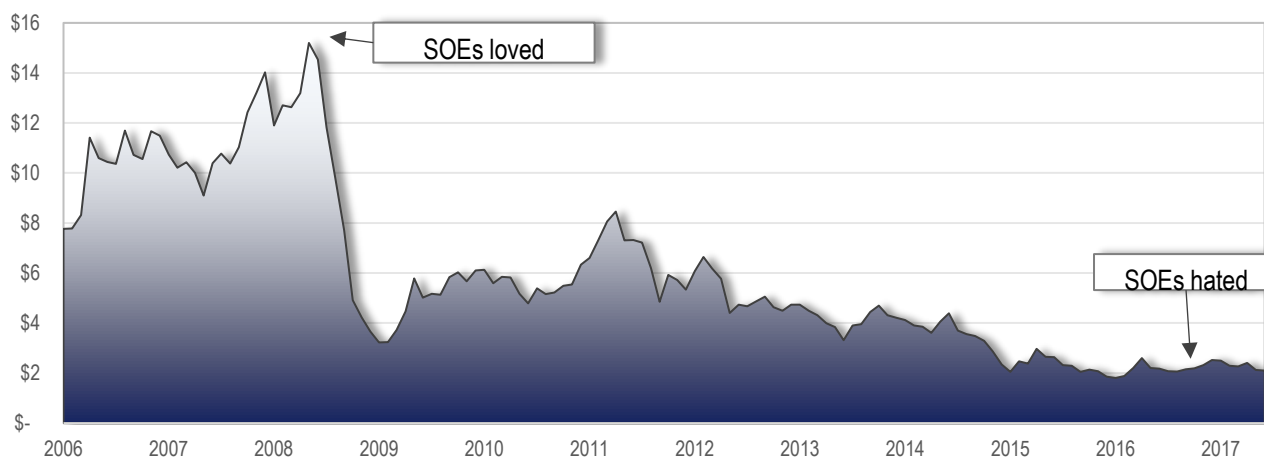
Source: Bloomberg

***"Patience can produce uncommon profits."***

-Philip L Carret

It used to be that investors in the emerging market countries preferred the SOEs (state owned enterprises) since they obviously have a competitive advantage, sometimes receiving monopoly/oligopoly status, 'gifts' of properties/assets, bailouts, preferred contracts, and other preferential treatment. Now, SOEs are viewed as pawns of the state, abused, defrauded, used for political purposes rather than for the benefit of shareholders, and otherwise mismanaged. Which view is true? Why – both, of course! When the stocks were receiving preferential treatment from investors as well as from the state, caution was warranted. Now that they are being abused and mismanaged by investors, it is time to remember Mr. Buffett's adage about being greedy when others are fearful. At any rate, the world's largest gas company is trading at a level 85% cheaper than it was in 2008. Price to book value has fallen from 2.2x to 0.23x. Reserves are valued at less than \$1 per BOE.

GAZPROM (Jan 2006 - June 2017)



Source: Bloomberg





## Conclusion

*"People go through periods when things are dark and cloudy, and they talk dark and cloudy."*

-Robbie Robertson

So there you have it – on the surface things look dark and cloudy. Pronounced dead on arrival have been: Active investing; Value investing; International (ex-U.S.) investing; Natural resource use; and Hard Money. Yet, hopefully the rebuttals above have been at least somewhat persuasive that we are witnessing, not death, but the extreme nadir of cyclical phenomena. Having survived the perfect storm of five pronounced, adverse trends, fundamentals-based, value-disciplined, actively opportunistic managers are extremely well-positioned to generate meaningful returns. Yes - the challenges to the overall market are daunting: record high prices and valuations; interest rates that theoretically can, and will, only go higher; profit margins that seemingly must drop meaningfully; a likely less trade-friendly and more nationalistic global environment; and the eventual day of reckoning for the mountain of central bank induced malinvestment. As pertains to most companies in the popular indices, the risks are clearly abnormally high and potential returns are abnormally low.

The main point here is that **the current large level of risk requires demanding a commensurately large amount of expected return on investments**. Investors should focus on outsized returns, and in this generally over-priced market, the bargains are scarce. But, the investing public's lack of patience and their extreme dislike of discomfort has resulted in some potentially lucrative investment opportunities. We suggest that the current ROD (return on discomfort, to coin a phrase) is potentially huge. Thank God that the markets are bifurcated. **The market is offering a commensurately large amount of expected return on certain underappreciated investments**. And, we at Kopernik have little interest in trying to time these prospectively large returns. We aren't worrying over the amount of *time* this mean-reversion process takes, nor the future of Fed policy and the 'fine-tuning' of discount rates. We don't find the 'official' pronouncements of growth rates, inflation rates, unemployment rates, or any other rates, to be particularly useful either. The future is unknowable and most economic variables and human behavior are unquantifiable. The chart below show that if the markets reflect estimated intrinsic value within a decade, the annualized returns will be more than adequate. Patience should be rewarded handsomely.

Year	Potential Upside			Internal Rate of Return
	50.0%	100.0%	150.0%	
1	50.0%	100.0%	150.0%	
2	22.5%	41.2%	58.1%	
3	14.5%	26.0%	35.7%	
4	10.7%	18.9%	25.7%	
5	8.5%	14.9%	20.1%	
6	7.0%	12.3%	16.5%	
7	6.0%	10.4%	14.0%	
8	5.2%	9.1%	12.1%	
9	4.6%	8.0%	10.7%	
10	4.1%	7.2%	9.6%	

Ultimately, Kundera seems to refute 5<sup>th</sup> century, B.C. philosopher Parmenides' belief that "lightness is positive and heaviness is negative," by narrating the view that "The heaviest of burdens is [...] simultaneously an image of life's most intense fulfillment," he says. "The heavier the burden, [...] the more real and truthful [our lives] become". We, at Kopernik, share the pain being felt by most investors who have stuck to bottom-up, fundamental investment analysis during this period of extreme irrationality. We seem to simultaneously be at extended points in the cycles for: passive vs active; growth vs value; U.S. vs non-U.S.; financial assets vs real assets; and fiat money vs hard money. Life may be linear and un-replicable, but human behavior is cyclical. Therefore, market



behavior is cyclical. The masses make the same mistakes over and over again. Great amounts of wealth will be made and lost when these cycles inevitably turn. **This is not the most enjoyable of times for value investors, but it is the most fulfilling.** As mentioned way back at the beginning, *Nietzsche believed this heaviness could be either a tremendous burden or great benefit depending on the individual's perspective.* We, at Kopernik view it as both, but mostly the latter. Kundera was right, **"The heavier the burden, [...] the more real and truthful [our lives] become."** Profiting from market inefficiencies is our *raison d'etre*.

Cheers,

**David B. Iben, CFA**  
Chief Investment Officer  
Kopernik Global Investors  
June 2017

*"The season of failure is the best time for sowing the seeds of success" -Paramahansa Yoganada*



## Appendix

### Buffett on Cash

WARREN BUFFETT: *Well, cash is always a bad investment. I mean, when people say cash is king a year ago, I mean that's crazy. I mean, cash wasn't producing anything, and it was sure to go down in value over time. And then you always want to be sure you have enough. It's like -- like oxygen -- you want to be sure it's around, you know. But you don't need to have -- you don't need to have excessive amounts of it around. And cash, we will always have enough cash around.*

CHARLIE ROSE: *Yes.*

WARREN BUFFETT: *But anytime we have surplus cash around, I'm unhappy. I mean, I would much rather have good businesses than cash. And we found a chance in the last year, thereabouts, to deploy -- we came in with something over \$40 billion in cash ...*

CHARLIE ROSE: *Right.*

WARREN BUFFETT: *... and we have got about \$20 billion now, and we've had some earnings. So, we -- we've put a lot of cash to work. And I like that. No, I'd much rather own a good business than have cash.*

CHARLIE ROSE: *And it is a hedge against the dollar?*

WARREN BUFFETT: *Well, you can say all assets are a hedge against the dollar. I mean, but -- all you know is that the dollar is going to be worth less 10, 20, 30 years from now. I say "worth less." Not worthless.*

CHARLIE ROSE: *Right.*

(LAUGHTER)

WARREN BUFFETT: *You want to watch that. But it will be -- you know, and that's true of almost every currency that I can think of. The question is how much it depreciates in value. But cash -- cash is not a place...*

CHARLIE ROSE: *Now, why is that?*

WARREN BUFFETT: *Well, because ...*

CHARLIE ROSE: *... that the dollar is going to be worth less?*

WARREN BUFFETT: *Because we'll print more of them in relation to the amount of goods that are moving. You know, if we dropped -- if we dropped a million dollars of cash into every household in the United States today, everybody would feel very good except the people that invested in things that were denominated in dollars. You know ...*

CHARLIE ROSE: *Exactly. Got it.*

WARREN BUFFETT: *There will be no tendency toward deflation in this country over time or -- or virtually ...*

CHARLIE ROSE: *A tendency towards inflation.*

WARREN BUFFETT: *Absolutely.*



## More on the Active/Passive Debate

HAS THE METEORIC RISE OF PASSIVE INVESTING GENERATED THE “GREATEST BUBBLE EVER”?

13D Research – June 15, 2017

In an article for Bloomberg View last week titled “Why It’s Smart to Worry About ETFs”, Noah Smith wrote the following prescient truth: **“No one knows the basic laws that govern asset markets, so there’s a tendency to use new technologies until they fail, then start over.”** As we explored in WILTW June 1, 2017, algorithmic accountability has become a rising concern among technologists as we stand at the precipice of the machine-learning age. For more than a decade, blind faith in the impartiality of math has suppressed proper accounting for the inevitable biases and vulnerabilities baked into the algorithms that dominate the Digital Age. **In no sector could this faith prove more costly than finance.**

The rise of passive investing has been well-reported, yet the statistics remain staggering. According to Bloomberg, Vanguard saw net inflows of \$2 billion per day during the first quarter of this year. According to The Wall Street Journal, quantitative hedge funds are now responsible for 27% of all U.S. stock trades by investors, up from 14% in 2013. **Based on a recent Bernstein Research prediction, 50% of all assets under management in the U.S. will be passively managed by early 2018.**

In these pages, we have time and again expressed concern about the potential distortions passive investing is creating. Today, evidence is everywhere in the U.S. economy—record low volatility despite a news cycle defined by turbulence; a stock market controlled by extreme top-heaviness; and many no-growth companies seeing ever-increasing valuation divergences. As always, the key questions are when will passive strategies backfire, what will prove the trigger, and how can we mitigate the damage to our portfolios? **The better we understand the baked-in biases of algorithmic investing, the closer we can come to answers.**

Over the last year, few have sounded the passive alarm as loudly as Steven Bregman, co-founder of investment advisor Horizon Kinetics. He believes record ETF inflows have generated “the greatest bubble ever”—**“a massive systemic risk to which everyone who believes they are well-diversified in the conventional sense are now exposed.”**

Bregman explained his rationale in a speech at a Grant’s conference in October:

*In the past two years, the most outstanding mutual fund and holding company managers of the past couple of decades, each with different styles, with limited overlap in their portfolios, collectively and simultaneously underperformed the S&P 500... **There is no precedent for this. It’s never happened before.** It is important to understand why. Is it really because they invested poorly? In other words, were they the anomaly for underperforming—and is it reasonable to believe that they all lost their touch at the same time, they all got stupid together? **Or was it the S&P 500 that was the anomaly for outperforming?** One part of the answer we know...If active managers behave in a dysfunctional manner, it will eventually be reflected in underperformance relative to their benchmark, and they can be dismissed. **If the passive investors behave dysfunctionally, by definition this cannot be reflected in underperformance, since the indices are the benchmark.***

At the heart of passive “dysfunction” are **two key algorithmic biases: the marginalization of price discovery and the herd effect.** Because shares are not bought individually, ETFs neglect company-by-company due diligence. This is not a problem when active managers can serve as a counterbalance. However, the more capital that floods into ETFs, the less power active managers possess to force algorithmic realignments. In fact, active managers are incentivized to join the herd—they underperform if they challenge ETF movements based on price discovery. **This allows the herd to crowd assets and escalate their power without accountability to fundamentals.**





With Exxon as his example, Bregman puts the crisis of price discovery in a real world context:

*Aside from being 25% of the iShares U.S. Energy ETF, 22% of the Vanguard Energy ETF, and so forth, Exxon is simultaneously a Dividend Growth stock and a Deep Value stock. It is in the USA Quality Factor ETF and in the Weak Dollar U.S. Equity ETF. Get this: It's both a Momentum Tilt stock and a Low Volatility stock. **It sounds like a vaudeville act...** Say in 2013, on a bench in a train station, you came upon a page torn from an ExxonMobil financial statement that a time traveler from 2016 had inadvertently left behind. There it is before you: detailed, factual knowledge of Exxon's results three years into the future. You'd know everything except, like a morality fable, the stock price: oil prices down 50%, revenue down 46%, earnings down 75%, the dividend-payout ratio almost 3x earnings. If you shorted, you would have lost money...**There is no factor in the algorithm for valuation.** No analyst at the ETF organizer—or at the Pension Fund that might be investing—is concerned about it; it's not in the job description. There is, really, no price discovery. And **if there's no price discovery, is there really a market?***

We see a similar dynamic at play with quants. Competitive advantage comes from finding data points and correlations that give an edge. However, incomplete or esoteric data can mislead algorithms. So the pool of valuable insights is self-limiting. Meaning, **the more money quants manage, the more the same inputs and formulas are utilized, crowding certain assets.** This dynamic is what caused the “quant meltdown” of 2007. Since, quants have become more sophisticated as they integrate machine learning, yet the risk of overusing algorithmic strategies remains.

Writing about the bubble-threat quants pose, Wolf Street's Wolf Richter pinpoints the herd problem:

***It seems algos are programmed with a bias to buy.** Individual stocks have risen to ludicrous levels that leave rational humans scratching their heads. But since everything always goes up, and even small dips are big buying opportunities for these algos, machine learning teaches algos precisely that, and it becomes a self-propagating machine, until something trips a limit somewhere.*

As Richter suggests, there's a flipside to the self-propagating coin. **If algorithms have a bias to buy, they can also have a bias to sell.** As we explored in WILTW February 11, 2016, we are concerned about how passive strategies will react to a severe market shock. If a key sector failure, a geopolitical crisis, or even an unknown, “black box” bias pulls an algorithmic risk trigger, will the herd run all at once? **With such a concentrated market, an increasing amount of assets in weak hands have the power to create a devastating “sell” cascade—a risk tech giant stocks demonstrated over the past week.**

With leverage on the rise, the potential for a “sell” cascade appears particularly threatening. Quant algorithms are designed to read market tranquility as a buy-sign for risky assets—another bias of concern. Currently, this is pushing leverage higher. As reported by The Financial Times, **Morgan Stanley calculates that equity exposure of risk parity funds is now at its highest level since its records began in 1999.**

This risk is compounded by the ETF transparency-problem. Because assets are bundled, it may take dangerously long to identify a toxic asset. And once toxicity is identified, the average investor may not be able to differentiate between healthy and infected ETFs. (A similar problem exacerbated market volatility during the subprime mortgage crisis a decade ago.) As Noah Smith writes, this could create a liquidity crisis: **“Liquidity in the ETF market might suddenly dry up, as everyone tries to figure out which ETFs have lots of junk and which ones don't.”**

J.P. Morgan estimated this week that passive and quantitative investors now account for 60% of equity assets, which compares to less than 30% a decade ago. Moreover, they estimate that only 10% of trading volumes now originate from fundamental discretionary traders. **This unprecedented rate of change no doubt opens the door to unaccountability, miscalculation and in turn, unforeseen consequence.** We will continue to track developments closely as we try and pinpoint tipping points and safe havens. As we've discussed time and again with algorithms, advancement and transparency are most-often opposing forces. If we don't pry open the passive black box, we will miss the biases hidden within. And given the power passive strategies have rapidly accrued, perpetuating blind faith could prove devastating.



## A Brief History of the Pebble Prospect

Per Wikipedia: Discovery

"In 1987 Cominco Alaska Exploration (CAE) (which subsequently became Teck Resources) collected mineralized surface samples at the Pebble site from color anomalies visible from aircraft. The first two exploration holes were drilled in 1988; in 1989 twelve more drill holes, soil sampling, and geophysical surveys indicated that the Pebble West occurrence (originally named Pebble Beach) was part of a large copper porphyry system. CAE continued drilling and other work through 1992, with a second drill campaign in 1997, with the resource doubled from 500M short tons to 1B short tons.

In 2001, Northern Dynasty Minerals, Ltd. optioned the property from Teck Cominco, the successor to CAE's parent company. Northern Dynasty Minerals began exploration in 2002, which continued through 2013. In 2005, Northern Dynasty discovered the Pebble East deposit and acquired 100% ownership of the Pebble mining claims.

### Project funding

In 2008, 140 million dollars were budgeted and approximately 150,000 feet (46,000 m) of additional drilling was completed.

In 2009, 70 million dollars were budgeted, to complete a preliminary feasibility study, or "prefeasability" study, and to prepare the project for permitting.

In 2010, 73 million dollars were budgeted towards the prefeasibility report, environmental studies, and various administrative and community-relations work. Applications for development and operations permits were not planned until after 2010.

For 2011, 91 million dollars were budgeted to complete the prefeasibility study, leading to permit applications in 2012. Environmental and engineering studies including 45,000 feet (14,000 m) of drilling to decide on mine design and a complete environmental baseline.

The land is owned by the State of Alaska. Pebble Mines Corp. holds mineral rights for 186 square miles (480 km<sup>2</sup>) of the area, an area that includes the Pebble deposits, as well as other, less explored, mineral deposits. A sequence of mining companies and partnerships have owned the Alaska mining claims at and around Pebble since the initial claim staking by Cominco in 1987. The Pebble Limited Partnership is now 100% owned by The Northern Dynasty Partnership, which is a wholly owned Canadian-based subsidiary of Northern Dynasty Minerals, Limited. Three of the world's largest mining companies purchased shares of Northern Dynasty or became partners in the Pebble Limited Partnership through obligations to fund exploration and development. All have since divested their interests.

Mitsubishi Corporation sold its 9.1% interest in Northern Dynasty Minerals in 2011.

Anglo American, a London-based mining company, struck a deal with Northern Dynasty to earn a 50% interest in a newly created Pebble Limited Partnership, the other 50% belonging to Northern Dynasty; between 2007 and **2013 Anglo American spent over half a billion dollars on the project**. In December 2013 Anglo American walked away from the project, losing its 50% interest, which reverted to Northern Dynasty Minerals Limited.

Rio Tinto Group, through its wholly owned subsidiary Kennecott Utah Copper purchased, for 87 million dollars, a 9.9% ownership of Northern Dynasty Minerals Limited in July, 2006, and in 2007 doubled that to 19.8% ownership, for an additional 94 million dollars. In April 2014, the Rio Tinto Group gifted its shares, worth only approximately 18 million by then, to two Alaskan charitable foundations.

Pebble is the largest known undeveloped copper ore body in the world, measured by either the amount of contained metal or the amount of ore.

Northern Dynasty estimated that Pebble contains over **\$300 billion worth of recoverable metals** at early 2010 prices."

*"The big profits go to the intelligent, careful and patient investor,  
not to the reckless and overeager speculator."*  
-J Paul Getty



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