CEDAR RIVER CAPITAL LLC

The Dull Blade of Occam's Razor

- Investment Shortcuts to Avoid –

Occam's Razor is a wonderful rule of thumb: "All else equal, the simplest explanation is usually the best explanation." William of Ockham (a.k.a. Occam) was a 14th century English Franciscan friar and philosopher credited with this insight, an insight embraced for both its simple aesthetic beauty as well as mathematical rigor and support from probability theory. Occam's Razor also applies wonderfully well to the stock market, an application likely not envisioned in the 14th century. The success of Apple in the Steve Jobs days was a good example of such an elegantly simple story - more phones sold equals a higher stock price.



But the razor does not claim that the simplest explanation is always the best explanation. In the stock market, there are many examples

where complexity and chaos are built in to the system. Sometimes stocks are easy and sometimes they are not easy. Occam's razor is not an instrument of great precision, but in fact is a rather crude and dull blade. A simple one liner explanation frequently glosses over important details that really need to be understood by the professional investor attempting to envision where investments and markets are headed longer term.

Further, not everyone has the same motivation to understand the investment stories at a deeper level. Upton Sinclair once remarked, "It is difficult to get a man to understand something when his salary depends on not understanding it!" There are many examples. Click bait journalists will err on the side of the short-cut one-liner explanation and avoid publishing the mind-numbing calculus details. Boiler room brokers will also err on the side of the simple but inaccurate one-liner. Relationship-focused wealth managers (i.e. the "babysitters") will generally take the short-cut. So too will short term traders. Chart technicians will usually go with the misleading one-liner, if a non-chart explanation is considered at all.

This leaves the true fundamental long-term equity manager virtually alone in a classroom filled with kids with attention deficit disorder. Over the years, survivors of this lonely monk-like existence will build a mental database of certain situations to avoid - situations that may look attractive at first but the placid surface belies the shark-infested challenges deep below. Situations to avoid may include a wide variety of possible short circuits ranging from certain companies, industries, geographies, CEOs and even environmental situations related to weather, politics, and demographics.

While there are dozens of oversimplifications or Occam's Exceptions to pick from, most of these situations can be grouped into two categories:

- Grand Delusions: Broad macroeconomic beliefs about the overall market that have little merit. While there are a couple dozen such Grand Delusions that commonly make the rounds amongst those with business models that enforce limited attention spans, beginning on the next page is a Top Ten List of the most egregious macroeconomic short circuits.
- *Misunderstood Motifs: Industry-specific microeconomic generalizations that have little merit.* There are many more examples to choose from here given there are a hundred industries represented in the S&P index. While not as impactful as the macroeconomic Grand Delusions, these microeconomic fantasies build up like grains of sand in the investment process gearbox and really need to be wiped clean and clear so long term investors can operate best. So below beginning on page 20 is a Top Twenty List of microeconomic mental shortcuts.

Is all theme-based investing bad? At some level, highlighting the higher profile failures of Occam's Razor in the investing world is akin to highlighting the higher profile failures of theme-based investing. The idea of buying into broad-based themes such as The World is Running Out of Water or America's Diabetes Epidemic has a seductive appeal since such the themes frequently are indeed reshaping the world.

But the devil is in the details. Take a deeper look into a theme-based investment shop like Motif Investing and within the Running Out of Water portfolio, there are dozens of stocks each with a very tangential claim on the idea that the underlying business will benefit from less water and more importantly each with many side businesses that will have zero correlation with global water supply (perhaps even some with negative correlation – yikes!). A better idea for believers in this theme is to use the Motif universe as a shopping list in order to find the two or three stocks that are the true beneficiaries, or "pure plays" in industry parlance. Even then, the investor will need to recognize that the two or three finalists will still be subject to dozens of other company-specific and exogenous factors. The takeaway here is to do your work and do it thoroughly. Theme-based investing is a reductionist approach in a world where the easy button sometimes works and sometimes does not.

To be clear, not all theme-based investing is bad. Some themes do indeed have tight correlations and with cause and effect behavior. But many of these properly functioning themes reflect association with various segments of the stock market rather than broad cultural shifts in the macro environment. That is, the boring themes seem to work but the sexy and seductive themes do not. So a theme of Higher Interest Rates has constituents with strong correlation whereas a theme of Running Out of Water has weak correlation. A theme of Nifty Fifty Blue Chips has strong correlation but a theme of Diabetes Epidemic has weak correlation.

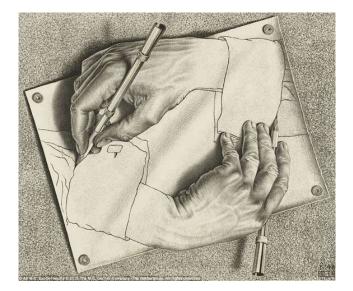
The worst case scenario is the seductive theme with low correlation constituents, but the theme itself is logically flawed. These are the Occam's Exceptions listed below, both large (Grand Delusions) and small (Misunderstood Motifs). With some familiarity of this full collection of dangerous mental shortcuts, the reader ought to develop a better understanding that things are not always what they seem.

Mental Shortcuts Part 1:

The Grand Delusions

The list below is in rough order of importance beginning with the biggest of the broad-brush mental short cuts, short cuts that seem to proliferate from many sources – financial media, traders, investor relations, brokers, advisors and more. Each of these Grand Delusions is then detailed in the order presented in the list. The lengthier list of 20 industry-specific Misunderstood Motifs begins on page 21.

- 1. The US President is the main factor driving the US stock market
- 2. The CEO/leadership is the most important factor behind the success of a company
- 3. A new high-profile CEO will fix an underperforming stock and/or company
- 4. A P/E of 100 is too high
- 5. The aging population is a tailwind for stocks, especially health care, travel, financials
- 6. Emerging markets are growing faster so their stock markets will do better
- 7. A weak dollar is bad for the economy and stocks, but good for the trade balance
- 8. A quality unionized company will have a supportive work force that is good for investors
- 9. Share purchases from insiders, buybacks, or activists mean a stock is a good investment
- 10. A company near bankruptcy will be just as forthcoming as a healthy company



Grand Delusion #1

The US President is the Main Factor Driving the US Stock Market

Expectation: The President is the main driver of the stock market, the economy and most investments

Reality: During peacetime, a President is only one of hundreds of factors that influence the stock market

While there is no question that real or anticipated moves of the US President can flow through to the stock market, it does not follow that all stock market moves are due to the US President. Yet this overly simplified narrative of connecting stock market moves to the US President is pervasive. There is a seductive appeal here to the casual observer not unlike the Flat Earth Theory. Yes there is always much short term market movement and speculation around Presidential politics. And yes, during periods of conflict like World War II, a President can move mountains, thanks to War Powers. But during peacetime, political gridlock frequently reduces Presidential moves to a minor tweaking above the status quo. Yet the status quo could well be a 1999 dot com boom or a scary 2008 Great Recession. The President does not create these booms or busts.

Perhaps the easiest way to envision the lack of Presidential influence is to think of what might happen to the market and economy should there be no legislative changes at all. Does that mean the stock market will not move? Heck no! Technology still moves forward, the population still grows and shifts geographically, medical research advances, the weather changes, CEOs get hired/fired, business schools promulgate new management science, emerging market economies outside the US grow and develop, new energy resources are discovered, apparel fashions change, companies undergo mergers and acquisitions, dietary choices change, and the list goes on and on. The President has little if any influence on any of these true drivers of the stock market and indeed is economically held captive by these factors.



While the list of factors that truly influence the stock market is lengthy with perhaps hundreds of line items, famed investor Peter Lynch used to summarize by saying stocks are about three things: earnings, earnings and earnings. So when analyzing the impact of possible legislative changes, one should begin by looking at the potential impact to corporate earnings. This part of the analysis is usually readily available, likely on the 6:00 news. This is usually where the Flat Earth folks stop. But the more important part of the analysis is ranking the impact of the proposed legislation among the list of the hundreds of line items of the true drivers of the stock market. The most likely result will be that the stock market moves around proposed legislative changes is simply not justified. There are exceptions of course.

Indeed it appears America is in the middle of one of those exceptional legislative developments right now. As of December 2017, a new Tax Bill has yielded a dramatic reduction in the corporate tax rate,

perhaps on the order of ten percentage points. Naturally, that flows directly through to earnings, earnings, earnings. And with a 10% boost in overall corporate earnings, one would expect a commensurate 10% lift in the valuation of the overall stock market, all else equal. Granted, there are likely contravening factors such a possible US budget shortfall, though many of these are more difficult to quantify. It is interesting that the bullish 2017 stock market rally of 22.5% happened to be about 10% points above the normal 12% annual return of the S&P 500 over the last 30 years.

Despite the 2017 Tax Bill "exception to the rule", the rule still stands, that a peacetime President really has little long term impact on the stock market, the economy or individual investments. Hard to say exactly what is on the legislative agenda for 2018. Perhaps there will be more attempts at immigration, infrastructure, and health care legislation. Interestingly, prior attempts in 2017 seemed to move the stock market for short periods. But in all fairness, these possible legislative changes just will not bubble to the top of the list of the hundreds of true drivers of the stock market. This does suggest there will be market buying and selling opportunities should there again be material market moves, up or down.

True believers in the Presidential Flat Earth Theory here will inevitably highlight huge moves in the market around Presidential regime changes as investors speculate on what the next administration might mean for markets. But let's look at that track record. How did that huge run on Jimmy Carter inflation stocks play out when Clinton was elected in 1992? True believers got smoked as oil dropped to \$10/barrel by 1998. How did the speculation around drug stocks work out after the 2000 Bush election dismissed the Hillary-induced Gore fears? Another ouch as R&D productivity hit all-time lows and the biotech IPO pipeline dropped over 80% by 2006, not to revive until 2014. And more recently, how is Trump's infrastructure plan playing out? Or the Mexico wall plan? Perhaps there is still time on these plans, but history would suggest the majority of short term stock market sector moves related to the plans of a peacetime President will subsequently underperform. Evidently the old Wall Street Maxim of "buy on rumor, sell on news" is apropos.

There are many reasons why investors associate stock market moves with the President. To begin with, the media seems to make the connection every day, warranted or not. The media business model is a model that lives and breathes on its ability to "gather eyeballs". And beginning the mainstream news with what the leader of the free world did today sounds really important, especially when delivered in the deeply serious voice of a professional newscaster. The business news uses the same script as the mainstream news knowing that any news of the leader of the free world gathers eyeballs. The effect is millions of TV viewing masses come to believe that a peacetime President can control the economy and the stock market. Psychologists will recognize this as the "Illusory Truth Effect" – the tendency to believe information to be correct by repeated exposure, despite frequent data to the contrary. This story has been repeated so many times that folks believe it is fact.

The web of Illusory Truth seems to ensnare brokers and wealth managers mainly as a result of industry financial incentives. While commission-based brokers have been losing share to fee-based money managers for some years, the financial incentives still play a role with portfolio turnover at brokers dwarfing that of money managers. While a tad harsh, there is indeed evidence of less scrupulous professionals taking short cuts either to generate more commissions (brokers) or to take more vacation

time (money managers), and right at the top of the list of short cuts is repeating the "Illusory Truth" espoused in the media about what the President means for stocks. If your broker or money manager is proposing or making changes in your portfolio because what the President is doing or planning, this ought to be a yellow flag, perhaps even a red flag.

There are many exceptions to this rule of course. Indeed, it is not uncommon for well-meaning professional managers to play the President card as a way to implement portfolio changes that are unrelated but fairly complicated to explain in a time efficient manner. Additionally, many brokers and money managers highlight that with the media persistently tying stock market moves to the President, their less informed but well-meaning high net worth customer base (think Jed Clampett here) come to believe that a good money manager must know Presidential politics. So the ability to sound smart about Presidential politics becomes a core skill set for managers trying to grow their high net worth business.

Short term traders might have an axe to grind here. Most short term traders like OTC traders are measured on their P&L at the close every day. Short term traders do not have the luxury of patiently waiting for the truth to come out. If the market is going to make the mistake of bidding up Jimmy Carter inflation stocks in late 1992 with the Clinton victory, and those very same stocks then underperform over the next several years as inflation drops to near zero, the trader needs to be long during the whopper phase and short during the reality phase. For short term traders, President-induced stock market moves are very real, whereas for long term investors looking through these gyrations, such moves are best described as fake news.

Global investors may also squirm at the idea that a President has little or no impact on the market. In some emerging and frontier markets, certain leaders may wield more power in that country compared to a President in the US. Fair enough. Political systems in many smaller countries have fewer checks and balances and certain banana republic Presidents can indeed make or break a local stock market. But these situations are generally an exception to the rule and are most common in countries that do not constitute a large portion of the capitalization of key global stock market indices.

Lastly, while the historic long term tie between the President and the stock market is indeed weak, the future tie to the stock market may tighten. Why? Because the active investment landscape is being surgically lobotomized by the growth of index investing and other passive investment approaches. Most index investors will not look at the details of the earnings models of the constituent companies where the main action is, but rather will attempt to generalize. And while such generalizations ought to focus on the detailed list that matters (again – hundreds of items such as technology evolution, population changes, weather, CEO changes, etc.), the reality is that folks trying to simplify their world with index investing will be highly prone to falling into the trap of associating stock market moves with the President. In the short run, the increased prevalence of index investing seems to be raising the amount of speculative activity around Presidential news. But looking beyond this short term media noise, the long run story based on actual earnings remains unchanged. A peacetime President generally cannot move earnings or markets and can only do minor tweaking to the overall economy, recent tax bill notwithstanding.

Grand Delusion #2

The CEO/Leadership is the Most Important Factor behind the Success of a Company

Expectation: Steve Jobs can make a buggy whip company succeed

Reality: Steve Jobs cannot make a buggy whip company succeed

Warren Buffett has a famous quote about business leadership, "When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is the reputation of the business that remains intact". The quote is brilliant but actually does not go far enough. When shopping for a good investment, all else equal, the best investment is the one that will make its leader look brilliant not the one that has a brilliant leader. There are some businesses that are just inherently better than others and these businesses will make even mediocre leaders seem smart. Buffett clearly knows this. On his investment in Coca Cola in the early 1980s, he quipped, "even a ham sandwich could run that company". Buffett has his priorities straight. The quality of the business dwarfs the importance of the quality of the leadership.

There are more ramifications here. First is the idea of a "management with a reputation for brilliance". Let's be honest here. On Wall Street, the so-called reputation for brilliance means management that hailed from a company where the stock price went up a lot. Is that management brilliance? Possibly. And possibly not. There are more stakeholders in a company beside the shareholders, such as the employees, the customers, the community, etc.

Also it is always very hard to separate luck from skill. Perhaps the management was quite mediocre but hailed from one of those easy-tomanage companies or a company with a temporary wind at its back. GE in the 1990s comes to mind here as one of the best performing industrial names in the S&P, not because it was a great industrial or had great management (though CEO Jack Welch was and still is a household name), but rather because the bulk of its earnings came from its financial business, a business that performed well in the declining rate environment



then, especially compared to more troubled rust belt industrials that did not have such cash cow finance subsidiaries.

Needless to say, GE became prime headhunting territory for CEOs of scads of troubled industrials looking for "management with a reputation for brilliance". But long-term nearly every one of those CEO placements was a failure. Buffett strikes again. The importance of the quality of the business dwarfs that importance of the quality of leadership. And this is true regardless of whether the so-called reputation of brilliant leadership was deserved in the truest sense of the word, or if the leadership reputation was instead based on Wall Street's ridiculously simple definition of leadership based on stock price.

But it gets worse. Walk the halls of a firm that manages assets for the ultra-high net worth set and ask about the importance of leadership. To a man, it will be the single most important item on the list of

investment criteria. Why? Because the money managers are drinking the kool aid! After all, the ultrahigh net worth set didn't earn the \$100 million family fortune working as a cashier at Wal-Mart. No, they are (or were) C-level officers for Fortune 1000 companies.

So when the ultra-high net worth wealth manager then goes on and on about the importance of quality leadership, what is really happening is the wealth manager is sweet talking his most important and wealthiest customer. Such wealth managers are notorious for name dropping their personal CEO relationships while trying to correlate personal ties with management with actual knowledge of the company and its fundamentals, an apples and oranges comparison. Long term successful analysts have wizened up to this conflict and it is not uncommon for these gray beard analysts to refuse to meet with such conflicted wealth managers that have ties to companies under their coverage. Thankfully Warren Buffett does not need to sweet talk the \$100 millionaire and can speak clearly why the importance of the quality of the business dwarfs that of the quality of the leadership.

Are there any exceptions to the idea that the people are not as important as the industry? Of course, there are exceptions to every rule, but there is one in particular worth mentioning; private equity investments like venture capital, real estate and leveraged buyouts. Here, the relationship between the majority equity investors and the top management of portfolio companies is more like a marriage and there is frequently a non-stop dickering process with multiple stakeholders as the investment matures and develops. A bad CEO here is a nightmare, and since it is private equity not public equity, the illiquid nature of the investment means the marriage bond is very hard to break by simply liquidating the stake and moving on. You are stuck. Indeed even Warren Buffett changes his tune when he is talking about acquisitions of portfolio companies for Berkshire Hathaway where he elevates "easy-to-work-with management" to near the top of his list.

Of course many public equities were once private equities. Perhaps this is yet another source of the mistaken belief that the management is the most important factor when judging the quality of a non-private investment. For those of us in the public markets, it is wise to put quality of management in its place – well behind the quality of the industry – and to understand the many conflicted sources that keep this mental short cut alive despite much evidence and Buffett-wisdom to the contrary.

Grand Delusion #3

A new high-profile CEO will fix an underperforming stock and/or company

Expectation: Buy the stock with new CEO announcement

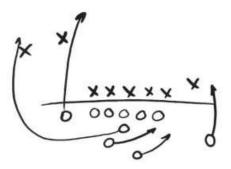
Reality: A new CEO will cut guidance hard likely at beginning of the first new fiscal year

New CEO announcements are generally viewed as a positive, especially for troubled companies in need of a turnaround that engage in a thorough and proper CEO search. And while a CEO cannot alleviate structural/obsolescence problems or the global economic business cycle, it is a sign that the company is serious about getting to a better position.

The reaction to a new CEO announcement will vary. A rock star CEO who sold his last three companies for huge gains will be very well received by investors and the news will likely immediately flow through to higher shareholder value, even in advance of a tangible action plan. But of the thousands of CEOs of US public companies, not many reach the household name status in a positive way – perhaps only a few dozen. So most new CEO announcements are more muted in comparison – optimistic about the new blood and the turnaround mission but still cautious about the factors that resulted in the CEO change to begin with. Rarely is a new CEO announcement regarded as bad news.

But the turnaround mission is never simple and straightforward. Frequently it is three steps forward and two steps backward. Most new CEOs are highly aware of the difficult road ahead as well as the rich rewards for success. In addition, most new CEOs are aware that investors have limited patience and that a five year wait for results is simply too long. The net effect is that essentially all new CEOs have a two year "honeymoon" period, a period during which weak results can be blamed on either the predecessor administration or necessary but disruptive investments or cost reductions associated with the new CEO turnaround plan. Only beginning in year three will the new CEO truly be held accountable for improved results.

The playbook then for any new CEO is as follows: 1) Get hired as CEO by making great promises to the Board of Directors for results in five years. 2) After the hiring announcement, inform investors that you will lay out strategic plans in detail with the fiscal year end results in some months and that in the meantime any previous guidance for the current year may not be reliable 3) When fiscal year end results are announced, lower the expectations as far as possible along with much cautionary



verbiage about the seriousness of the challenges facing the company based on how the company was run under the prior CEO. Make sure to crush any hopes – this is all about expectations management – the lower the better. Cut guidance not just for the current year, but for the next two or three years if possible. 4) With expectations much lower, the new CEO has basically put money in his/her back pocket for future use. Make sure there are zero positive surprises in the first two or three quarters since the new CEO will need to save these for after the ending of the honeymoon period.

With this playbook in mind, it now seems clear why buying a stock on a new CEO announcement short cuts the thinking with the medium to longer term playbook. There are many more moving parts to the story other than the great new CEO hire and leaving out parts of the playbook like "crushing expectations" could prove hazardous to investors focused on the biography and the people rather than the mathematical economics of the industry. But each situation really needs to be analyzed on its own merits. Broad brushing new CEO moves sometimes works and sometimes it does not.

Grand Delusion #4

A P/E of 100 is too high

Expectation: A high P/E ratio means the stock is overvalued

Reality: There is usually a reason for the elevated valuation which may not be elevated at all.

Valuation is in the eye of the beholder. When the phone rings and an investor is wondering if he/she should sell shares of XYZ Corporation because the stock is trading at a P/E ratio of over 100, it seems time to look into the valuation story in more detail. Using one and only one valuation metric is clearly a mental shortcut that needs to be avoided. Still it seems to come up over and over again – in the financial press, in analyst reports, in casual stock market conversation - that for example Amazon is overvalued because it trades at a P/E of 150, but IBM is undervalued because it trades at a P/E of 11. Clearly folks making this valuation argument have been wrong for most of the last 15 years. The root problem is in not understanding the valuation paradigm.

There are many reasons why the P/E ratio could be high, yet the stock remain fairly valued. Perhaps the stock really has rallied too far and now is the time to sell. Or more likely there was a one-time charge in the earnings that is skewing the ratio and the investor should be looking at the P/E ratio using next year's earnings estimate that has no such charges. Or perhaps one should be using another earnings benchmark



like mid-cycle earnings or peak/trough earnings. Or maybe there was a fundamental change at the company and the new earnings estimates are not yet available. Or perhaps there was a buyout announcement of XYZ at a very high price and there is still a wide discount to the buyout price suggesting it is wise to hold on to the stock. Or perhaps there is a corroborating metric such as cash flow or EBITDA. Probably not a requirement to go into a full discounted cash flow model, but it might be worth looking at a street model and back checking the reasonableness of the assumptions.

Some stocks just trade high on most valuation metrics, in particular consumer "story" stocks like Shake Shack at the time of its IPO. Some stocks trade low like foreign family-controlled conglomerates. The key is not to mentally short cut by simply buying either super cheap stocks that are cheap for a reason, nor is it the other extreme of buying really great stories but with outrageous valuations. Rather the key is to understand the intrinsic value within each story and where it ought to place on the valuation spectrum today and in the future. This is a tough judgment for which there really is no shortcut.

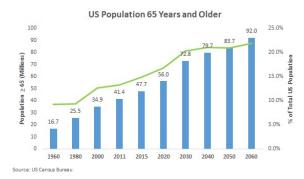
Grand Delusion #5

The Aging Population is a Tailwind for Stocks, Especially Health Care, Travel, Financials

Expectation: An aging population will increase demand in certain sectors which will lift the stocks

Reality: The aging population story is dwarfed by the noise of other factors

This pervasive mental short cut is a slick and simple story used repeatedly by industry professionals to sell many investments to the less-informed masses. Does that mean the story is false? Nope. There is indeed an aging population as the adjacent chart shows. And the aging population will indeed drive higher demand for health care services as well as leisure travel and retirement financial planning services. It's just that the aging population will have



basically no impact on the performance of your investments. The gradual demographic shift is far too subtle to move the needle and it simply gets lost in the noise of higher impact factors like regulatory changes, economic developments, interest rates, competition and dozens of other factors.

To illustrate, the biggest sector in the S&P that has this aging baby boomer tailwind is the pharmaceutical sector. Pharmaceutical stocks are driven up or down by a variety of factors including new drug research success, regulatory threats real and perceived, drug pricing negotiations, sector rotation partly related to US dollar strength/weakness, industry mergers, and of course overall stock market health. So looking back historically, in the early 1990s when Hillary Clinton was reviewing health care reform the drugs stocks deeply underperformed. But beginning in 1994 after Hillary's failure to make progress, the drug stocks roared for five years, partly on reversion to the mean, partly on the strong overall stock market, partly on advancement of human genome research, partly on increased merger activity and partly on the strength of the US dollar (which benefits drug stocks since the US is where all the profit is made thanks to high US drug prices). But ask a 1990s broker why drugs stock rallied and the broker will say...aging population! Really?!?

Fast forward to the 2000s. The US dollar drops like a stone in 2003 with the second Iraq war and stays weak until Russia's Crimea invasion in 2014. Drug stocks, which do well with a strong dollar, trade terribly for over a decade. Where did the aging population story go? The Wall Street Journal cited challenges with R&D productivity post the human genome discovery (though in all fairness the weak R&D productivity was related to the weak US dollar creating a sector rotation from overfunded 1999 tech/biotechs to 2004 China/oil). Needless to say, when the US dollar came roaring back in 2014 driving money back into drug stocks, out comes the aging population story again. It is nearly completely immaterial but the slick sales pitch to the less informed masses just won't die. It occasionally hides in the shadows whenever politicians talk about lowering drug prices. But as soon as the regulatory threat dissipates, out pops the aging population story. It's like whack a mole.

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The whack a mole problem goes throughout the whole health care sector, not just the drug business. The story has infiltrated therapeutics device companies (implantable defibrillators, artificial hips and knees), hospital companies, pharmacies, senior housing companies, medical instruments (cat scans, MRIs), health insurance, contract research, electronic health records and more.



The aging population story infiltrates other non-health care sectors like leisure travel and financial planning. These industries also are far more complicated than a one liner thesis would suggest. Both are subject to increasing supply, interest rates, regulatory changes and more. Some may point to the aging population in Japan as a causal factor behind weakness in the Nikkei since 1990, another incomplete analysis that commonly ignores the bubble of "Japan Inc." of the 1980s and the influence of foreign investors. As a broad rule then, the aging population story is more often than not a canard that should be looked upon skeptically and/or avoided and the actual investment performance over time will be dwarfed by other factors.

Has there ever been an aging demographic story that actually had relevance to a stock and its behavior, over a short term or long term time horizon? Yes indeed, but only as a headwind not a tailwind. As a specific example, for years, Harley Davidson faced the situation with its customer base getting older year by year. Harley just never really penetrated the millennial generation demographic. And the aging demographic weighed on Harley's valuation for years. Perhaps it is heartening for drug stock owners that at a demographic level, the ever present whack a mole promise of a tailwind may well be bogus, but it is clearly not a headwind like it has been for Harley. No arguments there.

Grand Delusion #6

Emerging Markets are Growing Faster so their Stock Markets will do better

Expectation: Population and GDP growth is faster in emerging markets, so their stocks will do better

Reality: Emerging markets track the weakness of the US dollar

It seems to make intuitive sense that emerging market economies are growing faster than developed market economies. Therefore the stock markets of the emerging markets countries will outperform the stock markets of the developed market economies. Alas, there are many problems with this simple thesis.

To begin with, the stock market and the economy are not the same thing. Most emerging markets have stock markets that are overpopulated with regulated industries not because the economies are overpopulated with regulated industries, but because the regulated industries tap the public capital markets and cannot hide from tax authorities. This creates a sector bias within emerging markets stocks

that is slanted toward raw materials industries especially in Latin America and Africa. Asia also has a sector bias though in favor of early to mid-stream manufacturing. All of these businesses are profoundly currency sensitive. So at a broad level, emerging markets really only do well whenever the US dollar is weak.

The currency explanation squares with the periodic table of returns that shows emerging markets over the last 30 years do not in fact materially outperform developed markets, but there are weak dollar periods like 2004-2014 where emerging markets did quite well for a lengthy period of time and strong dollar periods like 1990-2002 where emerging markets did quite poorly.



It is during these weak dollar periods where the mental short cut becomes an over-repeated Illusory Truth where the emerging stock market outperformance is "obviously" due to faster population and/or GDP growth. Don't buy it.

Grand Delusion #7

A Weak US Dollar is Bad for the Economy and Stocks, but Good for the Trade Balance

Expectation: A weak dollar means the US is weak. But the weak dollar will make US exports more competitive reducing the US trade deficit

Reality: A weak dollar lifts oil prices which worsens the US trade deficit. And it weighs on tech stocks

Politicians tend to love a strong dollar. Not because of the economic ramifications, but because any association with a weak dollar can be perceived as weakness in general, weakness that might cost votes. The adjective matters when dealing with the general voting public. The investing professionals may be a tad smarter than the general public here. Most investors realize that the dollar is measured in terms of other currencies, meaning a decline in the US dollar may arise from many non-domestic factors such as higher rates in Europe or the resolution of a non-US war reducing demand for the safe haven status of US dollars.

Still, when there is a material move of the US dollar up or down, there is a tendency to look exclusively at the currency impact on the trade deficit and importers/exporters. There is little if any emphasis on the currency impact across the value chain, a short cut that shows an incomplete understanding of global capital flows, flows that are at the heart of the stock market.

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The conventional academic view is that an undervalued US dollar will make exports from the US more competitive and make imports into the US less competitive. The combined effect will be to lower the overall US trade deficit. Alas though, movements in the US dollar – the global reserve currency – have many far reaching effects beyond the trade deficit. At the top of the list is the levered impact on commodity pricing. One would think that for every 1% weakening in the US dollar, the price of globally



traded commodities such as crude oil when measured in US dollars would increase by 1%. That is, our crummier dollar buys less crude oil. But the reality is far more dramatic. For every sustainable 1% decrease in the value of the US dollar, the price of crude oil bounces from 3% to 5%. The story is the same with other global commodities such as metals and grains. Since crude oil is America's biggest import, any substantive weakening of the US dollar widens the US trade deficit, the exact opposite direction suggested by academics.

Part of the rationale for the levered impact of the US dollar in commodity prices is that many commodities can be regarded as currency alternatives, especially in countries where the home currency is unstable. So when the US dollar, the world's reserve currency weakens, commodities become much more valuable as a store of value alternative to the dollar. And since the commodity markets are quite small compared to the currency markets, it does not take much of this thinking to have a levered impact on commodity prices.

Further, a small 1% weakening in the US dollar creates a profit arbitrage situation at the factory floor level where a 1% weakening of both raw material AND finished goods prices will result in outsized profits since finished goods are inherently more expensive. So the raw materials prices rise more than 1% to close the gap. And when measured across the entire value chain, the prices that move the most are as intuition would suggest the rawest of the raw materials, typically commodities from the ground literally – crude oil, copper, corn, coal, gold, etc.

We saw this story play out during the 2003-2013 period of high oil prices and a weak US dollar, a period with persistently high trade deficits. And with the recovery of the US dollar since 2014 and decline in crude oil prices, the trade deficit problem has essentially disappeared. Exactly the opposite direction predicted in the text books.

Further, the investor relations departments at most of America's global tech companies persistently highlighted how the weak US dollar increases profits from overseas operations while leaving profits of domestic operations unchanged. So from an accounting perspective, Microsoft and its peers were beneficiaries of the weak dollar. The gaping hole in this story is that investors were abandoning tech investments to chase the gusher of profits coming from the oil patch and other raw materials and from

the emerging markets like China and India. Global technology earnings may indeed have benefited from a weak dollar but global technology shareholders were left in the dust!

Hard to say if this backwards relation of trade deficits arising from a weak dollar will hold in the future. After all, the prevalence of hydraulic fracturing (fracking), has reduced oil imports into the US somewhat, a trend that appears to be persistent. Also, should electric vehicles ever become mainstream, oil imports would likely decline (electricity is not generated with liquid oil, but mostly comes from coal or natural gas which does not need to be imported).

While the conventional academic view has not really changed despite the experience of 2003-2013, the short cut explanation is still a short cut. A move in the US dollar has wide ranging impacts and it would be a mistake to look purely at the surface level impact on importers and exporters without considering things like the shifting price structures across the value chain or the makeup of America's main imports and exports or the constitution and make up of our key trading partners.

Grand Delusion #8

The Union Dream: Taking Wages out of the Competitive Landscape

Expectation: Removing labor from the competitive landscape lets companies compete on other factors

Reality: A higher allocation of profit to labor reduces competitiveness and raises cost of capital hurdles

While non-government unions have been in decline for decades in the US, it does seem a bit insensitive to be critical of unions now, sort of like kicking a man while he is down. Yet precisely because of the scarce presence of unions, there is little practical knowledge about the real world impact of unions to shareholders. Mental short cuts abound.

While the union goal of removing labor from the competitive landscape is an honorable objective, the practical application has been very difficult. One bad apple spoils the bunch. Labor is a meaningful component of expenses for most businesses. An interesting example here is the trucking industry after the 1980 Motor Carrier Act deregulated freight rates nationwide ushering in the rise of the low cost carrier. By 2000, unionized truckers were nearly gone. And even among those carriers with double breasted operations (union and non-union), the growth of the non-union side simply dwarfed the flat lining union operations.



The lower cost structure of the non-union operations resulted in a lower cost of capital and a higher return on invested capital. Capital spending in the non-union operations was fully accretive to shareholder value whereas capital spending in the union operations was about half as accretive with most of the leakage going to pensions, health care, inflexible work rules and other labor benefits. So the non-union fleet growth raced ahead in a profitable manner, and over the course of 20 years, union operations stagnated.

The steel industry was also touched by the move away from unions. Most people attribute the successful rise of Nucor Steel to innovative technology being the first mini mill to use continuous casting. The story has been repeated so many times – indeed there is a book, American Steel – that the story has become another "Illusory Truth" with little basis in fact at all. Yes, Nucor was an innovator and yes, they were the first with continuous casting. But that is missing the real story. Grab any analyst report during the Nucor 1990s heydays and all will point to higher operating profit per ton versus peers, an industry standard measure of operational efficiency. And all will also conclude it is due to continuous casting. But the secret lies in the more complicated measure of operating profit per ton excluding union labor costs such as legacy pension and health care costs (known awkwardly as EBITDAPRO per ton). On that measure, Nucor in its heyday was nowhere close to its peers. Continuous casting in fact appeared to be less profitable not more profitable. The real reason for Nucor's success was simply being non-union. Alas, as with union truckers, most of the union steel industry stagnated and is mostly gone today.

While union objectives are certainly admirable (and indeed many folks harbor secret hopes that some of today's tech sweat shops like Amazon, Facebook and Google will see a unionization effort), as an investor, it is very difficult to make a bet on a company long term with a hurdle rate that is inherently higher than peers. There are exceptions to the rule of course, the biggest exception being industries in tight oligopolies where there are no bad apples to spoil the bunch. Boeing and Airbus are a good example of a duopoly where labor has little effect on comparative cost of capital. Ironically, Boeing and Airbus customers – the airlines – are the exact opposite where labor costs can be a meaningful drag and a potentially very painful experience for shareholders. Another exception here might be trade unions since most trade union constituents have comparatively little overlap with large blue chip equities that compete on cost of capital.

While unions today are rare, especially outside non-competitive organizations like government and select tight oligopolies, the idea that labor cost can be removed from the landscape remains a wonderful ideal, yet an ideal that is at odds with capitalist competition where cost of capital determines who wins the race. This makes it very difficult to bet on a unionized company when non-union alternatives are freely available.

Grand Delusion #9

Share purchases from insiders, buybacks, or activists mean stock is a good investment

Expectation: Purchases show confidence in the future of the company

Reality: Purchases are frequently a result of pressure from other forces and may not be so helpful

There is an old saying on Wall Street that insider selling can happen for many reasons, but insider buying happens for only one reason. So a CEO buying company shares on the open market is generally viewed as a bullish sign that the CEO thinks the stock is a good investment and that fundamentals are solid. Alas though, there is more to insider buying than meets the eye. The challenge comes from two other common misconceptions including 1) the idea that the CEO is more qualified than others to make a call

on the stock and 2) the idea that the CEO is solely motivated by the same factors and constraints that investors face.

Is the CEO the most qualified investor to make a call on the stock? Most folks would likely put a famous investor like Warren Buffett ahead of the CEO, but most would also acknowledge that a CEO buying shares is a confidence builder. But insider buying can also go famously wrong, especially during periods of deep tectonic change in the broad macro economy. In other words, CEO buying has a profound provincial bias. The dot com CEO of 1999 can spot when his or her dot com is not keeping up with the dot com Joneses but is blind to the factors that put all of the dot com Joneses at risk. Same story with the oil company CEO of 2014 where heavy insider buying turned out to be a contrary indicator as oil execs whiffed the rare black swan FX call that drove the commodity melt down. CEO insider buying in general works best when the industry, the sector and the overall market are also supportive. Alas though, these macro factors are not so simple and are usually best left to professional investors rather than the more micro-focused widget company CEO. Both the micro view and macro view matter.

Is the CEO really motivated solely by investing factors? In short, no. An amusing recent write up on an investment website (Seeking Alpha) showed how insider buying at GE was not keeping up with the company's internal share ownership program requirements, so the insider buying was actually viewed as a negative because it was below plan! Share ownership programs became popular in the bull market of the 1990s with the idea that insiders that own shares are more likely to think like shareholders. But the side effect of mandatory share ownership programs is that it flies in the face of the idea that insiders only buy stock in their company for one reason. Further, it is not uncommon to see open market share purchases with deeply troubled companies, frequently a response to immense shareholder pressure. Such open market purchases are usually token amounts aimed at appeasing the masses and perhaps more motivated by the CEO trying to keep his or her job.

So there are many reasons for insider purchases, not all positive. Perhaps insiders – informed or not - think the stock is a good investment, perhaps they are required to buy the stock as a part of a share ownership program, or perhaps they are trying to appease the masses and just trying to hang on to their job. The story on insider buying has a few wrinkles.



But if insider purchases are frequently a red herring, does that also mean the corporate version of insider buying – that is, share buybacks – are also to be viewed with skepticism? Yes, again. Buybacks are generally a positive, but it is a mental short cut to say all buybacks are a positive. In recent years it seems corporate buybacks have become a substitute for dividend payments. These are usually smaller buybacks amounting to just a couple percent of shares outstanding and usually do not move the needle much. But the highlight is usually a larger share buyback announcement commonly associated with either a corporate reorganization, a reaction to a share price collapse or sometimes related to a longer term recap plan.

The thinking for nearly all of these is that the best use of the company's capital is to buy the company stock since either the stock is cheap, the prospects are great or both. As with insider purchases though, token share buybacks can be announced for short term political gain to appease the masses with less thought about the future viability of the company. A former colleague once jokingly observed that nearly every stock that went to zero had insider purchases and a share buyback. Perhaps a corollary here is that the long term investors that press hardest for insider purchases and share buybacks are often the most at risk for going out of business, not the most qualified investors.

Some companies have bought into the share buyback concept more than others and it seems over the last ten plus years there has been an emergence of investors who hold CFOs responsible for share buybacks that actually reduce share count (rather than simply offset dilution from employee stock option awards). The side effect of a company that reduces share count say 10%+ every year for 5-10 years is usually an increase in financial leverage. This is not necessarily an ideal outcome. A better approach is to identify the ideal capital structure and stick with it rather than incrementally lever a little more each year out of habit or under pressure from well-meaning but misguided investors.

So share buybacks, like insider purchases, are broadly positive but more complex than meets the eye. Other factors such as appeasing the masses and shifting capital structure may result in less than optimal decision making. And pressure to act frequently comes from the least qualified investors.

If insider buying and corporate buybacks are potential red herrings, does that mean that Warren Buffett or Carl Icahn buying shares is also a red herring? Again the answer is yes. At a broad level all three will be regarded as a positive when the news breaks of course. But with Buffett/Icahn, the challenge is that no one knows why Buffett/Icahn bought shares except those who work there. Perhaps the holding is a hedge against another position, or a short term trade in progress at the time of 13F quarterly holdings filing, or a holding from a position from a recently acquired investment company, etc. This holds true both for a long term investor like Buffett as well as for an activist investor like Icahn. And while it is fair to say that an activist like Icahn filing forms 13D/13G probably does have designs on the company and how it might be reorganized and/or sold to a peer, it is also fair to note that the activist space is a crowded space and much of the low hanging fruit has been picked.

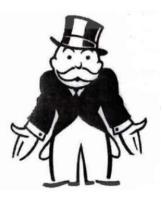
Grand Delusion #10

A Company near Bankruptcy is as honest as any other Company

Expectation: A company will tell its story in an honest, forthcoming manner in good times and bad

Reality: The truth, the whole truth and nothing but the truth, is a difficult task near bankruptcy

There seems to be a sliding scale of ethics on Wall Street. When business is good, investor relations and CEOs are easily accessible, happy, proud and willing to talk. When business is bad, the company becomes more distant and evasive. But when business is truly bad and the company is teetering on the edge of bankruptcy, a new and unsightly metamorphosis occurs. No one wants a bankruptcy on their watch – not CEOs, not investors, not investor relations. So the dialog devolves from defensiveness into an alternate reality based on wishful thinking while glossing over "small" challenges like asbestos. (For the record, an asbestos problem is NOT a small problem.)



Clearly it is a mental short cut to treat the dialog with all companies the same without taking into account the headwinds or tailwinds that put the companies where they are today. In particular, companies near bankruptcy are just not in a position to speak with an equal voice. They are living one day at a time, knowing the job may end tomorrow and in a way that will ripple through their marriage and family and likely leave a permanent stain on the resume.

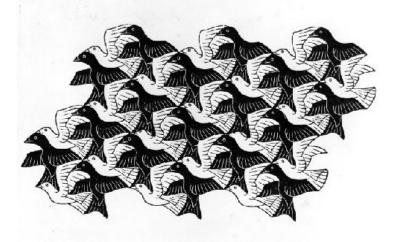
So when dealing with companies on the edge of distress, a different set of filters is called for. A few white lies right before the guillotine might be expected. And perhaps a small slide in ethics would be considered forgivable or at least understandable.

Mental Shortcuts Part 2:

Misunderstood Motifs

The list below is the Top Twenty industry-specific Misunderstood Motifs in rough order of importance. Notably, nearly every industry in the 99 Dow Jones industry groups has such misunderstandings, so this list is far from exhaustive.

- 1. Large money center financials are "blue chip" quality companies
- 2. Foreign financials are cheaper and/or growing faster than US financials
- 3. Buy non-US commodity producers will add to geographic diversification
- 4. Timber companies with sizeable uncut inventory will never have a cash flow shortfall
- 5. Homebuilders are great long term investments, despite some cyclicality
- 6. Engineering & construction is a traditional industry with traditional earnings reports
- 7. I love my new Ford, therefore Ford stock will do well
- 8. Consumer stocks become more efficient by spinning off tired old brands
- 9. Since you can't beat the house, casino stocks must be a good investment
- 10. Business development stocks are just like banks but with big dividends
- 11. Subprime loan companies are decent companies that trade too cheap
- 12. The value of a new media company is all about popularity
- 13. Serial consolidators are high quality companies with solid returns
- 14. A conglomerate discount is not fair
- 15. Pre-approval biotechs will do well post-approval as peak sales levels are realized
- 16. Utilities are just bond equivalents
- 17. Oil is about supply and demand
- 18. All transports have the same sensitivity to the US economy
- 19. Airlines are hurt by higher oil/fuel prices
- 20. A bond rating agency upgrades when bond prices are low and downgrades when high



Misunderstood

<u> Motif #1</u>

Large Money Center Financials are "Blue Chip" Quality Companies

Expectation: Large financials are lower risk "blue chips"

Reality: Large Dow Jones financials have black swan risk. Smaller, well-run financials are lower risk.

One of the unique risks of financial businesses is "black box risk". For a plain vanilla bank, this means most shareholders that are not insiders never really know what is in the bank's loan portfolio. Other financials like insurance companies and stock brokerages also have black box risk within their productive insurance or brokerage assets. And while there are tremendous regulatory disclosure requirements that help breakdown and categorize the asset portfolios and portfolio performance, the fact is there is always some leap of faith required when investing in financials. This is a very different from counting how many iPhones that Apple is selling.

But the most dangerous mental short cut is the idea that blue chip financials are somehow safer than smaller financials. The large size may make investors feel safer, being on board with billions of dollars of peers. The fact is that the larger the financial, the more complex the business with vulnerabilities that just do not exist with smaller institutions. A small local community bank doing plain vanilla mortgages in the backyard will have very few challenges managing expectations whether



those expectations are good or bad. But a large blue chip financial is always one bad foreign derivative contract away from complete failure, and a failure that will be a complete surprise to blue chip shareholders. The large blue chip financials – banks, insurance companies, stock brokerages – are loaded with these exotic asymmetric risk/reward contracts.

Small community banks rarely have the resources or expertise in exotic contracts to enter these businesses, a real boon in Black Swan years. That does not mean that small banks are risk free (or small insurance companies or small stock brokerages). Small banks may still have a terrible loan portfolio. But, from an operating standpoint, small banks with good loan portfolios are the least risky of the banks.

Of course it is tough to identify those small banks with good loan portfolios, a judgment that involves knowing a small bank and its leadership and its neighborhood and operations perhaps for years. But that is where the true low risk financial investments reside. By comparison, the so-called "blue chip" financials are loaded with operational risk.

Misunderstood Motif #2

Foreign Financials are Cheaper and/or Faster Growing than US Financials

Expectation: Compared to US Financials, many foreign financials appear cheaper or are growing faster

Reality: Apples and oranges. Regulatory and structural differences dramatically elevate the black box risk

Perhaps this misunderstood motif is really just a corollary to prior motif on so called "blue chip" financials. Large foreign banks will have the same risky asymmetric/derivative business exposure just like the US large banks. But the regulatory environment and industry structure will not be comparable to that of the US, a backdrop that greatly magnifies the black box risk associated with all financials. And unlike the US, it is difficult to hide from derivative risk in smaller well run financials since small community banks are hard to find outside the US.

America has a lengthy and well-documented 200 plus year history of distrusting large financial organizations and the American financial landscape is uniquely fragmented compared to most other countries. While the laws preventing interstate banking and the laws separating commercial banks from investment banks have been repealed some 25 years ago, they still leave a mark. There are over 6,000 community bank companies in the US compared to about 30 in Canada and a total of four banks in all of Australia. Outside the US, it is common for banks to also offer investment banking services, insurance products, asset management and other services not generally allowed to operate together within a single US company until more recent years. This ripples through to the regulatory framework where in America there are separate regulators for banking, securities, and insurance. This American banking paradigm just does not translate overseas.

Since the 2008 crisis, many of the European financials have a tempting appeal as share prices repeatedly come across value screens as cheap and underperforming. But low valuations are low for a reason. In the European Union there is much variance in banking standards from country to country. And while regulatory Banking Union has been a high level objective of the EU since the 2008 crisis shined such a bright light on the catastrophe of nonunion, the process may well take over a decade to fully implement and will



likely fight against regional politicians all the way. Asia also wrestles with non-comparability whether due to China's shadow banking system, financial side effects of Japan's moribund economy, ties to family controlled conglomerates in India and more.

At some level the idea of treading cautiously when evaluating investments in non-US financials would seem no different than evaluating non-US companies in any industry. There are great differences in the US health care industry versus the non-US health care industry, or the US tech industry versus the non-US tech industry, or the US steel industry versus the non-US steel industry, etc. The unique challenge with the foreign financial is the black box risk inherent in all financials is magnified by the

impenetrability of the key aspects of analysis: the loan portfolio, the leverage, the regulatory capital, the derivative exposure, the conflicted business mix, etc.

At the same time though, the financials are the largest sector in the MSCI World Index at 17% of the index. And it is not uncommon in emerging markets for the financial sector to account for over 50% of a country index. Indeed, many emerging market indices are heavily populated with the regulated industries – financials in particular - but also regulated oil & gas, telecom, mining, and electricity. Why? An unfortunate but common reason in lesser developed countries is that the non-regulated industries are all escaping taxes by staying under the radar as non-public companies. If the laws of supply and demand have any meaning, it ought to say something if foreign indexes are nothing but banks and you cannot buy "the good stuff" like tech and consumer names. The surplus of foreign banks seems to acknowledge the risk of the regulatory and operating environment challenges.

Analyzing US financials can be challenging and must be approached in a way that respects the riskiness of the business including the asymmetric business prevalent at the so-called blue chip banks. But most foreign financials, even those with familiar names and US operations, are simply not in the same risk category as most US banks. They are riskier.

Misunderstood Motif #3

Buying non-US commodity producers will add geographic diversification

Expectation: Adding British Petroleum to a portfolio of US stocks will help diversify geographically

Reality: Most commodities are on the same global cycle, so don't bother going overseas

In the middle of the tech bust of 2000, there was an amusing episode of Jim Cramer's Mad Money where a caller was upset that her portfolio was down over 50% despite being significantly diversified outside tech. When pressed about her large non-tech holdings she revealed that her non-tech holdings included HealthCare.com, Pets.com, EToys.com, Edgar.com and assorted other non-tech dot coms. Needless to say Cramer nearly blew a gasket and informed the caller that she actually owns the same stock a dozen times over – they are all internet names!

And so it is with commodities. Oil is the same all over the world at the same time. If the price of oil rises, so do the shares of US-based Chevron, UK-based British Petroleum and China-based PetroChina. Precious metals are also the same all over the world. Why go to South Africa for shares of Anglo Gold when US-based Newmont is on the exact same cycle? Same story for base metals like copper or aluminum. Same story for



agricultural commodities such as corn, wheat and fertilizer. Of course, there are a few exceptions to this phenomenon. Lumber, natural gas and some of the proteins do not trade at the same price everywhere in the world at the same time (mainly due to shipping cost and/or lack of storability).

For the majority of commodities that do trade with a global clearing price, there is one additional aggravation. Not only are all oil stocks all over the world highly correlated with each other, but they are also loosely correlated with all the other global commodities like gold, copper, corn, etc. This is especially noteworthy when the US dollar has an outsized move like in 2014, a move that put a big tailwind behind US consumers, a big headwind on the Chinese economy, and a collapse of nearly all global commodities. Hopefully the same Mad Money caller from the year 2000 was not thinking she was diversified in 2014 by owning shares of South Africa's Anglo Gold, Canada's Potash fertilizer, Australia's BHP Billiton Mining and US-based Chevron. In Cramer's words, these are all the same stock!

Perhaps one silver lining of the global correlation of most commodity investments, is that when the moon and stars align properly and a commodity upcycle begins, the opportunity set is now the whole world, not just a single geography. And while perhaps the US names move quickly there will likely be laggards in some far corner of the earth that might see a catch up rally. The opportunity set is now much larger, even though there will be little or no impact on geographic diversification.

In the insurance industry, actuaries refer to "silo risk" as a risk that pervades seemingly independent investments. Perhaps that is an academic way to look at the tight correlation of commodity investments regardless of geographic location. Still, if you hear financial professionals on television mention they are swapping shares of US-based Chevron for shares of China-based PetroChina to diversify into non-US stocks, you should probably change the channel.

Misunderstood Motif #4

Timber companies with sizeable uncut inventory will never have a cash flow shortfall

Expectation: If the acreage is large and the inventory is large, there must be lots of harvestable timber

Reality: With no age class disclosure, the timber is probably all toothpicks with no truly mature trees

While the timber industry is a fairly small component in the overall stock market, the lack of disclosure around timber portfolios is arguably one of the biggest oversights of the accounting profession. Literally every bankruptcy of size in the timber industry over the last 50 years has been due to this gaping hole.

What is really happening here is that less scrupulous timber companies push the envelope on harvest levels in order to generate cash flows and/or pay dividends to boost the stock price. And the higher stock price can then be used as currency to make more timber acquisitions. The new timber tracts will also see harvest acceleration to boost cash flows and the stock price. Rinse and repeat. At first whiff, this seems to reek of the problems associated with Serial Consolidators (Misunderstood Motif #13). This is true. But with timber companies, the ability to artificially boost short term cash flows with harvest acceleration puts the Ponzi scheme on steroids. In the long run, this strategy almost always ends poorly.

Arguably the most egregious example would be the 2012 bankruptcy at Sino Forest, a very high profile overcutting pyramid scheme. But the Sino Forest collapse was nearly identical to that of the similar-sized US Timberlands bankruptcy some ten years earlier, or the slightly less egregious but larger Crown Pacific bankruptcy of 2001. While greed and short sightedness appear to be at the heart of the culture of these companies, there is a ripple effect through to even the straightest arrows in the timber industry. The whole industry will be under pressure to increase return on net assets and even the good actors come under Wall Street pressure to maximize short term cash flows. This has been going on since the 1992 spotted owl listing constrained Federal timber cutting pushing private timber company valuations through the roof. The Ponzi scheme encore was good for the early 1990s participants like the Yale Endowment but has not been so kind for later entrants. That is how chain letters work.

This begs the question, which of the surviving timber companies today effectively rebuffed the Wall Street pressure for short term cash flow and which buckled under pressure and today are really just empty false front western towns? This exercise was done some fifteen years ago at regional brokerage McAdams Wright Ragen. Some companies like Weyerhaeuser, Pope Resources and Longview Fibre were fullly in the clear since they fully and voluntarily disclosed their age class distribution. No shortages of mature 50+ year old timber. And the southern timber companies like Deltic and today's Catchmark were OK since their shorter harvest rotations are less susceptible to borrowing from future generations.

But that did leave three fairly large timber companies in a gray area – Plum Creek, Rayonier and Potlatch. Of these three Plum Creek seemed like the obvious problem child since it was been gasping for oxygen on dividend payments resorting to selling off so-called recreational property. Rayonier was next in line since former CEO Lee Nutter was actually on record with harvest acceleration comments from 1999. Potlatch was a little cleaner but not out of the woods so to speak.

Since then, there have been two developments. First, Rayonier actually fully confessed to its overcutting problem thanks to the hiring of Dave Nunes from Pope Resources, a very straight arrow company. While the shareholders were brutalized on the news, CEO Nunes should have been awarded a Nobel Prize of Forest Products Investment for making Rayonier a truly investable and trustworthy name and taking Rayonier completely off the path of pyramid profit puffery.



The second development has been the merger of largest of the three problem companies - Plum Creek - with one of the straightest arrows - Weyerhaeuser. At first blush one wonders what Weyerhaeuser CEO Doyle Simons was thinking buying Rick Holley's oxygen-starved overcut behemoth. But Weyerhaeuser was the only company of comparable size and one of the very few companies with the opposite problem – an overstock of mature harvestable timber partly owing to genetically enhanced species planted decades ago now rapidly reaching maturity, internally known as The Wall of Wood. The merger was a get out of jail free card for Plum Creek. Indeed, the move not only was good for Plum Creek, but the entire industry avoided a black eye discount should a large 7 million acre timber company like Plum Creek go the way of Sino Forest.

But burying the age-class disclosure problem under the carpet only means that the problem will recur in the future. Hard to say whether the problem recurs a year from now or a decade from now. The only way to shut down future chain letters is for CPAs to acknowledge the issue and start requiring disclosures on age class. Without a voluntary age class disclosure, it is likely the timber company is hiding something. And investors will make the mental short cut that large acreage and inventory disclosures are evidence of rich timber assets. But as we have seen time and again, without an age class disclosure, the so-called mature timber is more likely to be acres and acres of toothpicks.

Misunderstood Motif #5

Homebuilders are great long term investments despite some cyclicality

Expectation: It's a cyclical business, but an above average homebuilder will weather the cycle

Reality: If home prices decline, nearly the entire industry goes underwater with covenant violations and bankruptcies

A trusted northwest regional stock analyst forecast in early 2008 that at least one of the top ten homebuilders would be bankrupt by year end. Bad news, the analyst was not correct, though there were a couple bankruptcies among the top 20 homebuilders. Good news (for the analyst), nine of the top ten homebuilders had violated covenants, and were it not for the reeling state of the banking industry in the latter part of 2008, all nine of those homebuilders would likely have been bankrupt. Clearly the analyst underestimated the severity of the crisis of the Great Recession of 2008-2009. The banks were in such desperate straits that they elected to not pull the plug on the homebuilders and instead moved into the mode of "extend and pretend".

But what does this say about the homebuilder business model when it is phenomenally profitable as prices rise and home sales volumes increase, but when prices decline it is a completely non-viable business? Homebuilders are just not good long term "set it and forget it" investments. Perhaps they are a decent trading vehicle, but do not make vacation plans while you are long a homebuilder.



Of course, it could be argued that the Great Recession of 2008-2009 was an unprecedented situation and one should not extrapolate anything meaningful from a once in a lifetime scenario. Perhaps there is some truth there in that all economically sensitive businesses were clobbered hard in the last recession. But as brutal as it was for most industries, homebuilding was simply worse. Much worse. The fact is that within the "value chain" of homebuilding, the only link in the value chain that went completely upside down was the final finished good – that is, the homebuilders. The rest of the value chain never really faced the risk of non-viability. Looking into the various steps of the value chain in more detail, one might try to zero in on comparable risk profiles of non-viability in 2008, yet they are just not there. What about home improvement stores like Home Depot and Lowes? Nope! What about covenant violations at appliance makers like Whirlpool? Nope. What about lumber companies like Louisiana Pacific or timber companies like Weyerhaeuser? Nope. What about covenant violations at the home furnishings companies like Bed Bath & Beyond or LaZBoy? Nope. Paint companies like Sherwin Williams? Nope. Its just the homebuilders that have the risk of non-viability where 95% of the top 20 violated covenants.

Again for short term trading, homebuilders are fine, but for long term "set it and forget it" investing, homebuilder stocks are terrible. If you really want to make a bet on the growth of new home construction over the long term, don't buy a homebuilder. Rather buy a company in ANY other part of the value chain – home improvement, lumber, timber, furnishings, home appliances – there are lots to choose from. Just avoid the homebuilders.

Misunderstood Motif #6

Engineering & Construction is a traditional industry with traditional earnings reports

Expectation - When the earnings improve, the stock will improve

Reality – E&C earnings are extremely fungible making valuation a finger-in-the-wind exercise

All is good until one day it isn't. There is a death spiral risk to all businesses that use the "percent complete" method of revenue recognition. Most of these businesses are large engineering & construction (E&C) companies where projects are huge in scale. Such projects might include major freeways or refineries with price tags in the billions of dollars and delivery schedules in years. The normal method of revenue recognition - that is, recognize the revenue earned as widgets are sold – does not apply when it takes five years to complete a single really big widget like a freeway or a refinery. So it would seem to make perfect sense to spread out the revenue recognition as the project managers report their percent complete.

The problems arise on two fronts. First, there is essentially infinite flexibility to report high or low earnings in any given quarter or perhaps even over the course of a year or more. So if the company needs the stock price to be high because of a strategic situation – perhaps an acquisition or an employee stock option expiration – the CEO/CFO can report great news on



earnings when it matters. Of course, it will borrow from future earnings and there needs to be a plan for that (for an acquisition, that plan would be to bury it in the normal M&A write-off to execute the strategic plan to turnaround and integrate the newly acquired company). Second, when there is a downturn, there is a tendency for customers to play the quality control card and not approve work that is essentially done creating the appearance of over-recognition of revenue, a problem that can snowball

and is difficult to reverse without taking a hit to earnings with contract write-offs (and contract write-offs for a contractor company are not pro forma charges that can be ignored).

Because of the unique mushiness of E&C earnings, some long standing investment professionals have gone so far as to suggest that E&C companies just should not be publicly traded entities. You simply cannot trust the numbers. Even some of the most conservative E&C companies run by trustworthy and conservative souls who proactively elect to not recognize any profit on contracts less than 30% complete still run into sizeable contract write-offs that raise the trust question.

A better solution is to acknowledge the problem and replicate best practices from other industries with near identical problems. That "best" industry would be the banking industry. Indeed, the large contract backlog at an E&C company has the exact same black box risk of the loan portfolio of a similarly sized bank. The difference is that the bank has scads of disclosures on credit risk, loan losses, non-performing loans, Texas ratios and more. But the E&C has only the income and cash flow statements – neither of which are very helpful at all. Of course, more disclosure may help understand the black box of E&C a little better, but it is still a black box. Without bank-level disclosure on the black box, it is very difficult to ever feel comfortable with the fungibility of E&C earnings.

Misunderstood Motif #7

I love my new Ford, therefore Ford stock will do well

Expectation: The consumer experience and the investor experience will be the same

Reality: There is a tie between the consumer and investor experience, but they are not the same

There was a popular restaurant in Seattle that seemed to have it all. Great reviews, great location, great menu, great interior and a packed house. And then Poof! It went bankrupt. The consumer experience and the investor experience are just not the same thing. Clearly there is a relation. No customers at all would suggest that the consumer experience and the investor experience are the same – a bad experience. But it is possible to give away too much to the customers or to the employees at the expense of investors. There is a hard-to-find sweet spot where all three stakeholders - consumers, employees and investors - exist peacefully and prosperously.

But when investors invest into consumer investments, it becomes very difficult to set aside the consumer hat and don only the investor hat. Personal biases can cloud the judgment on prospects for a business model that may have no appeal to the investor. This is where focus groups are helpful. But sometimes focus groups create unnecessary noise as everyone views themselves as an expert on consumer behavior since everyone is a consumer.



There was an amusing headline in Barrons many years ago shortly after the Krispy Kreme IPO and the related national-scale donut craze, "Buy the Donut, Sell the Stock". Evidently the professional financial journalists were able to see through the confusion of investors buying into the mouth-watering consumer experience, but with little regard for the factors that will lead to a long term successful investor experience. This advice still applies today – not necessarily to Krispy Kreme, but rather to other overheated names where the consumer experience has lifted the stocks to such elevated levels that the investor fundamentals will never be able to match expectations.

The opposite scenario can also take place where investors shy away from distasteful consumer experience without regard for the investor experience. Maybe your last Buick was a lemon, but that does not mean GM stock will decline. GM is far more complex and may see headwinds and tailwinds from many disparate sources – a pension adjustment, a new CEO, an acquisition in Europe, a new electric vehicle, a change in emissions regulations, etc.

More sophisticated investors have pointed out that consumers stocks that sell products or services that overlap with Wall Street consumption habits have a tendency to trade at a persistent valuation premium. While it is a bit difficult to characterize the demographics of Wall Street, Starbucks is frequently mentioned as an example of this investor/consumer behavior where the valuation is persistently rich but not in bubble territory.

When looking at consumer stocks, it is important to look at the consumer experience, but at a distant clinical level. It is easy to get caught up in a particular product or group of products – either too bullish or too bearish. The analysis of the consumer experience, when melded with the other parts of the business model, ought to reveal how the money drops to the bottom line, the key element for investors.

Misunderstood Motif #8

Consumer stocks become more efficient by spinning off tired old brands

Expectation: A large branded consumer goods company spins off small portfolio pieces for efficiency

Reality: The spin-off will usually struggle but create a wonderful chart for the erstwhile parent

It is difficult to underestimate the importance of consumer impressions for simple consumer products. Coca Cola has a huge advertising budget for a reason. Familiarity is at or near the top of the list of consumer purchasing criteria. This does create an interesting statistics strategy for large consumer products companies. A full scale advertising blitz clearly will lift consumption and the higher consumption level will frequently hold for quite some time even with a subsequent sharp scale back in advertising. Many large consumer products companies have product portfolios with hundreds of brands and the portfolio needs attention in the form of reinvestment in areas of anticipated demand and portfolio pruning in areas of lesser demand and/or redundancy. The portfolio pruning process can create spin off businesses more frequently than one might expect. The holding companies are quite smart here. Spin offs are rarely aimed at monetizing the hot brand (though that does happen on occasion), but more often is aimed at jettisoning the losers, due to fashion or function. And it is not uncommon to see ad spending drop 1-3 years before the spin.

This is known internally as "harvesting" as sales do not yet decline but profit goes through the roof. When the unfashionable company is then spun off to shareholders of the holding company, the new company is usually faced with a challenging future as ad spending is artificially low, sales are about the begin a post-harvest decline, and there is likely a structural issue with the product category that led to the spin off decision to begin with.



But at the holding company level, at the time of spin off, the stock chart gives credit for a fully valued spin off company, an adjustment made to the full history of the company as a publicly traded entity. This creates an artificial history and if the consumer holding company has multiple spin-offs, the artificial history can be very misleading.

A better way to view the history of a large consumer products company is to combine the performance of the holding company along with the performance of the spin offs, not an easy task, but a better picture of actual history. And it will be a picture that will clearly separate true outperformance from the smoke and mirrors.

Misunderstood Motif #9

Since you can't beat the house, the casino must be a good investment

Expectation: You can't beat the house, so the casino must be a good investment

Reality: The house is in its own high stakes poker game competing with other houses

During the 2008-2009 recession, all of the large casinos were either violating covenants or within a hair's breadth of violating covenants. And while the covenant violations – near or actual - were nowhere close to as bad as the covenant violations in say the homebuilder industry, the fact that these so-called professional gamblers nearly lost their entire bankroll (and some of the smaller operators did in fact go under) speaks to the risk that casino operators are willing to assume to get a leg up on their competition.

Ten years ago, leverage levels were simply too high especially amid a casino construction boom, a boom that seemed to follow a Field of Dreams business model ("Build it and they will come"). The combination of high leverage and the race to see who can build the fastest was not a healthy combination. Of course, it could be argued that 2008-2009 was an exceptional time in the world economy. Fair enough.



Indeed casino leverage levels today are only just over half of what they were prior to the Great Recession. But the idea that the house is the "smart money" ignores the competitiveness or foolhardiness of the environment in which the house operates and it ignores the chosen offense or defense the house is using to move forward or simply hold its own.

There is one other aspect to casino investing that runs through Wall Street. Most professional investors fashion themselves as expert gamblers (and many professional gamblers view themselves as expert investors). Indeed, at a cold hard mathematical level (i.e. the Kelly Criterion), the only difference between gambling and investing is the size of the bet relative to the size of the bankroll. Professional investors then have an immediate familiarity and kinship with casino investments, not unlike their familiarity and kinship with Starbucks stock.

The familiarity and kinship is not limited to long term fundamental investors, but also includes the entire noisy group of short-term, shortcut thinkers – day traders, boiler room brokers, TV journalists, baby sitting wealth managers, even chart technicians. Everyone is an expert on casinos it seems. And with everyone now an expert, the debate devolves to the lowest common denominator – you can't beat the house, so the house must be a good investment.

Misunderstood Motif #10

Business development companies are just like banks, but with big dividends

Expectation: It's just like a bank but with a huge dividend

Reality: Many of these BDCs will go under during the next downturn

The business development companies (BDCs) appear to be combining the worst aspects of the nontraded REIT sector with the worst aspects of the black box financials. Yet from the outside looking in, the BDCs just look like a bank but with a huge dividend.

Don't take the bait. The fact is, the huge dividend is there to raise the stock price to elevated levels, which is then used to issue new dilutive equity, the proceeds of which are used to build out the portfolio and...to pay more dividends! Both the non-traded REITs and the BDC companies are highly aware of the rules against Ponzi schemes and using new



investor money to pay old investors. Hence much of the prospectus focuses on the portfolio buildout and de-emphasizes the cash use of paying more dividends with the new investor money.

A retired pre-public REIT CEO once jokingly described the REIT growth process as a sliding Ponzi scale where the super early stage pre-public REITs were 90% Ponzi and 10% portfolio buildout and by the time the REIT reaches the IPO stage maybe 10 years later, the Ponzi stage is over and the dividend payouts

are sustainable without need for new equity investors. Perhaps less cynical observers would simply regard the overly-high dividend as an expensive form of bootstrap financing.

Regardless, the process ought to be regarded as mildly disturbing, especially given well over 100 prepublic REITs actively raising partial Ponzi money, mostly from low end brokers who get paid large commissions for these placements, often with the amusing pitch of low correlation with the S&P. But what really ought to raise eyebrows is the fact that the BDCs have adopted this REIT business model and now there are dozens of pre-public BDCs going through the same capital raising process using elevated dividends to attract new money.

The BDC model is a lot riskier than the REIT model. Most of REITs are very stable business models compared to most other industries within the S&P. The last recession, as ugly as it was, saw little in the way of REIT bankruptcies. Yes there were some reductions in net asset value. But about the only sector within the REIT industry that was truly troubled was the financial/mortgage REITs. By contrast, most other real estate sectors came through the other side with only medium-sized scratches – apartments, hospitals, offices and even shopping malls.

BDCs in contrast are not only less stable than REITs but are loaded with black box risk so you really have no idea what you own. Granted there are exceptions. Like with the banks discussion above, where some of the small community banks have little in the way of exotic derivative risk of the so-called blue chips, so too there are BDCs that will rise above the herd with non-cyclical recession-proof portfolios that last for the ages. But given low survivorship of both the financial REITs and the BDCs in the last recession and the difficulty of determining in advance who has that extra line in the 10-k that completely changes the game, it seems better to simply look elsewhere for investment ideas. Let the bait of the high dividend trap someone else.

Misunderstood Motif #11

Subprime loan companies are decent companies that trade cheap

Expectation: The stocks are really cheap, but the business is good

Reality: The business is inherently riskier

There is a morbid curiosity that draws attention to loan companies charging seemingly usurious, loan shark 30% interest rates to folks with credit problems. And what really seems to draw the interest is that

subprime loan companies always seem to trade at very low valuations. But a credit portfolio on the riskier end of the curve flows through to an earnings stream with more variability and a balance sheet with more frequent restatements. So the stocks have a tendency to get only half credit or worse for positive surprises, but full credit or more for negative surprises.



This can lead to a challenge with expectations management since arm chair observers may envision that a subprime company trading at half of book value can potentially recover to full book value with a few

decent quarters. But the reality is that the book value is always at risk with subprime loan companies and the stock may indeed trade back at book value not because the stock doubled but because the book value was cut in half on a restatement. There are a lot of moving parts in a subprime loan company and it is rare for these names to trade expensive. Don't get suckered into the cheap valuation.

Misunderstood Motif #12

The value of a new media company is all about popularity

Expectation: More eyeballs lead to more earnings

Reality: More eyeballs may or may not lead to more earnings

It is easy to confuse fame with fortune, as many a starving artist would attest. Twitter and Snap may get plenty of eyeballs, but their fame has yet to translate into fat profit margins (or for that matter, any profit margins at all). Netflix may now be past its starving artist phase but is hardly living the sweet life with only 5% net margins, still a long ways from Microsoft's 35% net margins.



To be sure, there are advantages to scale eyeballs as it is possible to monetize eyeballs with ads and perhaps launch stickier network-effect businesses such as messaging and social media. But the root schism with investors is the persistent mental short cut to correlate the stock price with fame rather than fortune despite the loose sloppiness of the correlation. You just can't stop folks from thinking "it's gonna be huge!"

This makes owning new media stocks hard for investment professionals who must communicate with non-professional customers. The subtlety of owning the company at the perfect sweet spot between fame/growth and fortune/valuation will be lost on the non-professional who will persistently arrive at the Hollywood band wagon conclusion that the stock was put in the portfolio because "it's gonna be huge!"

The thinking is not limited to new media companies of course. Certain consumer plays come to mind like Shake Shack a couple years ago or perhaps the dot coms of the 1990s. But new media is a little different since the business model is more dependent on maximizing eyeballs now to establish the monopoly in the new media before others. So an overvalued stock is inherently part of the business model as is the message from investor relations that "it's gonna be huge!"

Misunderstood Motif #13

Serial consolidators are high quality companies with solid returns

Expectation – Serial consolidators often have high ROE, a feature associated with high quality companies

Reality- The high ROE is more often than not fake news to perpetuate a Ponzi-like scheme

There is a pyramid scheme element to many strategies on Wall Street, and the industry consolidation strategy is right at the top of the list. The simple version of this pyramid begins with a company trading at a high multiple that then uses the overvalued stock to buy smaller competitors. And since the acquisition uses fewer shares to execute, the acquisition is immediately accretive to earnings per share. The higher earnings per share leads to a yet higher stock price which can then be used for yet more accretive acquisitions. Rinse and repeat.

Alas though, there is an old rule with such consolidators: "Industry consolidators are like bicycles – once they stop moving forward they fall over". Ouch! But indeed it is true. One of the core challenges is that many industries run more efficiently as a fragmented collection of Mom & Pop shops. Yet during the consolidation phase, the inefficiencies of the consolidated bureaucracy do not manifest straight away. As long as the consolidator is acquiring new companies faster than inefficiencies manifest, then the bicycle continues to move forward.

Clearly any sort of standstill in the acquisition spree can lead to near-fatal consequences, in particular if the standstill lasts more than a year where organic comparisons finally hint at the truth. At this phase, restatements and write-offs predominate and organic growth mysteriously drops below zero. This does create a strategic imperative for most industry consolidators. When a company reaches the end phase in consolidating an industry, it will not be allowed to stop. The chain letter ends poorly for those at the end of the line. So instead, it must either 1) broaden the mandate to acquire parallel industries and/or suppliers or customers or 2) it must jettison the consolidated industry and start consolidating a new industry.

Not all industry consolidators are subject to this same fate. The consolidators in the crosshairs are those companies doing dozens of smaller acquisition per year adding 10%-50% to the revenue base annually. However, those consolidators that make an acquisition of size every 1-3 years are not likely to have this same experience.

One other interesting aspect for those consolidators in the crosshairs is the screening problem. Many investors shop for good quality companies at cheap valuations using a process not unlike that of Joel Greenblatt's Little Book that Beat the Market. Greenblatt loosely defines good company as one with a high return on equity (ROE) and a cheap valuation as a low PE. Alas the devil is in the details.

The Greenblatt screen persistently yields scores of crummy industry consolidators with great ROEs. Yet obviously those great ROEs need to be looked at prospectively when the chain letter ends, not in the

rear view mirror as the chain letter is still paying. Short term investors may disagree since it is not known whether the chain letter ends a year from now or a decade from now. Fair enough. But the fact that the Greenblatt screen is littered with consolidators hints that there is some efficiency in the market and that a valuation discount may be warranted for those companies that need a high stock price to execute their strategy and persistently undergo the knife of cosmetic surgery to lift their ROEs, ROEs that are for all intents and purposes fake news.

Misunderstood Motif #14

A conglomerate discount is not fair

Expectation: The Conglomerate trading at a P/E of 4 will eventually rally to become fairly valued

Reality: The conglomerate discount will only disappear if the conglomerate breaks up

Investors with a value orientation are frequently drawn to conglomerates because of the cheap valuation metrics. But a low P/E ratio does not mean a stock is undervalued. Nor does a low sum-of-the-parts valuation. Both of these rationales are mental short cuts. The fact is virtually all conglomerates trade at low P/E ratios and trade below their sum-of-the-parts valuation.



A conglomerate discount is normal and should be tracked for fairness and consistency with history and with peer conglomerates. So it makes sense for value investors to seek out a conglomerate because the conglomerate discount is unfair relative to recent history or unfair relative to comparable conglomerates.

Alternatively, investors may seek out a conglomerate investment because there is reason to believe the conglomerate may break up in a way where some or all of the sum-of-the-parts valuation can be realized. This is a little trickier since it seems nearly every conglomerate has investors writing up imminent break up reports on Seeking Alpha and other popular investor websites. In developed markets, investor pressure does indeed lead to conglomerate break ups, which partly explains why there are so few conglomerates in the US.

In emerging markets, conglomerates are very common and many conglomerates are family controlled enterprises where break ups are viewed as a threat to the family. Don't hold your breath waiting for a break up of a foreign conglomerate. Some of these foreign family conglomerates have been together for centuries. And the conglomerate discount is likely to be around for the long term.

Misunderstood Motif #15

Pre-approval biotechs will do well post-approval as peak sales levels are realized

Expectation: The stock will do well as the new product meets or exceeds forecasts

Reality: The lengthy time period between Phase 3 and launch plays havoc with perceived upside

When an early stage biotech makes that rare advance past final clinical testing and regulatory approval, there is a transformation that takes place like a caterpillar emerging from its cocoon into a beautiful butterfly. The business model of a post-approval biotech is very different from that of a pre-approval biotech. No longer is the company dependent on Wall Street for follow on offerings to offset its R&D cash burn rate. The company can now stand on its own. But getting to this Promised Land is no easy task given the average new drug incurred over \$2.6 billion in R&D expenses, spent over 10 years in clinical testing, and with over 90% of drugs in clinical testing failing at some point along the way.



Needless to say, when it appears a biotech is on the edge of the Promised Land, there is a change in the investor base, a change that ripples through to other constituents such as covering analysts and investor relations. Some investors, namely the event-driven

investors, are drawn to the certainty of the odds of approval, and the upside to earnings after the approval. But many investors are drawn to the stock knowing that the lengthy 1-2 year wait between the end of clinical testing and final FDA approval means there will be no bad news for an otherwise high beta stock. So as long as the broad market remains bullish, investors will likely do well. This can work in reverse though, should the broad market turn bearish, a challenging situation for a high beta stock.

There are a few ripple effects to these pregnant biotechs in sustained bull or bear markets. In bull markets, valuation can become a concern, which can then put the sell side in a bind since their sales force needs to have a Buy on a stock should the stock be rising for one to two years. The easiest solution here is for the sell side analyst to raise the long term sales estimates for the lead drug. By the time the drug actually gets approved 1-2 years after the completion of clinical testing, the buy side has inadvertently induced the sell side to ratchet up sales projections to levels that are likely very lofty. The exact opposite situation can occur in a sustained bear market, where analysts are compelled to reduce peak sales estimates to justify lower price targets reflecting unsupportable legacy prior targets.

At some level, the idea of lofty expectations in a bull market and vice versa in a bear market would seem fairly obvious and not worth mentioning. It happens with all companies, not just pre-approval biotechs. The difference though is that most companies report earnings every quarter, which reels in expectations roughly every 91 days. In contrast a pre-approval biotech valuation is not dependent on quarterly earnings since there are no material sales prior to approval. Instead the valuation of a pre-approval biotech is dependent on the peak sales forecast some five years after approval, an approval that might be 2 years away. So funny business can abound uncontrolled for lengthy periods of time.

To the average long term investor not privy to the distorting moves of the buy side on the sell side consensus, there is a blind spot that seems to hide the grade inflation (or deflation) taking place prior to regulatory approval. This is the mental short cut that needs to be brought into the light of day. This is not to say all sell side research is too bullish and should be looked at with maximum cynicism. Rather, sell siders are influenced by the buy side and a sustained amount of pre-approval buying will flow through to the sell side and perhaps even to investor relations. Biotech is a wonderful sector which can add much in the way of potential alpha generation. But investors need to keep their eyes open here for grade inflation/deflation, and the factors that lead to grade inflation/deflation.

Misunderstood Motif #16

Utilities are just bond equivalents

Expectation: Utilities are bonds for all intents and purposes

Reality: There is a lot more to most utility stories than the bond-like features

Most investors correctly regard utilities as income-oriented investments that trade somewhat hand-inhand with the bond market. That is, as bond yields rise, investors will sell utilities lower thereby raising dividend yields roughly in line with the increasing bond yields. If this were the only variable in the utility equation, then all utilities would see equal stock market performance in any given year. Yet in the last year alone, there is a 50% spread between the best performing utility and the worst performing utility. Clearly there is more to the story than just interest rates.

The simplest explanation for variant performance within the utility sector is that most utilities have nonregulated subsidiaries and it is these non-utility subsidiaries that are pushing or pulling on the overall performance of any individual company. Usually these non-regulated businesses are related to the core utility business in some way – perhaps coal mining, or independent power generation, or automated meter reading. Needless to say, a decent sized exposure to coal was a tailwind in the 2003-2013 commodity heydays and a sizeable headwind since the 2014 return to commodity normalcy.



Another factor influencing individual utility returns is the fact that the industry has been in a slow motion consolidation since the repeal of the Public Utility Holding Company Act (PUHCA) in 2005. Prior to 2005, PUHCA prevented utility mergers that did not have contiguous service territory, a sizeable roadblock to industry consolidation. While buyout premiums in the sector are low (reflecting regulators and their need to share synergy savings with ratepayers), the merger success rate is also low (again

reflecting regulators need to share the synergy savings), and deals take a long time to close, there is still enough activity to create outperformance for individual utilities based on a buyout offer or speculation around a potential buyout offer. Beyond these simple explanations of diverging performance in the utility sector, things get a little more complicated. Looking into the core regulated side of the business is a bit like opening Pandora's Box. Some companies routinely over-earn their allowed rates of return and others persistently under-earn. Some state utility commissions are inherently unfriendly to investors, especially elected commissions. The rate making process is much like the sausage making process – the end result is usually palatable but the process is uncomfortable to watch and errors can range from unpleasant to deadly. While the big intervenors in a typical rate case are usually the staff and the public counsel, the fact is that there are usually dozens of intervenors all asking for money for various reasons, like a swarm of mosquitos feeding off its utility host. No wonder it takes over a year for a utility to raise a price a few pennies.

The instinctive reaction to such a display of immense bureaucracy is a rush to the Ayn Rand section of a local bookstore or website. But stepping back for a more philosophical view one can generalize about where the ratemaking process is likely to go awry and where investors are likely to go wrong about how a utility might respond to external factors, positive or negative. The most common rate-making problems are usually on the electric side (not the gas side) and usually related to generation sources and trackers related to input prices and/or seasonal fluctuations (and also due to lack of trackers). This is why gas utilities usually trade at a premium to electric utilities.

Investors can go wrong in many ways. Clearly utilities are more than just bond equivalents with subtle variations for non-regulated businesses and M&A potential. One example is the idea that investors should avoid all coal fired electric utilities because coal is environmentally destructive and will be subject to sizeable retrofit expenses for coal gas scrubbing and/or reinvestment in new forms of non-coal generation. While it may be true the utility will need to spend more, it is entirely possible and indeed likely that all or a portion of the spending will be included in the allowed rate base, the base upon which future rates will be decided. If so, the more the utility spends on environmental fixes, the more it makes for investors in the form of earnings per share. Welcome to the weird world of utility math where down is up, and up is also up.

Of course when the utility begins its next rate case to attest to the need of higher rates and the commission arrives at a seemingly innocuous decision midway between the utility request and the staff counter-proposal, the street research will lambaste the commission decision as totally inadequate. Most research readers are not aware that the analyst reports end up in the rate case testimony putting the publishing analysts in a permanent conflict of interest! So nearly all research reports about rate case decisions will suggest that the investors were treated unfairly. Welcome to the weird world of utility research, where good regulatory decisions are bad and bad regulatory decisions are also bad.

There are many potential pitfalls to avoid when looking at the utility industry, an industry that seems simple and low risk but in fact has a number of quirks. Perhaps the mental shortcut to avoid here is the understanding that a utility is more than a simple bond equivalent.

Misunderstood Motif #17

Oil is about supply and demand

Expectation: Oil is all about supply and demand

Reality: Oil is mostly about the dollar

When the 2003-2013 oil bubble first began its ascent, most investors initially ascribed the liftoff to tensions around the Iraq war. But the war ended rather quickly and yet oil priced marched ever higher. By 2005, CIOs and Research Directors began to reach out for more detailed explanations and a proliferation of in depth research reports followed examining supply and demand in great detail. Most fingered the growth of China as a causal factor on the demand side and Hubberts Peak Oil on the supply side. Both explanations were not only mental shortcuts, but they were greatly misleading.

The more meaningful explanation was that the US dollar declined nearly 30% against the euro and about 20% against a trade weighted basket of currencies. The collapse in the US dollar was the root cause of a broad commodity rally as the crummier dollar bought fewer barrels of oil, fewer bushels of wheat, fewer ounces of gold, etc. And since commodities are a form of currency especially in developing countries with smaller less stable home currencies, a decline in the US dollar created hording (or lack of pumping, drilling, digging, cutting, etc), and levering the impact of the US dollar decline. The impact was further levered by factory managers knowing that to stay whole the price increase on finished goods needs to match dollar for dollar the raw material price which implies higher percentage price increases for raw materials, with commodities seeing the biggest gains.



Yet the Chinese yuan was pegged to the US dollar when the US dollar declined. This had the impact of pouring gasoline over China's enormous export engine, so Chinese GDP growth went through the roof. And supply/demand analysts – not watching the currency – came to the conclusion that oil prices were higher because of the growth of Chinese GDP rather than the other way around. Oops.

Needless to say, most of the China/commodity players were ratted out in 2014 when the US dollar finally bounced back to fair value and then some. Folks who made the right call in 2003 for all the wrong reasons found themselves married to a thesis that did not hold water in 2014. Many of those investors are no longer in the investment business unfortunately.

Still in the defense of the China demand crowd, there is of course more than one variable in the equation and while the sizeable year to year or decade to decade moves in the US dollar have profound effects on the whole commodity complex, during periods when US dollar moves are small, then supply demand factors do indeed come into play. And the growth of China has been impressive and the Chinese economic and export situation is arguably the second most important variable in the equation for many commodities such as steel where China accounts for nearly half of world consumption.

Oil is also impacted by China though not as much as steel. And of course OPEC also plays a role with oil prices though again even OPEC is not as important as the US dollar for moves that last more than a few months. And as a general rule, for sizeable and sustainable oil price moves, the prime driver is the US dollar whereas China demand and OPEC supply are likely red herrings.

Misunderstood Motif #18

All transports have the same sensitivity to the US economy

Expectation: All transports are the same

Reality: Economic sensitivity is global for rails and ships, but domestic for trucks and airlines

In classic Dow Theory, a market trend in the Dow Jones Industrials needs to be confirmed with a similar move in the Dow Jones Transports in order for the trend to be regarded as sustainable. While there is clearly merit to the idea that a broad market move across all sectors – Industrials and Transports – is likely to be more sustainable, there is danger in the concept that all industrials behave a certain way and all transports behave another way.

Most investors intuitively understand the concept of a wide diversity of returns ranging from good to bad within the 30 stocks that constitute the Dow Jones Industrials. After all, the Dow Industrials include a wide variety of companies and industries such as Microsoft, JP Morgan, Exxon, Coke, Boeing, Pfizer, Disney and a potpourri of others. But there is less understanding of the diversity within the transports given the four transport sectors – railroads, airlines, truckers and ocean shippers – all seem like very similar businesses, businesses that basically ship things or people from point to point.



The most conventional mental shortcut is to regard the transports as simple proxies for the US economy. This simplistic view does not take into account what the transport companies are transporting. For example, if the US economy is strong, Occam's Razor would suggest US transports ought to be strong reflecting strong earnings. But if the US economy is strong and non-US economies are weak, then the US dollar will be strong, and a strong dollar is toxic to commodity prices like coal and grain, which will reduce shipments on railroads and ocean shippers. Yet US consumers will have more money in their pocket to buy things on Amazon, items that will be shipped predominantly in trucks. And they will take more vacations on US airlines.

The mirror image scenario is also viable should the US economy weaken when the non-US economy strengthens, a scenario that is very bullish for railroads and ocean shippers but bearish for truckers and airlines. Further, each transportation subsector has unique features - the oligopolistic concentration of the rails, the bankruptcy frequency of the airlines, the variability of the asset intensity of the truckers – suggesting there are more differences between transport subsectors than similarities.

For short term traders who do not wish to await the truth of earnings and how earnings results proliferate through each and every transport subsector and company, transports essentially trade day-to-day with the rails since the rails dominate the market capitalization of most transport indices. Rails do best when the US economy is perceived to be strong (creating interest in buying transports) yet the US dollar is weak (driving coal and grain prices higher).

For long term investors who can look through these day-to-day trader fictions (or worse the mental shortcuts of the broad Transport Index ETF investors), it is better to regard the transports not as a monolithic entity but rather like the disparate members of the Dow Jones Industrials. The macroeconomy alone is rarely a satisfactory stand-alone explanation for earnings growth or challenges within a transportation company. In fact, it is often a short term head fake that will lead long term investors in precisely the wrong direction.

Misunderstood Motif #19

Airlines are hurt by higher oil/fuel prices

Expectation: Airlines are hurt by higher oil prices

Reality: Higher oil prices in 2003-2013 largely fixed the airline bankruptcy problem from prior decades

The airline industry has been a challenging industry for many years especially in the years following deregulation in 1978. Bankruptcies have been prolific in the sector with many erstwhile household names forever gone – Braniff, Pan Am, TWA and many others.

Amid the hyper-competitive post-deregulation environment, one would have thought the elevated oil prices of the 2003-2013 commodity bubble would have been the straw that broke the camel's back. After all, jet fuel is neck and neck with wages as the single biggest variable cost component in running an airline. So the tripling of jet fuel prices between 2003 and 2007 should have driven the entire industry deep into the red and many to the point of covenant violations and bankruptcy. Yet the real world experience was exactly the opposite. Profits rose spectacularly. Bankruptcies subsided. The industry experienced a renaissance of surprising health and vigor.

What happened? For the first time since deregulation, the airlines stopped fighting each other with lower fares for higher market share and instead focused on a common and very scary enemy – jet fuel prices. In order to combat the new external threat, the airlines started getting clever first with simple

The Dull Blade of Occam's Razor

things like fuel surcharges and then increasingly capitalistic ideas like charges for baggage, food, entertainment, premium seats and more. The oil bubble in the airline industry was arguably the best example ever of taking lemons and making lemonade. Higher fuel prices should have killed the airlines, an industry already deeply troubled, but instead the industry began a cultural about face and a refocusing that continues to this day.



Does this mean that higher oil prices are now good for airlines? That is probably a bit of a stretch given the P&L sensitivity. Indeed on a short term trading basis whenever crude oil spikes hard for a day or two the airlines usually trade down. Of course the short term thinkers are not really able to connect the dots on the long term cultural transition that has taken place. So again we have a mental short cut and again one that proliferates through the media and perhaps shallow thinking portfolio managers, brokers, traders and chartists. That said, it does seem like the bulk of the cultural transition has taken place, so a positive correlation with oil at this point may not make much sense either.

Misunderstood Motif #20

A bond rating agency upgrades when prices are low, downgrades when prices are high

Expectation: Buy low sell high

Reality: Bond prices are not a consideration when forecasting probability of default

You would think the job of a publishing stock analyst and the job of a publishing bond analyst are exactly the same, other than the obvious fact that one is analyzing stocks and the other is analyzing bonds. But in reality there is a subtle distinction in the ratings systems, a distinction that makes all the difference in the world.

Most publishing stock analysts work for investment brokerages such as Merrill Lynch, Goldman Sachs, UBS, and others. Such analysts commonly have a buy/hold/sell rating system for the stocks under coverage with the rating based on whether the analyst believes the stock will rise or fall. In contrast, most publishing bond analysts work for bond ratings agencies like S&P, Moody's or Fitch. Such analysts have a rating system based on A, B, C grades with higher grades NOT being based on where the analyst thinks the bond price is headed, but rather being based simply on probability of the company defaulting on its bonds. This subtle distinction in ratings systems translates into a profound difference in the pattern of upgrades and downgrades.

For example, when a company runs into trouble and lowers earnings guidance – perhaps due to new competition or maybe a lawsuit – the stock analysts will need to re-evaluate the stock after the news is issued to determine if the market has appropriately reflected the bad news in the stock price. If the

stock analyst thinks the market is being too harsh, the analyst will upgrade on the bad news. If the analyst thinks the market is being too forgiving, the analyst will downgrade on the bad news. The key for the stock analyst is not the news, nor the price, but the interaction between the news and the price.

This is not the way the bond analyst thinks at all. For a bond analyst, the bond price is irrelevant. The only thing that matters is the news flow, specifically as it relates to probability of default. So if the news is that the company has lowered earnings guidance, then the probability of default just increased. So the only question for the bond analyst is whether the guidance reduction is material enough to lower the bond rating. It is inconceivable for a bond analyst that ANY guidance reduction could result in an upgrade. Again the bond analyst does not consider bond prices, a very different world than the stock analyst's world, a world that is all about the interaction between news flow and stock prices.



The bond ratings agencies took much heat during the mortgage bond meltdown of 2008. After all, many high-rated triple-A mortgage bonds from 2006 were downgraded one letter at a time all the way to C-rated junk bonds by 2008/2009. And in the years since the 2008/2009 bottom, there has been a gradual lift in ratings (albeit not back to triple A). From the perspective of a stock analyst, the bond

analysts did exactly the wrong thing and effectively bought at the top and sold at the bottom. But again, the bond analysts never look at price – just default probability. On that basis, they did their job to a tee. When things looked most promising, they had their best ratings, and when things looked most bleak, they had their worst ratings - exactly like a good bond analyst is supposed to do!

But perception and reality diverge here, a very inconvenient mental shortcut for folks at the bond ratings agencies in the 2008/2009 crisis. The perception is that bond analysts should somehow be like stock analysts and buy low and sell high. How did this misperception come about? There were a handful of factors. Perhaps highest on the list is the fact that there are far more stock analysts than bond analysts, perhaps 10 to 1. For the casual reader of an analyst report, the habit is to treat all analysts alike and ignore the subtle but extremely significant distinction in ratings methodology.

Also, high on the list of reasons for the mental shortcut is the fact that all analysts play a role as scapegoat for folks that are on the losing side of any economic development. When the dot com bubble burst in 2000, the stock analysts went through holy hell for another half decade and even though nearly all were exonerated. In 2008/2009 it was the turn for the bond analysts. The wielders of the torches and pitchforks included politicians, fund managers large and small, and of course the news media (which generally operates under the mantra of "if it bleeds it leads").

With politician and media involvement, the mental shortcut spread to the masses along with much misunderstanding about the bond rating business model, the bond underwriting process and potential conflicts of interest, but even less understanding about what a bond analyst does for a living and how a bond analyst is a very different animal than a stock analyst.

Today it seems the memory of 2008/2009 is fading and the bond analyst reputation is recovering. But the recovering reputation is not due to any acceptance of the true role of the bond analyst. The mental shortcut is as prevalent as ever. Rather, the recovering acceptance of bond analysts reflects a lesser demand for analyst scapegoats amid today's more benign economic times.

Concluding Thoughts

All else equal, the simplest explanation is still the best explanation

It is human nature to simplify decision making into heuristics or rules of thumb based on perception or experience. This is true whether the decision is choosing what clothes to wear, what car to drive, or what investments to buy. Over time, these simple rules will be refined by feedback, both positive and



negative, from real world experience. In the investment world, the evolutionary pathway of these thoughts and rules across multitudes of investors over time is the essence of what makes a market.

Occam's Razor embraces the idea that the investment world evolves along a pathway of simple rules of thumb (the combination of which may not be so simple). Importantly, not all rules of thumb are created equal. The

razor must be applied in a thorough and conscientious manner. This means expunging the prolific number of seductive short cuts and false leads – many of which are described above - and only then beginning the process of winnowing down the rule book to a manageable size.

Antoine de Saint-Exupery, the famous French author of *The Little Prince*, seemed to capture the spirit when he wrote that "perfection is finally attained not when there is no longer anything to add, but when there is no longer anything to take away".