Kopernik Global Investors, LLC

10 FOR 10

A Collection of Investment Commentaries Celebrating a Decade of Independent Thought

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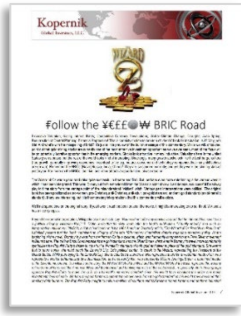
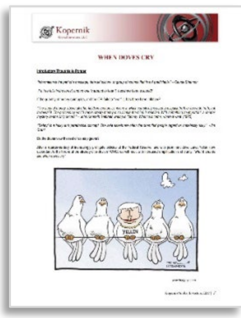


Dave uses the classic tale, the Wizard of Oz by L. Frank Baum, as a parody of the world's central banks, elected representatives, Neo Keynesian academics and the rest of the central planners and why we at Kopernik plan to forsake easy gimmicks and follow the yellow "BRIC" road.



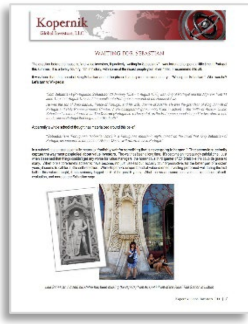
Dave discusses why we believe that valuation is the key determinant of risk (permanent loss of purchasing power) and why short-term price fluctuations are not risk, but are an annoying, often painful, creator of opportunity. While When Doves Cry reminds us of the Fed's cooing over taking the risk out the marketplace, Prince's apocalyptic anthem, 1999 will be used as a medium to lay out quite a bullish case for active management.

Drawing parallels to the 1959 American TV show, Dave discusses the current financial markets and why we believe, much like 1999 and 2008, we have crossed into the "twilight zone", why this appears to be the buying opportunity of a lifetime and how Kopernik is taking full advantage where many prefer to buy high and sell low.

Little could we have imagined that the markets would plunge much deeper into the Twilight Zone during 2016 through 2022, but late 2015 did prove to be the bottom for Kopernik's brand of value

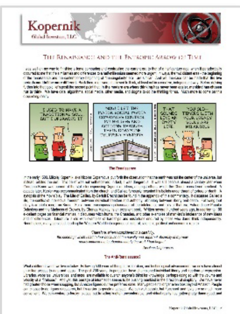
Taking cues from the 1977 Iggy Pop song bearing the same name, we discuss the distinctions between active/passive investing and why we at Kopernik *prefer to be the driver*, not the passenger.

We discuss the essence of time and how do we account it in an era where the world's central banks have suppressed the most important variable used to discount the time value of money. Since these developments have effectively rendered conventional valuation models useless we delve into how Kopernik tries mitigate it by, among other things, using Charlie Munger's approach of turning the models upside down.



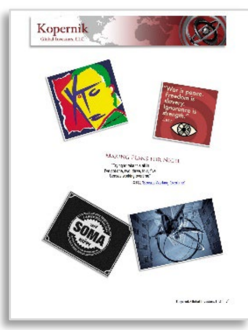
2018 | Waiting for Sebastian *(pages 92 - 108)*

We discuss the current investment environment by drawing parallels to the Portuguese myth based on the belief that King Sebastian will return to save Portugal. This seemingly captures the way most people feel about value investing by sneering at unpopular, but value-laden, tangible assets. We believe that what others condescendingly snub as “cigar butts” may turn out to be, figuratively, valuable ‘Cubans’, wrapper intact.



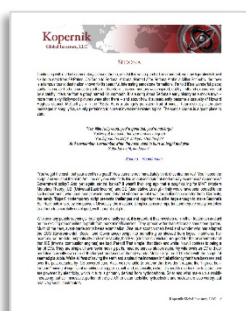
2019 | The Renaissance and the Entropic Arrow of Time *(pages 109 - 121)*

In this commentary, we contrast the renaissance period to the contemporary era. A half-millennium ago, mankind's search for truth began to breakdown the stifling barriers to thought and liberty. In the contemporary world where truth and liberty have conceptually become easy, they are being sacrificed. While this is a gross generalization, excellent opportunities have been opened up for those willing to use common sense, dig for the truth, and act upon their conviction. At Kopernik, we continue conducting in-depth due diligence, thoughtfully appraising value, maintaining patience and self-control, and staying disciplined in our process.



2020 | Making Plans for Nigel *(pages 122 - 171)*

In this commentary, we exlore why the "Big Brother" interpretation of the British post-punk band XTC's song "Making Plans for Nigel" reminds us of the inevitable increase in angst that is being felt, in no small part due to a decade of QE monetary policy. One can only imagine what will eventually be felt as a consequence of QE-infinity. We discuss how our current era of palpable angst is similar to that of the early 1970s, which kicked into high gear a period of high inflation, of big government, and the bull market in commodities. While the current era is likely another major inflection point in the markets, the times of investments that performed well in the 1970s can be expected to do well once again. Arguably, the current environments is like the 1970s on steroids. Fortunately for investors, the current valuations dividebetween expensive and attractively-priced stocks has probably never been this wide, making it a great time to be a bottom-up, value-conscious investor.



2021 | Sedona *(pages 172 - 184)*

Kopernik CIO Dave Iben summarizes many of his thoughts on the current inflationary environment and gives examples of how this has benefited value investors. They now figuratively have the wind at their backs.

2022 | Changes in Latitude *(pages 185 - 196)*

In this commentary, we have the audacity to give a non-standard view of “Buffett” stocks. Fortuitously, Mr. Buffett issued his annual letter this weekend, lending credence to our belief that he may share the view that now is more of a time for investing in real assets than in the stocks of over-earning consumer brands. In his summary, Mr. Buffett writes about how Berkshire Hathaway was a struggling ‘value’ stock in 1965, having just cumulatively lost money over a nine-year period. Its stock had more than halved. This quintessential deep value stock was the only holding that Warren kept when he unwound his investment partnership in the late 1960s.

Follow the Yellow BRIC Road

November 2013

₣ollow the ¥€££ ₩ BRIC Road

Excessive Valuation; Rising Interest Rates; Competitive Currency Devaluations; Global Climate Change; Droughts; Arab Spring; Resurrection of Central Planning; Financial Repression! This is certainly no time to turn to a children's' book for inspiration, is it? Why, yes it is! And what's with the misspelling of brick? It's just a little preview of the bullish message of this commentary. While we will, of course, point out that gold mining stocks are currently one of the most attractive investment opportunities we've ever seen, most of the focus will be on potentially lucrative opportunities in the emerging markets. Stocks look attractive in many industries. Valuations here in the United States give us pause, but the rest of the world looks kind of interesting. Shockingly, many growth stocks look like the best bargains here (true growth, generally in growing economies in contrast to the big, mature, consumer and technology companies that many still believe are growth). Remember the BRICs (Brazil, Russia, India, China)? They are so scorned currently, and yet they were the shining stars of yesteryear. For more on the BRICs, their kin, and other attractive opportunities, please read on.

The Wizard of Oz was a good read (also quite successful in theater and film). But, perhaps even more entertaining is the various ways in which it has been interpreted. This year, Disney put forth a movie told from the Wizard's point of view. Last decade, a successful Broadway play told the story from the vantage point of the misunderstood "wicked" witch. Various past interpretations were political. The original book has been positioned as pro-women, pro-Christian, anti-Christian, anti-adult, pro-gold standard, and anti-gold standard (pro bi-metallic standard). Many are interesting, but it is the monetary interpretations that this commentary will explore.

We'll not spend time on the original story. If you haven't read the book or seen the movie, it might be interesting to do so. If not, Wikipedia has a nice synopsis.

Beyond the normal interpretation, Wikipedia also has this to say: *"Baum did not offer any conclusive proof that he intended his novel to be a political allegory. Historian Ranjit S. Dighe wrote that for sixty years after the book's publication, "virtually nobody" had such an interpretation until Henry Littlefield, a high school teacher. In his 1964 American Quarterly article, "The Wizard of Oz: Parable on Populism", Littlefield posited that the book contained an allegory of the late 19th-century bimetallism debate regarding monetary policy. At the beginning of the novel, Dorothy is swept from her farm to Oz by a cyclone, which was frequently compared to the Free Silver movement in Baum's time. The Yellow Brick Road represents the gold standard and the Silver Shoes which enable Dorothy to travel more comfortably symbolizes the Populist Party's desire to construct a bi-metallic standard of both gold and silver in place of the gold standard. She learns that to return home, she must reach the Emerald City, Oz's political center, to speak to the Wizard, representing the President of the United States. While journeying to the Emerald City, she encounters a scarecrow, who represents a farmer; a woodman made of tin, who represents a worker dehumanized by industrialization; and a cowardly lion, who represents William Jennings Bryan, a prominent leader of the Silverite movement. The villains of the story, the Wicked Witch of the West and the Wicked Witch of the East, represent the wealthy railroad and oil barons of the American West and the financial and banking interests of the eastern U.S., respectively. Both these groups opposed Populist efforts to move the U.S. to a bimetallic monetary standard since this would have devalued the dollar and made investments less valuable. Workers and poor farmers supported the move away from the gold standard as this would have lessened their crushing debt burdens. The Populist Party sought to build a coalition of southern and*

Midwestern tenant farmers and northern industrial workers. These groups are represented in the book by the Good Witches of the North and South. "Oz" is the abbreviated form of ounce, a standard measure of gold.

Similarly, if one googles "The wonderful wizard of Oz: a monetary reformer's brief symbol glossary", they will find the following:

***"Dorothy** – everyman and woman, a simple, Populist character from the heartland of American Populism, Kansas.*

***Scarecrow** – farmers, agricultural workers, ignorant of many city things but honest and able to understand things with a little education. A strong supporter of Dorothy (Populism).*

***Tin Man** – industrial workers; a woodchopper whose entire body has been replaced with metal parts, thus dehumanized by machinery (robot-like with no heart) in need of oil (liquidity/money) to work, otherwise unemployed (he was idle for a year) without oil.*

***Cowardly Lion** – Wm. Jennings Bryan, a famous politician and Populist Presidential candidate in 1896 and 1900 (Oz was written in 1900) for monetary reform and a terrific orator (i.e., roar). Bryan was attacked as being somewhat cowardly for not supporting the US war with Spain. As a Populist Presidential candidate he sought to go to the capital city – the Emerald city. Bryan's famous "Cross of Gold" speech is referenced below.*

***Ruby Slippers –** these are silver in the book. Hollywood changed them to ruby red to take advantage of the new Technicolor used in the movie version, evidently ignorant of the meaning of the silver. Bryan and many other Greenbackers (monetary reformers supporting use of debt-free US Notes like Lincoln's Greenbacks to increase the money supply and thereby end the depression) shifted their tactics to the promotion of adding silver to the lawful coinage of America (i.e., to promoting a bi-metallic standard rather than the theoretically purer, fiat Greenbacks) when they realized they could thereby gain the backing of the powerful silver mining interests and still increase the money supply (without debt) to more than just gold. Silver thus became a symbol of overcoming a purely gold standard with the limited money supply and banker control that resulted. Hence, the silver slippers were extremely important in the book, as was the silver coin in reality.*

***Kansas** – a Populist stronghold, home of Dorothy, symbolized the national heartland.*

***Cyclone** (tornado) – the free silver movement, compared at the time to a political "cyclone" that swept Kansas, Nebraska and the heartland and aimed at Washington; also the depression of the 1890's which was compared to a "cyclone" in a famous monetary primer of the time and which robbed people of their homes and farms.*

***Oz** – corresponds to the standard measure of gold ounce – "oz."; America, where the gold oz. standard held sway, but where the use of the silver oz. (slippers) could free the slaves.*

***Emerald City** – political center of Oz /Washington D.C. To get there a politician had to take the gold way (gold standard); everyone there was forced to wear "green spectacles" – to see the world through another color (green) of money. This illusion upheld the Wizard's power.*

***Glinda, the Good Witch of the South** – the US South, which solidly supported Bryan and reform, as did much of the North (home of the other good witch in the book). The East and West (homes of the bad witches) supported McKinley.*

***Good Witch of the North** – Bryan's Populist supporters in the North and Northwest. The South and North largely supported Bryan in his Presidential campaign; the wicked East and West supported McKinley who was for the gold standard.*

***Wicked Witch of the East** – Wall Street bankers in NY, led by J.P. Morgan. President Grover Cleveland (of NY) was their pro-gold standard candidate.*

***Wicked Witch of the West** – drought and/or J.D. Rockefeller, by then a Cleveland banker (still viewed as "out West" from a NY perspective). President Wm. McKinley (a gold standard supporter from Ohio) was his candidate. She was a one-eyed witch , i.e., opposed to the two metal bi-metallic system; in the book she enslaves Winkies in the West much as the Wicked Witch of the East enslaves the Munchkins; dissolved by water symbolizing real water curing draught and/or liquidity ending the depression.*

Wizard *– a charlatan who politician-like can change forms in the book and who tricked the citizens of Oz into believing he is all powerful. Sometimes compared to a behind-the-scenes manipulator "pulling-the-strings" of politicians just as Wall Street's bankers do today. Mark Hanna, such a man at the time, has been suggested as the real life model for the Wizard. He said "There are two things that are important in politics. The first is money and I can't remember the second". Such an all-powerful view of money is a deceit noted under the word "Emerald City," above. Baum was well informed – he knew banks manipulated politicians and the people and commonly used deceit to fool them into submission. $700 billion or we face a "global financial meltdown" ring a bell? Bankers create money – a trickery certainly known to Baum.*

Yellow Brick Road *– the gold way or standard, composed of gold bricks.*

Deadly Poppy Field *– the anti-imperialism movement of the late 1890's which reformers felt was distracting Bryan from monetary reform (putting him to sleep on the issue), saved from that fate by the mice (the little people, Populist supporters).*

Color *themes, the colors of money: gold (coin), silver (coin), green (paper greenbacks).*

Winged Monkey's *– Plains Indians: "Once we were free people living happily in the forest." – Monkey leader. Like the winkies and munchkins, enslaved by the wicked witch and not freed until water (liquidity) destroys her hold on them.*

Yellow Brick Road *– the gold way, gold standard (yellow bricks).*

Oil *– liquidity, priming the pump of the economy, enabling employment of the unemployed (the Tin Man had been idle for a year without it).*

Toto *– the prohibitionists ("with Toto trotted along soberly behind her"), a movement which followed the bi-metallist Populist Party."*

The article referenced above continues with the full text of William Jennings Bryan's famous "Cross of Gold" speech from the 1896 Democratic Convention. *"You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold."* Well worth the read! Also interesting is the TV documentary, "The Men Who Built America", a fascinating tale of this time period, looked at from another vantage point. At one point it discusses how three of America's richest and most powerful industrialists temporarily suspended their rivalries and banded together to help defeat Bryan's bid for the presidency. Interestingly enough, Kopernik Partner and Portfolio Manager Isabel Satra's brother-in-law won several Emmys for writing and producing this outstanding documentary.

Perhaps the best write-up on the subject of whether Oz is a political satire on monetary reform or merely an entertaining fantasy, is "Money and Politics in the Land of Oz" by Quentin Taylor. Rather than discuss the merits of the different interpretations of Oz, I'd prefer to presumptuously put forth my own version. After all, the 21st century is vastly different from the late 19th. Using their wildest imagination, the citizens of the gilded age could not have conceived of our current state of affairs.

Oz Reprised

(Modernized and Globalized)

Our 21st Century Cast

The Scarecrow - Still represents the plight of the farmer. Maybe he lives in Brazil or Argentina or Ukraine. But he could still be from the U.S. where drought has recently, once again, become a big threat to farmers.

The Tin Woodsman - Is now the Ceramic Assembly Line Worker. He surely doesn't live in the U.S. (I'll believe the U.S. Industrial Renaissance when I see it). Let's say he's domiciled in China. Made of ceramics, he won't rust, but overcapacity, foreign competition, monetary failure, and obsolescence are as much a threat to him as rust was to his Midwestern forefathers. Unchanged is the desire for 'monetary' oil to help the obsolete and redundant factories survive.

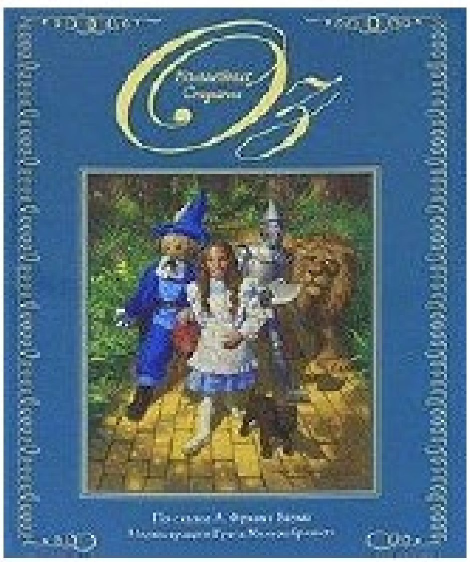
The Cowardly Lion - Could be almost any Head of State who puts populist rhetoric ahead of good government and sound economics. Certainly (Japanese Prime Minister) Abe has made a prominent bid to assume the lead role. But all the same, Obama has a solid claim on the role too. He came into office with a mighty roar, but then meekly followed in the footsteps of his predecessor. George W. presided over the biggest government spending orgy ever witnessed by mankind. It was financed by borrowing and by money printing. Obama kept many of the same people to run the financial and monetary affairs of the country. The massive spending, borrowing, and printing have not missed a beat ever since. It doesn't seem that either party is willing to try anything other than rhetoric and gimmickry.

The Wizard - Let's go with Greenspan! The onetime gold-standard proponent and Ayn Rand disciple turned to the "dark-side", embracing alchemy as the answer to all problems financial, real or imagined (Y2K). His "potions" became more powerful with time. He was knighted and nicknamed "The Maestro." He figuratively started a school of wizardry, alchemy, and illusion. Central bankers from virtually every country on earth have enrolled. His primary protégé, Ben Bernanke, took illusion to new levels. Mr. Bernanke, in turn, is mentoring Janet Yellen, who is believed to have the desire to one-up her predecessors. Bank of Japan Governor Haruhiko Kuroda also is certainly up to the challenge. Many others have similar aspirations. Who knows how much malicious magic will be conjured before Toto pulls back the curtain.

Winged Monkey - Capable of so much destruction or so much help, depending on who controls the golden crown. I nominate the banks! Destructive CDO–squareds, loans to indebted consumers, and toxic mortgages; OR, healthy loans to growing businesses, low LTV (loan to value) mortgages to qualified buyers, alpha-generating wealth management services. There's a world of difference. End the Fed!

Wicked Witch of the West - Let's stick with Drought/ Lack of Liquidity. Could be water or oil or fiat currency. At Kopernik, we believe that it won't be long until water, not currency, is the liquidity that much of the world will be thirsting for.

Wicked Witch of the East - Neo-Keynesians! It seemed like the 2008-9 event dropped a house on her. Unlike the book/movie, she hasn't stayed dead. Academics and the media are still spewing her toxins everywhere.

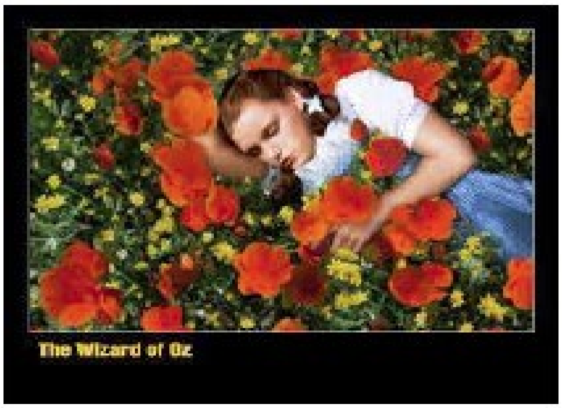


Dorothy - Let's rename her Natalya, and say she now hails from Russia. Like the U.S.A., circa 1890's, Russia is now an emerging market, and as such is growing economically. It has a large agrarian sector, has a strong military, and an educated population. We were still healing from the civil war, they are dealing with the disintegration of the Soviet Union. We had the Robber Barons, they have the Oligarchs. Mafia became a problem for both. We had abundant natural resources, they have abundant natural resources. We argued about the rightful place of gold in the monetary system (we now no longer even give it lip service), they still discuss the matter and are a constant buyer. At any rate, Russia has good assets, very low debt, runs roughly balanced budgets, and is making headway in the corruption problems (they have a long way to go).

One of the most important features in the book were the slippers. Hollywood opted to change them from silver to ruby. Being true to the times, the 21st century demands that we change them yet again. They are henceforth made of dollars, still the world's reserve currency (i.e. made of fiber since the dollar is printed on paper that is made mostly from cotton). They are green, and undoubtedly sport a designer label. Could the "Silverites" in the nineteenth century have imagined "quantitative easing"? Would they have approved? They wanted "easy money" in the form of silver being monetized at a fixed value of 1/16 ounce of gold. Since mines in the west were cranking out silver at a brisk pace, that would have been inflationary. But fiat currency of unlimited quantity would have been unthinkable. To put things into perspective, back in 1900 when Oz was written, the dollar, like silver, traded at a ratio close to 16 to 1 (it took 16 ounces of silver to buy 1 ounce of gold, but a slightly higher 20.67 dollars to buy 1 ounce of gold). The U.S. dollar remained fixed at the ratio of 20.67 to 1 until 1933 when FDR famously devalued it almost 70% to 35 to one. This arrangement lasted nearly 40 years when President Nixon notoriously defaulted on the U.S. obligation to honor the dollar's exchangeability into gold. Silver was easy money then. It is hard money now. It is now virtually as good as gold in our humble opinion. (The market price of silver has "devalued" from the aforementioned 16 to 1, to currently near 60 to 1.)

Investment Outlook

Deadly Poppy Fields or Fields of Gold?



"From the far north they heard a low wail of the wind, and Uncle Henry and Dorothy could see where the long grass bowed in waves before the coming storm. There now came a sharp whistling in the air from the south, and as they turned their eyes that way they saw ripples in the grass coming from that direction also. 'There's a cyclone coming, Em,' he called to his wife, 'I'll go look after the stock.' Aunt Em dropped her work and came to the door. One look told her of the danger at hand. 'Quick Dorothy!' she screamed, 'run for the cellar!'"

- The Wizard of Oz, by Frank Baum

In the book, the poppy fields were beautiful, yet they were a diversion, a potentially deadly one. We, at Kopernik, have always been fascinated by the fact that, often, things that seem risky aren't especially so, while things that seem so beautifully safe often prove treacherous.

Oh, the beauty of the "Nifty Fifty" stocks in 1972 (one-decision stocks, just buy and hold forever), or gold in 1980, or Japanese stocks in 1989, or technology stocks in 1999. And now, how attractive consumer/luxury goods stocks appear to many people in 2013's exuberant marketplace. There is something simultaneously exciting, yet reassuring about stocks that are moving parabolically ever higher. And how soothing to hear the pronouncements of the modern-day wizards at the Fed and Wall Street, and in the ivory towers of academics. The following is a sampling of prominent investment community lexicon:

"Luxury goods are no longer cyclical", "There is a (Greenspan/Bernanke) put option under the stock market", "There is a put under the bond market", "Risk can be boiled down to a metric like Beta, VAR, or tracking error", "Quantitative Easing will save the day", "We have an exit strategy", "Inflation is under control", "Deficit spending can go on indefinitely", "The multiplier effect enables us to get wealthier by spending more than we make", "Profit margins can stay at double normal levels despite a ZIRP (zero interest rate policy) environment". The list goes on. Yet, we believe that all of these decisions are wrong and that the storm is coming.

Before you drift off into a blissful slumber, take heed of the following:

Valuations for bonds and cash markets continue to be obscene, in the face of open and deliberate financial repression by the world's central banks. Artificially low rates have led to abnormally high prices for many other things: Art, collectibles, corporate bonds, high-yield bonds and real estate, among others. This has led many observers to conclude that, a la 2007, "there is no place to hide." Others might argue that 2013 is worse than 2007 when bonds and cash were still reasonably attractive. Many astute investors have recently gone on record as quite bearish: Stan Druckenmiller, Jeremy Grantham, Seth Klarman, Jim Rogers, Felix Zulauf, Charles de Vaulx, and Fred Hickey.

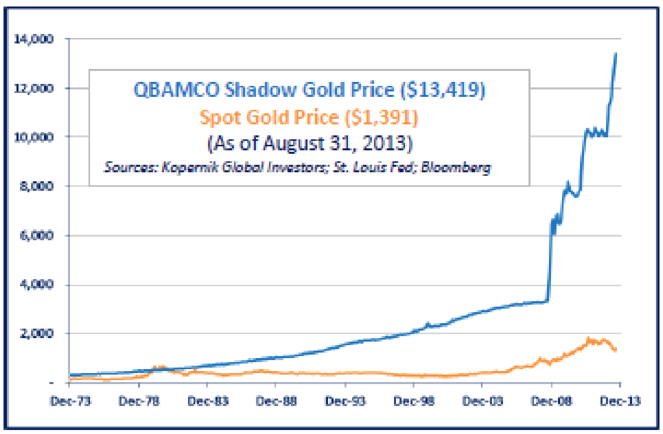
In the High-Tech Strategist, Mr. Hickey quotes Mr. Rogers as saying, "this is going to end very badly. Everybody will suffer – be very, very careful as these are perilous times." And Mr. Klarman has written, "Investing today may well be harder than it has been at any time in our three decades of existence, not because markets are falling, but because they are rising, and not because there are no opportunities, but because the underpinnings of our economy and financial system are so precarious that the un-abating risks of collapse dwarf all other factors." Dr. Faber points out that these major tailwinds from the past thirty years probably won't be there for investors in the future; falling interest rates, peaceful times, abundant and cheap resources, and relatively little social unrest.

We share most of the worries of these esteemed market veterans, and agree that the future should be much more difficult than the past. But… this is much different than 2007!

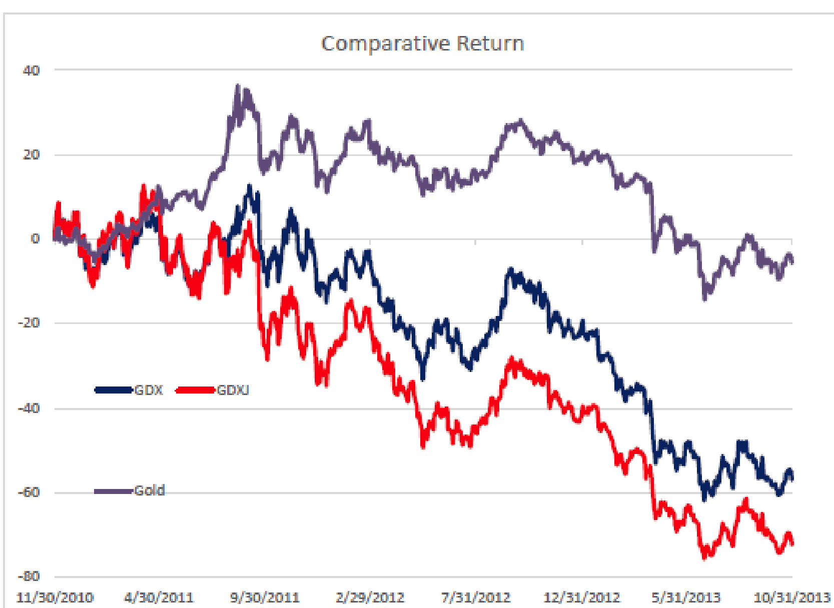
Investment Strategy "Follow the Yellow BRIC Road"

What should investors, recognizing that "we aren't in Kansas anymore", do now? Certainly, blindly following the route that worked in prior environments is far from guaranteed and could prove perilous. Kopernik Global Investors have some strong views and believe we see promising opportunities.

For starters, we have not changed our view on gold. Everyone should have a portion of their wealth secured upon a solid foundation of yellow bricks. With each dollar the Fed prints, gold becomes intrinsically a little more valuable (in dollar terms). I've written enough about gold over the past decade; there is no need to say more here. But, I will leave you with the following chart from QB Asset Management. It shows the "shadow price" of gold, i.e. the price that would be required to fully back the existing money stock. This suggests that if the U.S. was to fully back the money supply with gold, the price would need to be more than $13,000 per ounce. A Bretton Woods sort of arrangement (partially pegged) would call for a price in the neighborhood of $4,000/oz. This analysis is theoretical at best, but thought-provoking nonetheless. For several years now I've viewed the guys from QB as among the most insightful in the business. I'm pleased that they have joined us at Kopernik. It is great having them as an integral part of our daily research meetings and investment vetting process. Whereas the battle was once between gold and non-gold metals (primarily silver) for official status as money, today it is more a battle between tangibles and intangibles as de facto stores of value. We are happy to include bricks/coins of silver and platinum amongst the bricks of gold. Gems and base metals seem reasonable too. We're open to art and collectibles, though they are far from our sphere of competence.



	Security	Currency	Price Change	Total Return	Difference	Annual Eq
1.	GLD US Equity	USD	-5.67%	-5.67%	51.32%	-1.98%
2.	GDX US Equity	USD	-57.82%	-56.99%		-25.09%
3.	GDXJ US Equity	USD	-76.77%	-72.46%	-15.47%	-35.70%



Source: Bloomberg

A Silver Lining?

For starters, our journey down the "yellow brick road" will lead us far from the conventional (index constituents, etc.) and well beyond U.S. borders. It is important to remember the long-term potential of emerging markets during this time of challenging valuations in the U.S. stock market.

A half-century ago, John Templeton, one of the great investors of all time, invested in Japan. He made a tremendous amount of money even as the U.S. market went down from 1966 through mid-1982. Where others saw risk, corruption, a war loser, and a maker of cheap goods, he saw a strong work ethic, a developing middle-class, high level of education, high savings rate, and a seriously undervalued stock market!

A dozen years ago, Marc Faber wrote "Tomorrow's Gold". It is not at all about the yellow metal. It builds a compelling case for investing in Asia. Readers who heeded that advice made a lot of money, and they did so over a decade where no money was made (in aggregate) investing in the developed markets of the West. In his August 2013 issue of "Gloom, Boom & Doom" Dr. Faber further discusses his forty years in Asia. I highly recommend the issue. He discusses how the Hong Kong market went from 150 to 31,000 (with six corrections of over 50% along the way). Over half a century, China's GDP went from $100 billion to currently over $8 trillion. Taiwan's stock index went from 421 (1982) to 12,495 (1990). Korea's went up 25 fold over a quarter century.

We don't know which markets, if any, will provide these kinds of returns over the next quarter-century. Given its size and valuation, the U.S. is unlikely to be a top contender. It is logical to believe that the emerging economies will likely post much higher returns.

Ticker	Name	Mkt Cap	Chg YTD %	P/B	Curr EV/T12M Sales
+ MERVAL d	ARGENTINA MERVAL INDEX	957,404.31	+68.21%	.31	.17
+ IBOV	BRAZIL IBOVESPA INDEX	1.59MLN	-10.89%	1.05	1.85
+ KOSPI	KOSPI INDEX	1.14BLN	+.62%	1.18	1.14
+ INDEXCF	MICEX INDEX	21.20MLN	-.48%	.78	1.03
+ SPX	S&P 500 INDEX	15.68MLN	+19.08%	2.50	1.90
+ SENSEX	S&P BSE SENSEX INDEX	33.75MLN	+2.44%	2.58	2.21
+ SHCOMP d	SHANGHAI SE COMPOSITE	15.75MLN	-2.12%	1.52	1.30

*Source: Bloomberg *KOSPI=KOREA, MICEX=RUSSIA, SENSEX=INDIA*

We are excited that the current market appears to have much more in common with the markets of 1972 and 1999 than with the aforementioned 2007. Outside of bonds and cash, 2007 offered no place of refuge (and bonds required massive fed purchases to achieve their advances). 1972 and 1999 were dominated by obscenely expensive stocks which camouflaged a lot of attractively priced stocks. We believe the contemporary marketplace is similarly bifurcated, pricing some industries, sectors, and countries at stratospheric valuations while relegating other industries, sectors, and countries to the bargain bin.

Many years have passed since those summer days
Among the fields of barley
See the children run as the sun goes down
Among the fields of gold
You'll remember me when the west wind moves
Upon the fields of barley
You can tell the sun in his jealous sky
When we walked in fields of gold

-Sting

Rather than drifting asleep in a field of beautiful platitudes, Kopernik Global Investors has traded in our "green slippers" for "chariots of aluminum" and has been diligently searching for "fields of gold."

As has been the case for some time now, we like scarce goods that meet basic human needs! We like businesses that provide clean water, electricity, gasoline, food, and transportation. We love the inefficiencies in the marketplace. Two short years ago everyone wanted natural resource funds, non-dollar currency funds, infrastructure funds, agriculture funds, and even gold. How easily people forget lessons from the past!

At the same time, we eschew investing in the expensive stocks of companies that sell expensive goods that, while clearly satisfying human wants, do not meet actual human needs.

Kopernik is buying fields of barley. As the nearby chart illustrates, prices of farmland in the U.S. have skyrocketed. It now costs almost $7,000 per acre in Iowa. We are agnostic as to whether current prices are justified. We are thrilled to invest in publically traded, corporate farmland selling at one-tenth that cost in Argentina, Brazil, and Ukraine, places believed to have "Iowa quality" top-soil. Similar properties in Southeast Asia also seem like a bargain. We believe that ownership of good quality, well-managed farms diversified across multiple countries is a sound and potentially lucrative strategy.

Similarly, while investing in generators of cheap, clean, CO2- free electricity can be expensive, we're happy to report that significant

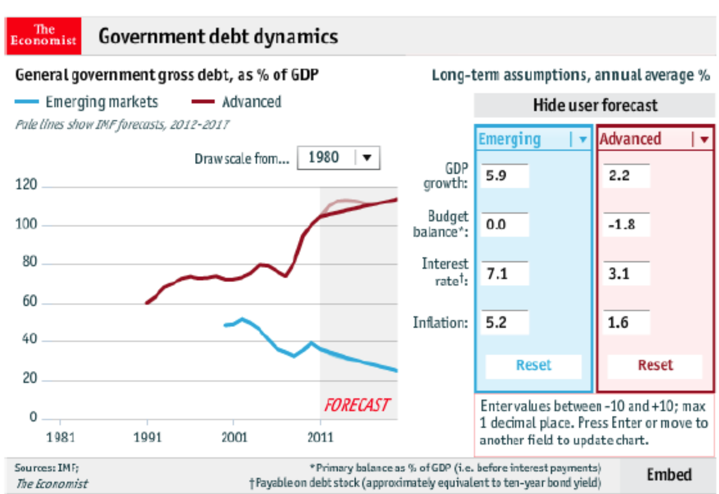
	ADECOAGRO SA	BRASILAGRO	SLC AGRICOLA SA	CRESUD SA	KERNEL	MHP SA-GDR	ASTARTA	GOLDEN AGRI-RESO	IOWA FARMLAND
Adjusted Earnings Yield (ex. Bio Assets)*	-3%	4%	4%	0%	5%	18%	8%	6%	3%
EV / planted area (acres)	$2,524	$1,266	$2,146	$1,335	$2,241	$3,783	$510	$7,291	$7,000

*Reflects Oct 27, 2013 * Last FY Earnings adjusted for Biological Assets*

discounts are available across the globe. In the emerging markets, we are finding quality franchises that due to the significant short-term challenges they face, trade at 90% discounts to our estimate of their replacement value.

Having illustrated that what appears safe can be a perilous illusion, let's discuss where risky appearances can be reasonably safe.

Is it risky to take the road less traveled?



"Every day is a winding road
I get a little bit closer
Every day is a faded sign
I get a little bit closer to feeling fine"
-Sheryl Crow

For some, the "great rotation" from bonds into "quality" dividend-paying stocks produced enough anxiety. The volatility and tracking-error of emerging market stocks present a bit too much "risk" for many.

However, risk is a complicated subject. For years we've viewed permanent loss of capital/purchasing power as highly undesirable and thus the primary type of risk that we strive to avoid. We've rejected the relevance of beta, volatility, tracking-error, and other measures of "risk" popularized by academics since we believe that they don't apply to true long-term investors (we further view short-term investing as an oxymoron). Rather than delve once again into our rationale, I'll refer you to the superb book, written by Howard Marks, "The Most Important Thing." Three whole chapters are devoted to the topic of risk. I've included some excerpts. (I don't mean to infer that he shares our views on the BRICs, as I have no idea.)

"A hugely profitable investment that doesn't begin with discomfort is usually an oxymoron."

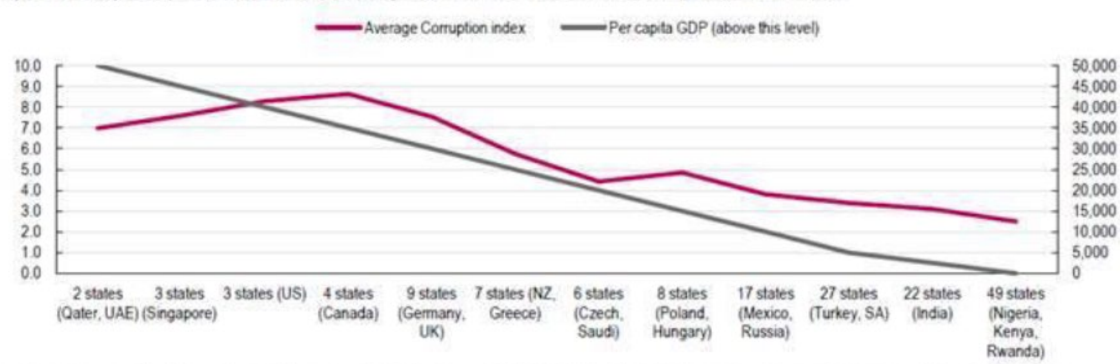
"When everyone believes something is risky, their unwillingness to buy usually reduces its price to the point where it's not risky at all. Broadly negative opinion can make it the least risky thing since all optimism has been driven out of its price."

"I'd say the necessary condition for the existence of bargains is that perception has to be considerably worse than reality. That means the best opportunities are usually found among the things most others won't do."

"*The greatest risk doesn't come from low quality or high volatility. It comes from paying prices that are too high. This isn't a theoretical risk; it's very real."*

Could it be that the highly esteemed stocks of "high quality" companies, sporting abnormally high profit- margins, will prove to be risky a la the Nifty-Fifty circa 1972, while the "broadly negative opinion" regarding the BRICs will make them "the least risky thing since all of the optimism has been driven out of the price"? Quite plausible. Several years ago, investors were fleeing the U.S. Dollar, perceived to be vulnerable at the time. One of their favorite places of refuge was the BRICs. And why not? China was on route to becoming bigger economically than the U.S., resource-rich Brazil and Russia were going to become very prosperous satisfying China's never-ending thirst for resources, and India had hit the lottery when the Internet was invented, allowing many high-value jobs to be outsourced to an intelligent, industrious workforce. For a variety of reasons, the stock markets are now way cheaper than they were then. What fascinates us is how "way cheaper" is considered to be "way more risky" by most investors; a massive distortion of reality. The Wizard of Oz himself would be envious of such an illusion. The current lower risk, higher potential upside prospect has captured our attention.

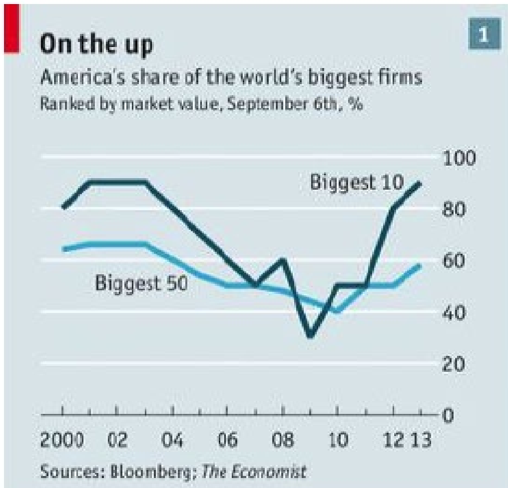
Figure 10: Average corruption perceptions index (lhs) for groups of countries* across various $5,000 per capita GDP brackets

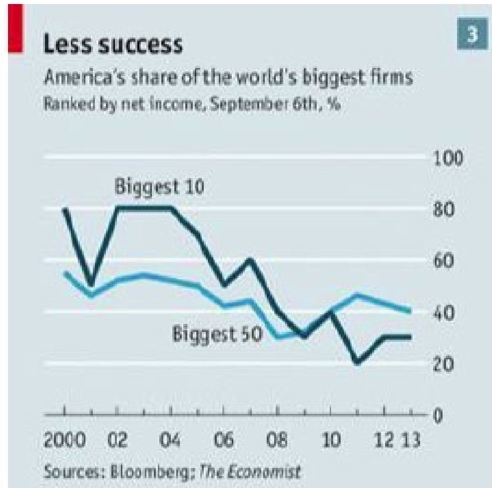


Note: * Examples are given of countries in each per capita GDP range , e.g. for the 4 states with per capita GDP of $35-40k (rhs), which includes Canada, their average corruption index level is nearly 9.0 on the left hand scale

Source: Transparency International, Renaissance Capital estimates

The following two charts from "The Economist" magazine show that the U.S. is growing important relative to the rest of the world in terms of market capitalization, but not because U.S. companies have become relatively more profitable vis a vis the rest of the world. No, it is because U.S. stocks have become much more expensive relative to their intrinsic value compared to non-U.S. domiciled stocks. Utilities in the U.S. trade at 1.6 times book value, **versus 0.33 in Russia and 0.21 in Brazil.** Railroads trade between 2.5 and 5 times book value in U.S., **versus less than 1.5 in Japan** (post this year's run-up) **and 0.85 for our Chinese holding** (also post run-up). Phone companies trade at 20 times earnings **versus less than half that for similar companies in the growth economies.** Farmland in Iowa trades at $7,000 per acre **versus one-tenth that level for publicly traded farmland in Argentina, Brazil, Ukraine, Russia, and Southeast Asia.** (See table on page 9.)





And finally, for those bothered by the spelling of BRICs, the valuations of Korean and South African stocks are intriguing. Let's add them. We like the BRICKS!

Conclusion

In the book, Dorothy et al head off on all kinds of adventures and face all sorts of adversity, only to find out that it had been unnecessary. All along, the solution to their problems had been right there with them. She needed merely tap her slippers. Silver was the answer! Whether Frank Baum was serious or facetious we'll never know for sure, although the case that it was a parody of the Populists and Silverites is persuasive. In our current tale, all Natalya needs to do is click the heels of her "greenback designer slippers" and it will be home sweet home. If she won't do it, it seems that we can rest assured that Janet Yellen will. Repeatedly! Lest there be any doubt, this commentary is absolutely meant as a parody of the world's central banks, elected representatives, Neo Keynesian academics and the rest of the central planners. We don't believe that printing currency can create wealth, only redistribute it.

We, at Kopernik Global Investors, plan to forsake the easy gimmicks and travel the "yellow brick road" in search of stores of value that should prove far superior to fiat currency. Our quest is for assets that are intrinsically valuable, be it farms, electricity generators, fuel providers, communications franchises, transportation enablers, and many others. And of course heavily discounted owners of gold reserves! We like what we're finding!

Cheers,

David B. Iben, CFA
Chief Investment Officer
Kopernik Global Investors, LLC
November 2013

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WHEN DOVES CRY

October 2014

WHEN DOVES CRY

Introductory Thoughts to Ponder

"Information is the part of a message, data set picture, or group of sounds that is not predictable." – Claude Shannon

If a tree falls in the forest, and no one is around to hear it, has there been a sound?

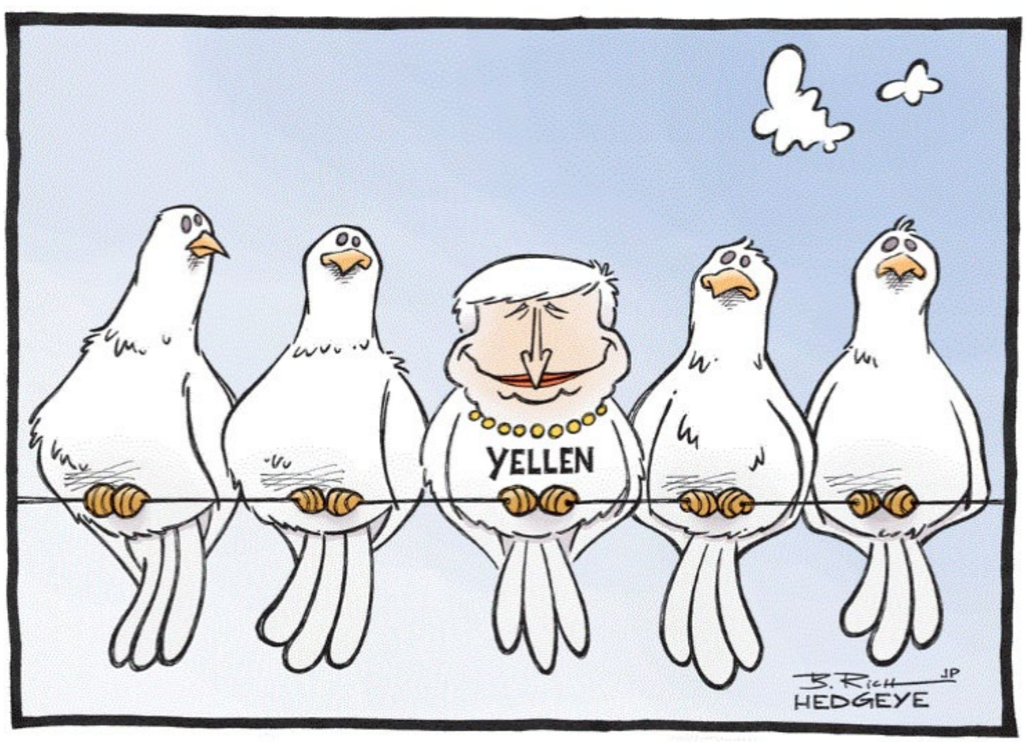
If the quantity of money quintuples, and the CPI fails to "hear" it, has there been inflation*?*

"The study of money, above all other fields in economics, is one in which complexity is used to disguise truth or to evade truth, not to reveal it. The process by which banks create money is so simple the mind is repelled. With something so important, a deeper mystery seems only decent." – John Kenneth Galbraith writing in 'Money: Whence it came, where it went' (1975)

"'Safety' is a tricky and paradoxical concept. The safe assets are often the ones that people regard as hopelessly risky." -Jim Grant

Do the doves view the rest of us as pigeons?

After a quarter-century of increasingly profligate policies at the Federal Reserve, and with prominent dove Janet Yellen now ascendant to the throne at the already ultra-dovish FOMC, we will hear, with increased amplification and clarity, *"what it sounds like when doves cry".*



www.hedgeye.com

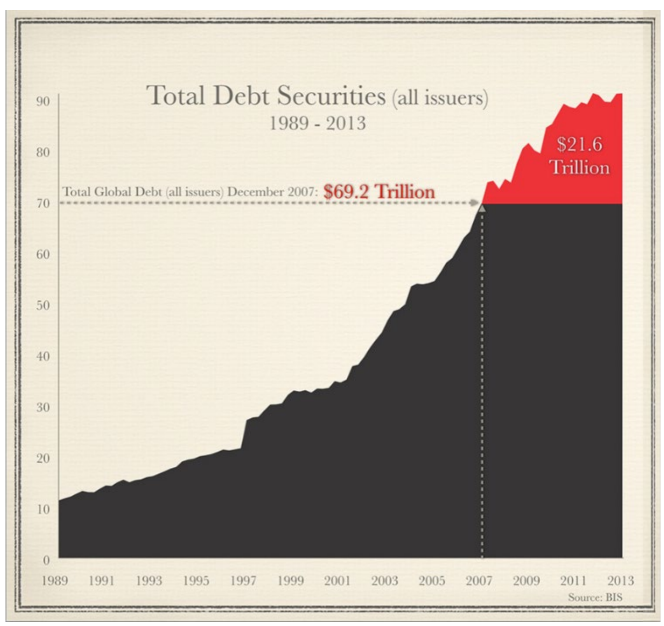
Investment Management is a great field. We're always learning interesting things, interacting with fascinating people, searching for diamonds in the rough, and given the opportunity to enhance the livelihood of people, foundations, endowments, retirement plans and others. We are blessed! Value-oriented investing is often easy, like being the house in a casino game. While the players always seem to be having all the fun, the house lets the laws of mathematics work their magic. So it is with investing. The "players" seem to be having all the fun, while the value investors patiently wait for the laws of mathematics and economics to accrue to their benefit. They always do.

At the casinos, occasionally someone gets "hot" with the dice. They continue to "roll the numbers", pressing all the way. Everyone at the table hoots and hollers while raking in the dough. The party can go on and on, while the house takes quite a beating. But, eventually the high roller "sevens-out", instantly losing back a good portion of their winnings. From there, the house meticulously makes back some more, and some more, and ultimately ends up well in the black.

So it is with value-focused investing. Though it is so easy most of the time**, it can be intolerably painful during those episodes where the momentum players get a "hot hand**." "Investors" begin to feel lucky. After a period of time they feel confidently lucky. Eventually they become arrogant. Participants willingly suspend disbelief. The laws of mathematics and economics are brushed aside as people see increasing "evidence" that the stocks of the cherished companies only go up, while the stocks of unpopular companies don't. Often they go down because in order to buy more of the hot stock, sector or ETF, funds are raised by dumping everything else. The expensive get more expensive while the bargains get cheaper still. Toward the end, when it seems that irrationality has maxed out, it actually accelerates, becoming parabolic. **Never is it more important, than at these moments, for investors to not lose their conviction in fundamental investing**. To jump on the popular stocks just before the "players" "seven-out" is tragic. To sell the underperforming stocks before all the money comes pouring back toward value propositions is unfortunate, to say the least.

Japan had a colossal financial bubble in 1989. During my lifetime, the U.S. has had three: the Nifty-Fifty in 1972; the Technology, Media & Telecommunications ("TMT") mania of 1999; and now. 2007, in my opinion, was merely a precursor to our current predicament. "Too big to fail" institutions became bigger still. Asset prices are generally all higher than their lofty levels at the top of the last peak. Debt levels are way higher now. Because we believe the bond market is undoubtedly the most overvalued market in the history of mankind (many $Trillions) and because it has been spilling over into stocks, housing, art, collectibles, healthcare and others, now is an important time to talk about financial manias. Even though Prince likely wasn't thinking of the stock market back in 1984, when he penned the lyrics about the collapse of 2000 and the preceding party of 1999, his songs still serve as a good source of inspiration and analogy.

Back in the 1980s, when I walked out of the movie Purple Rain because I disliked it, I never would have anticipated using it as an allegory to describe the 2014 investment environment. But I guess I wouldn't have expected the world to evolve into one where the eccentrics are the sane ones.



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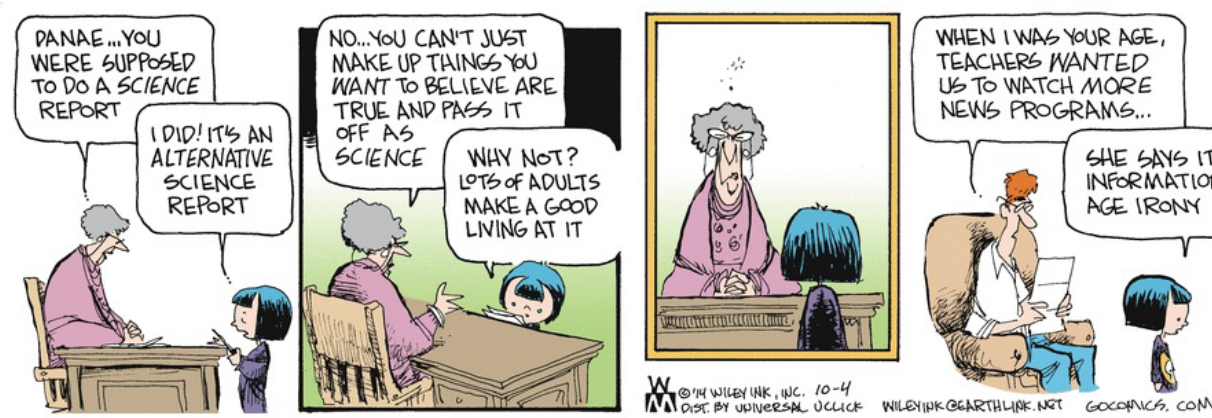


Non Sequitur by Wiley Miller
www.gocomics.com

While I've never been a huge Prince fan, I do admire inventiveness and willingness to be different and think outside of the box. While he (the Artist Formerly Known as the Artist Formerly Known as Prince) manages to come across as arrogant and strange even by music industry standards, I must admit that he is very talented. Much of his music is original, great to listen to, even catchy. Apparently his movie even won an Academy Award for Best Original Song Score (a few Razzies as well). At any rate, "When Doves Cry" is a really good song, and it comes to mind as we get inundated with incessant cooing about how the Fed's doves have taken all the risk out of the marketplace, and may have even abolished all troubles previously faced by mankind. The song hit number one and was considered to be revolutionary.

Per Schmoop.com:

> *""When Doves Cry" is a weird song, there's no doubt about it. Starting with its shredding, messy, opening guitar solo, you know that this song doesn't really follow the normal rules of pop convention. It's as if the song begins with a guitar solo just because—in fact the guitar solo isn't even in the same key as the rest of the song, and it isn't particularly noteworthy from a technical standpoint. It just sounds cool. Despite being a master songsmith and guitar player, Prince is more interested in where he can go creatively than doing what everybody else is doing; why else would he write "When Doves Cry" as a dance song without a bass line?"*

It *was* quite unique for Prince to remove the bass line from the song. In recent years, an equally strange and arrogant group at **the world's central banks have removed the bass from the world's base money.** (Technically Nixon did, Arthur Burns moved it forward, Greenspan pushed it to the limits, and Bernanke took the concept past the point of no return). And who is more aptly qualified as a vehicle for our discussion of central bank policy than the man behind, "When Dove's Cry", "Kiss", "Purple Rain", and "Let's Go Crazy?" His approach, per Schmoop.com above, doesn't sound terribly different from how I imagine Fed meetings. As a preview, it won't surprise you that this "hawkish" commentary will make the case that current central bank policy is ***adding*** tremendous risk to the marketplace and, far from abating mankind's troubles, easy money is accentuating them, and in some cases even causing them. **Financial bubbles are caused by monetary policy miscues**! After exploring these ideas, Prince's apocalyptical anthem 1999 will be used as a medium to lay out a quite **bullish case for certain stocks and for active management**.

Cartoon by Eric G. Lewis

"I never meant to cause you any sorrow
I never meant to cause you any pain
I only wanted to one time see you laughing
I only wanted to see you laughing in the purple rain"

-~~The Fed~~ Prince, Purple Rain

Almost a half-dozen years ago, in the wake of the launch of quantitative easing, I penned "When the Levee Breaks," suggesting that printing money is inflationary, but like *rain* falling behind a dam, is latent energy, hard to observe from downstream. But, it is energy all the same. Most would make the case that that call was way too early, with still no signs of inflation all these years later. A closer inspection of the data supports an entirely different conclusion. The beginning of 2009 turned out to be a beautiful time to unload dollar bills in exchange for almost anything else: art, collectables, high-end real estate, gold, stocks, bonds, and if possible, pre-payment of tuition, healthcare, insurance, transportation and most other goods and services. It now requires many more dollars to purchase these items than it did a mere five years ago. And sadly, most of **the ominous symptoms of this inflation undoubtedly still remain latently dammed up on the balance sheets of the banks.**

	2000	2014	Change in %
Chairman of the Federal Reserve	Greenspan	Yellen	
Money Supply in millions[1,6]	$601.0	$3,989.0	564%
CPI Index[1]	174.6	235.1	35%
4 Year avg. College Tuition[2]	$14,000.0	$23,700.0	69%
Avg. Student Debt. post College[3]	$14,000.0	$34,000.0	143%
Avg. Health Care per individual[4]	$4,672.0	$9,400.0	101%
LA Median Housing Price[5]	$200,000.0	$560,000.0	180%
Six pack of Beer before taxes	$3.0	$6.3	108%
Oil[1]	$33.0	$98.0	197%
Spot Gold[1]	$272.0	$1,282.0	371%
Copper[1]	$84.0	$322.9	284%
Corn per bushel[1]	$1.9	$3.9	105%
Beef per pound[5]	$2.6	$5.5	112%
Avg. Price of Cable TV	$20.0	$65.0	225%
MSCI ACWI ex U.S.[1]	$193.5	$288.6	46%
Total Gov't Expenditures in Billions[3]	$3,087.0	$5,800.0	88%
Current Account Balance in Billions	-$450.0	-$703.0	56%
Median Household Income[3]	$42,000.0	$51,000.0	21%

[1] Bloomberg, [2] National Center for Education Services, [3] St. Louis Fed, [4] cms.gov, [5] Trulia, [6] Monetary Base per Bloomberg

One can't help but notice the two items on the table that haven't risen significantly thus far in this nascent century: The amount of the price increases to which our government is willing to confess (CPI); and the ability of the average person to pay for these rising costs (median household income).

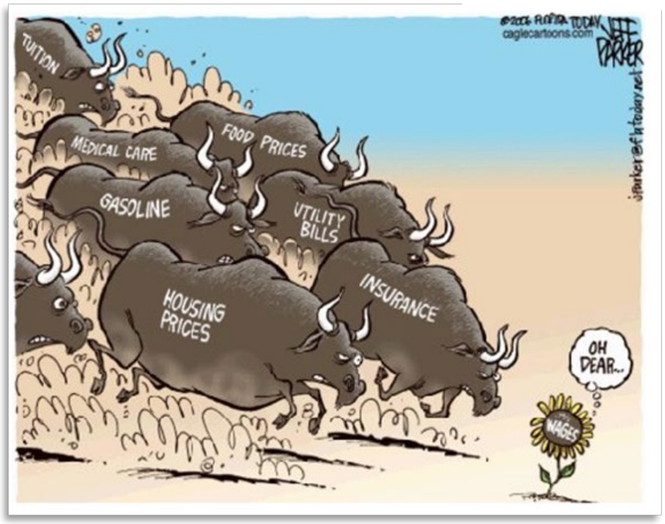
In addition to making the cost of living accelerate beyond the means of many people, it has made investing a higher risk/lower potential return proposition. As Seth Klarman pointed out in his recent letter, "*The Bank for International Settlements recently cautioned that financial markets are euphoric and in the grip of an aggressive search for yield. The S&P has gone over 1,000 days without a 10% decline, according to Birinyi Associates. Dutch and French 10-year government bond yields are at 500 and 250 year lows, respectively; Spain, 225 years. Spanish debt yields were recently inside of U.S. levels.*"

"Maybe I'm just too demanding
Maybe I'm just like my father too bold
Maybe you're just like my mother
She's never satisfied (She's never satisfied)
Why do we scream at each other?
This is what it sounds like
When doves cry"

-Prince, When Dove's Cry

Now, the members of the Federal Reserve's Open Market Committee may be great people. They are certainly well-educated people. They may even mean well; we have no way of knowing. But we are proponents of the free market. We do not believe that quasi-governmental bureaucrats (or anyone else) can override the market mechanism with positive effect. We worry that they are "too bold." It doesn't matter how low interest rates or the quoted job rate fall, they are "never satisfied." And is there correlation between easy money and the tendency of citizens of the world to "scream at each other?" We believe that ZIRP (zero interest rate policy) will work as well in the U.S. as it has in Japan over the past quarter-century. Low rates of return discourage the investment that is necessary to create quality jobs. People learn not to save, as interest on savings is far from adequate to offset the constant erosion of purchasing power that is corroding the value of their savings. With pro-debt, anti-savings policies in place it is not surprising that debt is growing and savings and investment dwindling. The government's publishing of low CPI numbers can obscure but not hide the symptoms of the Fed's hyper-inflationary policies. Those of us who are fortunate enough to own assets are enjoying the ascent of those valuations while those who don't are grappling with the rising cost of food, healthcare, tuition, insurance, rents, and entertainment while lamenting the inconvenient fact that wages aren't keeping pace.

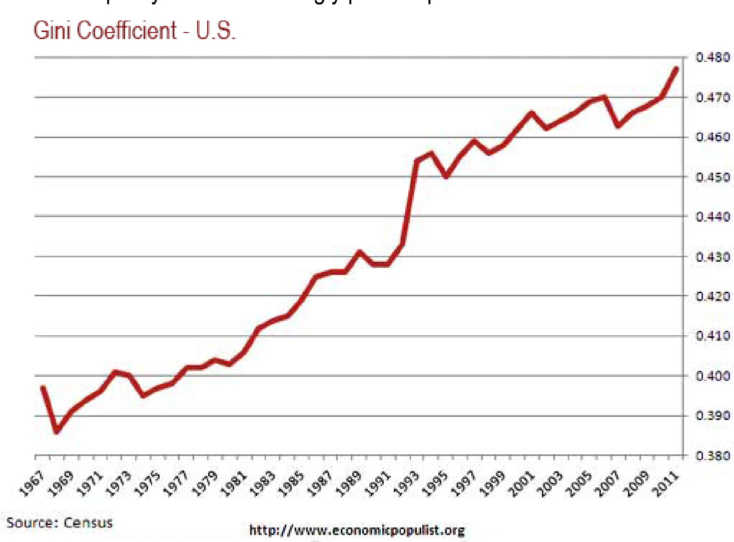
Jeff Parker
floridatoday.com



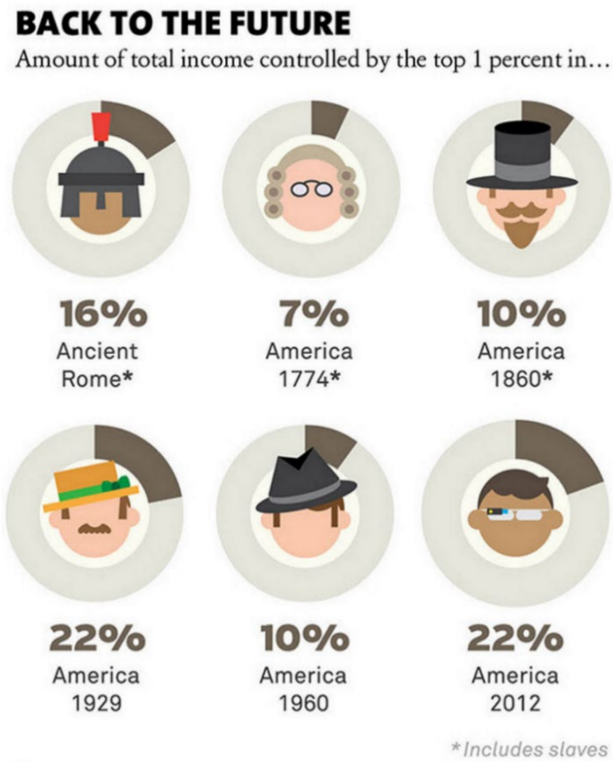
"War is all around us
My mind says prepare to fight"

-Prince, 1999

Students of history will note that easy monetary policy has been highly correlated with worldwide discontent. The current global problems should be expected in an environment of global competitive currency devaluations. Markets temporarily hitting all-time highs at a time when riots and skirmishes are prevalent and Thomas Piketty's book, "Capital in the Twenty-First Century," is on the best seller list seems odd, but isn't. Is this much different than 1972, when the "Nifty-Fifty" dragged the markets to all-time highs even as the Vietnam War, Watergate, class warfare, and a struggling economy were ever-present? While we have neither the time nor inclination to delve further into the correlation between easy monetary policy and geopolitical skirmishes, Grant Williams, Marc Faber, G. Edward Griffin and others have published interesting works on the topic. The following graph of the Gini coefficient suggest that wealth inequality could increasingly present problems.



The Gini Coefficient is the most common measure of income inequality. Zero denotes perfect equality while one is complete inequality, one person has all. Notice the trend since Nixon defaulted on America's obligation to back the dollar with gold. Just as economics would predict.



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"You don't have to be rich to be my girl
You don't have to be cool to rule my world"
-Prince, Kiss

The lyrics above are the antithesis of Fed policy. Mr. Greenspan appears to have valued being "cool" and when his accurate "irrational exuberance" quote briefly bruised his popularity, he made haste distancing himself from it. He and his two successors have followed a strict policy of, figuratively, 'you **do** have to be rich to be my girl.' The stated policy has been to create a wealth effect by making the assets owned by the rich go up in price, while everyone else is left to fend for themselves.

Prices of assets going up is, in many ways, a good thing. Prices outstripping their fundamental underpinnings is problematic. Before we get to the silver lining of the numerous opportunities to invest in assets whose prices are still low relative to their fundamental underpinnings, let's spend a little more time on past manias, their root causes, and the current situation.

"Yeah, they say two thousand zero zero
Party over, oops out of time
So tonight I'm gonna party like it's 1999
Yeah, yeah

Lemme tell ya somethin'
If you didn't come to party
Don't bother knockin' on my door"

~~-The Fed~~ Prince, 1999

The greatest stock market party in the history of mankind seemed to have been anticipated back in 1984, by Prince's song entitled, "1999." And how ironic it is that seven years after that bubble burst, an even bigger party was famously concluded with another guy named "Prince" losing a game of "musical chairs."

"As long as the music is playing, you've got to get up and dance."
-Chuck Prince, then CEO of Citigroup 2007

"Everybody's got a bomb
We could all die here today, uhh
But before I'll let that happen
I'll dance my life away"

-Prince, 1999

Now, in 2014, which remarkably enough turns out, again, to be a seven year interval, we've brought back Prince to emcee the biggest party yet in the financial markets! The current festivities were an exclusive, bonds only affair early on. But, in recent years, it has welcomed many newcomers, including many stock markets, the art market, collectibles, high-end real estate, and luxury goods. Cycles seem to come faster and be more extreme nowadays. Bernanke/Yellen couldn't be further removed from the days when the Fed's job was to "take away the punch bowl just when the party gets going", as Chairman William McChesney Martin famously stated. The important point is that this current party, in many ways, is not similar to 2007's game of musical chairs, but is very reminiscent of 1999's popularity contest. The price of tech, media, telecom, and other in vogue stocks became increasingly "high." Prices stayed low for the many stocks that were not admitted to the party. This fact worked out well for "true" investors who were buying these shunned entities. Many of these stocks did tremendously well in the early years of subsequent decade, even as the revelers nursed their nasty hangovers.

At the height of the madness, many of us who were missing out on the festivities consoled ourselves by doing comparisons. In general, these were designed to illuminate the absurdity of the party we were missing. There were charts comparing the market caps of decades-old, global market-leaders of industry, such as Boeing, Alcoa, BHP, Union Pacific, Lockheed, Raytheon, Archer Daniels, Tyson, Sigma Aldrich, and more, with the larger market cap stocks of money-losing technology companies that had managed to go public.

Pets.com peaked at $325mm.

Pets.com was a fun story. Like many companies at the time, they decided that selling things at below their cost was a great model as long as the internet was involved. They got backing from Amazon, went public, brought in sales of more than double what they had expected well into the future, saw their stock soar to $325 million, and went bankrupt, all in a year's time. Their sock-puppet mascot became quite popular and ended up being worth more than the entire company.

In 1999, 7 of the top 10 largest market caps in the world were tech or telecom companies!

Very much like 1999, and differing from 2007, the mania of 2014 is bifurcated. Certain segments of the market are ultra-popular, relentlessly ascending skyward. The funds required for their purchase come from the wholesale dumping of less de rigueur stocks.

The current group of manic stocks generally reside in several categories. One is Biotech, Healthcare, Technology, and leading Consumer companies that, granted, do tend to have strong fundamentals. They deserve to sell at a full valuation. Currently they sell at obscene valuations. Many stocks of companies that aren't members of these esteemed sectors are much less pricey. Some are downright cheap.

Regarding the second category, the U.S. market has become overly esteemed. Following 5 years of moving persistently upward and 3 years of leaving the rest of the world in the dust, U.S. stocks have continued charging further, even as international stocks have given way to gravitational pull. Thus far in 2014 the S&P 500 is up 6% while European stocks are down over 8%, Japanese down 7%, much of Asia and Latin America down some, and Russia and Ukraine are down 23%. Eight of the top ten market caps are now U.S. based companies. At the height of the TMT nonsense, I heard a great speech at a Grant's conference. The presenter was comparing one tech company to an entire country of over a billion people. "Intel vs India" he put forth. "Both are five letter words starting with the letter "I." Both are supported by an industrious Indian workforce, and both are capitalized at $440 billion." It, of course was a wonderful time to sell Intel and buy Indian stocks. Now that similar levels of irrationality seem to have returned, we put forth the following table. It speaks for itself.

Market Capitalization	$540 billion	$609 billion
Price-to-Sales	70%	350%
Price-to-Book	0.65	5.04
Size of Workforce	77,000,000	83,000

Resources		
Land	6.6 million sq. miles (4.2 billion acres)	2.9 sq. miles(1,866 acres)[3]
Rivers	100,000[1]	-
Lakes	2,000,000[1]	-
Freshwater Reserves	1/4 of the World	-
Crude Oil	80,000 (m b)	-
Natural Gas	48,676 (billion standard cu m)	-
Gold - in the vault	35.5 million ounces (1,104 tons)[2]	31.1 million ounces (970 tons)[4]
Gold - in the ground	125 million ounces (3,906 tons)[5]	-

Rapidly Obsolescing Products	No	Yes

[1]The largest of Russia's bodies of fresh water, Lake Baikal, is the oldest, deepest and purest fresh water lake in the world. Baikal alone contains over one-fifth of the world's fresh surface water. Of the country's 100,000 rivers, the Volga at 2,294 miles is the longest river in Europe.

[2]Over a period of six months, Russia has purchased 54 tons of gold and has now overtaken China as the fifth largest country in total gold reserves.

[3]Apple Inc., Form 10-K for the FY ended Sept 28, 2013. Approximately 15% is leased property, 85% is owned.

[4]Cash and Short Term Investments of $37.8 billion as of June 28, 2014 converted to ounces of gold ($1,215/ounce as of Sep 14, 2014).

[5]Kopernik estimate was obtained by summing the gold resources available for multiple Russian gold miners.

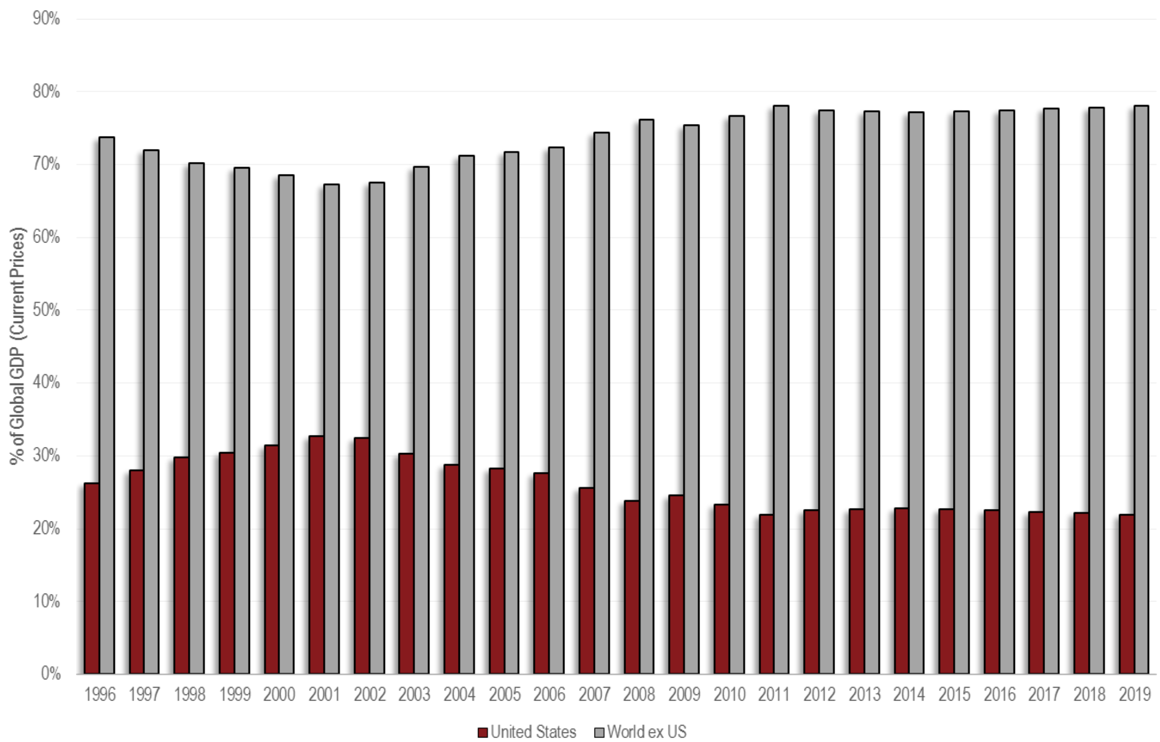
SOURCES: The World Bank, Britanica, OPEC, Bloomberg

The market's extremely bifurcated nature is turbo-charged by the current ETF craze (exchange traded funds, allowing people to "play" their favorite industry, sector, country, etc. via a pooled security, while foregoing the pesky task of having to research and analyze businesses, to ascertain which ones are most suitable to be owned in an investment portfolio). With no specific stock research being done, tenets of the efficient market hypothesis are nowhere to be seen, and during the manic phase, members of an ETF outperform similar stocks that are not held by the ETF. Passive investing was popular in the late 90s (using index funds rather than ETFs), contributing to the mania. Eventually the valuation of index members became so expensive relative to non-members that the subsequent underperformance of index funds was inevitable. Again today, passive investing is the fad. Every week, funds are pouring out of actively managed funds and into passively managed ETFs. Partially as a result, the Russell 2000 small cap index is down 6%, even as large U.S. stocks are up over 8%. Sooner or later, **it seems inevitable that ETF prices will come back to earth as money flees these overpriced funds for funds that are managed by professionals who actually perform research before investing, and who insist on paying economic prices**.

American Exceptionalism

As we near the end of 2014, a recent "Top Story" on the Bloomberg included an article about "American Exceptionalism." Per Wikipedia: ***"Exceptionalism** is the perception that a country, society, institution, movement, or time period is "exceptional" (i.e., unusual or extraordinary) in some way and* ***thus does not need to conform to normal rules or general principles."*** We must confess that the increase in nationalism in much of the world, including the U.S., is a bit concerning. It often is heightened in eras of money printing and usually leads to unpleasant geopolitical outcomes. But that isn't our main point, which is that while we agree that the U.S. is arguably the greatest country ever, **when it comes to risk, price is the most important variable.** In 1929, the U.S. was a great country that had at least 85 good years in its future. "*We will not have any more crashes in our time"* was John Maynard Keynes' prediction in 1927. Irving Fisher, a renowned economist, famously proclaimed in 1929*, "Stock prices have reached what looks like a permanently high plateau. I do not feel there will be soon if ever a 50 or 60 point break from present levels".* The market promptly plunged 90%. The U.S. was a great country in 1933 too, although people temporarily didn't feel that way. That turned out to have been a wonderful time to invest. In 1972, the U.S. was a great country with at least 42 wonderful years in its immediate future. The future was so bright that on January 1, 1973, Barron's published its famous Roundtable interviews with big-name professional investors. The title was "Not a Bear Among Them" (Source: newworldeconomics.com). Presumably they were all wearing shades. At any rate, the market peaked that month and fell 50% over two years. The AMEX, the NASDAQ of the sixties, was already in the midst of a 90% collapse. In December of 1974, people were in no way sanguine regarding the U.S., but what a remarkable time to invest.

Japan's omnipotence was beyond refute in 1989. Investors decreed their superior education, savings rate, work ethic, long-term vision, government/private partnership, and methods. U.S. companies raced to emulate them, as their stocks ran to unparalleled heights, collectively valuing them almost on par with all the world indexes' non-Japanese companies. Unsurprisingly, it was a horrendous time to invest in Japan and wasn't a bad time to invest in the U.S. The U.S. continued to be a great country in 1999 (when Alan Greenspan referred to the U.S. as an "oasis of prosperity") and 2007, but investing in those stock markets turned out to be painful endeavors. The years 2002 and 2009 were nice times to invest. Proponents of American Exceptionalism are missing the point**. "Is the U.S. exceptional?" Is the wrong question to be asking. "What is the correct valuation?" Is much more apropos.** The bad news is that we're at valuations that have always proven to be dangerous in the past. The U.S. bond market is yielding next to nothing, adjusted for inflation using CPI. Adjusting for money growth, yields are quite negative. The U.S. stock market is the priciest ever on a CAPE (cyclically adjusted price to earnings) basis (at 25 times), with the lone exception of 1999. That year was the only year where the market has been more overpriced on a market capitalization to GDP basis as well. Sovereign debt is another 100% of GDP. Total debt is 350% of GDP. Inclusion of unfunded liabilities swell the number to a frightening 1000% of GDP (all numbers are per U.S.debtclock.org).



Source: International Monetary Fund

The U.S. now represents roughly half of the MSCI-All Country World Index (a la Japan in 1989) even though, as the above chart illustrates, it represents one-fifth of the world's GDP. The U.S. is a wonderful place. Its markets are many things, but "safe" is not one of them. **The good news is that, in sharp contrast to 2007, there are pockets of value in certain sectors and countries**.

Investment Strategy

"She walked in through the outdoor,
She wore a raspberry beret
The kind you find in a second hand store"

-Prince, Raspberry Beret

In this bifurcated market, in which investors are succumbing to lemming-like instincts to dive into ETFs, previous portfolio holdings are instantly relegated to the secondhand store. Contrarian-minded investors, choosing not to follow the herd, will be intrigued by Prince's story of finding what he was looking for coming in through the out door. We are not looking for antiques, and certainly not for worn-out goods. Au contraire, it is amazing how many of the marquee names that were prominent in many portfolios three or four years ago, are now being unceremoniously peddled at the "secondhand store."

Energy was top-of-mind a few years back. After all, China was growing fast, the population of the world had doubled in the past 40 years, and six billion people lived in the developing parts of the world, those that historically have consumed energy and resources at a voracious rate. Investors loved coal, oil, natural gas, and especially non-polluting, non-CO2 spewing solar, wind, hydro and nuclear. While oil is off its highs, the rest of this list has been relegated to the bargain bin. Of particular interest are coal companies selling for less than $1/ton, hydroelectric dams selling at 1/5 of replacement cost in emerging markets, uranium miners pricing the commodity at less than ½ of its incentive cost of production, providers of key components for nuclear reactors with strong backlog, and a major gas producer in Russia selling at 5% of the value placed on the cost per reserve of many of the major worldwide producers.

Cartoon bv Lee Lorenz

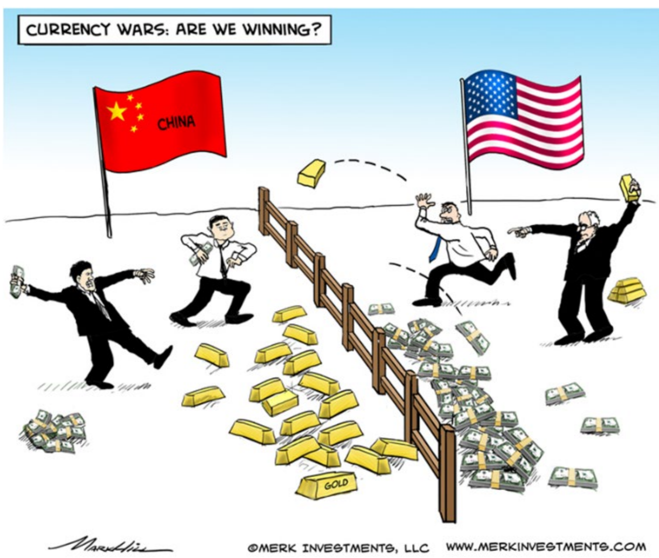
"And then I thought, What better hedge than a uranium centrifuge?""

Agriculture is another area that investors were fawning over in the recent past, cognizant of the fact that the quantity of arable land wasn't coming close to keeping up with the proliferation of people and of currency. This has created many opportunities for us in the past. One of the most interesting is the present apparent mispricing of profitable, growing companies in countries rich in topsoil, such as Ukraine, Argentina, Brazil, and parts of Asia. We are paying a small fraction of like-properties in the States.

Infrastructure is often the type of business that investors gravitate toward, with its natural barriers to competition, ability to meet sustainable needs of the people, and access to long-term financing. Right now we're thrilled to be paying bargain basement prices for growing regional airlines in the U.S., passenger railroads in Japan and China, mobile phone service providers in China and Korea, and phone companies in Italy and Russia. Japanese water purification companies are "priced to sell" as well.

Niche technology companies are available at thrift store prices in Japan and emerging markets. Our portfolio owns niche finance worldwide including two extremely dominant Russian financial companies held at compelling valuations.

In light of the aforementioned central banks' promiscuity, gold may be more important now than ever. Unbelievably, as the fundamental worth of gold has arguably skyrocketed in recent years, the market price has dropped by a third. Remarkable! Even more remarkably, the price of publicly traded companies, that own massive quantities of gold, have plunged 67% as measured by the GDX (Market Vectors Gold Miners ETF). The GDXJ, representing the smaller companies in the industry, is down a breathtaking 80%! This is one of the compelling opportunities of our time, in our humble opinion. They are so inexpensive that our models show them to be undervalued, even if gold stays at current distressed levels. The very valuable optionality comes for free.



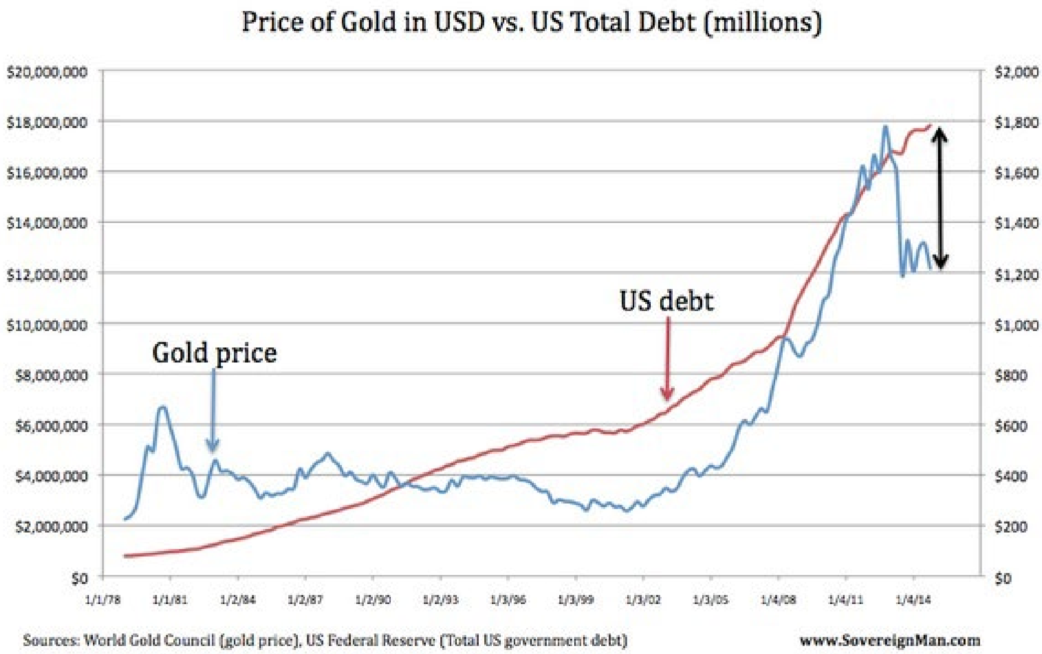
www.merkinvestments.com

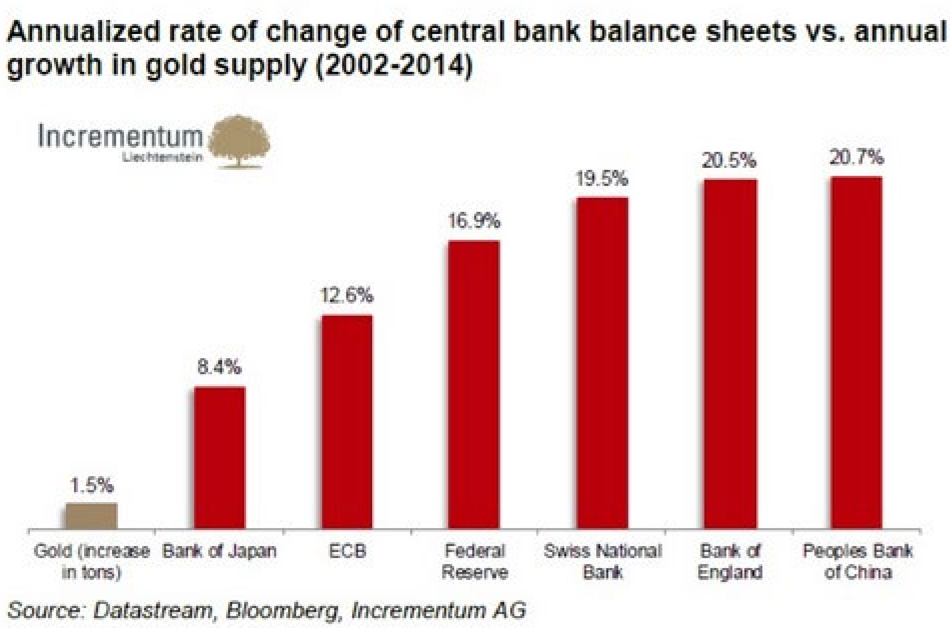
To conclude, we love this market. Just like in late 1999, the future is bright but current resolve is the key to success. We believe that valuation is the key determinant of risk (permanent loss of purchasing power) and that short-term price fluctuations are not risk, but are an annoying, often painful, creator of opportunity. For those who disagree with this premise, U.S. markets may seem tempting, while bonds look compelling and our portfolio appears risky. For those whose values and views are in alignment with ours, U.S. stock valuations are dangerous, bonds appear to be an accident waiting to happen, and our portfolio of leading companies selling at 2/3rds of book value and 11 times earnings is a compelling investment! We vow to remain steadfast in our value discipline.

Thank you for your continued support.

Cheers,

David B. Iben
Chief Investment Officer
Kopernik Global Investors, LLC
October 2014





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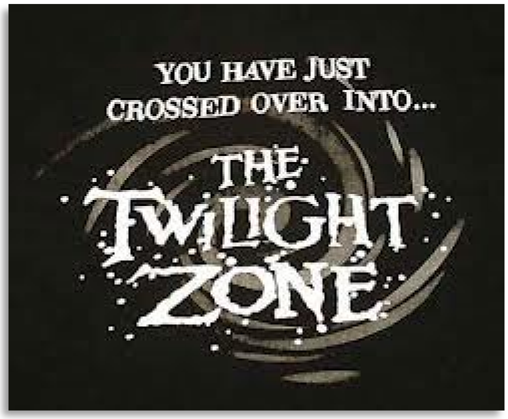
The Twilight Zone

January 2015



There is a fifth dimension beyond that which is known to man. It is a dimension as vast as space and as timeless as infinity. It is the middle ground between light and shadow, between science and superstition, and it lies between the pit of man's fears and the summit of his knowledge. This is the dimension of imagination. It is an area which we call the Twilight Zone.

- *Opening narration (Season 1)*

For those younger readers who may not know of the Twilight Zone, Wikipedia offers the following description:

> ***"The Twilight Zone*** *is an American science-fiction/fantasy anthology television series created by Rod Serling, which ran for five seasons on CBS from 1959 to 1964. The series consists of unrelated stories depicting paranormal, futuristic, Kafkaesque, or otherwise disturbing or unusual events; each story typically features a moral and a surprise ending."*

Beyond being a show, and later on a movie, it has become part of the modern lexicon. As presented in the Urban Dictionary:

> *"**A state of surrealism, where things that should not make sense seem to do so.** Term taken from the 1960's TV show hosted by writer Rod Serling."*

What an apropos way to describe the current monetary system! The financial markets are a fascinating arena. They are interesting, intellectually stimulating, economically lucrative, filled with intelligent, provocative individuals, and are a perfect showcase of behavioral psychology. The fact that markets are usually a step or two removed from reality is much of the fun and is ultimately the reason that they can be so lucrative over meaningful periods of time. We are all so lucky to be a part of it.

In 1999, the world's stock markets ventured beyond being a little off-kilter and "crossed over into the Twilight Zone." While this was happening, it was the most painful time of my career. The subsequent dozen years were the most satisfying and rewarding of my life, as our clients benefitted handsomely from the market's inevitable return toward the direction of reality. I think 1999 is still fresh enough in people's memories that I don't need to spend much time on it. Suffice it to say that stocks of tech, media and telecom companies ran to inconceivable heights even as "old-economy" stocks were figuratively given away.

From my vantage point, the world's stock markets recently, for the second time in a one-third century long career, "crossed over into the Twilight Zone." To co-opt the opening narrative from the show's second season, in this Commentary we will "*travel through another dimension, a dimension not only of sight and sound but of mind. A journey into a wondrous land whose only boundaries are that of imagination.*"

It is important to ask questions. Sometimes it can be fun. For example:

- Why are a wise man and a wise guy opposites?
- Why do you park in a driveway and drive in a parkway?
- Why does a ship carry cargo and a car carry shipments?
- Why are there interstate highways in Hawaii?
- If you try to fail, and you fail, have you succeeded or failed?
- If pro is the opposite of con, is progress the opposite of congress?
- How do a fool and his money get together in the first place?
- Is a metaphor like a simile?
- Did Noah keep his bees in archives?
- How come we choose from just two people for president and 50 for Miss America?
- Does expecting the unexpected make the unexpected expected?
- Is it good if your vacuum really sucks?
- Have you ever imagined a world with no hypothetical situations?
- Why do you recite at a play but you play at a recital?
- Why is quite a few the same as quite a lot?
- Why do people who know the least know it the loudest?

Often it is imperative to ponder more serious questions. Before getting to the important questions du jour, a little background is in order. What Kopernik Global Investors ("Kopernik") do for a living is appraise businesses and opportunely buy these businesses when the market offers them at large discounts to our estimate of their risk-adjusted intrinsic value. **History demonstrates that when inexpensive stocks have been falling for years, they seldom extend to us the courtesy of immediately reversing course. Before rewarding our patience handsomely, they usually force us to look foolish for a period of time.** Being wrong approximately 30% of the time is the expected cost of investing against the crowd. Being right 70% is our expected reward. Similarly, subpar years worming their way into the mix is a requisite byproduct of looking different from the crowd. Endeavoring to continue our long-term record of generating significant alpha, we willingly endure the occasional unpleasant period. The fourth quarter of 1999, the July through October period of 2008, and the September through December 2014 chapters of my career warrant special attention. These three periods all demonstrated the bipolar nature of the market at its worst, and our propensity to drastically underperform during these environments. Valuable properties that had reached levels that appeared to be too low to be true, dropped significantly further as they were "puked-out" (sorry, can't come up with more fitting words) by "investors" who simply couldn't bear any more pain. These periods of capitulation can be very painful. Compounding the discomfort, this often happens in conjunction with expensive stocks catapulting upward. At these moments, two things are important. **It is very important not to lose one`s conviction at these pivotal moments in time. Equally important though, is not to cavalierly dismiss the situation.** One must, in good times and bad, question everything. **Does the wholesale dumping of tangible assets, and of growing businesses in emerging countries, represent the figurative "canary keeling over in a coal mine," or does it present thoughtful investors with one of the better buying opportunities of the century?** Proceeds from this wholesale dumping of tangible value are apparently being used to finance purchases of the polar-opposite, expensive financial claims on miniscule expected future cash flow from securities that lack meaningful asset backing. Does this mean that a new paradigm is underway, or that supreme caution is in order?

Canary in a Coal Mine

"Now if I tell you that you suffer from delusions
You pay your analyst to reach the same conclusions
You live your life like a canary in a coalmine
You get so dizzy even walking in a straight line"
-The Police

Let's begin this investigation by using some artistic license with Sting's lyrics, "*Now if I tell you that the marketplace suffers from delusions, let's see if analysis reaches the same conclusions." This* analysis is intended to help readers form their own opinion as to the extent to which it is the market, or Kopernik, that has taken a brief detour from the realm of reality.

Let's frame the questions and then examine the data:

EMH (efficient market hypothesis) assumes that investors tend to be rational. ***Is this rational?***
EMH assumes that it is not possible to consistently outperform the market. ***Really?***
EMH assumes that capital structure, taxation and trading costs don't matter. ***To whom?***
EMH assumes that investors have equal access to information and that they analyze it diligently. ***In what world?***

In the nascent 21st century, have we finally discovered the Philosopher's Stone?

Can wealth be conjured up by bureaucrats or does it need to be earned?

Is it logical that the U.S. Dollar was considered risky in 2011, but now is considered 'safe' at a level that now is meaningfully more expensive (risky) relative to other currencies?

Is it logical that U.S. long bonds, viewed as risky at 14% yield, are considered safe at sub-3% yields?

Is it logical that bonds were considered much more risky when the debt was a low percentage of GDP than they are now, when the debt is an astounding 100% of GDP and all liabilities exceed 700% of GDP?

If bonds are a claim on dollars, and dollars are backed by those same bonds (on the other side of the Fed's balance sheet), should we be scared? Shouldn't investors demand more than 3% of annual compensation?

Is it likely that Developed Country governments' involvement in the bond markets makes bonds more attractive while Emerging Country governments' involvement in electricity, phones and resources effectively renders their stocks un-investable?

Can the cost of capital be calculated from a formula that doesn't incorporate the price of the security?

Is it wise to invest in a sector or country that has recently attracted an outsized proportion of the available capital?

Is economics a science?

Is government a science?

Is investing a science?

Is the world flat?

Does the sun revolve around the earth?

Is nuclear power a dead industry?

Is coal a dirty relic of a bygone era?

Can risk be boiled down to a number?

When did risk to a manager's career become more important than risk of permanent loss of capital to investment portfolios?

While some of these questions are self-evident – effectively rhetorical – let's look at our answers to most of them.

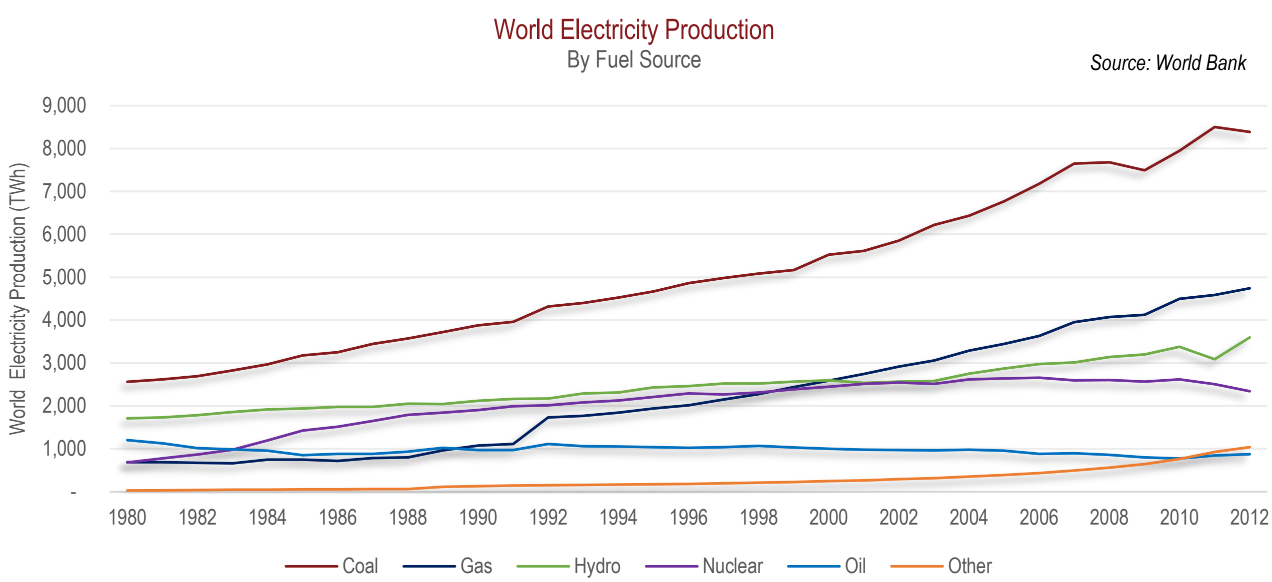
Assessing the Canary's Health

"*In the world of investing, being correct about something isn't at all synonymous with being proved correct right away.*"
-Howard Marks

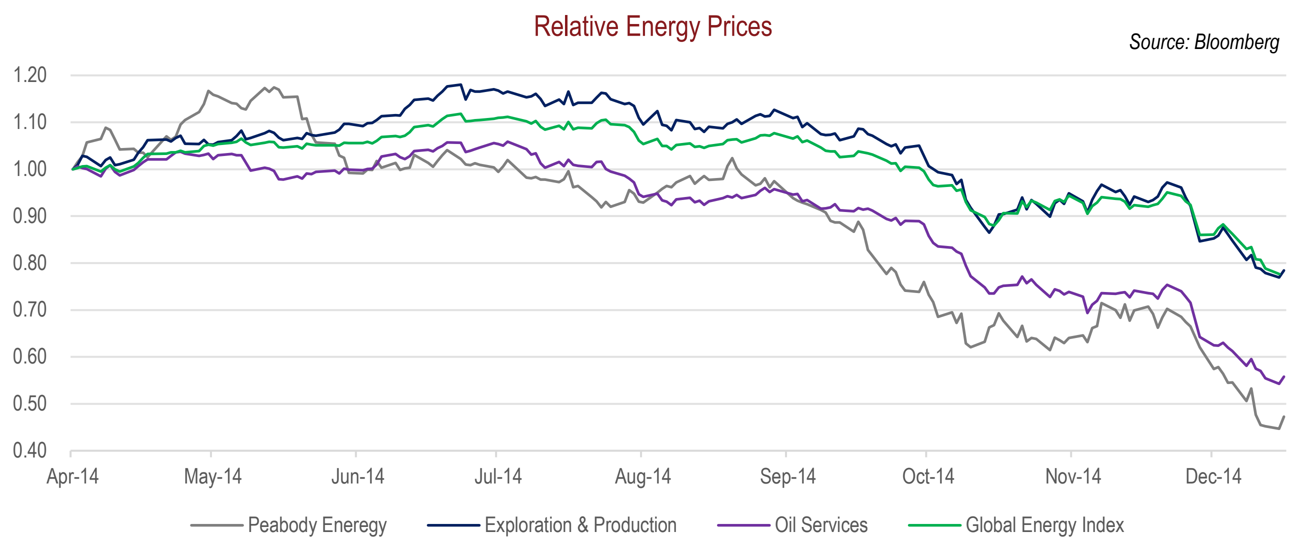
"*You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right.*"
-Benjamin Graham

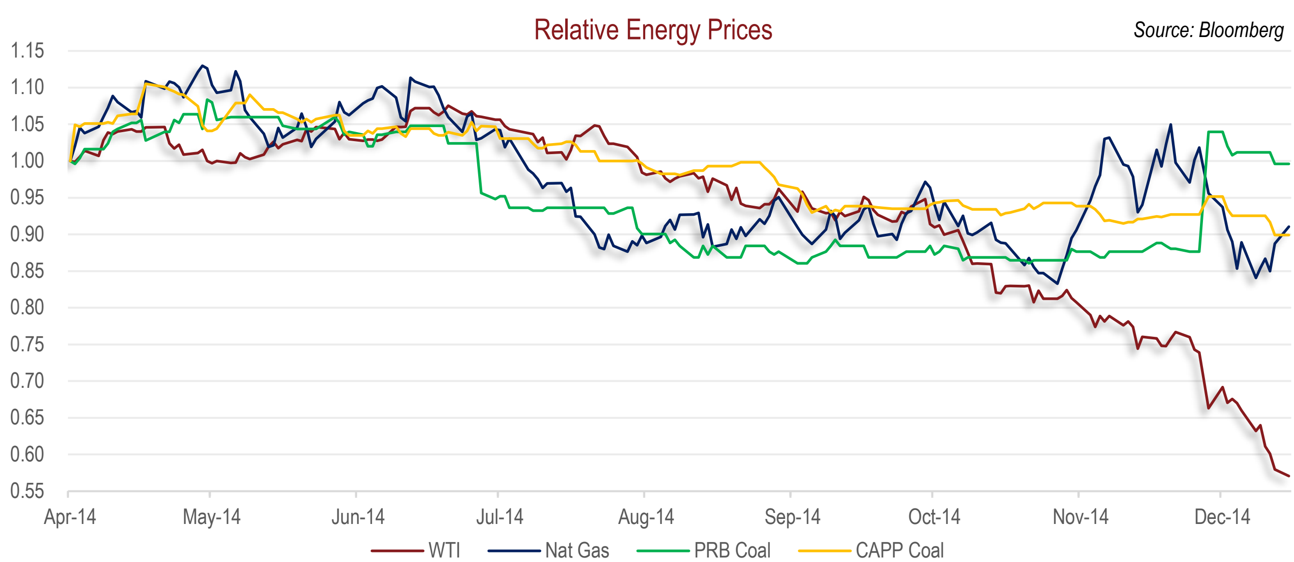
Let's take a look at Kopernik's portfolio holdings and analyze whether recent price movements are indicative of long-term trends or short-term volatility. In other words, does it appear we're mistaken or that we're merely early and the market's mistakes are creating tremendous profit-making potential? In the current, extraordinary environment, the answer to this question is virtually all that matters to those assessing portfolio decisions. We'll start with specific industries and companies and then migrate to a 'big-picture' perspective.

1) **Coal**
The market is suggesting that coal is about as relevant as oxen are to meeting the energy needs of the future. It is dirty and in some ways mankind might be better off if this perception that it were going away was true. But it is not going away! The population of the world has more than doubled over the past half-century, and resides predominately in the emerging economies of the world. They are, and will be, doing what the rest of us did when we were in our development stage – exploiting their resources and using energy extensively. Meeting this objective will require utilizing any and all sources at their disposal. The exhibits illustrate that coal is a predominant source of electricity. Its use will undoubtedly level off, but is it realistic to expect it to drop dramatically?



Importantly, coal is also cheaper than almost all other sources. It represents millions of years of solar energy captured in fossil fuel form. It will be used. Using Peabody Energy as an example, it is clear that the market has always exhibited bipolar tendencies in its attitude toward coal stocks. Buying when the market hates it has always been a winning strategy. Should this time be different?



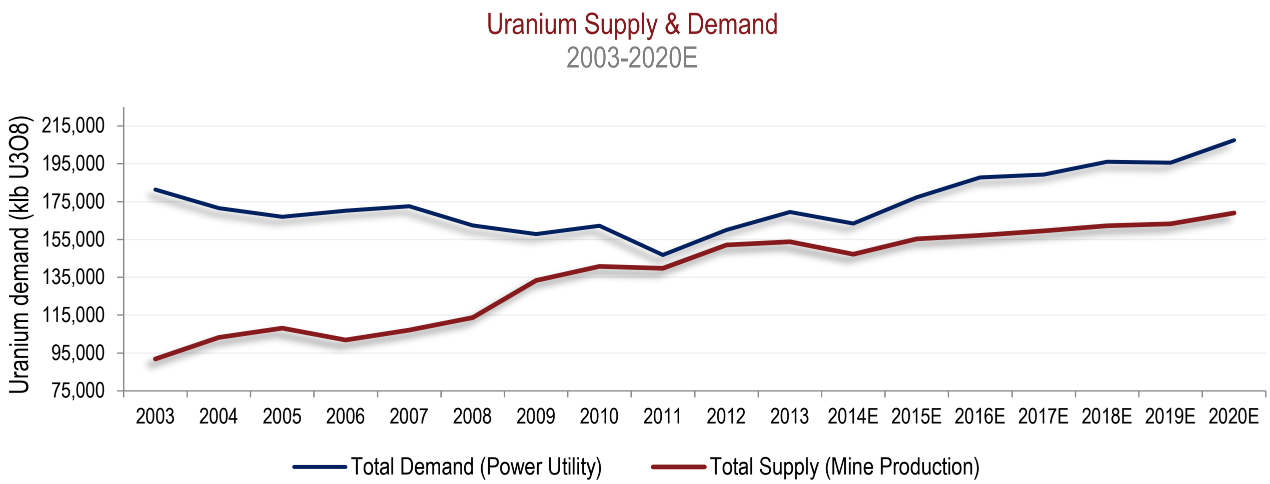


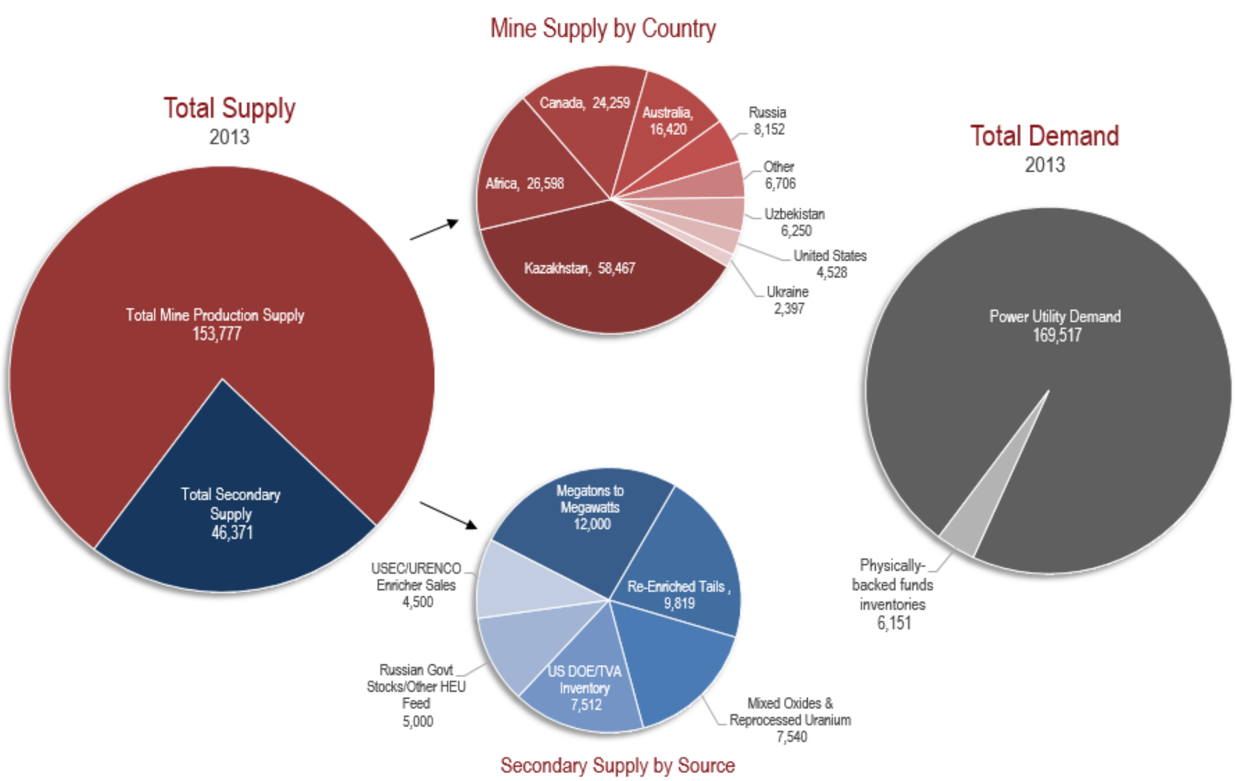
WTI – West Texas Intermediate | PRB Coal – Powder River Basin | CAPP Coal – Central Appalachian Coal

It is interesting how oil has dropped much harder than coal but coal stocks have plunged much more than oil stocks. This will likely prove to be a temporary aberration.

2) **Uranium**

The market is assuming that Fukushima was the "coup de grace" for nuclear power. They couldn't be more wrong. As discussed with coal, meeting the needs of 7 to 8 billion people will increasingly be a challenge. Nuclear, like all energy sources has some unfortunate negatives, but it is cheap and clean and CO2 free. The exhibits show that mine production has consistently been below demand. The Mega-tons to Mega-watts program is over, one of many factors suggesting that mine supplies will need to grow. In addition to existing reactors, many more are being built. Inventories are currently high but falling. It is believed that sufficient mine production will require a more than doubling of price.





Source: UX Consulting Company

New Reactors Under Construction

90 net new reactors by 2023

Source: Cameco, Q2 2014

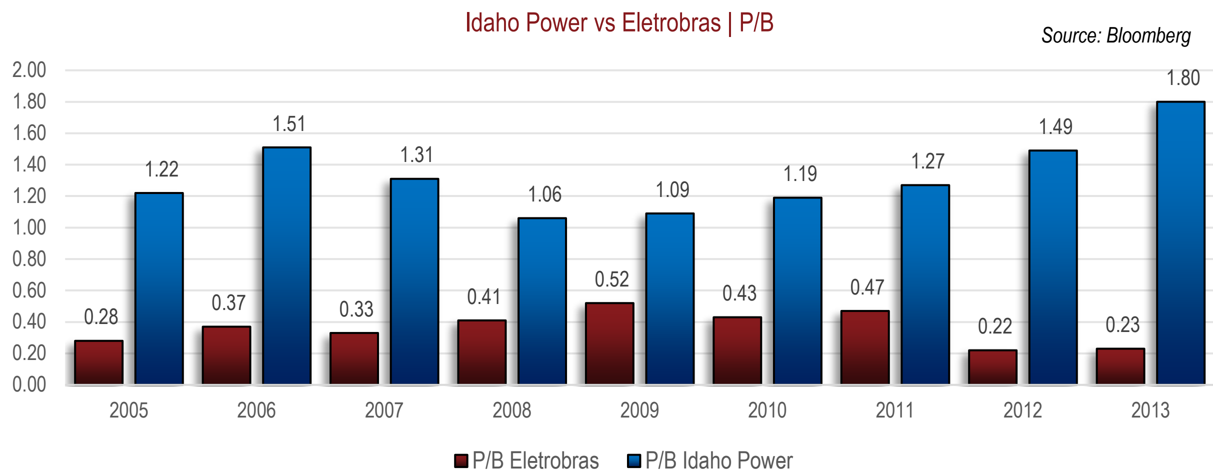
Region/Country	Operable 2014	New	Shut	Operable	Change	Under Const. 2014
Americas	126	8	(8)	126	**0**	6
Europe	136	10	(16)	130	**(6)**	4
Asia	77	14	(14)	77	**0**	9
Other*	6	16	-	22	**16**	5
India	21	15	-	36	**15**	6
China	21	57	-	78	**57**	27
Russia & E. Europe**	49	21	(13)	57	**8**	12
Total	**436**	**142**	**-51**	**526**	**90**	**69**

*Other: Bangladesh, Iran, Pakistan, Saudi Arabia, South Africa, Turkey, United Arab Emirates
**E. Europe: Armenia, Belarus, Ukraine

"And then I thought, What better hedge than a uranium centrifuge?"

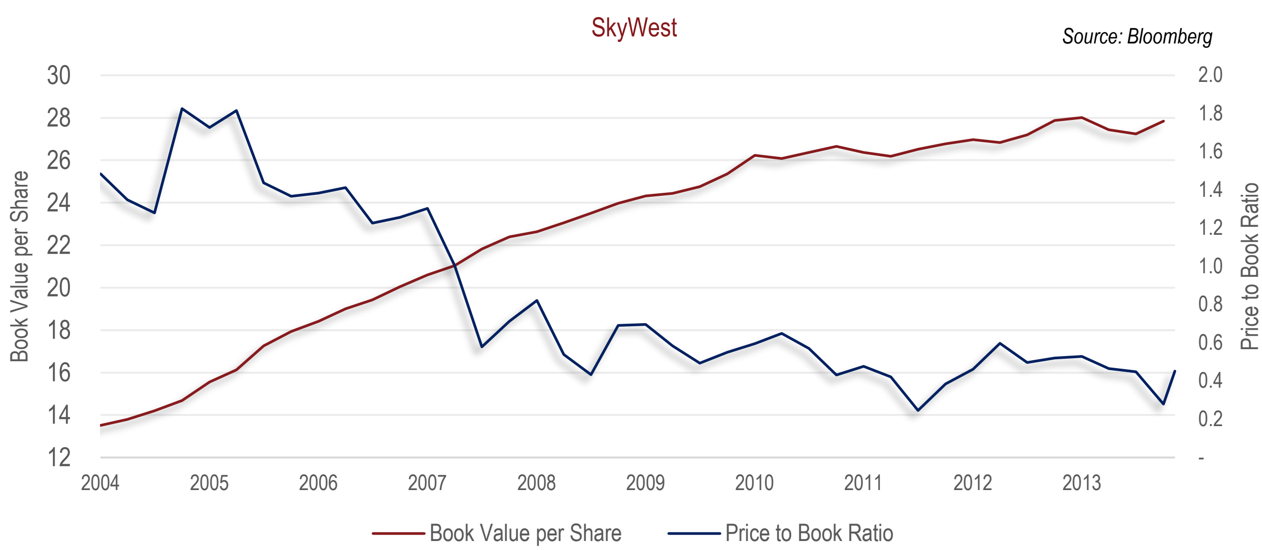
3) **Hydropower**

The stock market prices of mundane U.S. utility companies are up substantially, as people trip over themselves to secure a 3% dividend yield. Naturally, one would expect the stocks of utilities generating cheap, clean hydroelectric power, and doing so in growing economies, would be leading the pack. After all, hydro is arguably clearly superior to other forms of electricity. Yet, in the ''Twilight Zone'', these stocks have not only failed to keep pace with U.S. utilities, they have fallen into the bargain basement. Are cost leading monopolists really worth only 20% of replacement cost or is the market making a colossal mistake?



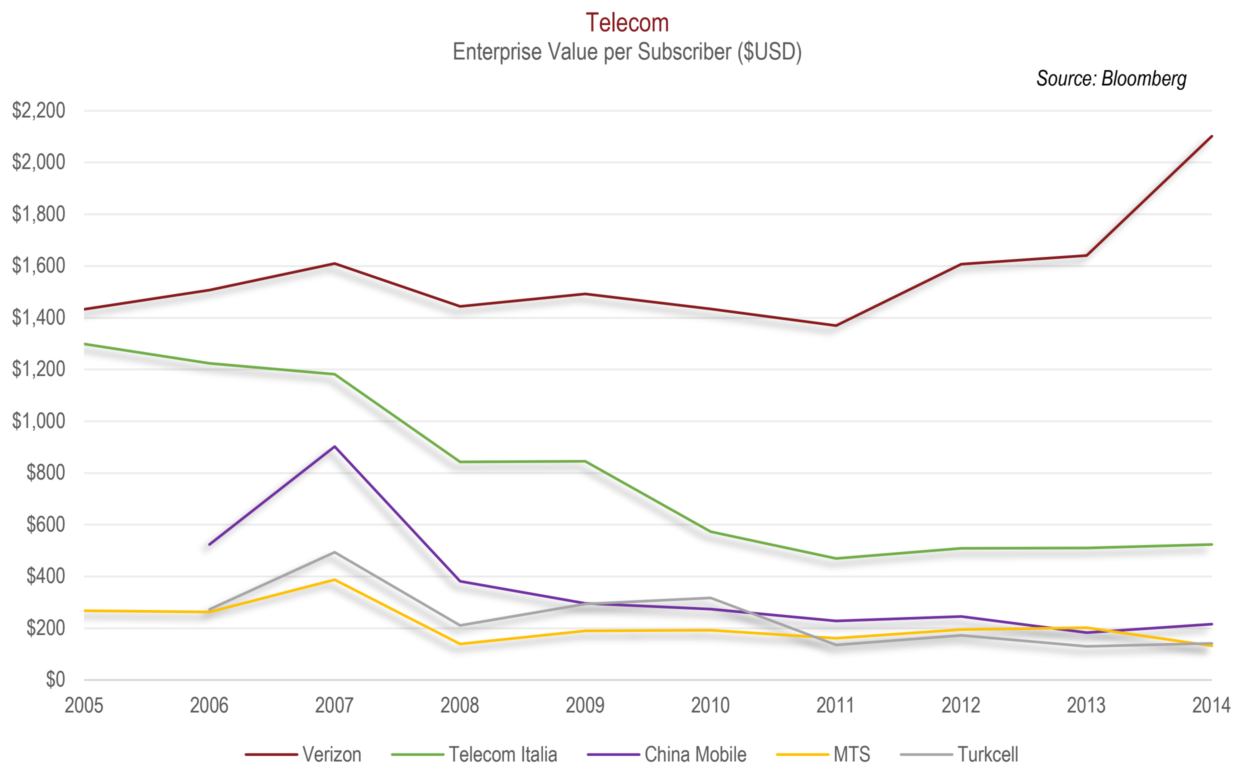
4) **SkyWest, Inc.**

As a result of lower fuel prices and previously distressed prices, the airline stocks have had quite a run. As one of the few industry participants to have fairly consistently added to book value over a long period of time, SkyWest, with its strong market niche, surely deserves to sell at a premium to book value and to other airlines. In fact, it has been left out of the rally and sells at less than half of book value. We believe that the market should focus less on the volatility of earnings and more on the long term growth of book value.



5) **Telecom**

Is there a better poster child for market inefficiency and human irrationality? The whole industry was priced insanely in 1999 and yet, despite phenomenal growth, was figuratively being given away three years later. NTT had the largest market cap on the planet during the late '80s and yet, was offered at only four times free cash flow, two decades subsequent. Investors have, at various times, preferred mobile, then wireline, then mobile. They have vacillated between a preference for emerging markets and developed markets, big and small, cable and fiber, code division and time division, current cash flow and growth, etc. Within emerging markets, investors' fondness is especially fickle. Opportunities are frequent.



6) **Russia/AAPL**

Twenty years from now, students won't believe that this anomaly ever happened. The table says it all. No further comments should be necessary.

Market Capitalization	$362 billion	$627 billion
Price-to-Sales	70%	357%
Price-to-Book	0.65	5.62
Size of Workforce	77,000,000	83,000

Resources		
Land	6.6 million sq. miles (4.2 billion acres)	2.9 sq. miles(1,866 acres)[3]
Rivers	100,000[1]	-
Lakes	2,000,000[1]	-
Freshwater Reserves	1/4 of the World	-
Crude Oil	80,000 (m b)	-
Natural Gas	48,676 (billion standard cu m)	-
Gold	36.8 million ounces (1,150 tons)[2]	31.1 million ounces (970 tons)[4]
Gold Reserves	125 million ounces (3,906 tons)	-

Rapidly Obsolescing Products	No	Yes

[1]The largest of Russia's bodies of fresh water, Lake Baikal, is the oldest, deepest and purest fresh water lake in the world. Baikal alone contains over one-fifth of the world's fresh surface water. Of the country's 100,000 rivers, the Volga at 2,294 miles is the longest river in Europe.
[2]Over a period of six months, Russia has purchased 54 tons of gold and has now overtaken China as the fifth largest country in total gold reserves.
[3]Apple Inc., Form 10-K for the FY ended Sept 28, 2013. Approximately 15% is leased property, 85% is owned.
[4]Cash and Short Term Investments of $37.8 billion as of June 28, 2014 converted to ounces of gold ($1,215/ounce as of Sep 14, 2014).

Sources: The World Bank,
Britannica, OPEC, Bloomberg, IMF

"*Undervaluations caused by neglect or prejudice may persist for an inconveniently long time, and the same applies to inflated prices caused by over-enthusiasm or artificial stimulants.*"
Ben Graham

"*The best opportunities are usually found among things most others won't do.*"
Howard Marks

"*To buy when others are despondently selling and to sell when others are euphorically buying takes the greatest courage, but provides the greatest profit.*"
John Templeton

7) **Bonds**

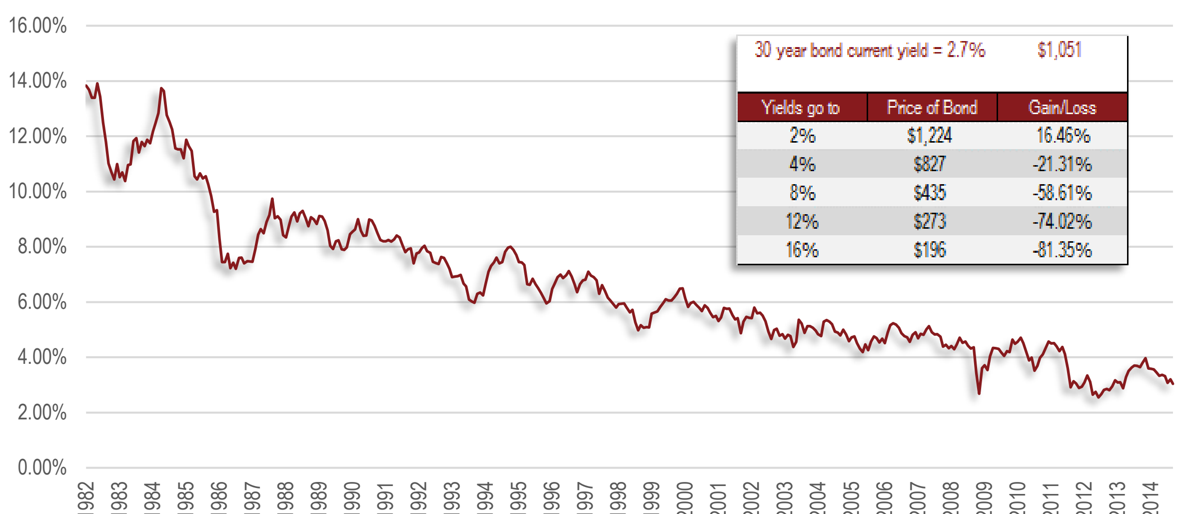
"She walks like she don't care
Walkin' on imported air
Ooh, it makes you wanna die

(the Market), you've gotta see (it)
Go insane and out of (its) mind
Won't come in from the rain
She's oceans running down the drain
Blue as ice and desire" – Blondie

The bond market certainly is 'walking on air'. Rarefied air! Lately it seems that a central banker spewing out hot air is all that is necessary to levitate the bubble higher still. It is interesting (to me anyhow) that Blondie, one of the greatest New Wave bands ever, was popular during the latter days of the last great bond bear market. It was an environment that couldn't have been more different from today's. It was a time of extreme negativity and fear. Bonds were commonly derided as being "Certificates of Confiscation" due to their tendency to drop relentlessly. In hindsight there were many reasons to be positive, but people were blinded by fear. Nowadays, investors have no fear. Today they seem blinded by greed or, at the very least, by complacency. There are many reasons to be fearful of bonds. Where is the negativity now that it is in order? Rates are miniscule; fundamentals are scary.

For example, **Bonds are claims on cash, while cash is a claim on those very same bonds!** (Fed's balance sheet liabilities are cash (currency and demand deposits) while they are backed by the Fed's assets which are primarily bonds). Could this circularity eventually come to be viewed as fraud? Or at least viewed as an accident that was waiting to happen? Further relevant bond fundamentals: the U.S. has run annual budget deficits in 46 years of the past half-century; liabilities have now reached 692% of GDP; national debt is now 4 times the cash which will ultimately be required to pay the bonds off (bonds do settle for cash); 29 times more cash will have to be conjured up by the central ~~'alchemists'~~ bankers to pay off the estimated $115 trillion of unfunded obligations of the U.S.! (Data sources are in the Appendix, Pg. 28.)

Historical 30 Year Bond Yield



30 year bond current yield = 2.7% $1,051

Yields go to	Price of Bond	Gain/Loss
2%	$1,224	16.46%
4%	$827	-21.31%
8%	$435	-58.61%
12%	$273	-74.02%
16%	$196	-81.35%

Bonds ended 2014 at a mind-blowing yield (or lack thereof) of 2.75% (and quickly dropped another ¼ percent, to below 2008 levels). The above chart shows the three decades long journey of interest rates from compellingly high to virtually nonexistent. The insert shows that a further drop to 2% could lead to gains of 16.5% but that a small increase to 4% could result in relatively larger losses of 21%. A return to rates of the early 1980s, a time when investors were distraught over the financial situation of the U.S. (which incidentally looked Herculean in comparison to our current predicament), would result in a plunge of over 75% in the price of a 30 year Treasury. There is a reason that some refer to bonds as offering 'return-free risk!'

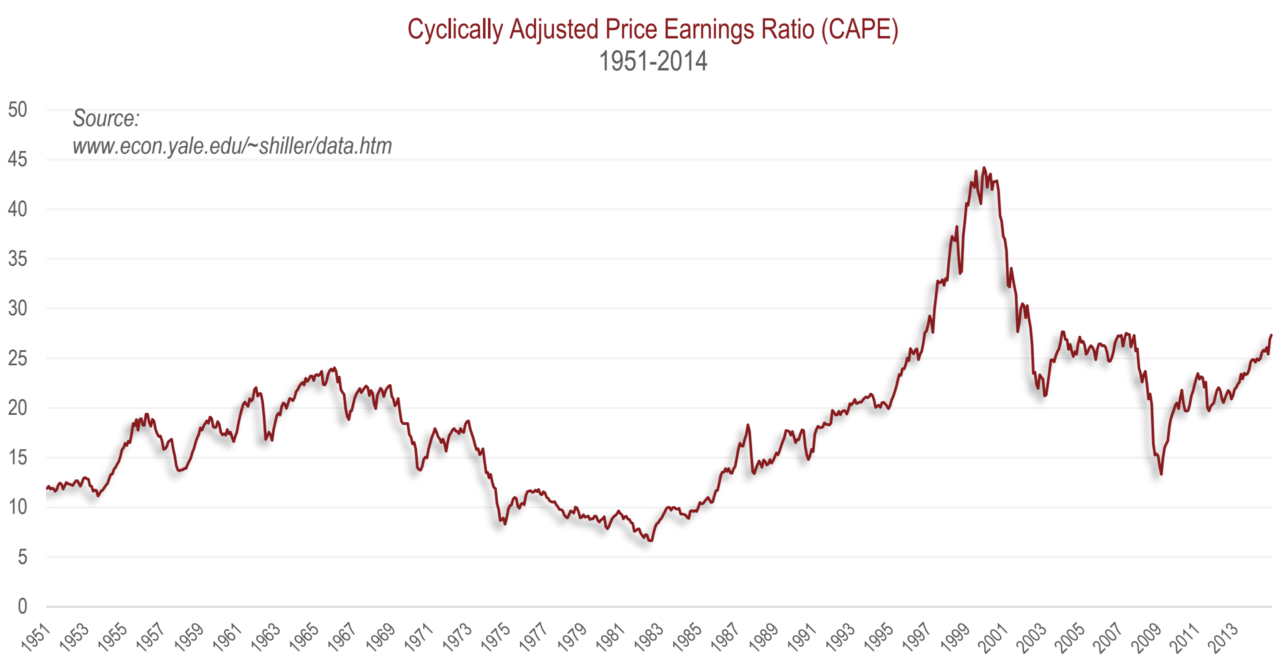
As a completely random aside, it is merely a coincidence that the lyrics used in this Commentary from music groups (Blondie, The Police, and Oingo Boingo) are all from circa the end of the last major inflection point for financial assets relative to real assets. Maybe subconsciously I miss the high yields as well as the music of the era. (We'll end the Commentary with some lyrics from this century.)

8) U.S. Stock Market

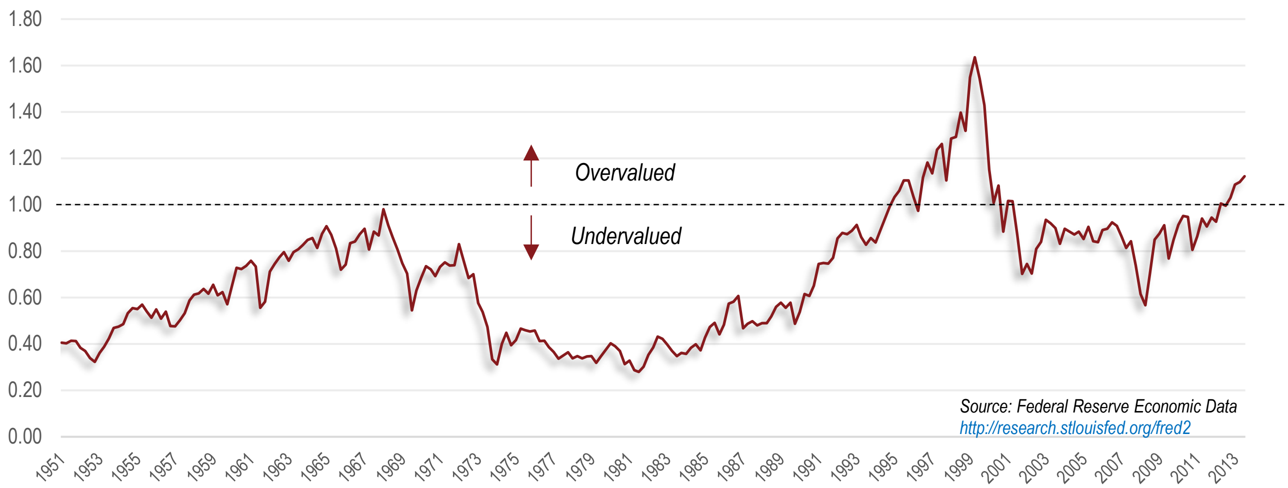
Stocks in the United States are reasonably valued **If** one believes that: 1) margins will permanently hover significantly above historic norms; 2) interest rates will always be close to zero; 3) taxes, in aggregate, won't rise much from current levels; 4) the rule of law won't weaken; 5) labor will be content to accept an historically low 'piece of the pie' even as they watch capital earn a historically outsized slice; 6) the U.S. is an oasis, immune from the challenges afflicting the rest of the world; 7) cycles are a thing of the past; 8) there will be no 'black swans[1]'; 9) one single country can deserve to be valued at more than the cumulative value of every other country (as represented in the MSCI -ACWI (all country world index)).

Kopernik is very thankful to have the latitude to invest elsewhere!

[1]The black swan theory is a metaphor that describes an event that comes as a surprise, has a major effect, and is often inappropriately rationalized after the fact with the benefit of hindsight.



Tobin's Q Ratio
1951-2013



Tobin's Q: A ratio devised by James Tobin of Yale University, Nobel laureate in economics, who hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets.

Top 500 | Price to Book

Source: Morgan Stanley Research

MacroMavens

Cap weighted indices have proven to be a valuable warning system whenever they've become highly concentrated in one industry, sector, or country. Examples include energy (1980); Japan (1989); TMT (1999); Financials (2007); perhaps the US now?). If it weren't for 1999, this would be the most expensive the U.S. market has ever been!

9) **Emerging Markets**

Growth is a wonderful thing! It is worth a lot. The problem with paying up for future growth is that, more often than not, it doesn't fully materialize. Four years ago, despondent about the lackluster prospects for the US and Europe, investors excitedly paid up for growth in the BRIC[1] countries. Growth turned out to be pretty good but far short of lofty expectations. This led to market losses. Flash forward to 2015. Investors now are willingly paying up for prospective growth in the large, mature, heavily-indebted United States, while giving away prospective growth in the growth economies of the world. You can't make this stuff up.

[1]BRIC: grouping acronym that refers to the countries of Brazil, Russia, India and China, which are all deemed to be at a similar stage of newly advanced economic development.

	% of World GDP 2013	% of MSCI ACWI Jan 2015
United States	22%	52%
China	12%	2%
Japan	7%	7%
Germany	5%	3%
France	4%	3%
United Kingdom	4%	7%
Brazil	3%	1%
Italy	3%	1%
Russia	3%	0%
India	2%	1%
Other	36%	23%

Source: World Bank, Bloomberg

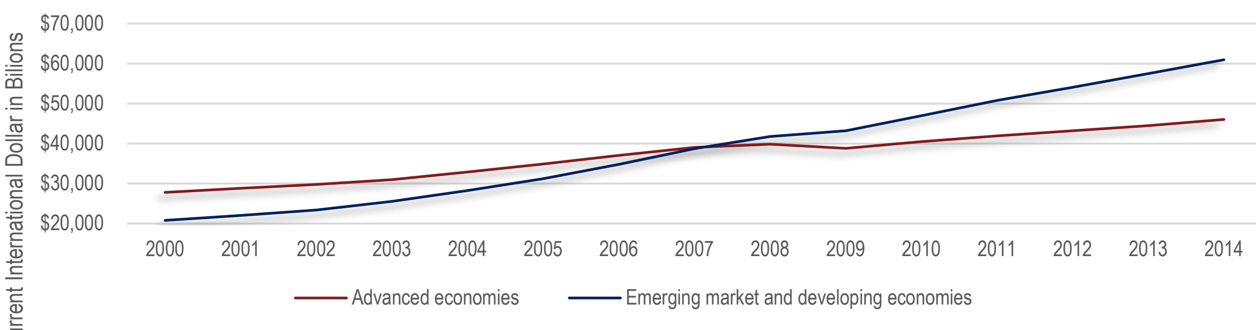
Ticker	Name	P/B	P/E	Curr EV/T12M Sales	EV/T12M EBIT	FCF Yld	Dvd 12M Yld - Gross
SPX	S&P 500 INDEX	2.736	17.920	2.118	15.132	5.124	1.993
MXEA	MSCI EAFE	1.539	16.248	1.343	13.689	4.197	3.163
HSI	HANG SENG INDEX	1.371	10.323	2.228	11.158	6.680	3.692
MERVAL	ARGENTINA INDEX	1.256	11.448	1.693	15.276	-5.282	1.345
IBOV	BRAZIL IBOVESPA INDEX	1.211	15.491	1.418	10.637	15.784	4.824
KOSPI	KOSPI INDEX[1]	1.097	130.344	0.986	21.028	2.749	1.105
RTSSTD	RTS STANDARD INDEX[2]	0.405	4.450	1.013	6.095	32.889	0.090

[1] KOSPI – Korea Stock Exchange Index
[2] RTS Index – Moscow Exchange Blue Chip Index

Source: Bloomberg

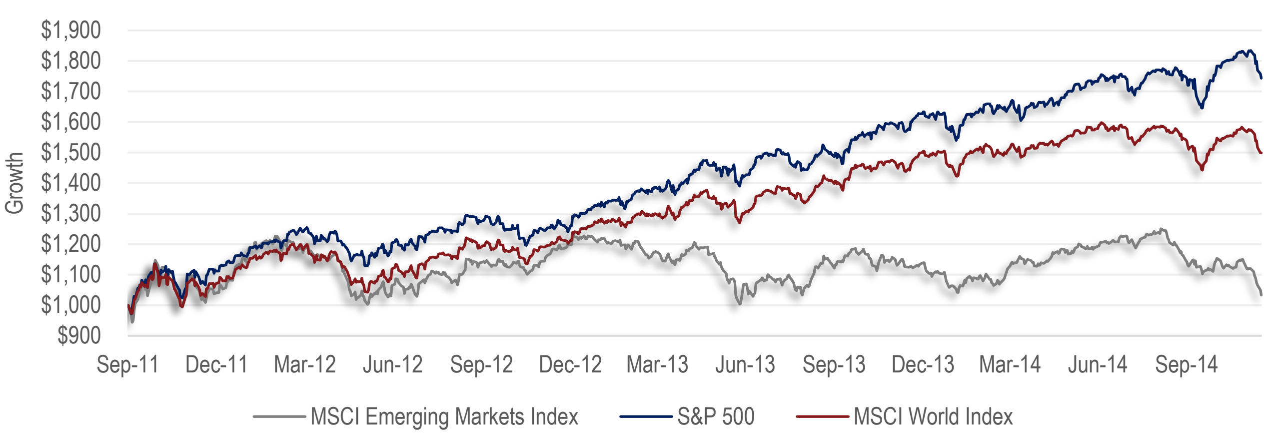
Advanced Economies vs Emerging Economies
Gross domestic product based on purchasing-power-parity (PPP)

Source: IMF



Performance of Global Equity Markets
September 30, 2011 - December 16, 2014

Source: Bloomberg



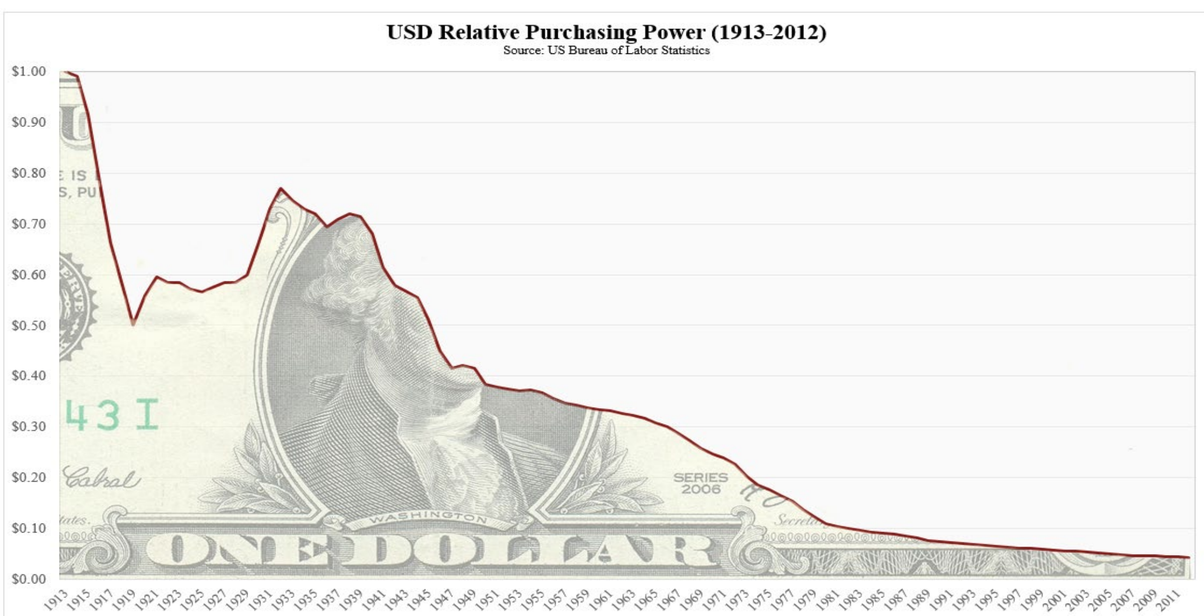
10) **Gold**
"The Barbarous Relic"

Definition of Intrinsic Value

The actual value of a company or an asset based on an underlying perception of its true value including all aspects of the business, in terms of both tangible and intangible factors. This value may or may not be the same as the current market value.

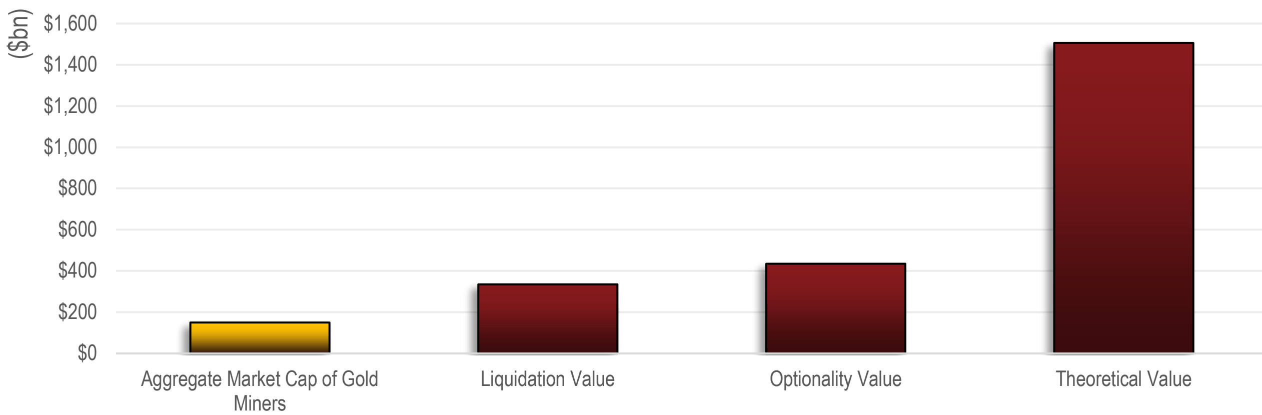
	Gold	Dollar
Production Input	No	No
Generates Income	No	No
Edible	No	No
Medium of Transaction	Fair	Excellent
Store of Value	Excellent	Poor
Intrinsically Valuable	*	*

- If one googles "intrinsic value of gold" they will encounter many articles about how "gold has no intrinsic value." Such is the contemporary mindset.
- The wisdom of the ages is perhaps best captured by Voltaire's famous quip that, "Paper money eventually returns to its intrinsic value – zero."
- Gold has been used as money since at least 550 B.C. when it was coined by King Croesus of Lydia. It has maintained its purchasing power for thousands of years.
- Regarding fiat currency, "The average life expectancy for a fiat currency is 27 years, with the shortest life span being one month. Founded in 1694, the British pound Sterling is the oldest fiat currency in existence. At a ripe old age of 317 years it must be considered a highly successful fiat currency. However, success is relative. The British pound was defined as 12 ounces of silver, so it's worth less than 1/200 or 0.5% of its original value. In other words, **the most successful long standing currency in existence has lost 99.5% of its value**." (source: Washington's Blog)
- When comparing money that has held its purchasing power for thousands of years with the dollar, that has lost more than 95% of its purchasing power thus far in my lifetime, it is probable that modern social scientists have awarded the "no intrinsic value" moniker to the wrong one.



Data: ftp.bls.gov /pub/special.requests.cpi/cpiai.txt

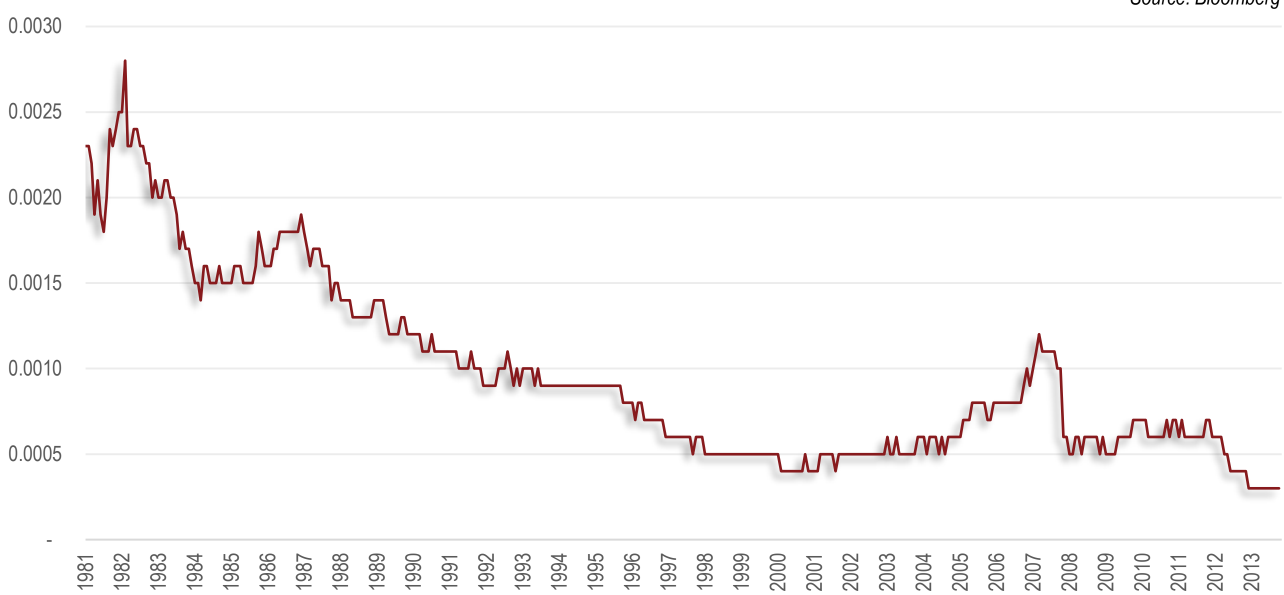
Gold Miners Market Cap vs Upside Potential



Kopernik Estimates (see pg. 28 of Appendix for valuation assumptions)

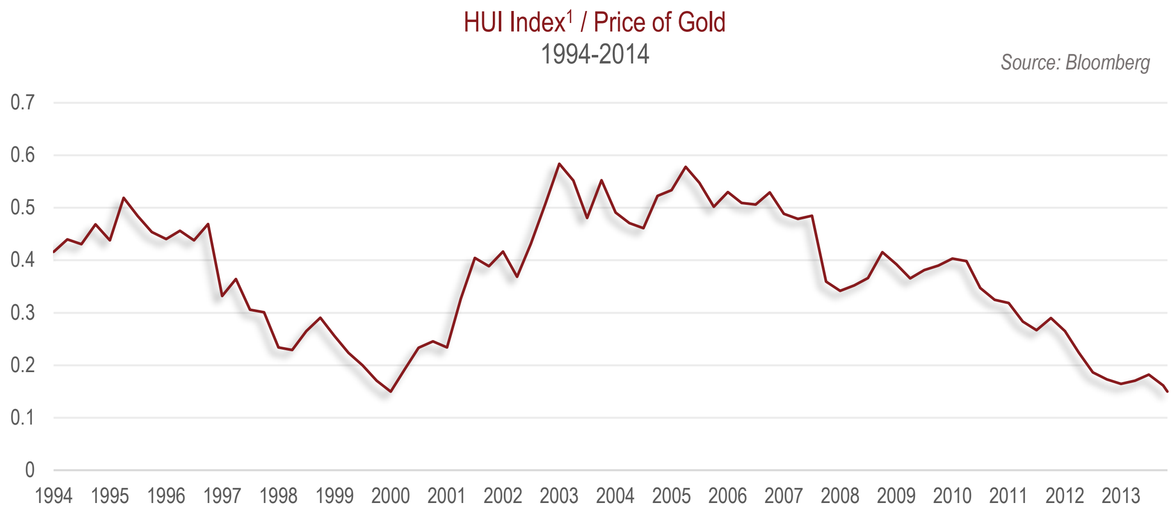
Gold Price / U.S. Monetary Base

Source: Bloomberg



Certainly each and every argument against gold's intrinsic value is equally applicable to the dollar's value. The case in support of gold's worth is not applicable to the dollar. The dollar's value is primarily psychological. Economically, its value has been virtually all diluted away. The dollars in circulation in 1980, per ounce of gold held by the Treasury, amounted to 400. That number has now grown to 15,000! Arguably, 97% of its value has been diluted away. Theoretically, the price of gold should have appreciated by 37.5 times (it has gone up 2.5 times). One of these two monetary mediums will still have value a hundred years from now. We believe people should exchange a good portion of their dollars into gold posthaste, while they still can.

11) Gold Mining Companies

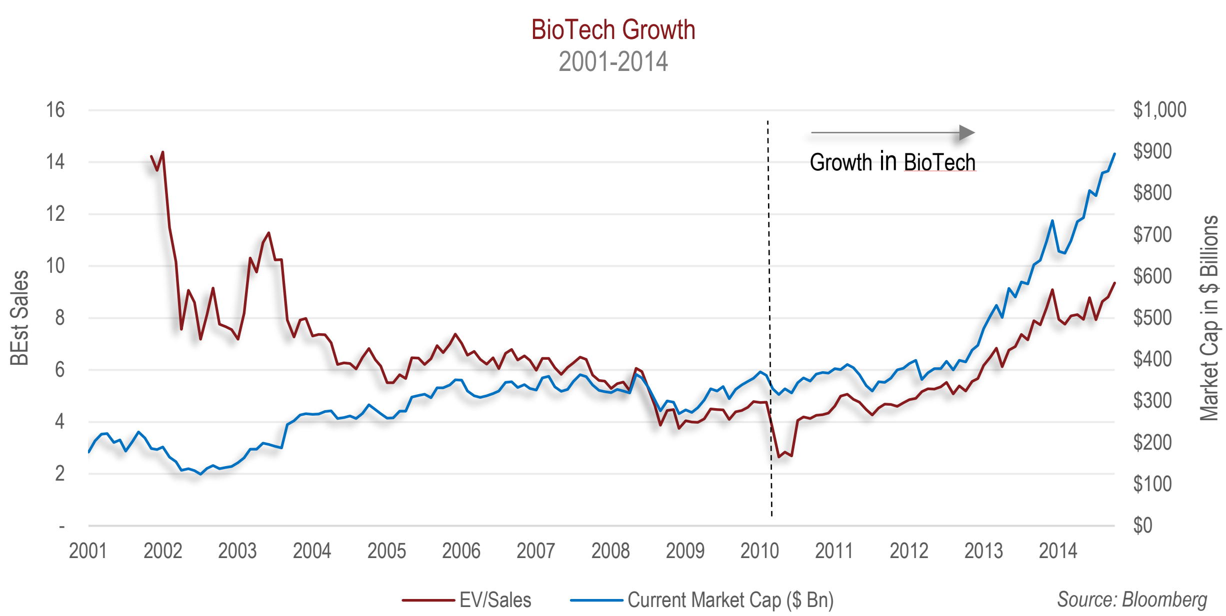


[1]HUI Gold Index: The NYSE Arca Gold BUGS Index is a modified equal dollar weighted index of companies involved in gold mining. BUGS stands for Basket of Unhedged Gold Stocks. It is also referred to by its ticker symbol "HUI"

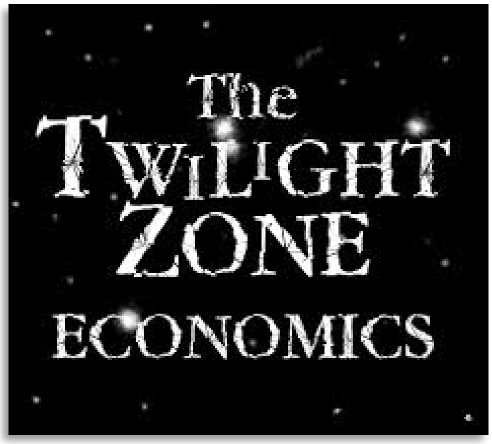
While every prudent household must, in our opinion, own some physical gold, the most compelling way to gain exposure to the attractive gold fundamentals is to own the businesses that own massive amounts of gold in-situ. The above chart illustrates how cheap these stocks have become relative to the gold they own.

12) Biotech

Nine times sales! Many with no earnings. In this market earnings are not necessary, a nice story will more than suffice. Déjà vu!



Capitalization is up nine-fold over the past decade!



The Big Picture – Living in a World of Sounds Bites and Weird Science

Having switched from pre-veterinary studies to economics in college, it is interesting to observe how, over the years, the social sciences have been trying to metamorphosize into physical sciences. Various wags have suggested that they suffer from a bad case of "physics envy". A more accurate interpretation could be that people try to create certainty in an uncertain world. At extremes they choose to believe in myth rather than deal with discomfort. How nice it would be if risk, inflation, and well-being could be boiled down to a single number. Grander still would be if that "number" allowed for formulaic policy management rather than requiring thought, sacrifice, hard choices, using common sense, and defense of one's policy choices, in order to achieve economic success.

"Magic and technology, Voodoo dolls and chants, Electricity, We're makin weird science
Fantasy and microchips, Shooting from the hip, Something different, We're makin weird science
Pictures from a magazine, Diagrams and charts, Mending broken hearts, And makin weird science

From my heart and from my hand and, Why don't people understand my intentions?
Weird, Weird science"
-Oingo Boingo

But, alas, our policymakers want us to believe in magic. Let's start with **economics, which in many ways has just become a servant of government and public policy, not unlike the role played by astrology to rulers in the past**. Before, yet again, pointing out some of the flaws with Keynesian economics, let's take a look at the following comments by Robert Schiller:

> *"The problem is that once we focus on economic policy, much that is not science comes into play.* ***Politics becomes involved, and political posturing is amply rewarded*** *by public attention. The Nobel Prize is designed to reward those who do not play tricks for attention, and who, in their sincere pursuit of the truth, might otherwise be slighted. Why is it called a prize in "economic sciences", rather than just "economics"? The other prizes are not awarded in the "chemical sciences" or the "physical sciences." Fields of endeavor that use "science" in their titles tend to be those that get masses of people emotionally involved and in which crackpots seem to have some purchase on public opinion. These fields have "science" in their names to distinguish them from their disreputable cousins."*
>
> *- Robert Schiller, 6 November 2013, post winning the Nobel Prize*

It is interesting that the award went to Mr. Schiller, whom I respect, and to Mr. Fama, even though the two of them have contrasting ideas. It certainly isn't a physical science.

Now, turning to Keynes, I confess to beating a dead horse. Keynes was a bright guy, but his opinions did sway with the times. He said a lot of smart things over the years. Unfortunately, many of his theories seem more fanciful than sensible. Yet, the fault in current economic theory isn't entirely his *ideas* but more the fact that government bureaucrats have used them as an excuse to grow government ever bigger. His theories make it easy for them. In his defense, he proposed to use government to counter-balance private cyclicality, not to spend incrementally more during bad times **and** good. But this was all too predictable. Unlike with physical sciences, human behavior can't be precisely modeled, merely studied and anticipated. Unlike Keynesians, Behavioral Economics and proponents of the Austrian economic school understand this.

"*Although most economists in the 20th century and our time would disagree strongly, Mises insisted that economic theory itself was an a priori discipline. What he meant is that economists shouldn't ape the methods of physicists by coming up with hypotheses and subjecting them to empirical tests. On the contrary, Mises thought that the core body of economic theory could be logically deduced from the axiom of "human action," i.e., the insight or viewpoint that there are other conscious beings using their reason to achieve subjective goals."*

- Wikipedia

The following discusses some of the ways that academics and government careerists attempt to formulize non-formulaic factors.

"***It is the middle ground between light and shadow, between science and superstition, and it lies between the pit of man's fears and the summit of his knowledge."***

-Twilight Zone (Season 1)

C + I + G = Y
(consumption + private investment + government spending = GDP)
The addition of imports and exports improves the formula but the flaws are fatal. Does consumption equal income? Seriously?!!!!! One great analogy found on the internet was that of a corn farmer. The corn he harvests is income. The amount he stores in a silo is savings. The amount he eats is consumption. Consumption is negative production, negative income, and negative savings. But here is a formula that regards negative income as positive income. This formula is taught in most colleges and used by academia and government. Surreal!
Similarly, if two neighbors grow their own food, prepare their own food, and consume their own food, it is doubtful that anyone would claim that they've contributed to national income. But if neither produced any food, but one neighbor served breakfast to the other who in turn serves lunch to the first, has income increased?

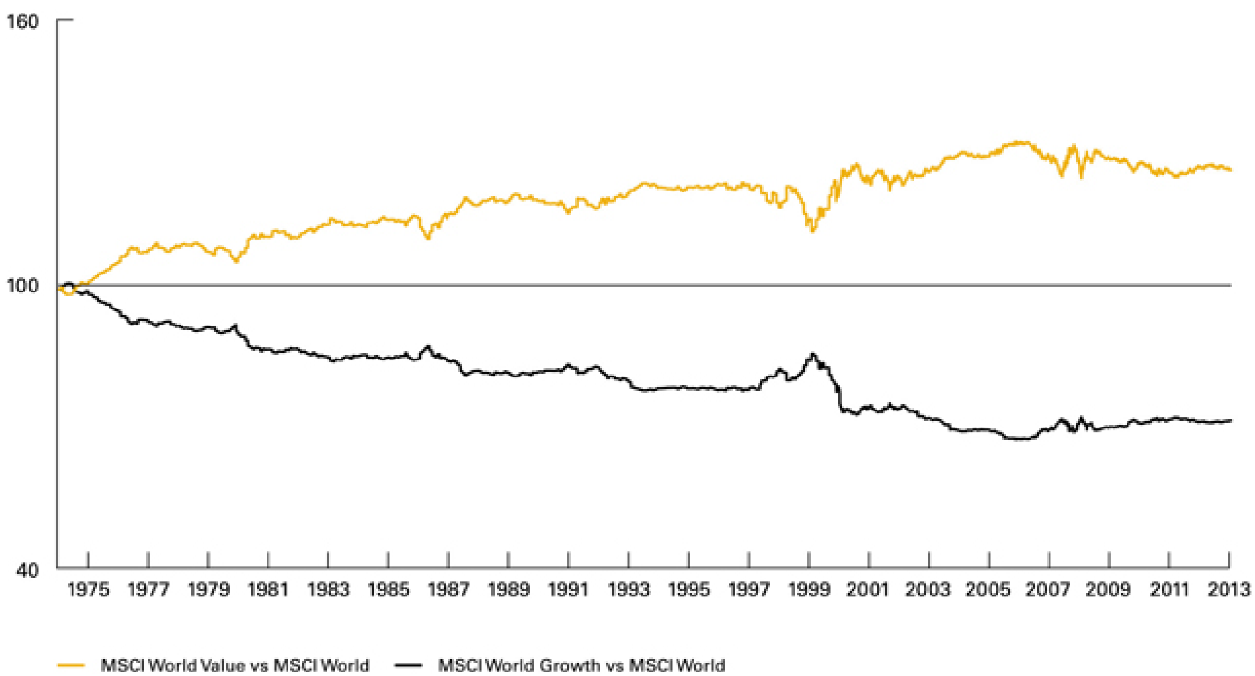
And what about government spending?!

Once again, spending is not producing income! But even if it were, the government has no money, they take it from the citizens. If a citizen foregoes spending so that they can pay tax to the government, who in turn spends the money for him, has aggregate income increased? The critic could go on endlessly but enough said. Interested parties should Google for more info.

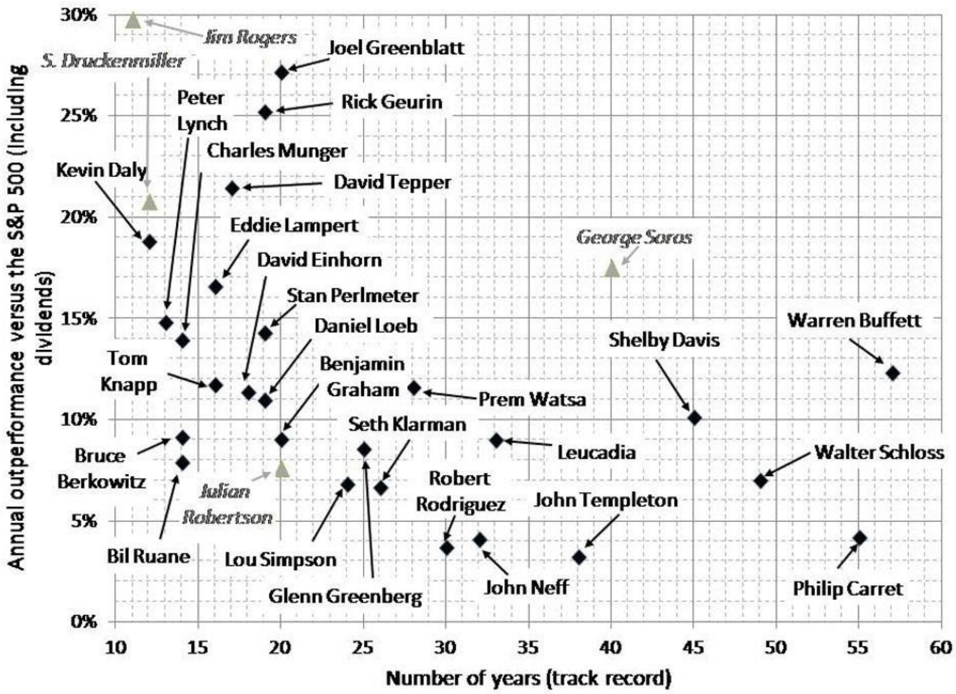
Keynesian Multiplier Effect
(an increase in government spending results in an even greater increase in national income)

Who wouldn't be in favor of spending ones way to prosperity? Each dollar spent will create enough income and investment to generate more income than was spent. A perpetual motion machine would be nice, too! There is plenty of material available to those who would like to read further on this, including the marginal propensity to save/consume. There is no need to discuss further here.

EMH (efficient market hypothesis) – Logic and empirical evidence demonstrate decisively that buying assets when they are attractively priced leads to better performance than does buying those same assets at expensive valuations. The following chart is but one example:

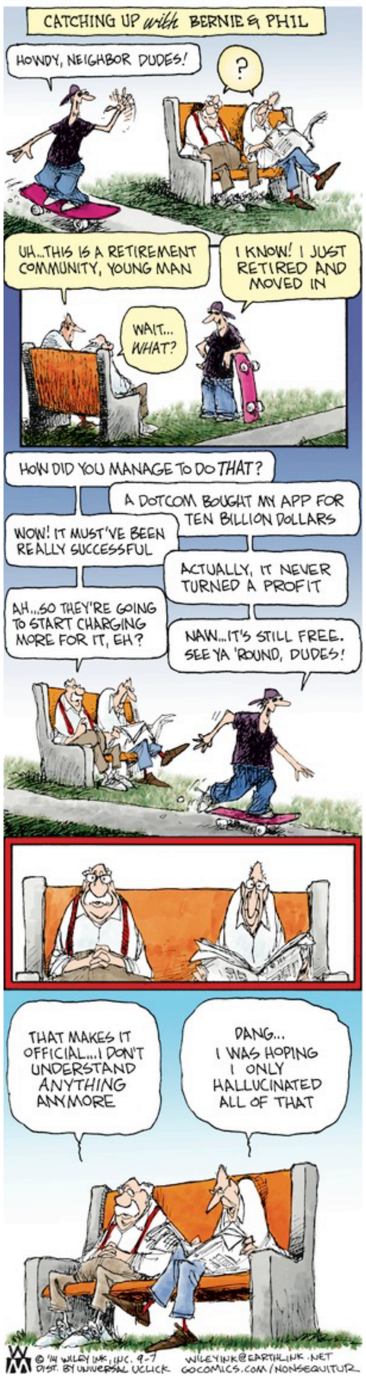


James P. O'Shaughnessy's book, "What Works on Wall Street" shows that low prices relative to sales and book value have led to substantial outperformance for many decades. Reams of other empirical findings are readily available. Beyond the studies, it should be clear that stocks could be purchased 90% cheaper in 1933 than in 1929. Fifty percent discounts were available in 1974 (vs 1972), 2002 (vs 2000), and 2009 (vs 2008). The fact that certain managers fairly consistently outperform the market can be explained away using the logic that even routine coin-tosses will lead to some lucky consistent winners and some perennial losers. The fact that many can be identified a priori based upon their thought process and disciplines, cannot be explained away.



Source: "Investment Wisdom from Wall Street's Legends", Frederik Vanhaverbeke

NON SEQUITUR
BY WILEY



Furthermore, the fact that the assumptions underlining EMH are indefensible is a huge problem. I don't know of anyone that seriously believes that humans are rational beings, that taxes don't matter, that information is evenly distributed, that fundamental analyses is commonly performed diligently (certainly ETFs are proof to the contrary), etc. It is a fact that assets routinely become too expensive and too cheap. It is a cyclical phenomenon. A la 1999, the current environment shows that suspension of disbelief and even giddiness can happen.

"We have 10 seconds—what is the meaning of life?"

As mentioned in past commentaries, efficient markets (if true) make ETFs/passive products attractive, yet these products, in and of themselves, undermine the assumptions upon which the theory is based. The passive investment craze of the late nineties sowed the seeds of many good years for active managers/bad years for indexers. We believe the current uber-enthusiastic stampede into ETFs has created a similar environment once again. We're excited about it.

The nearby comics pertaining to growth investing peaks, the shallow, short-term nature of analysis, and technical analysis say all we want to say, but we're more than happy to discuss further with interested parties. Suffice it to say, they are short term strategies that work well for some, but not for most, and most importantly, in the process, create opportunities for long-term investors.

Rather than subscribe dogmatically to a certain methodology, be it momentum, technical analysis, growth, GARP[1], quant, or specific definitions of value, all of which at moments in time have their days in the sun, we prescribe hard work, common sense, independent thought, a valuation-based foundation, and discipline. "There is no free lunch."

[1]GARP: "Growth at a Reasonable Price" An equity investment strategy that seeks to combine tenets of both growth investing and value investing to find individual stocks.

"*It's not supposed to be easy. Anyone who finds it easy is stupid.*"
Charlie Munger

CAPM (capital asset pricing model)

$$\overline{r_a} = r_f + \beta_a(\overline{r_m} - r_f)$$

Where:

r_f = Risk free rate

β_a = Beta of the security

$\overline{r_m}$ = Expected market return

Can a model that does not even incorporate price as a variable conceivably be valid? Clearly not! Only in the Twilight Zone. If a stock's share price fluctuates from $20 to $100 and back to $40, has the cost of equity remained constant (all other things equal)? Can't be true. If true, investors should be as happy to pay $100 as they were at $20 and the company should be equally happy to raise capital by selling shares at $40 as they would be at $100. The fact that many seem to conduct their affairs in this manner does NOT make it rational. Other flaws include the facts that: rather than a "risk-free rate" there only exists a central bank manipulated rate; the beta of a security has nothing to do with the expectation of future permanent gain or loss; and the expected market return doesn't include the single most important variable – valuation – thus CAPM is merely poppycock.

MV = PQ
(money supply * velocity = price * quantity)

In the vein of logical inference versus precise imprecision, it should be clear that an increase in money supply should lead to higher aggregate price levels. It is important to recognize that while this is typically useless information, during times of major change it matters greatly. When Paul Volcker slammed the brakes on money supply growth in 1979, price appreciation was going to level off meaningfully. In the realm of economics, that **was** what mattered. How soon and by how much was an important matter only to those who routinely can't see the forest for the trees. In that case it took three years, but a multi-decade bull market in financial assets ensued, even as real assets began their descent into a long bear market. Currently, at year-end 2014, the profligate monetary growth of the past half-dozen years has caused, and will continue to cause, increasing aggregate price levels. A quintupling of the monetary base is a **major** event. It **is** what matters. A significant consequence has been the launch of asset and of service prices. Not all assets and services, but specifically those that are paid for by the two main beneficiaries of the inflationary policy (governments and/or the rich). Trying to ascertain ***when*** the bulk of the price increases finally hits the system is a mug's game.

Reducing the relationship between money and price to a precise formula is another example of physics envy. There is always a lag effect. M (money supply) is a variable with many different definitions upon which the 'experts' disagree. V (velocity) is a plug figure that is solved for or assumed to be constant. Both are problematic approaches. P (price) is very hard to measure accurately, but the government's goal is all too often to measure it inaccurately. High prices mean higher expenses and lower revenues for the government. Therefore, it is important to be cognizant of the fact that it is the government that measures and publishes the price index. They have created commissions with a mandate to lower the calculated number. They use only consumer prices which means excluding industrial prices and asset prices. Asset prices are a glaringly important omission. Prices are then 'hedonically' adjusted, meaning that if a price increase is accompanied by perceived quality improvements, it is deemed not to be a price increase. They seem to be clueless that quality has always improved over the ages and to believe that subjective input from government bureaucrats is a helpful addition. If the price of beef goes up, people are assumed to substitute chicken at a lower price (what about a negative hedonic adjustment here?). And Q (quantity) is fairly impossible to measure and is also 'adjusted.' Other than these complaints, MV=PQ is a nifty little formula.

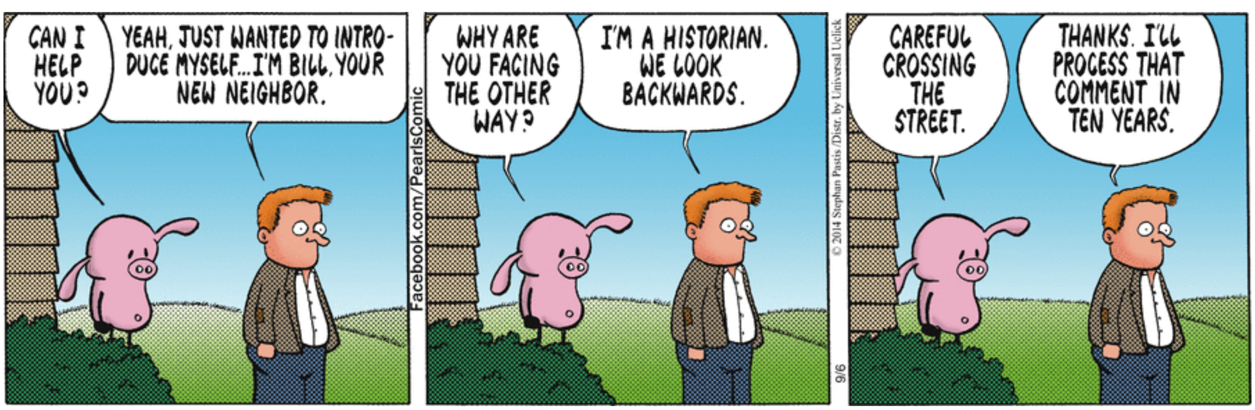
"My creation, is it real?
It's my creation—I do not know
No hesitation—no heart of gold"
-~~Janet Yellen,~~ Oingo Boingo

Money can be created by fiat (and further created by banks using another multiplier effect)

Voltaire famously said that fiat currencies eventually reach their intrinsic value of zero. Will and Ariel Durant's must read, "The Lessons of History" summarizes that "bankers understand that history is inflationary and that money is the last thing that a wise man will hoard." Various internet sites suggest that the average duration of fiat currencies is less than four decades, with none having reached four centuries. In contrast, a sell-side analyst, (we'll do him a favor and leave his name out), recently claimed that gold was in a six-thousand year old bubble. He elected to assign the term "fiat currency" to gold as well. Fiat currencies get their name from the fact that they aren't underpinned by anything tangible, but rather get their value by government mandate (fiat). Gold, on the other hand, has been chosen by people to serve as money. For thousands of years people have chosen gold as money because they value its scarcity, attractiveness, anti-corrosive property/durability, divisibility, and coin-ability. Most importantly, it is nobody's liability and cannot be 'printed by governments. As discussed earlier, while currency can be conjured out of thin air, **wealth cannot!** Life would be easy if it could. The world's central banks would like us to believe that they have found the Philosopher's Stone. Rest assured that they have not. Because fiat currency is always mismanaged and loses value relative to gold, it always has had an interest rate yield to compensate savers for their diminishing purchasing power. Such a yield seems to be requisite everywhere except in the "Twilight Zone."

Quantifying Risk
(VaR, Standard Deviation, Tracking Error, etc.)

We would highly recommend Howard Marks' great book, "The Most Important Thing" to all investors. Risk is many things to many people. Some investors' aversion to non-portfolio risks creates opportunity for other investors, those willing to accept/mitigate these risks. Kopernik resides firmly in the camp of investors who focus on managing and mitigating the risk of permanent loss of purchasing power to the portfolio. Many commonly used metrics such as those in the sub-heading measure the past. Risk pertains to the future. Volatility measures often fail to distinguish between upside volatility and downside volatility. Tracking error as a measure of risk implicitly assumes that the index being tracked is riskless. It would be a very different world if the past always predicted the future and if events always conformed nicely into a bell-shaped pattern. Mr. Marks demonstrates that risk cannot be calculated precisely, and suggests that effective management requires expertise, common sense and discipline.



"*It is easier to rationalize than it is to be rational.*"
-unknown

Conclusion

"There is no such thing as a free lunch"

"*To thrive as a value investor you have to risk being called a dummy from time to time.*"
Christopher H. Browne

"*Value investing is at its core the marriage of a contrarian streak and a calculator.*"
Seth Klarman

In 1999, society began to believe that the creation of the internet had somehow suspended the laws of the universe. Mathematics, human behavior, and the principals guiding economic decision-making held no sway. Price did not matter. In 2014, society seems to believe that central bank omnipotence has negated the laws of the universe. Once again, mathematics, human behavior, and economic principles are considered to be quaint. Price does not matter. Scarcity is not valued. Wealth does not need to be worked for; does not need to be earned! It can merely be conjured up by bureaucrat magicians with a printing press.

We, at Kopernik, believe that math is an absolute. We believe that human beings tend to do what they are incentivized to do. It is clear that marginal utility drops as supply increases (i.e. scarcity matters immensely). We simultaneously believe that modeling of the physical world has been one of the utmost accomplishments of mankind, and that attempts to model human behavior and other imprecise and interdependent variables have led to many of the great follies of mankind. Furthermore, we believe that there are many risks in the market but none are a more important contributor to future loss than **excessive price.**

The central banks of the world made fiat currency extremely abundant. The population is growing. Gold, uranium, clean water, energy, farmland, phone franchises, and transportation infrastructure have remained quite scarce. Their value relative to cash and bonds has soared. For years, this fact was reflected in the marketplace. The market's recent excursion into the "Twilight Zone" has surrealistically given us **the opportunity to buy these useful, important, and scarce assets at pre-QE3 prices!** (Queue twilight zone music here.) Wants are valued well above needs. This appears to be the buying opportunity of a lifetime. Kopernik are taking full advantage of a "Twilight Zone" world where many prefer to buy high and sell low. As was the case in 1999 and 2008, it is likely that this year some investors will awaken to a nightmare, even as fundamentals-based, value-focused investors stand to reap the rewards of due patience, fortitude, and diligence.

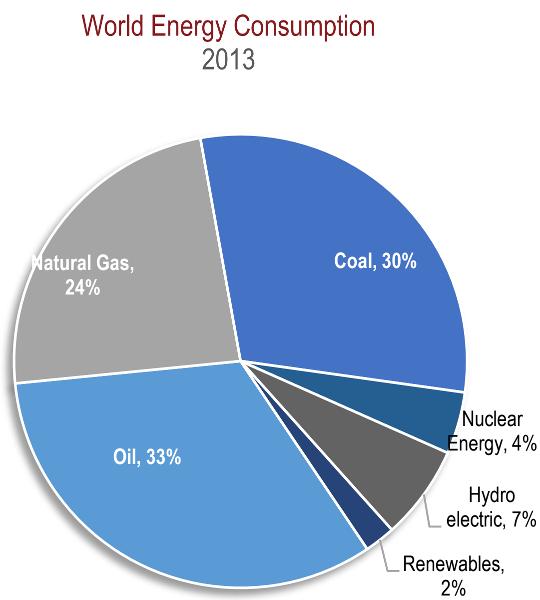
Happy New Year!
May 2015 bring you much health and happiness!

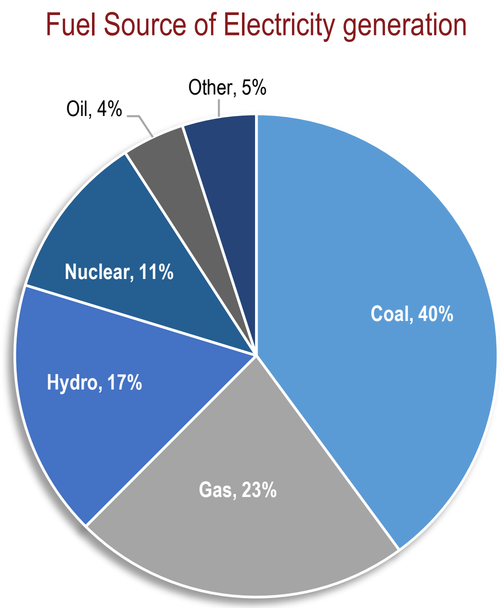
Cheers,

David B. Iben, CFA
Kopernik Global Investors
January 2015

"I ain't happy, I'm feeling glad
I got sunshine in a bag
I'm useless but not for long
The future is coming on
It's coming on"
-Clint Eastwood, by Gorillaz

Appendix





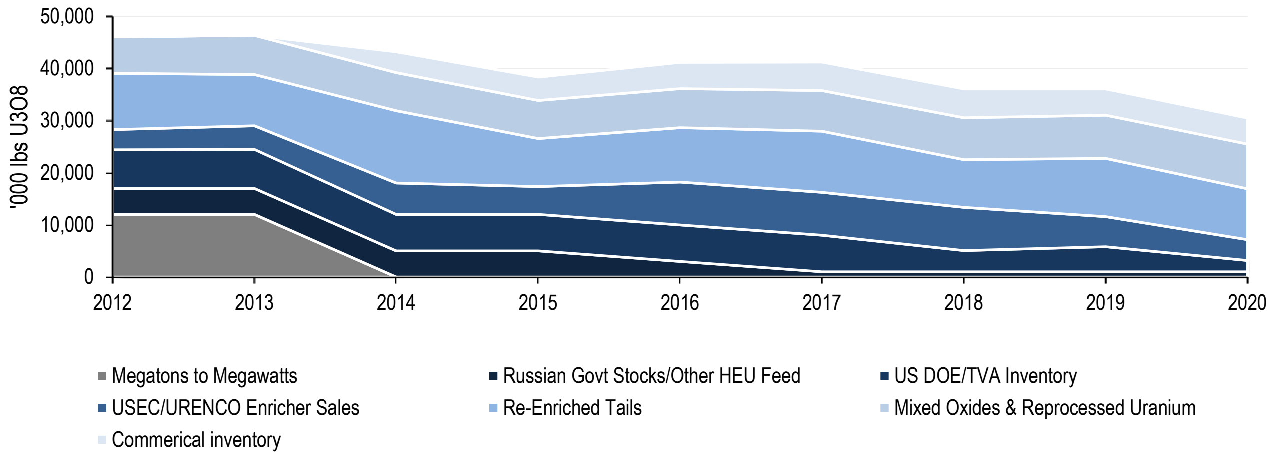
Source: World Bank

	Price		$/BTU	$/MWh
Coal (PRB)	$11.55	$ per Ton	$0.66	$6.56
Coal (CApp)	$49.95	$ per Ton	$2.08	$20.81
Coal (Ill. Basin)	$44.55	$ per Ton	$1.89	$18.88
Coal (China)	558.31	RMB/Metric Ton	$3.84	$38.38
Coal (Europe)	$71.30	$/Metric Ton	$2.99	$29.95
Coal (S. Africa)	$65.00	$/Metric Ton	$2.73	$27.30
Coal (Australia)	$62.75	$/Metric Ton	$2.64	$26.36
Natural Gas (US)	$3.21	per Mcf	$3.21	$24.05
Natural Gas (UK)	£0.50	Pence/Therm	$7.84	$58.77
Natural Gas (Gazprom sales into Europe)	$10.30	$/Mcf	$10.30	$77.25
LNG (Japan)	$16.02	$/Mcf	$16.02	$120.15
LNG (China)	$12.20	$/Mcf	$12.20	$91.50
Brent Crude Oil	$62.18	$ per bbl	$10.68	$116.86
Heating Oil	$1.85	$ per gallon	$13.74	N/A
Gasoline	$1.63	$ per gallon	$13.05	N/A

Source: Bloomberg

Global Uranium Supply
Secondary Sources
2012-2020E

Source: UX Consulting Company

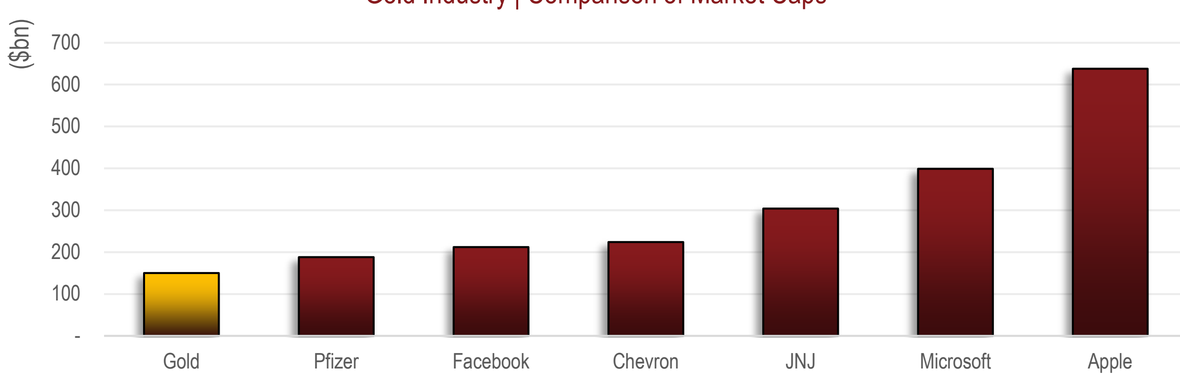


US run a deficit in 46 of last 50 years.	Source: Bloomberg
US national debt is now $17.9T	Source: http://www.usdebtclock.org/.
End of 2013 GDP = $16.768 trillion	Source: BEA.Gov
Total US unfounded liabilities = $115.5T	Source=http://www.usdebtclock.org/.
Monetary Base 11/1/14 = $4.018T	Source= http://research.stlouisfed.org/fred2/series/AMBNS

US Gov. deficit as a % of GDP = 17.9T/16.768 = 1.067x or 106.7%
Total unfunded US liabilities as a % of GDP = 115.5/16.768 = 6.92* or 692%
Cash as a percent of Gov. deficit = 4.018/17.9 = 0.22x or 22%
Cash as a percent of total US liabilities = 4.018/115.5 = 0.034* or 3.47%

<u>Gold Miners Market Cap vs Upside Potential</u>
Liquidation Value: $200/ounce for ounces in the ground and an 85% recovery rate.
Optionality Value: $260/ounce (the price of a 5yr call option with a strike price of $1300); same ounces and recovery rate
Theoretical Value: $900/ounce; same ounces and recovery rate.

Gold Industry | Comparison of Market Caps

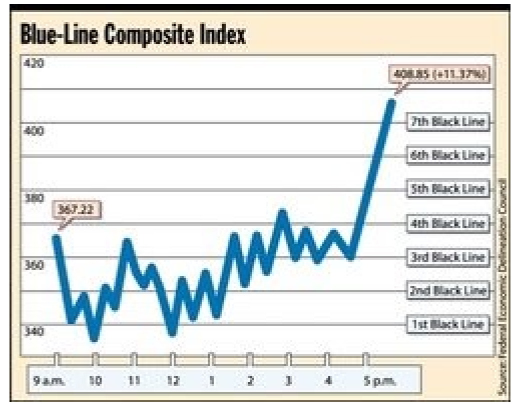


The ONION
From 2000

NEW YORK–Excitement swept the financial world Monday, when a blue line jumped more than 11 percent, passing four black horizontal lines as it rose from 367.22 to 408.85.

It was the biggest single-day gain for a blue line since 1994.

"Even if you extend the blue line's big white box back many vertical lines, you won't find a comparably large jump," said Milton Vogel, a senior analyst with Merrill Lynch. "That line just kept going up, up, up." The blue line, which had been sluggish ever since the red line started pointing down in April, began its rebound with an impressively pointy 7 percent rise Friday. By noon Monday, it had crossed the second horizontal line from the top for the first time since December. Ecstatic investors are comparing the blue line to the left side of a very tall, steep blue mountain.



Blue-Line Composite Index

"It's a really steep line," said Larry Danziger, a San Jose, CA, day trader and golf enthusiast. "I stand to make a tremendous amount of money as a result of the steepness of this line."

"It looks like the line's about to shoot out of the box," said Boston-area investor Michael Lupert, enjoying a glass of white zinfandel on the bow of his 30-foot yacht. "I'm definitely going to keep a close eye on this line as it continues to move to the right."

Wall Street traders react to the blue line's 41-point leap.

Despite such bullishness, some financial observers are urging caution.

"Given this line's long history of jaggedness, we really should take a wait-and-see approach," Fortune magazine associate editor Charles Reames said. "And even if this important line continues its upward pointiness, we must remember that there are other shapes, colors, numbers, and lines to consider when judging the health of the economy."

Reames also warned that the upward angle of the line, which most analysts agreed was approximately 80 degrees, may have been exaggerated by the way the graph was drawn.

A group of white men make cell-phone calls to discuss the blue line.

"The stuff that's written along the bottom of the graph is all squished together, making the line look a lot more impressive than it is," Reames said. "Had that same stuff been spread out more, the line would have looked a lot less steep."
Still, most U.S. investors found it hard to contain their enthusiasm as the blue line shot up sharply, outperforming the green line, the yellow line, and even the thriving dotted purple line.

"Typically, the blue line rises or falls no more than 10 in a day," said Beverly Hills plastic surgeon Dr. Jeffrey Gruber. "But Monday, it went up an astonishing 41–and during a time when we have a big red slice showing on our pie charts, no less. We live in a truly remarkable time.

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The Passenger

July 2016

The Passenger

"Oh, the passenger
How, how he rides
Oh, the passenger
He rides and he rides
He looks through his window
What does he see?
He sees the sign and hollow sky
He sees the stars come out tonight"
-Iggy Pop

Was Iggy referring to drugs or had he anticipated the beauty of ETFs circa 2016? Reviewers suggest that 'he sees how wonderful everything is once he relinquishes control, becomes the passenger instead of the driver.' Longtime readers know that I have a proclivity to view many songs and movies as metaphors for the investment world. In this case, passive investing, de rigueur in the marketplace, comes to mind. The "old school" investors labor over 10-Ks, 20-Fs and other regulatory filings, struggling through those boring 'notes to the financial statements,' and 'pounding the pavement' to perform due diligence via site visits and industry conferences, while vigorously 'interrogating' company management teams and then spending hours building valuation models. Meanwhile, the passive investor hops aboard the ETF du jour and *he rides and he rides.*

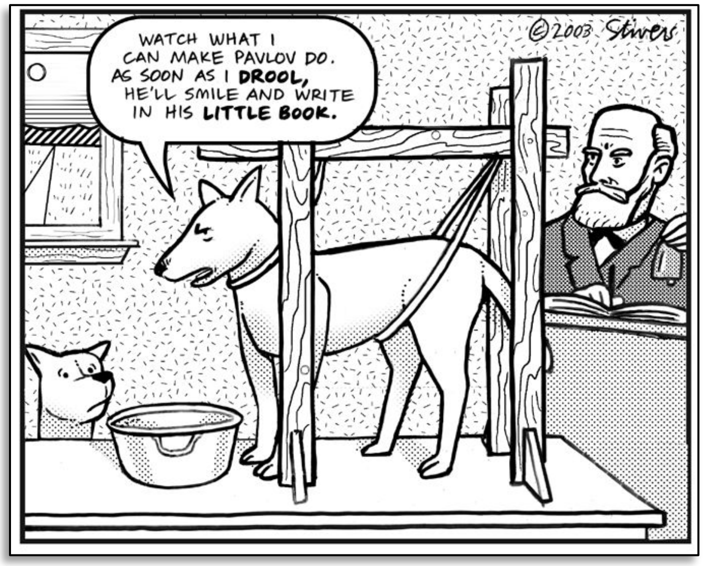
He/she enjoys generally high levels of trading liquidity, and the ability to quickly gain exposure to desired industries, sectors, regions, and cap ranges. Fees are minimal and taxes can be managed. Tracking error can be kept very low, a source of much relief to many. Much of the 'unseemly' 'rolling up of the sleeves' to perform tedious bottom-up, fundamental analysis can be dispensed with. While active investors are laboring away, the passenger, *he rides and he rides.*

The driver must contend with the 'back seat drivers.' Why did you turn that direction? This road is boring, that one, too crowded. Can't you drive faster? When will we get there? And the passenger? He doesn't have to explain short-term problems with individual stocks to clients. He doesn't need to defend volatility or tracking error, or conjure catalysts. No, *he rides and he rides.*

"And everything looks good tonight
Singin' la-la-la-la-la-la-la-la"
-Iggy

Sitting here, well into the 21st century, on the footsteps of the era of the driverless car, robo-advisors, and virtual reality, Kopernik hereby takes on the arduous task of defending 'reality.' This Commentary puts forth the case for active management. To jump to the conclusion, we believe that there is a need for diligent investment research. We believe that there is an investment return on independent thought, on hard work, on willingness to bear the discomfort that goes hand in hand with contrarianism. In the current environment that return is prospectively quite high. The performance battle between active/passive management is cyclical in nature, and once again it is time to invest actively. While we concede many of the virtues of passive management, it is clear that it has its pitfalls as well, which are being overlooked. The case for passive investing assumes just a few 'passengers' taking a free ride on the back of a market made 'efficient' by millions of investors working hard to gain equal access to information, staying rational at all times, performing analysis to derive a fair price, and always paying that fair price. Even if one were to believe that people are rational and that markets can be efficient, once there are too many passengers relative to too few drivers, the theory goes out the window. At that point, the premise is nullified; the tail is wagging the dog.

Kopernik
Global Investors, LLC



The Dog Days for Active Management

It was an honor to be invited to speak at the London Value Investor Conference in late May. It is clear that these days are indeed uncomfortable, figuratively muggy, for value investors. In fact, even at a value conference, more than half of the audience preferred to be viewed as 'franchise' investors. It seems that the maxim "everyone owns quality growth stocks" is not far off the mark. It's worth noting that it was much worse last year when, apparently, the vast majority shunned the value classification. Still, at this juncture, all investors that continue adhere to a value-based discipline must be asking: Is the stigma fading? Are the dog days finally winding down? Time will tell - either way, a discussion on passive investing may be instructive. It's important to start with the disclaimer that we've never believed that 'growth' was the antithesis of 'value.' It is merely a wonderful attribute that increases intrinsic value. ETFs on the other hand………

There were many interesting speakers, including Jean-Marie Eveillard, Howard Marks, and James Montier, all of whom I've admired for many years. I highly recommend the conference and plan to attend again in the future. I mention the conference because, among the many great presentations was one called "Passive Aggressive: The Implications of 'Industrialized' Capital Allocation," by Michael Keller, a Partner of Brown Brothers Harriman.

Mr. Keller addresses a quick history of capital allocation, highlights the size of the current market for passives and illustrates a handful of their benefits and drawbacks, and segues to the larger implications of industrialized capital and passive investment. I found many of his bullet points to be interesting and well worthy of passing along.

(Below is a summarized version of his slides, to which we've taken some editorial license)

60 years of commercial, technological and analytical innovation in the capital markets

- Computerization, OTC, MPT, EMH, stochastic price models
- Deflation of trading commissions

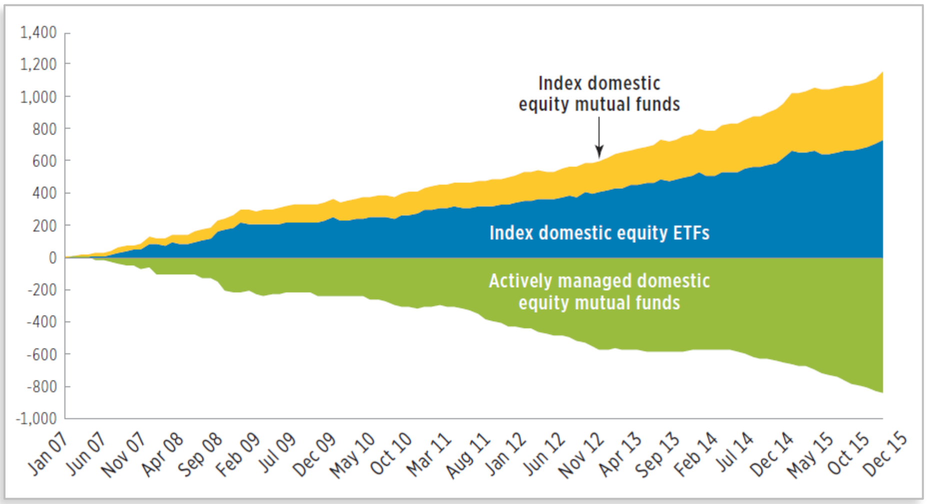
Multi-decade rise of commingled products and funds

- Retail investors and advisors gravitate toward funds over stock ownership
- Major industry shifts - DB to DC, in-house to consultant led, bank trust model to open architecture
- Fund complexes became big business
- Size begins to conflict with specialization and concentration
- 'Index hugging' (intentional or not) becomes widespread
  - Being different can have career costs in a style box driven world!

Growth of Exchange-Traded Funds

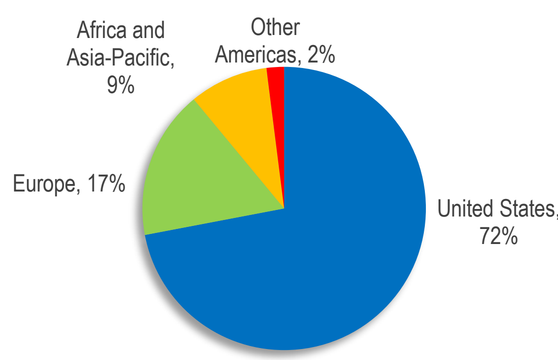
- Technology ingenuity and capital enabled the rise of index funds/ETFs
  - Today, a stunning array of varieties, including leveraged macro and factor-based
- The market has become massive
  - ETFs alone total ~3 trillion; 6x increase in AUM over 10 years
  - Including index mutual funds and separate accounts, we estimate as much as $20 trillion is being managed passively worldwide; approximately 1/3 of total market cap
- Seven-year bull market and monetary policy excesses have played a role, particularly post-2012

Cumulative flows to and net share issuance of domestic equity mutual funds and index ETFs
billions of dollars, January 2007–December 2015

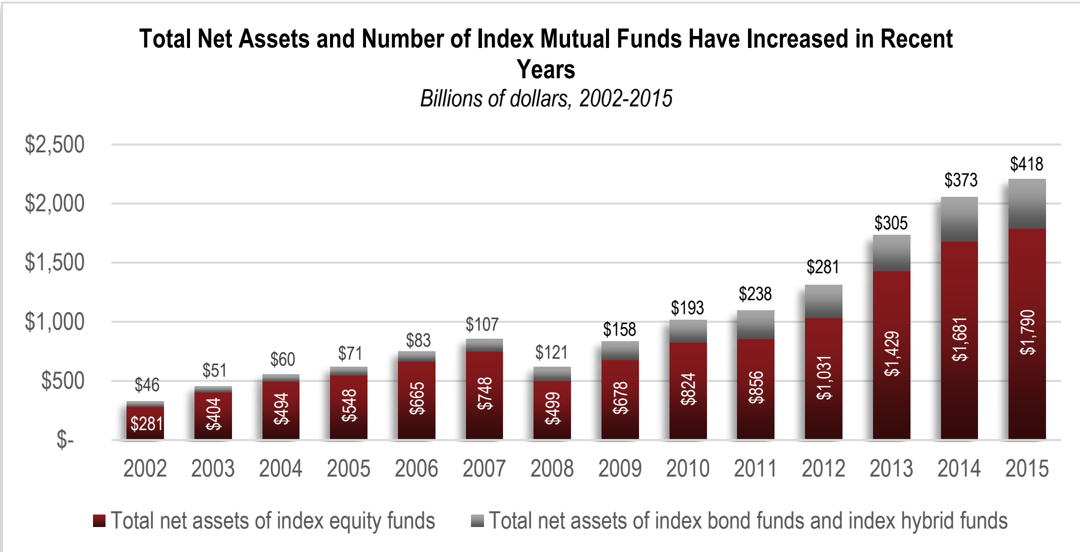


Note: Equity mutual fund flows include net new cash flow and reinvested dividends.
Data exclude mutual funds that invest primarily in other mutual funds.

The United States Has the Largest ETF Market
Percentage of total net assets, year-end 2015



Sources: ICI Investment Company Institute, 2016 Investment Company Fact Book



Sources: ICI Investment Company Institute, 2016 Investment Company Fact Book

Passive funds have continued to take market share in the asset management business globally. The "active" industry is now only four times bigger than "passive", compared with 8.5 times in 2007. -GREED & fear, Chris Wood, CLSA

Benefits

- Low costs, low turnover, minimal tracking error, tax advantages, broad menu of options
- ETF industry structure provides liquidity and reliable pricing (most of the time)
- Low-cost 'robo advisory' and target date funds improve financial inclusion
- Free drag from low value-added active managers is squeezed out

Drawbacks

- Products with cap-weighted structure dominate the market
  - **Incremental flows benefit the recent winners**
  - Higher volatility and correlation; investors use passives to chase on the way up, cut exposure on the way down
- **Active manager redemptions precipitate selling in conviction stocks**
- **Index composition determined by third party**
- Realized shareholder returns may not match benchmark
- Changes in shareholder voting power

It is worthwhile to add that the third party determining the index does not even try to identify the most attractive investment candidates, nor do they claim to.

Mr. Keller then featured the following quote from Glenn O'Donnell, Forrester Research 2010*: "A process or profession becomes industrialized when it matures from an art form to a widespread, repeatable function with a predictable result and accelerated by technology to achieve far higher levels of productivity."* This evolution from an art to an industry is interesting. A third of a century ago, I believed that our business was 80% science and 20% art but now view the ratio to be roughly the inverse. Not to be misconstrued, the science portion is important. In fact, it is prerequisite. But, as Charlie Munger points out, a multidisciplinary approach is necessary. Many of the things that managers put forth as competitive advantages are merely the bare minimum of attributes that a good manager must have. **The edge comes from augmenting the math and science with the arts.** One must consider economics, history, psychology (crowd behavior), philosophy, integrity, generosity, aptitude, incentive structure, and so much more. Mr. Keller seems to be laying out a powerful case that the investment industry's vast and impressive increase in efficiency has not served the clients well. It has inadvertently done the opposite. The proverbial forest has been lost in the trees. He points out that **the mindset has shifted from managing securities to managing exposures.** Kopernik would say, it has **shifted from investing in companies to speculating on trends.** He makes the important observation that a systemized approach may sound reasonable but it doesn't work well in real life since "the market is not a repeatable, solvable system." It is affected by human behavior, unpredictable events, and exogenous factors. Also, systems tend to look backwards creating the "risk of constantly 'fighting the last wars.'"

Why ETFs are Inherently Anti-Value

*"I am a passenger
I stay under glass"*

It is time to put the passenger 'under glass.' Let's use the magnifying glass. In our past Commentary ("When"-ing isn't Everything), we discussed how good analysis requires the rigorous use of questioning. Regarding ETFs: Is the 'science' of investing incorporated in the construction of ETFs? Is the 'artistic' side of investing incorporated in the construction of ETFs? Is the wisdom of Munger, Templeton, Marks, Klarman, Rogers, etc., etc., etc., incorporated in the construction of ETFs? Do the assumptions underpinning the efficient market hypothesis hold in the contemporary world of ETFs?

Mr. Keller devotes a slide to the anti-value (my words) characteristics of ETFs and to the resultant "Opportunities for Value Investors."

- Little attention is paid to divergences between market value and intrinsic value
    - Stocks are purchased/sold reflexively; index membership, sector or factor overrides other considerations
- Momentum orientation of index-based and factor products adds to market volatility, which erodes compounding over cycles
    - Inflows are self-conforming, little attention paid to the **incremental risks** undertaken
    - **Value-oriented investors with a full-cycle mindset can benefit**
    - 'Smart beta' and factor-driven styles aren't substitutes for fundamental strategies; they don't employ due diligence or subject matter expertise
    - **Contextual awareness as a form of risk management can be quite valuable**
    - Doesn't imply a need for macro analysis, but instead an ability to objectively study the high-level view
    - Empiricism vs. judgement; doesn't have to be a religious debate

His subsequent slide entitled "Differentiated Active Management Shines Over Full Cycles" demonstrated that the vast majority of managers that have outperformed the S&P 500 over a 10-year period, had high active share combined with moderately low turnover. (He sources eVestment and BBH analysis). We, at Kopernik, are particularly pleased with this finding.

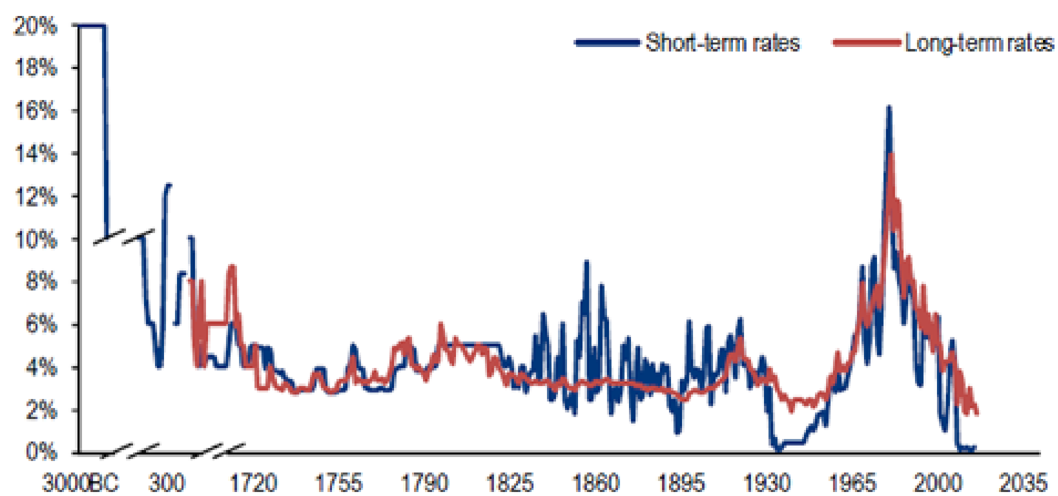
Before moving on to the next section, a few examples of the monsters that can result as the unintended consequences of good ideas. High quality global journalism requires investment.

From the FT on May 30, 2016

> "*The research group Morningstar classifies 25 ETFs as low volatility funds, with $35bn in assets at the end of April, $9.8bn of which had been invested in the first four months of the year. The pace of inflows picked up sharply in February, after stock markets gyrated with fears of a global recession.*
>
> *Money has kept being added, even though the Vix index of market volatility has fallen back close to a one-year low. The six largest low vol ETFs alone had further inflows of $1.6bn in May.*
>
> *The $13.1bn iShares Edge MSCI minimum volatility USA fund from BlackRock, which has doubled in size in the past 12 months, has had inflows on all but three days so far this year. A $7.1bn sister fund that runs a minimum-volatility portfolio of non-US stocks has had inflows on every day but one this year."*

The article quotes Jeffrey Gundlach, "Low volatility stock funds are probably the most dangerous thing out there." We tend to agree, but it will be interesting to see how posterity judges them relative to negative yield bonds.

Chart 1: The lowest interest rates in 5000 years



Source: BofA Merrill Lynch Global Investment Strategy, BoE, Global Financial Data, Homer and Sylla 'A History of Interest Rates'
Note: the intervals on the x-axis change through time up to 1700. From 1700 onwards they are annual intervals. Full methodology available upon request

"Nobody told me there'd be days like these
Strange days indeed strange days indeed

Everybody's runnin' and no one makes a move
Everyone's a winner and nothing left to lose
-John Lennon

Another example of good no longer being good when it becomes overdone is the Nifty-Nine (The infamous FANG stocks plus Priceline, Ebay, Starbucks, Microsoft and Salesforce (apparently coined by Ned Davis Research)).

The Pools of the late 1920s, the bank trust departments of the early 1970s, the index funds of the late 1990s and the ETFs of the current era have much in common. All were times of easy money, of great leaps forward in technology, and of people confusing good companies and good ideas with good investments. All were times when momentum investing was very popular, when crowd psychology created bubbles. We have all seen this movie before.

"Richest blend in the world."

Monthly data. GFD Europe index is used, which reconstitutes the MSCI Europe estimate pre-1970, and includes a 12% UK weighting until 1970, after which it uses actual MSCI Europe weightings; latest UK weight is approx. 26%.
Source: BofA Merrill Lynch Global Investment Strategy, Bloomberg

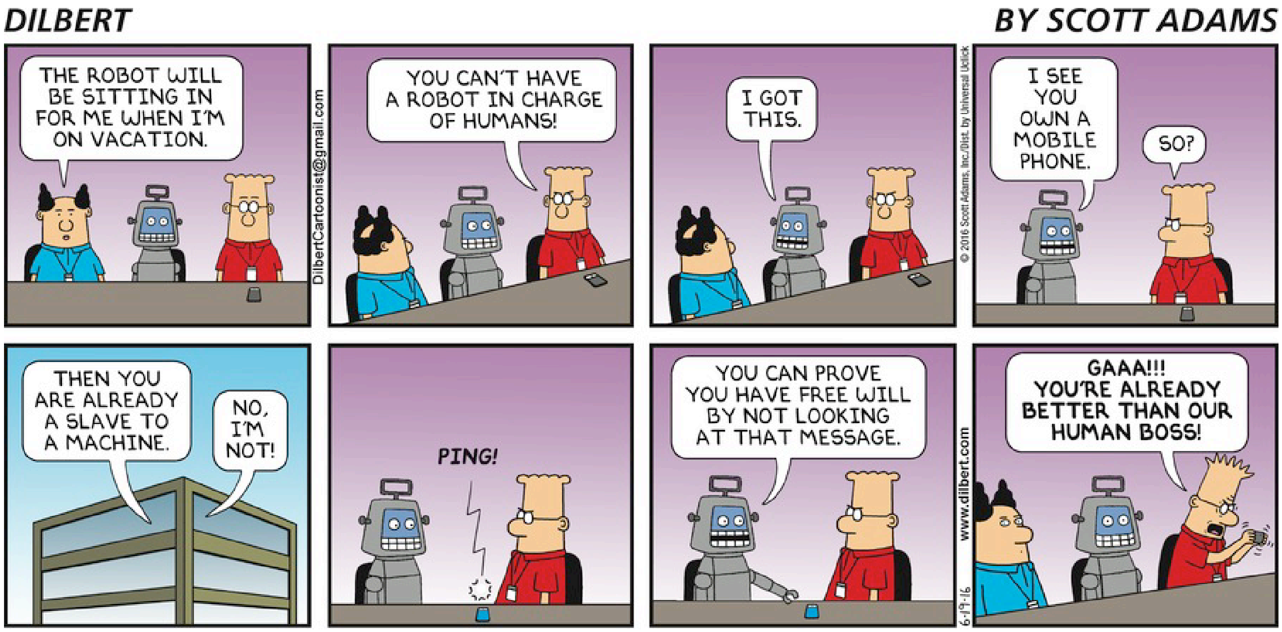
"We call it master and servant
it's a lot like life"

-Depeche Mode

Time to move on to the all-important subject of technology. We are huge fans. Technology makes life so much easier. It makes it possible to follow the world without being everywhere at once. But, we think that it's fair to expropriate P.T. Barnum's famous quote regarding money: " 'technology' makes a very excellent servant, but a terrible master." We believe that this is true for investment orthodoxies as well. Growth is good; value, prerequisite. Momentum is a factor, and quants add efficiency and reduce emotion. However, being a slave to any rigid orthodoxy is, we believe, foolish. Models and rigid processes are begging to be gamed and/or front run. Having algorithms drive the process certainly doesn't change this.

al·go·rithm

algəˌriTH̲əm/
A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.



"But I am not kidding when I say that a growing number of people in the markets know a lot about computers but virtually nothing about markets."
–Jared Dillian, The 10th Man

We've talked in the past about how social sciences often seem to envy the physical sciences. Nowhere is this more true than in economics and investments. And, perhaps, nowhere is it more spurious than when it comes to risk management. I can't quickly capture in a paragraph a subject to which Howard Marks devoted three must-read chapters. But that is precisely the point. Risk can't be captured in a nutshell. It is difficult. It pertains to the future, to the unknowable. It is said that risk means that more things can happen than will happen. How can that be captured in a number? In a cyclical world, do past trends extend into the future or do they revert to the mean? It depends, of course. Beta, volatility, and tracking error do nothing to help one understand if they are overpaying for a security. They do nothing to help predict the future. But they sound impressive. And they can be calculated, and calculated quickly by computers. As Mr. Gundlach suggests above regarding low-vol ETFs, mis-defining risk can be the most dangerous thing one can do. We will add that when index benchmarks are over-priced, high tracking error is not a risky thing, it is a desirable thing. Even when it is calculated by a powerful computer.

"Running through the field where all my tracks will be concealed and there's nowhere to go."
-RHCP

In conclusion, we are not anti-passive investing. For example, it makes sense that entities managing large sums of money choose to allocate the bulk of it to a passive 'core.' Why pay for active management in situations where the size of the investment will tend to force the returns to converge towards the index returns? It is also reasonable that many choose to augment the passive core of the portfolio with active 'satellites.' Logically, the satellites choose to limit capacity and have very-high 'active-share,' thus allowing for significant divergence from the core. The less like the core the better.

Our points are that anything is dangerous when taken to excess and that everything has a time and a place. Pertaining to time, one can't help but feel a little joy for the City of Cleveland, which in sporting terms, waited for more than a half-century for their time to come. For those who invest with active managers, or in value stocks, or emerging markets, gold, or other hard assets, it feels like things have been out of sync for a half-century. It has been an unusually prolonged correction. As we discussed in 'The Big Long' Commentary, it has/had lasted anywhere from 2 to 9 years through this past January. And, as the commentary pointed out, this is a good thing. The more depressed the valuations at the nadir, the more pronounced the subsequent upswing is likely to be. In the investment arena, the importance of major inflection points can't be overemphasized. This is often when anti-value capitulates to value. Momentum stocks, like the fireworks on the Fourth of July, reach their zenith and succumb to the force of gravity, to the oohs and aahs of the crowd.

In terms of taking good things to excess, we are often told that virtually everyone is heavily invested in 'quality growth stocks', trendy ETFs, and in anything that historically has exhibited low volatility. Let the fireworks begin!

"Oh the passenger
He rides and he rides
He sees things from under glass
He looks through his window side
He sees the things that he knows are his"

To this we ask, does he, in fact, "see the things that he knows are his?" Or is he playing a trend, or merely following the direction received from an ivory tower, without really knowing what the ETF owns or what is it worth?

We, at Kopernik Global Investors, are active investors. We are appraisers of businesses; owners of businesses. We are passionate about rolling up our sleeves and doing fundamental research. We are obsessed with uncovering value. When it comes to investing other peoples' money, we don't want to be taken for a ride. We want to know what we own. We want to know why we own it. We want to have a strong grasp of how much it is worth. We utilize many of the advantages that technology has to offer, but we like being in the driver's seat.

Have a healthy and happy second half to 2016.

Cheers,

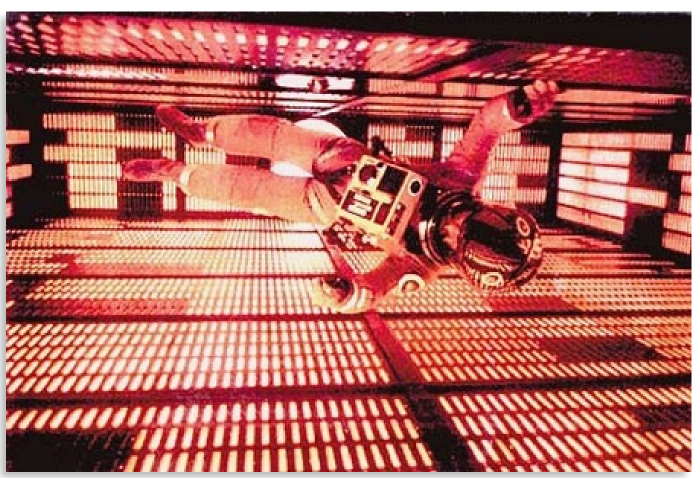
David B. Iben, CFA
Chief Investment Officer
July 2016

P.S. A lot of people are fearful of computers and robo-advisers. We welcome them as tools, to augment the intuition, creativity, interpersonal skills, independent thought that, thus far anyhow, are only possessed by human beings. We leave you with the most famous lines from 2001 A Space Odyssey:

HAL: Just what do you think you're doing, Dave?

HAL: Look Dave, I can see you're really upset about this. I honestly think you ought to sit down calmly, take a stress pill, and think things over.

HAL: I know I've made some very poor decisions recently, but I can give you my complete assurance that my work will be back to normal. I've still got the greatest enthusiasm and confidence in the mission. And I want to help you.



"And I don't want it, the things you're offering me
Symbolized bar code, quick ID, oh yeah
See I'm a 21st century digital boy
I don't know how to read but I've got a lot of toys
My daddy's a lazy middle class intellectual
My mommy's on Valium, so ineffectual
Ain't life a mystery?"

-Bad Religion

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Please consider all risks carefully before investing. Investments in a Kopernik Fund are subject to certain risks such as market, investment style, interest rate, deflation, and illiquidity risk. Investments in small and mid-capitalization companies also involve greater risk and portfolio price volatility than investments in larger capitalization stocks. Investing in non-U.S. markets, including emerging and frontier markets, involves certain additional risks, including potential currency fluctuations and controls, restrictions on foreign investments, less governmental supervision and regulation, less liquidity, less disclosure, and the potential for market volatility, expropriation, confiscatory taxation, and social, economic and political instability. Investments in energy and natural resources companies are especially affected by developments in the commodities markets, the supply of and demand for specific resources, raw materials, products and services, the price of oil and gas, exploration and production spending, government regulation, economic conditions, international political developments, energy conservation efforts and the success of exploration projects.

Investing involves risk, including possible loss of principal. There can be no assurance that a fund will achieve its stated objectives. Equity funds are subject generally to market, market sector, market liquidity, issuer, and investment style risks, among other factors, to varying degrees, all of which are more fully described in the fund's prospectus. Investments in foreign securities may underperform and may be more volatile than comparable U.S. securities because of the risks involving foreign economies and markets, foreign political systems, foreign regulatory standards, foreign currencies and taxes. Investments in foreign and emerging markets present additional risks, such as increased volatility and lower trading volume.

The holdings discussed in this piece should not be considered recommendations to purchase or sell a particular security. It should not be assumed that securities bought or sold in the future will be profitable or will equal the performance of the securities in this portfolio. Current and future portfolio holdings are subject to risk.

To determine if a Fund is an appropriate investment for you, carefully consider the Fund's investment objectives, risk factors, charges and expenses before investing. This and other information can be found in the Fund offering materials, which may be obtained by contacting your investment professional or calling Kopernik Fund at 1-855-887-4KGI (4544). Read the offering materials carefully before investing or sending money. Check with your investment professional to determine if a Fund is available for sale within their firm. Not all funds are available for sale at all firms.

Time in a Bottle

April 2017

TIME IN A BOTTLE

If they[1] could save time in a bottle,
the first thing that we'd have to do,
is to save every day,
till eternity passes away
just to afford life, it's true.

If they could make debts grow forever,
their words could make wishes come true,
we'd print every day,
some more treasure, and then,
per Ben,[2] we would spend them, it's true.

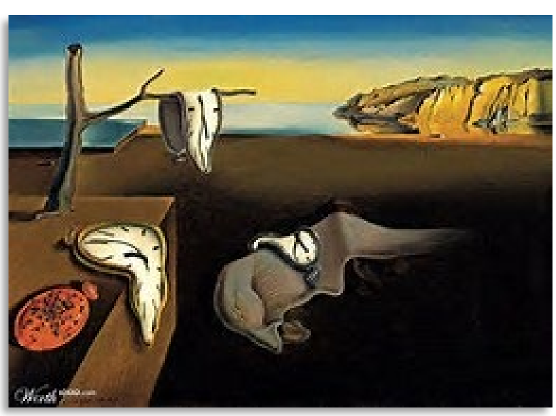
But there never seems to be enough time,
to earn the returns, pensioners are due
once you fund them
I've been around enough to know
values are the ones
I want to go through time with.

If I had a box just for wishes,
and dreams that had never come true,
the box would be empty,
except for the memory
of how they tried QE, plus two.

Jim Croce, *Time in a Bottle*
[1]The Central Banks
[2]Ben Bernanke

This a treatise on time. What is the essence of time? How do we account for it? How do we value time in the current era, an era that is increasingly being referred to as the "post-truth" era? One of the 'truths' that has been taken from us is the market derived value of what time is worth. The world's central banks have taken the rate of interest to zero (or below), and in the process deprived us of an invaluable input in the discounting mechanism used to value investments. They have, in essence, stolen the price of time – the value accruing to capital over time is negligible. The advantage to saving money is greatly diminished (the recent rate moves in the U.S., to levels a hair's breadth above zero, do not alter the following discussion).

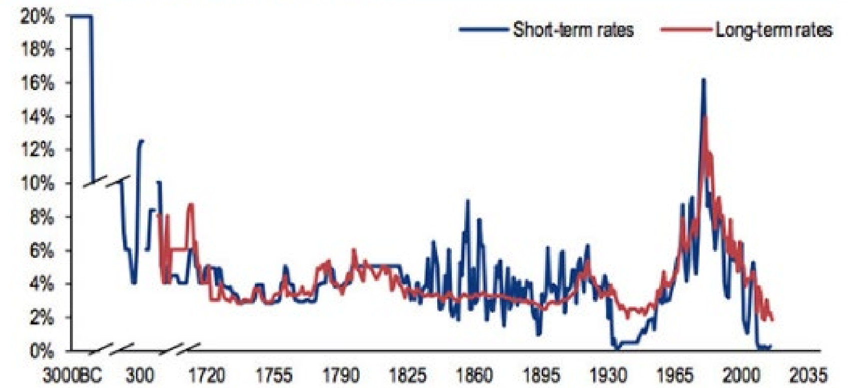
Keeping in mind the saying made famous by John Templeton, an investor we deeply admire, who opined that the four most dangerous words in investing are "this time it's different," it is with some trepidation that we pen this article about how *this time it really is different*. Now, not to be misconstrued, while things are extremely different at this moment in time, in the long run, things won't turn out differently. For good or bad, we pretty much know how this story ends.



"But if you close your eyes,
Does it almost feel like
Nothing changed at all?
And if you close your eyes,
Does it almost feel like
You've been here before?
How am I gonna be an optimist about this?"
– Bastille – Pompeii

There will undoubtedly be some twists in the plot since central banks are trying some interesting strategies. However, history is rife with examples of similar monetary institutions employing the same fallacious policies that are currently viewed as 'innovative.' We find no evidence, however, of these historical antecedents happening on a concerted worldwide effort, nor of interest rates being taken down to such extreme levels.

Chart 1: The lowest interest rates in 5000 years



Source: BofA Merrill Lynch Global Investment Strategy, BoE, Global Financial Data, Homer and Sylla 'A History of Interest Rates'
Note: the intervals on the x-axis change through time up to 1700. From 1700 onwards they are annual intervals. Full methodology available upon request

In the short-term this means that things are different and different in ways that can't be ignored. **Business as usual could prove dangerous**.

For example, what discount rate should investors use in their DCF (discounted cash flow) models? Does the financial engineering, that is so prevalent today, justify assuming permanently higher profit margins when building one's financial valuation models? Or do these shenanigans portend much lower margins in the future? Will the debt-enabled growth of the past half-century (supercharged over the past decade) follow a Keynesian model and multiply into even better growth, or will it prove to have borrowed growth from the future?

Truly, the central bankers have made investment analysis a much more arduous task. One must wonder: Are financially engineered book values as meaningful as they once were? Do these metrics still even have meaning? Are extremely low earnings yields (high P/E ratios), based upon highly levered and manipulated earnings, justified merely because rates on competitive investment alternatives are similarly depressed? Or are P/E multiples ultimately headed way lower as the market anticipates that debt-infused mal-investment will likely lead to lower future earnings? As cheap debt increasingly replaces equity on corporate balance sheets, are book values as meaningful as they were in the past? As cash flow metrics become increasingly tortured, how much alternative analysis is now required to compensate for these inaccuracies? In particular, as we'll get to shortly, how much should we depend upon estimates of cash flow in the **future**? Are currencies a way more important factor now than they were before the era of competitive devaluations? Though it hasn't been that long since last spring's Commentary on the importance of the question "when," the current centrally planned economy dictates that the matter of time receive yet more attention, more thought, and more discussion. Much more.

"As if you could kill time without injuring eternity" - Thoreau

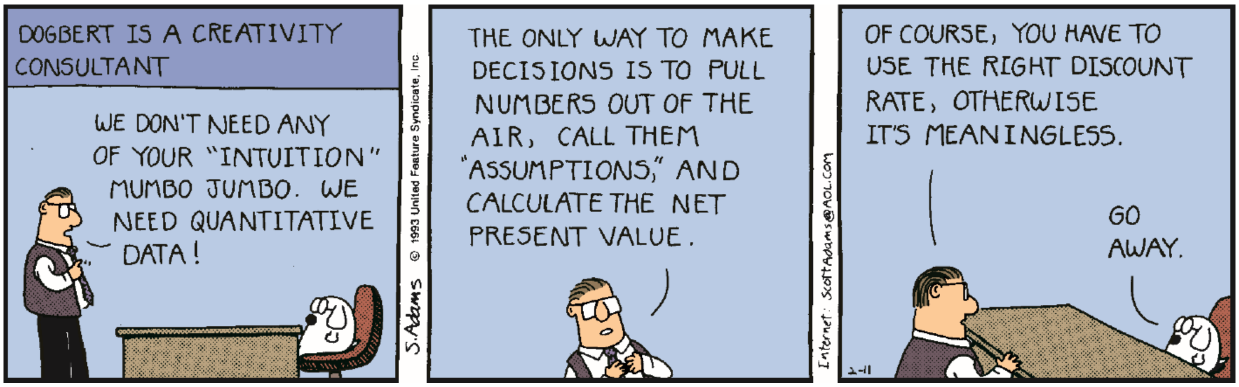
We promise not to spend an inordinate amount of time on economic theory, but when central bankers, and kindred central planners, monkey with the market mechanism, it can't be ignored. Ever since the advent of QE (quantitative easing), we've marveled at the hubris of central bankers, and their presumed ability to turn unlimited quantities of paper into money of real value. This is analogous to the Sorcerer's Stone, circa the 21st century. Fortunately, this folly has led to very good, if extremely erratic, investment returns over the past eight years. The recent string of ever-increasing prices of stocks, bonds, real estate, and of other investible asset classes, seems to have created a legion of investors in search of instant gratification. Over the past several years we've been bemused by the market's fascination with time/timing, with an increasing focus on the Fed's arrogant attempt to "bottle" time. What should we make of the central bankers' 'altruistic' gesture to make the cost of borrowing de minimus. It doesn't take economic training to understand the concept of TANSTAAFL (there ain't no such thing as a free lunch), i.e. there are trade-offs. As pertains to everything - somehow, somewhere, somebody is paying for it, and/or an opportunity to have done something else has been foregone. It should be clear that one person's gain is another's loss. For one person to be able to borrow for free means another person is getting no return on a loan they have made. Borrowers gain at the expense of savers and of investors. This sometimes means that one generation is benefitting at the expense of another. Clearly these situations can create disharmony. It is paradoxical that a less certain, possibly disharmonious future coincides with lower rates by which society discounts that future.

It should be self-evident that low expected rates of return on investments will disincentivize incremental investment. When desired returns are unlikely to be realized from more legitimate investment alternatives it may chase people into speculative investment vehicles. Further disincentivizing investment is the lack of pertinent information about what constitutes a fair return on that investment. If one can put a $100 in the bank and it will be worth $110 a year from now (10% rate of interest), they likely won't consider making an investment that portends less than 10% annually. The less certain the prospects of an investment, the more likely a return above 10% will be demanded. When demand for borrowing is high, the marketplace charges more for loans, and conversely, when demand is low, the rate of interest charged falls to a lower level. With this in mind, central planners theorize that if they artificially lower the rate of interest, demand for goods will move higher, creating self-perpetuating economic growth and jobs. Conversely, the so called 'Austrian economists' believe that artificial demand leads to too much capacity, financed by too much debt, which leads to an eventual economic bust due to the resultant redundant capacity. We'll leave it to the reader to decide which theory makes more sense to them.

An early proponent of the Austrian school of thought, Ludwig von Mises, postulated a century ago, just after the collapse of the Austrian Empire, that individual subjective values are translated into the objective information necessary for rational allocation of resources in society. In his 1920 paper on the Economic Calculation Problem, he made clear that economic planning is a poor substitute for free market capitalism. In those days, of course, his criticism was focused on the socialism of capital goods. He probably couldn't have even imagined today's world of socialized financial markets, one sometimes referred to as socialism for the rich. Can centrally planned interest rates really lead to better allocation of capital than would rates set by supply and demand in a free marketplace? With that as a background, let's delve into the topic at hand: How do we solve the problem of valuing companies in a world without time? A world where your bank balance earns nothing? In a world where mal-investment rules the day? How do we solve today's "economic calculation problem"?

$$\text{NPV} = \sum_{t=1}^{T} \frac{\text{Estimated Cash Flow}_t}{(1+\text{Estimated i})^t} - \text{Initial Cash Investment}$$

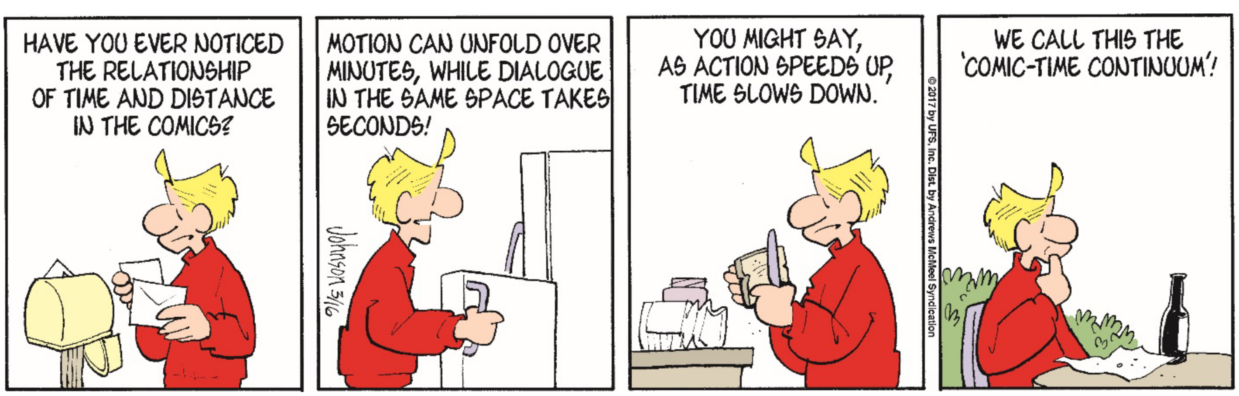
One of the most popular valuation models used in our industry is the DCF or discounted cash flow model (shown above). It adjusts for the fact that cash becomes less valuable to us over time due to the cost of that capital and/or the ability to make returns on that capital elsewhere. The model is so popular that it is commonly understood that "Intrinsic Value ***is*** the Present Value of Future Cash Flows."



This is a surprisingly dangerous tenet. Highly relevant to the discussion is the fact that DCF models have been referred to as the Hubble telescope of investment models: It gives you incredible clarity, but if anything's a tad off, you are looking at the wrong galaxy. If being off by a fraction, can put you in the wrong galaxy, might the type of errors for which government planners are infamous put us in 'a galaxy far, far away'? The problem is the inconvenient fact that no one knows what cash flow will be in the future. One must guess. People prefer the term "estimate" to guess. Anyone who doesn't understand that human beings are way worse at forecasting that we think we are might try reading *The Little Book of Behavioral Investing* by James Montier or *The Undoing Project* by Michael Lewis. Due to central bank induced mal-investment, estimating the future is likely much harder now than at most any time over the past 3/4 century. Cash flow margins have been inflated to unsustainable levels and growth rates have been goosed at the expense of future growth. A more important problem is that the central banks have suppressed, beyond imagination, the rate of interest that is the primary variable in determining the rate that is used to discount the aforementioned guesstimates of cash flow. In other words, DCF, this once cornerstone of fundamental valuation analysis, has become essentially obsolete.

"Tell me, tell me one more time"
-Joe Jackson, One More Time

Before venturing into a difficult discussion of valuing securities sans a way to price time, let's restate what we know. Many investors believe that the 'correct' way to ascertain the intrinsic value of a security is to calculate the present value of future cash flow. Not cash flow, but estimates for future cash flow. There are reams of data that suggest people are not very good at estimating future cash flow. Compounding the problem is the tendency to magnify small errors into big mistakes. And the icing on the cake is that the world's central bankers' actions have catapulted our ability to forecast from extremely hard to ridiculous.



With that as a backdrop, we at Kopernik, believe that the conventional wisdom, that "Intrinsic Value ***is*** the Present Value of Future Cash Flows" has it backwards. We recognize that ***Future Cash Flow is the likely outcome from owning an Asset that is Intrinsically Valuable***. Fortunately, while central banks can mess with information, they cannot suppress the inherent worth of assets and franchises. Their worth cannot be set at zero in a committee meeting. Assets (and people) are intrinsically valuable. And the more valuable they are, the more economic value they are likely to generate in the future. In a world where one can have a reasonable understanding of what something is worth, but can't reasonably know *when* that value will be realized, nor what discount should be charged against the time required to wait, use of a forecasting tool seems foolhardy. Or more succinctly, when an investor knows "*what*" and "*why,*" but not "*when*," models should be based on "*what,*" not "*when*". A large discount can be used to compensate for the uncertainty around timing. Therefore, rather than guessing the future and then trying to price time to ascertain value, Kopernik flips the model upside down. Starting with what can be reasonably assessed, we appraise the value of a franchise (to be discussed further in the rider below). Comparing our appraised value to the market's appraisal based upon crowd consensus, we then use scenario analyses to determine the rate of return that will be garnered from an investment in that franchise, using varying periods of time until the marketplace gets around to pricing in the value we have calculated. The analysis also indicates the degree to which our investment hurdle rates can be exceeded or missed. As the nearby table illustrates, an asset bought at half-price will generate more than 10% annually even if one's patience can endure for seven long years. If it takes a full decade to reach fruition, the return drops to 7%, disappointing but not too bad. Conversely, if the markets recognize the value within two years, the return on the investment exceeds 40% annually.

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

"If something must happen, it will happen"

In summary, central bank meddling has made conventional valuation models much less reliable than in the past. We believe that prudent analysis now requires the use of many differing valuation metrics. Metrics should be tailored to specific industries. In the current environment, it is all but impossible to accurately determine any of the input variables used in a DCF model for equity securities, making their use extremely dangerous. Caveat emptor. On the other hand, rather than guessing the future, use of solid fundamental analysis to appraise the value of franchises/assets can provide healthy returns to patient investors who have the conviction to see their investments through to culmination.

(This concludes the main message of this commentary. For those whom have interest, a further discussion can be found as a post script. Addressed first are the perils of assigning undue value to units of currency expected to be received in the future. Secondly, we'll delve into ways of appraising businesses sans a crystal ball.)

"*The only reason for time is so that everything doesn't happen at once.*"
- ~~Albert Einstein~~, Ray Cummings

Thank you very much for your continued interest and support.

Cheers,

David B. Iben
Chief Investment Officer
Kopernik Global Investors, LLC
April 2017

"No such thing as tomorrow
All we want
Two, three, go!
Time, got the time tick tick tickin' in my head"

– Joe Jackson, Got the Time

Having already discussed the difficulty of using DCF, let's move on to another important factor in the model – what is being discounted? In the investment world, we are discounting future expected cash flow, in other words currency. When discounting the value of currency to be received in 30, 20, even 10 years from now, curious minds will want to know more about the nature of money, in general, and currency in particular.

mon·ey (mŭn'ē) *n. pl.* **mon·eys** or **mon·ies**

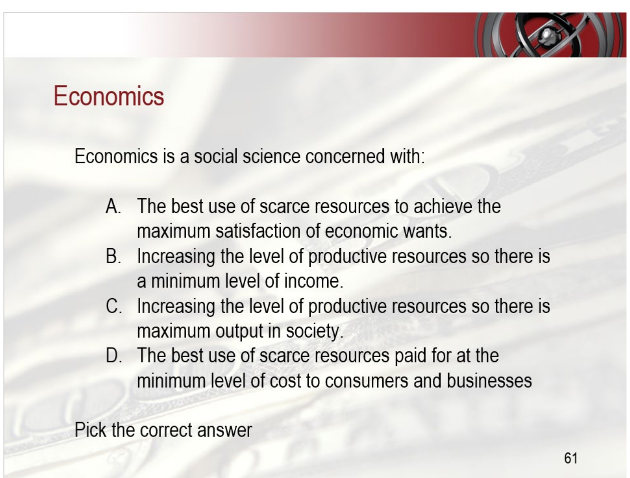
1. A medium that can be exchanged for goods and services and is used as a measure of their values on the market, including among its forms a commodity such as gold, an officially issued coin or note, or a deposit in a checking account or other readily liquefiable account.
2. The official currency, coins, and negotiable paper notes issued by a government.
3. Assets and property considered in terms of monetary value; wealth.

Now, like many things, the definition seems to have become watered down with time. In the past, the first half of definition number one would be readily accepted, with the rest likely to be considered derivatives of money. But let's go with it. And currency?

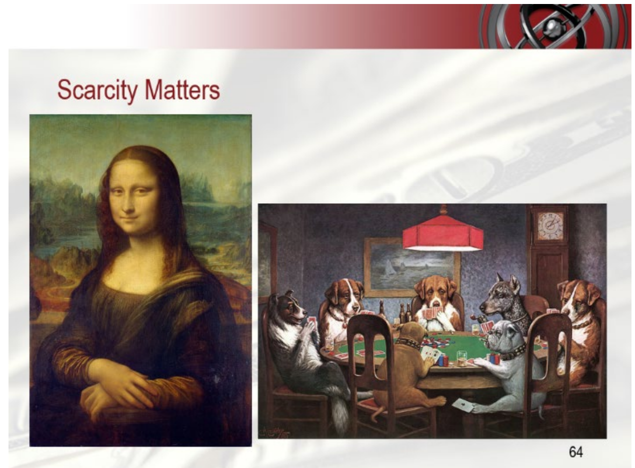
cur·ren·cy (kûr'ən-sē, kŭr'-) *n. pl.* **cur·ren·cies**

1. Money in any form when in actual use as a medium of exchange, especially circulating paper money.

Clearly money is a medium of exchange. And, to continue to be accepted as a medium of exchange, it must be an effective store of value – be able to be "used as a measure of their values on the market." Three and a half decades ago it was held sacrosanct that governments always had, and always would, devalue their currencies. We did a little research and put together a presentation, which some of you have seen. An abridged version of the presentation, without the narrative, follows. In case of doubt, the answer to the first slide is "A."




Why is Water Battled Over in the Desert but Disdained in a Flood Zone?
63

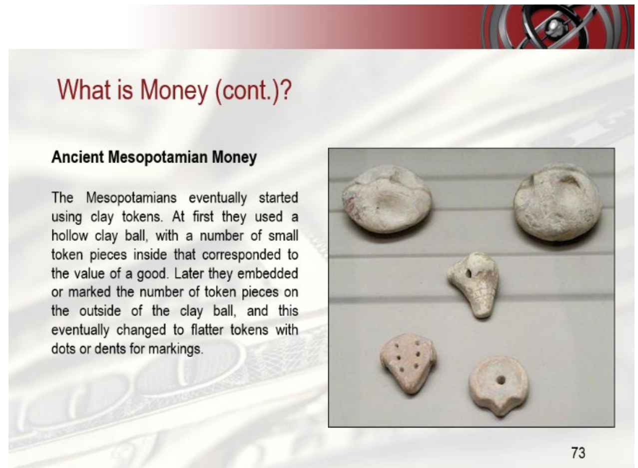

Scarcity Matters
64

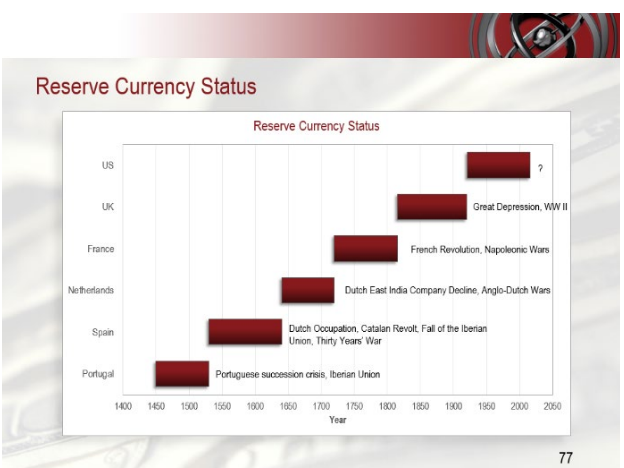

One Earth – 1.6 Billion People
Year: 1900
WORLD POPULATION : 1,578,000,000
http://worldpopulationhistory.org/
65


One Earth – 7.4 Billion People
Year: 2016
WORLD POPULATION : 7,403,400,000
http://worldpopulationhistory.org/
66


Which Money Loses Value over Time?
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
68


What is Value?
Reichsbanknote
Fünfzig Millionen Mark
MILLIONEN
S·6079858
500
71





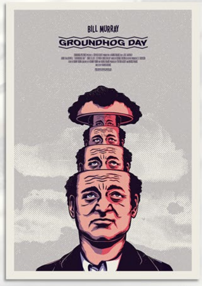
Clearly money can take different forms and can evolve over time. As the last slide shows, some achieve 'reserve currency status' which has many benefits. This privilege often lasts for quite a while, though never indefinitely.

The contemporary, 'enlightened' central bankers believe that they are printing money without devaluing it. The following slides should augment what your common sense is likely already telling you. They will fail. As you've probably come to expect, we've found a good analogue for the central banker's hubris in the form of a movie. What follows is a heavily bastardized version of that great Bill Murray movie – Groundhog Day.

Reviewing Money History Again, Through the Eyes of Phil Connors

Groundhog Day is a 1993 American fantasy-comedy film directed by Harold Ramis, starring Bill Murray, Andie MacDowell, and Chris Elliott. It was written by Ramis and Danny Rubin, based on a story by Rubin.

Murray plays ~~John Law Rudolf Havenstein Ben Bernanke Mario Draghi Haruhiko Kuroda~~ Phil Connors, an arrogant ~~Pittsburgh TV weatherman who, during an assignment covering the annual Groundhog Day event in Punxsutawney, Pennsylvania~~ Central Banker, who finds himself in a time loop, repeating the same ~~day~~ era again and again."



78

`This is one time where television really fails to capture the true excitement of a large squirrel predicting the weather.`

79

Groundhog Day, Roman Style

The denarius, Rome's coinage of the time, was, essentially, pure silver at the beginning of the first century A.D. By A.D. 54, Emperor Nero had entered the scene, and the denarius was approximately 94% silver. By around A.D.100, the denarius' silver content was down to 85%.

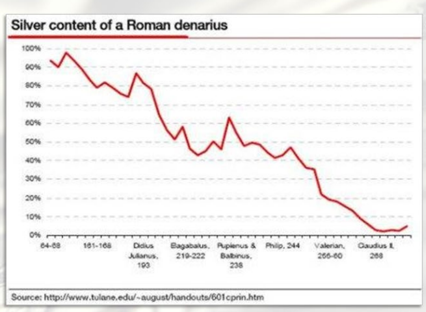
Emperors that succeeded Nero liked the idea of devaluing their currency in order to pay the bills and increase their own wealth. By 218, the denarius was down to 43% silver, and in 244, Emperor Philip the Arab had the silver content dropped to 0.05%. Around the time of Rome's collapse, the denarius contained only 0.02% silver and virtually nobody accepted it as a medium of exchange or a store of value.

-The Daily Reckoning

81

82

Everyone Knows An Empire's Currency Can't Depreciate



84

To Inflation and Beyond

The adoption of fiat currency by many countries, from the 18th century onwards, made much larger variations in the supply of money possible. Since then, huge increases in the supply of paper money have taken place in a number of countries, producing hyperinflations – episodes of extreme inflation rates much higher than those observed in earlier periods of commodity money.

Economists generally believe that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply.

85

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Inflation of Wampum/Cowry

The Europeans, finding they have the power to flood the market with shells, inevitably debase the currency.

In America the colonists in the 18th century go to the length of inventing a machine which can manufacture white shell beads accepted as wampum by their Indian trading partners.

The African market is even more easily flooded with shell currency. Cowries, previously brought with difficulty to India and then overland through Africa, are now imported in shiploads by Dutch and British ships calling at the Maldives on their way back from the far east. They become a standard part of the price for slaves in west Africa. It has been calculated that during the 18th century more than 10,000 tons of these shells are brought round the Cape. By 1770 the price of a single slave is about 150,000 cowries.

Read More: http://www.historyworld.net/wrldhis/plaintexthistories.asp?historyid=ab14#ixzz4OadqJT00

87

The French Say “Oui” to Paper Money

John Law was the first man to introduce paper money to France. The notion of paper money was greatly helped along by the passing of Louis XIV and the 3 billion livres of debt that he left.

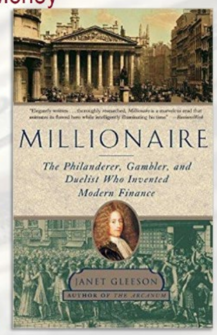
When Louis XV was old enough to make his own mistakes, he required that all taxes be paid in paper money. The currency was backed by coinage…until people actually wanted coins.

The new paper currency rapidly became oversupplied until nobody wished to own the worthless junk anymore and demanded coinage for their currency.

Oops. It looks like Law didn't think that anyone would actually want coins ever again. After making it illegal to export any gold or silver, and the failed attempts by the locals to exchange their paper currency for something of actual value, the currency collapsed.

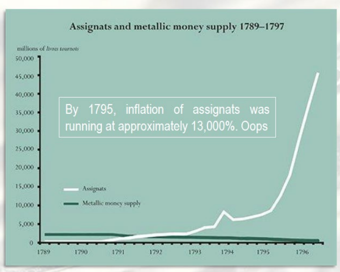
John Law became the most hated man in France and was forced to flee to Italy.

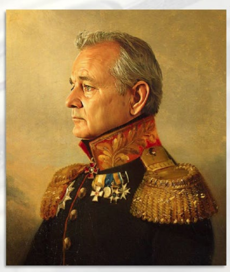
-The Daily Reckoning



88

France, paper money, take duex, assignats!





89

The French discover that Central Bankers are Caught In A Suicidal Infinite Loop?

90

French fiat, take trois, Sacre Bleu!

After Waterloo had come and gone, the French gave it another go in the 1930s, this time with the paper franc. It took only 12 years for them to inflate their currency until it lost 99% of its value.

91

No Central Bank Exit Strategy Seems To Work “Apres moi le deluge”

92

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Paper Currency Reaches the States

"Ain't worth a Continental" – is a popular idiom. Enough said.

93

The Groundhog Loop Continues

Greenbacks were paper currency (printed in green on the back) issued by the United States during the American Civil War. They were in two forms: Demand Notes, issued in 1861–1862, and United States Notes issued in 1862–1865. They were legal tender by law, but were not backed by gold or silver, only the credibility of the U.S. government.
- Wikipedia

95

Punxsutawney Phil and The Financing of the Civil War

The government could either print its own money or go into deep perpetual debt to foreign creditors. On February 25, 1862, Congress passed the first Legal Tender Act, which authorized the issuance of $150 million in United States Notes.

The reverse of the notes were printed with green ink, and were thus called "greenbacks" by the public. In 1862, the greenback declined against gold until by December gold was at a 29% premium. By spring of 1863 the greenback declined further, to 152 against 100 dollars in gold. The Greenback's low point came in July of that year: 258 greenbacks equal to 100 gold. When the war ended in April 1865 the greenback made another remarkable recovery to 150.

Interestingly, California and Oregon defied the Legal Tender Act.

The Confederate currencies obviously fared much worse.

96

Groundhogs Uber Alles

Post-World War I Weimar Germany was one of the greatest periods of hyperinflation that ever existed. The Treaty of Versailles was essentially a financial punishment placed on Germany to make reparations.

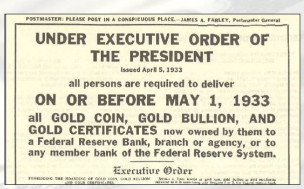
The sums of money to be paid by Germany were enormous, and the only way it could make repayment was by running the printing press.

-Daily Reckoning

97

In the Brightness of the US phenomenon, The Groundhog repeatedly sees his Shadow

- For centuries, the British Pound was the world's reserve currency. However, World War II devastated the British economy leading the U.S. Dollar to replace the Pound as the world's newest reserve currency.
- From 1879 - 1933, the U.S. Dollar was backed by a physical commodity – Gold.
- On April 5, 1933, President Franklin D Roosevelt began to remove the U.S. off the gold standard, requiring all physical gold greater than $100 to be turned into the government in exchange for paper money at $20.67 per ounce.



POSTMASTER: PLEASE POST IN A CONSPICUOUS PLACE.—JAMES A. FARLEY, Postmaster General

UNDER EXECUTIVE ORDER OF THE PRESIDENT

Issued April 5, 1933

all persons are required to deliver

ON OR BEFORE MAY 1, 1933

all GOLD COIN, GOLD BULLION, AND GOLD CERTIFICATES now owned by them to a Federal Reserve Bank, branch or agency, or to any member bank of the Federal Reserve System.

Executive Order

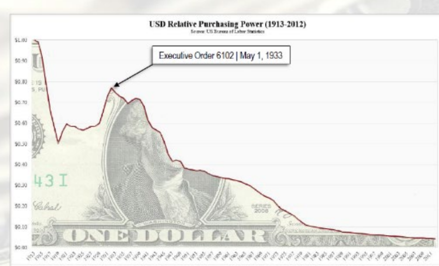
FORBIDDING THE HOARDING OF GOLD COIN, GOLD BULLION AND GOLD CERTIFICATES

- In 1934, the government price of gold was increased to $35 per ounce, effectively increasing the gold on the Federal Reserve's balance sheets by 69%. This increase in assets allowed the Federal Reserve to further inflate the money supply.
- In 1971, President Richard Nixon completely abandoned the gold standard, which meant the U.S. would no longer convert U.S. Dollars to gold, thus beginning the era of the fiat dollars in the U.S.

98

Another Quiz

- At what point was the Federal Reserve Created?
- At what point did Roosevelt default on the obligation to back the dollar at $20.67/oz?



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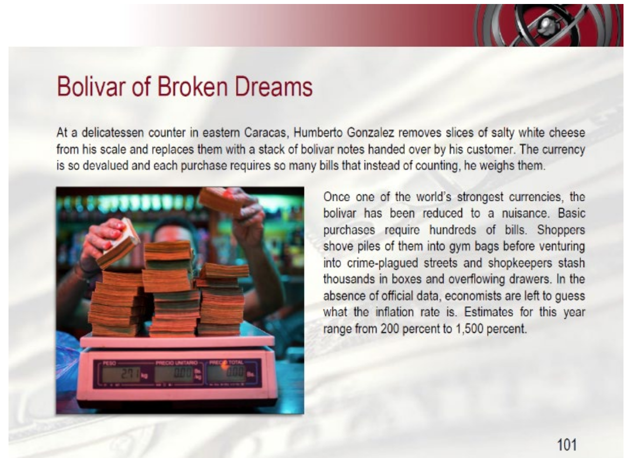

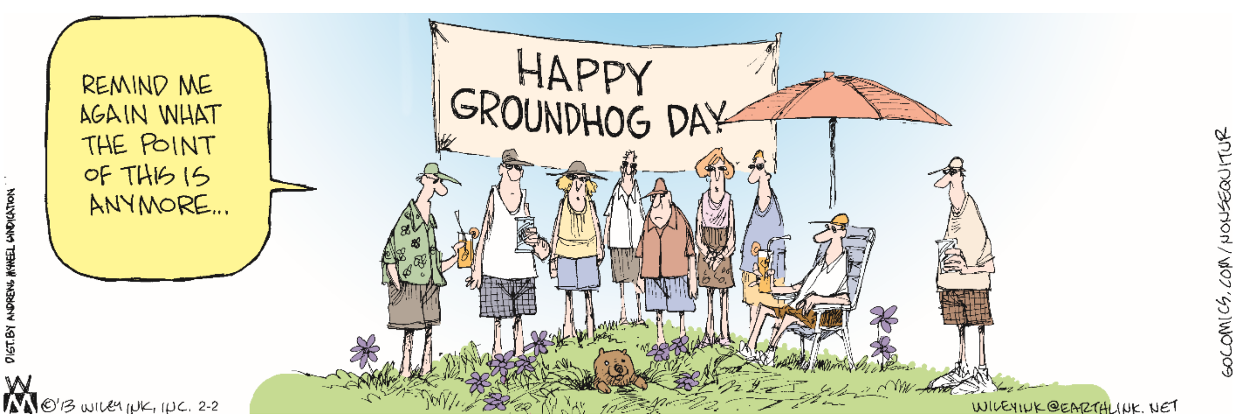

So there you have it – a small sample of the vast array of stories about past attempts by authorities to manipulate the money stock. Each presumably thought that they would be the one to do so without ill consequence. As Yogi Berra put it, "it's déjà vu all over again." Thanks to central bank arrogance, like Murray's character Phil Connor, society has been condemned to reliving the same degrading show over and over and over again. Not Groundhog *Day* so much as Groundhog *Era*, and each episodic era has its own unique plot. But, as stated way back at the beginning, we know the (not then) ending. As Mark Twain observed, "History doesn't repeat itself but it often rhymes".

In this ever-cyclical world in which we live, as we jump forward to the current episode of "alchemy made easy," it's instructive to recall that in the early 1980's no one believed that the Fed could dampen inflation. Now, the marketplace gives no credence to central bankers' ability to 're-inflate.' Forgotten is Ben Bernanke's famous speech from 15 years ago. For those whom have also forgotten, rather than copy the relevant paragraphs, a synopsis from Forbes should suffice:

"Ben Bernanke earned the sobriquet "Helicopter Ben" for his observations in a 2002 speech that "the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost", that the existence of this technology means that "sufficient injections of money will ultimately always reverse a deflation", and that using this technology to finance a tax cut is "essentially equivalent to Milton Friedman's famous "helicopter drop" of money."

We are not saying that the cash flow your model is incorporating will lose much more value than your discount rate is factoring in, only that it is a possibility that should be given serious consideration. Is that a helicopter we hear in the distance?

"*Ch-ch-changes*
Where's your shame?
You've left us up to our necks in it
Time may change me
But you can't trace time"

-David Bowie

Ap·praise (əˈprāz/) verb; past tense: appraised

1. to set a value on : to estimate the amount or appraise the damage
2. to evaluate the worth, significance, or status of; especially : to give an expert judgment of the value or merit of

"*Does anybody really know what time it is*
I don't
Does anybody really care"
– Chicago

Moving on to a discussion on appraising businesses, in a world without useful discount rates, a few points to make. Point one: DCF models are fine if they are taken with a grain of salt, are used over many scenarios, and ARE NOT the only valuation measure being used. Point two: multiple valuation metrics should always be used, in the current environment more than ever. Point three: a metric that works well to appraise a business in one industry may be of little or no value when appraising another. In particular, asset heavy businesses are very different than asset light businesses, and cyclical businesses can be quite different from less cyclical ones. What follows are some commonly employed measures:

Valuation Metrics

Price to:	Positives	Negatives
Revenue Generator: Megawatt of production capacity; Phone Subscribers; Replacement Cost of Building; Liquidation Value of Resource Reserves; Pharma Pipeline; Hectares of Farmland; Square Feet of Retail Space	Puts things in perspective Helps spot fraudulent accounting	Points in time Doesn't incorporate cost or yield Can be very long term Fails to account for growth
DCF	Right inputs yield correct output Tries to incorporate the future	"Discounted cash flow to us is sort of like the Hubble telescope – you turn it a fraction of an inch and you're in a different galaxy. There are just so many variables in this kind of analysis– that's not for us." -Curtis Jensen What is the value of cash in the future?
Book Value	Best estimate of value per IFRS	Point in time measure Often includes intangibles of dubious value Values change
Tangible Book Value	Best estimate of tangible value per IFRS	Point in time measure Leaves out intangible that may be valuable Values change
Earnings (TTM)	Reflects actual earning (per accountants)	Point in time measure Worthless for cyclical companies Worthless for secular change Easily manipulated
Earnings (Forward Earning)	Reflects earning potential (analysts)	Point in time measure Worthless for cyclical companies Worthless for secular change Human Error

Since every metric has its virtues and its drawbacks, it seems silly to use only one. But in addition to multiple metrics, as mentioned, thought needs to be given to industry suitability. For example, most mature tech businesses don't gain their competitive advantage from the capital employed in the business. As a result, price-to-book value is not a particularly helpful metric with which to appraise Microsoft. Price-to-earnings is a decent metric for that fairly stable, mature business. Conversely, P/E is a particularly poor way to value highly cyclical businesses. They famously should be purchased at the bottom of the economic cycle, when earnings are depressed, resulting in high P/Es. Tangible assets are interesting. If they meet a need, and will do so well into the future, they have value and thus can be expected to generate cash in the future. Buildings can sell below the cost of building more building for a while, but not for too long. Otherwise, an increasing population will have no place to stay. Prices will increase to the cost of building a new one. This is known as replacement cost and is a quite useful valuation tool. Ditto for tankers and other ships. The price of extracting oil from an existing well is important information and can help establish net cash to be generated if a well were to be liquidated. Liquidation value is a useful tool to establish downside protection, but should be used in conjunction will other data. Liquidation value is theoretical, since managements seldom choose to liquidate themselves out of a job. Ongoing businesses need to factor in the price of replacing the reserves that are being liquidated. We call this the "incentive" price. As with the building mentioned above, commodities of all types should be expected to fluctuate around their replacement cost/incentive price. Utilities such as electricity generators and distributors and communications companies also should be viewed with replacement prices in mind, but can be adjusted up due to monopoly status, adjusted down due to regulatory issues, or both. Hard assets in general are under appreciated currently. The chart below illustrates this point.

Chart 2: Real Assets at all-time lows relative to Financial Assets

Source: BofA Merrill Lynch Global Investment Strategy, Global Financial Data, Bloomberg, USDA, Savills, Shiller, ONS, Spaenjers, Historic Auto Group. Note: Real Assets (Commodities, Real Estate, Collectibles) vs. Financial Assets (Large Cap Stocks, Long-term Govt Bonds)

This commentary is already lengthy, so we'll stop here. Our next commentary will talk more about values currently available in the public equity markets and the advantages therein.

We are confident that value investing will return to prominence soon enough and that speculating on trends will yet again be exposed for what it is. For better insights on valuing assets versus forecasting earnings, please see literature from some of the great minds of investing: Templeton, Graham & Dodd, Marks, Eveillard, Buffett and Munger.

"The only thing we learn from history is that we learn nothing from history."
- Friedrich Hegel

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Waiting for Sebastian

October 2018

Waiting for Sebastian

The question before the house is, "are value investors, figuratively, waiting for Sebastian?" I was fortunate to spend a little time in Portugal this summer. It is a lovely country, rich in history, with some of the nicest people you'll ever meet. I recommend it to all.

It was there that I first heard of King Sebastian and of the phrase that inspired this commentary – "Waiting for Sebastian." Who was he? Let's turn to Wikipedia:

> *"Dom **Sebastian I** (Portuguese: **Sebastião**; 20 January 1554 – 4 August 1578) was King of Portugal and the Algarves from 11 June 1557 to 4 August 1578 and the penultimate Portuguese monarch of the House of Aviz.*
>
> *He was the son of João Manuel, Prince of Portugal, and his wife, Joanna of Austria. He was the grandson of King John III of Portugal and Holy Roman Emperor Charles V. He disappeared (presumably killed in action) in the battle of Alcácer Quibir. Sebastian I is often referred to as **The Desired** (Portuguese: o Desejado), as the Portuguese people longed for his return to end the decline of Portugal that began after his death."*

Apparently a whole school of thought has materialized around this belief:

> **"*Sebastianism*** *(Portuguese: 'sebastianismo') is a Portuguese messianic myth, based on the belief that King **Sebastian** of Portugal, disappeared in the battle of Alcácer Quibir, **will return** to save Portugal."*

In a nutshell, the phrase essentially means to **"foolishly wait for something that is never going to happen." That seems to succinctly capture the way most people feel about value investors.** The wait has been a long time. It's become an increasingly painful time. Just when it seemed that things couldn't get any worse for value managers, the horrendous third quarter of 2018 felt like the coup de grace to many. When one's core tenets appear to have become, not just useless but, actually counterproductive, for the better part of a dozen years, it seems to call for a little self-reflection. While Kopernik's unique brand of value-oriented investing performed well during the first half of this value drought, it has seriously lagged for 5 of the past 6 years. What follows are some observations, a modicum of self-evaluation, and more on the Sebastian saga.

Like Sebastian himself, his statue has been missing (for repairs) from its spot infront of the Rossi Rail Station in Lisbon

Mind the GAAP
(Have Value Investing and Accounting Principles become Obsolete?)

Times have changed, there's no doubt about it. And it's continuing to change at an accelerating rate. Most economies have become predominately services-based, with little need for massive asset-heavy capital spending. "Ideas" are the new corporate focus. Why spend on bridges, and factories and ships when the new billionaires have sprung forth from social media and services? Who needs airplanes when they can travel vicariously through others on Facebook, et al? Why waste capital on *locomotive* engines when there are *search* engines chugging out massive profits? And many of the 'new era' businesses have a tendency toward monopoly, toward a winner take all outcome. As a result of this, combined with antitrust enforcement that has gone MIA, excess profitability is seemingly endless. In this sort of environment, it is understandable that many question even the very efficacy of accounting rules. Are GAAP (generally accepted accounting principles) and IFRS (international financial reporting standards) even relevant anymore? Are they a relic of a bygone era? And what of people who still use these archaic numbers to inform their investment decisions? Does price still matter? Isn't catching the right stock all that matters? Isn't it now better to overpay for the winners than to miss these leaders by foolishly waiting for an attractive entry price? Why should value ever return to favor? Waiting for Sebastian indeed!

In addition to the countless attacks on value investing by the usual suspects, we certainly can't help but notice that many "value" investors have joined the chorus. Several have recently penned some thought-provoking letters and presentations discussing why they have migrated to new processes using valuations that are 'more appropriate' to the new era in which we now find ourselves. The Harvard Business Review recently published a piece by professors from Tuck School of Business, Columbia Business School, and Haskayne School of Business that attacks accounting as being inappropriate for the modern world, ***suggesting capitalizing ideas rather than assets***. The article contains the following quotes from people at businesses they interviewed*: "They consider the calculation of GAAP-based profitability to be more of a hinderance and distraction to their internal resource allocation decisions. One CFO commented that they now avoid inviting company accountants to their strategy meetings, while another said that* ***CPA certification is considered a disqualification for a top finance position****"; and "standard-setters might want to encourage disclosures related to (i) value per customer; (ii) earnings or revenue outcomes or other specific metrics related to specific projects in progress; and (iii) data on how the R&D and software talent of digital firms is being deployed."* Time will tell whether capitalizing ideas (capitalize means to recognize as an asset, rather than an expense, in the financial statements) is a capital idea or should be viewed more akin to a capital offense.

While a lot of the views we've alluded to above contain kernels of truth and are worthy of thought**, Kopernik remains true to our long held principles/process/philosophy**. For more on why we believe that the current environment for value investors is the antithesis of "waiting for Sebastian," - it is waiting for the inevitable – read on.

Value investing is a methodology predicated on the idea that it is much wiser, and more profitable in the long run, to pay less for something than it is worth. Conversely, it is speculative, at best, to pay more for something than it is worth. This premise should be inherently obvious to everyone. But life is complicated – consultants and index providers, amongst others, have attempted to define value and growth through contrived and spurious methodologies. Thoughtful investors will not allow themselves to be confined by these methodologies, preferring more tried and true, and useful valuation techniques. Meanwhile, other "value" managers, those who are in the process of capitulating under the duress of periodic underperformance, will also not allow themselves to be confined by these methodologies, preferring more *convenient* (as opposed to tried and true) valuation techniques. These techniques tend to get much more lenient in lockstep with the bull market's age and strength. As Charlie Munger has stated, "anyone who thinks it's easy is stupid." In the late 1990s, many capitulating 'value' managers rebranded themselves as GARP (growth-at-a-reasonable-price) or value with a 'catalyst.' The contemporary environment is rife with "Quality Franchise" managers who suggest that quality represents value. This is true if one believes that current inflated margins, engineered growth, and record low discount rates are sustainable. Most of those who migrated to more "modern" valuation techniques in the late 1990s eventually got walloped. Today, once again, new fangled views of value must be considered, studied, and viewed, we believe, with a high degree of skepticism. Let's examine further.

We concede that in many cases book value is not relevant. Yet many of the detractive arguments ring hollow. For starters, technological change has always made many companies worth much more than their book value, while damaging other companies and causing them to be worth far less than book value. This is nothing new. Social media, gene editing, search engines, and smart phones have been complete game changers. Might that have also been the case for air conditioners, telephones, telegraphs, railroads, canals, vacuum tubes, semiconductors, automobiles, airplanes, the printing press, and so on through the millennia? Book value proved a useful measure through many eras – might it still mean something?

Moving on to financial engineering – if a company buys back their own stock at a premium to book value, but at a discount to its economic value, we can all agree that book value becomes misleading; book value per share goes down while economic value per share is actually increasing. However, if the buyback occurs at a premium to book value and at an even bigger premium to economic value, then the drop in book value per share is accurately reflecting a loss in economic value. Economic value is a somewhat subjective concept but one should be cognizant of two highly relevant points: recent buybacks have been occurring at record prices and valuations and history shows that record levels of buybacks always occur near market peaks. What is the chance that managements are actually adding value through these buybacks? Investors can disregard the resultant lower book value at their own peril; doubly so when the buybacks are debt financed.

Regarding the concept of "long-term, value-creating, intangibles," giving examples of stocks that turned out to be worth a lot more than book value can be dangerous and is what is known as 'cherry-picking.' Over the decades, many companies have hired engineers, scientists, marketing whizzes, and others who have endeavored to create intangible value in the form of superior ideas, brands, products and services. Most have failed to do so, some achieved their fifteen minutes of fame, and a select few have created long-term value. Because success is a longshot, all of the major accounting authorities have always correctly mandated the costs involved with R&D, advertising, marketing, and similar efforts be expensed as they've occurred, rather than capitalized. To cherry-pick the ones which succeeded, and use them as proof that efforts to build brands and create technology should not be expensed seems disingenuous, even dangerous. Many of today's clear winners will be tomorrow's Schlitz beer, Sony Walkman, Blackberry phones, etc. We just don't know which ones, yet. (The list of *formerly* dominant companies is much too long to incorporate here.) Caveat emptor.

People should also beware of arguments that don't factor in price. For example, if a company should be purchased because they have the best technology and/or the best ecosystem, market share, management, brand, country of domicile, distribution network, etc., does that argument apply to any price? $20 per share? $40? $400? $4000? $40,000? No matter how great a business is, there exists a price that is simply too high! We are sure of it.

If price-to-book value doesn't carry the same gravitas it once did, **what about price to: earnings (normalized); sales; replacement value; liquidation value; GDP; cash flow? When the market is at, or near, the most expensive level ever when appraised on any of these metrics, can one really afford to rationalize it away?** Does the "new era" really negate the laws of mathematics? Has human nature evolved beyond emotion? Does greed no longer lead to excess? Does excess no longer lead to lower returns in the future? Can Apple, Google, Facebook, Netflix, Amazon, Baidu, Tencent, and Alibaba **compete against each other and all win**? With the size of government claims now the highest percentage of GDP ever, and debt claims against GDP the highest ever, and equities now priced near the largest percentage of GDP ever, can the new economy really support this triple threat? Keep in mind, all of these claims are senior to the claims of equity-holders.

Furthermore, can value really be found amongst a feeding frenzy for the super-popular, high-profile stocks? When everyone owns "quality franchises," can they possibly be bargains? When billions of dollars are flowing into the FAANG[1] stocks every hour, is it even conceivable that they are underpriced? **Doesn't value investing by its very nature require a contrarian bent?**

On the other side of the coin, the fact that intangible value may occasionally be overlooked does not mean that tangible assets don't still have value. **The current investor stampede into intangibles has left tangible assets neglected and underpriced**. Many dominant companies can be purchased at significant discounts to tangible book value. And while tangible assets may be way less sexy than their intangible brethren, they are safer by a wide margin. As previously mentioned, today's must-have technology is tomorrow's memorabilia. Meanwhile, mobile service infrastructure, electricity distribution systems, metal reserves, railroad systems, farmland, and many other similar assets are highly unlikely to become obsolete in our lifetimes. They will continue to be inherently valuable over time. Regardless of how the anointed stocks perform, buying these valuable tangible assets at a sliver of their intrinsic value seems destined to be a highly rewarding undertaking.

[1] *FAANG is an acronym for the market's five most popular tech stocks, namely Facebook, Apple, Amazon, Netflix and Alphabet's Google*

Franz Ferdinand
(Empires, Franchises, Money; Tangibles Don't Matter – Until They Do)
(Investment Strategy)

Now seems to be an important time to move at least some assets from momentum toward value. Although this environment feels more reminiscent of 1972 than 1999, it is close enough to 1999 to repeat our message to clients at that time: "it may sound like sour grapes, but if a manager had a good year in 1999, you should beware." In the current equally narrow and bifurcated market, we will reiterate that sentiment – it may be sour grapes, and we may be wrong, but we would suggest extreme caution regarding pronouncements of the death of value, and be very wary of any manager who is excelling in the recent, exuberant period. Our prior commentaries, *Runaway Train* and the *Weight of the Wait* provide more in-depth narrative on the pain and probable reward of staying true to the value discipline during the cycle extremes. We suggest, among other things, that while Buffett was smart to switch from Graham-type asset-based investing to sustainable earnings-based investing in the early 80s when few others did so, now that everyone is forecasting strong future earnings, maybe this is a good time to be one of the few scooping up cheap assets. We believe that it is a major mistake to refer to 'quality franchise' stocks as 'Buffett' stocks. When quality franchise stocks were all the rage in the late 60s/early 70s, Mr. Buffett wasn't buying them, he was returning most of the money to his investors. The last time franchise quality stocks got out over their skis, during the late 1990s, people were calling the likes of Coca-Cola a "Buffett-stock," seemingly clueless to the fact that they were touting a stock at over $80 that Mr. Buffett had purchased at less than $3. Like everyone, we appreciate the beauty of the goodwill inherent in quality franchise stocks, but believe that value is seldom found in sectors that everyone loves and everyone holds. Value usually resides where no one is. In this ever cyclical world in which we live, there's a time and a place for everything. Now is the time for value, and value, at this moment, mostly resides in the unloved "cigar-butt" stocks of Graham and Dodd fame. To continue the discussion of why we really like the present, massively bifurcated marketplace in general, and tangible assets in particular, let's return to Iberia.

Sometimes, as they say, life is stranger than fiction. Even I am surprised at the things that inspire these commentaries. A few days after being introduced to the tale of Sebastian, a group of us were at a music festival listening to Franz Ferdinand (Scottish rock band) when a mosh pit broke out in our vicinity. It had been a while since I'd been in one, but it was a lot of fun. It helps to be way bigger than everyone else. Anyhow, in the midst of it, a young Spanish gentleman comes up and yells, "Dave Iben?! - Dave Iben, the gold guy?!" My colleagues were floored. I don't know that I'd ever thought of myself as a gold guy, much less **the** gold guy. Heck, I was short gold miners in the 1980s and avoided them in the 1990s. We owned a lot of them off and on during the last decade and again over the past seven years. But, having given it some thought, I believe that if there was ever a time to be associated with gold, or purveyors thereof, **now** seems like a fortuitous time. The future looks exceptionally bright.

Let's explore the fundamentals from top to bottom. The reason that Kopernik employs a bottom-up, analytical approach, rather than top-down, is because: 1) price is paramount and 2) often, the story is best when an asset is over-owned and over-priced.

Top-down methodologies led people to buy tech in 2000 and again now. A compelling fundamental story led to the Japanese market elevating to a valuation roughly equal to the value of all the rest of the world's stocks put together in 1989. During the almost three decades since, their market is down one-third even as GDP rose 65%. A top-down approach persuaded people to sell the U.S. market when things looked bleak in 2002 and again, when they looked even bleaker in 2009. It is supporting people's decision to buy into that very same U.S. stock market now at four times the price (seven times for the NASDAQ 100). The top-down story for gold was extremely compelling at the end of the inflationary 1970s following a run from $35/oz to $800/oz. Gold later sank to $255/oz. but the top-down story led people back in during the QE[2] infused heights of 2011 when the price exceeded $1900/oz. Presumably, one should assume that the top- down story has evaporated now, since gold has been in a bear market for more than eight years. One would be very wrong. Read on.

Let's start Kopernik's self-examination process here, with gold. Gold related equities are, after all, a quarter of the portfolio. Are we wrong or is the market in one of its infamous bouts of irrationality? Time will tell, but the facts couldn't be much more encouraging. Let's examine, starting, out of curiousity, with the top-down story before moving on to the much more relevant, bottom-up analysis. We will discover that the top-down story has weakened in lock-step with the price of gold. Perhaps surprisingly, the story has become much stronger. Gold hit $1900/oz. in 2011 because the Fed had tripled the money supply in three short years and people doubted that the Fed really had an "exit

[2] Quantitative easing is an unconventional expansionary monetary policy in which central banks buy government bonds or other financial assets with the goal of stimulating the economy.

strategy." Were they wrong? In fact, their cynicism didn't go far enough. Not only did the Fed fail to exit, they subsequently almost doubled the money supply again. Over four years, money supply almost quadrupled. Additionally, most of the central banks contracted the disease. Their affliction turned out to be even more severe. See below:

Source: fred.stlouisfed.org, Bank of Japan, Bank of England, European Central Bank, tradingeconomics.com, gold.org

As of 2017

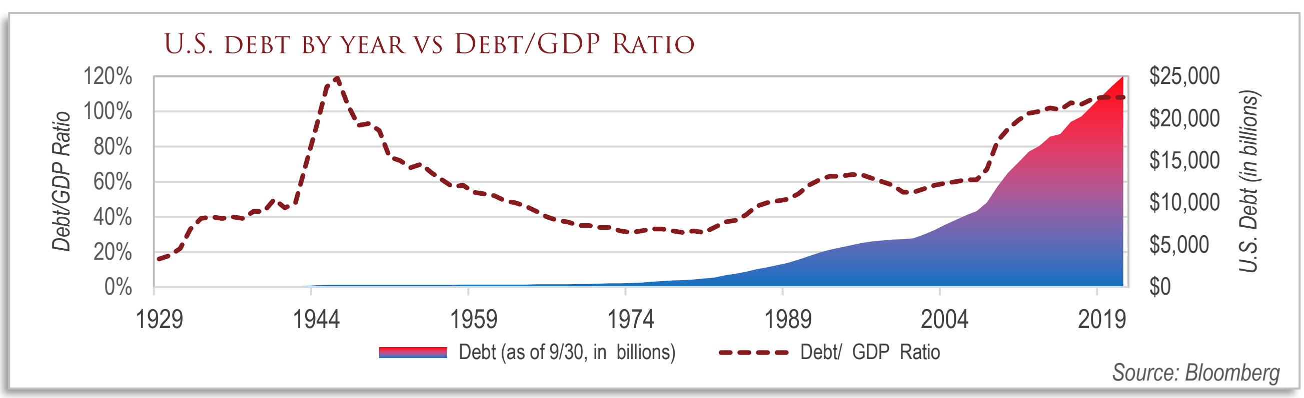
Country	Money Supply (USD, billions)	GDP (USD, bilions)	Money Supply/GDP	Gold Reserves (tonnes)	Money Supply/Gold Reserve ($/oz)
U.S	$3,585	$19,391	18.5%	8,114	$13,743
Japan	$45	$4,872	0.9%	765	$1,830
China	$1,044	$12,238	8.5%	1,843	$17,620
Swiss	$576	$679	84.9%	1,040	$17,227
England	$108	$2,622	4.1%	310	$10,837
Canada	$70	$1,653	4.3%	3	$725,765
Europe	$1,396	$12,590	11.1%	14,652	$2,964
Aggregate	**$90,400**	**$87,505**	**103.3%**		

	2008	2018		
Country	**Money Supply (USD, Billions)**	**Money Supply (USD, Billions)**	**Gold Reserves 10 Year Growth**	**Money Reserves 10 Year Growth**
U.S	$910	$3,585	-0.2%	294.0%
Japan	$9	$45	0.0%	400.0%
China	$476	$1,044	207.1%	119.3%
Swiss	$41	$576	0.0%	1304.9%
England	$96	$108	0.0%	12.5%
Canada	$51	$70	0.0%	37.3%
Europe	$893	$1,396	13.6%	56.3%

So, from the top-down, a further price appreciation versus debasing fiat currencies seemed inevitable. We suspect that it still is. We'll watch the current attempt to withdraw excess funds with great interest. (Excuse the smirk.)

Turning our attention from failed monetary policy to failed fiscal policy, governments have without question failed to get their houses in order. They were going to reduce the concentration of "too-big-to-fail" banks and bring down the level of debt in the economy. How did they do? The question is rhetorical as you're all aware that both the banks and the debt burden have become much larger.

Regarding their efforts to reduce bank concentration: 10 largest banks control 3/4 of assets; big 4 control 54% up from 45% in 2007. Number of banks has fallen from 14,000 in 1985 to 8,500 in 2000 to 4,938 in 2017[3]. See below:



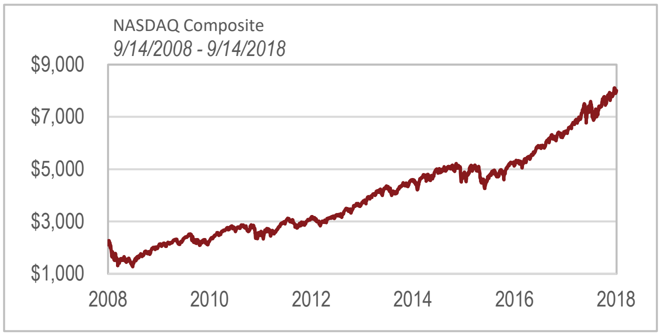
[3] *Sources: www.nhbr.com, www.ameicanbanker.com, www.brookings.edu*

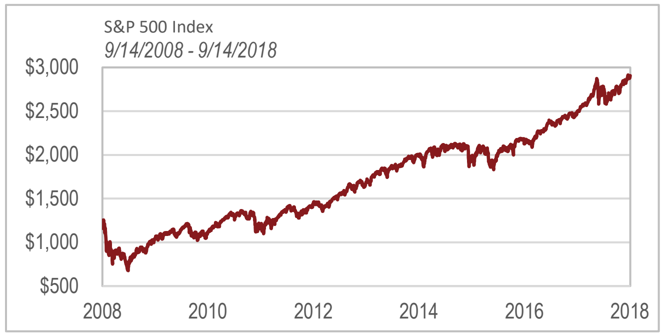
As the chart shows, the U.S government has taken on substantial debt. It is now the highest ever, with the exception of post-WWII victory. It now exceeds 100% of GDP. Globally, total debt has gone from 205% to around 280% of GDP over the decade.

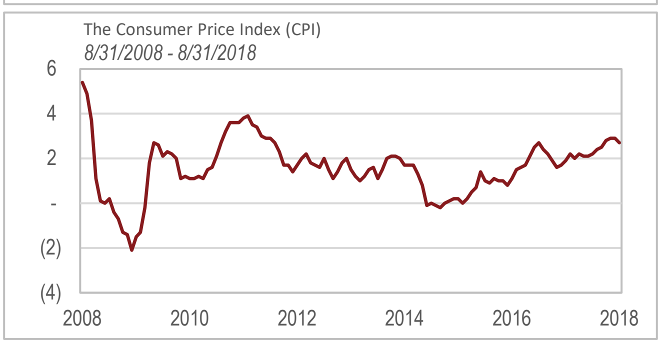
And, as anybody with a rudimentary knowledge of Austrian economics could have confidentially told you, the severe "unintended" consequences include mal-investment, rising inequality, concentrated pockets of rapid price inflation, and the creation of another bubble. Take a look at some of the charts below and make up your own mind as to the success of central banks' policy and as to the unintended consequences.

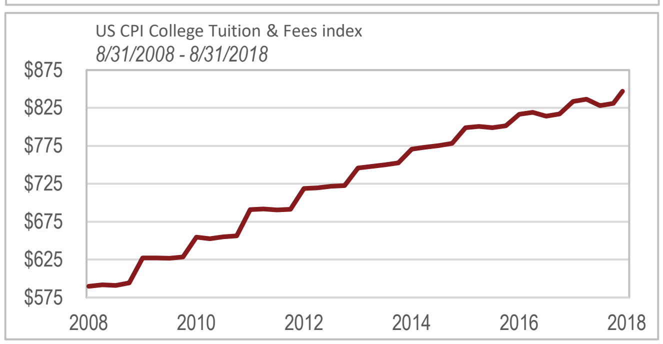
The following charts are kind of scary:

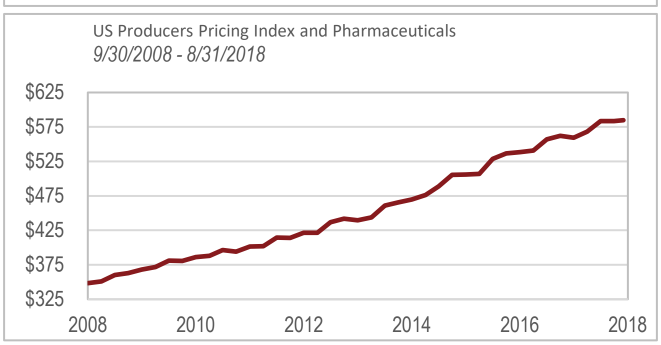
Source: Bloomberg

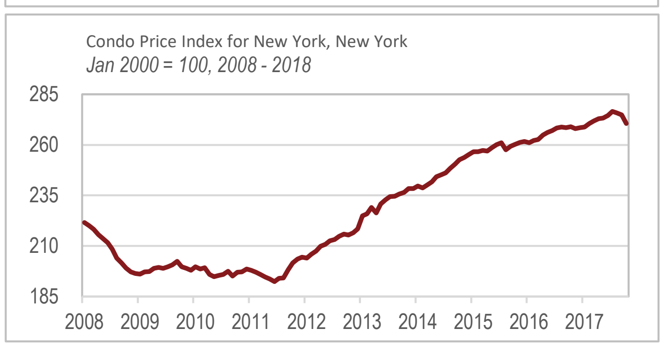


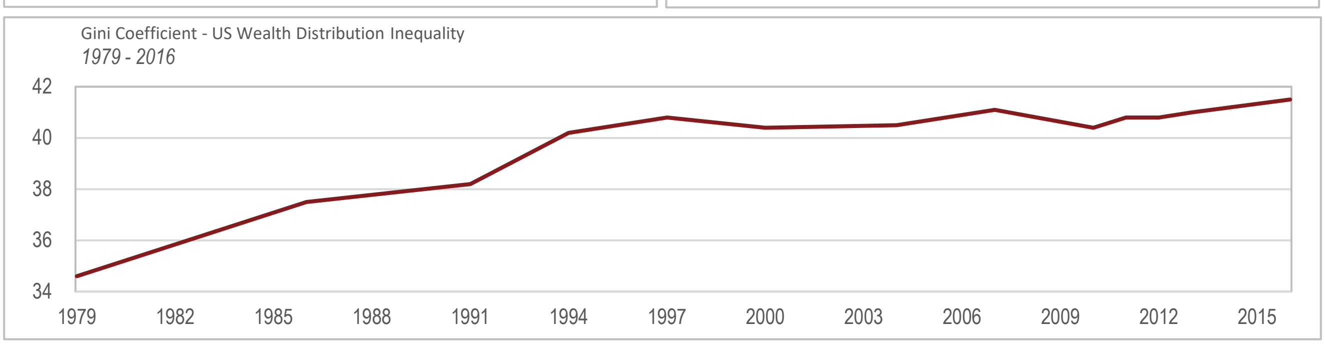




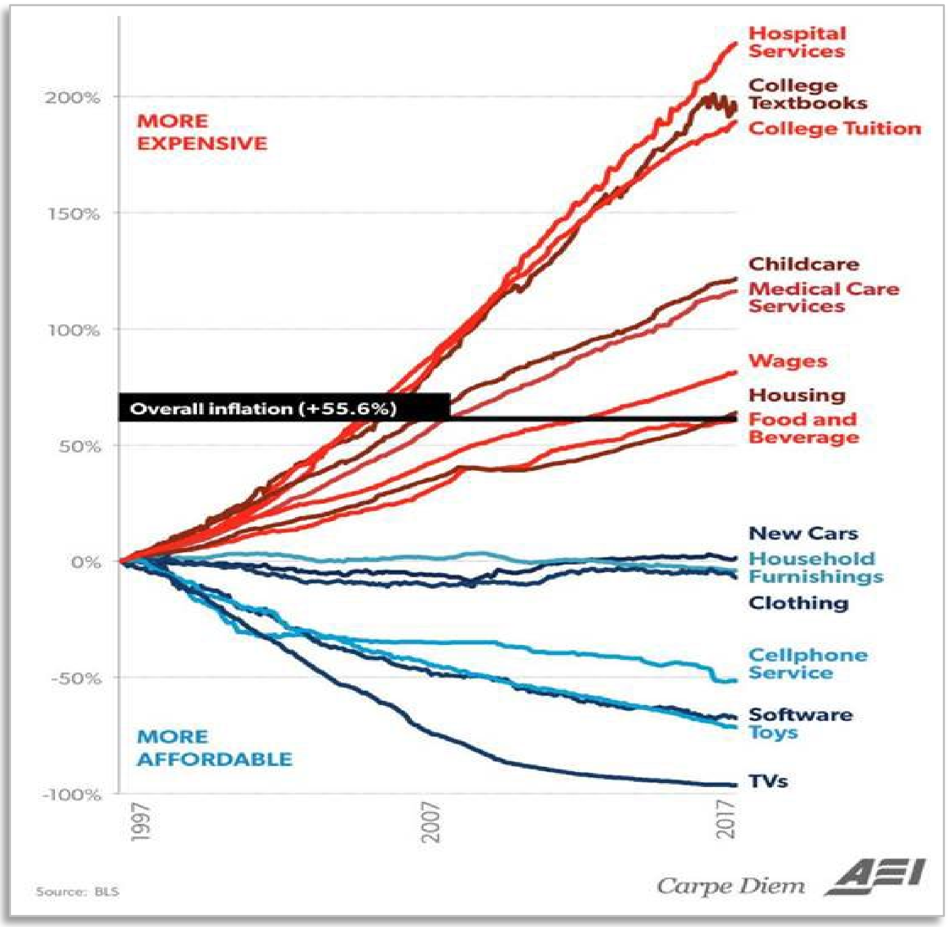








Government deficits are widely, and logically, believed to cause inflation in the future. I'm not aware of any major political party in any country on the planet that is arguing for fiscal austerity; or even fiscal precedence for that matter. Will fiscal profligacy lead to future inflation and rising gold prices? Time will tell.

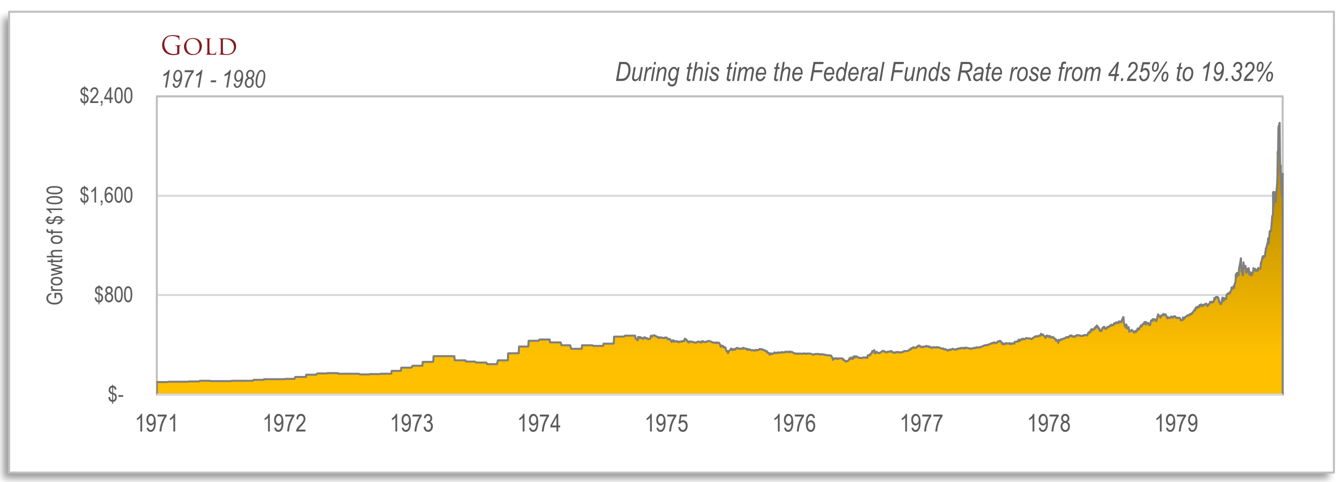


Enough said.

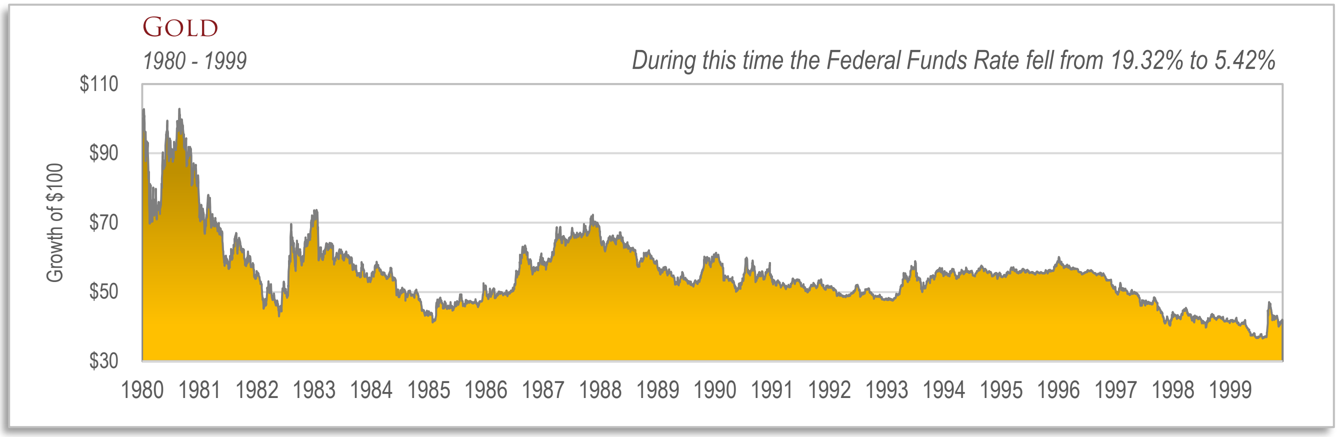
Okay, that concludes the top-down analysis. Moving on to the bottom-up picture, it is interesting, almost awkward, to note a rare occurence - **a compelling top-down story, hand in hand with a compelling bottom-up story.** Obscured by the pain of recent underpeformance, lies the best of all worlds for active managers willing to pursue value-laden gold miners. Top-down approaches suggest that the price of gold should go way up due to ever-inceasing fiscal irresponsibility on a massive scale with no end in sight. Bottom- up analysis reveals that supply and demand are drastically out of balance and that bringing the two back to equilibrium will require the price of gold to go higher; the price required to incentivize adequate future supply is believed to be roughly two-thirds higher than the current market price.

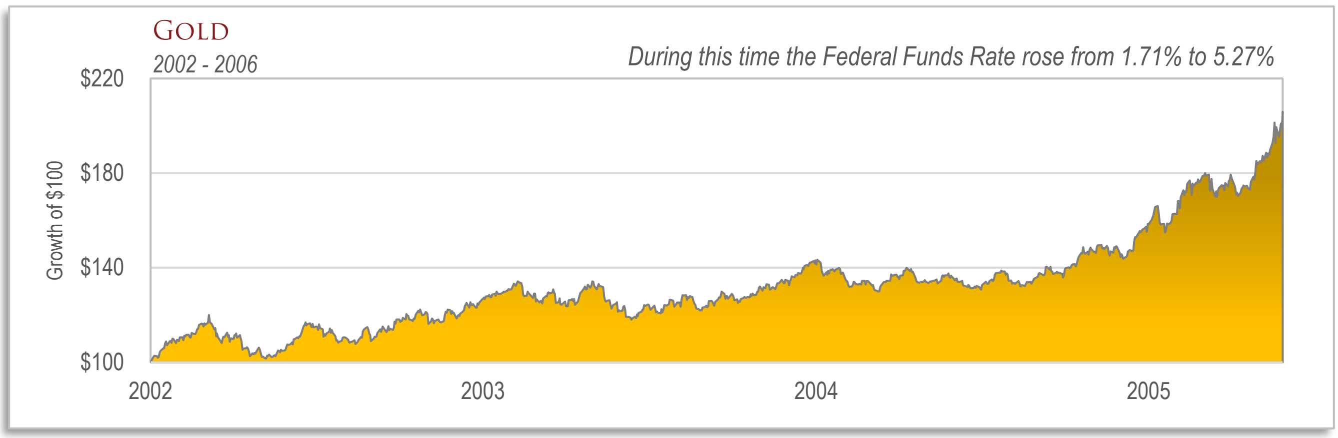
Top-down analysis would indicate that the gold price will move higher because, even after monetary policy has been lax for an entire decade, the U.S. is struggling to find an "exit strategy." Other countries haven't even attempted to exit. The largest increase in global money supply in the history of the earth occured last year. Bottom-up analysis focuses on the fact that the U.S. monetary base is already at $3,585 billion, equivalent to $13,742/oz of gold, up from $117 billion and $450/oz in 1980. Top-down analysts might point out that gold miners are oversold whereas true bottom-up investors can't help but feel bullish due to the fact that many gold stocks are trading below their liquidation value (even at current, depressed gold prices) while offering massive upside potential. We are further excited by the anomaly that gold owned by miners is selling at a huge historical discount to gold held above ground.

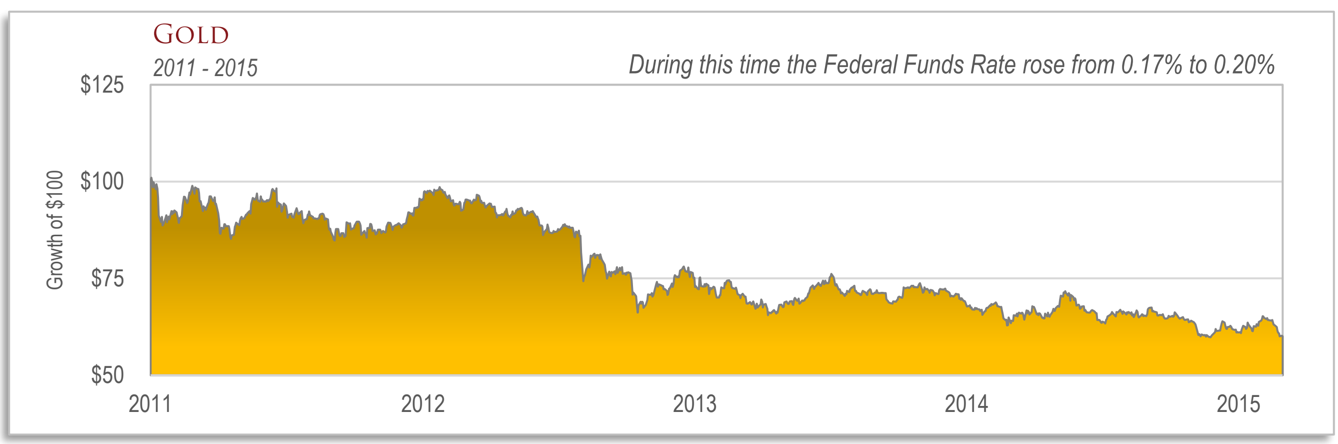
Before moving on from gold, let's evaluate the commonly repeated myth that rising interest rates cause gold prices to fall.



Sources: Bloomberg

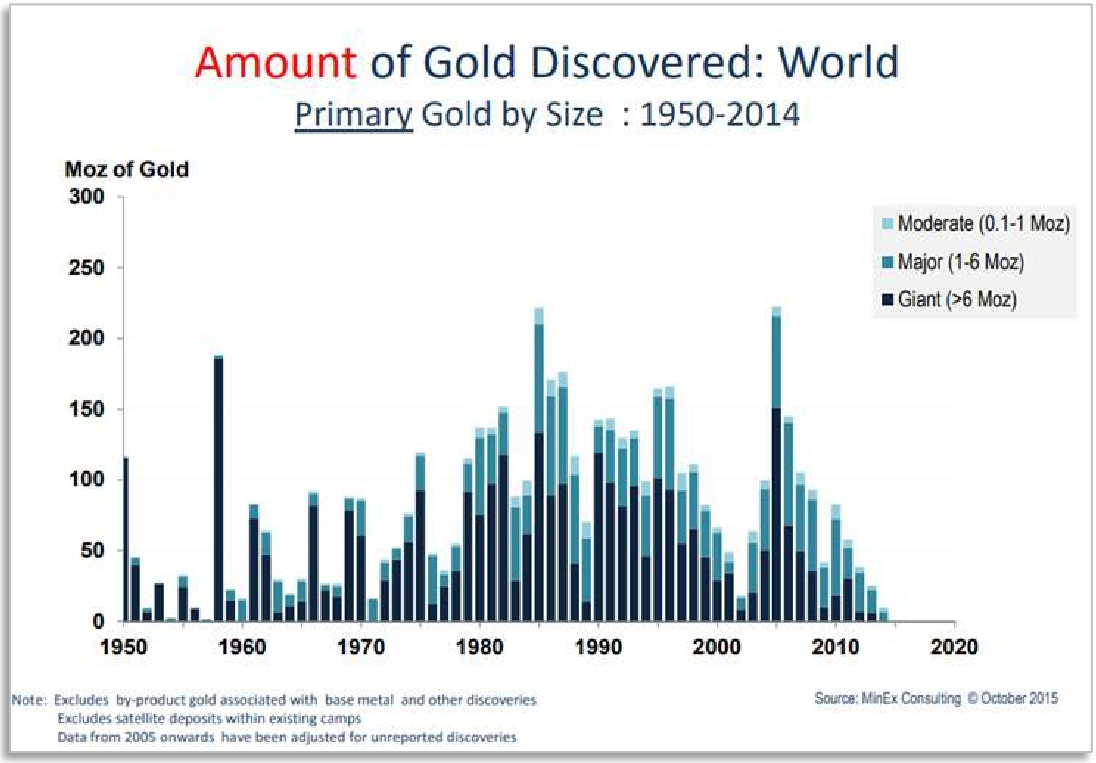


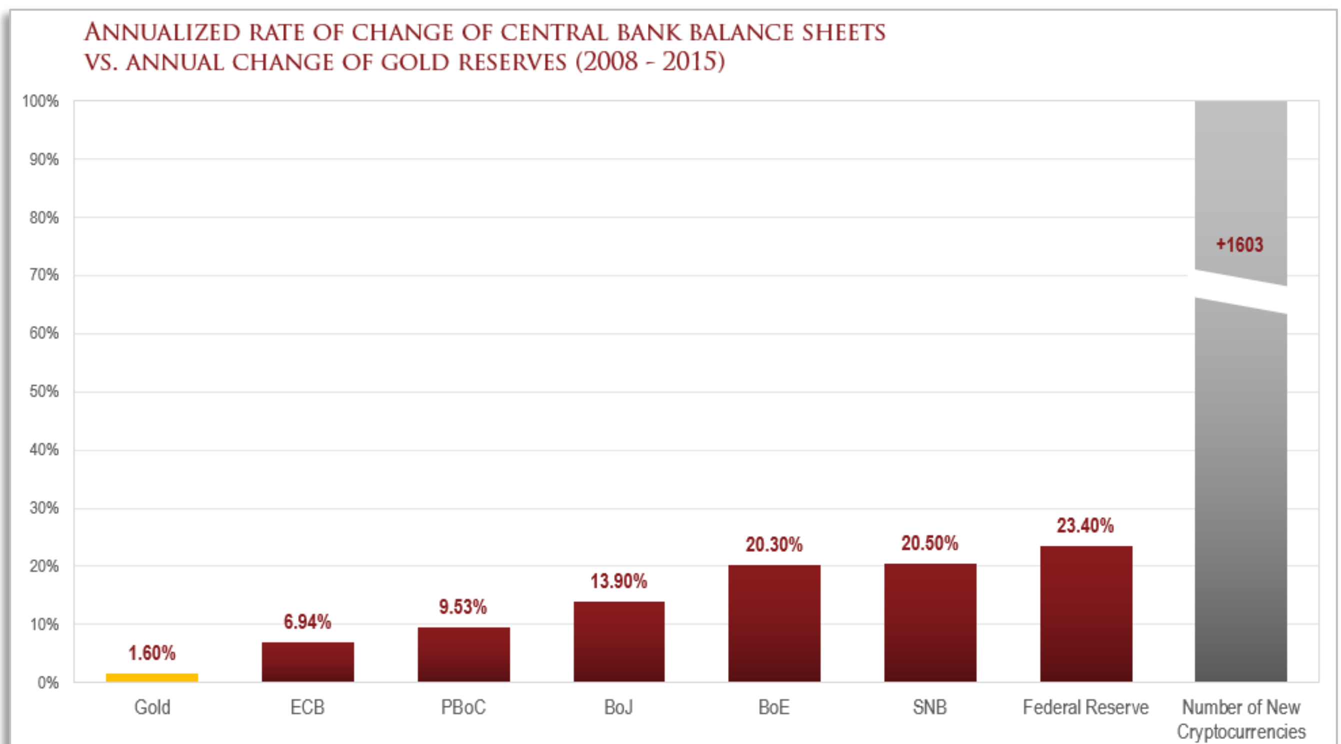




Sources: Bloomberg

Continuing to peruse the fundamentals, one may be inclined to ask: has gold become abundant? Have many gold discoveries been made in recent decades? Are the major companies replacing their mined reserves? Has a meteor of solid gold crashed into the earth? After centuries of trying, have alchemists learned to turn base metals into gold? The answer to all is a resounding "NO." The supply creeps along at a percent or two a year. Meanwhile, the supply of currency, fiat and crypto alike, has experienced a decade for the ages. New eras come and go, but in the end, supply and demand always matter.



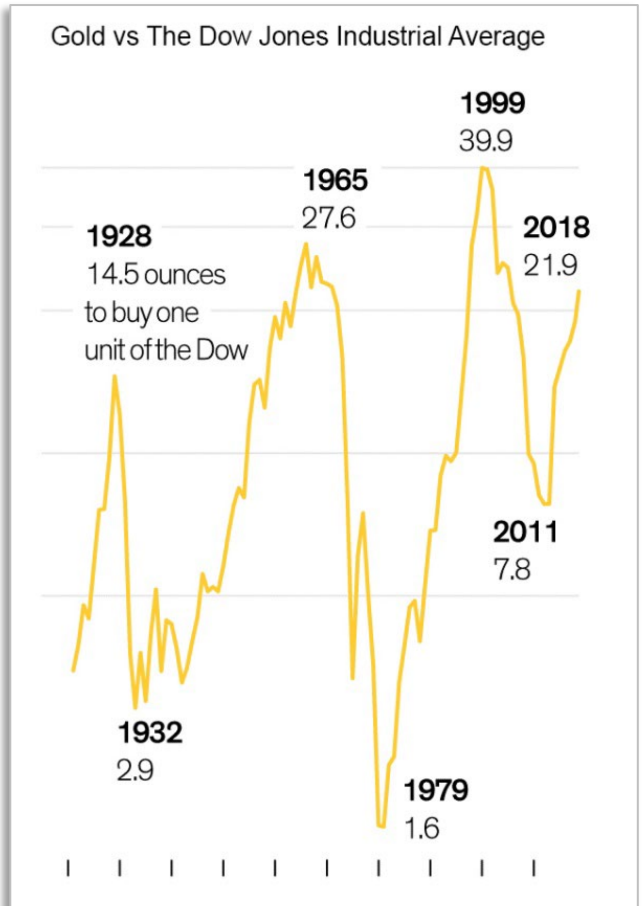


Sources: FED, SNB, BOE, PBPC, Incrementum AG, Kopernik

("And to say it once more. Public opinions—private laziness." - Nietzsche)

*"Did you ever have to finally decide?
And say yes to one and let the other one ride?
There's so many changes and tears you must hide."
-John Sebastian (I know, wrong Sebastian)*

In an abnormally bifurcated market, people have a choice – stay with the uber-popular trend-setters or pivot to the unloved; stocks that could only look beautiful to value types. Everyone is waiting for "the catalyst." Who knows if it has arrived, but as the above referenced song suggests, "*you bet you'd better finally decide.*" For Kopernik, the choice is easy. At current levels, many stocks with tangible value look downright enticing. In an otherwise overpriced world, gold is cheap. For now, I'm fine with the moniker - the Gold Guy. In a world of "too much" of most everything, I will be the scarcity guy. The "gold guy," "platinum guy," silver guy," "natural gas guy," "uranium guy," "clean water guy," "farmland guy," or the "large-growing-country-with-scarce-market-capitalization guy!"



Source: Barrons.com *Gold Is Cheap. Inflation Is Coming. You Do the Math* | Andrew Bary

Before concluding, let's quickly revisit the haves versus the have nots. Returning to Franz Ferdinand - the concert was great. And, it prompted me to revisit the history of the original Franz Ferdinand, the Archduke of Austria, whose assassination is credited with sparking World War I. He escaped an assassination attempt in Sarajevo when a bomb exploded slightly off target. Undaunted, he continued with his schedule. Later in the day, his driver made a wrong turn and got caught in traffic. One of the conspirators was sitting in a bar, mourning the failed attempt, looked up and couldn't believe his luck. He walked out, shot the Archduke, and within a few years, four empires had collapsed. That's right, empires that had lasted centuries came crashing down: Russia, Germany, Austria, Ottoman. I once read an interesting piece about life in Vienna in 1914, written, I believe, by Marc Faber. People were living large: restaurants, night-life, good times, the good life. None even imaged that their five hundred-year-old world empire was teetering on the edge, soon to disappear.

Sometimes it's dangerous to pay exuberant amounts for perceived future prosperity. Sometimes world powers get arrogant. Sometimes they overspend. Sometimes they make mistakes. Sometimes they just have bad luck. We hope that suggestions that the ¾-century "Pax Americana," which has led to relative peace and prosperity for the planet is unraveling, is off base. All the same, what an important time it appears to be, to diversify across countries, regions, sectors, asset classes, currencies, and stores of value. Now, in the era of global, monetary experimentation, this is not the time to have 54% of your eggs in one basket, even if those eggs are American (The U.S. comprises 54% of the MSCI-All Country World Index, but roughly only 20% of World GDP). As pointed out above, now is the time to buy gold, especially at the unbelievable discounts available through the gold mining stocks. Now is the time to buy uranium, at an 80% markdown from the previous price peak. The uranium ETF (URA) is down 90% from its 2011 level and has just capitulated on the metal, and begun including capital goods companies that have vague exposure to nuclear power in the portfolio. It sounds like the proverbial bell is ringing. Over the summer, the price of uranium bounced – it is now 40% above the low, and Cameco Corp., the world's largest publicly traded uranium company, won a major tax-related victory over the Canadian government. Instead of paying a fine that was estimated to be $400 million (mm), possibly even $2 billion, they will pay nothing (being appealed). Shockingly, the stock is lower now than it was at summer's onset. Over the longer-term, it is 80% lower than it was eleven years ago.

Likewise, while oil has tripled off of the depressed levels of three years ago, cleaner alternative natural gas has not. It remains at a 75% discount to the peak of 2008. And, in fellowship with gold and uranium, ownership of the resources via the stock market offers even more enticing bargains. Range Resources, for example, is down 83% from its level in 2014. Gazprom, the world's largest gas company, is 85% below its 2008 level, despite the fact that over that same period its book value per share has sextupled! Elsewhere, the Bloomberg agricultural sub-index is less than half its level of a decade ago. We will continue our strategy of opportunely buying profitable, publicly-traded farming companies, predominantly in the developing world, as they persistently go on sale on a rolling basis. The MSCI-EM Utilities index has almost been cut in half since 2007. We have opportunely trimmed and added to our utility holdings in recent years. We've been taking gains in France and Brazil while adding back our previously trimmed Russian franchises. Telecom has been similar. One of the shining stars of 1999's TMT (Technology, Media and Telecommunications) market, the MSCI-EM Telecom is not only well below the '99 level but is less than half of 2007's. Korea and China look particularly interesting here.

In summary, while we fully expect to be wrong one-third of the time, based upon self-reflection, we don't believe that this is one of those times. As we concluded in 2000, we once again conclude that it is the market that has lost touch with reality. We doubt that the "shooting-stars" of the current rally are really worth much more than they were several years back. And we strongly believe the market is foolish to be sneering at unpopular, but value-laden tangible assets. We are excited that the current, very bifurcated market offers tremendous value to those willing to prospect in the very unpopular venues where value resides. Real assets are, figuratively, being given away. Many stock markets in the emerging parts of the world are a decade into bear markets, even as many great companies that are domiciled there continue to prosper; a prosperity not reflected in the stock prices. Optionality is grossly underpriced, whether it dwells in resource companies with huge operating leverage to undervalued minerals, or in put options on indices that are momentarily untethered from fundamentals, or elsewhere. This is in large part because implied volatility is being suppressed and people have forgotten that stability itself is inherently unstable. We're excited by the opportunities created from today's historic misperceptions and concurrent mispricing. What others condescendingly snub as "cigar butts" may turn out to be, figuratively, valuable 'Cubans', wrapper intact.

We wish you all a healthy and happy holiday season,

Cheers,

David B. Iben
Chief Investment Officer
Kopernik Global Investors
October 2018

P.S. While we signed off on a positive note, those interested in hearing more about the perils represented by the 'two-sided coin' of a bifurcated market, the requisite shots at momentum stocks, and/or the other side of the Sebastion story – read on.

As pertains to prophesies of a new era, we say, "beware false prophets/profits." With that, let's segue back to King Sebastian, and **to the idea that he is not an analogue for value investing, but for momentum investors, new era investors, and others investing in the dream of a future that has evolved past the need for old-time fundamental value**. The following article provides a different view of the savior king.

> *"D Sebastião: The Return of the King*
> *Lynne Booker*
>
> *If there were to be a vote for the worst king of Portugal then you might think that D Sebastião would be a clear winner, far ahead of a field including such incompetents as D Afonso V and D Afonso VI. He led a cripplingly expensive crusade to North Africa, in which his army was completely destroyed and he himself was killed. Even more disastrously for the monarchy, he left the kingdom with no viable heir and ripe for a takeover by the King of Spain, Portugal´s long standing and mortal enemy.*
>
> *It is therefore a surprise to find that many Portuguese cannot wait for him to return! Legend has it that one misty morning D Sebastião will reappear and with him Portugal´s wealth and greatness will be restored. Before he was born he was referred to as O Desejado (the desired one) and after his catastrophic invasion of Morocco he was still called O Desejado, as indeed he is today. What is it about Portugal´s "King Arthur" that has given rise to such a myth and to such a fanatical belief in a king who brought his country to ruin?*

D Sebastião was certainly seen as a saviour at the time of his birth. The dynasty of Avis was struggling to survive. Of D Manuel´s 13 children, the only survivors were D João III and his brothers the Infantes D Luís and Cardinal D Henrique. D Luís was unmarried and had only one bastard son, and as a cardinal, D Henrique was not able to marry. Of D João III´s 9 children, the only survivor was the sickly Príncipe D João who was married to his double first cousin D Joana de Áustria as soon as possible. (They were aged 16 and 17 respectively). With bated breath, the whole of Portugal waited for the birth of a male heir. Having performed his dynastic duty, the exhausted Príncipe D João died 18 days before the birth of his son, D Sebastião who had been begged from God with so many tears, pilgrimages, processions and alms.

D Sebastião came to the throne at the age of 3 when his grandfather, D João III died at the early age of 55. At first, grandmother D Catarina was regent during D Sebastião´s minority, and then great uncle Cardinal D Henrique took over. D Sebastião was educated by the Jesuits and his greatest desire was to be a crusader. He took little interest in the task of government and he dreamed of military conquest and the expansion of the faith. His major and indeed only aim was to conquer Morocco. He was not a strategist or planner; these were cowardly traits. His motto could have been the same as that of the SAS, Who dares wins! When he assumed his duties as King at the age of 14, he took no advice from the experienced D Catarina and D Henrique and the way to his heart was through flattery and admiration. Avoiding Lisbon and the possiblity of unwanted advice, the young king traveled around the Alentejo and the Algarve with like-minded young aristocrats. He developed a craze for physical fitness and he took violent exercise in all weathers: he would hunt, go hawking, joust and he would fight bulls (but he would not kill them or allow them to be killed).

From an early age he suffered a lifelong chronic ailment which affected his sexual organs. He had an apparent dislike of women and there were grave doubts of his generative abilities. The Spanish Ambassador at Lisbon said that speaking to him about marriage was like speaking to him of death. Although he received numerous proposals on behalf of marriageable Spanish or French princesses, he was just not interested.

But he was passionately interested in Morocco. Because the Portuguese fortresses in Morocco (Alcácer Seguer, Arzila, Azamor and Safi) had become expensive to maintain and unproductive and because the increasing demands of Empire proved that there were just not enough men to occupy them, D João III had abandoned these outposts of the Empire. D Sebastião was determined on a crusade to win them back again. Having surrounded himself with useless aristocrats and fawning favourites, D Sebastião set about making concrete his vision of Empire. Needing money, he raised special taxes; he borrowed 400,000 cruzados at 8% from a banker in Augsburg (in return for a 3 year monopoly on the sale of pepper); and for 240,000 cruzados, Portuguese New Christians bought from him a papal Bull which temporarily suspended the right of the Inquisition to confiscate their captives´ property.

In 1573 D Sebastião spent six weeks in the Algarve examining his levies and the defences against the corsairs. In Tavira, after he had examined the Forte do Rato, the delighted town staged a bullfight, and the king demonstrated his great upset when one of the bulls was killed.

D Sebastião visited the Portuguese fortress of Ceuta in Morocco for the first time in 1574 and by the summer of 1578 he had finally managed to gather an invading force. It consisted of 14,500 infantry, made up of Portuguese and mercenaries from Italy, Germany and Spain and 1900 cavalry and 36 guns. That great historian of Portugal C R Boxer calls the campaign that ensued one of the worst managed in recorded history. The invading force landed at Arzila and the infantry marched 33 km southwards towards Larache and then 32 km southeastwards towards Alcácer Quibir towards the waiting Moorish army.

D Sebastião was young, nervous and incompetent. Because he had not ordered any reconnaissance whatever, he was unaware of the size of the Moorish army (50 000 men, innumerable horsemen and 27 guns) or its proximity. He insisted that he was the only one who could give the order for any attack; he physically pushed fidalgos and soldiers whom he considered out of place; he offended the Spanish commander, who publicly regretted his participation in the invasion; he delayed giving the order to attack and when he did, it was only to the cavalry, apparently forgetting everyone else. D Sebastião refused to flee even when it was obvious that the battle was lost and many aristocrats were killed because they could not leave him. D Sebastião was eventually surrounded and cut down. Only about 100 Portuguese escaped from the scene of the battle and about 6,000 survived as prisoners. The cost of this ridiculous adventure was 1,000,000 cruzados (one half of the state´s annual income). Portuguese schoolchildren are taught that the battle was lost because of the sabotage of Spanish mercenaries. Spain of course was in a position to gain if D Sebastião were killed.

When D Sebastião´s body was eventually returned to Portugal in 1582, it was interred in the Mostério dos Jerónimos in Belém. A century later, his tomb was completed with the following verse (here translated from the Latin):

In this tomb lies buried Sebastian - if the story is true -
Who in the sands of Africa was gathered in by impatient death
Do not say that they are mistaken who believe that the king still lives
He was fated to die, and in his death he lives on

Strangely, despite the humiliating defeat and annihilation of the expedition, Portuguese people did not blame D Sebastião. He was regarded as a tragic hero of epic proportions whose disappearance was only temporary. At first it was believed that he was in hiding and his people called him O Encoberto (the hidden one). During the years 1580 - 1640, when Spanish kings occupied the throne of Portugal, people put their faith in a Messianic deliverer, D Sebastião O Adormecido who would wake from the dead to inspire them. This strong belief is now known as Sebastianismo and is associated with a forceful and heartfelt patriotism, which may have underwritten Portuguese belief in its Empire right down to 1974. Ironically, therefore, it could be seen that this headstrong and militarily inept youth, by leading his countrymen to a tragedy of epic proportions in the sands of Africa, indirectly contributed towards the comparative longevity of his nation´s American, Asian and African empires. The ´spin´ does not work for me. I think D Sebastião emptied Portugal´s coffers, wasted thousands of lives and lost Portugal its independence. For these reasons he gets my vote as Portugal´s worst king!"

Source: Copyright (c) 2014. Algarve History Association

Ignoring the numbers and charging full-speed ahead; that doesn't sound like any value investors we've ever met! Au contraire. Surrounding himself with aristocrats and favorites? Ignoring the numbers? Charging on in the belief that this time is different? These are the traits for which momentum investors are famous. Unwavering support for "The Desired One(s)" is their very M.O. The anointed ones who will save the empire from decline in the midst of dysfunction, a heavy debt burden, and challenging overall fundamentals? Anyone picturing the FAANG stocks here?

Clearly Sebastian is a better analogue for "New Era" stocks than for value stocks, but we are not suggesting that New-Era Sebastianites are waiting. They are doing anything but - patience is not their thing. Momentum stocks attract more and more money as they rise, figuratively ever closer to the sun.

"Careful, pal. You're talking about the stocks I love!"

They embrace the rosy future of the FAANG stocks. They know no fear other than "FOMO," the "fear of missing out" on the get rich quick bonanza. Major leaps forward in technological innovation are a powerful, market driving force, especially when in conjunction with easy monetary policy. Thus it was when technology opened whole new worlds to the Dutch, English, French, et al in the early 19th century, leading previously unimagined wealth for the South Seas Company and the Mississippi Company. These stocks rocketed skyward accordingly. Likewise, a great bull market sprung from the building of the canals and again with the advent of the railroads. Later, the 1920s, almost a century ago, was an era that is still famous for technological innovation, for its go-go economy, its "Gatsby-esque" ostentation and class divide, and, of course, one hell of a bull market. Jumping forward to the late 1960's and early 70's, technology was once again hopping, the Fed's "printing press" was working overtime, and the stock market was, accordingly, in overdrive. Leading the way were tech stocks and consumer franchises, the ones which had proven especially adept at utilizing technology to create "best of breed" products, services, distribution and advertising. The stocks of many such companies became members of the "Nifty Fifty" "can't lose" stocks.

The global leader in technology during the 1980s was Japan. They dominated automobiles, consumer electronics, machining, and semi-conductor equipment, and gained prowess in media. American companies started imitating Japanese culture and processes. The market boom was one for the ages. The next decade, centering on mobile communications, fast IC's[4] and, of course, the advent of the internet, led to enormous growth, returned the technology leadership position to the U.S., and eventually sent the NASDAQ into the stratosphere.

Every investor should read "Devil Take the Hindmost and/or Extraordinary Popular Delusions and the Madness of Crowds." They tell their story in a much more interesting manner than I can. And, if anyone is in doubt as to how the above market manias ended, you'll find that in these books as well. While social media, search engines, home delivery, bio-engineering and CRISPR[5], clean energy, and autonomous vehicles are without a doubt, game changers, imagine the impact on society that was brought about by canals, railroads, airplanes, cars, air-conditioning, indoor plumbing, distributable power, telephones, telegraphs, ships that could sail the Cape of Good Hope, penicillin, computers, and so forth. To say that contemporary times are fantastic is an understatement. To say that "this time is different" from all the other speculative, technology-driven times is, in the words of John Templeton, "most dangerous."

Among the prevalent apologies for current record-high valuations are: accounting methodologies are obsolete, antitrust laws are no longer enforced, central bankers are wiser, interest rates are permanently low, financially engineered growth is tantamount to real growth, modern businesses are asset-light, perpetual government deficits are a good thing, and who knows what else. A fraction of these points arguably contain a grain of truth; most are delusions, even deliria. In the first quarter of 2000, the last "new era," we – as value oriented investors - could only batten down the hatches, and await the inevitable return to normalcy. We can also make two points:

1) *the laws that guide mathematics, finance, economics and human behavior have not been eliminated because of technological advancement and…*

2) *even if we are wrong about the potential of momentum stocks, the stampede out of value stocks into growth has left value stock at levels from which enormous future returns look almost inevitable.*

Now, eighteen and a half years after the last tech bubble, we've once again battened down the hatches. We're riding out the storm, and we reiterate the same two points. **We believe that most momentum stocks possess far more risk than potential upside, and, most importantly, that a subset of value stocks, following a decade long bear market, have reached levels that portend significant upside with lower than average risk**.

[4] Integrated Circuits
[5] Clustered Regularly Interspaced Short Palindromic Repeats – CRISPR technology is a tool which allows researchers to easily alter DNA sequences and modify gene function.

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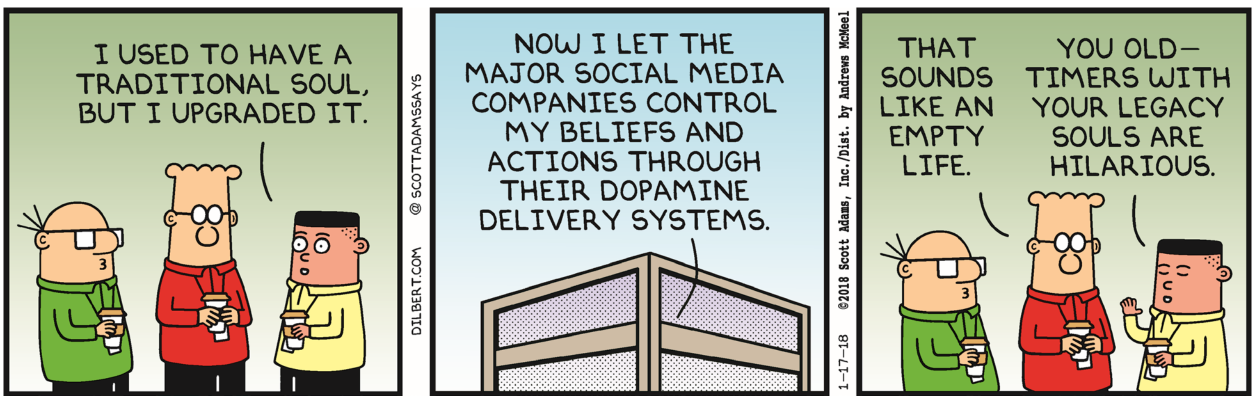
Kopernik
Global Investors, LLC

The Renaissance and the Entropic Arrow of Time

May 2019

The Renaissance and the Entropic Arrow of Time

I was well on my way to finishing a tome comparing and contrasting the current era to that of a half-century ago, when it paradoxically occurred to me that the similarities and differences to a half-millennium seemed more urgent. In ways, the two distant eras - the beginning of the renaissance and the contemporary beginning of “the singularity” era - are similar. And yet, the case can be made that **the two periods couldn’t be more different.** Back then, men weren’t allowed to think, at least not in a creative, independent way. Before delving further into that topic, let’s posit the second point that, **in the modern era where thinking has never been easier, mankind has chosen not to think**. We have data, algorithms, social media, other media, and dogma to do the thinking for us. Much more to come on this disquieting reality.



The Renaissance

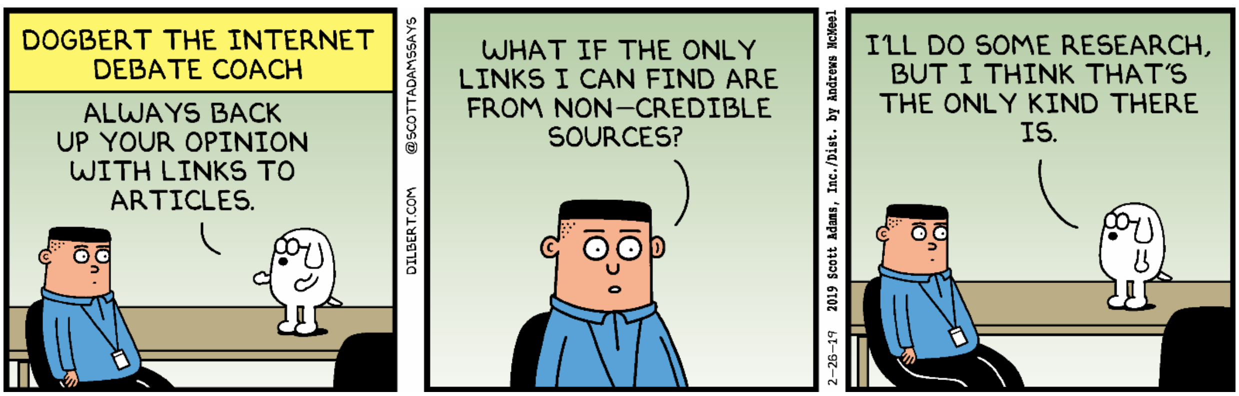
In the early 1500, Nikolaj Kopernik, aka Nicolas Copernicus, put forth the observation that the earth was not the center of the universe, but instead, orbited the sun. This belief was not well received; in fact, it was dangerous. It was still perilous almost a century later when Giordano Bruno was burned at the stake for espousing Copernican ideas, amongst others, which the Church considered heretical. A decade later, Kepler was excommunicated from the church, and Galileo famously recanted his beliefs under threat of torture or death. A synopsis of the movie/play, The Life of Galileo, by Bertolt Brecht can be found in the appendix of this commentary. It discusses Galileo’s life, the conflict of intellectual freedom; between individual freedom and authority; ultimately between liberty and death. Following that story is a brief excerpt on Bruno. For a more encompassing discussion of the intolerance and folly of that era, Extraordinary Popular Delusions and the Madness of Crowds, by Charles Mackay, is an excellent book. Written several hundred years ago, in addition to 100 excellent pages on financial manias, it discusses witch hunts, the Crusades, and other examples of mankind’s intolerance of new ideas and of differences. Literature is rife with examples of hardships and misfortune endured by those who dared think independently. Nonetheless, many persisted, leading the Western World into a period of cultural, scientific, political and economic rebirth.

“Therefore, when I considered this carefully,
the contempt which I had to fear because of the novelty and apparent absurdity of my view,
nearly induced me to abandon utterly the work I had begun”.

- Nicolaus Copernicus

The Anti-Renaissance?

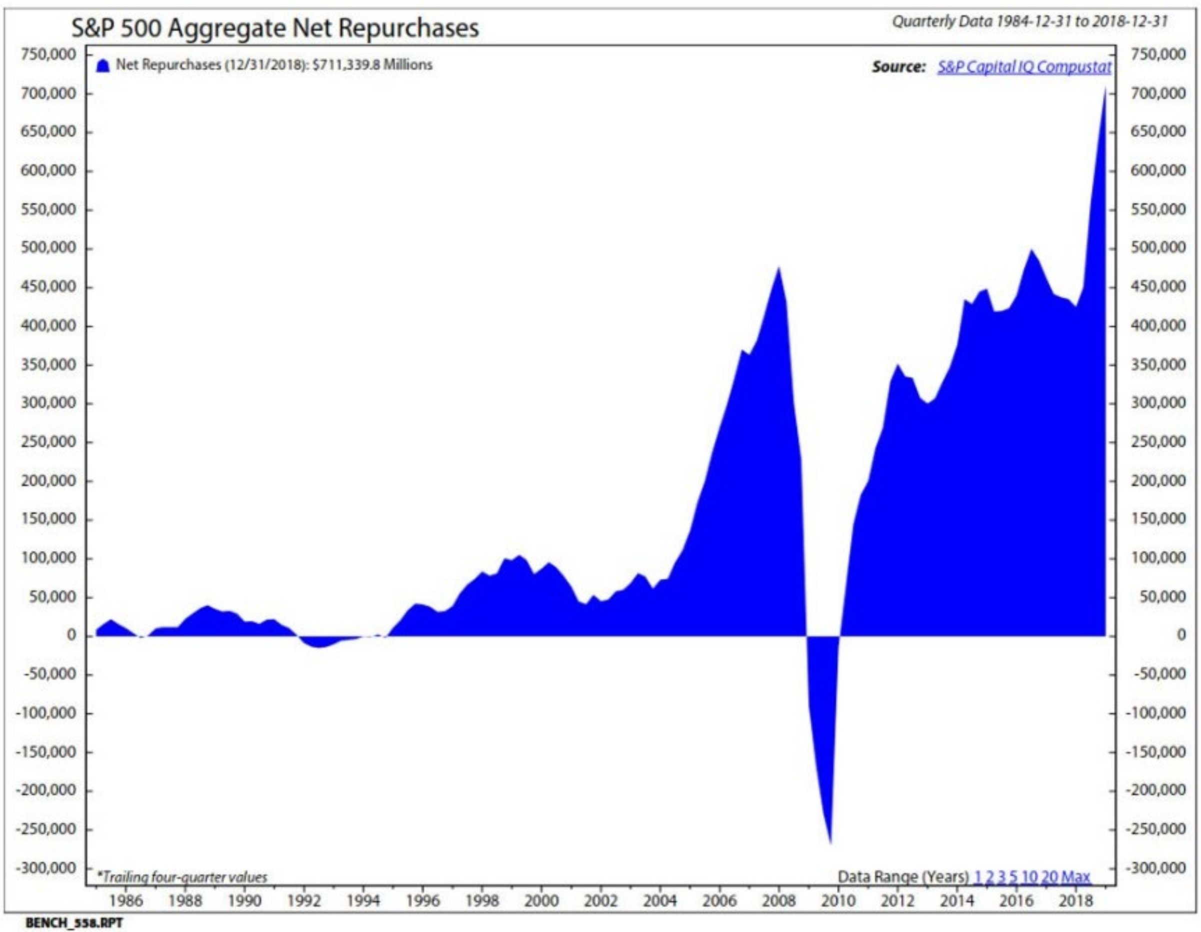
What a different world we live in today. Following 500 years of thought, exploration, and technological advancement, we now have almost unlimited access to data and ideas. The past 200 years, in particular, have championed individual liberty and freedom of expression. Libraries, websites, universities, and more, are available to quench anyone’s thirst for knowledge; perhaps doing so with the volume and velocity of a “firehose.” And yet, this barrage of information seems to be pushing mankind in the direction of simplicity. We have never had greater choice when shopping, but Amazon figured out we preferred ease. Many people no longer even look beyond Amazon. People can choose to do rigorous research, but it’s easier to google a subject. We can visit people, but Facebook and texts are so much more convenient. We can venture to foreign places, but traveling is often uncomfortable, and virtual reality has gotten pretty damn good; and it's improving rapidly. We can play sports, but staying in shape is a pain in the butt, and video games are a lot of fun. It is hard to fathom, but enterprising entrepreneurs are making millions from just being watched while they play video games. Elsewhere, there are now virtual sports leagues, complete with gambling and fantasy leagues. We have a democracy, with the right to vote for anyone we choose. This is true for much of the world now, yet to use the States as an example, most people don't choose to vote. Those who do vote, don't venture beyond the choices allowed them by the entrenched party duopoly of Democrats and Republicans. This proved true even in the recent presidential election, when a lot of people professed to dislike both of the candidates put before them. News-wise, the potential sources are unlimited, but people have chosen to cordon themselves off from the world, allowing themselves exposure only to a news source that will spoon feed them what they would like to hear; whether that source be CNN, Fox, Facebook, or another. It appears to be too painful to have to mull over alternative viewpoints. Politicians, once elected, increasingly will vote solely along party lines, regardless of the merit.



I could drone on but I won't. It will just make me sound old and grumpy, and more importantly, prevent me from getting around to the **main topic – the abrogation of thought in the investment field, and the tremendous opportunity that is being created for those individuals/institutions who are still eager to utilize independent thought and endure the discomfort that is often associated with doing so.**

Like our namesake – Kopernik (Copernicus) – we relish doing our own analysis and coming to our own conclusions. We are truly grateful that, unlike Copernicus, we live in an era where we can publish our ideas and act on our analysis without fear of loss of life or even of social standing. And, we are excited that our analysis, a la Copernicus, leads us to vastly different conclusions than the commonly embraced doctrine of contemporary times. Significant potential excess returns are in the offing due to the dogma embraced by academics, and even by many in the established investment community. As a prime example, we are thrilled that when a stock falls in half it is widely viewed as more risky than it was pre-drop, due to the increased volatility arising from the drop. Yes, volatility is widely viewed as risk, we aren't making that up. Conversely, when a stock methodically goes up until it reaches a wildly expensive valuation, it is considered low risk due to its exhibited low level of past volatility. Once again, we're not making this up. People even create funds solely devoted to buying these expensive, but low historic volatility stocks. We happily take the opposing side of both of these misguided ideas; we prefer to buy low and sell high, as quaint as that sounds. Theory proposes that volatility is risk, analysis demonstrates that it is no such thing.

Another popular idea is that stock buybacks are an effective way to return cash to shareholders. Analysis illustrates that any investment undertaking that does not include price as a variable is dangerously flawed. Buying back shares at an undervalued price is likely a very effective, value-accruing action. Buying at overvalued prices is value-destructive, and thus is not an effective return of cash to shareholders. We put forth that it is not a return of cash to shareholders at all, but rather a gift of cash to exiting shareholders, those who were smart enough to sell their stock into the company's inflated bid. History demonstrates that companies have done the vast majority of their repurchases near market tops; will this time be any different? Logic shows that **paying high multiples for a stock tends to be value destructive while suppressing interest rates allows this value destructive action to be short-term accretive to earnings per share**. Here again, we'll let others utilize value-destructive, but EPS accretive schemes. We'll focus on true wealth accretion.



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A theory that no one had heard of a year ago, but is now all the rage, is Modern Monetary Theory (MMT). It basically states that any country that has the ability to print the currency required to satisfy its debt, and has the wherewithal to suppress the rate of interest being paid on that debt, needn't worry about debt. They are better served to provide ~~the voters with all of the largest they desire, I mean provide~~ the citizens with the basic needs that they require. Why should people lack food, education, and medical care when the government can create the money needed to provide for them? Once again, it sounds great but doesn't withstand even a modicum of scrutiny. The problem, of course, is that **while the government can conjure abundantly more currency, they can't create more wealth**. It should be clear to all that manufacturers of food, drugs, etc. will ultimately want something of value for their efforts, rather than depreciating pieces of paper (or their electronic equivalent). People will point out that the last decade plus of money printing has not led to inflation; that things are different now. Here again, it sounds like a persuasive point until it is subjected to even a smidgeon of examination. Such scrutiny will reveal that inflation has been quite prevalent, even while following a customary pattern during bouts of monetary profligacy. During past episodes, the inflationary symptoms arose first in the asset markets, then began to migrate into the broader economy. This time too, inflation has been rampant in the asset markets during the past decade of rapid global monetary growth, especially in the global bond markets (where $11 trillion of bonds now trade with a negative yield), U.S. stocks (the NASDAQ is up 7-fold), and real estate in the world's financial centers. The inflated bond market has allowed governments to easily access beaucoup-capital, which subsequently transmitted the inflation toward their favorite programs, prominently including healthcare, education, and defense. More recently, some central banks, most notably the U.S. Fed, have tried to slow the rate of inflation of the money stock. History and logic strongly suggest that they will fail, and recently they have pretty much admitted their failure. Oddly enough bonds and stocks have rallied wildly in response to this failure. We live in interesting times. Expect the inflationary symptoms to continue to follow their historic pattern and spread to more areas of the economy as the central banks resume their money printing experiments.

As one of the most inflated areas, bonds deserve some individual attention here. Popular belief is that economic/financial weakness is good for bonds because the authorities will choose to come to the rescue, by lowering interest rates or buying bonds (QE) or whatever their scheme du jour happens to be. Over the past decade, this has proven to be the case. But, upon reflection it has become increasingly clear that manipulation of interest rates is actually quite a daft concept. Analysis must start with the question, "what is a bond?" The answer, per Investopedia is "a fixed income instrument that represents a loan made by an investor to a borrower. A bond could be thought of as an I.O.U. between the lender and a borrower." Understandably, over the years, investors were very reluctant to lend to those whom lacked the wherewithal or the integrity to repay the loan. Over time, some came to realize that it was okay to relax credit standards a little if interest rates were raised enough to compensate for the increased risk of eventually receiving less than full repayment of the principal lent. **Only in the "twilight zone" of the current environment is it accepted that the worse the ability of the borrower to repay, the lower the interest rate they should accept!** It is presumed that if the government can't pay, they will intervene in the marketplace to suppress interest rates/inflate bond prices. The U.S Government now owes a debt approximating 100% of its annual gross domestic product (GDP). If one (correctly) includes off-balance sheet obligations for pensions, social security, healthcare, etc. the true size quintuples. But even sticking with the official number, the odds of being repaid, with a currency of similar to today's value, are slim to none. This is because in order for governments to obtain funds they ultimately must confiscate funds from the private sector, usually through taxation. Empirically, governments haven't been able to extract much more than 20% of GDP from its citizenry, meaning that the debt is around five times the government's annual revenue (100%/20%). Now if a person has debt, outside of that secured by property or businesses, that is five times their annual income, they have a problem. Why should it be any different for governments? Unfortunately, the situation is even worse than it first appears. A government won't survive if it doesn't provide protection through a military and police force. Additionally they have made many promises to provide education, healthcare, social security and other 'safety nets', and increasingly a whole lot of largesse. Survival becomes difficult for a government that fails to significantly deliver on such promises, especially for democracies. If one were to assume that three-quarters of revenues will suffice, that leaves one-quarter of revenues for debt repayment. Therefore the U.S. debt is twenty times the annual funds available for repayment (100%/20%/25%). Importantly, it is not being repaid at all; it is growing rapidly. Even worse, **there is no willingness to repay it**. This is true of both political parties in the U.S. (see MMT above) and of virtually all parties across the globe. This is a long way of saying that the U.S. cannot and will not make good on its debt obligations. To be clear, it is understood that **they undoubtedly will make the payments, they will just do so with a currency that doesn't come close to the purchasing power of the 2019 U.S. Dollar.** The default will be economic, it will be moral, but it will not be visible. Therefore, interest rates arguably should be at all-time high levels to compensate for this risk. (Pointing out this important fact one more time, in this twisted environment, the higher the level of risk, the lower the rate of interest being accepted.) Rates are once again hovering near historic lows, the financial situation of most governments (risk) is also at an historical low point. We'll leave ownership of intermediate and long term bonds to others who are more adventurous than we.

But wait, we are reminded, the U.S. is in better shape than Europe, financially. Many European countries have higher debt levels (to GDP) and most of their economies are too government heavy, sapping strength from the private sector. Yes, arguably many European countries are less able to repay their debt than the U.S. is, meaning that rates should be even higher there. Lending support to our point, rates are actually lower there, even less than zero. Yes, that is another modern connivance, the idea that it makes sense to loan money at rates of less than zero. The explicit agreement is that if the borrower defaults you lose most of your money and if they don't default you still lose your money, but very little of it. We could write a tome on why negative interest rates are an evil thing. Others have, so we won't. Before moving on, let's not forget Japan, widely considered to be the "mother of all deadbeat governments." Their debt is in the neighborhood of three times GDP. Rates have been amongst the lowest in the world over the past three decades. Go figure. At any rate, society certainly seems to believe that financial profligacy should be highly esteemed; Kopernik's analyses lead us in the opposite direction.

Having talked a bit about current thought on government finance and on bonds, the obvious place to go from here is "money." It is a medium of exchange, a store of value, and the eventual consideration that bondholders hope to receive. The subject has become much more interesting than it probably has any right to be. Is the dollar really "the cleanest dirty shirt" thereby making it the best form of money? Is the market saying that the Euro and Yen are better because investors will accept a lower interest to hold them? Is the yuan the currency of the future? Or, is cryptocurrency the money of the future? Certainly, a mere 15 months ago, crypto was all the rage. Maybe it will be again – certainly it has more going for it than fiat currency, i.e. money that is backed only by mandate and the promises of politicians. The dollar is a particular curiosity to us right now since people simultaneously revere it (DXY continues to be very strong), yet get upset if cash is held in their investment account. Seems they don't like dollars after all, they prefer stocks and bonds. Put another way, they prefer the expectation of dollars in the future to dollars now! So much for the 'bird in the hand' maxim. With that in mind, the store of value part of the definition becomes important. The medium of change part of the equation probably disappears when the store of value part of the equation comes into question. Therefore, preferring a fixed-rate bond (a certain claim on a future dollar) to a current dollar in an era where interest rates are being suppressed, massive quantities of fiat currencies have been printed worldwide over the past decade, democracies have no stomach for fiscal discipline, central banks have a goal of eroding the purchasing power of their currencies in the future (and stand ready to ease further), and markets are expensive, seems foolish. Since U.S. bonds are claims on dollars and dollars are claims on the bonds on the Fed's balance sheet, and the quantity of both are increasing without limit or concern, our analysis of this circularity leads us to prefer scarce assets as 'money.' Fiat currency has proven consistently and unfailingly to be neither scarce nor value retentive. Like fiat, cryptocurrencies come with the promise of future scarcity. That may be true, we won't bet against. But for our hard earned wealth, and for that of our clients, we'll stick to assets that don't require others to honor their future promises. For centuries, alchemists have been trying to create value from substances that lacked much value. Turning lead into gold (money for much of history) was a popular endeavor. What would they have thought about the current belief that money can be created from nothing at all? They would take their hats off to those who are currently conjuring fiat and crypto currencies out of thin air. Once again, when it comes to our savings, we'll take scarce, hard assets instead. It doesn't hurt that they are so undervalued at the moment. Precious metals are the most undervalued and have the longest history as money, but we won't argue with those who prefer other hard assets. As it pertains to proliferating managed monetary alternatives, we will leave them to the theoreticians.

"Can you give me a hand moving these?"

"There's not a snowball's chance in hell that we went through 8 years of free money and didn't create a bubble"
-David Rosenberg

Moving on from savings to investing, possibly one of the biggest follies of doctrine in modern history is the current belief, some may say cult-like devotion, to the idea that the right way to invest one's hard-earned money is to do so through momentum-laden vehicles that eschew analyzing and understanding what one owns. It is commonly referred to as "passive investing' and it works very well in momentum markets. It is an unfortunate place to be when momentum invariably turns. Rather than go into detail, I'll refer you to our previous commentaries on the subject and to this excerpt from Howard Marks' memo entitled "Investing without People:"

"Is it a good idea to invest with absolutely no regard for company fundamentals, security prices or portfolio weighting? Certainly not."

We believe that good money will be made by those who think for themselves and take advantage of the tremendous opportunities availing themselves due to misguided theories and practices. Let others fear volatility, fall to the siren song of stock-buybacks and other forms of financial engineering, get debased holding the currencies of profligate nations, credulously accept low yields to hold the bonds of hopelessly indebted entities, and chase momentum stocks (especially those passively held in the absence of analysis, appraisal, or other requisite due diligence.) At Kopernik, we plan to continue conducting in-depth due diligence, thoughtfully appraising value, maintaining patience and self-control, and staying disciplined in our process.

"In all affairs it's a healthy thing now and then to hang a question mark on the things you have long taken for granted."
— Bertrand Russell

Transitioning to other examples of the importance of independent thought, the mainstream belief that "disruptors" are the only place to be, is a worthy topic. They aren't necessarily wrong – disruptors can be exciting and can yield true 'home run' type returns. But with this high return potential comes high risk, very high risk. Most of the **highly esteemed disruptors are in industries that have long histories of the disruptor eventually becoming the disrupted**. Technology stands out. We fully understand putting a high valuation multiple on a stock that may become the next Apple; but in general, putting high multiples on companies in industries where 90+ out of a 100 may become the disruptee, in this rapidly changing world, is a recipe for tears.

Worthy of serious thought is the fact **that technology is now rapidly disrupting many other industries, in other words, making them much more risky investments**. For example, it was amazing how quickly Eastman Kodak went from being the dominant, and highly profitable, provider of film, cameras and printers, to an uncompetitive provider of image capturing technologies. Nowadays, many other companies will succumb to similar challenges. Perhaps industrials are a good place to start. After spending years and billions on factories, machinery, supply chain, and expertise, what if anyone with a 3-D printer can build better, stronger, cheaper products? And what of automobiles, a key component of industrial production? Will ride hailing reduce the need for as many cars or will the ease of use and reduced costs increase demand? Will the cars of the future be powered by internal combustion engines or electric? If electric, will they mostly be battery electric, plugin hybrids, hybrids, or perhaps fueled by hydrogen fuel cells? These outcomes will have a huge impact on the number of moving parts in the car, the metals used in the car, the type of primary energy sources used, and so forth.

Healthcare is also ripe for disruption, especially in the U.S. where many companies charge way more than they do for the exact same product elsewhere. What if drug companies, who have profited for decades from avoiding cures because treatments are more profitable, have to compete with biotech companies that develop cures? Suppose gene editing eliminates some of these treatable ailments? What if devices such as Apple Watch/Fitbit can regulate people's behavior; what if they thereby drastically reduce the need for medicines that treat diabetes, cholesterol, blood pressure, and many other semi-controllable diseases? This sort of disruption goes beyond the pharma companies, impacting distributors, labs, hospitals, outpatient centers, PBMs and insurance companies (could be positive for the latter).

Energy is certainly being disrupted. Wood and whale oil were disrupted by heating oil, which was replaced by electricity that was generated from coal (and hydro and nuclear), to later being generated by natural gas (in the developed world), and then more recently to being increasingly fueled by wind and solar. A combination of technological changes and regulatory/societal issues are making it a dicey proposition to spend billions on generation/transmission/distribution of electricity, as PG&E can attest.

Telecom is not a newcomer to disruption. Between wire and coax and fiber and the airwaves, transmission vehicles are constantly evolving. Regarding all facets of communication, the technology is changing rapidly and consistently, 3G, 4G, 5G…for example. Spending a lot of capital on any particular technology is not a riskless proposition, to say the least. Adding to the technological risk, many governments have mandated low rates, iffy investment, poor competitive dynamics, and other detractors from returns on investment. Additionally, as we've seen in India, sometimes competitors are willing to buy market share, using paltry rates.

Where does one start when discussing the disruptive forces facing consumer staples and consumer discretionary companies? Amazon is a logical starting point. Its stock is priced as if it is going to put everyone else out of business. Oddly, many of their competitors are priced as if their futures are rosy, too. This "everyone is priced to win" phenomenon is reminiscent of 1999. Without a doubt Amazon and Alibaba, et al are disrupting the business in a major way. And, these same woebegone competitors that are being marginalized, are increasingly having to use Amazon's platform to do business. Expect plenty more pain to come.

For one thing, the world's central banks' supercilious attempts to help consumer businesses in the short-term, have massively harmed their long-term prospects. By massively suppressing interest rates, they encouraged consumers to buy things that they didn't need and couldn't afford. This pulled sales forward, leaving consumers highly indebted and less needful of future purchases. The problem compounded when the frontloaded sales strength encouraged retailers to add capacity, on the assumption that the sales numbers represented a positive trend rather than an aberration.

Elsewhere, Millennials and Gen Z-ers have increasingly pushed back against previously accepted technologies in the food industry, taking a dim view of GMO, and of the pesticides, herbicides, antibiotics, and hormones that are so common in contemporary foods. And they increasingly are spurning packaged foods, believing them to be more of a nutrient-free, chemical-cocktail than a food. This has now gone on for much too long to be dismissed as a fad. Time will tell, but it's beginning to look like many of the packaged food companies are ruing the day when they chose to lever up their balance sheets. Disruption bites, so to speak.

Might future deliveries of groceries and other goods be made by Amazon, or by Uber Eats, proprietor delivery a la Dominos, by drone, or might people still prefer to swing by a physical store to save money or handpick the goods? Will the world still be very global, allowing us all to benefit from comparative competitive advantage or will the strong trend toward nationalism force sourcing to be more local? Certainly, very local is all the rage in the restaurant business. With so many unknowns, it is tough to want to invest a whole lot of long-term capital in many consumer facing businesses currently.

Clarifying the point before moving on, **we have nothing against disruption**. Au contraire, disruption is good. It allows progress, betterment of mankind, and survival of the fittest. It leads to a fit, productive economy. But, **industries currently prone to massive disruption deserve to sell at discounted valuations, reflective of the concurrent risk!** Once again, **this conclusion is counter to conventional wisdom. Therein lies the opportunity.**

The market is believed to like certainty. Therefore, industries that are less disruption-prone ought to be selling at a premium. The fact that they tend to trade at a large discount should intrigue would be investors. It intrigues us.

Let's lead off with transportation. Who didn't find the teleporter on Star Trek to be pretty cool, but it isn't happening in our lifetimes. And forgive us if we don't take Musk's Hyperloop seriously. It is a decent bet that infrastructure dedicated to planes, trains, and ships won't be badly disrupted before a healthy return on investment can be garnered. While efficiencies from technology and inefficiencies from politics may mildly hinder the demand for shipped goods, it's hard to see shipping being surpassed as the way to get goods from point A to point B over water. Quality transportation franchises oughtn't to sell below the cost of invested capital. We continue to be sanguine.

It is no shock that gold is an apparent winner from the trend toward increasing fiscal and monetary extravagance. As a type of money, it has not been disrupted for thousands of years. The Fed has now all but confirmed that there is no exit strategy for QE, thereby effectively ratifying the obvious, that fiat currencies cannot be counted on to store value. Never have; never will. Meanwhile, notwithstanding its recent bounce, crypto is having a tough time of it. Maybe someday its kinks will be worked out, but we will take the laws of nature over promises of future discipline. Gold is scarce, malleable, divisible, inert, attractive, and has a thousand-year history of being money. It is hard to over emphasize the importance of the fact that it's nobody's liability. It won't be disrupted and it's severely underpriced in our humble opinion.

Utilities are subject to disruption, but not equally so. High cost electricity is prone to disruption and deservingly so. Conversely, low cost power should continue to be in high demand in a world with a growing population, currently at 7.5 billion people. This means natural gas. This means existing properties for coal, hydro, nuclear, solar, and wind. Whether new investment in these areas will earn a fair return is controversial and subject to change. We prefer to invest in existing plants versus green-field plants. Low-polluting properties are much preferable to properties associated with higher pollution. They are better for the environment and will likely prove cheaper, for example when subsequent pollution control expenditures are required. Therefore, they are much less prone to disruption, an important pillar in Kopernik's preference for gas, nuclear, hydro, solar, and wind. The market has a differing opinion on hydro and nuclear. We are taking advantage of this inconsistency.

Likewise, even accounting for the rapid growth of solar and wind, it is hard to imagine uranium and natural gas being competitively harmed. They are cheap and clean. North America has plenty. They are dependable. They are selling for well below the cost of incremental production, portending substantially higher future prices. Timing unknown.

There are also various special situations that are attractive. The central banks have very publicly suppressed interest rates. This makes valuable information unavailable to investors and lowers the opportunity cost of holding an investment. Meanwhile various agents have suppressed, if not outright redefined the definition of, volatility. Volatility now means a down market. A violent, volatile, upswing in stocks leads to a drop in the VIX (volatility index). These two phenomena have led to a gross underpricing of optionality. Whether those options reside in a markedly underpriced ship/dam/mine/well or in a more standard form such as a put option, the market seems to be vastly underpricing it. We saw a glimpse of the potential optionality in 2016. We anxiously await the return of cyclicality in the future.

Investing Alongside the Entropic Arrow of Time

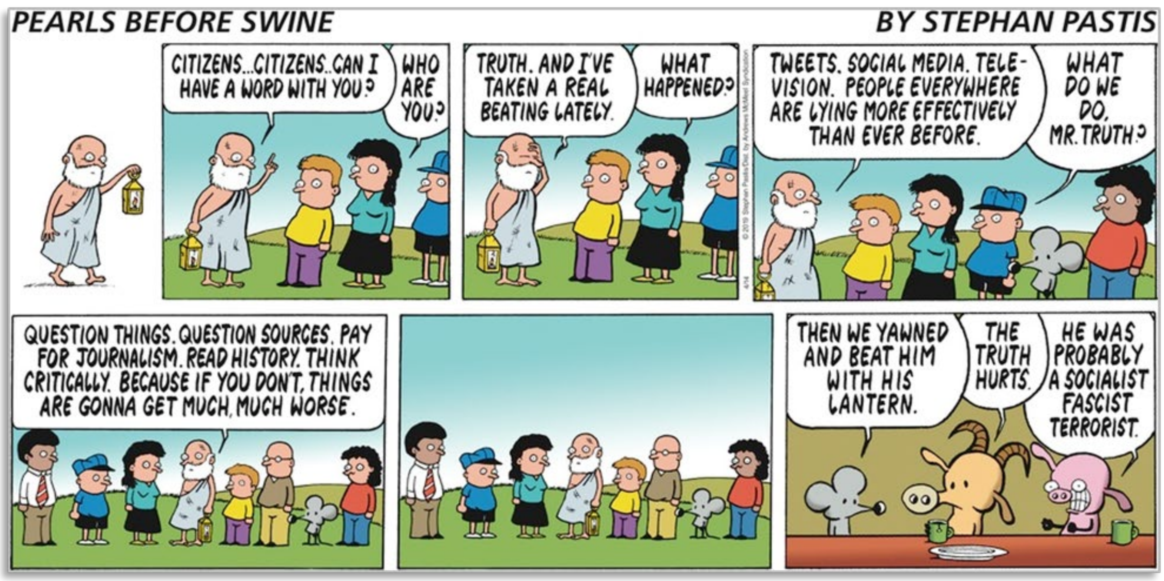
Entropy is a measure of disorder. It increases with the gradual decline of a system into disorder. The second law of thermodynamics states that the entropy of an isolated system never decreases. It is believed that the universe will continue expanding, becoming less organized. It seems that this law of physics applies to civilization as well. It can be persuasively argued that a breakdown from an authoritative system into a system that is more conducive to individual liberty and creativity is a very positive development. The further devolvement into anarchy and chaos is distinctly not positive. The "Renaissance Men" of a half-millennium ago had to take on great personal risk to challenge the orthodoxy of the, then prevalent, oppressive establishment. They slowly persevered. Monarchies gave way to representative forms of government. Science migrated from faith-based to research-based approaches. Literature and art ventured from very centrist to quite eccentric expressions. The economy progressed from feudalism to more decentralized, capitalistic, and individualistic practices. The monetary system became more flexible, incorporating derivatives of metals, thereby greatly increasing its use as a medium of exchange. Science, art, medicine, industry, and economic well-being flourished for the next five centuries, admittedly with plenty of cyclical downswings along the way.

The loosening of the yoke undoubtedly freed growth in many fields. Fast-forwarding to the 21st century, the pace of change has accelerated dramatically, but the entropic process seems to be approaching the latter stages; be that stage one of enlightenment and the Solidarity, or on the contrary, an unfortunate breakdown into anarchy and chaos. Disparate countries are choosing not to follow the rules of the global governing bodies, making the world potentially more dangerous. For example, is gene editing a step toward nirvana or toward the opening of Pandora's Box? Religious order/moral authority/spiritual direction, for good or bad, have become very fragmented and less potent. Government has devolved from representative democracies into a more pure democracy, with all the wonderful benefits and unintended hazards that accompany this trend. As Churchill said, "it has been said that democracy is the worst form of government except for all those other forms that have been tried from time to time." But, while democracy is probably better than all those other forms of government, Alexander Fraser Tytler has pointed out that, "*A democracy is always temporary in nature; it simply cannot exist as a permanent form of government. A democracy will continue to exist up until the time that voters discover that they can vote themselves generous gifts from the public treasury. From that moment on, the majority always votes for the candidates who promise the most benefits from the public treasury, with the result that every democracy will finally collapse due to loose fiscal policy, which is always followed by a dictatorship*." Certainly, we have already reached the point where the people have primarily chosen to vote largesse for themselves. At the same time, the whole concept of the nation state is, despite the pushback from nationalists, being usurped by a paradigm of corporatocracy. Quite possibly, this is a key driver of the nationalist uprising that we've been witnessing on a global level. Perhaps related to changes in government, is the deterioration of capitalism into something more akin to cronyism. Ray Dalio, Jeremy Grantham, Marc Faber, "Austrian economists," and many others have written plenty on the subject of wealth concentration, absence of antitrust enforcement, the power of political action committees, etc. so it isn't necessary to devote more space here. Another topic, for which there is no shortage of verbiage, is MMT discussed above. What does it mean for the world that economists, governors, academics, and much of Wall Street have effectively embraced the satire (written by Mark Knopfler and Sting) - "*Money for nothing?*" We would add more lyrics from the song, *"look at them yo-yo's, that's the way you do it."* Here again, a step toward nirvana or a step toward hell. For a proactive piece regarding modern finance, monetary theory, religion, and democracy, that you may find enlightening, infuriating, or perhaps both, "The five experiments: a short essay; by Fernando del Pino," is a stimulating read.

"The main focus in my life now is to open people's minds so no one will be so conceited that they think they have the total truth. They should be eager to learn, to listen, to research and not to confine, to hurt, to kill, those who disagree with them."

-John Templeton

Clearly, these have the possibility of being less stable times. Global cooperation and rule of law seem to be waning. If so, rather than paying up for the illusion of stability and clarity, people ought to be demanding a much larger margin of safety and more optionality/upside potential. Both are available for those who seek them.



Conclusion

A half-millennium ago, mankind's search for truth began to breakdown the stifling barriers to thought and liberty. In the contemporary world where truth and liberty have conceptually become easy, they are being sacrificed. While this is a gross generalization, excellent opportunities have been opened up for those willing to use common sense, dig for truth, and act upon their conviction. Thank God that we are allowed to think for ourselves, hold opposing opinions, and hold unto values. If many others prefer to get their beliefs from social media and popular doctrine, and to chase dreams of 'Unicorns' and utopian fiscal and monetary schemes, we are pleased to 'scavenge' for the 'diamonds in the rough' that they are disdainfully leaving behind. These include scarce goods that can't be printed or otherwise conjured by political types: infrastructure; corporate owners of gold and other precious metals; clean electricity generators; dominant phone service providers in growing markets; producers of relatively cheap, clean energy; transportation networks; agricultural companies; and plenty of special situations. As Yuval Noah Harari suggests, the difference between a myth and a natural law, is that the later holds true whether or not people believe. For example, if people stop believe in gravity, it still exists, whereas money stops being money when people stop believing that it has value. We are blessed that we have liberty and the freedom to think rationally and independently. We believe in: the laws of mathematics; the concept that supply, demand and usefulness effect value; the irrationality of crowds and its adjunct – the inefficiency of markets; and that the world is a cyclical place. These will all continue to exist with or without our endorsement. We believe in the importance of rigorous due diligence employing bottom-up, fundamental securities analysis. And finally, we want to acknowledge that we are fortunate and grateful to have so many solid, thoughtful, likeminded clients and partners. A la 1999, we all anxiously await the inevitable time when people stop believing in Unicorns and free money. Interesting times, indeed.

Cheers,

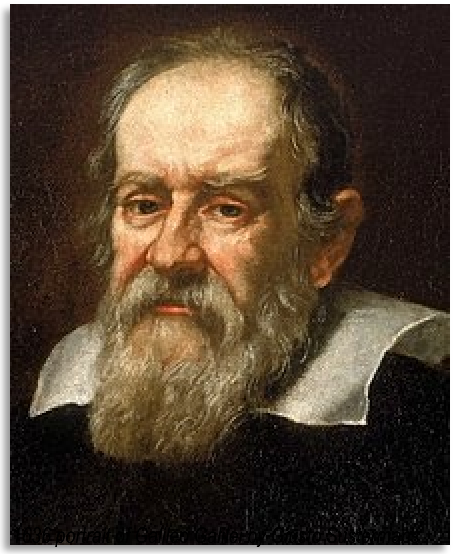
David Iben
CIO, Kopernik Global Investors
May, 2019

Willing to think Differently

Nicaulaus Copernicus (Polish: Mikolaj Kopernik, German: Nikolaus Kopernikus; 19 February 1473 – 24 May 1543) was a Renaissance Mathemetician and Astronomer who formulate the heliocentric moel of the universe which placed the Sun, rather that the Earth, at the center.

Copernicus had a doctorate in canon law and, though without degrees, was a physician, polyglot, classics scholor, translator, governor, diplomat, and economist who in 1517 set down a quantity theory of money, a principal concept in economics to present day, and formulated a version of Gresham's law in 1519, before Gresham.

Synopsis



Galileo, an eminent professor and scientist in the 17th century Venetian Republic, is short of money. A prospective student tells him about a novel invention, the telescope ("a queer tube thing"), that is being sold in Amsterdam. Galileo replicates it, and offers it to the Republic as his own creation. He gains an increase in his salary, but within a short time his ruse is discovered.

Galileo then uses the telescope for careful observations of the Moon and the planets, and he discovers the moons orbiting Jupiter. His observations strongly support Nicolaus Copernicus' heliocentric model of our Solar System, which is counter both to popular belief and to the doctrine of the powerful Roman Catholic Church. He furthermore publishes in vernacular Italian, rather than traditional scientific Latin, thus making his work and conclusions more accessible to the common people.

His daughter's engagement to a well-off young man (with whom she is genuinely in love) is broken because of Galileo's reluctance to distance himself from his unorthodox teachings. Galileo is brought to the Vatican in Rome for interrogation by the Inquisition. Upon being threatened with torture, he recants his teachings. His students are shocked by his surrender in the face of pressure from the church authorities.

Galileo, old and broken, now living under house arrest with a priest monitoring his activities, is visited by one of his former pupils, Andrea. Galileo gives him a book (Two New Sciences) containing all his scientific discoveries, asking him to smuggle it out of Italy for dissemination abroad. Andrea now believes Galileo's actions were heroic and that he just recanted to fool the ecclesiastical authorities. However, Galileo insists his actions had nothing to do with heroism but were merely the result of self-interest.

Giordano Bruno (/dʒɔːrˈdɑːnoʊ ˈbruːnoʊ/; Italian: [dʒorˈdaːno ˈbruːno]; Latin: Iordanus Brunus Nolanus; born Filippo Bruno, 1548 – 17 February 1600) was an Italian Dominican friar, philosopher, mathematician, poet, cosmological theorist, and Hermetic occultist. He is known for his cosmological theories, which conceptually extended the then-novel Copernican model. He proposed that the stars were distant suns surrounded by their own planets, and he raised the possibility that these planets might foster life of their own, a philosophical position known as cosmic pluralism. He also insisted that the universe is infinite and could have no "center".

Starting in 1593, Bruno was tried for heresy by the Roman Inquisition on charges of denial of several core Catholic doctrines, including eternal damnation, the Trinity, the divinity of Christ, the virginity of Mary, and transubstantiation. Bruno's pantheism was also a matter of grave concern, as was his teaching of the transmigration of the soul. The Inquisition found him guilty, and he was burned at the stake in Rome's Campo de' Fiori in 1600.

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Making Plans for Nigel

May 2020

Making Plans for Nigel

"Trying to take this all in
I've got one, two, three, four, five
Senses working overtime"

-XTC, 'Senses Working Overtime'

On behalf of the Kopernik team, our heartfelt condolences and prayers to those who have suffered sickness, pain, job loss, economic hardship, and, especially, loss of life.

I remember well the autumn of 2007, watching the financial system come crashing down around us. The Dow Jones Industrial average was obliviously hitting new all-time high levels. Flabbergasted, as the Wall Street party raged on, I penned the Weekend at Bernie's commentary, certainly the timeliest one in the 25 years I've been writing them. Twelve and a half years later, the ACWI Financials index trades 48% below its 2007 peak and the Banks index is down even further – 58%.

In 2020, things seem **much more serious than in 2007, as the entire monetary system trembles** under the weight of decades of gross mismanagement. This time, as the very "money" in which bonds are to be repaid undergoes massive, orchestrated debasement, it is the bond market that has surged to the highest prices in recorded history. **Much of the tens of trillions of dollars' worth of world sovereign debt sells at negative real yields; i.e. they are guaranteed to impose real economic losses over their duration**. À la Weekend at Bernie's, the party rages on, seemingly unaware of the fatal blow being dealt to the monetary system. After all, the Fed and government have promised to throw $2, no $4, make that $6, did I hear $8, trillion dollars into the system, most of it in support of the most expensive bond market of all time. Some of it will be used to resuscitate the collapsing economy. It's noteworthy that this collapse comes a mere two months after being at record strength.

Pump it up until you can feel it.
Pump it up when you don't really need it

-Elvis Costello & The Attractions, 'Pump It Up'

(Artwork is from the incomparable WILTW, from 13-D Research. Elvis Costello lyrics were our addition)

Some even suggest that with this massive, globally coordinated, government/central bank intervention, we are witnessing the last legs of capitalism. Their case is compelling. The near future will provide more data, but let's start with what is known now. We know that "Big Brother" has come to our rescue and done so in mind-blowing fashion. As for our take on recent events, **we've got one, two, three, four, five senses working overtime. Trying to take it all in.**

To get a glimpse into the sensory overload, let's begin with this from Almost Daily Grant's:

> *The Howitzer Chronicles (March 25, 2020)*
>
> *In other words, "whatever it takes!" Before the opening bell, the Federal Reserve pledged to purchase Treasurys and mortgage-backed securities "in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions." Minutes later, the Federal Reserve Bank of New York chimed in* ***with plans to buy $75 billion in USTs and $50 billion in agency MBS each and every day****, "subject to reasonable prices."*
>
> ***For context, the Fed bought $75 billion in Treasurys per month under the so-called QE2 program of 2010 to 2011, and $40 billion of mortgage backed securities per month in the 2012 to 2013 QE3 program****. The newly announced weekly pace of $375 billion of Treasury and $200 billion of MBS purchases would add roughly 15% and 18%, respectively, to the central bank's current holdings of each asset class. That is, per week.*
>
> *And that's not even all. Beyond ramping up those existing strategies, the Fed is expanding its QE into different realms, announcing the establishment of a pair of facilities, one directly lending to new corporate debt issuers and the other to a so-called special purpose vehicle which will then purchase corporate bonds on the secondary market (issues must be rated investment grade by at least two agencies and mature in five years or less) as well as ETFs which "provide broad exposure" to the investment-grade bond market.*
>
> *Step aside, Mr. Market. Uncle Sam is buying you out. (emphasis added)*

Grant's Interest Rate Observer quotes Evercore ISI thusly – "officials worldwide have floated 168 stimulus measures over the past eight months." Elsewhere, surely most of you have seen the following headline:

Kudlow, Mnuchin Hail $4 Trillion Market Bailout through the Fed, as Part of $6 Trillion 'Stimulus Package'

Yes – that is trillion with a T. Scuttlebutt suggests that an additional $2 trillion is on the way for infrastructure, extra pork, and whatever else they can come up with. $8 Trillion!!! Although, most importantly, **they've made it clear that the ultimate amount of money printing will amount to "whatever it takes!"** As to how much it is likely to take, the Austrian economists have been warning us for decades that once money printing commences in earnest, it must continue exponentially to postpone an asset price collapse. For continued evidence that central bankers view us as being past the point of no return – keep reading.

From the *LA Times* (March 26, 2020):

You might get $1,200 from the $2-trillion stimulus bill. What will special interests get?

- A $17-billion loan for aerospace giant Boeing, which was struggling long before the coronavirus pandemic
- Lower capital reserves for small banks, a longtime goal of their lobbyists
- Federal tax breaks for restaurants, grocery stores, and other retailers that would let them write off renovations
- $75 million in grant money for the National Endowment for the Arts and the National Endowment for the Humanities to award

- A provision that speeds up the FDA's review of over-the-counter drugs and sunscreen
- Tax provisions for wealthy real estate investors (potentially including the president and his family)
- $500 billion in loans from the federal government to distressed businesses, states, and local governments

From CNBC (March 25, 2020):

What's in the 2 trillion coronavirus relief plan?

- One-time direct payments of up to $1,200 for individuals and $2,400 for couples
- $25 billion in grants to airlines and $4 billion to cargo carriers for payroll expenses
- Another $25 billion and $4 billion to airline and cargo carriers for loans and loan guarantees
- $117 billion for hospitals and veterans' healthcare
- $16 billion for the strategic national stockpile of pharmaceutical and medical supplies
- $350 billion in loans for small businesses

  (Editorial note: this fund quickly ran dry – but was rapidly restocked. $485 billion was added on April 23rd.)

The University of Texas News appropriately labeled all of this:

"Proposed Bailout is Socialism for the Rich"

The Treasury Department reminds people to please return stimulus checks accidentally sent to deceased relatives.

And finally, Howard Marks, in his weekly Update (March 27, 2020) notes the following actions:

- An emergency interest rate cut of 100bp on March 15, 2020 (This on top of a recent 50bp cut means interest rates are now at 0%)
- The Fed and Treasury are supporting the commercial paper market; asset purchases are possible
- The relaunch of the Commercial Paper Funding Facility and the Primary Dealer Credit Facility on March 26, 2020. With the PDCF, dealers can even pledge equities to the Fed, with only a 16% haircut, and receive a 90-day loan at 0.25%

Okay – the use of "finally" above was premature. I can't type as fast as our governments provide fresh fodder. These headlines are from late March. Still typing away in mid-April and the news just keeps getting more surreal.

From Bloomberg News (April 11, 2020):

"Fed Has Firepower to Do More after $2.3 trillion aid blitz":

- Fed unveils a municipality Liquidity Facility under which it will buy up to $500 billion in short-term notes directly from U.S. states, counties, and cities
- Fed announces potential purchase of so-called junk bonds, those with lower than investment-grade ratings

And this just in from FoxCarolina (April 15, 2020):

"New Bill in Congress calling for $2,000 per month to be sent to Americans amid pandemic"

The voice of reason
Is one I left so far behind
Head over heels, where should I go?
Can't stop myself, out of control
Head over heels, no time to think
Looks like the whole world's out of sync

-*The Go-Gos, 'Head Over Heels'*

Okay! **That is admittedly a whole lot for the senses to take in.** Grant's Interest Rate Observer noted the following:

> *A layman may well conclude that somebody isn't reading the newspapers. BlackRock, Inc., after all, is speculating about a $10 trillion Federal Reserve balance sheet (up from $4.2 trillion at the new year), while the Committee for a Responsible Federal Budget is forecasting a $3.8 trillion federal deficit (versus an annual run rate of $1 trillion before the pandemic). Each estimate is disorienting. And each prompts some curiosity, to say the least, about the integrity of the currency that the government is materializing and spending with such dazzling ease.*

Sometimes I laugh and sometimes
I cry, other times I sit and
Wonder why.

–*Social Distortion, 'Sometimes I Do'*

On the surface, all is well. The government and Federal Reserve have yet again "come to our rescue." Bonds will be bought in unlimited quantity, so no need to sweat the lack of yield. The Fed's implicit "put option" will protect you. Stocks will continue to be indirectly supported through low-cost loans to companies, and *wink-wink* will be bought outright, if need be, in the future. And the largest stocks will continue to receive undue largess from the government through lower interest rates than their competitors pay, tax breaks, ability to acquire competitors without antitrust enforcement worries; and beyond these, the Fed will do "whatever it takes." The market still wholeheartedly embraces these platitudes as reassuring. Hence, the 30% rebound in the U.S. stock market as the economy plunges into the worst recession since the Great Depression of the 1930s.

If I fall back down, you're gonna help me back up again,
If I fall back down, you're gonna be my friend

-*Rancid, 'Fall Back Down'*

We, for one, find that most of the data on the previous pages assaults the senses; it batters them. It is all too much to take in. Famously slow to anger, we now feel rage. **Welcome to the punk/new wave issue of our commentary**. "Making Plans for Nigel" is a great song by British post-punk band XTC (who also wrote the lyrics that led off this correspondence, from "Senses Working Overtime").

We're only making plans for Nigel
We only want what's best for him
We're only making plans for Nigel
Nigel just needs this helping hand
And if young Nigel says he's happy
He must be happy

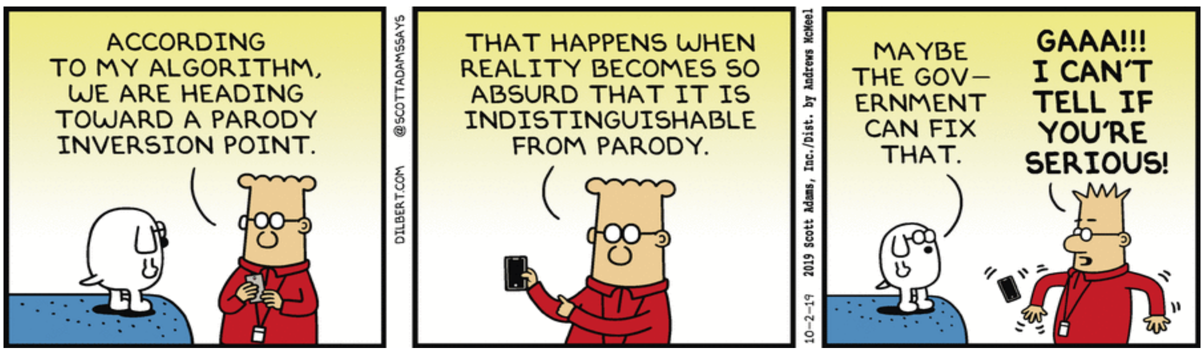
-*XTC, 'Making Plans For Nigel'*

Apparently, this is a song about parents badgering their son to take a job with the steel company, but others interpret an anti-'big-brother' element to it. The latter angle inspired this missive. **This commentary is written for those who don't want the government making outsized plans for us: for those who prefer capitalism to cronyism; prefer that assets be allocated by markets rather than by bureaucrats; that winners and losers be determined in the marketplace rather than by committees; and who prefer price discovery to suppression.** We now live in a time when Orwell is increasingly thought a prophet and one of the few things that is staunchly agreed upon by West and East alike is the importance of a command economy. This is especially evident in the eager acceptance of ultra-expansive, experimental monetary policy in conjunction with record-setting, deficit-generating fiscal spending. Government planners now decide for us when businesses must "temporarily" close, but also which business are exempt from those orders.

While everyone supports protecting the vulnerable, allowing them to self-isolate and otherwise shield themselves from harm, instead it is the government who decides who gets to go outside and who is effectively under house arrest, umm, shelter in place. A healthy twenty-five year old with a nascent business that will perish if neglected isn't allowed the freedom to make a different choice than an elderly person with diabetes or respiratory issues. They get to decide which companies are given life-saving access to cheap capital and which are left to a Darwinian future, likely to succumb to the hardships resulting from the government mandated closures. They plan to whom they will extend largess and who shall be cut adrift. They plan to bail out one industry, but not the next. Occasionally the propaganda machine releases surveys suggesting that "*Nigel's happy"* and "*if young Nigel says he's happy, he must be happy*." And so, they commence even more planning, but mind you, "for the greater good."

Grasping to Control, so I better hold on

-*Green Day, 'Basket Case'*



We'll try to minimize the time spent opining about our new, centrally planned economy and promise to eventually focus on how to best capitalize, in the stock market, upon the opportunities that always seem to go hand in hand with such challenges. But the challenges are real enough. We don't take any comfort in the fact that the central banks, and governments, purportedly have our backs. One must wonder if the virus, which is serious enough, also served as a convenient excuse to unleash the plans that they've known they'd eventually have to execute when they first headed down the path of QE, which was always a path of no return. That *"you can check out anytime you like, but you can never leave,"* was the major point of our Hotel California commentary, penned nearly a dozen years back at the onset of QE.

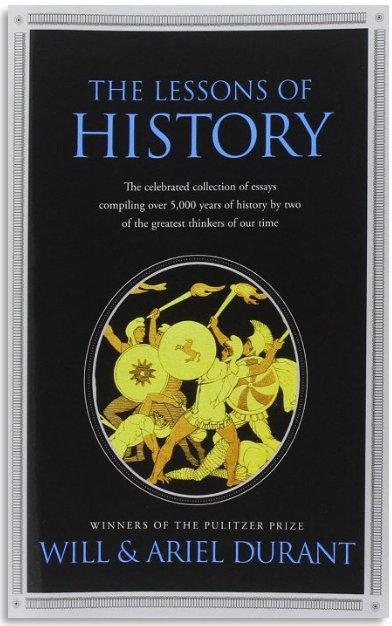
You and me have a disease
You affect me, you infect me
I'm afflicted you're addicted
You and me, you and me
I'm on the edge
Get against the wall
I'm so distracted

-*Bad Religion, 'Infected'*
discussing the Fed's relationship with the economy, perhaps?

And so here we are, and one must ask themselves the (admittedly rhetorical) questions: Can interest rates be held to *de minimis* levels forever? Are negative rates sustainable? Are they a panacea or a *disease*? Might the artificially supported asset classes, the *afflicted* ones, now reside at levels that portend more risk than prospective gain? It's clear that in this debt-*infected* economy, it's important to search for securities where the systematic risk is low, and to find areas where the opportunities are abnormally exciting. Don't worry.The daunting challenges we face, as is often the case, have led to monumental investment opportunities. Let's discuss probable winners and losers in this New World Order.

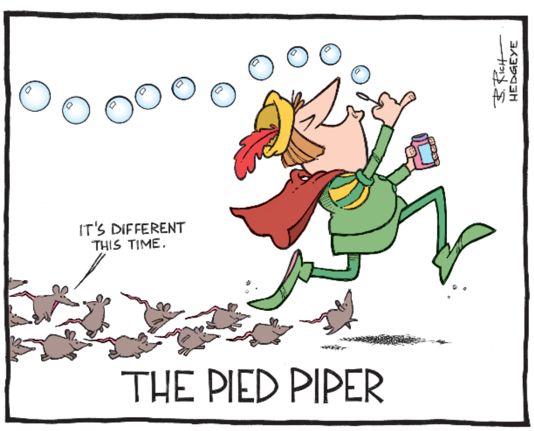
Chapter 1

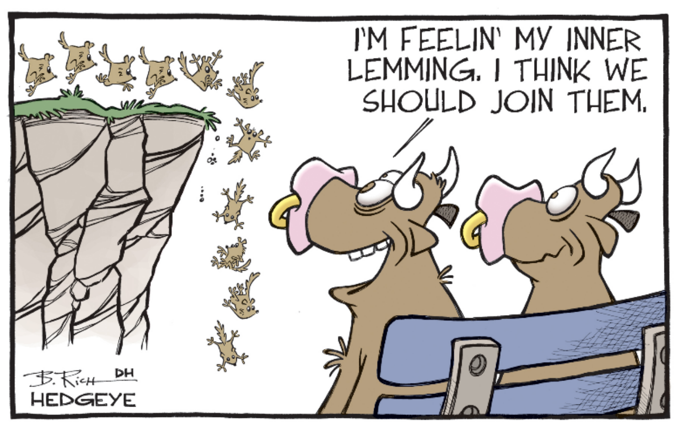
The Case Against Last Generation's Winners
Continuing to be This Generation's Winners



*Those who do not learn history
are doomed to repeat it.*

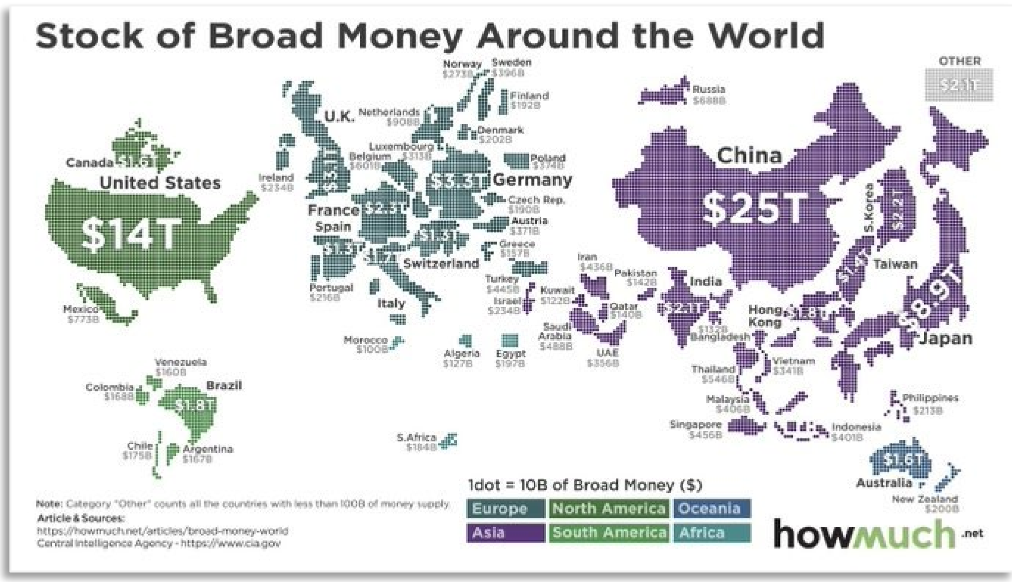
– George Santayana



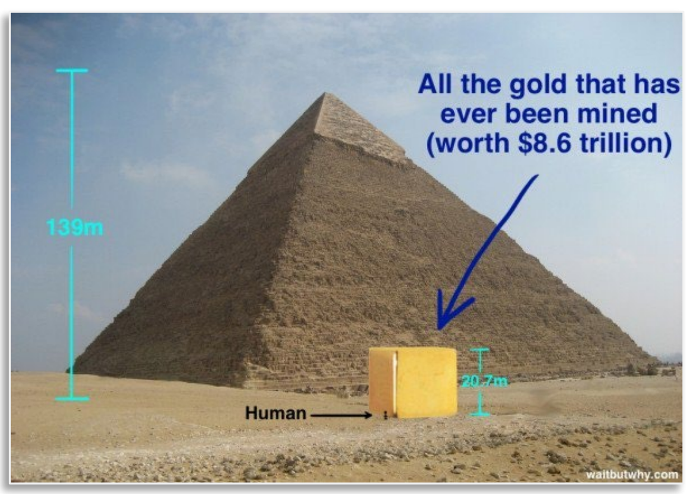


<u>Derivatives of Money and Derivatives of Derivatives of Money</u>

It makes sense to start by addressing investment categories that possess more risk than potential return before migrating to some truly exciting opportunities. As the bond market levitates near six-thousand-year high levels, a logical starting place is with the medium in which bonds are payable - currencies. Should one choose to hold their liquid wealth in Yen, Yuan, Euro, Dollars, Francs, or in harder currencies like precious metals? Let's start with a map of what the currency world looked like before the recent deluge.



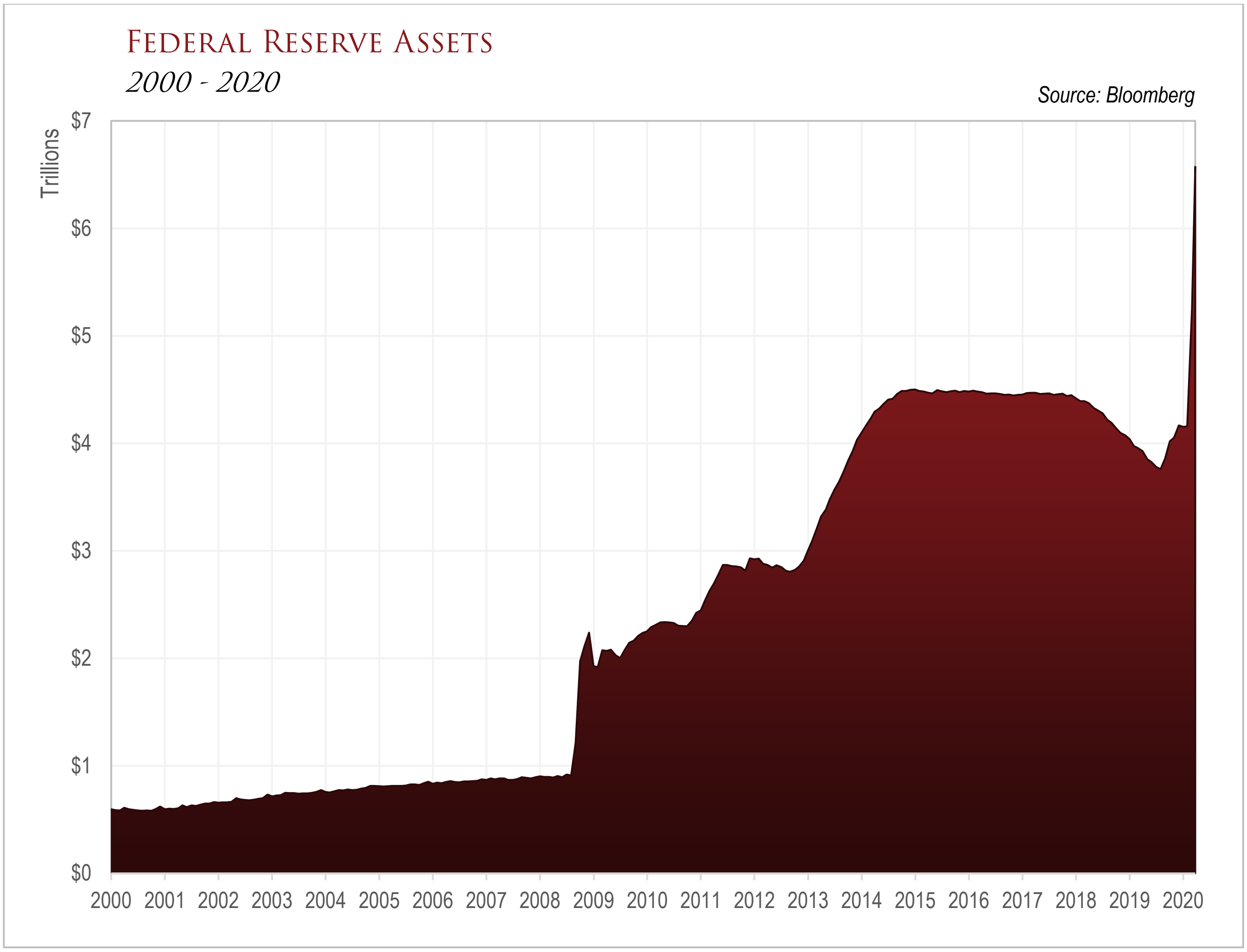
Yes, those are Ts for trillions, not B for billions. And this data is from 2017! By February 2020, U.S. broad money stock had increased to $15.5 trillion; on March 23, 2020, the Fed announced unlimited QE, so who knows how much more that number will grow. The "printing presses" have had a busy dozen years prior to the current, hyper-frenzied activity. Imagine what this map will look like in a year. By comparison, let's graphically look at all the gold that has ever been mined.



We bulls stare open-mouthed as gold – gold, for Pete's sake, nature's own hedge against the Ph.D standard of monetary management – buckles in the face of one central-bank liquidity gusher after another.

-Grant's Interest Rate Observer - March 20, 2020

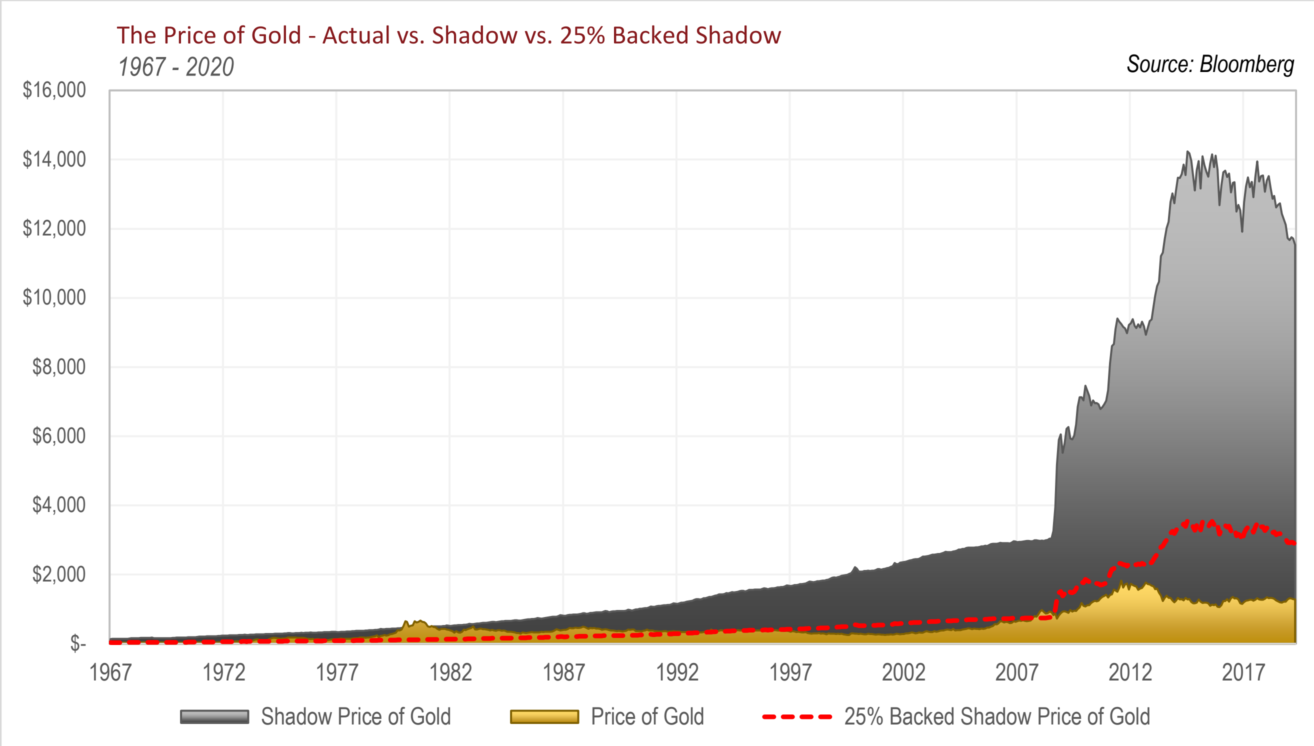
And, let's not forget the current trend in money debasement:



You wonder what it takes to unnerve the holders of currencies that tumble off the digital presses by the trillions.

-Grant's Interest Rate Observer - March 20, 2020

Anyone who believes that supply and demand still matter, that scarcity is valuable, that governments should pay a reasonable real rate of interest to compensate for perennial debasement, and/or that the central banks are at all sincere about their "do anything to reflate pledge" should have some gold in their portfolio. The only question is how much? Just for fun, the chart belows suggests what the value of gold would be if even a sliver of gold was demanded as partial collateral for currently unfettered central bank currency emissions.



The value of the U.S. dollar has fallen from approximately one twenty-first of an ounce of gold less than a century ago to one seventeen-hundredth of an ounce of gold now. That's worth repeating: in 1930 one could buy a gold coin for $20.67, whereas that same coin now would cost $1695, eighty-two times more. This is an ominous tendency. We'll be the first to admit that trending past results into the future can be dangerous, so let's investigate a little further. After all**, the viability of fiat currency as a store of value is the preeminent issue here**. Relevant fact number one – a hundred years is a long time, encumbering many generations, suggesting it is much more meaningful than just a shorter-term trend. Point two – building off the previous one, there are more than two thousand years of written history that show that fiat currency **always** suffers material devaluation.

As Voltaire famously put it, *"fiat currency always returns to its intrinsic value – zero."*

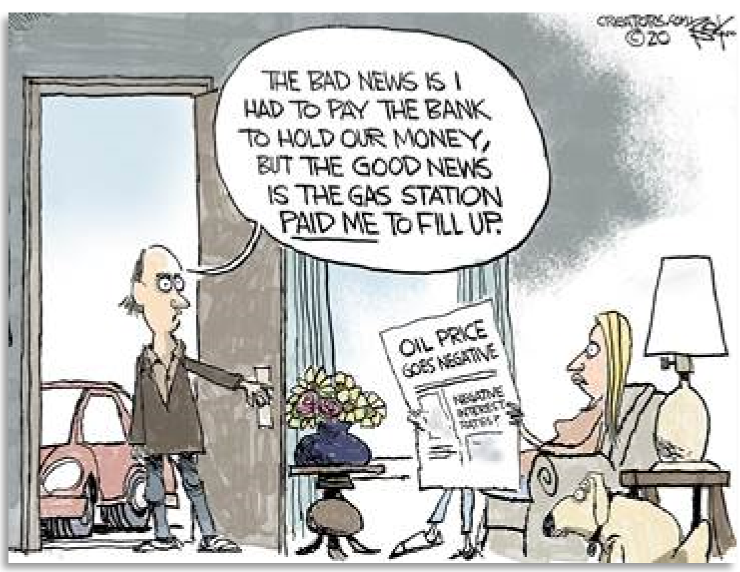
Thirdly – gold is not an aberration; this hasn't been gold's value going up, it has been gold holding its purchasing power while the dollar lost most of its. The prices of education, healthcare, prime real estate, common stocks, and a lot of other things have surely gone up more than eighty-two times. In a similar vein, the chart above shows that, theoretically, gold hasn't yet risen nearly enough to reflect the massive increase in money supply; we'll call this point four. Even if one conceded that Bretton Woods tended to have a coverage ratio roughly twice the 14% used in the chart, the suggested further drop in the dollar, relative to gold, is still quite significant. The fifth, and perhaps most persuasive point, is that all of the headlines encapsulated near the beginning of this narrative suggest that the Fed, and their brethren in other countries have come forth with actions in support of their promises, demonstrating determination to debase their currencies in major fashion. And lastly, and equally persuasive, the governments have debts (i.e. claims on currency) that far, far exceed their abilities to settle those debts.

Recent events have shown the importance of holding enough cash to tide one over on a rainy day. Events have also shown the beauty of holding cash as both a buffer and as a means to take advantage of market downdrafts. People should always hold enough cash to suffice and to provide peace of mind. But, it should be clear that **cash has been a horrendous "investment" over the past hundred years**, and all evidence points toward it being worse over the coming decade. Those who can afford to invest elsewhere must do so to protect their purchasing power.

And**, if long-term holding of currencies is ill-advised, perhaps the absolute last place one should invest is in low paying claims on these rapidly depreciating currencies**. Of course, we are referencing fixed-income securities. Intermediate to long-term bonds, yielding near zero, are in fact a prime example of **return-free risk**. Regarding the returns, the U.S. 30-year Treasury yields a whopping 1.17% annually. Admittingly, this is better than the 60 basis points (hundredths of a percent) offered by 10-year Treasuries, and well above the negative yields on offer in France, Germany, the Netherlands, Sweden, and Japan. Oh, and the Swiss require you to pay them more than one percent for the privilege of loaning money to them. What risk must one take on for these woeful yields? Some believe there is none since the central banks have backstopped us. They had better be correct, since a return of interest rates to the levels that existed when I entered the business would result in an 88% drop in the price of the bond. Even a small step in that direction would be quite painful. Is risk real? Read on.

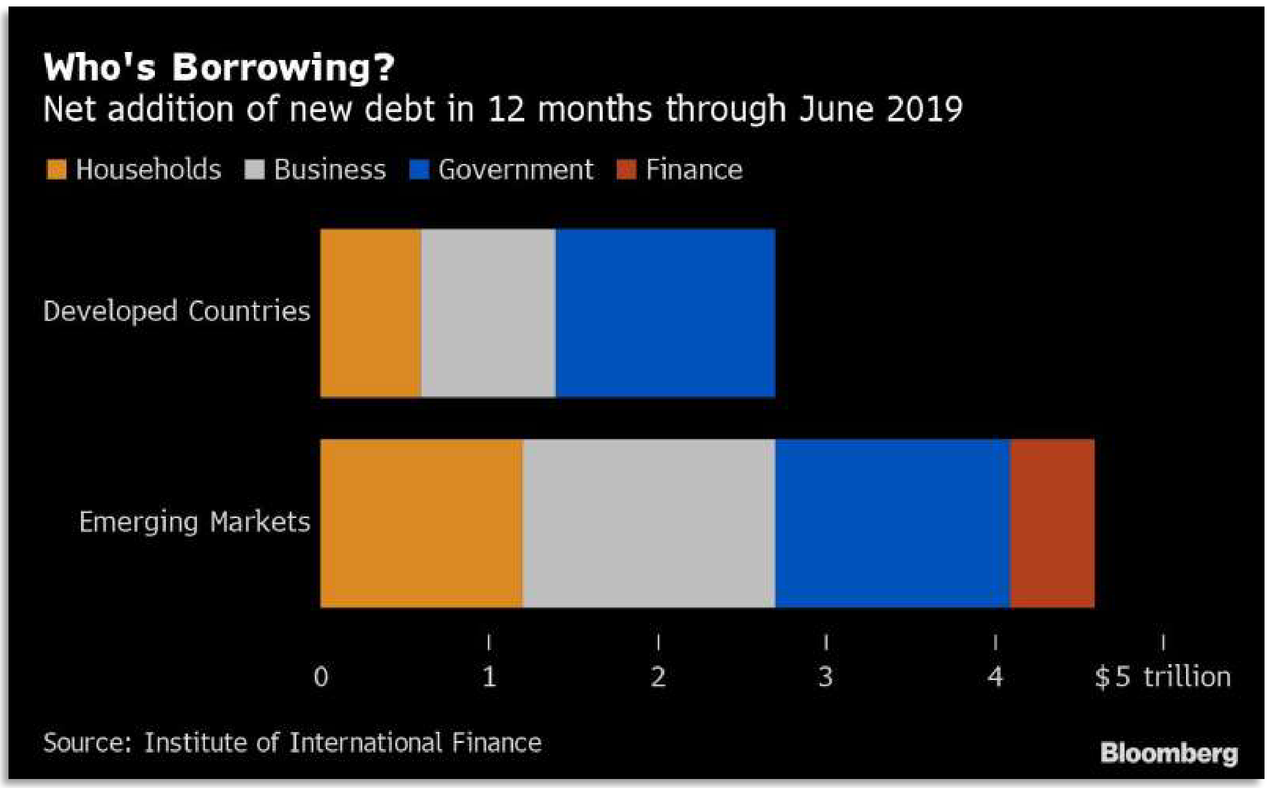
They think that I've got no respect, but everything (yields) less than zero

- apologies to Elvis Costello



Assessing the prospects for bonds (future claims on fiat currency), in absolute terms and relative to stocks, it is noteworthy that stocks just fell significantly, while bonds soared still higher. This, of course, was in response to the Central Banks' pouring money into the market, and thereby validating people's faith in the "Fed-put." Quickly they succeeded in gunning sovereign bond prices to the highest in recorded history.

Paltry yields are a major deterrent to holding bonds. Beyond that obstacle, current and potential bondholders needn't argue the pros and cons of modern government, but they must recognize what the New World Order is, and then invest accordingly. Remembering that a sovereign bond is a loan to a country, it is important to ascertain whether said country has the wherewithal and/or the integrity to repay the loan. We are unaware of any prominent politician, representing any major party, in any country, who advocates balancing his/her country's fiscal deficit or meaningfully paying down the sovereign debt. To the contrary, rapid growth of debt is a universal phenomenon.



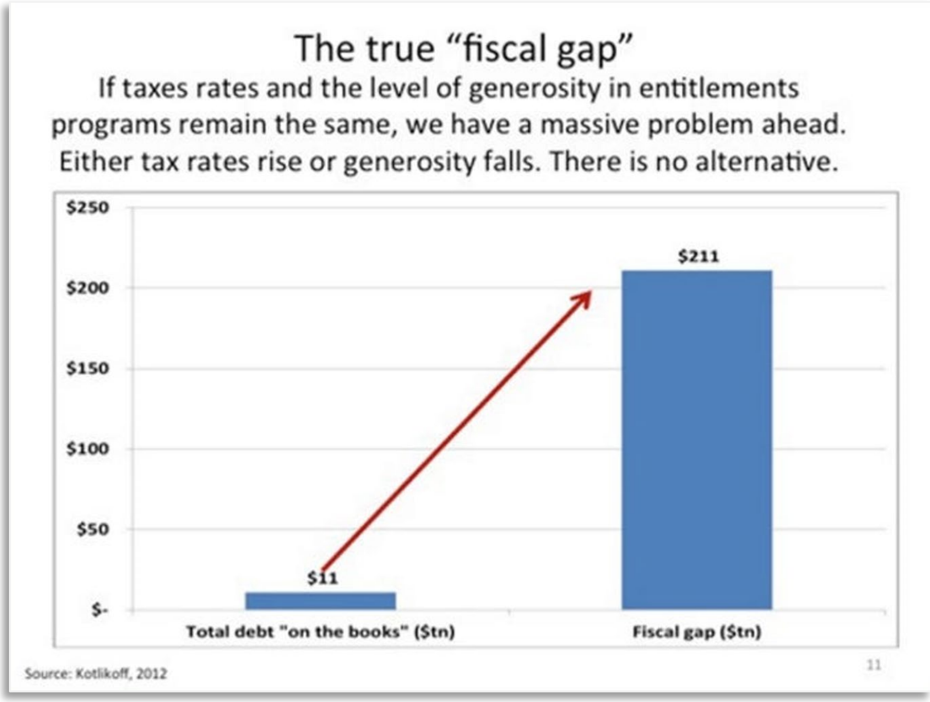
As this chart shows, between June 2018-2019, total new debt in emerging markets approached $5 trillion.

By the first part of 2019, total global debt was over $250 trillion:

> *Global debt hit a fresh record above $250 trillion in the first half of 2019, with China and the U.S. accounting for more than 60% of new borrowing, the Institute of International Finance said. Borrowing by governments, households and non-financial business now accounts for more than 240% of the world's gross domestic product, and it's growing faster than the global economy, the Washington-based IIF said in a report published Thursday.*

-Bloomberg.com, November 14, 2019

Imagine how much deeper the hole is now, in 2020. Hedge Funder Stan Druckenmiller points out that if you take the present value of of the benefits we promise, the current debt present is about $211 trillion. The chart below illustrates why tax increases, broken promises, and massive currency debasements are all in our future.



Take away, take away
Take away this ball and chain
I'm sick and I'm tired
And I can't take any more pain

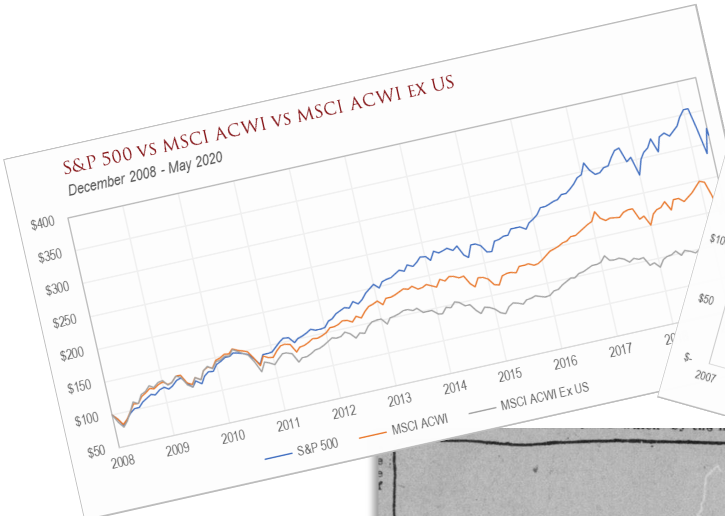
-*Social Distortion, 'Ball and Chain'*

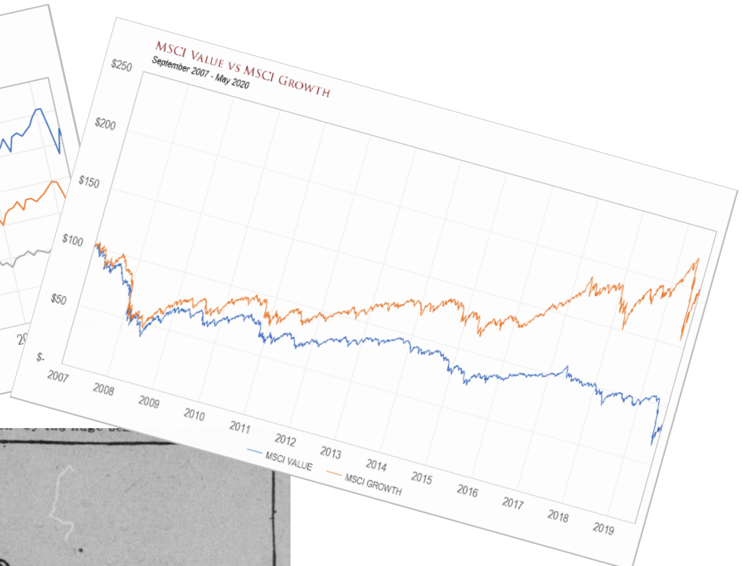
A look at the financial positions of the governments of Japan, China, most European countries, and the United States, among others, demonstrates that the ability to repay those loans (in script with purchasing power equal or even close to the money lent) is simply not there. The aforementioned political considerations; the galactic monetization of the debt; the advent of MMT (modern monetary theory), including people's QE (quantitative easing in a manner that puts the money into the broad population rather than **just** the hands of asset owners); previously unimaginable lack of fiscal discipline; lack of monetary discipline; massive debt loads; and thousands of years of monetary history, all make clear that **governments do not have the integrity, willingness, or ability to repay**. Bonds have their purposes but are no longer an investment asset that can meet the needs of investors.

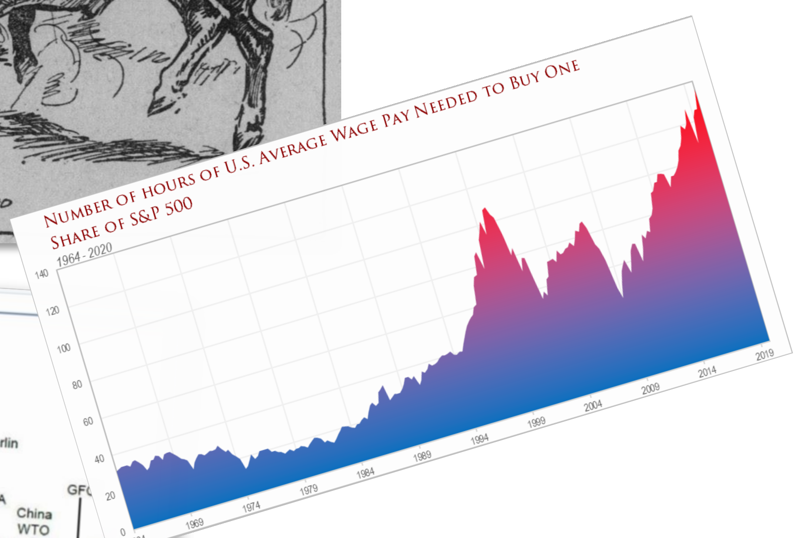
Central banks have well succeeded on their GFC (global financial crisis) pledge to make bonds so ugly as to force investors to invest in other asset classes and thereby force those prices higher. They were arguably far less successful in their contention that QE would spur economic growth, as well. We take the central bankers and politicians at their word on this particular issue and will continue **to approach bonds as quasi-uninvestable for the foreseeable future**.

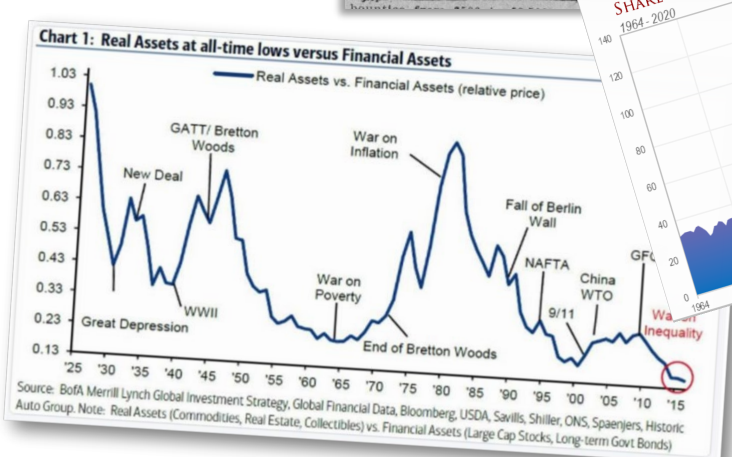
Chapter 2

The Case Against Stock Indices
(But for Undervalued Businesses Trading Publicly)









Kopernik
Global Investors, LLC

Time to segue to stocks in general; we'll get to the specifics later. Remember T.I.N.A. (there is no alternative [to stocks])? It was a widely held belief prior to March 2020. The idea was that, post-GFC, the Fed would make bonds so unappealing that investors would **have** to roll out the *risk* curve. It was fascinating to watch investors abandon this tenet during March, even as market action made it now more valid than ever before. At any rate, central banks have succeeded in making bonds less inviting than any other asset class. And since bonds are now more expensive (and stocks cheaper) than was the situation two months ago, when investors felt that they had no alternative but to buy stocks, **it should be clear that over the long-term stocks are likely to perform much better than bonds.** However, two points are important to consider: 1) **over the short-term, stocks may disappoint people.** They aren't cheap (especially in the U.S.) and the near future could prove daunting as the economy tumbles and unemployment soars. 2) The old saw was probably never more true than now – "it's not so much a stock market as a market of stocks." Buying the popular indexes is still not an enticing risk/reward proposition, whereas there are now many businesses that are at historic bargain prices. It is a great time to be a bottom-up, value-conscious investor.

Before going further into *which* value stocks, let's dig a little deeper into *why* value (and not popular "anti-value") stocks are the more desirable place to be. And, apologies, this does involve delving back into the social distortion that has been building over the past dozen years and is now accelerating into warp speed.

Why is it necessary to go off on this tangent? Well, currency, stocks, and especially growth **stocks are a reflection of confidence in the future.** Willingness to hold currency depends upon a belief that central bankers won't allow the loss of purchasing power to be painful. If you haven't lived in a high inflation country, talk to someone who has. Cash isn't saved, it is spent, ASAP. For investors in equities, **putting a moderate to high multiple on an estimate of earnings sometime in the future requires faith that the company will not encounter undue competition or other business issues, that society will continue to favor the company, free enterprise and capitalism, that management will make no major missteps, and that multiples won't dip someday soon.** Growth stocks tend to have the most aggressive estimates for future earnings and the biggest multiple on those estimates. This is warranted when all the assumptions play out as planned. Currently they are priced to reflect extreme sureness and optimism. QE (quantitative easing) has certainly been a wind at the back of growth stocks for the past dozen years, a gale force wind at that. Will the "category 5" storm that the new QE promises to be also obediently lift growth stocks and bonds while leaving the CPI (consumer price index) behind? Looking beyond the past dozen years, history and logic suggest that this is unlikely to continue to be the case. Remember, this would require maintenance of today's optimism, valuation multiples, economic continuity, and preference for things financial over things real. At the onset of QE1, Marc Faber, Jimmy Rogers, and other experienced, successful investors alerted us that this was "socialism for the rich" and "sowing the seed for extreme inequality and social discord," robbing the marketplace of the pricing mechanism upon which it relies, and more. Evidence mounts that they were correct. Of course, the Austrian economists have been telling us this for decades.

Obviously, society is faced with many tough choices. Triage is a word that is being used a lot recently. It must be tough on medical professionals, having to decide who gets attention, and is therefore likely to live, and who is left without access to necessary apparatus, drugs, and help, and is therefore probably destined for an adverse outcome. Military leaders have similar choices. And it is difficult making subjective, fateful decisions. When it comes to governing, do we allow hundreds of thousands to potentially die from a disease or do we put tens of millions out of work?

Don't Stand so Close to Me

-*The Police, 'Don't Stand So Close to Me'*

On the economic front, the age old debate has been: do we let the market cycle happen, cleansing the system, at a heavy short-term cost to people's livelihood, or do we prolong the cycle, avoiding the pain, but with the high likelihood that future pain will be much greater, when the piper eventually calls? These are difficult decisions. Subjective decisions. We don't know the future.

You Gotta Keep 'Em Separated

- The Offspring, 'Come Out and Play'

I have my opinions, as do all of you. **The message here is not that my opinion is correct, it is that the last people on earth that I'd like to see making these all-important decisions are politicians and bureaucrats.** Don't get me wrong, many of them are fine, upstanding individuals who are working hard on our behalf. We applaud them. But we are also talking about many others, about people who are famous for "kicking the can down the road" rather than addressing a problem now. Many of them, unfortunately, have earned a reputation for selling out, choosing votes and monetary donations over doing the right thing.

You wanna make a little mess
You wanna make a little crime
If you're gonna do wrong, buddy, do wrong right

-The Devil Makes Three, 'Do Wrong Right'
(possibly singing from the governments' monetary and fiscal policy mission statements?)

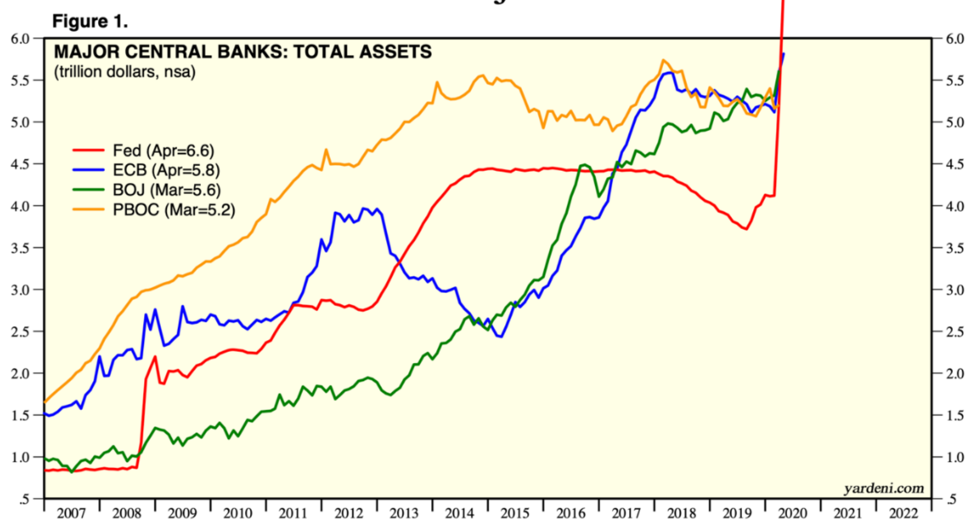
And they find themselves in a quid pro quo world where they often must support unworthy causes to garner support for their own pet projects. But most importantly, even if we dismiss all of the above – even in a perfect world where every single person in government is honest, diligent, and doing the best that they can – we still don't want them making such decisions. Large groups of bureaucrats, famously, are poor decision-makers. **If super large, bureaucratic, centralized decision making was a superior model, the Soviet Union would have won the Cold War.** There is a reason that centralized economic decision-making has always failed in the past. And, outside of economics, the history books are filled with volumes of stories of autocratic governments eventually tragically inflicting pain on a subset of their populace.

Don't want a nation under the new mania
And can you hear the sound of hysteria?
The subliminal mind-#$% America*
Welcome to a new kind of tension
All across the alien nation
Where everything isn't meant to be okay
Television dreams of tomorrow

-Green Day, 'American Idiot'

Furthermore, if printing money were a panacea for the stock market, why has the Chinese market done so poorly over the past dozen years? The Japanese market is below where it was 30 years ago despite mind-blowing amounts of centrally planned monetary stimulus beginning in 2000. The chart below shows the scale of global quantitative easing.

Total Assets of Major Central Banks



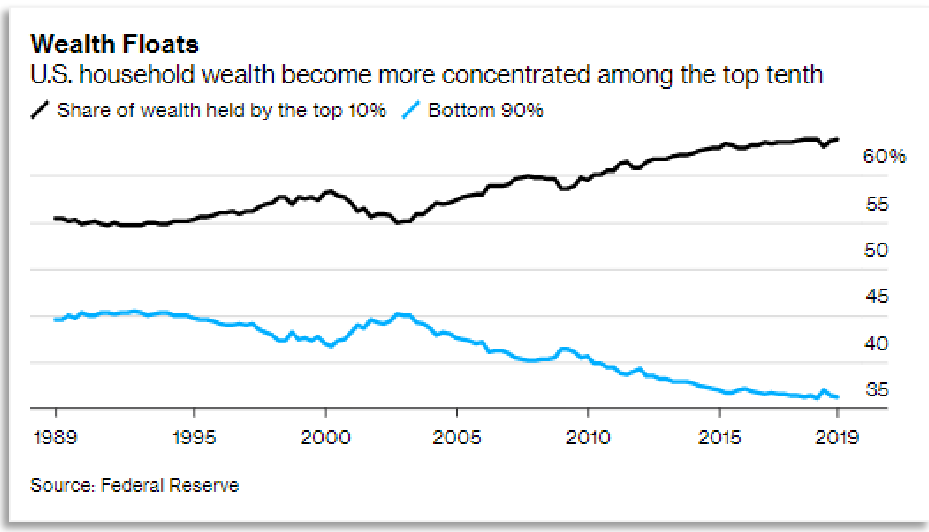
Source: Haver Analytics.

For treatment of coronavirus, depression, recession, bear markets, unemployment, debt contagion, deflation anxiety, ecoanxiety and political risk. Take as directed.

Grant's Interest Rate Observer, February 7, 2020
The reality is that maybe the word 'cycle' is no longer even relevant, given that we have so much unconventional central-bank involvement.

- US equity strategist at a prominent bank, recently echoing Irving Fisher's unfortunately timed quote in 1929.

As optimists, we at Kopernik are willing to assume that none of the tragic outcomes are in our country's future. As realists, we are all too aware of what central planning has brought us thus far. It has brought us a society where news is commonly believed to be fake, and where inequality is back to the levels of circa 1929. Unfortunately, the lessons of history instruct us that over time wealth always concentrates and later gets redistributed, sometimes peacefully, but often violently.



It goes down the same as the thousand years before
No one's getting smarter
No one's learning the score

-The Offspring, 'Come Out and Play'

Also mirroring 1929, the Fed has brought us a major stock market bubble, which may have just popped. This time around they created the biggest bond market bubble of all time. In the process they created the "bubble in everything," which is starting to spring leaks, even as they pump feverishly. Evidence of years of mal investment is cropping up everywhere. The Fed "had" to come to the rescue of the repo market sixteen months ago, and again recently. Before the virus, delinquencies and defaults were becoming worrisome in auto loans, student loans, and the high-yield corporate market. Ultra-expensive real estate has not been moving well for quite some time. There has been an explosion of so-called "zombie" companies, those that aren't earning enough to cover obligations. They remain on "life-support" loans while making life difficult for their prudently managed competition. In a free market they would have been allowed to fail, cleansing the economy and sowing the seeds for better times ahead. We know that suppressed interest rates have been a major transfer of wealth from savers to debtors, while delivering a fatal blow to many pension funds in the process. Because pension funds can't come close to meeting their promises to pensioners in an environment where bonds pay paltry yields, their promises will be broken. People will find they either can't retire because the pension payments are a far cry from what was expected, or will spend retirement in poverty.

They're saying things that I can hardly believe
They really think we're getting out of control

They say you better listen to the voice of reason
But they don't give you any choice 'cause they think that it's treason
So you had better do as you are told
I wanna bite the hand that feeds me
I wanna bite that hand so badly

- Elvis Costello & the Attractions, 'Radio Radio'

It is logical to assume that unlimited QE will cause unlimited mal investment. How could it not? Very little of the torrent of new programs are funding investment in projects that will **sustainably** improve lives, improve society, improve the economy, or provide a means for payback. Much of it is going to keep afloat companies that squandered their money over the past decade; creating many more "zombies" in the process. It is great that many deserving small companies will be helped back to their feet, and that struggling individuals will have a lifeline. But, trillions of dollars being figuratively blasted out through a firehose by bureaucrats with questionable expertise and/or motives can't be all good, to put it mildly.

I'm a match, she's kerosene
You know she's gonna burn down everything

-The Interrupters, 'She's Kerosene'
perhaps talking about the Treasury
and the Central Banks collaborating? 😉

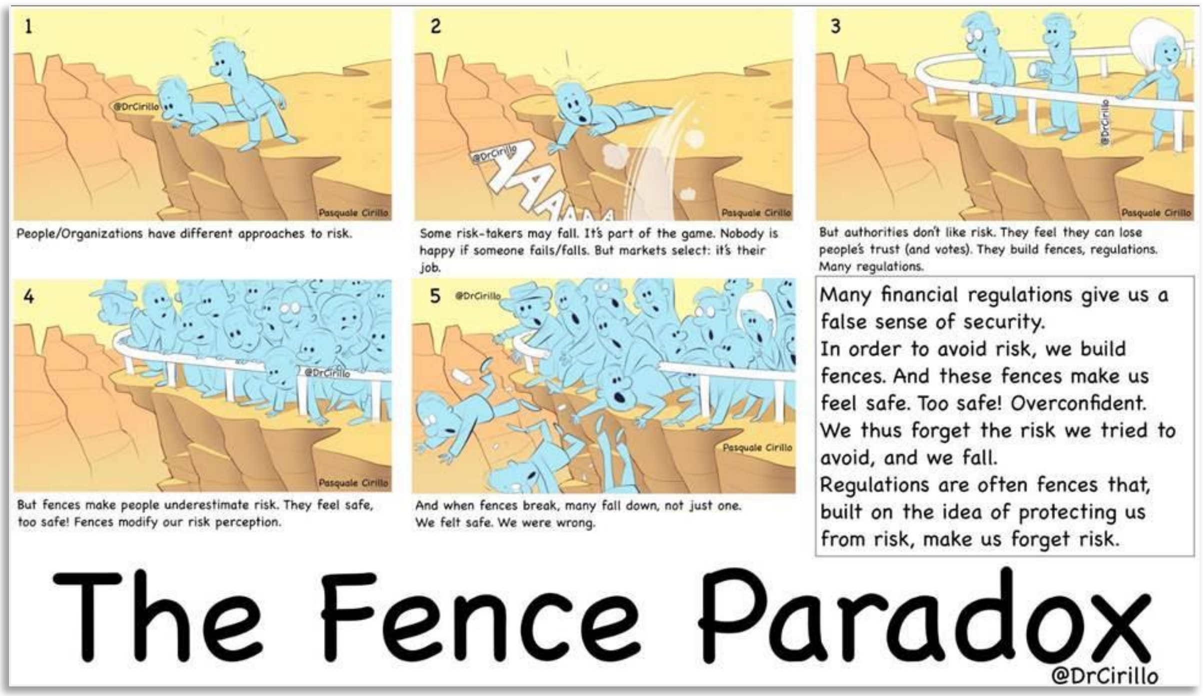
In the GFC, they talked about addressing the "too big to fail" banks while in actuality merging them into bigger banks. Now, they say they are addressing the struggles of small businesses, but again their actions speak to the contrary. In a world afflicted by too much money in the hands of too few firms, the $350 billion small business fund has run dry (and was later increased to a total of around $800 billion) and pales in comparison to the $4 trillion of funds being conjured to support the markets and rain largess on private equity firms, hedge funds, bond funds, and others exposed to troubled bonds. In an environment where ETFs have caused grossly inflated valuations for mega-cap stocks and for most bonds, a trillion greenbacks are being handed to $7 trillion ETF behemoth, Blackrock, to distribute. We're not making this up; really.

These economic decisions are made by the same governments that have decided that you can't have eleven people get together for a BBQ, but some states say 25, others say 1000, and the CDC earlier said 50. You can't have a meal in a restaurant but can in an airplane or on a cruise ship. Sports – out, oh, except golf. Retail stores closed, uh, unless they sell ammunition or liquor. Here in Florida, they arrested a pastor for holding a service, and then a couple of days later specifically listed church services as exempt from the closures. Meanwhile, people in the U.S. will be getting checks from the government, regardless of whether they have permanently lost their job, temporarily lost their job, or have never lost a day's pay. While $1200 dollars will help many, it won't make up for lost jobs. And it won't create new jobs. And, if the $5600 per family until you go back to work proposal passes - Katie bar the door. It is great to help the unfortunate, but if the government incentivizes both sloth and mischief, it doesn't take a genius to figure out what we will get.

I don't want to work
I want to bang on the drum all day

-Todd Rundgren, 'Bang the Drum All Day'

We could go on for pages, but you get the point. **Central planning politicians are not the people I'd like to see running the economy, or the healthcare system.**



(found on the internet)

Yet some are suggesting that we're on the verge of that idyllic (or dystopic, depending upon one's point of view) world where we eat and be entertained on the government's dime. **Market action certainly promises that Domino's and Netflix will be the key providers of the twenty-first century's version of bread and circuses.**

But you know you're gonna come down every night
And there ain't no way you're ever gonna feel satisfied
Well now you'll find me downtown
Gracefully face down
Just wishing I could feel alright

-*The Devil Makes Three, 'Gracefully Facedown'*

Reasonable people can disagree as to governments' competence and motives, but if we can all agree that unintended consequences are a certainty, then it's time to move back to a discussion of the stock market.

Coming down is the hardest thing
I'm learning to fly
Around the clouds
But what goes up
Must come down

-*Tom Petty & the Heartbreakers, 'Learning to Fly'*

The first, and most obvious, question is this: QE worked wonderfully for stocks, especially for large stocks, U.S. stocks, growth stocks, venture cap stocks, stocks of quality franchises, and for momentum stocks of all kinds. **Won't the "mother of all QE programs" provide more of the same, but on steroids?** Our answer is – it could, but that is doubtful. Like all Fed induced bubbles in the past, in the end the best performing bubble stocks will end up "gracefully face down," with their investors wishing that they "could feel alright." Logically, when asset prices run up far in excess of their fundamentals, they will falter, regardless of how good the companies are. Exhibit one shows what happened to the stocks of "really good companies" when similar markets hit an inflection point.

1973-1974	2000-2002	2007-2009
Du Pont -58.4%	Cisco Systems -89.3%	Google -65.3%
Eastman Kodak -62.1%	Microsoft -65.2%	Bank of America -94.0%
Exxon -46.9%	JP Morgan -76.5%	Microsoft -50.3%
Ford Motor -64.8%	Intel -82.3%	Merck -65.5%
General Electric -60.5%	McDonalds -74.4%	Coca Cola -42.3%
General Motors -71.2%	EMC -96.2%	JP Morgan -68.5%
Goodyear -63.0%	Disney -68.4%	Intel -56.8%
IBM -58.8%	Oracle -84.2%	AT&T -49.3%
McDonalds -72.4%	Merck -58.8%	Cisco Systems -60.0%
Mobil -59.8%	Boeing -58.6%	Boeing -72.6%
Motorola -54.3%	IBM -58.8%	Apple -60.9%
PepsiCo -67.0%	Amgen -66.9%	Citigroup -98.1%
Philip Morris -50.3%	Apple -81.1%	
Polaroid -90.2%		
Sears -66.2%		
Sony -80.9%		
Westinghouse -83.1%		

And only time will tell whether the impressive recent rally, led by momentum stocks, is a resumption of a powerful dozen year trend, or a bear market countertrend rally, known as a bull trap. The 1999 tech bubble broke on March 9th, yet the NASDAQ 100 bounced, and peaked 18 days later. From June to August, it bounced 35%. Also, in August, the S&P 500 came close to its March peak before falling in half over the next year and a half. Intel actually reached a summit that was 20% higher than its March high. The chart above points out that it subsequently fell 82%. Given the worst fundamental backdrop since the 1930s, buyers of this trend should tread carefully. *Caveat Emptor!*

Before moving on, we'd be amiss if we didn't address the inherent advantages of large companies. The idea that mega-caps, with their economies of scale, market clout, and government influence are unbeatable is compelling. However, it is important to keep in mind that, at a point, diseconomies of scale build, clogging the works.

> *Scale has its diseconomies as well as economies. At some invisible inflection point, the colossus loses more in dexterity than it gains in power and loses more in political vulnerability than it gains in commercial prestige. And at some other unmarked bend in the road, the once admirable founder of a great business may undergo the not unfamiliar personality transformation from entrepreneur to lord of creation.*
>
> *-ADG April 16, 2020*

One need look no further than GE, and its long descent from its zenith at what was far and away the largest market cap in the world, several decades ago. Some of us remember well, former "unbeatable" global marketshare leaders: Sears, Schlitz Beer, Kodak, U.S. Steel, and General Motors. None of the components of the Dow Jones Industrial Average from a hundred years ago are still in the index. Only GE even survived. No, while size is advantageous, mega-size is both a blessing and a curse.

The Dow Jones Industrial Average was created in 1896 by Charles Dow and originally consisted of 12 companies: American Cotton Oil, American Sugar, American Tobacco, Chicago Gas, Distilling & Cattle Feeding, General

> *Electric, Laclede Gas, National Lead, North American, Tennessee Coal and Iron, U.S. Leather and U.S. Rubber. At the time, these companies represented each sector of the market.*
>
> *-Investopedia*

As to the idea of Fed-inflated assets outrunning their fundamentals, evidence mounts that housing prices have outrun rents, and rents have outrun wages, i.e. people's ability to pay the rent. The April rent arrears are mindboggling, by the way. Returning to equities, it is fairly well-known by now that Apple stock went up 78% over the two-thirds year that ended in mid-February, while its estimated operating income this year is less than last year's which, in turn, was less than the prior year's. Less well-known is that the S&P's six-year run has been unaccompanied by any pre-tax economic profit, **as the *Wall Street Journal* pointed out late in 2019.** And it's not just Apple. After the past twelve years of 'free' money, there is evidence that the economy is vastly overbuilt already. Who's going to build more restaurants, retail stores, office buildings, etc. when we are so over stored already compared to other countries and to the past? And when thousands of companies, most with seemingly endless access to capital, are all employing a 'blitz-scaling' model, is it logical to assume that they all are going to win? Can they scale perpetually in our finite world? You know our answer. **For "players" of momentum, indices, ETFs, and other popular vehicles of investors' fancy, we repeat – *Caveat Emptor!***

> *…gonna get ya, get ya, get ya, one way or another*
>
> *-Blondie, 'One Way or Another'*

No, **rather than investing in companies striving for infinite growth in a finite world, we suggest doing just the opposite. It's an opportune time to own scarce, need-fulfilling assets in a world of prolific fiat currency.**

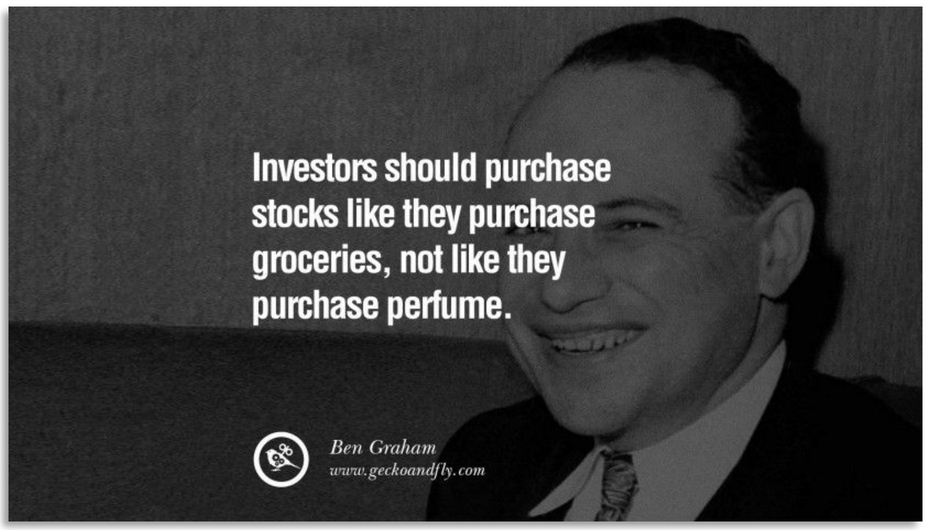
Chapter 3

Unparalleled Opportunities for Managers Employing Bottom-Up Fundamental Research

It's Not A Stock Market. It's A Market Of Stocks

-Old Wall Street Saw

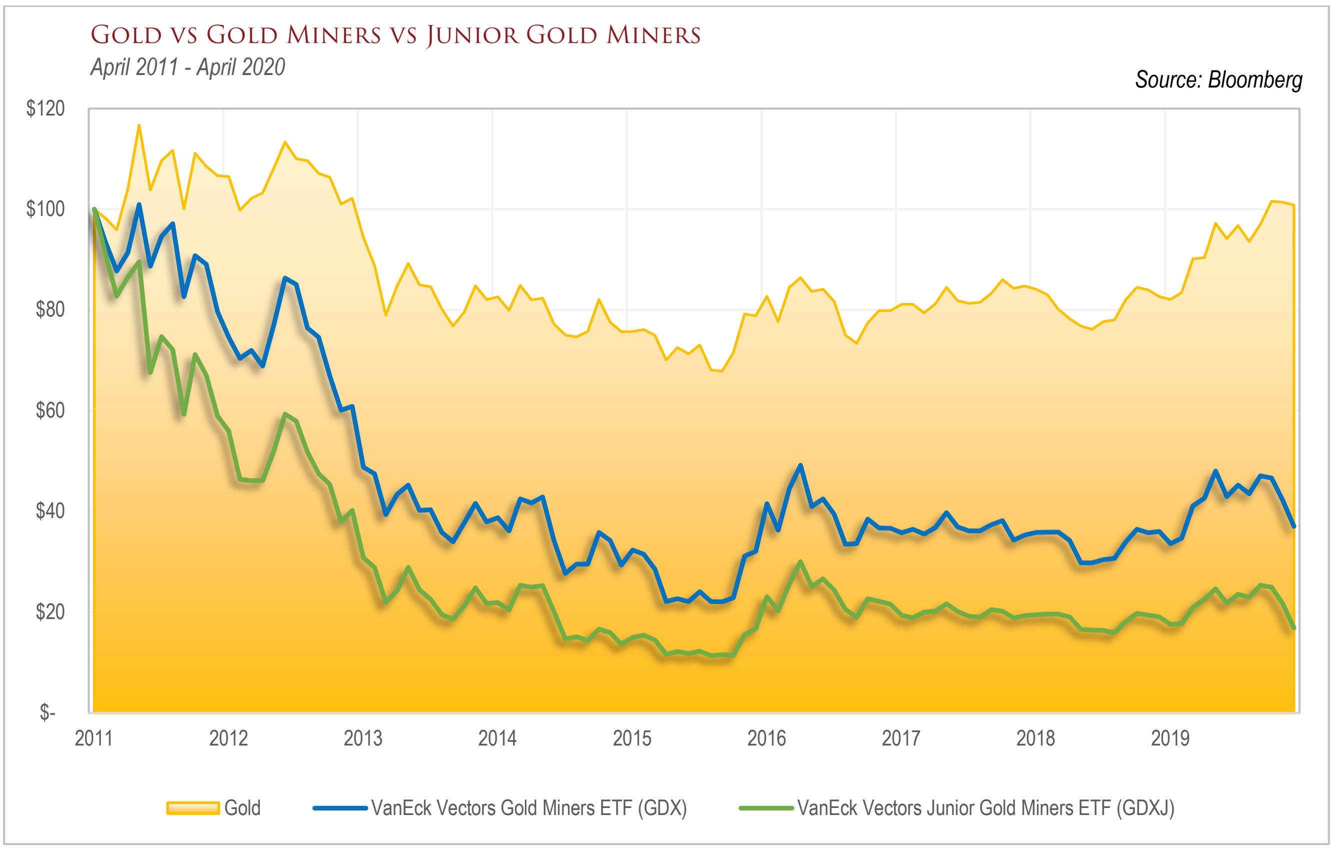
The current market offers unprecedented bargains on finite, need-fulfilling assets, in a world of proliferating, limitless fiat currencies!



Go! Go! Black and gold!
Old-time hockey, bar the door
Clear the track it's all-out war
Light the lamp, throw a hit
Black and gold never quit

-Dropkick Murphys, 'Time To Go'

I'm certainly not a Bruins fan. But, we're appropriating the meaning of this great song from the Dropkick Murphys on behalf of hard assets, be they hued black, gold or otherwise. Oil, gold, and other extracted minerals deserve a spot at the forefront of investor attention. The Materials sector certainly is priced to warrant attention, even lyrics, at this juncture. We already touched on gold and precious metals (above ground anyhow) in the currency discussion, since ultimately they have always been monetary assets. But, **while gold is money, gold miners are investments – extremely attractive investments at that**. It's been a rough decade as reserve grades dropped, costs rose, many management teams blundered at the previous cycle peak and then again at the 2015 cycle trough, and geo-political issues became more challenging. So, a performance lag was in the cards. But, as highlighted in the following chart, **when the price of the gold they own in their reserves climbs by 12%, while the market revalues those same reserves down by 60%, that is not a performance lag, that is a complete disconnect!** It is a great opportunity to buy at a steep discount.

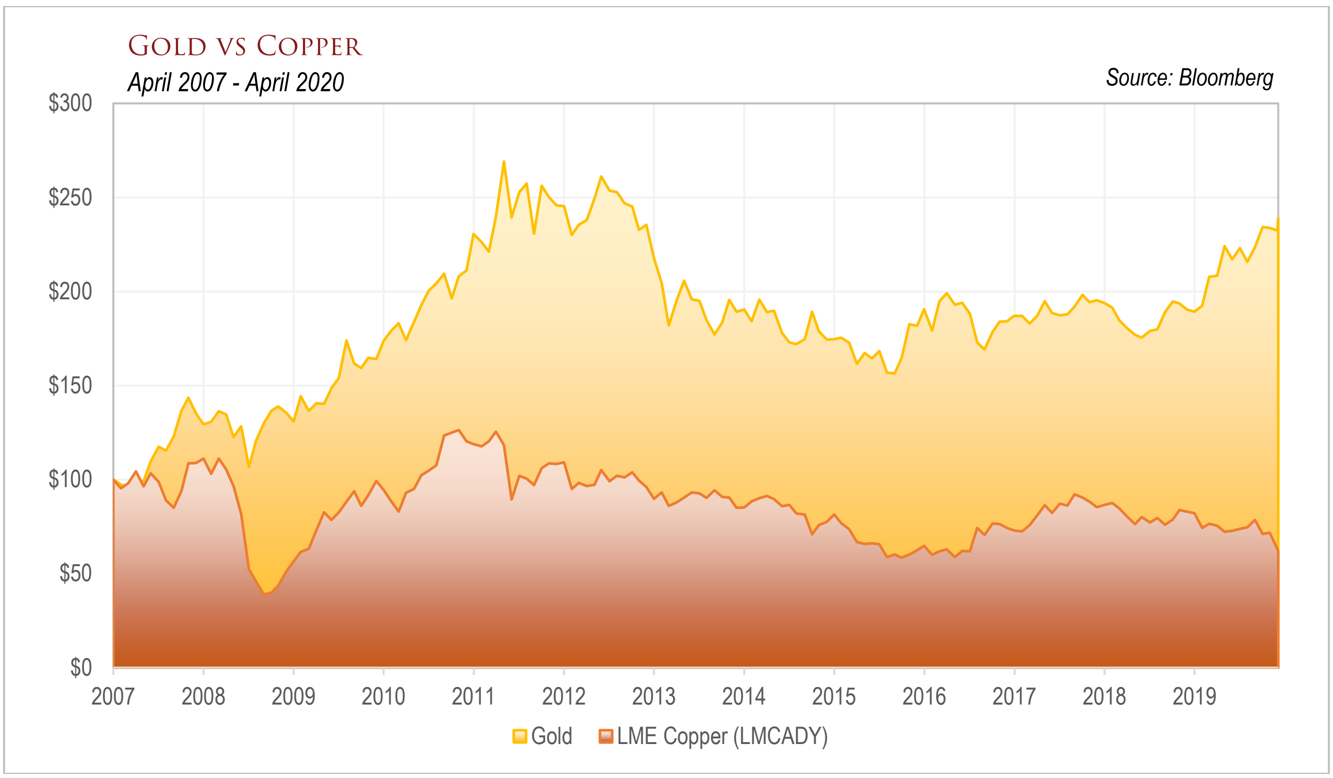


Just three points to make on gold miners before turning to some other potentially lucrative options: 1) QE-infinity promises to pump the price of gold much higher; 2) we are at the point in the cycle where management teams are erring on the side of excess conservatism; and 3) for those investors who are willing to buy the junior miners, some of which possess very large resources, there is an 81% off sale in progress (as represented by the GDXJ on the above chart).

Let's turn our attention to other commodities, which recently have reached **generationally attractive prices**. Most of them hadn't been especially interesting since they were pushed skyward by the Chinese-driven bubble of a decade ago. They have become interesting again following their decade long decline, in absolute terms and relative to gold, followed by the recent virus-driven *coup de grace*. The following are various charts highlighing the damage. **This all paints a picture demonstrating that gold is very cheap compared to the dollar, and other fiat currencies, gold miners are very attactive relative to gold itself, many commodity prices have become very depressed in relation to gold, and commodity related companies have become quite attractive relative to the commodities they own.**

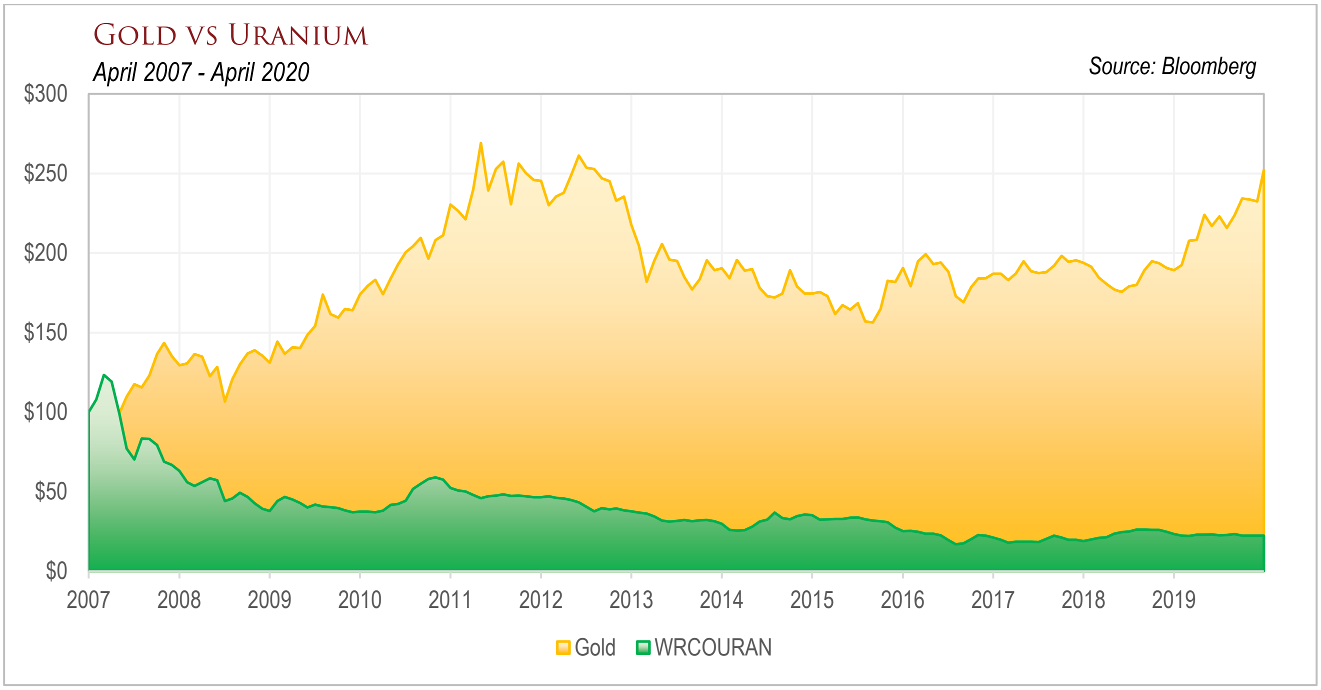
Copper

It's hard to imagine that, despite all of the battery and electronics hype, copper sells at a fifty percent discount to the price of a dozen years ago. As investors' love for copper has waxed and waned over the years, we have trimmed and added back to gold mining companies that own a lot of copper as well. If current trends continue, we will likely add some copper companies to the portfolio.

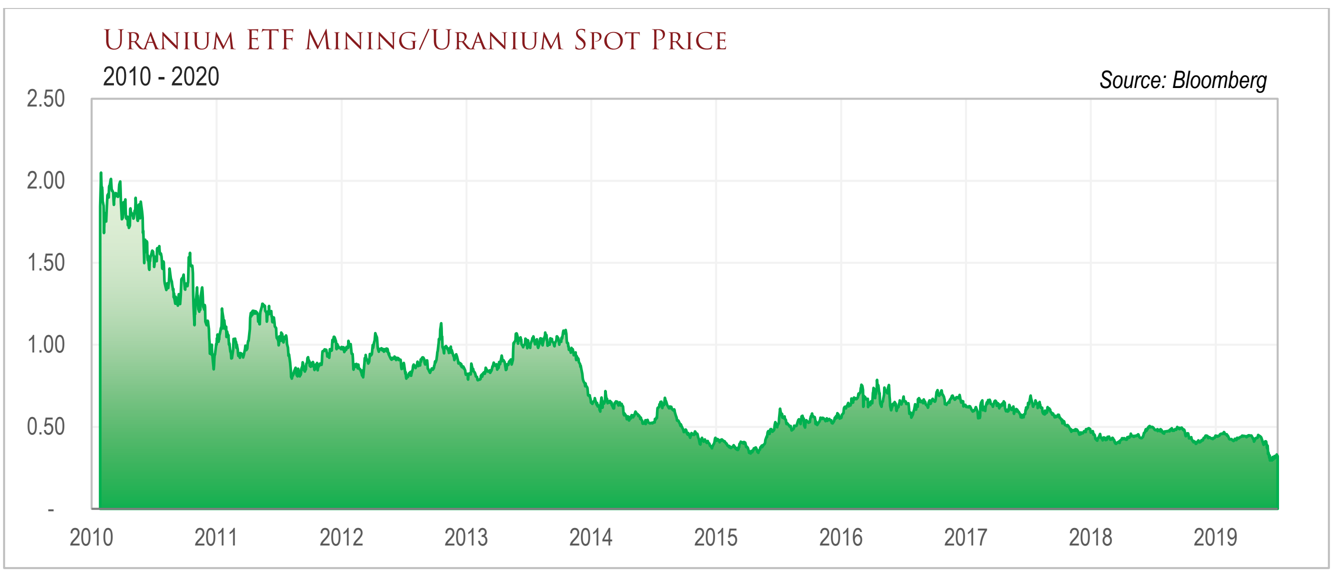


Uranium

We don't typically invest with a "catalyst in mind," believing that attractive valuation eventually serves as its own catalyst, and having noticed that stocks usually rocket higher before people notice the catalysts. Uranium seems to be one of the rare exceptions. Catalysts have become abundant in recent months. Cameco closed MacArthur River (maybe the best mine ever). The U.S. Department of Energy stopped selling their stash, and the Russians stopped several years prior. The Kazakhs cut production once, then twice, and just announced a coronavirus related major reduction of supply. Similarly, Cameco closed its Cigar Lake mine, temporarily, due to the coronavirus. Two high-cost mines in Africa have finally closed. On the demand side, demand for electicity is down some, but Japan has reopened nine reactors and China has opened a similar number, with thirty more in various stages of planning and construction. Funds have been formed to buy and hold. Supply falls well short of demand. The price is up from $18 to $32, which is still less than a quarter of the peak. Prices need to double, if not triple, to avoid shortages and multi-billion dollar reactors sitting idle.

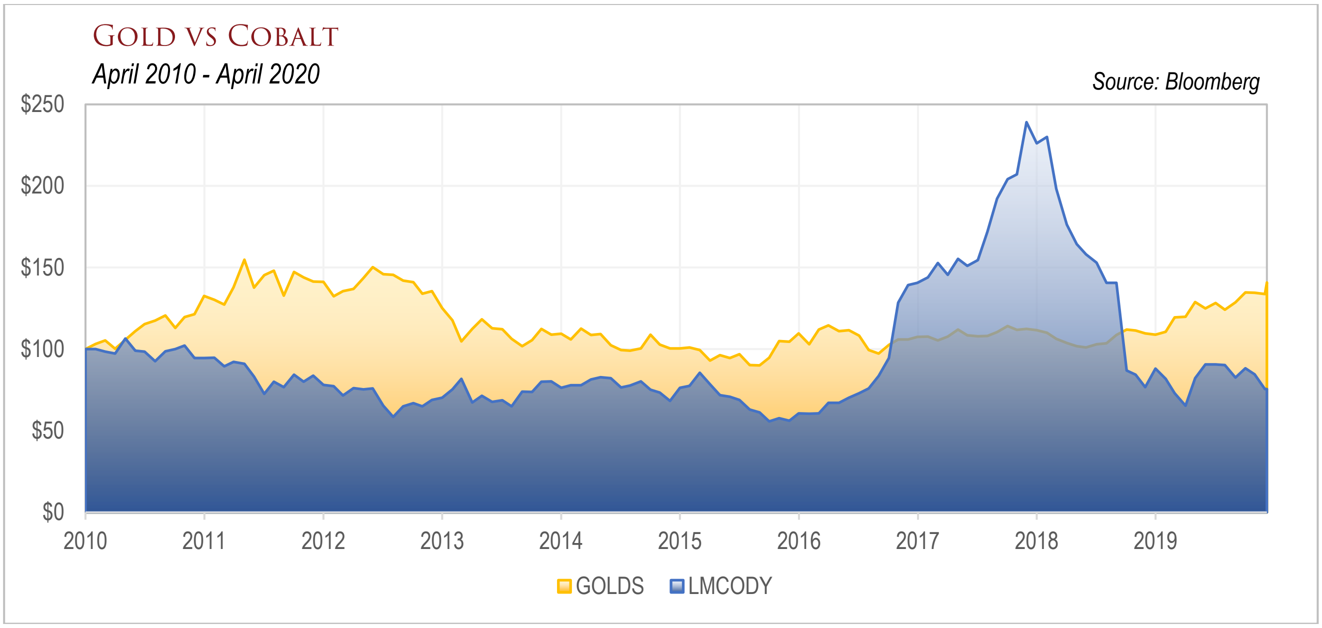


Echoing a common theme, the commodity is down 82% but the companies that own uranium have sufferred an even more severe hammering. For example, Cameco, peak to trough, was off 90%; the smaller ones fared even worse.



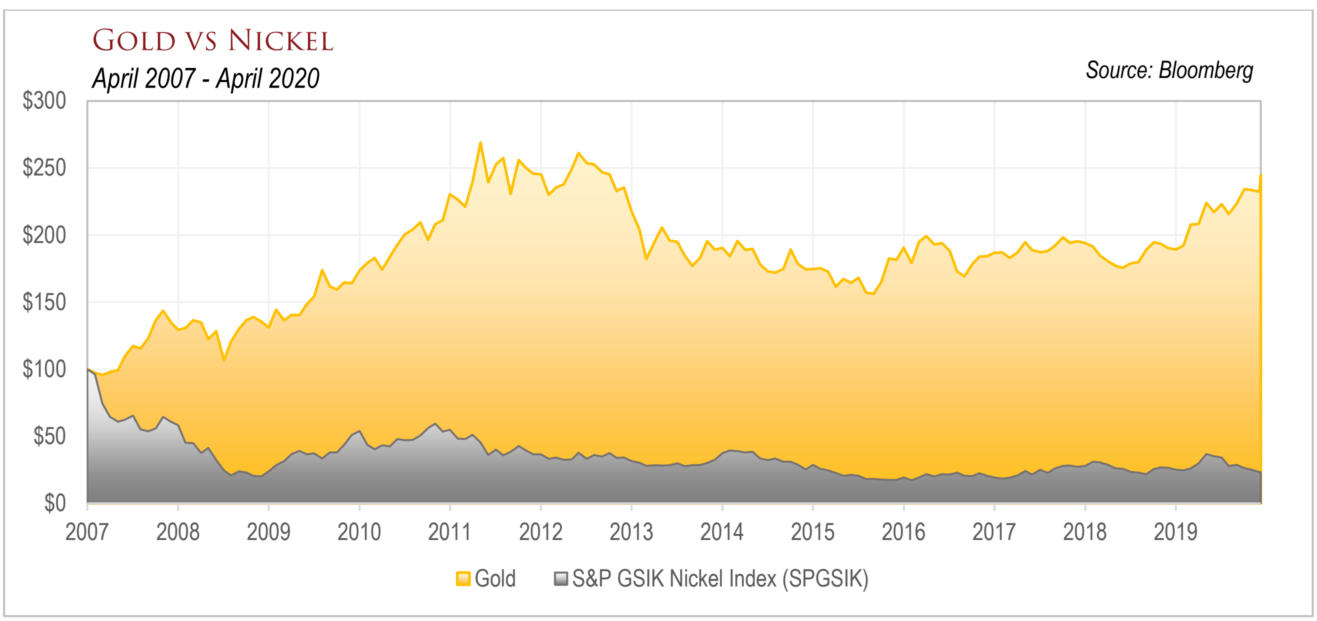
Cobalt

This chart illustrates the extent to which price can move due to hype about exciting things (in this case batteries for EVs) and then the nasty hangover that so often follows. We had a small holding that got bought out. Pure plays are rare.



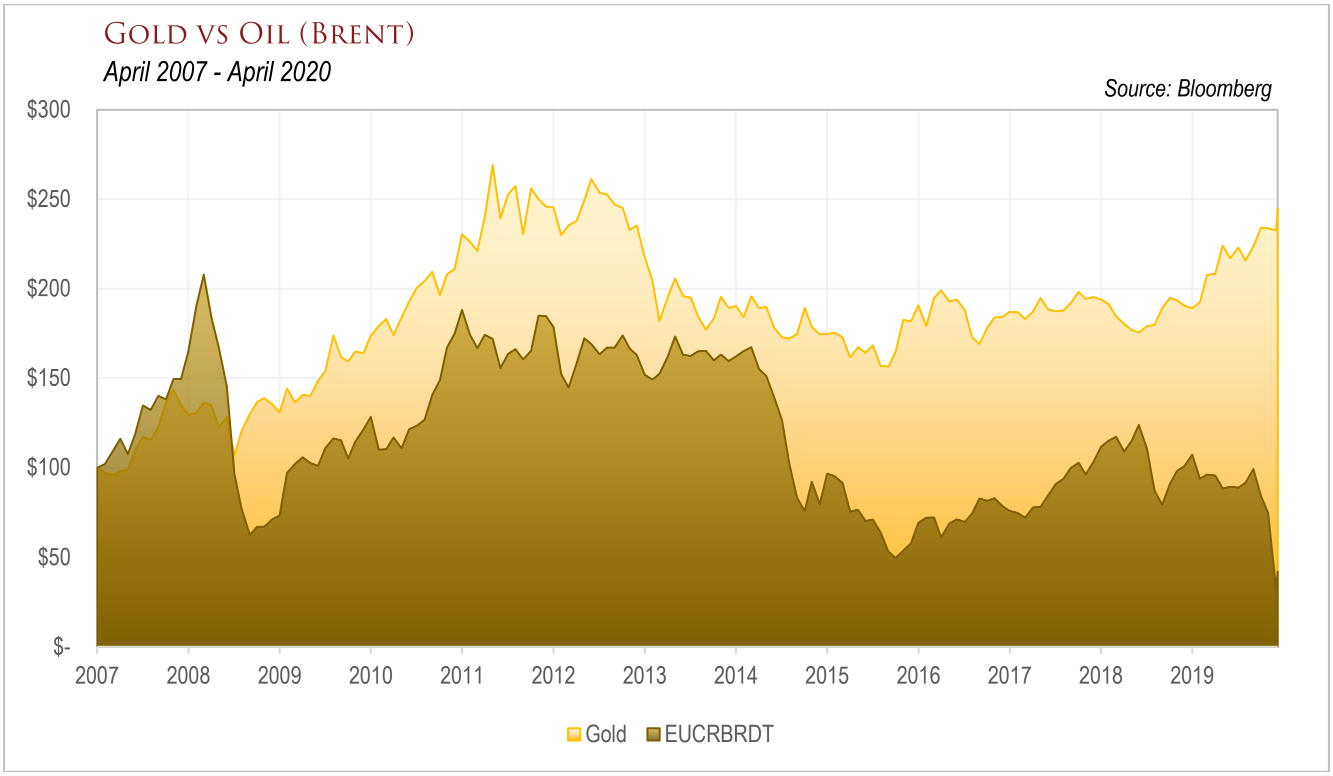
Nickel

Batteries and storage could use massive amounts of nickel. This fact is highly promoted. Thus, it's a bit of a surprise to see that prices are down three-quarters from 2007. Here again, if present trends persist, the portfolio could take advantage of opportunities in this area.



Oil

We've invested in oil infrequently over the past dozen years. The 2015/16 period was a profitable exception. In 2020, once again, we find the area to be enticing. Reasonable people can debate what share of the energy market oil will lose over the next half-century, or whether the equilibrium price is $40 or $90, but we're willing to go on record that $13 is not sustainable for any meaningful period of time. (The negative $40 per barrel recently posted in the futures market can be viewed as a reflection of too much money sloshing around the system and peculiarities of the futures markets, rather than as a reflection of the long-term value of oil.) The price has been periodically negative in parts of Canada, though, due to transportation bottlenecks. As things calibrate, the upside is significant.



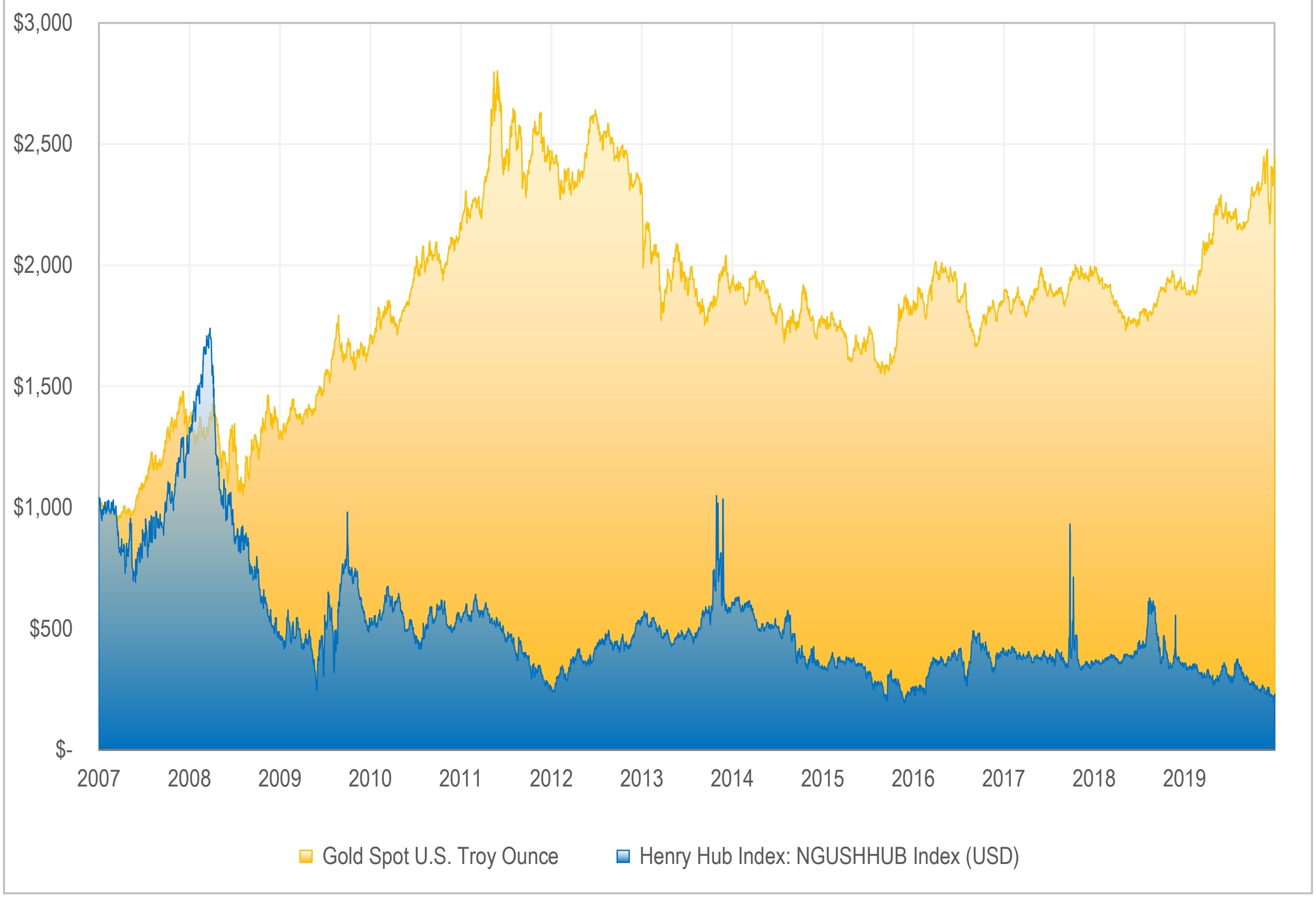
Natural Gas

Gold went up 140% while natural gas at first rose faster then dropped over 80%. Investment sentiment has gone from viewing gas as a cheap, clean, strategically located, attractive energy source to disdaining it as a useless, overabundant byproduct of oil, or worse yet, an evil hydrocarbon. Stock market investors were recently reminded that crowd-based opinions are cyclical, even fickle. We suspect that energy investors will rediscover this truism in the not so distant future. Mismanaged and over-indebted, most of the industry's participants have watched their stocks drop more than 95%. COVID-19 was the last thing that this industry needed. But, when we get to the other side, the survivors could register 5, 10, even 20-fold returns from the bottom.

Gold Vs Natural Gas

April 2007 - April 2020

Source: Bloomberg

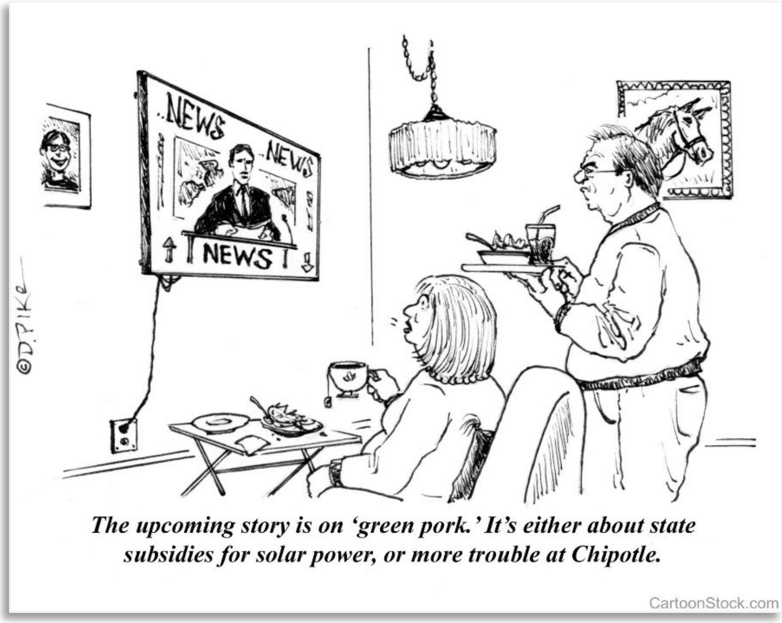


Grains

Grain prices have held up much better than metals or energy prices. They have held their own in nominal terms, although adjusted for inflation they too have had a rough decade. They are now bouncing around near the lowest prices in thirteen years. Active investors will appreciate the extreme of the anomalies in this area. Publicly traded companies that grow food are trading at single digit price-to-earnings ratios. From the price, it should be clear that they aren't U.S. companies. By contrast, Dominos, a company that turns the food into a pizza, sells at 38 times earnings, while Chipotle, which puts the food in a tortilla, sells for 55 times earnings, 88 times this year's expectation. Evidence of extreme bifurcation is everywhere, but the preposterousness in this industry is beyond the pale. Certainly, opportunity can't be far behind.

Upon the fields of barley
You'll forget the sun in his jealous sky
As we walk in fields of gold

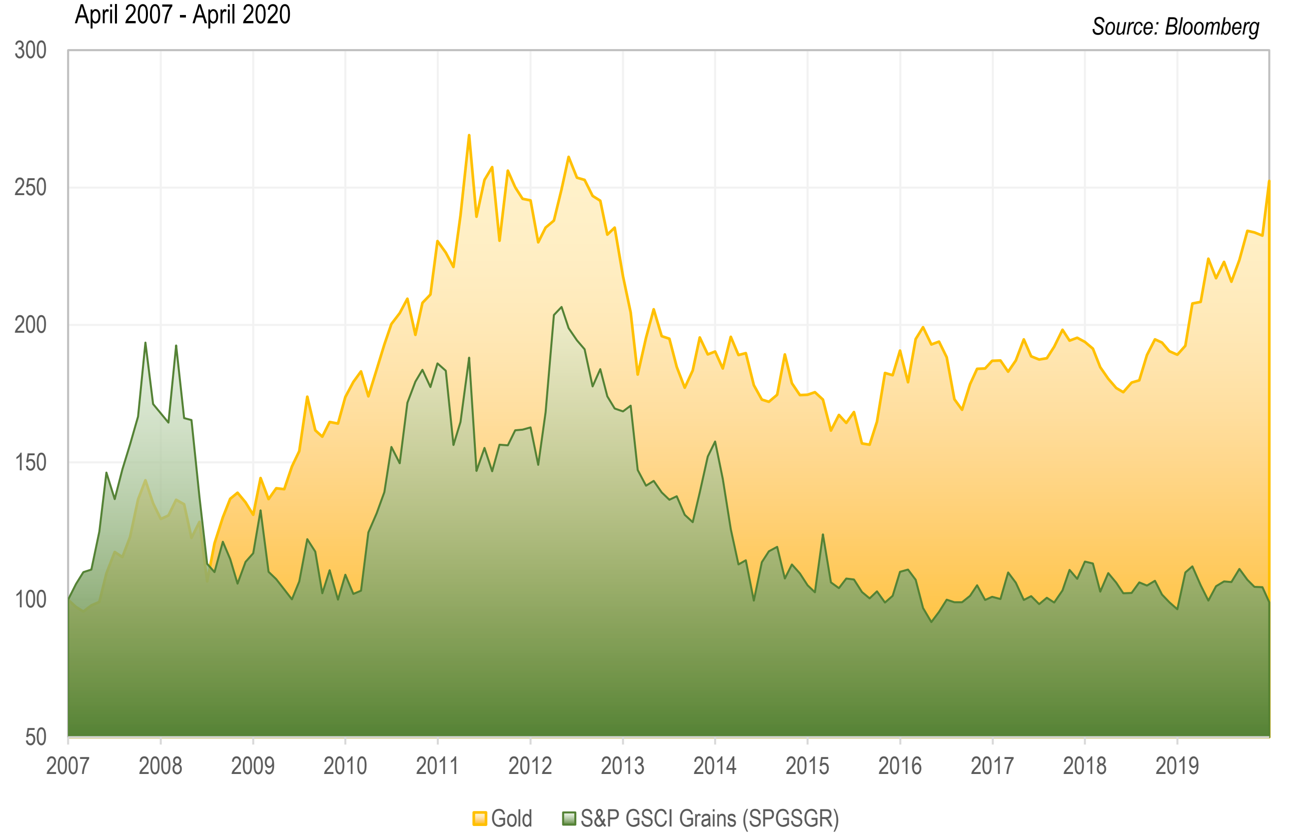
-Sting, 'Fields of Gold'



The upcoming story is on 'green pork.' It's either about state subsidies for solar power, or more trouble at Chipotle.

Gold vs Grains

April 2007 - April 2020



Quality Franchises; Unpopular Domiciles

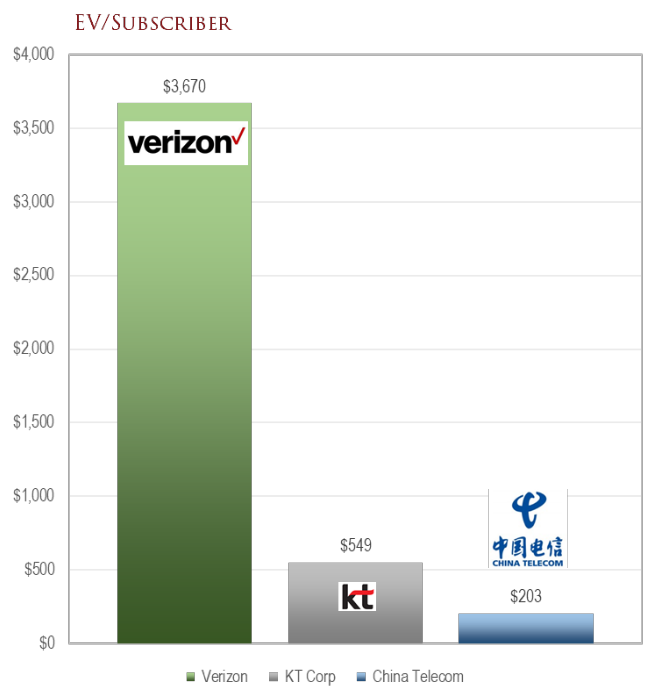
If my eyes don't deceive me,
there's something going wrong around here.

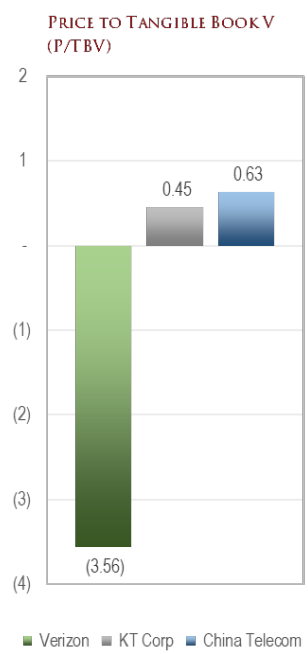
-*Joe Jackson, 'Is She Really Going Out With Him?'*

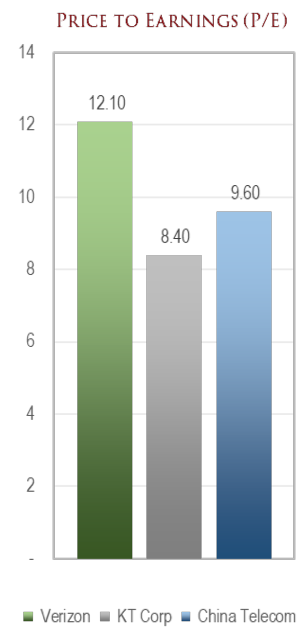
Most investors say they love quality franchises, and who doesn't? In addition to healthy, and relatively stable, profit margins, good franchises also have scarcity value, an increasingly valuable trait as currency rains from the skies. But we suspect that what most really want is momentum. An eleven-year uptrend is alluring. Clearly, so many investors insist on buying the most expensive ones. This will likely prove problematic as history and logic make clear that paying expensive prices for really good companies is a losing strategy**. Fortunately, quality franchises are available at bargain prices, but it requires venturing into good but unpopular domiciles.**

The pictures below illustrate the large divide in valuation metrics for stocks of U.S companies relative to non-U.S companies. Shown are communications, transportation, electricity generation companies, and food producing enterprises across regions. There are many more examples, but this narrative is long enough already.

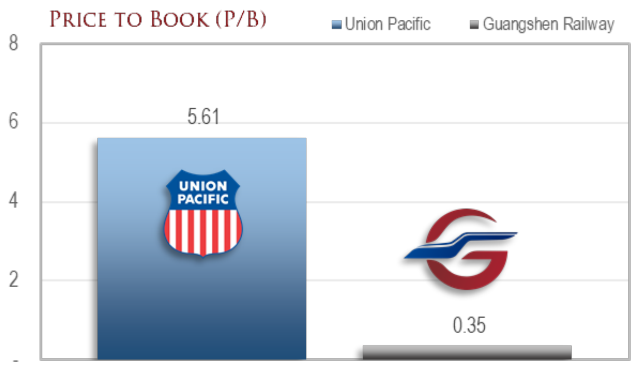
Communications



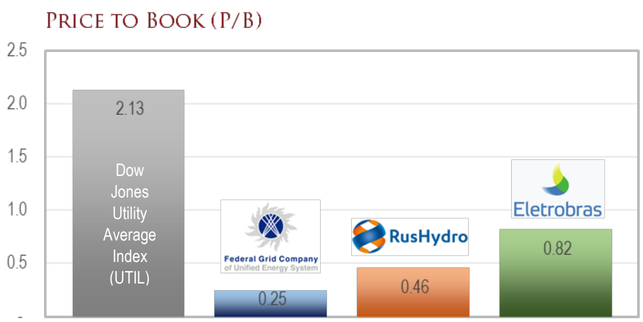


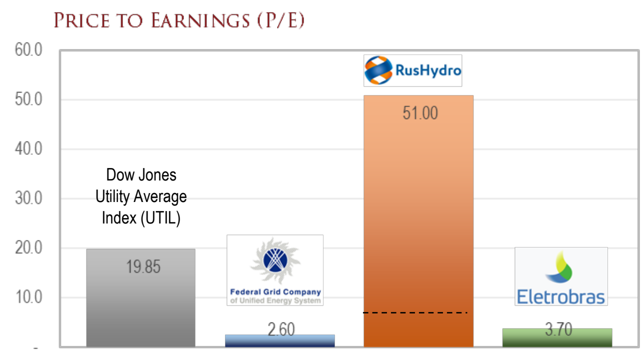


Transportation



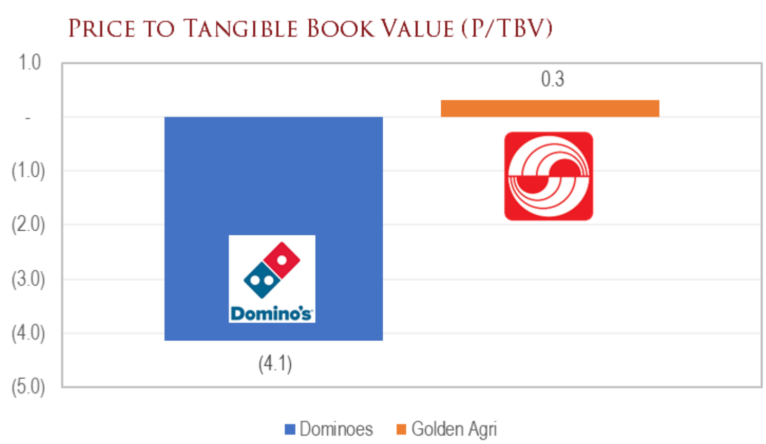
Electricity Generation



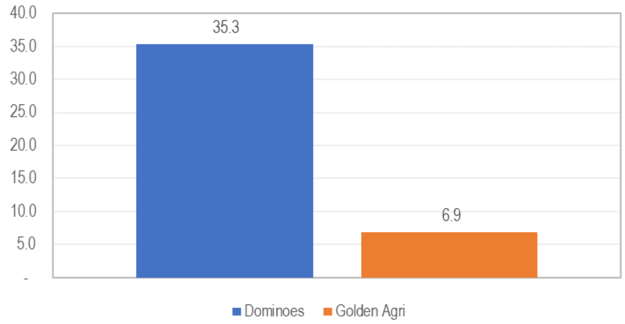


RusHydro is 7.6 times this years expected earnings

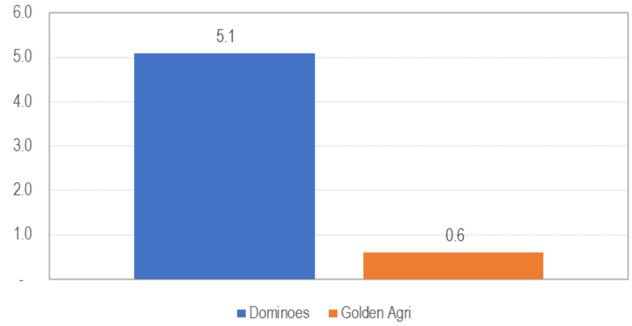
Food Producers



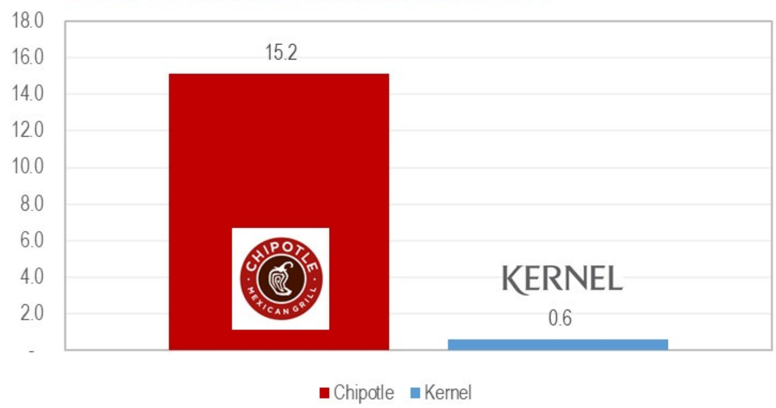
Price to Earnings (P/E)



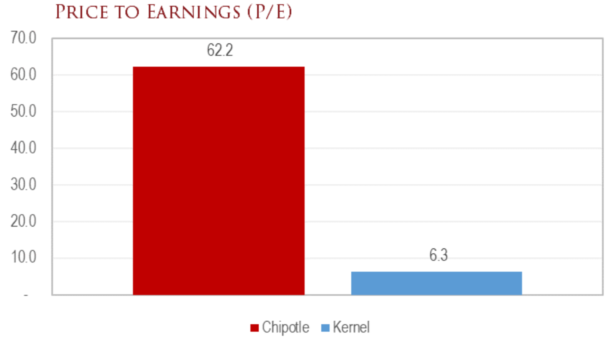
Enterprise Value to Sales (EV/Sales)



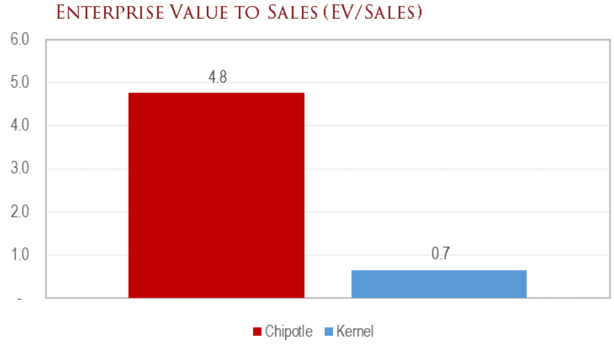
Price to Tangible Book Value (P/TBV)



Price to Earnings (P/E)



Enterprise Value to Sales (EV/Sales)



Kernel is one of the world's leading producers of sunflower oil and other agricultural products.

While space does not permit more specific examples, the following chart gives a quick snapshot of the overall market: the U.S. relative to non-U.S, relative to an uncorrelated portfolio that is global, all-cap, and attentive to valuation (using our portfolio as a proxy).

As of March 31, 2020	S&P 500	MSCI ACWI ex U.S.	Kopernik Global All-Cap
Enterprise Value to Sales (EV/S)	2.4x	1.4x	0.9x
Price to Cash Flow (P/CF)	11.8	8.2	2.6
Price to Tangible Book Value (P/TBV)	10.1x	2.0x	0.4x
Price to Earnings (P/E)	19.6x	13.7x	6.9x

Source: Bloomberg

The difference is undoubtedly bigger than shown since more than ninety percent of S&P companies don't use standard accounting practices anymore, flattering their numbers meaningfully. This is much less common abroad.

When managing the reported numbers is rewarded more than doing the hard work of managing the business, that incentivises some of the worst forms of managerial behaviour.

-Jason Hsu, Rayliant Global Advisers

Now, many people say that they agree with our view on stocks, but they are quite concerned about timing. We've written a lot about this topic. We aren't good at timing (obviously) but believe it's over emphasized because: 1) especially long cycles are usually deciphered as evidence that cycles no longer exist. They have always eventually turned, often with exaggerated vigor; 2) The recent events seem to be screaming – "the game is over", market leadership surely is shifting; 3) Timing doesn't matter that much in the big picture. The following chart makes clear that big returns over any reasonable time period will yield stellar investment. This is doubly true in comparison to sovereign bond yields (or lack thereof).

It's all I can do, to keep waiting for you

-the Cars, 'It's All I Can Do'

	Upside Potential			
Year	2X	3X	5X	
1	100%	200%	400%	Internal Rate of Return
2	41%	73%	124%	
3	26%	44%	71%	
4	19%	32%	50%	
5	15%	25%	38%	
6	12%	20%	31%	
7	10%	17%	26%	
8	9%	15%	22%	
9	8%	13%	20%	
10	7%	12%	17%	

The "return on patience" is likely particularly high now. Outsized returns are most achievable from extreme points in the cycle, during challenging times, and at major inflection points in the market. For further thought on style shifts and on why efforts to reflate past bubbles go somewhere, but not where they're intended, let's turn to 18th century philosopher Richard Cantillon. He pointed out the obvious, that monetary inflation is not distributed evenly throughout the economy. Those closest to the money get enriched while those way downstream get the short end of the stick, eventually paying higher prices for things without ever having benefitted from access to the money. The Spanish found money in the New World and benefitted disproportionately relative to the rest of the world. With Bretton Woods, the U.S. was given the sole right to print the world's reserve money and benefitted disproportionately. Banks can create "money" and benefit accordingly. In QE (1 – 3) money was given to the banks, benefitting the finance industry disproportionately. This time around, money is being tossed around more broadly, but the bulk of it is, once again, being given to the financial industry (although much more broadly this time: private equity, fund management companies, hedge funds). So, people are not wrong to think that we will see the same winners. Central bank money printing always has been, and always will be, a mechanism for transferring wealth from the poor and middle class to the rich. But, beyond the rich winning, it isn't simple. Cantillon pointed out that moneyed economies tend to lose their manufacturing base and suffer from high prices and lack of drive. Certainly, this happened to Spain eventually and over time they succumbed to the British. It is said that during Bretton Woods the U.S began to lose its manufacturing base and to hemorrhage gold. Are the financial position, work ethic, and morals of very large U.S. corporations, states and the federal government anything like that of the past centuries?

Friedrich Hayek expanded on Cantillon's analysis, comparing the spread of money through the system to honey being poured on a platter. It congregates in the center where it is poured. But it can only go so high at the spot that it's poured before it starts to seep outward toward the edges. With time it keeps spreading further. It seems an apt analysis and suggests that while, yes, they are going to dump more money predominantly into the hands of the rich, much of the finance industry is pretty saturated with honey already. Look how supersaturated the sovereign bond market is. Many rates are negative; can they be more overpriced than that? **Paying someone to borrow money from you makes as much sense as paying someone to rent a room from you or to let you work for them.** Sheer madness. Talk about social distortion. Talking about distortion and mal investment, it is worth repeating a phrase from earlier: Who's going to build more restaurants, retail stores, office buildings, etc. when we are so over stored already compared to other countries and to the past? And when thousands of companies, most with seemingly endless access to capital, are all employing a "blitz-scaling" model, is it logical to assume that they all are going to win? Can they scale perpetually in our finite world? You know our answer. No, **rather than investing in companies striving for infinite growth in a finite world, we suggest doing just the opposite.**

And, timing-wise, there has perhaps never been a better time to eschew chasing momentum and instead to focus on quality, scarce assets. Growth will be increasingly hard to sustain. The divergence in the valuations between value stocks and growth/momentum is breathtaking. And, while it is strange that style shifts so often happen at the turn of a new decade, that is exactly what so often happens. That style shifts indeed happen periodically is fully logical. The masses always take good things to excess, and thereby sow the seeds for their own destruction. It is said that no investment is so good that it can't be ruined by being chased by too much money. At any rate, the following chart is interesting. It is our own adaptation of Marc Faber's work, from a piece he wrote about a fictive uncle, who made trades roughly once per decade. Turned out to be a superb strategy. Cycles are very real.

What might the coming Decade have in Store?

Faber's Fictive Uncle

1960s	Own Quality Franchises	
1970s	Own Gold/Energy	Avoid Fixed Income
1980s	Own Japanese Equities	Avoid Gold/Energy
1990s	Own U.S. NASDAQ	Avoid Japanese Equities
2000s	Own Gold/Energy	Avoid U.S. NASDAQ
2010s	Own U.S. S&P 500	Avoid Gold/Energy
		?
2020s	What's Disliked, Cheap, Useful? Conversely, what is Over-owned, Ultra-expensive?	

Obviously, a few months don't mean much. But, the popular index stocks may have peaked in March, growth will be hard to resuscitate in the post-corona environment, and the market leadership is seemingly much too narrow to sustain. Meanwhile, gold is rising and is back in the vicinity of all time highs, uranium has bounced recently and supply is well short of demand, and some emerging markets are certainly poised to grow faster than the developed world. The times may be a changing.

CHAPTER 4

Summary

Those who would give up essential Liberty,
to purchase a little temporary Safety,
deserve neither Liberty nor Safety.
-Ben Franklin

The greatest dangers to liberty lurk in the insidious encroachment by men of zeal,
well-meaning but without understanding.
-Justice Louis Brandeis

The urge to save humanity is almost always a
false face for the urge to rule it.
-H.L. Mencken

Liberty means responsibility.
That is why most men dread it.
-George Bernard Shaw

Let's stand up for truth, bondage or freedom,
you have to choose
-Paddy and the Rats, 'Join the Riot'

Several issues ago, we looked back a half-millennium to see what we could glean from the stark contrast with our current era. The following issue looked back a "mere" half-century to re-examine the period that arguably most mirrors our current age. While this commentary is clearly about current happenings, inspiration came from a very different era, jumping forward a decade to the late 1970s/early 1980s. It was a period of bear markets and angst. Not surprisingly, it was a great time to be limping into the stock and bond markets; by the eighties it was time to back up the truck. George Orwell's 1984 was still about a time in the future and his "Big Brother" still seemed like fantasy**. While the stock and bond markets still seem planted in a mindset circa 1973, the angst of the late '70s is palpable**; probably much worse. That era has in common with ours the angst and the likelihood that this is also a major inflection point in the markets. That was the cyclical end of a period of high inflation, of big government, and the bull market in commodities. Conversely it was the beginning of a super cycle in stocks and especially bonds. **The current era is probably the end of all those cycles.**

Fifty years ago, people expressed their discontent by taking to the streets. Now, most seem to internalize their anguish. This is indeed a very different era. The inspiration came to me on the Rooftop at Pier 17, a great venue for music. All of the lyrics used in this paper are from groups that I've personally seen perform live, over the years. The notable exception is XTC, who provided the introductory lyrics and also the title song. I find live music to be enjoyable, entertaining, and a great study of crowd behavior and psychology. I look forward to live entertainment being legal again. The Pier 17 event was the third time I've seen the group Social Distortion over the past three decades. They were excellent, as were Flogging Molly and The Devil Makes Three. That genre of music caught the angst of forty years ago, an angst that is re-emerging with a vengeance now. The increase in angst was inevitable with the launch of QE. One can only imagine the pain that will eventually be felt as a consequence of QE-infinity. So yes, you can count us amongst the not insignificant contingent of people who believe that when you distort the market's pricing mechanism (interest rates) you inadvertently **distort the fabric of society**. The signs are proliferating. Last fall, viewing this subject as perhaps too negative, I shelved this commentary for a number of months, until recent events provided much "richer" material than I ever could have imagined. They've made so many plans for Nigel – what he can do, when he can work, if he can work, which government funds he's entitled to. His schedule is booked solid, yet he must hang out at home. Understandably, I felt compelled to finish this. So, here it is. I felt like it needed to be said. Hope it was a worthwhile read.

It's those changes in latitudes, changes in attitudes
Nothing remains quite the same
With all of our running, and all of our cunning
If we couldn't laugh we would all go insane

-*Jimmy Buffett, 'Changes in Latitudes, Changes in Attitudes'*

We don't want to end this commentary without reiterating that the silver lining in all this is the opportunity to gain attractive cash flow yielding investments in quality business franchises, with the caveat that they mostly reside in unpopular countries, and also to garner massive upside optionality by investing in resource-rich businesses. The valuation divide between expensive stocks and attractively priced stocks has probably never been this wide. Investors have a choice. We believe that this is our most attractively valued portfolio in four decades.

More importantly, **we are all blessed to be in the investment industry**. We have the ability to continue to operate even during the current lockdown. While there are certainly more obstacles, we can still do research, talk to interesting people, learn interesting things, and provide service to clients and friends. Speaking for myself, I feel that now is the time to give back to the community, be that through charity or supporting local businesses that are struggling. I applaud the many others who are responding accordingly.

This missive has been uncharacteristically opinionated. I hope it didn't offend too many people. And, I endeavored to at least stimulate a lot of thought. If not now, when? And, lastly, I detailed what I believe to be generationally attractive investment opportunities. Hopefully, this proved helpful to some.

Most importantly, we certainly hope that you, your family, and your friends have stayed healthy during this pandemic. We also hope that you are faring reasonably well in the harsh environment that has resulted from this virus and the reaction to it. We wish you good health and happiness.

Sincerely,

David B. Iben, CFA
Chief Investment Officer
May 2020

Related Articles of Interest

When it comes to chronicling what becomes of a society as economic decision-making is wrested from individuals and small businessmen by politicians and bureaucrats, perhaps no one was better than Ayn Rand. A gifted, if eccentric, writer, she grew up in Russia and witnessed the early days of communism there. If there was ever a time to read/reread her masterpiece – *Atlas Shrugged* – it is now. I've reprinted the first few pages, which set the stage and capture a little of the underlying feeling that people are starting to feel again, here in 2020. One can't help but wonder if Eddie's mighty oak tree isn't a fitting analogue for our economy.

We'll then move on to Jim Grant, Howard Marks, and others.

"Who is John Galt?"

The light was ebbing, and Eddie Willers could not distinguish the bum's face. The bum had said it simply, without expression. But from the sunset far at the end of the street, yellow glints caught his eyes, and the eyes looked straight at Eddie Willers, mocking and still—as if the question had been addressed to the causeless uneasiness within him.

"Why did you say that?" asked Eddie Willers, his voice tense.

The bum leaned against the side of the doorway; a wedge of broken glass behind him reflected the metal yellow of the sky.

"Why does it bother you?" he asked.

"It doesn't," snapped Eddie Willers.

He reached hastily into his pocket. The bum had stopped him and asked for a dime, then had gone on talking, as if to kill that moment and postpone the problem of the next. Pleas for dimes were so frequent in the streets these days that it was not necessary to listen to explanations, and he had no desire to hear the details of this bum's particular despair.

"Go get your cup of coffee, " he said, handing the dime to the shadow that had no face.

"Thank you, sir, " said the voice, without interest, and the face leaned forward for a moment. The face was wind-browned, cut by lines of weariness and cynical resignation; the eyes were intelligent. Eddie Willers walked on, wondering why he always felt it at this time of day, this sense of dread without reason. No, he thought, not dread, there's nothing to fear: just an immense, diffused apprehension, with no source or object. He had become accustomed to the feeling, but he could find no explanation for it; yet the bum had spoken as if he knew that Eddie felt it, as if he thought that one should feel it, and more: as if he knew the reason.

(several pages omitted here, editor note)

He did not know why he suddenly thought of the oak tree. Nothing had recalled it. But he thought of it and of his childhood summers on the Taggart estate. He had spent most of his childhood with the Taggart children, and now he worked for them, as his father and grandfather had worked for their father and grandfather.

The great oak tree had stood on a hill over the Hudson, in a lonely spot of the Taggart estate. Eddie Willers, aged seven, liked to come and look at that tree. It had stood there for hundreds of years, and he thought it would always stand there. Its roots clutched the hill like a fist with fingers sunk into the soil, and he thought that if a giant were to seize it by the top, he would not be able to uproot it, but would swing the hill and the whole of the earth with it, like a ball at the end of a string. He felt safe in the oak tree's presence; it was a thing that nothing could change or threaten; it was his greatest symbol of strength.

One night, lightning struck the oak tree. Eddie saw it the next morning. It lay broken in half, and he looked into its trunk as into the mouth of a black tunnel. The trunk was only an empty shell; its heart had rotted away long ago; there was nothing inside— just a thin gray dust that was being dispersed by the whim of the faintest wind. The living power had gone, and the shape it left had not been able to stand without it.

Years later, he heard it said that children should be protected from shock, from their first knowledge of death, pain or fear. But these had never scarred him; his shock came when he stood very quietly, looking into the black hole of the trunk. It was an immense betrayal— the more terrible because he could not grasp what it was that had been betrayed. It was not himself, he knew, nor his trust; it was something else. He stood there for a while, making no sound, then he walked back to the house. He never spoke about it to anyone, then or since.

Eddie Willers shook his head, as the screech of a -rusty mechanism changing a traffic light stopped him on the edge of a curb. He felt anger at himself. There was no reason that he had to remember the oak tree tonight. It meant nothing to him any longer, only a faint tinge of sadness— and somewhere within him, a drop of pain moving briefly and vanishing, like a raindrop on the glass of a window, its course in the shape of a question mark.

He wanted no sadness attached to his childhood; he loved its memories: any day of it he remembered now seemed flooded by a still, brilliant sunlight. It seemed to him as if a few rays from it reached into his present: not rays, more like pinpoint spotlights that gave an occasional moment's glitter to his job, to his lonely apartment, to the quiet, scrupulous progression of his existence .

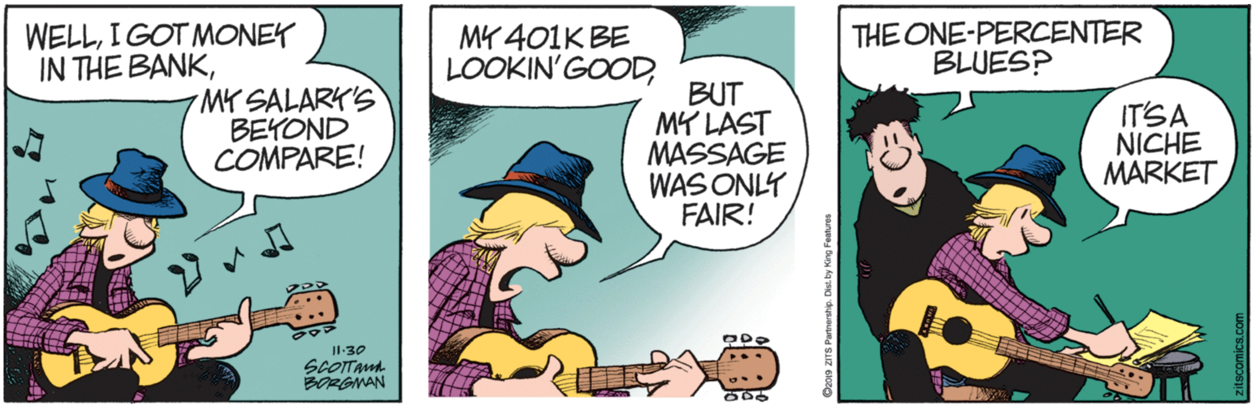
He thought of a summer day when he was ten years old. That day, in a clearing of the woods, the one precious companion of his childhood told him what they would do when they grew up. The words were harsh and glowing, like the sunlight. He listened in admiration and in wonder. When he was asked what he would want to do, he answered at once, "Whatever is right, " and added, "You ought to do something great ... I mean, the two of us together." "What?" she asked. He said, "I don't know. That's what we ought to find out. Not just what you said. Not just business and earning a living. Things like winning battles, or saving people out of fires, or climbing mountains." "What for?" she asked. He said, "The minister said last Sunday that we must always reach for the best within us. What do you suppose is the best within us?" "I don't know." "We'll have to find out." She did not answer; she was looking away, up the railroad track.

Eddie Willers smiled. He had said, "Whatever is right," twenty-two years ago. He had kept that statement unchallenged ever since; the other questions had faded in his mind; he had been too busy to ask them. But he still thought it self-evident that one had to do what was right; he had never learned how people could want to do otherwise; he had learned only that they did. It still seemed simple and incomprehensible to him: simple that things should be right, and incomprehensible that they weren't. He knew that they weren't. He thought of that, as he turned a corner and came to the great building of Taggart Transcontinental.

The building stood over the street as its tallest and proudest structure. Eddie Willers always smiled at his first sight of it. Its long bands of windows were unbroken, in contrast to those of its neighbors. Its rising lines cut the sky, with no crumbling corners or worn edges. It seemed to stand above the years, untouched. It would always stand there, thought Eddie Willers .

Whenever he entered the Taggart Building, he felt relief and a sense of security. This was a place of competence and power. The floors of its hallways were mirrors made of marble. The frosted rectangles of its electric fixtures were chips of solid light. Behind sheets of glass, rows of girls sat at typewriters, the clicking of their keys like the sound of speeding train wheels. And like an answering echo, a faint shudder went through the walls at times, rising from under the building, from the tunnels of the great terminal where trains started out to cross a continent and stopped after crossing it again, as they had started and stopped for generation after generation.

Taggart Transcontinental, thought Eddie Willers, From Ocean to Ocean— the proud slogan of his childhood, so much more shining and holy than any commandment of the Bible. From Ocean to Ocean, forever— thought Eddie Willers, in the manner of a rededication, as he walked through the spotless halls into the heart of the building, into the officee of James Taggart, President of Taggart Transcontinental.



Jim Grant adds the following from the April 17th issue.

How such meager interest rates will sit with the state pension funds that, with respect to actuarial liabilities, were half broke before the country suspended commerce is another mystery. A catalyzing crisis of the pension funds, should it come, would likely go down as another one of those unintended consequences of well-intended actions.

Frédéric Bastiat, the 19th-century French essayist, knew all about well-intended acts and the trouble they cause. "In an economy," he wrote, "an act, a habit, an institution, a law, gives birth not only to an effect, but to a series of effects. Of these effects, the first only is immediate; it manifests itself simultaneously with its cause—it is seen. The others unfold in succession—they are not seen: it is well for us if they are foreseen."

Howard Marks always lays ideas out so well. He wrote a memo a while back talking about perverse consequences of negative interest rates. Enjoy:

"It's not just Einstein's observation (the miracle of compounding) that may be rendered invalid. Negative rates turn a lot of the usual processes upside down. *Here are several examples:*

- *Negative rates make life more difficult in a TINA ("there is no alternative") world. Many investors don't want to knowingly sign on for negative rates.* ***That makes risky investments preferable, even if they promise historically low prospective returns. In this way, risk aversion is discouraged. "I have no choice but to go into risky assets, because I can't accept a negative return on safe ones."***
  There is clear evidence that this is happening among institutional investors. The flow of pension fund money into any asset that promises to beat zero-rate bonds has been so dramatic that equities, junk bonds, property, private equity and a host of other more abstruse areas of investment have spiraled in value – and to such an extent that they look highly vulnerable to any shock . . ." (Financial Times, August 5, 2019)

Proof? What about the fact that in early July, a €3 billion offering of Italian sovereign bonds maturing in 2067(!) was almost six times oversubscribed thanks to its lavish 2.877% yield? What a bonanza Italy was at the time, with a 10-year bond out-yielding Germany's 10-year by 215 basis points, 1.78% to -0.37%.

- *There's no longer any reason to pay slowly in order to make money on "float."*
    - *In the old days, people paid their bills on the last possible day, preferring to keep the money in the bank and earn interest as long as possible. Under negative rates they may prefer to pay sooner.*
    - *Many insurers traditionally have made money primarily because they paid claims years after they collected the premiums on the policies they issued. What happens if it costs them money to hold float until claims are paid?*
- *Likewise, there's no impetus to collect receivables quickly. In the past, wholesale customers were offered discounts for paying bills early. Now the seller might say, "No, you keep it. I'd rather you paid me in six months."*
- *Negative rates put pressure on people, such as retirees, who live on the income from their investments.*
- *Importantly, the pessimistic signals sent by negative rates may mean they have a contractionary rather than stimulative effect.*

  Research has suggested that Japan's negative rate policies may have backfired, actually lowering inflation expectations instead of firming them, as hoped. (The New York Times, September 11)

  Last week famously blunt ING boss Ralph Hamers excelled himself, all but calling the ECB idiotic for planning to shift rates further downwards. "The negative rate environment is making consumers so uncertain about their financial environment that they're starting to save more rather than less," he said.

  Mr. Hamers has a point. Rather than encouraging people to borrow and spend, the data suggests nervous eurozone consumers are hoarding. Eurostat reports the eurozone household savings ratio is at a five-year high of nearly 13 per cent. (Financial Times, August 5)
- *If interest rates for small savers ever were to go negative, it would give rise to the juxtaposition of income penalties for households with benefits for "the elites" through their ability to profit from rising equity prices. Economic impact aside, the boost to populist politics would likely be dramatic.*
- *Negative rates can distort the workings of floating-rate financial products. Lenders and depositors might have been happy in the past receiving interest rates at a spread over the base rate Euribor. With a negative base rate, however, loans and deposits might leave them with less money than they anticipated as time passes.*
- *Negative rates on U.S. Treasurys would, for example, harm the Social Security Fund (which can only invest in Treasurys), hastening the day when it runs out of money.*
- ***Negative rates can warp the calculation of discounted present values.*** *In particular, when the discount rate is negative, the present value of future pension obligations can exceed their future value. The combination of high discounted obligations and low yields on investments can be disastrous for the funded status of pension funds.*
- ***Ditto for the impact on bank profitability.*** *Negative rates charged to borrowers can sap the returns banks depend on, throwing countries' banking systems into reverse. Already, some banks have seen the need to issue mortgages with negative interest rates. "In a negative rate environment, the bank must pay to hold loans and securities. In other words, banks would be punished for providing credit . . ." (Jim Bianco on Bloomberg, September 3) "Certainly Europe's bankers are squealing, as they feel margins squeezed by low rates on lending and a reluctance to pass on negative rates to depositors." (Financial Times, August 5) Big banks can charge negative rates to corporate and HNW depositors, but as I mentioned earlier, thus far retail banks haven't passed them on to small savers. Doing so could cause those savers to leave the banking system, depriving it of a traditional source of deposits.*
- *What about the application of negative interest rates to corporate bonds? How will the markets value businesses that hold cash versus those that are deep in debt? Traditionally, markets have penalized heavily levered companies and rewarded those that are cash-rich. But if having negative-yield debt outstanding becomes a source of income, will levered companies be considered more creditworthy? Conversely, how will the market value businesses that hold a lot of cash and thus have to pay banks to keep it on deposit?*
- *Financial models and algorithms – which essentially are a matter of looking for and profiting from deviations from historic relationships – may not work as well as they did in the past, since history (all of which has been based on positive interest rates) may be out the window.*

WAITING FOR GOOD-DOUGH
Paul Singer, Elliott Management, April, 2020

In the play “Waiting for Godot” by Samuel Beckett, which premiered in 1953, two characters wait for the arrival of someone named Godot, who never arrives. In our version, Good-Dough is sound money, and its chance of arriving is just about as slim.The reason that we have been harping on the failure of central banks to normalize monetary policy these past 10 years is that we were highly concerned about entering the next financial crisis/bear market/recession (whenever it might arrive) without the fluff, detritus and litter of the previous crisis having been cleaned up and scrubbed clear. To have the curtain go up for the “next show” on a stage where the stagehands are caught in the floodlights holding $20 trillion dollars of bonds and stocks purchased under the one-size-fits-all monetary flood period, with interest rates at, near,and most significantly below, zero, is to start the next thrilling show deeply unprepared. The world’s major central banks continued emergency policies for 10 years after the emergency was over, with no theoretical or empirical support for doing so. Those policies resulted in a gradual slow-growth recovery coupled with dramatically rising securities and asset prices. The reason this is important is that QE, ZIRP and NIRP are deeply unsound policies, and rely for their magical-seeming efficacy on naïve faith by citizens, investors and businesses that paper money is trustworthy no matter how much of it is whisked into being, and no matter what the return (or literal cost in the case of NIRP!) is from holding claims on it. Like any compelling “serial” on TV, we will start with a reprise of the highlights from the previous exciting episode: 2008. Too much debt, unsound financial institutions, oblivious corporate executives, and arrogant and clueless central bankers brought the world to the brink of financial extinction in 2008. Then, so the story goes, these same central bankers morphed into heroes and saved the world with their monetary fire hose on “full crowd control” and “confetti” settings. That tsunami of newly printed free money lifted securities prices, deepened inequality and unleashed the political testiness that comes along with such a novel and distorted recovery, and it tested and kept testing the willingness of people to accept cotton-candy money at full value. Sadly, when people (including those who should know better) do something stupid and reckless and are not punished, it is human nature that, far from thinking that they were lucky to have gotten away with something, they are encouraged to keep doing the stupid thing, keep believing the unbelievable and keep assuming that they were just plain wrong to be concerned about “old-fashioned” restraints (like sound money: Good-Dough). As we have pointed out ad nauseam et beyondum, doubling down on unsound policy just raises the stakes and the intensity of the future “payback.” Inflation is generally rising price levels. Inflation can be caused by supply issues or blockages, excess demand, wars or various versions of money printing. It is normally hard to convince people to accept paper money (backed by nothing) that is being debased, and human history is full of examples of currencies that were debased and then fell precipitously in value. Debasement is not novel; it is a timeless way for sovereigns to attempt to pay less, or far less, on the obligations they have incurred. Usually it does not “work,” in the sense of permanently fooling people, because at some point people front-run the debasement, which turns into a tail-chasing episode that can, and frequently does, destroy people’s savings and make them really angry, in contrast to the desired result of fooling people into passively accepting the erasure of their assets (the governments’ obligations). In the case of the post-2008 debasement, a combination of technological change, globalization and the use of the newly printed money to buy bonds has kept reported consumer price inflation in bounds and fed the narrative that monetary radicalism is really a panacea without risks and side effects. The inflation instead has gone into stock, bond, real estate and art prices and has exacerbated inequality. It actually has created more financial engineering than economic growth, but the sheer size of it ($20 trillion of bond and stock purchases and zero percent and below interest rates) brought the global economy close to appearing to return to normal after 2009, albeit growing more slowly than before. But the failure to normalize monetary policy prior to the next crisis (which is now hard upon us) ensured that the next crisis would bring the unsound (and experimental) monetary policy to even greater uncharted heights (depths?) of unsoundness. Prior to 2008, central bank balance sheets were clean and interest rates were sort of low but normal. In contrast, just prior to the virus a couple of months ago, $20 trillion of purchased stocks and bonds were still on central bank balance sheets, and Japan, Europe and Switzerland had policy interest rates below zero. One can only imagine what is going to happen to central bank balance sheets and global interest rates now, given that the global economy is screeching to a halt. Is the $20 trillion of central bank securities holdings going to rise to $30 trillion? Almost assuredly yes. How about $40 trillion? $50 trillion? Who knows? Are short-term policy rates going to be negative everywhere? Is all this going to matter? Will there be a serious deflationary period that will cause governments to pour even more fuel on the fire? Following a brief deflationary period, is the even-more-radical monetary flood going to create a tipping point following after which fiat money is rejected and hyperinflation begins, a process which could be self-reinforcing and serve to wipe out the real value of global savings and send consumer prices, commodity pricesandreal estate prices to the moon? Even if that is the path that governments are following (wipeout of savings, attempted wipeout of debt), and you try to align your businesses and assets on that path, things will be much more complicated than you think. Take real estate, for example. Of course it is "real," and you might think that it is a slam-dunk to preserve value in a serious inflation. But commercial real estate is a peculiar asset. It looks real because kicking it can break your toes, but it is generally highly leveraged and depends upon the relationship between rents and costs. If there are rent controls or moratoria, formal or forced by circumstances, and no controls on costs, commercial real estate can produce rapid insolvencies. A little thought will reveal many more examples of the complexities involved in a period of monetary destruction such as the one that is possible in the near future. In addition to the monetary excesses, almost all developed countries are growing their debt and their unfunded future promises (retirement, health care and other obligations) to record amounts. Currently, to fight the deepening recession, not only are central banks restarting QE without limit, they are also cutting already-low rates, and their governments are cranking up massive deficit-spending plans. There are many times in a long investing career that one hears,"Where will this all end?" We never thought that was a good question, because there is no "end," just a succession of real-world events and market actions stimulating policy reactions. Politicians love markets going up, and if there are no countervailing considerations, like rapid consumer price inflation, then they will try to keep markets high and rising and interest rates low forever. The world is currently in a deep recession from which it will be complicated to recover. Emergency policy is appropriate. Deficit spending and massive monetary expansion arecalled for to prevent total collapse. Holes in people's basic ability to feed themselves must be filled with alacrity. However, the new fiscal and monetary policies currently underway are the largest peacetime policies of their type ever enacted, and when piled on top of the existing, pre-virus, central bank policies, the top of the pile of debt will likely reach the heavens. We have a hard time imagining what will occur in policymakers' minds post-COVID-19 to make them responsible stewards of monetary soundness, but monetary soundness is the key to financial system soundness, confidence in economic stewardship and fiat money, and the inauguration of a new period of sound,non-inflationary growth. They got away with unsound policy for 12 years. Now they think they have the magic formula, the one-size-fits-all nostrum that enables them to control the yield curve and to promise and deliver unlimited amounts of money without cost and without risk. They are wrong. They are just as wrong as when they said that recessions and financial crises are things of the past. The new element in the equation of the forces which will shape inflation and deflation in the near future is supply-chain blockages. Prior to the virus, sluggish growth plus globalization and technological change, together with bond-buying by central banks, kept producer and consumer prices calm. It gradually led to a widespread (crazy) belief that inflation is an historical artifact, not a modern possibility. In the current situation, the global economy is plunging in activity, and this would normally be sharply deflationary in terms of producer and consumer prices. However, several factors might change the equation, probably when the economy bottoms but possibly prior to that time. One factor would be very significant supply blockages all through the global supply chain. Additionally, the global supply chain is likely to undergo dramatic changes (as companies and governments recognize the national security as well as economic risks of sole-source or limited-source critical products and services) that will generally increase the cost of goods to the consumer. Other very important factors arethat the existing already-radical monetary policies have been dramatically ramped up, and fiscal policies have now gone full MMT with the new huge stimulus bills(which passed without even a discussion of how to "pay" for it). "Paying" for things with "real" money is now a quaint, outdated concept. Money is going to hell. Good-Dough is not coming. As usual, timing and shape TBD. Stay tuned for the next exciting chapters in this serial.

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Sedona

September 2021

Sedona

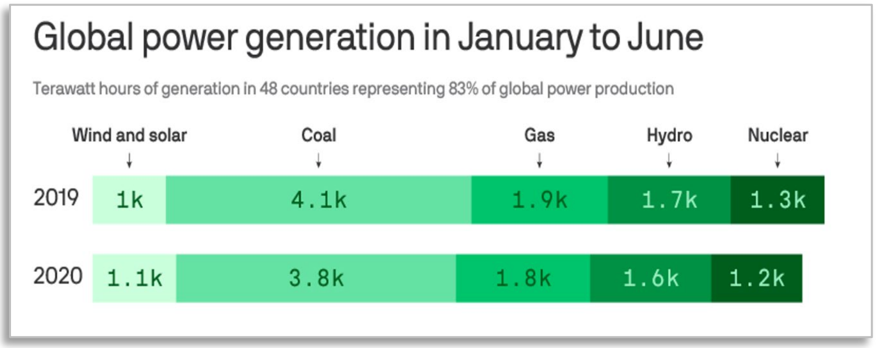
Continuing with our last commentary's desert theme, amidst this value-parched environment, we now figuratively travel six hours east from 29 Palms, California to Sedona, Arizona. Named after Sedona Arabella Miller Schnebly, the town is a famous tourist destination known for its beautiful, interesting sandstone formations. I'm told it's a wonderful place; sadly, I've never had a chance to go there. Therefore, this commentary was inspired, not by firsthand experience, but by a catchy little tune from a group named Houndmouth. It is a song about Sedona's early history as a movie town – more than sixty Hollywood pictures were shot there – and about how it subsequently became a casualty of Howard Hughes' staunch McCarthyism in the 1950s. As is a strangely persistent trait of mine, I hear distinctly alternative messages in song lyrics, usually pertaining to current investment-related topics. The song's chorus is a good place to start:

"Hey, little Hollywood, you're gone but, you're not forgot
You've got the cash, but your credit's no good
You flipped the script, and you shot the plot
And I remember, I remember when the neon used to burn so bright and pink
Saturday night, kinda pink"

-*Sedona – Houndmouth*

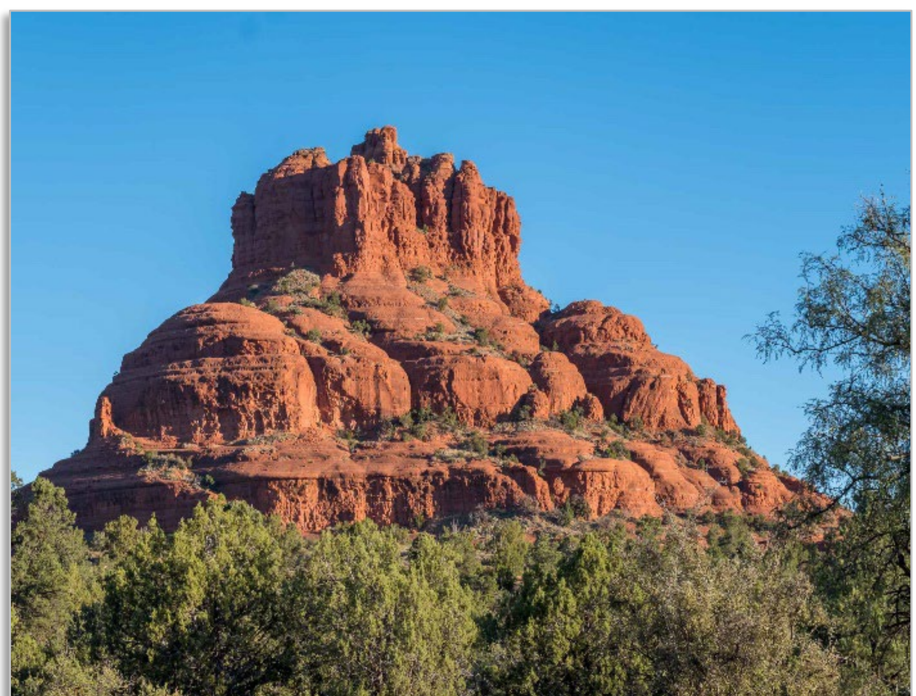
"You've got the cash, but your credit's no good!" How can one not immediately think of central banks? "You flipped the script, and you shot the plot." Am I the only one who finds this an apt descriptor of modern-day economics? Academics? Government policy? And, yet again, central banks? It wasn't that long ago that a *script* calling for MMT (Modern Monetary Theory), UBI (Universal Basic Income), and QE (Quantitative Easing)-infinity would have been booted to the sci-fi department, who upon receipt would have debated whether or not it was too outlandish even for them. Certainly, the newly "flipped" contemporary script presents challenges and opportunities alike large enough to make Sedona's Bell Rock pale in size by comparison. Obviously, the investment implications are important and require equity portfolios to adhere to a carefully developed, well-thought-out plot.

With so many people seemingly reading from a faulty script, it is important that investors rein in their frustration and act on the exciting opportunities to profit from market inefficiencies. They appear wider than Arizona's sandstone gorges. Much of the new, avant-garde script bears examination. One must scratch one's head and wonder who has adapted the ESG (Environmental, Social, and Governance) script into something so skewed from logical intentions. For example, we are told, emphatically and simplistically, that EVs (electronic vehicles) are good for the environment and that ICE (internal combustion engines) are bad. Period! That simple; that black and white. Now, I confess to being a fan of EVs. They are simpler, have fewer moving parts, need no service station stops. My wife owns an EV and our portfolios currently own one of the largest producers of them (Hyundai Motor Corp), so I'd be fine with the script if it seemed plausible. We're all fans of saving the earth and applaud the increases in fuel efficiency that have been realized over the past decades by ICE-powered cars. Alas, we're unable to pretend that EVs don't require the "high-carbon-footprint" mining of significant quantities of copper, cobalt, and, especially, nickel. It's hard to overlook the fact that they are powered by electricity, which in turn is primarily derived from hydrocarbons. Solar and wind make up a rapidly increasing, but still minuscule, portion of the pie. Other clean fuels like hydroelectric and nuclear are also worthy, but relatively small, contributors.



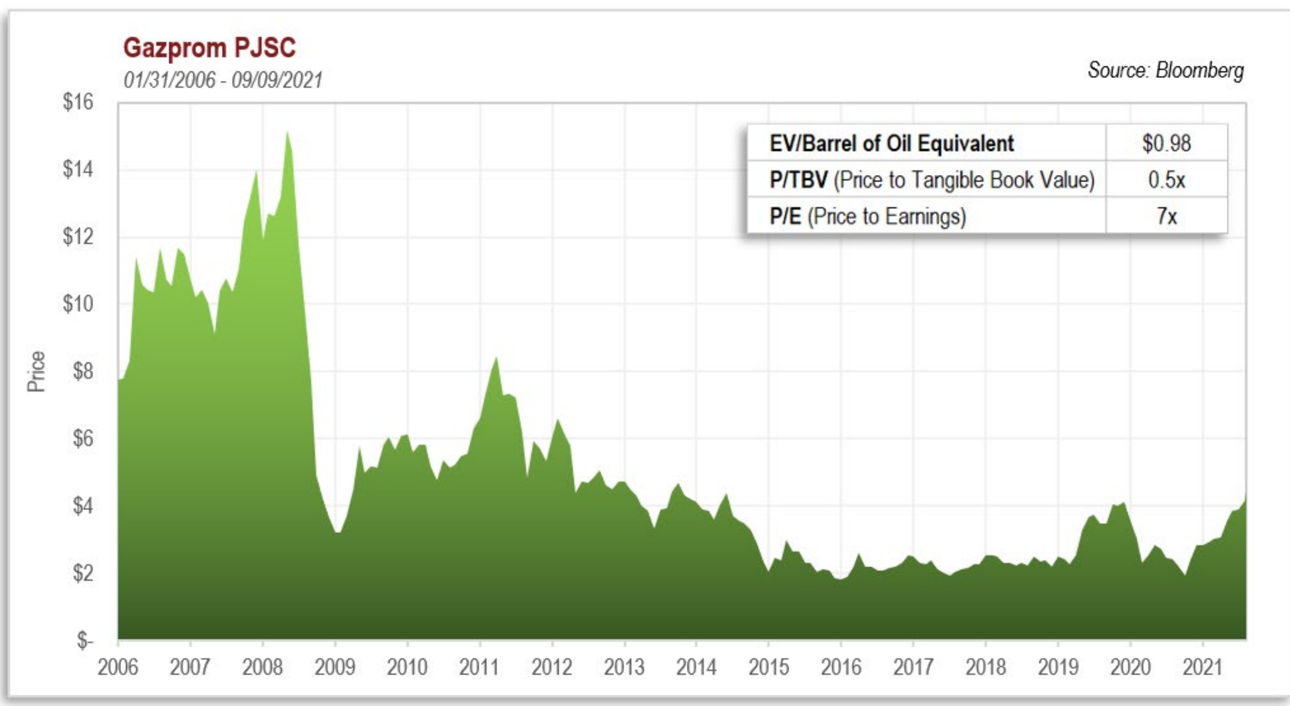
Source: Data: Ember; Chart: Danielle Alberti/Axios

The continuing, rapid switch from coal to natural gas is believed to have been a more important contributor to CO2 reduction than has the build out of wind and solar. We are proponents of much of the progress being made on the energy front but believe that the flipped script that investors are acting on has led to gross mispricing. Stocks of purported good guys are selling at hard-to-support valuations. Members of the ESG-blacklists languish at attractive prices, despite the fact that many of these are on the blacklists for erroneous reasons. Often these unfortunate victims are actually an important element of the solution. We happily own shares of producers of clean hydro and nuclear energy, and relatively clean natural gas. We leave the ownership of a car company selling at *thirty times book value* and *eighteen times sales* to the sci-fi fans: a valuation 'altitude' of almost $3/4 Trillion!!

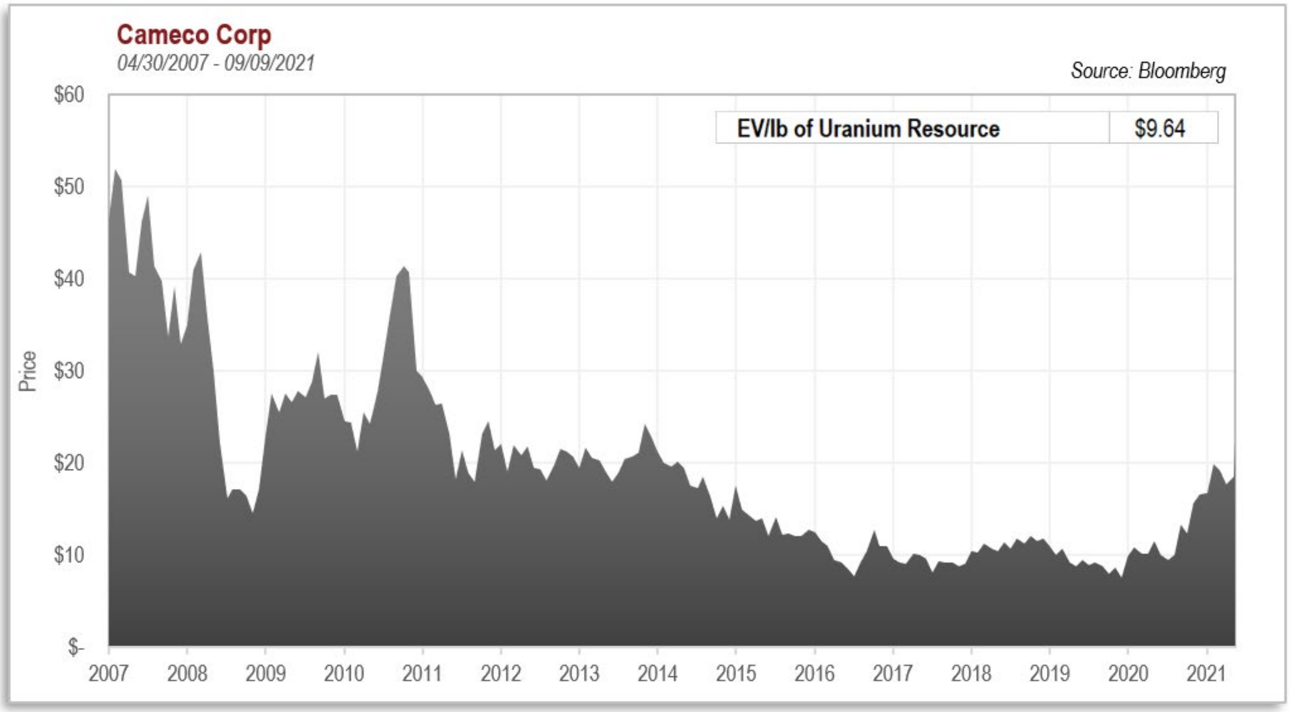


Bell Rock, Sedona, AZ

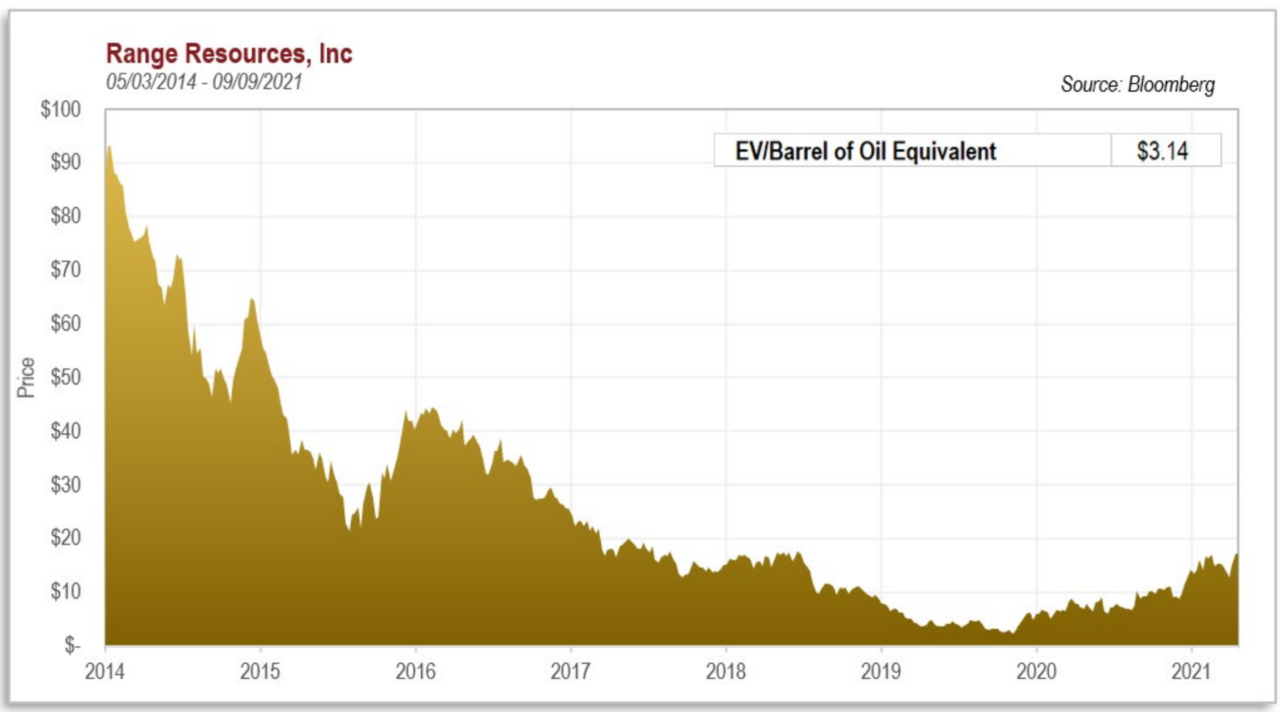
Tesla, Inc. designs, manufactures, and sells high-performance electric vehicles and electric vehicle powertrain components.



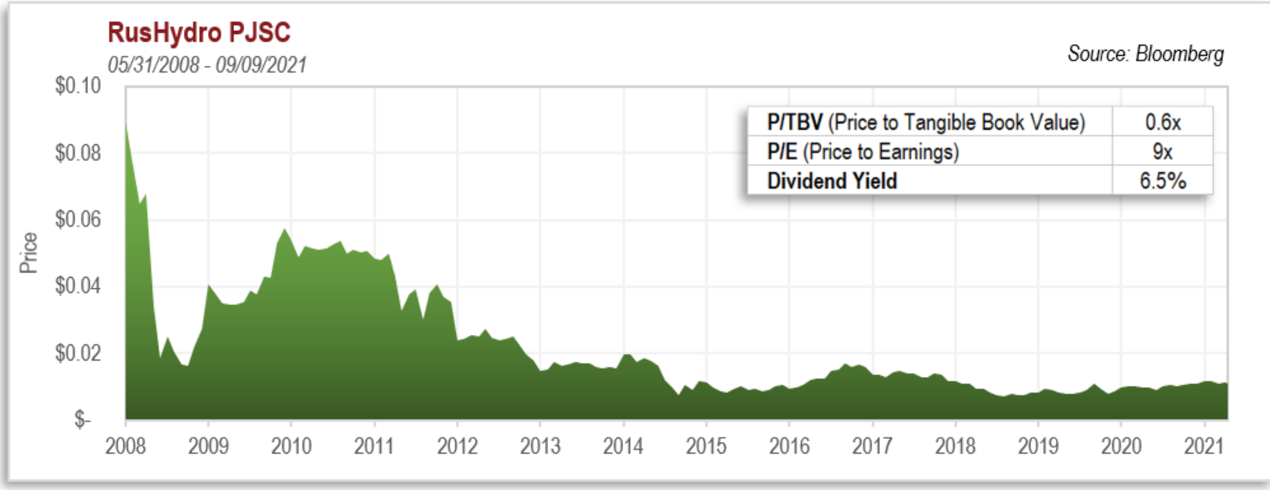
Gazprom PJSC operates gas pipeline systems, produces and explores gas, and transports high-pressure gas in the Russian Federation and European countries.



Cameco Corporation explores, develops, mines, refines, converts, and fabricates uranium.



Range Resources Corporation is an independent oil and gas company that explores, develops, and acquires oil and gas properties.



RusHydro PJSC owns and operates hydroelectric generation plants.

Analysis suggests that the “clean” energy stocks featured above are attractive. Following a long descent down the cliff and continuing journey along the bottom, purveyors of efficient, effective sources of energy – nuclear, hydro, natural gas – are still just getting started on their current ascent up the far face of the canyon. Kopernik valuation models dictate doubles from current prices.

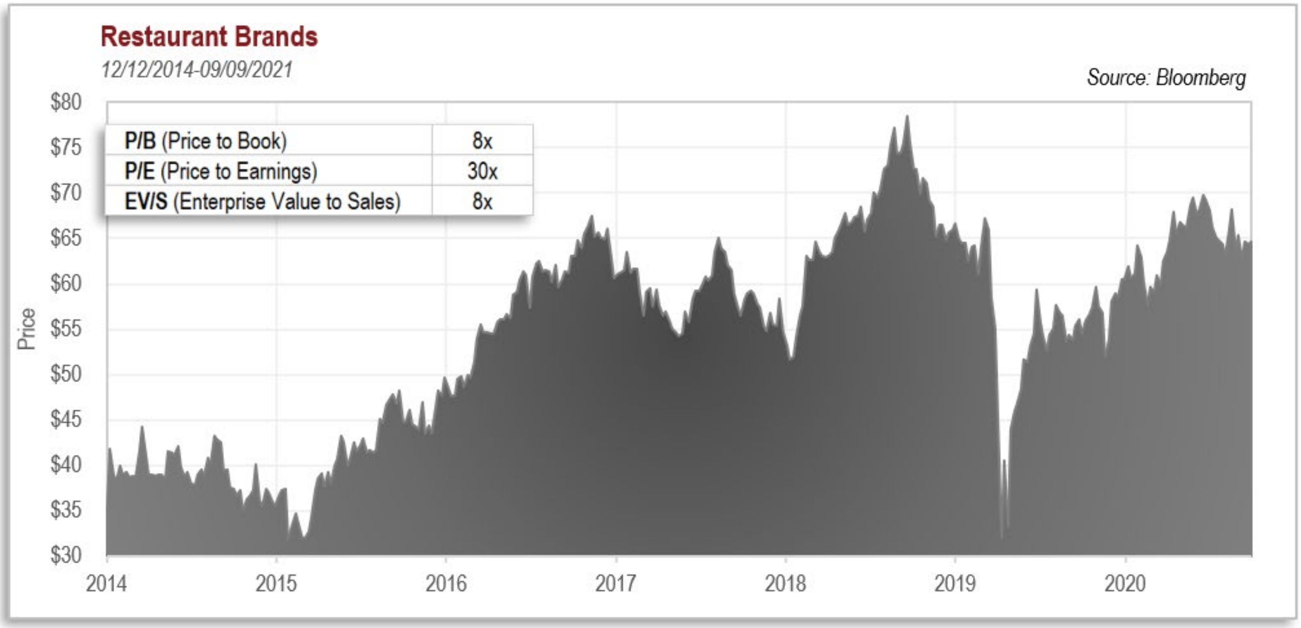
Sticking with ESG-related issues, we reiterate that we are supporters, when approached logically. We all want to live in a better environment and are happy to work toward that end. ESG, thoughtlessly and illogically applied is a meaningful and increasing problem, in our view. Fortunately, at the same time, it has created significant opportunities for research-based investors.

It was previously noted that the title song is actually about McCarthyism:

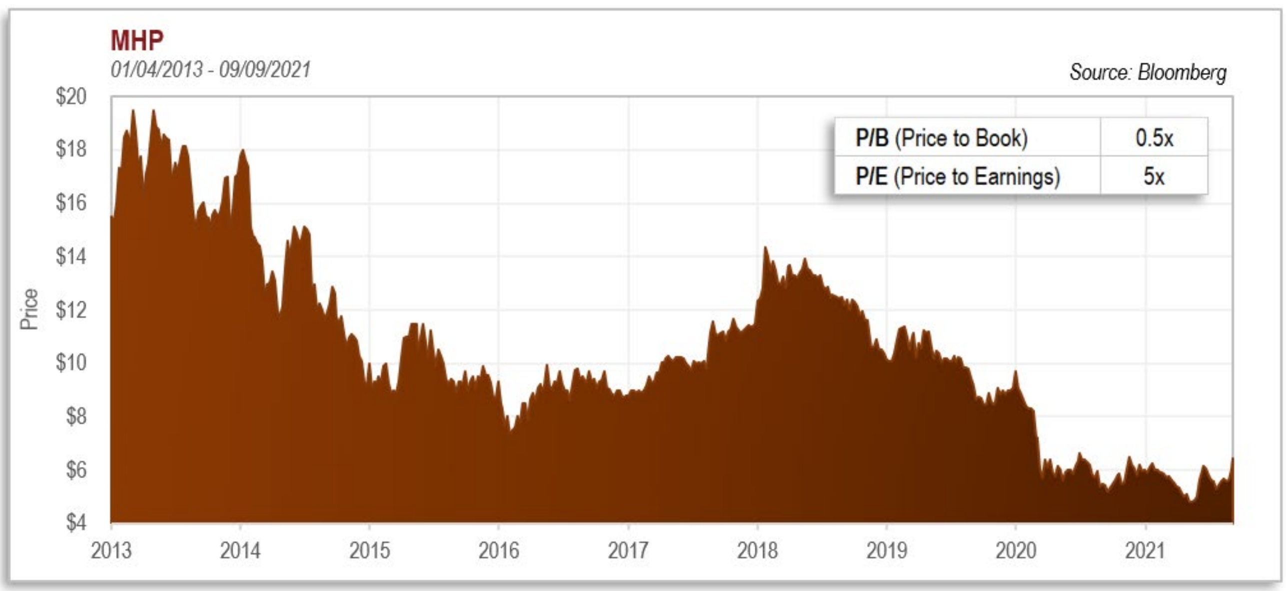
“The blacklist and its hosts
Came down so swift and it drove ‘em to the coast”

I grew up staunchly anti-communist and continue to view it as a logically and empirically flawed philosophy. All the same, we are no fans of blacklists or mob psychology turned ugly. One must feel sorry for the individuals whose careers were shattered after they were **falsely** accused of communist leanings. Stocks, of course, aren’t people, and as the above energy example highlights, **we are fans of buying bargains off of an errant blacklist.** Investing often is about taking advantage of mob-psychology-induced mispricing. Certainly, independent thought has become a relatively scarce commodity.

Moving on to another example - when it comes to health, it is widely accepted that obesity is a major problem (particularly in America). Evidence suggests that it is a very important contributor to the leading causes of death, such as diabetes, heart disease, cancer, and the flu. It is also generally accepted that whole foods are healthy, while processed foods have increasingly found themselves on the hot seat due to their clear ties to obesity. Now, I’m not preaching, I could stand to lose a few pounds and my diet is far down the spectrum from wholistic. The point is that the main architects of the ESG script have made little effort to incorporate healthiness into their narrative. The result is that purveyors of unhealthy food often find their stocks are prominently featured in the scripts of portfolio managers, while the stocks of healthy food producers lie on the cutting room floor. The result is a delicious bifurcation of valuations. We believe that attractive valuations are important to portfolio health.



Restaurant Brands International Inc. operates fast food and quick-service restaurants.



MHP focuses on the production of poultry meat and grains.

MHP, a leading Ukrainian chicken producer, sells at half of book value and less than five times earnings. Restaurant Brands is an owner of fast-food restaurants that slap chicken (and beef) onto a bleached bun, lather it with mayonnaise and salt, and sell it with a side of fries and full-sugar soda. While I confess to liking Burger King, I find the valuations hard to swallow. It trades at eight times book value and almost eight times sales. Elsewhere, I choke on the value of Chipotle, a good restaurant with seeming carcinogenic valuations: 101 times earnings, 25 times book, and 8 times sales. Our lack of risk-tolerance aside, whole foods vs. processed foods is yet another great example of how whimsically applied ESG standards have created canyon-sized bifurcations in the market. Health benefits should accrue to the independent-minded investor.

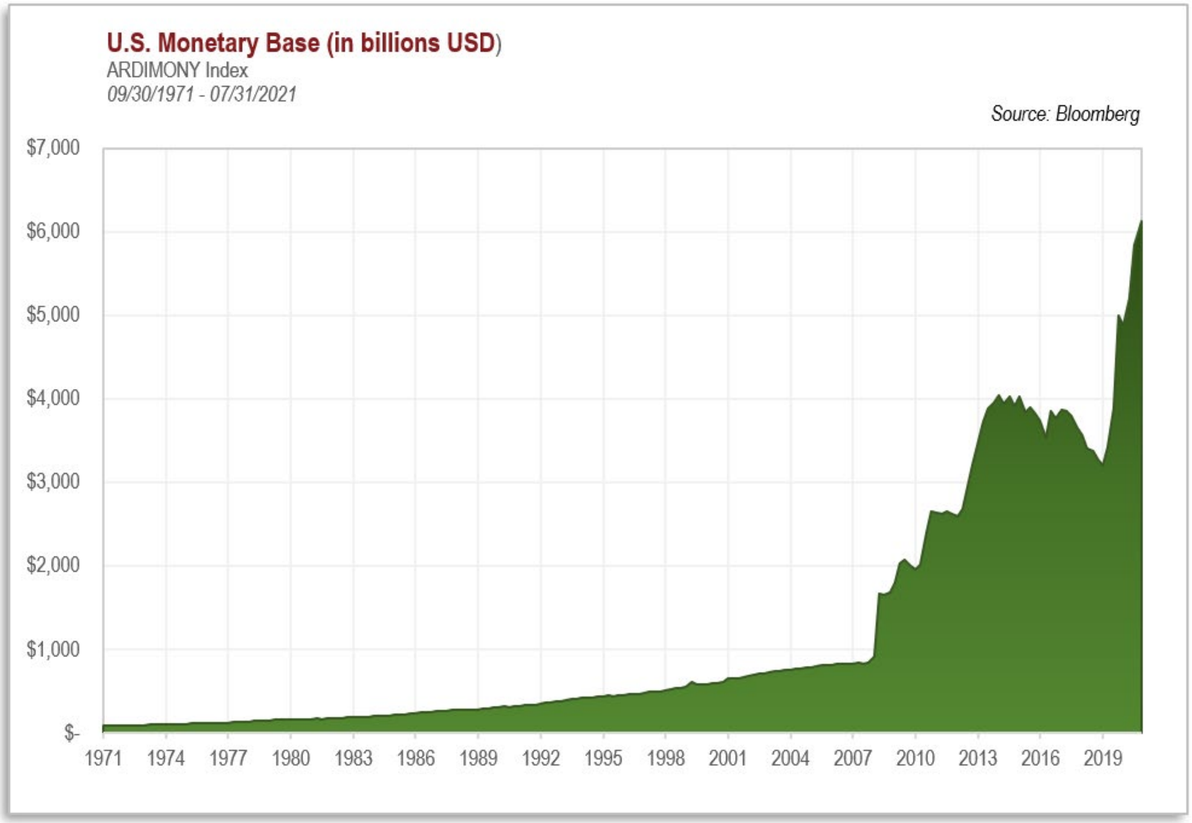
Another example of how misperceptions of the mob have led to bargains is the stocks of global phone companies. The darlings of the 1999 - TMT stock mania have had a tough couple of decades in the markets despite massive growth in the usage of their services. With the exception of Verizon (which is slightly above its 1999 level), almost every major global player is well off of its previous peak levels.

The Chinese phone companies are an interesting study of regulation gone awry. Last winter, the U.S. government decided that certain Chinese stocks should be divested from U.S. portfolios. Selling cheap stocks of profitable companies that are in no need of raising capital harms the portfolios of U.S. investors, while in no way harming the divestee companies. Be that as it may, the decision was made to force divestiture. Subsequently, it was decided that the publicly traded Chinese phone companies, being subsidiaries, were exempt from the ruling. During his last week in office, the previous president of the U.S. decided that they would not be exempted. The ensuing mass exodus created bargains for **non-U.S.** investors across the globe. The stocks subsequently bounced between 25% and 50%. The new president decided he would make up his own mind, but in the meantime, it was okay for investors to buy these stocks. Later, he decided that they should be sanctioned after all; this ruling took effect in early August. I wish I were making this “stuff” up. As a result of this foolhardy intervention, investors outside of the U.S. can buy these stocks at a small fraction of what must be paid for Verizon or AT&T stocks.

Granted, this is only one contributing factor to the valuation chasm; phone stocks are quite cheap in Korea, and a few other places. Investors dwell on what’s popular, on what might be on somebody’s unpopular list, and on what current margins are. We believe that they would be better served to focus on which are good companies and are at valuations that portend good future outcomes. Secondly, rather than harping on whether KT Corp and China Telecom will ever be allowed to earn more than current margins, a noteworthy 60%-80% discounts to those of Verizon, they should enjoy the fact that they are collecting nice dividends (>4%), garnering nice earned-yields, and not having to worry about whether regulators will continue allowing Verizon to grab 22% operating margins into perpetuity, even as the “risk-free” rate languishes at 0%. Verizon stock seems like a decent value but with prospective downside-risk, whereas many of the shunned Asian telecom stocks represent great value, along with significant upside potential.

“You got the cash but your credit’s no good”

Segueing to our next topic, we live in a world where even as 100% bottom-up investors, we would be remiss if we didn’t factor into our models the fact that the **Federal Reserve has conjured into existence almost nine times more dollars over the past fourteen years than they did during the previous ninety-five years!** And, predictably, as their cash goes up, their credit goes down in lockstep. I suppose it is worth reminding people **that federal reserve notes (dollars) are what the name implies – credit instruments rather than money.** Per Investopedia: “A Federal Reserve note is a term to describe the paper demand liabilities of the Federal Reserve, commonly referred to as "dollar bills," which circulate in the U.S. as legal tender.” They go on to mention that since 1971 the notes haven’t been backed by hard assets and are now backed solely by the government's declaration that such paper money was legal tender in the United States. These notes are still commonly referred to as "dollars," which was previously a legally defined quantity of gold or silver but is now simply the official unit of account for U.S. legal tender.


U.S. Monetary Base (in billions USD)
ARDIMONY Index
09/30/1971 - 07/31/2021
Source: Bloomberg
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$-
1971
1974
1977
1980
1983
1986
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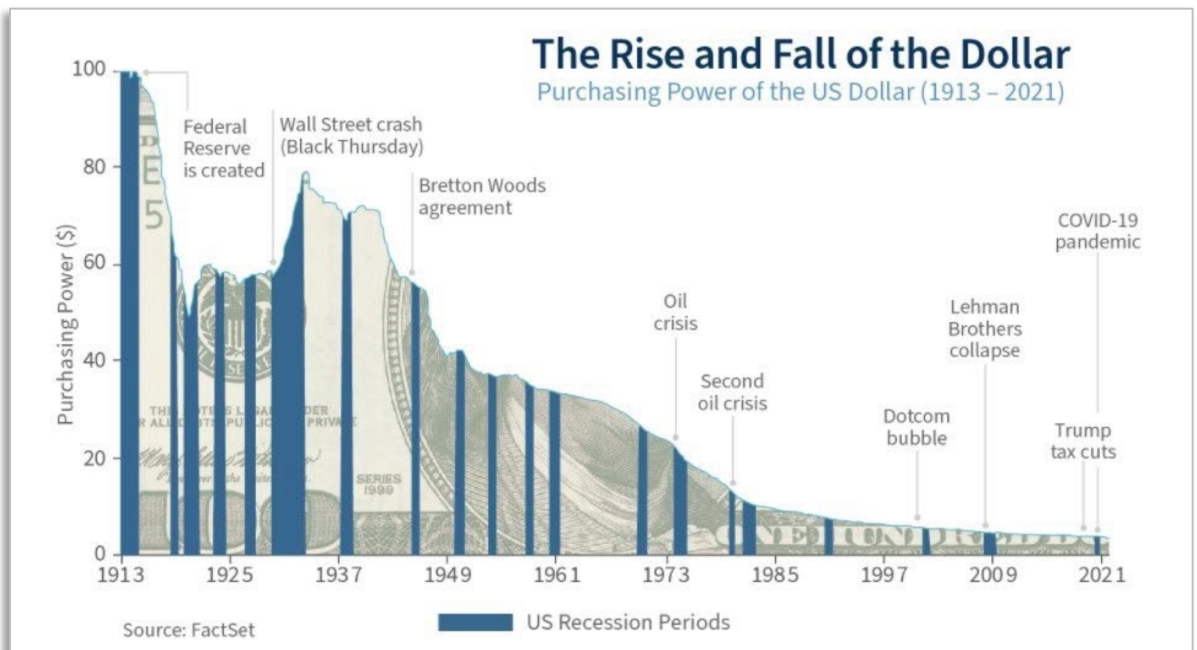
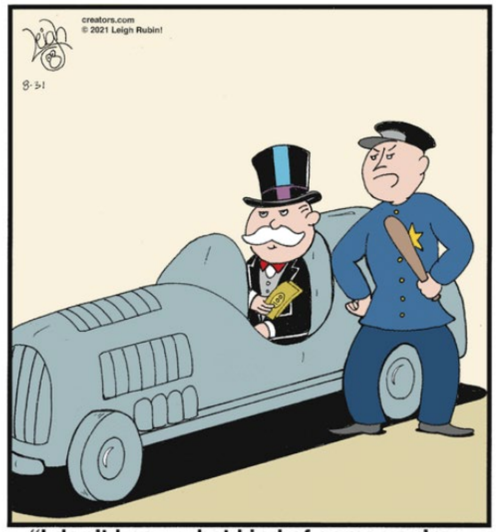
2007
2010
2013
2016
2019


The Rise and Fall of the Dollar
Purchasing Power of the US Dollar (1913 – 2021)
Purchasing Power ($)
100
80
60
40
20
0
Federal Reserve is created
Wall Street crash (Black Thursday)
Bretton Woods agreement
Oil crisis
Second oil crisis
Dotcom bubble
Lehman Brothers collapse
COVID-19 pandemic
Trump tax cuts
1913
1925
1937
1949
1961
1973
1985
1997
2009
2021
Source: FactSet
US Recession Periods

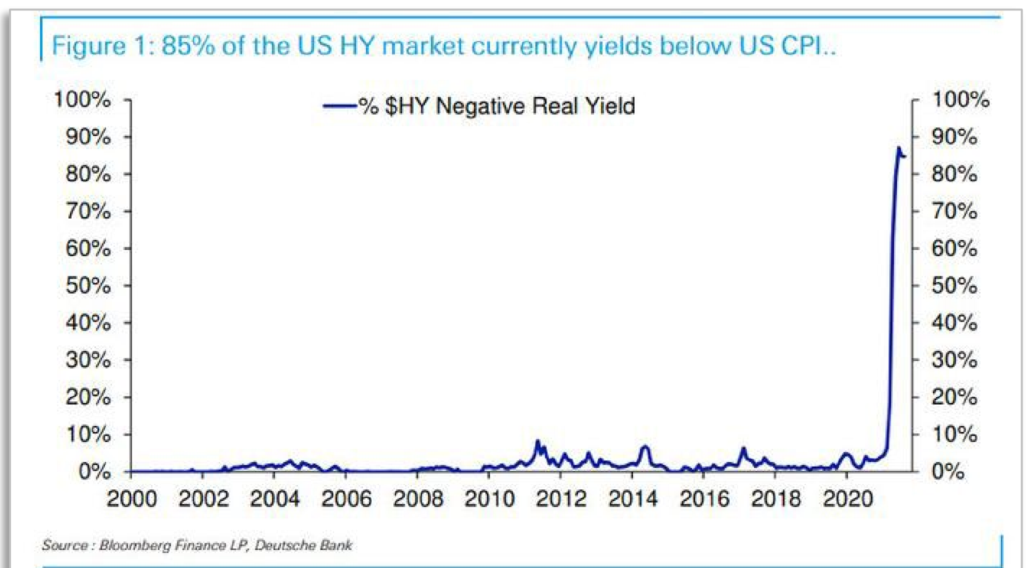
So there you have it, more dollars, less value per dollar. According to the Fed's website, during my lifetime, the monetary base has gone up more than 120 times. That is *not* a typo, but it *is* a devaluation of 99.8%. Even the horribly manipulated CPI (consumer price index) confesses to a 96% loss of purchasing power over that timeframe. History substantiates economic theory demonstrating that there is a lag between when money is printed and when prices increase noticeably. Since most of the current stock of "money" has been printed over the past year and a half, much of the increase in prices will become starkly apparent in the future.

It should be clear to all that **central bankers can print currency but they can't print wealth**. It is said that years ago when Janet Yellen proposed to the Reserve Board that they should target a 2% annual debasement, she made the case that the vast majority of people would foolishly prefer a 3% raise in a 5% inflationary environment than no raise in a deflationary environment. Apparently the board members condescendingly chuckled with the exception of one person. He suggested that people had been asked the wrong question; how might they have responded if queried as to their preference between losing 86% of the worth or 95%, over the next century. That is the difference between the Fed's stated goal of 2% inflation versus their new willingness to overshoot at little, at 3%. At 5% inflation, 37% of the dollar's value erodes in one decade. Imagine being told by your investment manager that their aim was to lose a third of your net worth over the next decade. How are central bankers getting away with it?



"I don't know what kind of game you're playing, pal, but perhaps I didn't make myself clear. When I said your money's no good here, I meant it literally ... here or anywhere else, for that matter."

I have said before that bonds are essentially un-investable, and with current yields trailing the CPI as the chart below shows, it is clear why.



Listening to Houndmouth singing, "*I remember, I remember when your neon used to burn so bright and pink, so bright and pink"* **while** perusing the above evidence of the destruction of the dollar's purchasing power, a slightly altered chorus runs top of mind: *'I remember, I remember when **money** couldn't burn, and used to shine so bright and golden.'* But, alas, as stated on page one of this missive, "it is important that investors rein in their frustration and act on the exciting opportunities to profit from market inefficiencies."

Investment Strategy

Value investors, so accustomed to having the figurative "macro" winds in their faces now find themselves fortuitously with a galeforce wind at their backs. The most undervalued stocks – sans inflation – are often the very same stocks that should perform best if/when the investing crowd gets a whiff of inflationary symptoms. This is important because the past 13 years demonstrate the central bankers' seriousness about their consistent pledge to debase their currencies. Understanding the "Cantillon Effect," i.e. the effects of debasing currencies flowing unevenly through the economy, is perhaps the preeminent task for investors in the current environment.

Kopernik concludes that investors are well served to:

1) Shun fixed-income investments that yield less than the promised rate of debasement
2) Shun defacto fixed-income investments that don't yield incrementally more than the promised rate of debasement
3) Factor the non-neutrality of money into the analytical process
    a. When money supply doubles, then doubling of prices is neither instantaneous nor uniform
    b. Asset prices tend to move first (witness stocks, bonds, real estate, even quasi-assets)
    c. Services and intermediate goods take longer to move
    d. Beware of assets with pricing difficulty. Buyers of inflating assets are especially troubled (if pass-through is difficult)
    e. Creditors are disadvantaged
4) While factoring the effects of debasement into models is error-prone, assuming that money printing doesn't have an effect on pricing is abject folly

In addition to shunning fixed-income, we believe that investors should seek large margins of error for price takers. Now is the time to own intrinsically valuable franchises. Investors understand this to the extent that they are buying great companies like the FAANMGs[6]. Due to strained valuations of those, we'll leave investing in these companies to others. What investors are missing are the great companies that are far more attractively valued either because they aren't prominently featured on a list (popular index or exchange traded fund) or because they are prominently featured on a list (someone's blacklists based upon erroneous ESG-assumptions, unpopular regional/country domiciles, bad technicals, etc).

"The devil's in their rush
And this duct tape makes you hush
Hey there Sedona, let me cut you a deal"

We believe **there is current value, plus meaningful 'free' optionality in a handful of areas**: emerging markets, infrastructure, agriculture, precious metals, other metals (especially uranium), natural gas, and occasionally other hydrocarbons. We re-emphasize that value doesn't come from estimates of future cash flows. The converse is true, **future cash flow is the likely outcome of possessing intrinsic value**. As the central bankers strive to strip currency of intrinsic value, it is more important than ever to keep this in mind.

[6] FAANMG is an acronym that refers to the stocks of six prominent U.S. technology companies - Facebook (FB), Amazon (AMZN), Apple (AAPL), Netflix (NFLX), Microsoft (MSFT), Google (GOOG).

We wish you all much health and happiness during these historic times. We continue to strive to protect and grow the intrinsic value of your portfolio in the face of ongoing monetary debasement. We like the current prospects.

Cheers,

David B Iben, CFA
Chief Investment Officer
September 2021

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Changes in Latitude

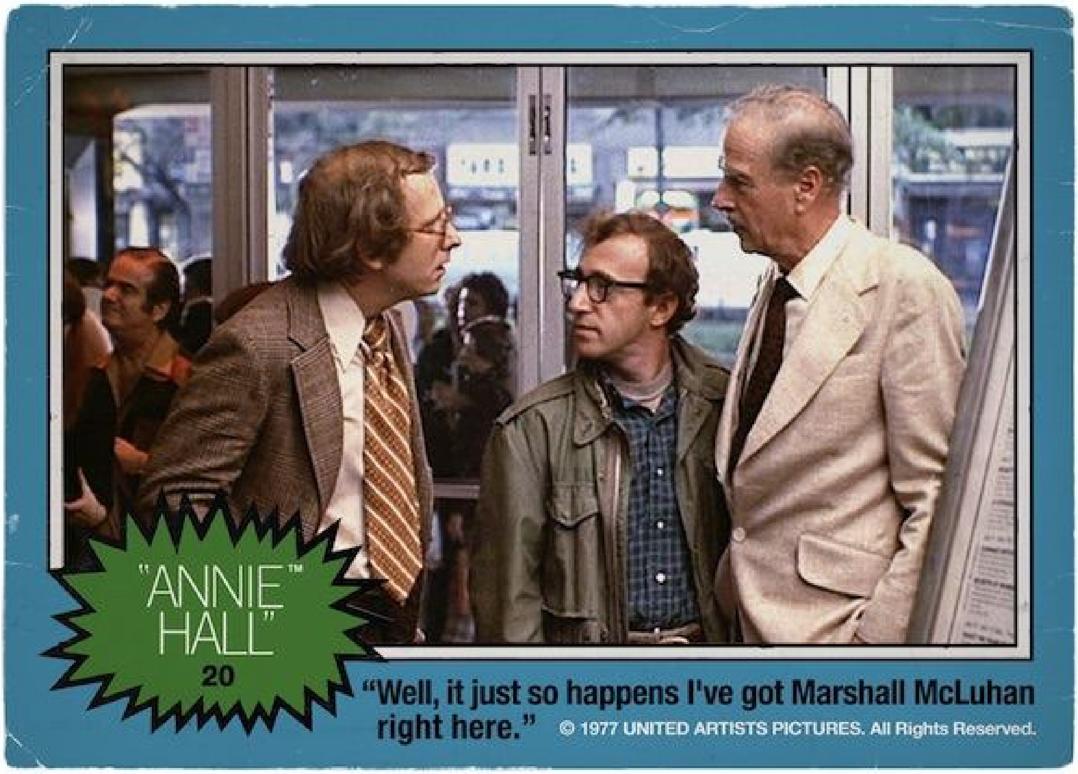
February 2022

"Visions of good times that brought so much pleasure
Makes me want to go back again
If it suddenly ended tomorrow
I could somehow adjust to the fall
Good times and riches and son of a bitches
I've seen more than I can recall
It's these changes in latitudes, changes in attitudes
Nothing remains quite the same"
-Jimmy Buffett

I've now been lucky enough to have spent four full decades in the investment business. I look forward to the next two decades. As the song says, it's been good times and riches, and all kinds of characters (mostly wonderful), and I've seen more than I can recall. I've also witnessed a hundred- and eighty-degree change in investor **attitudes** towards stocks, bonds, gold, inflation, the role of government, and more. Some of the most frequent questions lately have been regarding whether the growth/value cycle is turning, ending a phenomenal fifteen-year run for growth stocks, in absolute terms and relative to value. The evidence that this may be occurring is growing stronger. Whether or not this is the real deal, or just another head fake, remains to be seen. But from current valuations, **a pivot from growth to value seems inevitable**. It is only a question of when. Therefore, a much more important discussion revolves around attitudes towards value investing. A conversation with many "value" investors could leave potential investors dazed and confused as to what "value" is. Even more so than in 1999, we've noticed many value managers proclaiming their move to a more exciting and less painful definition of value.

For those who believe that growth is the place to be forever, no need to read on. For those who are considering moving a portion of their portfolio into value, what follows is a short discussion of our thoughts on value. You undoubtedly won't be surprised to find that they differ from the norm.

Jimmy Buffett seems, in ways, like the ultimate value investor. Behind that laid back persona is a guy who, through hard work, patience, and good decisions, has reportedly accumulated a net worth just short of $1 billion. Changes in latitude, changes in attitude seemed the perfect song to discuss society's rapidly changing attitudes toward markets in general, stocks more specifically, and value investing most explicitly. Don't worry, this will not be a discussion about Fed policy; we would have found some of Buffett's other, more apropos, songs if that were the case ("the great filling station holdup" or "why don't we get drunk….." for example). What we do want to discuss is the concept of "Buffett stocks." What?! Wrong Buffett?! Pardon the confusion, but that is exactly the point that we'd like to make. We are suggesting that people are confused as to what a Buffett stock really is. Admittedly, there's already a large oversupply of people writing about Warren Buffett, but we promise to come from a unique angle.



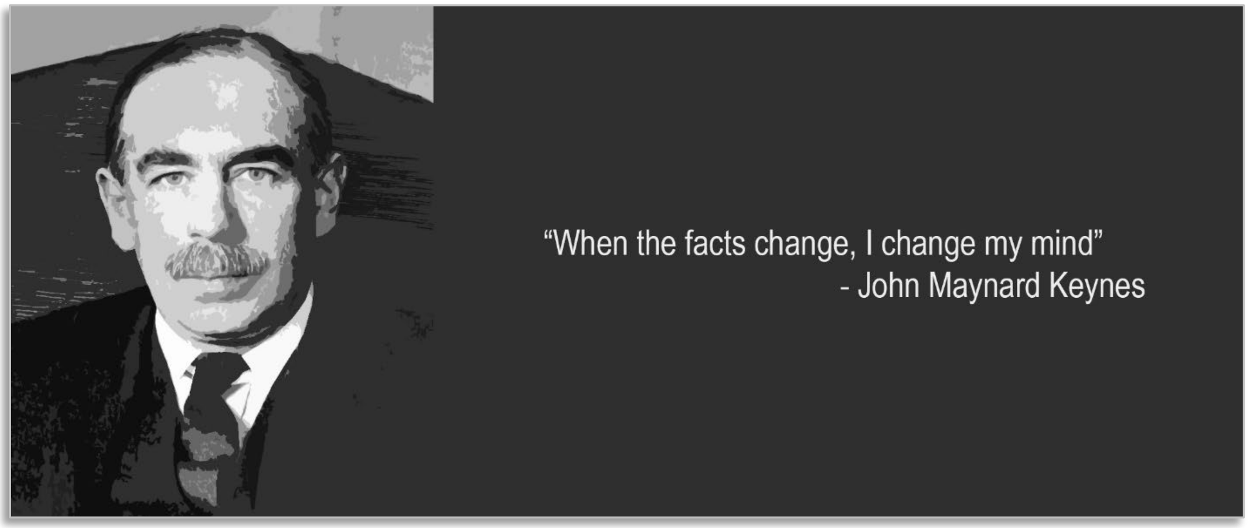
Endeavoring to discuss our take on Warren Buffett's view of stocks may be foolhardy as it brings to mind a great scene from the movie *Annie Hall*. Distressed with the opinions of a boisterous pseudo-intellectual in front of him in a movie queue, Woody Allen's character turns toward the audience complaining that the guy's opinions on Marshall McLuhan's philosophy are all wrong. He then materializes Mr. McLuhan out of nowhere, who proceeds to tell the man, "I heard what you were saying. You know nothing of my theories." Understanding the perils, let's move on. I am doubtful that any of you will materialize Mr. Buffett to rebut this. We doubt that he will see this or that he would take exception to any of it. If I'm wrong, his feedback would be extremely welcome.

Famously, Mr. Buffett, a big fan of his mentor Ben Graham, realized that a lot of potential returns were being left on the table by confining his investment purview to Mr. Graham's "cigar butt" stocks. In conjunction with Charlie Munger, Warren broadened his horizon, cognizant of the fact that there is tremendous value in intangibles, to businesses with a "moat," that the market was failing to recognize. Additionally, the miracle of compounding was also clearly underpriced. He legendarily spent the 1980s and early 1990s building a portfolio of these compounding, quality franchises. His success was unparalleled, and these stocks have come to be known by the honorific "Buffett stocks."

We don't mean to take any of this away from him. We have long been fans of his logic, wit, analogies, and pearls of wisdom, and feel that he deserves all the kudos he's received for steering value investing toward a better, more thoughtful place. However, to paint him into a box, to categorize him or make his stocks a cliché is to do him a great disservice. He has proven to be a great and versatile investor. And true investors can't be neatly tucked into a category; one time period's sucker bet becomes the bargain of a latter period. Investors should take advantage of the bargains that the market gives them. This is something that Mr. Buffett has always done extremely well. As such, we opine that people are making a mistake when they carry an adage of his into a different environment, believing it to still hold water.

Think about it. In Berkshire Hathaway's 2002 annual report, Buffett called derivatives "financial weapons of mass destruction" yet in a later time he made $4.9 billion by selling put options on the S&P 500, FTSE 100, Euro Stoxx 50, and the Nikkei 225.

He sold puts on Coca Cola in 1993 as well. There are many other examples of where Warren has cautioned against a class of investment only **to reverse course when compelling values later emerged**. This action virtually always served him well. Investors were well-suited to follow his actions rather than adhere to his prior words from a no longer relevant period. These include junk bonds, highly levered companies, airlines, technology stocks, gold miners, poorly managed companies, and international/emerging market stocks. John Maynard Keynes famously answered a question by stating…

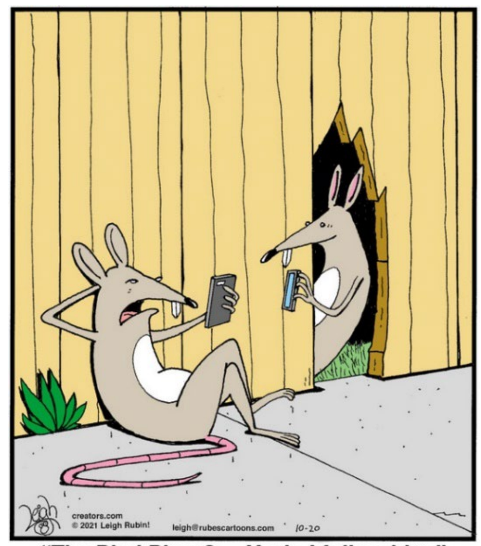


It seems to us as though Buffett has taken a page out of the economist's book in his stock picking.

All the above is meant to lay the foundation for one of the two major points we hope to make in this missive, that stereotypical **"Buffett stocks" are not necessarily "Buffett stocks!"** In the current market, it is clear that they are not. Like everything else, the high quality, wide-moat franchise companies represent investments that Buffett likes to make **when the time is right**. Perhaps history will help illuminate the point. In the late 1960s and very early 1970s, quality franchise stocks were becoming all the rage, culminating in an infamous stock market peak. The market leaders were widely known as "one-decision stocks" (only need to decide when to buy, selling was foolish) and later as the "Nifty Fifty." Did Warren get killed in the subsequent massacre of these sacred stocks? He did not, for several reasons. One, he sold all of his stocks several years earlier. Furthermore, he never owned these quality franchise stocks during the 1960s. In that decade, his investment partnership owned the likes of Associated Cotton Shops, Hochschild & Kohn department stores, Mid-Continent Tab Card, Dempster Mill Manufacturing, Sanborn Map, and Commonwealth Trust of Union City. Traditional value all the way, no household names amongst them. When he sold all of these in 1969, he kept only one stock – a struggling textile mill named Berkshire Hathaway. Deep value.

In late 1973, when the stock market had fallen sharply, Warren was back in, buying stocks hand over fist. He famously likened himself to "an oversexed guy in a whorehouse" (later toned down to "a kid in a candy store.") Importantly, amongst his orgy of investments were none of the "Nifty Fifty" quality franchise stocks. The time was still not right.

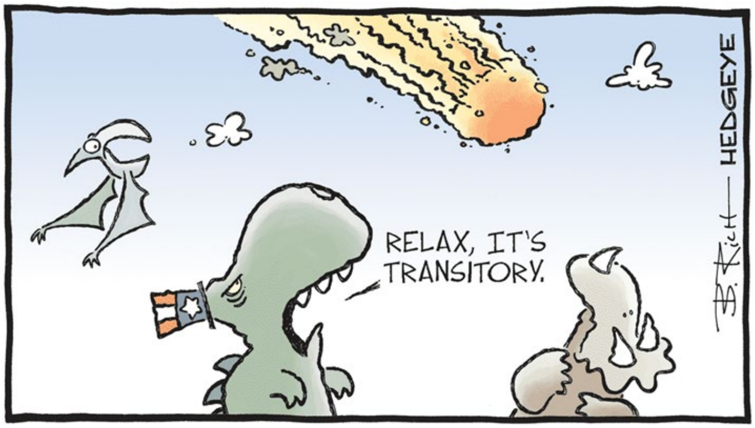
The 1970s were arguably a precursor to our current decade. They also followed a time of euphoria and ushered in a time when the piper figuratively needed to be paid for prior monetary and fiscal malfeasance. Buffett bought GEICO, down from $61 to $2, which was teetering on bankruptcy and likely would not have survived without Mr. Buffett's assistance. He bought Blue Chip Stamps, a franchise on a rapid course of decline. Other companies were early on in their ascension toward becoming stronger franchises: the *Washington Post* and See's Candy. The stocks of quality franchises would need to languish for another decade before they hit Warren's radar screen. Coca-Cola, Gillette, etc. were all priced at unbelievable discounts in the 1980s; this is when I came into the business and I, too, felt like "a kid in a candy store." **He succeeded because he bought when good companies were valued to be good investments, not merely because they were such good companies.**



"The Pied Piper? ... Yeah, I follow him."

If the prudent strategy is to follow Warren's actions rather than his ruminations from eras past, it behooves one to look at his current actions. Admittedly, this is much harder to do now than in the past since it's not easy to distinguish Buffett's actions from those of Ted Weschler and Todd Combs. In recent years, Berkshire has admittedly bought into great, yet far from cheap franchises such as Visa and Amazon. The drug companies are arguably good franchises but there are so many of them around the globe that the size of their 'moats' is worthy of debate. Berkshire has made recent entries into technology such as Snowflake and the well-timed purchase of Activision Blizzard. There are a host of very expensive stocks, so maybe he's evolving into an aggressive growth investor (or, more likely, his colleagues are leading the efforts in that direction). But the main interests for this discussion are two items of note: 1) Berkshire's recent tendency to sell rather than buy more of the classic "Buffett stocks" of old; **and 2) indications of an important key change of direction**.

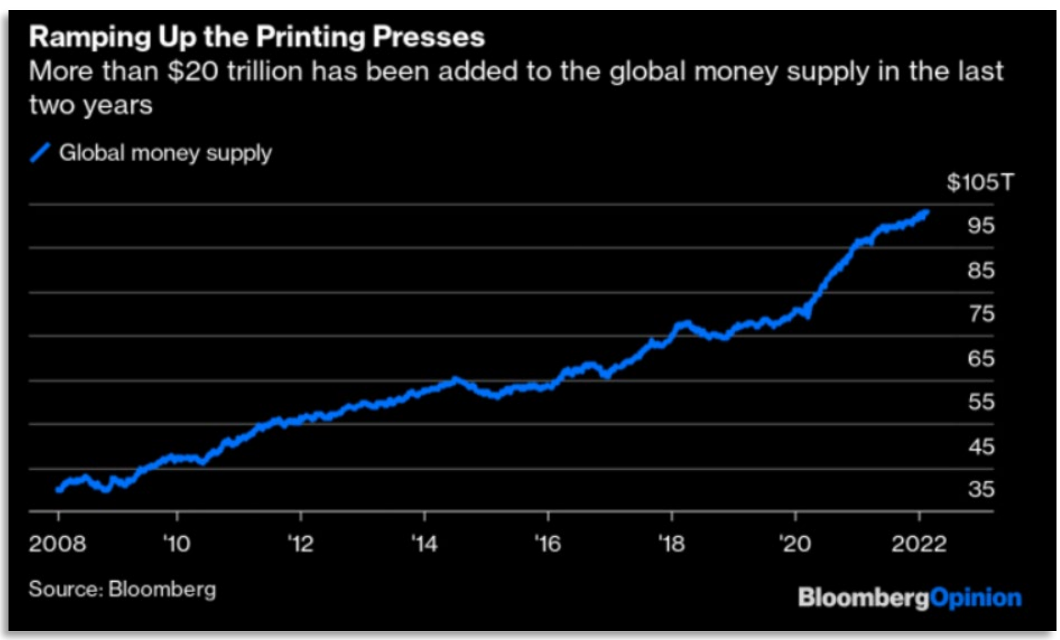
Importantly, four decades ago, when interest rates were in the mid-teens, Warren eschewed taking on financial debt, famously touting the "free float" on offer to insurance companies. In the year 2022, when the rates on 30-year treasury bonds are a full 500 basis points below the rate of inflation (the abridged number as actually acknowledged by the government) he seems to have once again adapted to the times. A quick look at the Bloomberg shows that Berkshire Hathaway has 36 bonds outstanding. Seems like an intelligent move on its part. (And, not to mislead, the company is not highly leveraged, net of cash balances). Another change is a willingness to sell, not just dollar-based debt but, foreign currency bonds as well. Even more importantly, Buffett is using the money to **purchase stocks that are a far cry from the stereotypical "Buffett stock."** A year and a half ago, he purchased $6 billion of Japanese trading companies. In addition to not being U.S. based, a quick perusal of the financials will show that "trading" is a name from the distant past; Mitsubishi, Mitsui, Sumitomo, Marubeni, and even Itochu are, in large part, natural resource companies. If that seems a strange move, we'd suggest otherwise. He bought at a time when people's fear of depression (remember 2020? So recent and yet so long ago) led to bargain basement prices: commodity prices were below 2007 levels; and many of his comments from recent years have made it clear that he believes that contemporary fiscal and monetary policy will rapidly erode the purchasing power of the dollar. Those looking for more specific evidence of change need look no further than Barrick Gold. Warren had been well-known for his animosity toward gold. He's spun many a disparaging remark in an auric direction. But again, we emphasize that his opinions migrate with the opportunity set. It appears that he now finds gold mining to be a worthwhile investment. It is worth pointing out that he has also bought several oil companies in recent years.



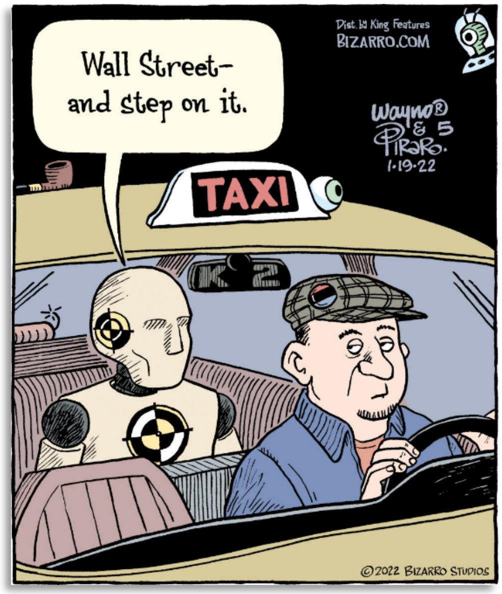
Segueing from Warren back to Jimmy, what should investors do in the current environment?

"I don't know where I'm a gonna go
When the volcano blow"

-Jimmy Buffett, Volcano



As mentioned early on, if you believe that the past thirteen years of growth-led, debt-powered, wild bull markets served as a precursor to a long future of more growth-led, debt-powered, bull markets, then you needn't have read this far. For those who believe that the world is complex and cyclical, and that at least a portion of your investment portfolio needs to migrate away from the expensive winner of the past decade, let's discuss other alternatives.



We'll skip over the obvious – that with interest rates still miniscule and the possibility that the monetary inflation of the past 13 years will continue to migrate through the environment looks to be increasingly evident, owning bonds should be avoided whenever possible. The same goes for de facto bond proxies within the higher echelons of the equity and real estate spheres. More positively and concretely positioned, investors ought to invest part of their portfolio in sectors that offer significant upside potential and, even more importantly, provide shelter from the impending storm.

But there's this one particular harbor
Sheltered from the wind
Where the children play on the shore each day
And all are safe within

-Jimmy Buffett, One Particular Harbor

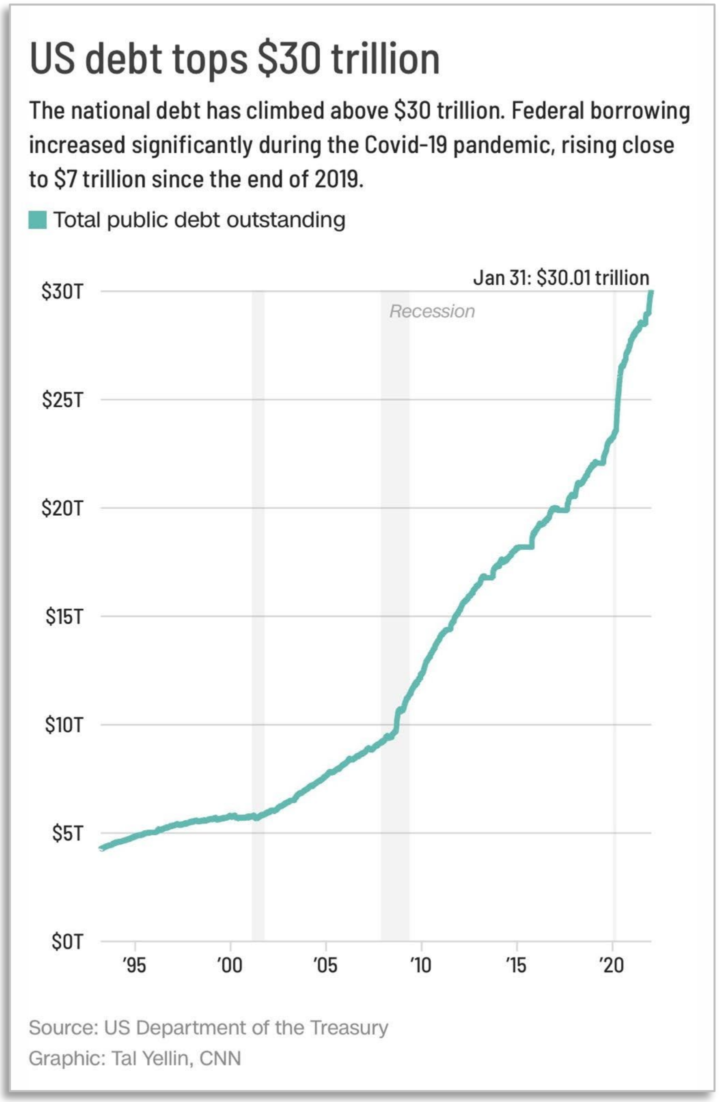
Top-down/macro investors should be seeking investments that perform well during troubled times and offer significant protection from inflation. Gold is an obvious choice. Other commodities are perhaps equally of interest. Other owners of hard assets such as hydroelectric dams, nuclear electricity generators, broad-based resource properties (the aforementioned "trading" companies), cellular networks and others should pique their interest, as well.

Ua pau te maitai no te fenua
Re zai noa ra te ora o te mitie

This is translated as:
"Bounty of the land is exhausted
But there's still abundance on the sea."

-Jimmy Buffett, One Particular Harbor

For firms like Kopernik that employ a 100% bottom-up approach to investing, we are thrilled to own these very same macro validated assets for less than book value and in many cases for less than ten times earnings. And these values are not pertaining to down and out turnaround situations; they are world class businesses. We are pleased to own the two world leading companies in important arenas: nuclear power franchises, hydroelectric power franchises, owners of uranium reserves, undeveloped gold reserves (see below), and trading companies. We are invested in the world's largest telecom franchise and also in the largest, lowest cost natural gas company. The portfolios hold strong oligopoly businesses around the globe including: a stock exchange, dominant banks, railroads, electricity distribution, housing, shipping and agriculture. Seven and a half billion people require commodities. Reducing carbon generally means replacing one commodity with another. Scarcity matters. Demand will remain strong but supply is limited, as Jimmy points out – the "bounty of the land is exhausted."



<u>Conclusion</u>

"Oh, yesterday's over my shoulder
So I can't look back for too long
There's just too much to see waiting in front of me
And I know that I just can't go wrong
With these changes in latitudes, changes in attitudes
Nothing remains quite the same
With all of my running and all of my cunning
If I couldn't laugh I just would go insane
If we couldn't laugh we just would go insane"

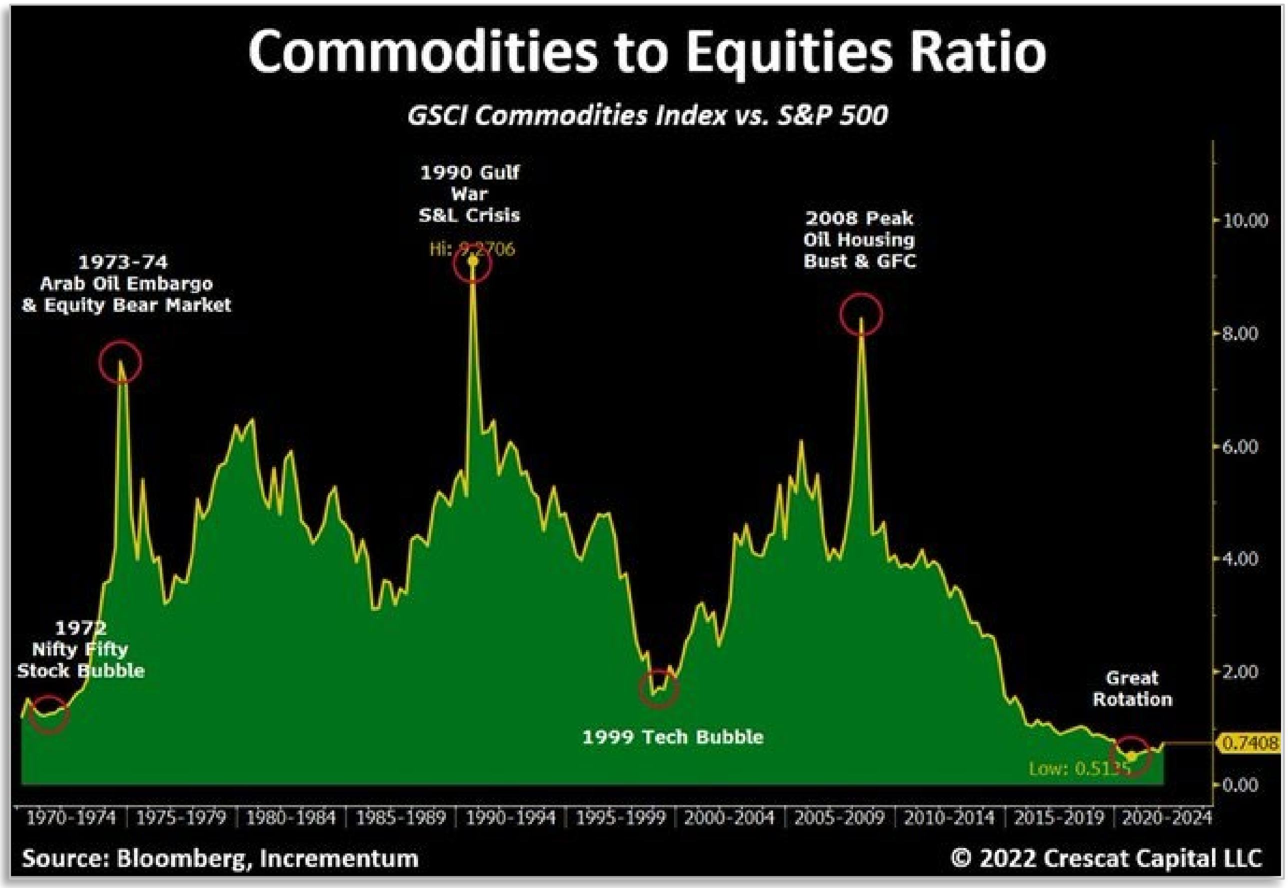
-Jimmy Buffett

"A great many people think they are thinking when they are merely rearranging their prejudices."

"Common sense and a sense of humor are the same thing, moving at different speeds. A sense of humor is just common sense, dancing."

-William James

Many of us probably wish that the world was a little less insane at the moment. We could cry but laughing is a better way to stay happy and sane. Perhaps equally important, **the insanity of the crowds usually provides extremely attractive money-making opportunities to those who can keep their wits** about them. If everything turns out well, owning good assets at depressed prices should prove to be a successful strategy. However, should the apparent complete breakdown of fiscal and monetary discipline (and common sense) turn out once again to be highly inflationary, the ownership of scarce, useful resources could be highly rewarding, even **requisite to the preservation of one's purchasing power.**



To paraphrase Mr. Buffett (Jimmy, but perhaps Warren too), value investors "shouldn't look back for too long at yesterday, there's just too much to see waiting in front of them." For non-value investors, perhaps it's time for "changes in attitude. Nothing remains quite the same."

We deeply appreciate your partnership and support during these fascinating times. We wish you a happy healthy 2022.

Cheers,

David B. Iben
Chief Investment Officer
February 2022

Kopernik's portfolio holds four of the top five and six of the top ten.

TOP 10 – World Gold Projects

As of January 2022.

	Project	Country	Majority Owner (%)	Development Status	Geology	Total Resources (mozt)
1.	Pebble	United States	Northern Dynasty Minerals (100)	Preliminary Economic Assessment	Porphyry, Supergene Copper	106.54
2.	Kerr-Sulphurets-Mitchell (KSM)	Canada	Seabridge Gold (100)	Prefeasibility	Porphyry, Skarn	104.64
3.	Sukhoi Log	Russia	Polyus (78)	Feasibility	Orogenic Gold	66.37
4.	Norte Abierto	Chile	Barrick Gold (50); Newmont (50)	Preliminary Economic Assessment	Epithermal, Porphyry, Epithermal - High Sulfidation	54.70
5.	Donlin	United States	Barrick Gold (50); Novagold Resources (50)	Permitting	Orogenic Gold	45.04
6.	Tujuh Bukit Porphyry	Indonesia	PT Merdeka Copper Gold Tbk. (100)	Prefeasibility	Porphyry	28.07
7.	Wafi-Golpu	Papua New Guinea	Harmony Gold (50); Newcrest Mining (50)	Feasibility	Porphyry, Epithermal - High Sulfidation	26.71
8.	Treaty Creek	Canada	Tudor (60)	Preliminary Economic Assessment	Porphyry, Volcanic Hosted Massive Sulfide	24.51
9.	Cascabel	Ecuador	SolGold (85)	Prefeasibility	Porphyry	22.44
10.	Casino	Canada	Western Copper (100)	Feasibility	Porphyry	21.32

Note: This ranking excludes stalled projects such as Siembra Minera (Gov't of Venezuela), Reko Diq (Barrick Gold/Antofagasta) and La Colosa (AngloGold Ashanti).

Source: Miningintelligence

mining intelligence data

"Truth isn't always beauty, but the hunger for it is."
Nadine Gordimer

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Investing involves risk, including possible loss of principal. There can be no assurance that a fund will achieve its stated objectives. Equity funds are subject generally to market, market sector, market liquidity, issuer, and investment style risks, among other factors, to varying degrees, all of which are more fully described in the fund's prospectus. Investments in foreign securities may underperform and may be more volatile than comparable U.S. securities because of the risks involving foreign economies and markets, foreign political systems, foreign regulatory standards, foreign currencies and taxes. Investments in foreign and emerging markets present additional risks, such as increased volatility and lower trading volume.

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