



KOPERNIK PERSPECTIVE

I Don't Get It



The 1988 movie *Big* is a classic for many reasons, but it is especially good at giving a window into how a naïve child would think and act in an adult world. After being transformed from a child's body into an adult body by a magic Zoltar fortune teller machine in a carnival, the main character, played by Tom Hanks, must live an adult life until he figures out how to change back to a child. He approaches the world from a child's innocence and curiosity and is more blunt than adults are supposed to be in certain settings. After he ends up in a job at a toy company and sitting in a meeting where an executive pitches the idea of a toy, based on marketing surveys, that transforms from a building into a robot, he raises his hand naively and says "I don't get it." From a child's point of view, he then asks "What's fun about that?" The humor of that scene lies in the fact that in the corporate world you aren't supposed to directly challenge peers like he does in the movie, let alone with total innocence and lack of understanding of the politics of corporate life.

That is a long setup to the current investing environment. To quote the movie I innocently say "I don't get it."

We are approaching ten years of accommodating monetary policy around the world (longer if you start with Japan). Moving the discount rate has been a tool for a long time to try to stimulate or cool the economy, with differing results. The other, more

experimental policy of money printing is far more insidious. At this point the one thing we can agree on is that the central banks have been brilliant in convincing the average citizen it is a positive to increase credit and keep our economy from crashing or growing faster, depending on your point of view.

In 1984 the rock band Dire Straits had a hit song, *Money for Nothing* which describes how normal people have to work hard but rock stars get their "money for nothin' and your chicks for free." That sounds like today's central banks, if you substitute stocks and bonds for chicks. Take everything you hear and read from the worldwide central bankers and put it aside and think about this. The central bank has, and continues to, create money out of thin air, literally, and then use that money to buy real assets like bonds and stocks.

Today the U.S. Federal Reserve owns \$4.5 trillion in assets including over 20% of all U.S. treasuries and 11% of all U.S. mortgages. Japanese ownership of bonds and stocks is approaching \$4.5 billion, which includes roughly 40% of all Japanese government bonds and, according to Goldman Sachs, they are also a top 10 holder of roughly 90% of ALL Japanese stocks via ETF purchases. The Europe Central Bank is approaching \$4.5 trillion in assets and growing. Switzerland is approaching \$900 billion in assets, which is well over 100% of their annual GDP, and they are now the 8th largest holder of U.S. stocks. While Europe, Switzerland and Japan keep buying more the U.S. Fed has stopped buying bonds and is in fact talking about letting its bond portfolio roll off when their current holdings mature, i.e., selling its holdings (we will see if this actually happens).

There is a great scene in the movie *Tommy Boy* where the main character, played by Chris Farley, is trying to refute the quality of a competitor's guarantee and says, "Let's think about this for a sec." Currently the world central banks are effectively giving us a guarantee that all their money printing is normal and will have no adverse effects. We beg to differ. Central banks create money out of thin air, buy real assets with it, then when they sell those assets they hold cash. All the interest income from the bond holdings of the Fed has gone back to the Federal Government and reduced the federal deficit. While it wouldn't be technically correct from the Fed's accounting point of view, it doesn't seem to be too much of a stretch to assume the newfound cash proceeds from letting the bond portfolio roll off will find their way to the federal government to reduce the deficit/reduce the overall debt. This makes sense, right? Money created with no cost will be used to pay down the federal debt with no adverse effect. If this is true, why not just print more and pay off all the debt? I'm being serious. If it is this simple and clear it is the obvious solution. Why not go further and create more money and pay off all the debt from all the cities, states, counties and maybe each person on the planet and start fresh? It is ludicrous and yet that is the path we are on and most impressively the central banks have convinced the average person this is totally normal.

I don't get it.



While we all know the Federal Reserve in the U.S. and the equivalent central banks in Japan, Europe and Switzerland are all experimenting with different forms of Quantitative Easing with no practical regard for the unintended consequences, the realities have long been known. The real question is, when will we see these anomalies that have been created lead to a bad outcome?

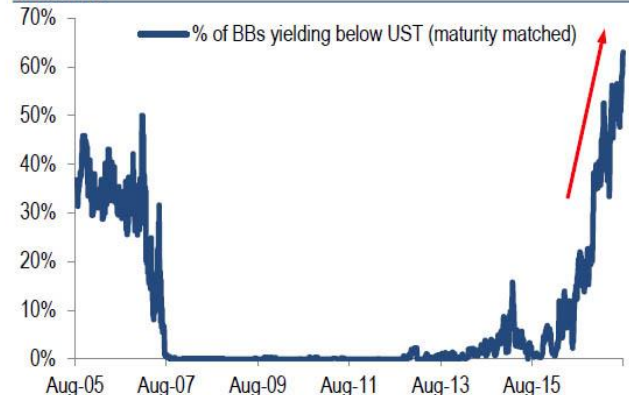
While we don't know when something bad will happen in the markets the perversions are sprouting up everywhere. Since much has been written by many unbelievably smart investors about bubbles or expensive markets and being cautious, let's look at a couple specifics that maybe aren't as well known. I recently came across the following charts:

Chart 7: Euro HY yields have almost converged to US Treasury yields now



Source: BofA Merrill Lynch Global Research. Using HEAD index, and GOQO indices.

Chart 8: 60% of European BBs yield less than equivalent-maturity US Treasuries



Source: BofA Merrill Lynch Global Research. Senior BB HY bonds only. Bloomberg.

In Europe, where individual countries don't have the ability to "manage" their own currency and most countries, other than Germany, have MUCH worse debt profiles than the U.S., their weakest public companies (ie, junk rated) now have debt trading at lower yields than the U.S. federal debt yields. Over 60% of European BB rated high yield bonds yield less than similar-maturity USTs. Of all the things that don't make sense today in terms of valuations, this might top the list. This is, of course, leaving aside the negative interest rates of many government bonds, we still see in various parts of the world.

I don't get it.

As a value investor, our job is to assess a business and assign what we think is a fair value. To us this is obvious and doesn't just apply to stocks or bonds but to everything in life. Who would buy a house just because it was going up? Art? etc.. It seems silly not to seek value in a world where the average person's wealth is limited. While we understand humans are emotional and thus the efficient market theory is ridiculous, it is still amazing to see people pouring money so quickly into a price insensitive product such as indexes and ETFs. Evidently the draw of the market is going up is too much to miss out on by asking if it is a fair value. Here are just a few specific examples to illustrate the silliness of what is going on:

As a quick background, the Indexes and ETFs are generally market cap weighted. So as the passive craze has really taken hold the investment flow into the biggest components of the ETFs is automatically increased, regardless of their individual financial performance.

- Oil peaked at roughly \$115 in June 2014. ExxonMobil's revenue in Q2 2014 was \$98 billion and in Q2 2016 was \$58 billion, or down 41%. EPS fell during this timeframe from \$2.05 to \$.41, an 80% decline. That said, their payout ratio for dividends has gone from 41% of NI to 183% of NI. Their debt has gone from \$19.4 billion to \$44.5 billion. The stock price over this period is up 4% while most small cap oil company shares are down big. Hmm.
- John Deere's annual sales peaked in 2013 at roughly \$37.8 billion with net income at \$3.6 billion. Revenues are expected to be just over \$25 billion in 2017 with net income expected at \$2 billion. This is a 33% decline in sales and a 45% decline in net income. Over that time period their stock price is up 42%. Hmm.
- Caterpillar's annual revenue peaked at the end of 2012 at over \$65 billion with net income at roughly \$5.65 billion. For 2017 they are expected to have just under \$41 billion in revenue and net income of roughly \$2.5 billion, declines of 37% and 55%, respectively. Over that time the stock has gone up 30%. Hmm.



- Shorter time frame, but how about Apple? Its revenue peaked in 2015 at \$234 billion and net income of \$53.5 billion. The expectation for 2017 is revenue of \$226 billion and NI of \$46.8 billion, declines of 3% and 12%, respectively. The stock price over this period is up 42%. Hmm.

The ETF mania is also at play with large companies in foreign markets.

- Bharti Airtel is the biggest mobile phone company in India. In 2014 a new, local competitor (Reliance Jio) announced they would start up and would be SUPER aggressive on pricing to gain market share. They launched at the very end of 2015. For Bharti, from 2015 to 2017 revenue is expected to be roughly flat and net income will be down 39%. This is not good and still masks the more near term issue. In the last 2 quarters their revenue is down 12% and 14%, respectively. All the while the new competitor keeps pushing on price. In this time period Bharti's stock is up 17%. Hmm.

Clearly passive money has created the current scenario where fundamentals matter less to an individual stock's valuation than the money flows, which creates valuation perversions that ultimately can't last.

To highlight this further, just like we have written about before in terms of the correlation to the indexes of all the big value funds, you can see similar correlation increases in individual components of the S&P 500 to the index. A select list:

Company	1995 Correlation w/ S&P 500	2015 Correlation w/ S&P 500
Apple	0.16	0.66
Chevron	0.29	0.69
ExxonMobil	0.35	0.73
J&J	0.31	0.79
Pfizer	0.19	0.72
Procter & Gamble	0.37	0.74

Source: Bloomberg

While money flows into the indexes and ETFs have created individual stock valuation aberrations, it probably also has a ton to do with the lack of market volatility. While much has been written about the volatility (VIX) index being at record lows, here is another chart to further highlight the lack of volatility showing the number of 1% daily moves in the S&P 500.

	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17
Days of 1% down days	31	32	40	54	54	72	37	20	17	13	34	75	55	37	48	21	17	19	31	22	3
Days of 1% up days	50	47	52	48	51	53	45	21	13	16	31	59	62	39	48	29	21	19	41	26	3

Source: Bloomberg

Needless to say, something has to give. The index universe has become a big momentum trade. It seems to be one of the most crowded trades in the history of investing.

Maybe this time is different but throughout world history that has rarely been the case. More likely is that things will act like they have in the past and value will matter at some point in the not too distant future. As an example, today Amazon is the darling, having gone up 250% since early 2015 (sales were up 49% over that same time period). It trades at 190+ P/E. That said, Amazon has always been thought of as the main vehicle for internet disruption of retail, so this isn't new. Do most investors remember that even with all that the stock went down 94% between late '99 and late '01 (sales were up 90% in that time period) and were down 60% from late '07 to late '08 (sales were up 29% in that period)? The Enterprise Value to Sales has gone up from 1.5 in early 2015 to almost 3.5 today. So yes, the company is growing quickly, but the valuation is growing much faster, which clearly isn't sustainable.

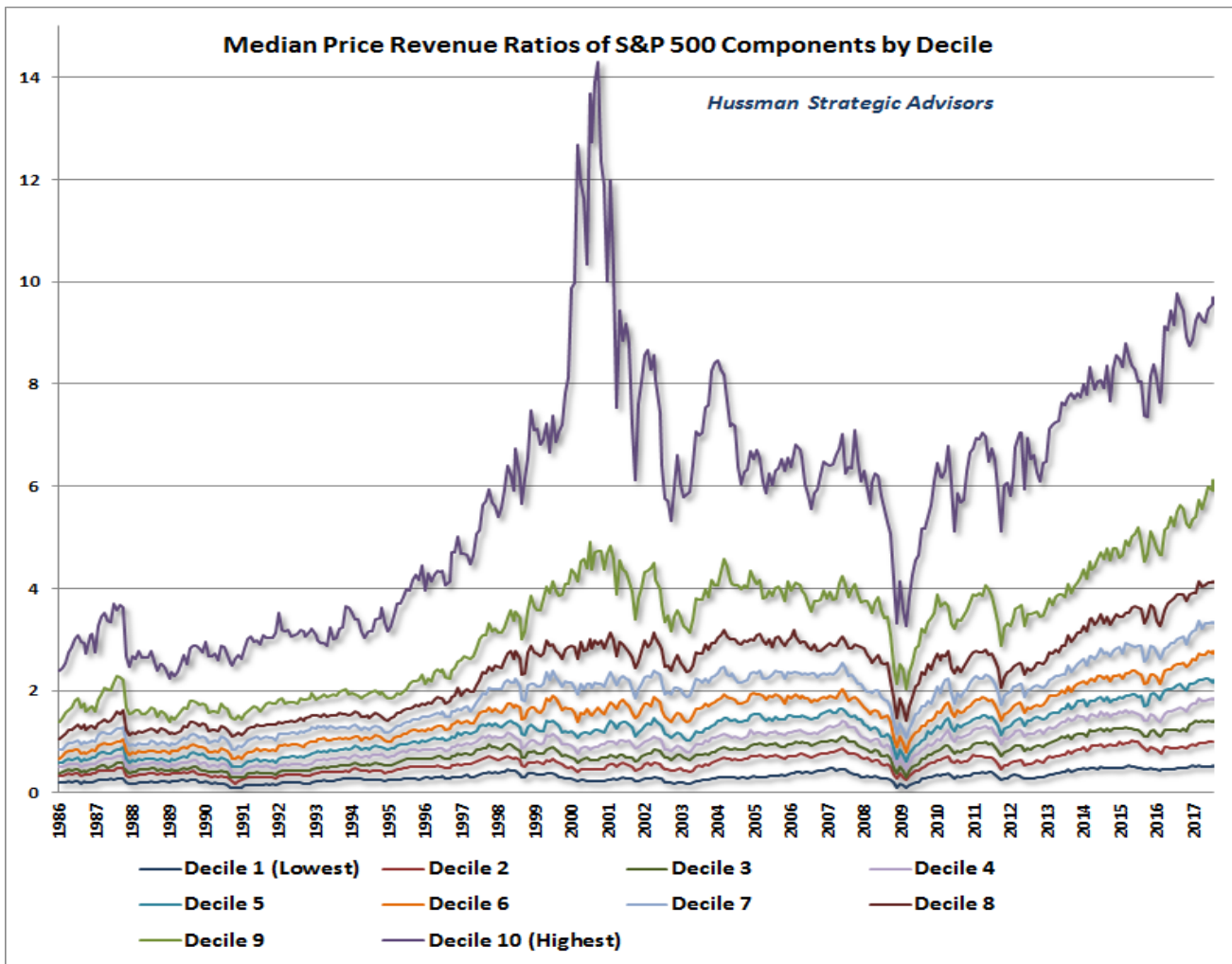
Microsoft is also thought of very positively for their cloud platform, Azure, and Windows and Office franchises. The stock is up 175% since the end of 2012, while revenues are only up 22% and net income is down 13% over that same time period. It trades at 29 P/E. Do most



investors remember that between late '99 and late '00 the stock was down 63% (sales were up over 20% in that period) and was down 60% from late '07 to early '09 (sales were up 20% during that same time period)?

In one of my favorite movies, *Forgetting Sarah Marshall*, Paul Rudd plays a dim-witted surf instructor Kumu and while giving some advice to the main character he says "When life hands you lemons, just say f*** the lemons and bail." Because of the index/ETF mania, especially as it relates to larger cap stocks primarily in the developed world, markets are currently handing us "lemons" so it is our job to "bail" from those areas and search for the areas of more interest. Those areas are less mainstream and less likely to be in the indexes or ETFs such as smaller caps, turnaround stories, emerging markets, etc.

Below is another fascinating chart showing today's valuation extremes. It breaks down the S&P 500 into deciles and shows the Price/Sales ratio for each decile annually since 1986. With the exception of the richest decile of stocks (which is only lower than the big cap tech bubble in 2000), every decile of the S&P 500 is currently at or within 2% of the most extreme valuation in history. While many people say today's market is not nearly as expensive as it was in 2000, the answer is it depends. In 2000, as you can see in the chart below, the top decile of expensive stocks (the highflying tech/biotech stocks) were outrageously expensive, while the rest of the market was high but not outrageously so. Today, the top decile is really high, but not nearly as bad as 2000, but virtually all of the rest is super expensive as well. Big difference. As John Templeton said, "The four most expensive words in the English language are **this time is different.**"



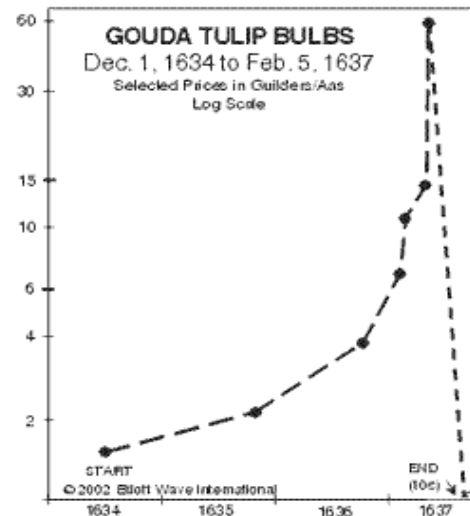
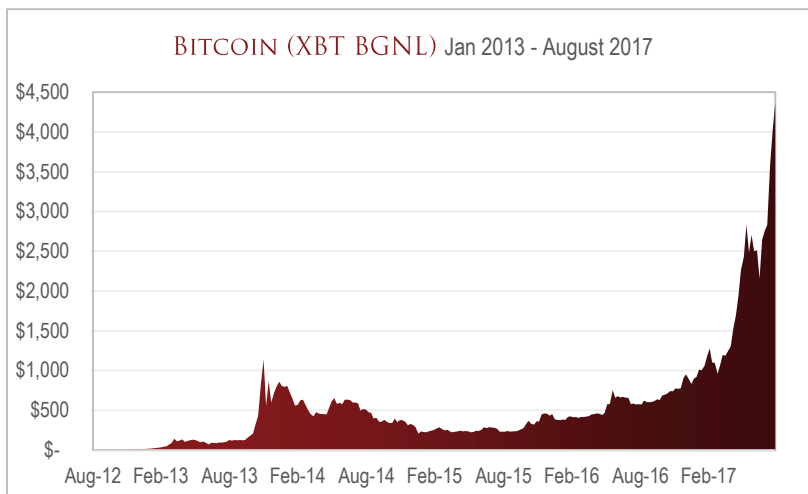
Source: Hussman Strategic Advisors

I don't get it.



Another “asset class” that is much discussed these days is cryptocurrencies, including Bitcoin, Ethereum or any of the other roughly 900 cryptocurrencies (yes, 900 and more seemingly by the day). Using Bitcoin, since it is the biggest, as the proxy the chart is nothing short of tulip like. In the early 1600s people were so sure that the market for tulip bulbs would keep going up that they bought them at ever increasing prices with virtually no thought for value. Today these stories of tulip speculation seem silly and outlandish, yet it happened. We are not saying the same will happen for Bitcoin and the like, but it is hard to argue that the prices being paid for all cryptocurrencies are based on any kind of value and the exponential increases sure look like pure speculation.

Howard Marks of Oaktree recently called Bitcoin “not real.” While that might seem strong or extreme it begs the bigger question, what is real? Above we talked about how central banks around the world have created money at no cost, so is that real? The bullish argument for bitcoin is that since it was created with a fixed amount of supply with no ability to add more in the future and the blockchain technology behind it has total transparency so there can be no hidden supply created. Thus, it is clearly a store of value and thus worth more all the time. From this point of view can anything in a fixed supply be a currency? But that is too simplistic since then every person could start their own currency (wait, it seems like that is already happening). Should it matter that Bitcoin’s supply is fixed, or is the right analysis that there is a seemingly infinite supply of all different cryptocurrencies?



The mania behind cryptocurrencies has taken Bitcoin to a total market value in excess of \$70 billion, which is roughly the same market valuation as Du Pont, Blackrock, Costco or Caterpillar. It’s newest competitor, Ethereum, has a total value of over \$30 billion, which is roughly the same as Sherwin Williams, Target or McKesson. The fact that Bitcoin is up more than 850% in the past 18 months and Ethereum is up more than 2,300% just in the past year tells you how crazy the speculation is in these “assets.” Combined all cryptocurrencies have a market value of over \$125 billion. The reason so many Bitcoin competitors are coming is the FOMO (fear of missing out) and Initial Coin Offerings (ICOs), which offer smaller investors the chance to “get in” at the ground floor. Two of the biggest “new” cryptocurrencies are Litecoin and NEM, each with market values of roughly \$2.3 billion. For that same money you could buy either Rite Aid (big drug store), GATX (largest rail car leasing company), Sotheby’s (one of two dominant auctioneers) or RLJ Lodging Trust (owns over 100 hotels throughout the U.S.). All of these either currently earn or have earned in the very recent past at least \$150mm in net income per year. A couple weeks ago there was an ICO for Filecoin which raised \$250mm. To put this in context, this would make it the 25th biggest IPO of 2017 in terms of money raised if it were a real IPO. Think about that. This is all insanity. So now that alternative Bitcoin platforms (ie, currencies) are very easy to create, what is each one worth?

Blockchain, the underlying technology of Bitcoin, is clearly very real and a critical piece to future secure transactions which will surely have tremendous value in certain applications. But like most clever ideas, as opposed to patented items or processes, it can be copied, changed and augmented infinitely at a very low cost which argues that the platform is a great innovation that is tough to monetize. Companies that were thought to be vulnerable to the blockchain usurping their role in a transaction have created their own private blockchain applications and are turning out to be the first mover with volume and thus seem to be in the best position to win (Visa, investment banks, custody banks, etc.).

On a related note, very recently there have been many discussions within the Bitcoin world that the processing speed is too slow and it is holding back Bitcoin. Bitcoin is an open-source technology so there is no one group in charge leaving its fate to its owners. The solution



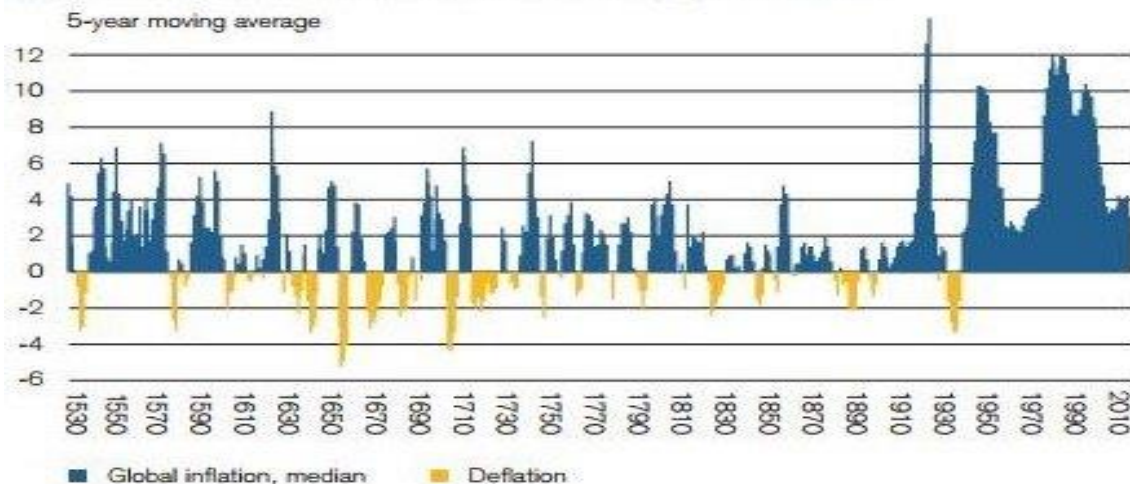
was to change the software code slightly. Leaving out all the technical details, the Bitcoin developers recently “forked” and created a new (alternative) cryptocurrency, and underlying blockchain named Bitcoin Cash. In the last couple days a third fork was announced and will start trading later in 2017. An irrefutable store of value cannot be changed. While today they aren’t saying that the total number of coins needs to expand, but if they can change the code can’t this be possible? With this change might it potentially change the narrative that it is a fixed supply and thus a great store of value?



Compared to a cryptocurrency, a country’s currency is backed by the trust in that government. That said the central banks increase supply every year and sometimes in massive quantities. Virtually all countries around the world overtly say they need at least 2% inflation in order to maintain economic stability, which said another way, they want to guarantee that the average citizen loses at least 2% of their purchasing power a year, combined with punishing savers by reducing interest rates to close to 0%. That doesn’t seem like they are looking out for the average citizen. John Maynard Keynes famously said that inflation is a way for governments to “confiscate, secretly and unobserved, an important part of the wealth of their citizens.” Why people accept the “inflation is good” narrative is a total mystery. Hopefully someday people will look back and see this as the contemptible act that it is.

As a side note, global inflation has been negative many times throughout history without world ending consequences, so why now is it different? You can answer this, but the answer certainly isn’t about maintaining economic stability.

Figure 1: Persistent inflation is a 20th century phenomenon



Sources: Reinhard & Rogoff, IMF, Credit Suisse.

Historical data compiled by Professors Reinhard and Rogoff show alternating inflation and deflation phases before “fiat money” gained importance. More credible and independent central banks, influenced by monetarist theory and in many cases with an explicit inflation goal are factors that contributed to a “Great Moderation” after the last big shocks in the 1970s.

To sum up our thoughts on cryptocurrencies, we understand the theoretical fixed nature of any one cryptocurrency’s supply and the potential interest based on that. But when so many variants can clearly be created for so little, have such wild price volatility, have a very short history, and can’t be used as a means of transactions, we don’t know what to think other than to be VERY suspicious. Our answer is do nothing and move on looking for better values. It still seems to Kopernik that the better and more obvious question is, why gold isn’t universally seen as the global currency that it has been for thousands of years?

Kopernik

Global Investors, LLC



I'll end with **Stein's Law** by the economist Herbert Stein. "If something cannot go on forever, it will stop" (It is also fantastic that he is the father of the actor Ben Stein, who was the teacher in Ferris Bueller's Day Off who repeatedly calls out "Bueller... Bueller... Bueller..." when taking roll call while Ferris Bueller skips school). More specifically he said if a trend cannot go on forever, there is no need for action or a program to make it stop, much less to make it stop immediately; it will stop of its own accord. It is so obvious it seems stupid. That said, there are times where it is helpful to step back from the noise or narrative everyone is talking about and think about fundamentals and value. In today's environment it is increasingly hard to find true value, as opposed to relative value, especially in larger cap stocks. We continue looking and questioning the accepted truths that do not seem quite right and keep to our reason for being.

To conclude, I don't get it.

Thank you for your continued support of Kopernik.

Mark McKinney

Co-Portfolio Manager – Kopernik International Fund / Analyst

Kopernik Global Investors, LLC

August 2017



Important Information and Disclosures

The information presented herein is confidential and proprietary to Kopernik Global Investors, LLC. This material is not to be reproduced in whole or in part or used for any purpose except as authorized by Kopernik Global Investors, LLC. This material is for informational purposes only and should not be regarded as a recommendation or an offer to buy or sell any product or service to which this information may relate.

This letter may contain forward-looking statements. Use of words such as "believe", "intend", "expect", "anticipate", "project", "estimate", "predict", "is confident", "has confidence" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are not historical facts and are based on current observations, beliefs, assumptions, expectations, estimates, and projections. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and other factors, some of which are beyond our control and are difficult to predict. As a result, actual results could differ materially from those expressed, implied or forecasted in the forward-looking statements.

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.