

MRP CAPITAL INVESTMENTS, LLC

4th Quarter 2022 Client Newsletter

Capital Market Update

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As discussed in previous newsletters, the 4th quarter of this year was where all the returns were to be found. The S&P 500 appreciated 7.08% in the 4th quarter. However, a dismal December didn't make this quarter feel much different from the other three. On a price basis, the S&P finished down 19.44% for the year. Additionally, the Aggregate Bond Index closed down 14.98% for the year. In 2022, we got to enjoy the rare occurrence of stocks and bonds falling over 10%.



S&P 500 2022 Chart Supplied by BigCharts.com



**"Be greedy when
others are FEARFUL,
and be fearful
when others are
GREEDY,"
Warren Buffett**

As we noted in our 1st quarter 2022 newsletter, we needed the Fed's Quantitative Tightening (QT) to impact the longer end of the curve more than the short end to steepen the curve and incentivize banks to lend. As inflation grew hotter, the Fed cranked rate hikes up faster than QT and the yield curve inverted substantially causing us to shift to a more Bearish stance.

This coming year, we need to see inflation cool and the Fed halt rate hikes. For a clue regarding how quickly this may be happening, watch the bond market. A flattening of the curve would suggest this cooling process is underway.

Behavioral Finance

When analyzing the market one of the most important things to comprehend is the mood of the market. It is very clear that we are currently in a Bear Market. The financial world likes to talk about a Bear Market in terms of the price change percentages. For example, down 20% is a Bear Market, while down 10% is a correction. I've said over and over that is one of the laziest things I've ever heard financial professionals say. It isn't magically a Bear Market when a market that was down 19.9% finally crosses the 20% mark. Rather, the type of market is determined by the mood of investors, not price changes. If investors look at everything through pessimistic eyes, then we have Bear Market.

Given that the Sentiment Indexes are buried at all time lows, the Put/Call ratio is at an all-time high, and any discussion on the market focuses on how bad things are, we can clearly see that we are neck deep in a Bear Market.

As I watched the financial news networks over the last few days/weeks, a recurring pattern caught my attention. It was a recurring pattern of major investment professionals adopting modus operandi grounded in pessimism. I think this mindset was in full display when former Treasury Secretary Lawrence Summers was praising our current Fed's actions and comparing them to a recent trip he took. He mentioned that on this trip, his plane was supposed to leave at 3:30 pm. However, it kept getting delayed and delayed. When it was finally announced it would be leaving at 9 pm, he said he prepared himself for a departure time 2 hours later than that. And, again, he told this story as a way to praise what the Fed was currently doing in the market.

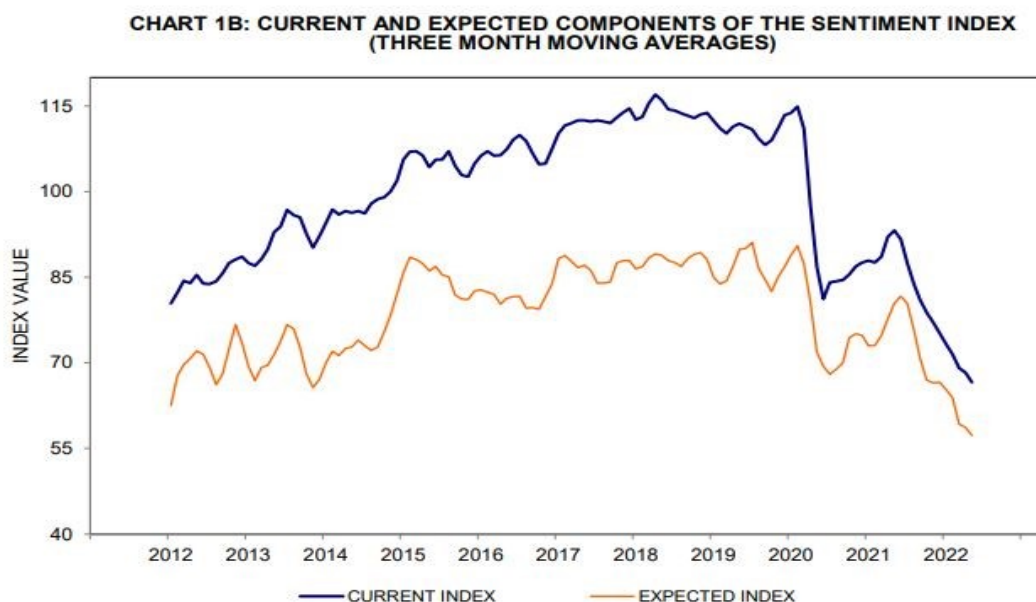
Using his travel story's premise, Dr. Summers is saying that the Fed might think inflation hit its peak in November, but it needs to continue taking aggressive monetary policy actions...just in case. If the Fed is, indeed, following along in the same line of thinking as Summers' airport story, then they will overtighten monetary policy and will have to aggressively stimulate the economy soon after that in order to correct this mistake. Sounds a lot like 2018/2019 to me.

It's like déjà vu all over again—2018-2019



Chart of Fed Funds Yield provided by Trading View

I believe the Fed is taking the pessimistic view that Summers illustrated. In fact, this “expect the worst” mindset seems to be part of human nature. Below is a chart of the University of Michigan Consumer Sentiment Index. The Blue line shows people’s current financial situation, while the orange is their future expected financial situation. Without fail, the expected situation is always worse than how things actually end up being. This clearly shows that people are always too pessimistic about the future. This is important to realize when making investment decisions.



To look at this concept on a more personal level, let’s consider a few questions. How are you financially? House in good shape? Got enough money in the bank and/or income coming in to live a good life? Do you feel pumped up and excited when you think of stocks and investments? What does the future economic landscape look like to you? How about when talking with your friends? They in a similar boat?

I think I know how most clients would answer those questions. Most people reading this newsletter are in great financial shape. But I am sure they are worried that things in the future could change. This is exactly what the above chart illustrates. After all, its human nature, especially in times of uncertainty, to anticipate and prepare for the worst.

We are in uncertain times now. With this, our natural instinct to worry is pretty strong. In times like these, investors seem to hang on every word the Central Bankers speak. In all honesty, given their forecasting track record, I wonder why people follow their words as if they were gospel?

Coming into this year, the Fed had forecasted a 0.9% level for 2022 Fed Funds rate. Meanwhile, the bond market was pricing in a much higher level. At year end, the Fed Funds rate was 4.5%, which was way above the Fed's forecast and inline with the bond market's call. Furthermore, earlier this year European Central Bank President Lagarde said inflation was transitory and not a big deal. Close to a year later that "transitory" process appears to be transitioning at a snail's pace.

For release at 2:00 p.m., EST, December 15, 2021

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, December 2021

Variable	Median ¹					Central Tendency ²				
	2021	2022	2023	2024	Longer run	2021	2022	2023	2024	Longer run
Change in real GDP	5.5	4.0	2.2	2.0	1.8	5.5	3.6-4.5	2.0-2.5	1.8-2.0	1.8-2.0
September projection	5.9	3.8	2.5	2.0	1.8	5.8-6.0	3.4-4.5	2.2-2.5	2.0-2.2	1.8-2.0
Unemployment rate	4.3	3.5	3.5	3.5	4.0	4.2-4.3	3.4-3.7	3.2-3.6	3.2-3.7	3.8-4.2
September projection	4.8	3.8	3.5	3.5	4.0	4.6-4.8	3.6-4.0	3.3-3.7	3.3-3.6	3.8-4.3
PCE inflation	5.3	2.6	2.3	2.1	2.0	5.3-5.4	2.2-3.0	2.1-2.5	2.0-2.2	2.0
September projection	4.2	2.2	2.2	2.1	2.0	4.0-4.3	2.0-2.5	2.0-2.3	2.0-2.2	2.0
Core PCE inflation ⁴	4.4	2.7	2.3	2.1		4.4	2.5-3.0	2.1-2.4	2.0-2.2	
September projection	3.7	2.3	2.2	2.1		3.6-3.8	2.0-2.5	2.0-2.3	2.0-2.2	
Memo: Projected appropriate policy path										
Federal funds rate	0.1	0.9	1.6	2.1	2.5	0.1	0.6-0.9	1.4-1.9	1.9-2.9	2.3-2.5
September projection	0.1	0.3	1.0	1.8	2.5	0.1	0.1-0.4	0.4-1.1	0.9-2.1	2.3-2.5

Source: FOMC

Currently, Lagarde is calling for an extended period of rate hikes in Europe, while the FOMC sees the Fed Funds terminal rate being 5.1%. Interestingly enough, the bond market is pricing in the likelihood of rate cuts in 2023. Frankly, I can't think of a better way to illustrate the cause of uncertainty in the market right now then by simply looking at the differing opinions right there.

Even though the S&P did appreciate 7.08% in the fourth quarter, we think it is wise to keep mentally and emotionally prepared for market volatility in light of this uncertainty. We get vitally important information on January 13th when the CPI report is released and soon after that the January 30/February 1 FOMC meeting takes place. Depending on the data revealed, we will march onto the next phase of the market's cycle or continue getting our nerves rattled as this grinding phase of the market continues.

Forest and Trees

There is an often used idiom that goes something like, “you can’t see the forest through the trees.” As you’d expect given the definition, this idiom seems to make little sense. If you are looking at the trees, aren’t you seeing the forest? No, not if you take the forest to mean the entirety of the forest. All you are seeing is a few trees and you aren’t grasping the vastness of the whole forest.



I say all that because I believe it applies to our current market. We have CNBC, Bloomberg, Fox Business, MSNBC, and many other sources of information spewing out data points (trees) one after the other in rapid machine gun like fashion. Many times the market reacts immediately. Ready, fire, aim! That is a phrase I like to use when describing this manic style of trading when the news de jour is all that is driving the price action.



Perhaps an illustration of what I mean is, let’s say that: *the monthly CPI report gets announced on the news. It is 0.2%, not 0.3%. The market rockets higher for a few seconds. But wait Core CPI came in at 0.4%, right inline with expectations. The gains just generated a few seconds ago evaporate because maybe inflation isn’t getting better. Then the Fed Chair states that the FOMC stands ready to raise rates if inflation picks up again next month and the market sells off in a fast a furious nose dive. The next morning a major company in the S&P 500 beats earnings expectations and it pops 15% higher on the news. But then it says it won’t give a forecast for next year because insight into next year is too clouded by unforecastable variables. In a split second, that 15% gain is gone and now it is racking up losses. But wait, don’t all those numbers demonstrate stable or cooling inflation and earnings coming in better than expected? Hold the phone. Let’s slow it down a little bit and breathe.*

While we are taking a breath, let's look at the forest. Let's examine the entirety of the forest and give it some context. To accomplish this, we will look at the data concerning our current market and we will compare it to how that data looked right before COVID hit the world.



You can't get anymore big picture, "forest-like", than analyzing data such as; global GDP, global debt levels, and household incomes. The table below shows us this big picture data before COVID and where we are now.

	<u>2019</u>	<u>2022</u>	<u>Change</u>
Global GDP	\$86.41 trillion	\$101 trillion	+\$14.59 trillion
US GDP	\$21.37 trillion	\$25 trillion	+\$3.63 trillion
S&P Earnings	\$139.47/share	\$181.14/share	+\$29.88%
Labor Force	164 million	164.77 million	+0.47%
Median income	\$69,029	\$71,186	+3.03%
HH Debt	\$14.1 trillion	\$16.45 trillion	+\$2.35 trillion
Global Debt	\$226 trillion	\$305 trillion	+\$79 trillion
10 Yr Yield	1.92%	3.5%	+1.62%
CPI	256.974	297.711	+15.85%

Looking at this data, we see that our economy is growing. With our robust labor force, we've added almost \$15 trillion to global GDP in 3 years. Given household net worth and S&P earnings levels it is clear that both, companies and individuals, are benefiting from those gains. However to generate those gains, massive amounts of leverage were deployed. This has left us with a pile of debt to deal with and, at the moment, rising interest rates. Rates are moving higher because too much money was printed during the bailouts and, as a result, inflation was ushered in. This increase in debt load, combined with increasing rates, makes the cost to carry the debt a clear and present danger to our current debt-driven economic expansion.

Armed with a clear view of the “forest”, we need to remember the market assimilates every piece of information effectively causing price action to arrive at equilibrium prices on all assets and liabilities within the economy. Therefore, we need to comprehend what bits of information, upon assimilation, are imbedded in market prices. After which, we need to assign probabilities regarding potential changes in the status quo that could impact the equilibrium of current price levels.

With that, what is priced into the market right now?

For starters, this market is fully aware of the bout of global inflation that we are dealing with. Therefore, I find it hard to imagine that high inflation rates are not fully priced into the market. With that, any news to support the fact that, yes, we have inflation, should have limited impact on market prices. Given this view on inflation, the market is locked on to the idea that interest rates are going higher. Combining high inflation and rising rates should make earnings tougher to generate. This is the main reason that the market expects earnings to come in light next year.



All of that sounds bad, but the market is fully conditioned that if things get too bad, the Fed will jump in and save the day with a massive amount of stimulus. This so-called “Fed Put” is what keeps risk appetite high. Because speculators, if wrong, will be thrown a life line by the Fed through some kind of bail out.



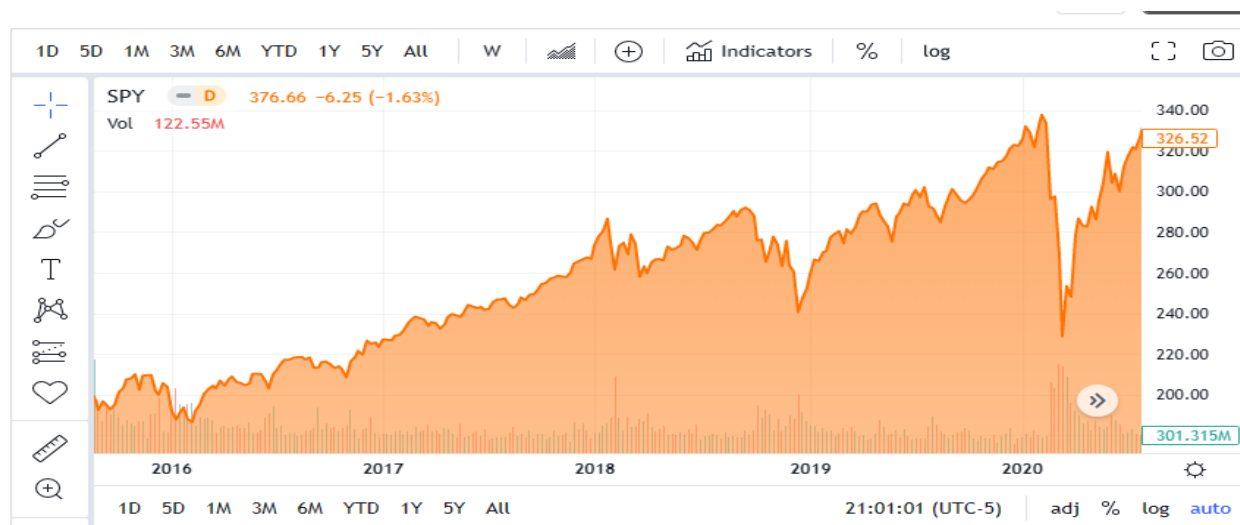
For most of 2022, if not all, the market priced in the restrictive impact China’s Zero COVID policy had on the global economy. And the impact the Ukraine/Russia War would have on Europe’s energy supply, especially in the winter. It also looks like consumers are shifting their imbedded understanding that all goods and services will be available at any time they want them to a more patient approach regarding the availability of good and services in the market place. More specifically, coming into 2022 people’s desire to get their goods NOW led them to pay premium prices for quick delivery. However as time passed, consumer’s became more accustom to slower delivery of goods in order to avoid paying premium prices.

Next, we need to crank out the numbers regarding earnings and valuation levels to see how they could impact our current market's pricing.

As a sidebar, I know that many readers might be new to our research process and might be skeptical of the value this prognostication could have on their portfolio. That is, “is it even worth it to perform these exercises in an attempt to predict the future?”

To answer that question I will say that, I have used these types of models for quite some time and have had very good success. For instance, in 2016, when the S&P 500 was 2,077, I went through a process similar to the one we are doing now. That analysis suggested the market had about 50% more upside left to run with the model's forecasted 2020 price being 3,200 for the market.

Interestingly enough, January of 2020 saw the S&P ringing in the new year at 3,225 and, after the COVID sell off, it was back to those levels in June. So, I guess, yeah, it does appear taking the time to work with our models is worth the time and does add significant value to our portfolios.



AMEX:SPY chart by TradingView

2016-2020 SPY Chart provided by Trading View

This time around, we are going to come at our forecast from 3 different angles. The first one is just a basic valuation analysis using historical data. The second is the Earnings Yield method that we used in the last newsletter when we laid out potential end of year 2022 market levels. The final method, that we will use, is the proprietary model previously mentioned in the 2016 analysis. We can call this one the MRPCI Market Valuation Model.

The basic method takes the average P/E ratio for the S&P since 1971 (which is 19.80) and multiplies that by a set of earnings levels. The first set used is the Standard and Poor's current level of predicted 2023 earnings, which currently stands at \$203.75 and serves as our Base Case. The other 2 sets of earnings apply approximately a 10% discount (Bearish Case) and a 10% premium (Bullish Case) to the Base Case earnings figures.

The second analysis uses the Earnings Yield method to discover the appropriate valuation multiple to be applied to the 3 earnings sets. This multiple is based on the current 10 year U.S. Treasuries yield (which is 3.88%) and the average risk premium (which is 1.06%).

The final method, the MRPCI Market Valuation Model, uses historical data going back to 1939.

The results of those analyses are:

Basic Method

Bearish Case— $(19.8 \times 185) = 3,663$

Base Case— $(19.8 \times 203.75) = 4,034.25$

Bullish Case— $(19.8 \times 225) = 4,455$

Earnings Yield Model

Bearish Case— $((1/(0.0388+0.0106)) \times 185) = 3,744$

Base Case— $((1/(0.0388+0.0106)) \times 203.75) = 4,123.9$

Bullish Case— $((1/(0.0388+0.0106)) \times 225) = 4,554$

MRPCI Market Valuation Model

Bearish Case— 3,460

Base Case— 4,027

Bullish Case— 4,599

In an effort to remove bias, we aggregate the predication model's output and consolidate them into one data point. This gives us our base case forecast. Additionally, we take the lowest predicted price and used that as our Bear Case and take the highest for the Bull Case. Those results are:

Consolidated Numbers

Bear 3,460

Base 4,073.35

Bull 4,599

The Base Case is the focus of our forecast for the year end 2023 S&P 500 price level. It represents a +6.09% price change for the index. With the current yield on the S&P being 1.67%, we are looking at a forecast for a 7.76% total return for the market this upcoming year.

After we have taken a look at the forest and seen its entirety, we then turn our focus to the smaller details (trees).

With the big picture, we saw an economy that was growing but had taken on loads of debt to get there.

Digging into the smaller details, we discussed a threat to the global economy being higher interest rates because that would make the cost to carry that debt too burdensome. Therefore, rates must be kept low in order for this economy to succeed.

An even smaller detail to pay attention to occurs at the end of January/beginning of February when the FOMC meets to make a decision on interest rates. Two weeks before that, on January 12th, CPI will be released. These two pieces of data will give us information regarding the level of inflation and direction of interest rates. As such, these two days will provide some of the most crucial information regarding how 2023 will turnout.

It is our opinion that this data will show inflation is falling rapidly and this will give the Fed the opportunity to stop raising rates sooner than the market expects. If this happens, then it is Bullish for the stock market and bond market. Recall, lower rates suggest higher valuation multiples for stocks and lower rates mean higher bond prices.

Another potential bullish catalyst for the markets is China easing the Zero COVID Policy. This would turn the Chinese economy on again and provide a significant boost for the global economy.



Additionally, Putin has recently shown signs of yielding to the global community. He has said he that he is open to peace talks and he has backed off his complete insistence that all energy related business transactions with Russia must be completed in rubbles. This could be a huge positive for global commerce.



It is also our belief that consumer behavior is changing in regards to expectations of good and services being ready at the snap of a finger. The delays caused by a lack of workers and supplies have become normalized. As a result, this should reduce inflation as the tendency to pay up big for immediate fulfillment of goods/services will wane.

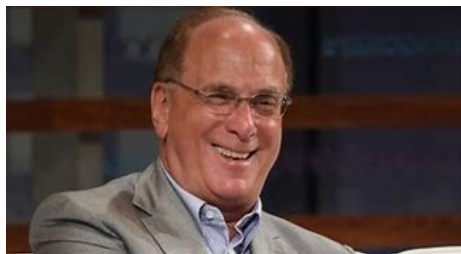


Altogether, these things lead us to believe that our Base Case may lean towards our Bullish Case. As these outcomes are not currently priced into the market and we believe some are likely to occur.

It is often said successful investing is a combination of art and science. Essentially, we outlined the science part of the equation in this report, while in the last few pages, we touched on the “art” part of the equation. If an investor can understand what is already priced into the market, decipher what could change regarding those variables, and, most importantly, comprehend how that will impact market prices, then they truly can see the forest through the trees.

Cryptocurrency Update

If someone is getting all of their cryptocurrency education from the big news entities following the FTX disaster, they probably think **BITCOIN IS DEAD**. There is no doubt that the media coverage of Scam Bankman-Fried (SBF) has a big impact on that perception. However, if they have been staying up to date with all the happenings in the crypto world, they definitely think **LONG LIVE BITCOIN!** In this regard, Blackrock CEO Larry Fink's comments to Andrew Ross Sorkin at the Deal/book summit speak volumes. You will note that many of Mr. Fink's comments echo what we've been saying in these newsletters the last several quarters.



For starters, he said that he thinks that most of these cryptocurrency companies are going out of business. We agree with that comment and that is why we said in the 2nd quarter 2022 newsletter, "There are over 19,000 different cryptocurrencies in the market place right now. This is a ridiculous amount of coins and there is no question that this shake out will reduce that number drastically."

In regards to the FTX collapse, Mr. Fink said, "FTX's failure was it was printing its own token. It was not DeFi. It didn't have a ledger that was open to the world. The whole foundation of what crypto is supposed to be is a distributed ledger* that is across the whole system." Again, we agree with those comments 100%.

Distributed Ledger- is a digital system for recording the transaction of assets in which the transactions and their details are recorded in multiple places at the same time

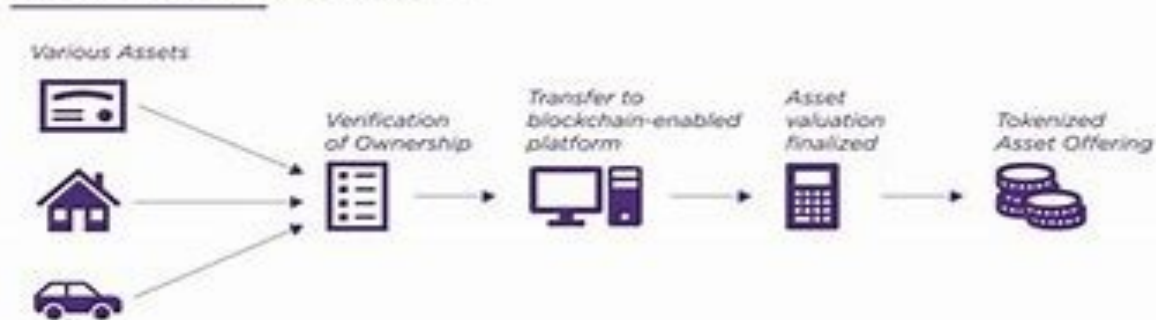
Building upon his comments, FTX's token was, essentially, a centralized token controlled by SBF. He could print more of it, if he needed to. He could increase or decrease the float as HE needed. He totally controlled and manipulated that token, which is the opposite of what Decentralized Finance is all about.

A truly decentralized financial ecosystem has no single person or entity in control. In addition, with a truly decentralized currency, new coins cannot be printed at will as there is a distinct and detailed process regarding creating more currency and/or reducing the amount in the system. This process is part of the protocol's code and, in a Proof of Work* ecosystem, the process can only be changed if a majority of nodes running and verifying transactions on the network agree on the changes. No one person can do anything to make changes in these truly decentralized financial systems, like Bitcoin. However, FTX was not structured that way as one person was empowered to do, essentially, whatever he wanted. And this, as Larry Fink mentioned, misses the entire point of crypto/decentralized finance.

Furthermore, Mr. Fink said, "I actually believe this technology (blockchain/distributed ledger) will be very important. I believe the next generation for securities will be the tokenization* of securities. If we have a distributed ledger, we know every beneficial owner, every beneficial seller, and we have instantaneous settlements. It changes the whole ecosystem. We don't need trust banks, custodians, or any middlemen. This will reduce fees."

Again, we agree with him 100%.

ASSET TOKENIZATION PROCESS



Proof Of Work-is a consensus mechanism used to confirm that network participants, called miners, calculate valid alphanumeric codes — called hashes — to verify transactions and add the next block to the blockchain.

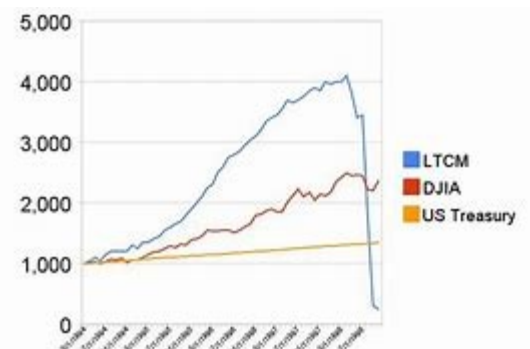
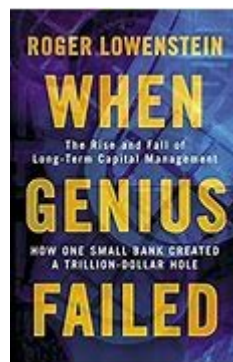
Tokenization is a process that converts the rights and benefits to a particular unit of value, such as an asset, into a digital token that lives on blockchain.

Within the industry, it appears there is currently a cleaning out of the riff raff underway, while, behind the scenes, governmental agencies are getting their regulations sorted out. This cleansing process is ugly and lots of weak players will go out of business, unethical firms will be exposed, but the best of the best will rise to the top.

We've seen this "clean up" phase many times over. In fact, I had a front row seat for the Long Term Capital Management debacle. After which the outcry from investors was, "no one will ever invest in hedge funds again!" It appears that investors did invest in hedge funds again as hedge fund assets under management have grown from \$149 billion to \$5.1 trillion.

Why did they choose to invest in hedge fund again?

Regulations! After LTCM almost blew up the entire financial system, regulators brought in change and oversight to the hedge fund space and, viola, AUM grew 25X.



The interesting point here is the fact that in the hedge fund industry in the late 1990s and the Cryptocurrency Industry of today, the failures were not due to the underlying ecosystems. Hedge funds weren't given much oversight and things were pushed too far. But since then, the hedge fund infrastructure and asset class has proven to be very viable. And this is precisely how crypto is shaping up today, more specifically bitcoin and the Bitcoin network are shaping up today. In fact, the FTX crew had no bitcoin on their balance sheet at all because they weren't able to be manipulate it like some of the other cryptocurrencies they used to commit their crimes. Perhaps that fact highlights the big reason why bitcoin is still standing as the King of the Crypto-world.

Whatever the reason may be, the fact remains that Bitcoin is still with us and growing. It is still with us despite the cryptocurrency going through several massive selloffs, including falling 89.4% in 2011, 86.93% in 2014, 83.85% in 2018, 63.33% in 2020, and 77% in our current downturn. However, as the dust settled on each of these pullbacks, bitcoin began to appreciate again. Whatever it is, that Bitcoin has, seems to always lead to a comeback after the falls. In fact, the corresponding gains after each of those sell-offs are: 6,230%, 2,388%, 12,336%, 1,692%, and, although we don't know if we've bottomed out on our current pullback, from its current low, bitcoin is up 7.24%.

Historical Downside Events



2011-2022 Bitcoin chart provided by S2F.

Non-Financial Events occurring this quarter



In the quarter, the world's population passed the 8 billion mark.



Liz Truss resigned as U.K. Prime Minister on October 25th



Respect For Marriage Act signed into law in December



The Houston Astros won the World Series in November



US Department of Energy enjoyed a major breakthrough regarding nuclear power when it achieved "ignition" on December 13th.



FIFA World Cup began in November

Appendix

2016 Research Report “Earnings Recession” page 5-6

The next step we need to take in this process is to apply the historical data to our current market. This will allow us to see what the historical averages say our current market could do if this, indeed, is the trough in earnings.

To review:

- Current low reading on S&P 500 earnings is \$86.75
- Date of low reading on S&P 500 earnings is 3/31/2016
- Average earnings gain for historical trough to peak run is 123.81%
- Average time of the historical trough to peak earnings run is about 4 years

Ok...let's apply the math...

If we have bottomed on earnings and the historical averages hold true, we will see the earnings on the S&P 500 go from \$86.75 to \$194.16 ($86.75 + 86.75 * 1.2381 = 194.16$). And this appreciation in earnings will reach its peak in early 2020.

The next step that I believe always needs to be done is to analyze whether this kind of move is feasible.

When looking at my macro-economic model, projected trend earnings in early 2020 is \$126.64. And, as we know, during the peak of Boom time earnings, earnings always over shoot projected earnings. The question is how much do they over shoot by?

Of the 5 trough to peak earning's run we've been studying in this report, I found the average “over shoot” of earnings at the cycles peak was 33.05%. When you apply a 33.05% over shoot to our projected 2020 earnings of \$126.64, you get \$168.49 ($126.64 * 1.3305 = 168.49$).

Based on this, I would say the \$194.16 is too high of an earnings estimate. Is it possible? Of course, but I can't plug that number into my model given how far above historical precedent that would be. I have to use the \$168.49 figure for peak earnings in my projections for feasibility purposes.

Appendix

Now we have a peak earnings figure that makes rational sense based on the market's history. And that figure is \$168.49. This implies that our rebound in earnings can still be substantial, but, nevertheless, below average.

Regardless, an S&P 500 that produces earnings of \$168.49 should trade at a higher price than we are currently at.

To see where the market could be with these kind of earnings, let's apply a basic valuation methodology to the data. For this, let's just take the average market P/E ratio and apply it to those earnings. The average Price to Earnings ratio on S&P 500 stocks since 1970 until now is 19.18. So, the implied Fair Value of the S&P with earnings of \$168.49 is 3,231.64 ($168.49 \times 19.18 = 3231.64$).

To summarize this analysis:

If the S&P 500 earnings have, in fact, bottomed and appreciate at a below average pace, they could feasibly reach \$168.49 by early 2020. This implies a potential climb in the S&P 500 to 3,231.64 over that time frame. This would equate to an approximate gain of 50% over 4 years.

Sidenote...

In January 2020 the actual S&P 500 price was 3,255 versus the predicted 3,231.64 as outlined above.

INFORMATION AND DISCLOSURES

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