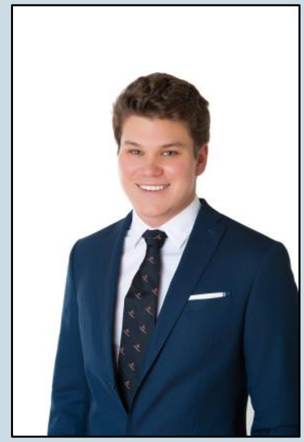
Bull Market in Review

Sam McChesney - November 2021

This White Paper is designed to educate investors about what has influenced the unprecedented bull market that has occurred since the 2008 Global Financial Crisis. It is not designed to present a direct conclusion as to what this means for the markets and economy as we move forward.

"Bull Market in Review" will explore two main factors that have acted as the driving forces behind the bull market that we have experienced over the last 12 years, and how the Fed's response to the Global Financial Crisis (GFC) has shaped the current investing landscape.



Sam McChesney, Associate Advisor
Incline Investment Advisors, LLC

Part 1: The Global Financial Crisis

For the purpose of this paper, it is important to understand the steps that the Federal Reserve and Government took in order to combat the GFC and fend off total economic meltdown.

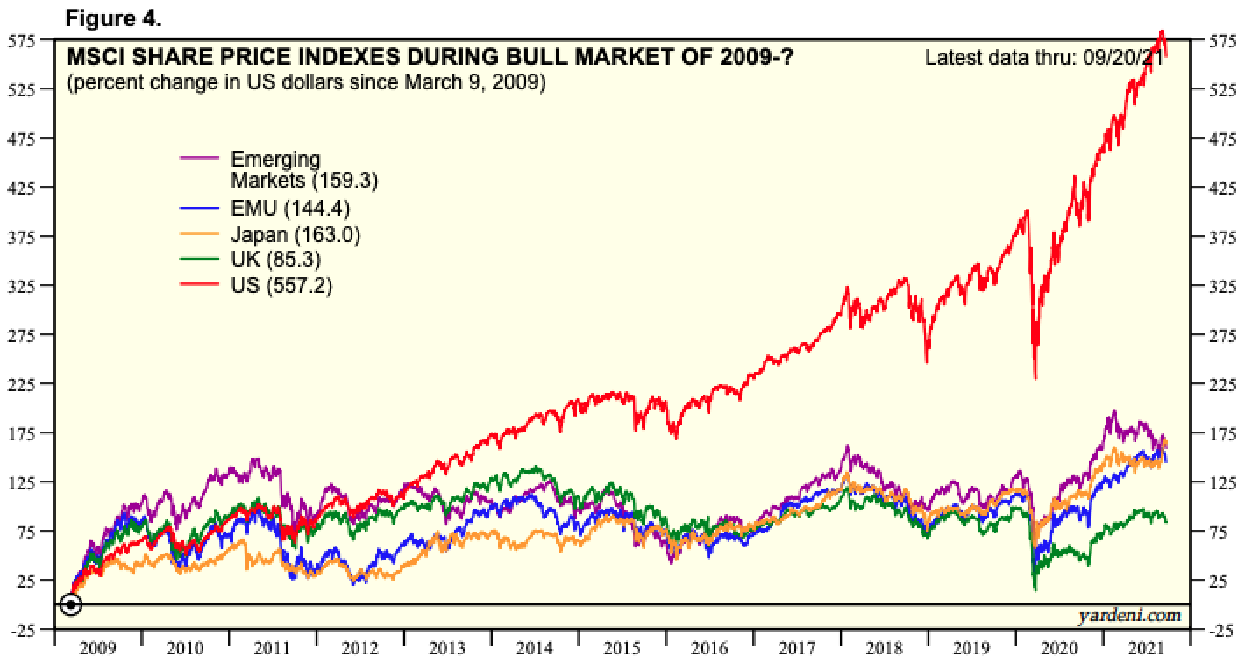
The Fed's first reaction to reign the spiraling markets under control was to utilize the main tool of traditional monetary policy; interest rate cuts. Thinking back to basic economics, lowering interest rates will stimulate the economy. If banks can access cheap money, their lending terms for consumers and businesses are more lenient and cheaper. This leads to an increase in consumer spending and money velocity. However, due to the severity of the crisis, simply cutting rates was not enough to stimulate the economy and financial markets. By mid-December 2008, the nominal rate had reached nearly 0%. Due to the origin and size of the crisis the Fed knew they would have to roll out some unconventional tactics.

Following the collapse of Lehman Brothers in September of 2008, policymakers and the Fed realized that major bank failures were extremely costly. This is when TARP (Troubled Asset Relief Program) and Quantitative Easing were introduced along with a slew of other spending programs to bail-out major players in the over-leveraged and over-exposed financial system.

Quantitative Easing (QE) is a monetary policy where the central bank purchases a pre-determined amount of government bonds and other distressed financial assets. This process injects money into the financial markets and props up prices. Eventually, these colossal spending efforts began to take effect and in March of 2009 the markets started to recover. Shortly after, the United States financial markets entered into what would become the strongest sustained bull market in modern history.

The chart below demonstrates how the U.S market compares to other major stock indices around the world in terms of percentage growth since 2009.

Major MSCI Indexes



Source: MSCI.

We can clearly see the U.S equity markets dominate every other major index.

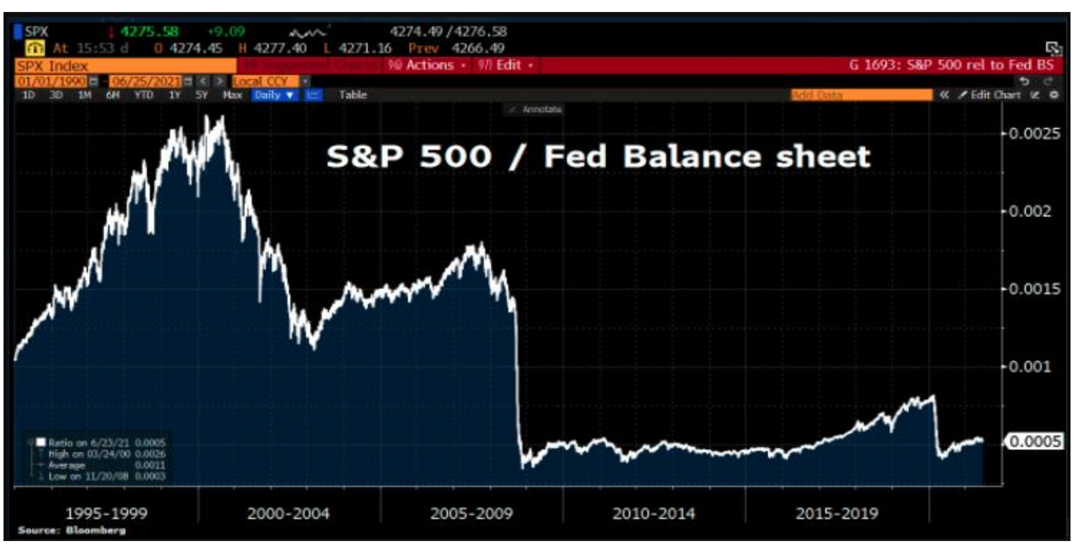
The sheer magnitude of this bull market raises some questions as to what has been driving this unprecedented growth. If you have been paying attention to the Fed's actions and the markets over the last decade, it's no secret that there is a correlation between the Fed balance sheet and this incredible market performance.

The Fed balance sheet is where assets that have been purchased through TARP and QE end up, so every time they launch a new QE buying program, the balance increases. The Fed has carried out a total of four QE purchasing programs including QE4 which was launched in response to the pandemic. Counting only the first 3 QE programs, the Fed grew their balance sheet from $870 billion pre-GFC to $4.5 trillion in 2016, an increase of more than 500% in eight years.[1]

We can examine how much of an impact that $3.6 trillion of buying had on the markets by using the two charts below. The first chart shows the Fed balance (yellow line) versus the S&P 500 (blue line) from 2009 to 2020.

This chart demonstrates that there is a correlation between the Fed's balance sheet and the stock market; as the Fed buys up assets more money is injected into the financial markets which drives prices up. Based on this, a rough conclusion can be made that the Fed balance sheet impacts the market, but we don't yet know the magnitude of the impact.

The chart below takes the S&P 500 and *divides* it by the Fed's balance sheet. It allows us to see what would theoretically be "real growth" of the S&P 500, or growth that occurred without the assistance of Fed buying. There has been almost no real growth since 2009. We can see that prior to 2008 there was evidence of real growth, but in the aftermath of the GFC the markets would have flatlined without fed assistance and money printing.



This brings an important question to light; did the Global Financial Crisis ever truly end, *or has Fed buying combined with other efforts propped up the markets for the last 12 years?*

To get a better understanding of whether or not this record bull market has been justified by real growth, we have to examine the underlying driver of the stock market and economy; the actual public companies that make up the market. By breaking down how public companies have been behaving over the last 12 years, we can develop a more vivid picture of what is happening in both the stock market and real economy.

Part 2: Public Companies

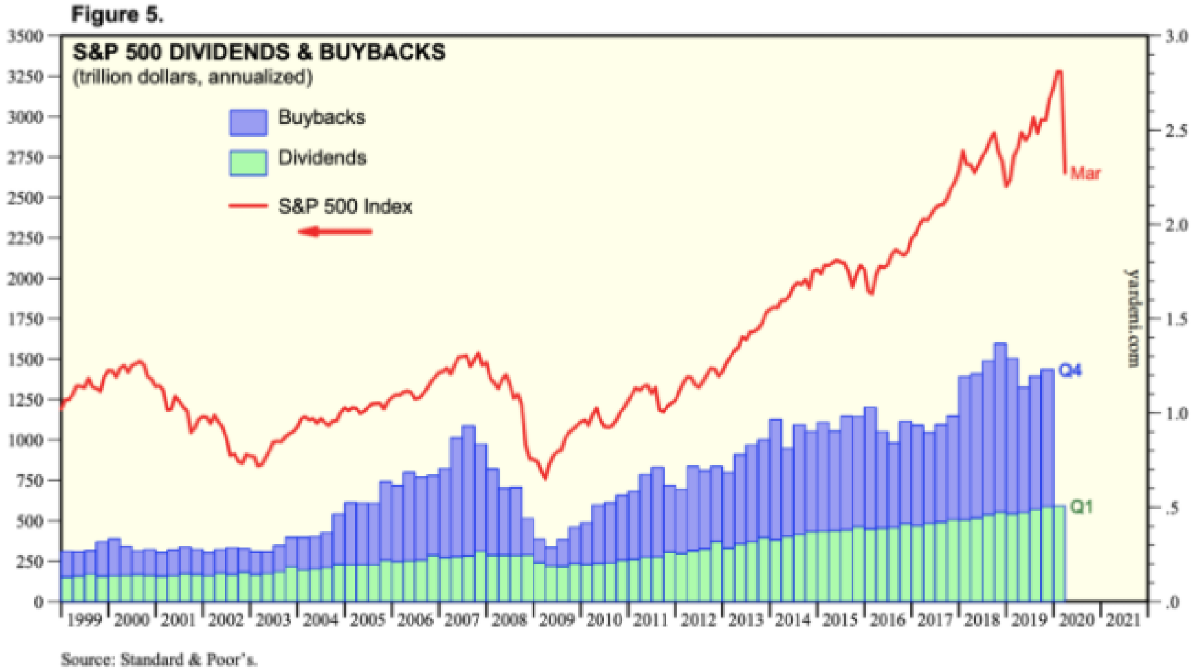
As mentioned earlier, the Fed's first response to the GFC was to cut interest rates, and nominal rates remained close to zero until 2017. This record period of sustained low interest rates allowed public companies to raise cash by issuing debt. Debt is issued in the form of bonds that investors can buy. When an investor buys a bond on the open market, he or she is essentially loaning money to the company with the promise of being paid back with interest. In periods of very low interest rates, companies are more likely to issue debt because the interest they have to pay investors back is negligible. The company can then take the cash that they have borrowed and spend it how they see fit. In theory this sounds like a great opportunity for companies to leverage cheap debt into things like research and development, capital expenditures, or paying higher wages. Since 2007, investment grade debt, which is defined as any bond rated over BBB-, has grown from approximately $2 trillion to over $6 trillion (Bloomberg Barclays Indices). More than 50% of investment grade debt is triple B rated – a phenomenon known as the "triple B cliff", meaning an economic shock could send those ratings spiraling into junk bond territory.[2] Total corporate debt now exceeds $11 trillion.[3]

So, what have public companies been spending all of this cash on? When companies have cash on hand, they can spend it in three major ways. The first is to invest it into their business, as discussed earlier. The second is they can pay out cash dividends to shareholders. Paying dividends puts more money into the pockets of investors and in turn will most likely be re-invested into other companies or spent in the real economy. The last major way a corporation can spend cash is share buybacks. A share buyback is when a public company purchases their own shares on the open market. This process reduces the total supply of available shares which artificially drives the share price up. Until 1982, share buybacks were difficult to conduct because they were considered market manipulation. Buying back shares allows companies to increase their earnings-per- share (EPS) which signifies that a company has grown and expanded. By removing shares from the market, you are simply reducing the denominator in the EPS calculation. EPS is a key metric which is reported quarterly that Wall Street and investors around the world use to judge the strength and growth of a public company.

Due to a wave of hostile takeovers conducted by corporate raiders in the late 70's and early 80's, the SEC passed rule 10b-18 in 1982, which provided a safe harbor for public companies to buy back shares.[4] The theory behind this decision is it allowed public companies to increase shareholder value. This rule set off a frenzy of buybacks that started in 1984. In 1982 public companies spent an average of 50% of their earnings on dividends, which left 50% to be re-invested into their companies. By the late 80's they were still spending 50% on dividends but buybacks had begun to take hold with companies spending an average of 30% on share buybacks.[5] This left a mere 20% of earnings to be re-invested. An important fact to remember is that interest rates during this time were extremely high to combat rampant inflation that occurred in the late 1970's and into the 80's. High rates meant that corporations were issuing much less debt and using actual revenue to issue dividends and buyback shares.

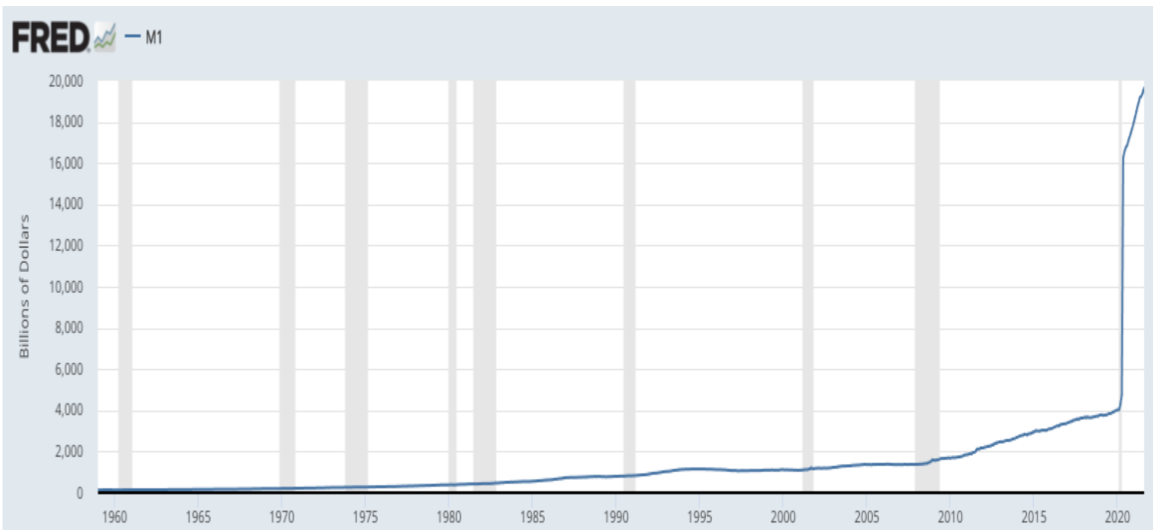
Fast forward to 2005 and public companies listed on the S&P 500 were spending an average of 54% of earnings on share buybacks and 37% on dividends. This leaves 9% of revenue to be re-invested into their companies. Shortly after, companies found themselves spending over 100% of their earnings on share buybacks which means they were dipping into reserves or issuing debt to raise cash. After 2008 we entered into a phase of complete debt-leveraged buyback mania, which was assisted by low interest rates. The chart below demonstrates this trend of increasing buybacks and dividends from 1999 to 2020.

Buybacks & Dividends



Between 2009 and 2018, 465 of the public companies that were listed on the S&P 500 spent $4.3 trillion on buybacks and $3.3 trillion on dividends. Together this equates to $7.6 trillion, which account for 91% of net income during that time period. $7.6 trillion is more than Germany and the United Kingdom's combined annual GDP. Following the tax reform in 2018, only 43% of the companies on the S&P 500 recorded *any* research and development expenses, and just 38 out of 500 companies accounted for 75% of the R&D spending.[6] This directly impacts the ability of these companies to compete on a global scale. In order for a company to remain competitive they need to invest in productive capabilities and R&D. There are certainly companies such as Apple who hoard massive amounts of cash on their balance sheet and are not financing buybacks with debt. However, companies like Apple are becoming increasingly less common with many public companies now surviving on debt.

The original argument supporting buybacks was to increase shareholder value. Although this seems like a good practice in theory, opening the door to buybacks in 1982 has not accomplished that. With executive compensation tied directly to share price, it has only increased income inequality, hindered innovation, and decreased productivity. Share buybacks can inflate a company's share price and assist in boosting EPS so it lessens the motivation to invest into real value creation. This has led corporate America into a more than decade long debt binge that has drawn down cash and added leverage, which has only increased the overall fragility of the entire financial system. Thinking back to the "triple B cliff theory" we know that over 50% of investment grade debt is triple B rated, so an economic shock could send those bonds into junk territory. That economic shock occurred in March of 2020 when the pandemic began. In response to this the government began printing unimaginable amounts of money to keep over-leveraged companies, the stock market, and the economy afloat. Below is the M1 money supply chart.



Since March of 2020 the Fed balance has increased more than 100% and the Treasury is printing so much money that they recently halted weekly reports of M1 money supply for the first time in history. If the U.S financial markets were already being propped up by the Fed and share buy backs prior to the pandemic, where does this leave us now? We are now experiencing a stock market and economy that is very highly correlated to the supply of money.

In light of this information, we can now see how much of an impact that the Fed's actions and share buybacks have had on the market over the last 12 years. Without these two components the market would not have sustained such a stunning rally following the Global Financial Crisis. However, these practices are not sustainable and eventually something will have to change. We have recently begun to witness the impacts of excessive money printing in the form of inflation. Consumers have started to notice prices of everyday goods increase dramatically. Inflation has now remained over 5% for more than five months and it is clear that the Fed cannot sustain printing money at this rate. Public companies are more leveraged than ever and simply cannot continue to issue so much debt. As noted in my previous White Paper, institutions and individual investors are also extremely leveraged, with margin debt at an all time high. This simply means that whenever the music stops, the fall back down to reality could be very severe.

This leaves investors wondering when the music will stop. How much longer can these methods of propping up the market and economy continue? No one knows the exact answer, but we can help answer questions about how to be properly prepared. Our actively managed strategies at Incline Investment Advisors give our clients peace of mind when it comes to their portfolios. Rather than be passively invested in ETFs and Mutual Funds, our clients are invested in professionally managed strategies with active oversight. They can rest easy knowing that if the music stops tomorrow, we will be ready. We apply both a value and systematic approach for our clients and focus on designing portfolios that are properly diversified and ready for whatever the future may hold. We offer certain strategies that have the potential to perform exceptionally well during inflationary periods and encourage anyone reading this to reach out to us if you would like to learn more.

[1] Board of Governors of the Federal Reserve System. (n.d.). Retrieved October 22, 2021, from https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm.

[2] Blumenthal, S. (n.d.). *On my radar: The end of the long-term debt Supercycle*. CMG. Retrieved October 22, 2021, from https://www.cmgwealth.com/ri/on-my-radar-the-end-of-the-long-term-debt-supercycle/.

[3] Goldfarb, S. (2021, June 14). *Pandemic hangover: $11 trillion in corporate debt*. The Wall Street Journal. Retrieved October 22, 2021, from https://www.wsj.com/articles/pandemic-supercharged-corporate-debt-boom-record-11623681511#:~:text=Nonfinancial%20companies%20issued%20%241.7%20trillion,size%20of%20the%20U.S.%20economy.

[4] Lazonick , W. (2021, February 12). *Profits without prosperity*. Harvard Business Review. Retrieved October 22, 2021, from https://hbr.org/2014/09/profits-without-prosperity.

[5] Lazonick , W. (2021, February 12). *Profits without prosperity*. Harvard Business Review. Retrieved October 22, 2021, from https://hbr.org/2014/09/profits-without-prosperity.

[6] Sakinc, M., Lazonick , W., & Hopkins , M. (2020, January 7). *Why stock buybacks are dangerous for the economy*. Harvard Business Review. Retrieved October 22, 2021, from https://hbr.org/2020/01/why-stock-buybacks-are-dangerous-for-the-economy