TIFF INSIGHTS

CIO Quarterly Commentary

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Attention Seekers: GameStop and Bitcoin

Normally in these commentaries, even when overall performance is good, we tend to lament those things standing between our portfolios and the performance that we want them to achieve. We admit to focusing more on any shortcomings in our portfolios, or why some funds or managers have lagged, or why fixed income (where we remain underweight) for the past few years has performed better than expected. We have talked about what could become the next headwind for equity performance, or if we believe the coast is clear. We have even talked about Modern Monetary Theory (aka "MMT"), a theory we would prefer not to be utilized, but which, nonetheless, seems to be slowly becoming the driving economic theory in the U.S.

Today, instead, we are going to write about two current issues that have captivated investors' attention: GameStop and Bitcoin. We don't usually spill much ink on popular topics, believing that by the time we comment, most people will have read or heard enough to satisfy their interest. However, we hope these next few paragraphs help you better understand how we generally address issues such as these two very different current topics.

First, though, we will report that during the last few quarters we have had good results in our portfolios. We have stayed somewhat overweight equities and our equity managers have added value, hedge funds have outperformed bonds, and our hedge fund managers have done reasonably well. We believe the rise in yields is becoming the next concern for equity prices and could cause stock price volatility. Still, by year end we expect big economic improvements resulting from successful vaccinations and the dramatic reduction in COVID cases should overcome higher yields and push stock prices higher. We hope that this is the outcome, and that our manager roster continues to perform well. We will keep you posted.

In his book "How to Win Friends and Influence People" Dale Carnegie urges us to live by the essential principles, to avoid criticizing, complaining, or condemning. Hopefully, we are not about to violate any of these principles as we share our thoughts about GameStop at its new price of ~$190 (+/- $150 or one-day's price movement!) per share, and Bitcoin, up nearly 10-fold in the last year, at its new price of $58,500 per coin.

GameStop: Gaming Software or Gambling Stock?

For starters, we believe that in the short run the market is a voting machine, but in the long run it is a weighing machine. Prices can deviate from fair value for a whole host of reasons, and as Keynes correctly noted, they can stay irrational longer than you can stay solvent. A host of Robinhood traders have tried very hard to put this axiom into practice, led by the idea "We can stay [irrational] longer than they can stay solvent." In a nutshell, these traders used different web sites to coordinate their efforts to drive the price of the stock up so high that anyone short would be forced to buy it back or go bankrupt. Before the saga ends, these traders may have bankrupted at least a few organizations, and maybe quite a few. The fate of some well-covered hedge funds, the biggest shorters of GameStop and presumably the main target of these traders, is still uncertain as we write.

Taking a step back, we know that capital markets were created to facilitate the raising of capital for businesses or governments seeking to make long-term, profitable investments. Investors who believe an idea will generate returns above those they might earn on their capital elsewhere with similar risk,

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invest in the shares (or bonds) on offer. In stocks, one becomes an owner of the business. The better the company does, the more money it makes, the more valuable the company becomes, and the stock price is likely to rise. While there are many other factors that impact stock prices, the primary driver of success or failure is the fundamental performance of the underlying business. Markets allocate capital to the best management teams and their best projects by adjusting the price and number of shares the company would need to sell to raise the extra capital for a new project. Secondary market trading of these shares allows original owners to sell a portion of their interest to new shareholders who believe investing in a particular security represents an attractive potential return. There it is - your MBA in one paragraph.

What the Robinhood crew attempted to do is not investing. It may, in fact, even be illegal. If a few hedge funds or mutual funds got together and conspired to buy or sell a particular security to make the price move to some level whereby others would be forced to unwind their positions or go bankrupt, they most likely would be prosecuted. Coordinating purchases and sales with others in an attempt to manipulate share prices has historically been considered illegal. Regardless of how the Congressional inquiry into GameStop trading turns out, this whole situation reminds us of the old poker axiom: if you don't know who the patsy is, you're the patsy.

We believe GameStop's share price will eventually gravitate toward a price that reflects their future business prospects and expected cash flows. If they have important and potentially profitable new revenue streams that become visible to investors, then the stock price should go higher. If their current lines of business shrink or become less profitable, then the stock will likely go lower. This is how all stocks trade, and GameStop is unlikely to be a norm-breaking exception. Looking at analysts' GameStop estimates on Bloomberg in early March, we saw that two dropped coverage, and the remaining 8 were evenly split between ratings of hold and sell. No analyst had a buy rating. On Bloomberg, the price target 12 months out is $45.42. To the best of our knowledge, none of our managers has a position in the stock. Knowing that the most knowledgeable, financially aware people who track GameStop stock collectively believe the share price will decline by 75+%, we would hope that any manager, who does hold it, is short.

Bitcoin: To Own or Not to Own?

Before you read the second portion of this letter it is important for us to acknowledge that blockchain and the decentralization of finance, as we've all known it, are incredibly important trends that will impact our future in profound ways and deserve careful attention as areas of investment focus. In what follows, we are focusing solely on one cryptocurrency, Bitcoin. Not on blockchain or "de-fi", or anything more than Bitcoin. The Bitcoin saga shares a few similarities with GameStop, but also has a few unique causes. Bitcoin's pricing has been extremely volatile but has soared over most periods since its introduction. Bloomberg's Bitcoin price chart goes back to July 2010 when it started at $0.06 per coin. The journey to $58,500 has not been smooth as there have been many price pullbacks including two of over 75%. Regardless, like many others we wish we had the foresight to buy $100 worth of Bitcoin at the beginning and to hold it until today when it would be worth over $80 million! Alas, we did not. There are two reasons we believe Bitcoin (or any cryptocurrency) would have value – as a currency, or as an investment. Let's try and briefly determine if Bitcoin has either.

Using our capital markets framework from above, Bitcoin was invented by the mysterious Satoshi. The idea was to create something with limited supply that was tightly controlled, known by all on a public blockchain, with issuance declining over time, not subject to change by the government or economic conditions, that can be used as a currency or owned as a store of value. Some number of a new

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Bitcoin (6.25 coins today) will be awarded to a “miner” who solves a very complicated mathematical question, creating a new block. This occurs once about every 10 minutes and is the only way new Bitcoin come into existence. The size of the reward a successful miner receives declines by 50% every four years. In total, there will only ever be 21 million Bitcoins, with the last being mined in 2140. Today, 18.67 million already exist, suggesting the future new supply will be very small.

Extracting from above, we know: (1) there was an initial owner/inventor, (2) new units (coins) are issued on a limited and regular basis for work done, and (3) all coins can be traded in the secondary market where buyers and sellers see the prices. Sounds much like a regular stock so far. So, how easy is it to use Bitcoin as a currency in a transaction? Bulls point out that PayPal, Visa, and Mastercard have recently accepted Bitcoin onto their platforms and that this development should greatly accelerate adoption. In fact, Paypal announced in the last few days that they would begin accepting crypto currency (more than just Bitcoin) for payment to their 29 million merchants, and of course you can now buy a Tesla with Bitcoin. Both developments boosted Bitcoin. Nevertheless, as of December 16, 2020 fundera.com counts just 13 “major corporations” among the 2,352 companies in America willing to accept Bitcoin in transactions. Given there are nearly 11 million employers in the US, this seems a very low number indeed. We believe the extreme volatility of Bitcoin would cause most people and businesses not to accept it as payment for services if only because in USD terms people do not know what Bitcoin might be worth when it comes time to pay the bills. Currency fluctuation risk of this sort has long been a concern for businesses operating in foreign lands, and they are quite adept at hedging these unwanted exposures. Yet for most individuals and smaller businesses here in the US, such a currency risk does not seem worth taking. At this juncture, we do not see Bitcoin functioning as a currency in any meaningful way, though it could happen if derivative markets become much deeper, more liquid, and more readily available to individuals and merchants.

From a purely investment perspective, however, Bitcoin and other cryptocurrencies are far more intriguing. The limited and known supply suggests it could serve as an inflation hedge. In fact, some believe that Bitcoin is viewed by younger investors in much the same way that gold is seen by older investors – as a store of value. This could be true. Comparing the two, we note that gold has been considered a store of value globally for several thousand years and today its ownership has been spread widely across the globe. Gold is traded freely in most jurisdictions, and most countries’ central banks hold some portion of their reserves in gold. In contrast, Bitcoin was “invented” in 2009 so it does not have thousands of years’ worth of acceptance as a store of value. Rather than being widely held, Bitcoin’s ownership base is likely quite concentrated in the hands of its early investors and true believers (suggesting that the actual liquid float may be a small fraction of the total Bitcoin outstanding) and which contributes to Bitcoin’s extreme volatility. Like gold, Bitcoin is traded freely in most jurisdictions today, but we know of no central bank that has invested any reserves in cryptocurrencies.

This analysis suggests favoring gold over Bitcoin in 3 of 4 categories, at least for now. If central banks begin holding Bitcoin as reserves, then the price would likely move much higher. Also, if over time governments do not consider Bitcoin a threat to their control of monetary policy and therefore do not restrict or regulate it in any way, investor confidence in Bitcoin would increase. On the flipside, two concerns we have are some sort of blockchain hack and potential regulation. Odds of a hack seem low currently, unless a quantum computer capable of much, much, much faster computing speeds than those available today sneaks onto the scene. We could more easily imagine another hack or technological disruption of the “wallets” or account numbers (“keys”) that owners are required to use to access their Bitcoins. Lose your keys, lose your coins. On the other hand, odds of regulation probably grow with Bitcoin’s success. However, neither of these is a new concern and the market seems comfortable today that neither is likely. Finally, possibly the most thoughtful reason for Bitcoin concern

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comes from Bridgewater's Ray Dalio who argues that while the supply of Bitcoin itself is limited, the supply of other forms of cryptocurrency is unlimited. Ray didn't say this, but if asparagus prices rise too high, maybe people will eat more broccoli. He also points out that throughout history the first mover often gains the upper hand, but does not always dominate forever, especially in technological areas. Think AOL, Nokia, Blackberry, Friendster, and many others. Success today suggests success tomorrow, but certainly does not guarantee it.

Another growing concern is that we believe Bitcoin ownership may still be very concentrated, and that recent price rises result from a few decent sized buyers simultaneously trying to establish their desired positions while the primary holders continue not to sell. If true, the result would explain extreme upside price volatility. Similarly, on the occasion when a larger holder does decide to sell, the holder may be joined by lower conviction owners and the supply/demand balance can quickly reverse. We've occasionally seen great stock and great private equity investments move up sharply for years and exhibit extreme volatility along the way. Each time, however, the price gain resulted from a business success inherently creating value that the price gains reflected. Unfortunately, an owner of Bitcoin won't someday get a share of e-commerce payment profits, or of Bitcoin blockchain ledger growth, or anything else. To the best of our knowledge, Bitcoin cannot be read, turned into jewelry, and worn, framed, driven, or watched every Sunday on television. Those who seek to buy some Bitcoin and then "just sit on it" must consider that to the extent this practice is followed by many others, the result could contribute to continued Bitcoin price swings or even help make them more extreme.

The Bitcoin market does not behave like a normal market today. Bitcoin seems more like a confidence game at this point, to us. While we don't mean to suggest anything nefarious is happening, we do think the notion of investing in something solely because it will only ever have a limited and known number of copies made, seems a narrow reason, especially as the total value of all Bitcoins surpasses $1 trillion. The level of confidence that no unexpected new Bitcoins will be minted is very high. We accept this but remind readers of Ray's earlier caution that other cryptocurrencies (coins) will be minted. That each Bitcoin is therefore worth today's price of $58,500 is tough for us to reconcile and, in our minds, will remain true only so long as others believe it should be. Although the same can be argued of gold, as discussed above, gold's much longer history and broader acceptance suggests more future stability.

The most important takeaway from this quarter's letter may be that there are always a million things that can distract you from what's truly important. At $190 per share the total market value of GameStop is a little over $13 billion. Total US equity market capitalization on December 31, 2020 was nearly $51 trillion. In six months, most of us are unlikely to remember the GameStop saga, unless you got swept up in it. Of course, Bitcoin's value could continue to grow, even to the point it becomes equal in value to gold as some believers suggest. To do so, Bitcoin would have to rise from merely $58,500 per coin today to as much as $600,000 per coin (assuming gold's price stays flat). We do not think that will happen and so we do not own Bitcoin. We may be wrong, but after taking a close look at Bitcoin twice in the last two years we are unlikely to spend much more time analyzing this very difficult to forecast situation, especially at current prices. Avoiding these types of GameStop and Bitcoin distractions is essentially a daily chore, and one we commit to as we seek to grow our members' investment portfolios, and recommend you commit to as you seek to grow your own portfolio.

On the other hand, to those who look at GameStop and Bitcoin as indicia that we must be in or near a bubble in the asset markets, it is our view that we are not. Valuations are high, with the S&P 500 trading at a P/E of 22x forward 12-month earnings compared to a long-term average of somewhere around 16x. The MSCI ACWI forward P/E stands a little above average at 19x, but not as high as that of the US. So, yes, stocks are expensive, and require earnings growth in the next 12 months, but

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prices are not crazy if we are exiting a recession and in the early part of a multi-year global economic rebound. We believe that's right where we are. The road will probably be bumpy because of the high valuations, but we think stocks remain the place to commit capital. Bonds, which have sold off some in the first part of the year and will be supported as long as possible by global central banks, are still expensive trading at an effective "P/E" of 58x (1/current yield on the 10-year treasury). If the global economy picks up, we believe inflation will rise some and that investors will continue to lose confidence in low return, potentially risky bonds in their portfolios. We continue to underweight bonds at today's valuations.

Here's to: vaccine success, no major virus mutation setbacks, lockdowns ending, continued low front end rates and easy monetary conditions, a return of animal spirits, a global synchronous expansion and generally rising global stock prices for a few years. It can't be that easy, can it? We're sure glad it's not 2020.

As always, we sincerely appreciate the opportunity to manage your capital and to help you achieve your organization's financial goals. We are here to assist you, so please do not hesitate to contact us. We hope 2021 is a healthy and terrific year for everyone.

Your TIFF Investment Team

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