October 10, 2022

Fellow Investors:

Once again, welcome to the new investors who have recently joined. I'm encouraged by the firm's continued growth despite the challenging market environment.

In general, stock prices appreciated in the first part of the third quarter, then depreciated significantly in the second part. Previously, I commented that I thought valuations were reasonable at current levels. I continue to believe this. However, as always, I can make no guarantees for what will happen next in the market. But I can express my belief that over a long-time horizon investments made today should perform well.

In my previous letter I mentioned inflation briefly before focusing primarily on volatility. In this letter I'd like to offer some additional thoughts on inflation: what it is, where it comes from, why it is important to stock prices, and how it is managed.

Inflation

Inflation is defined as the general increase in the prices of goods and services. Generally speaking, things tend to get more expensive over time, and a dollar doesn't buy as much as it used to. That's why your grandparents tell you stories about how much they could buy with a nickel when they were young.

In general, when people have money, they spend it, resulting in increased demand, which allows sellers to increase prices, which, again, is the definition of inflation. Furthermore, it's easier for sellers to increase prices when inventories are low, as they have been lately with the pandemic closures and supply chain disruptions. Therefore, at a high level, we can attribute the recent bout of inflation to increased cash that consumers received from a combination of the Covid stimulus programs, the increases in personal income, and the price appreciation in recent years of many assets including stocks and real estate. All of these put money into the hands of consumers, increasing demand when inventories were constrained.

Financial Theory

Shown below is the most important formula in all financial theory. It's the fundamental building block of the time value of money. In words, it says that the present value (PV) of any asset today is equal to the sum of its discounted future cash flows (CF). In this equation, the interest rate (r) is in the denominator, which means that as interest rates increase, the value of all financial assets decrease.

$$PV = \sum_{t=0}^{n} \frac{CF}{(1+r)^t}$$

When inflation increases, investors demand higher rates of return from financial assets to offset the loss from inflation. Thus, rising inflation will decrease the value of all financial assets. This is in large part why stocks have declined so much this year. We have seen a general repricing of the market. Stocks and bonds repriced first, as they usually do. Other assets, such as real estate, respond more slowly, but we are now seeing prices drop there too.

The Federal Reserve Bank

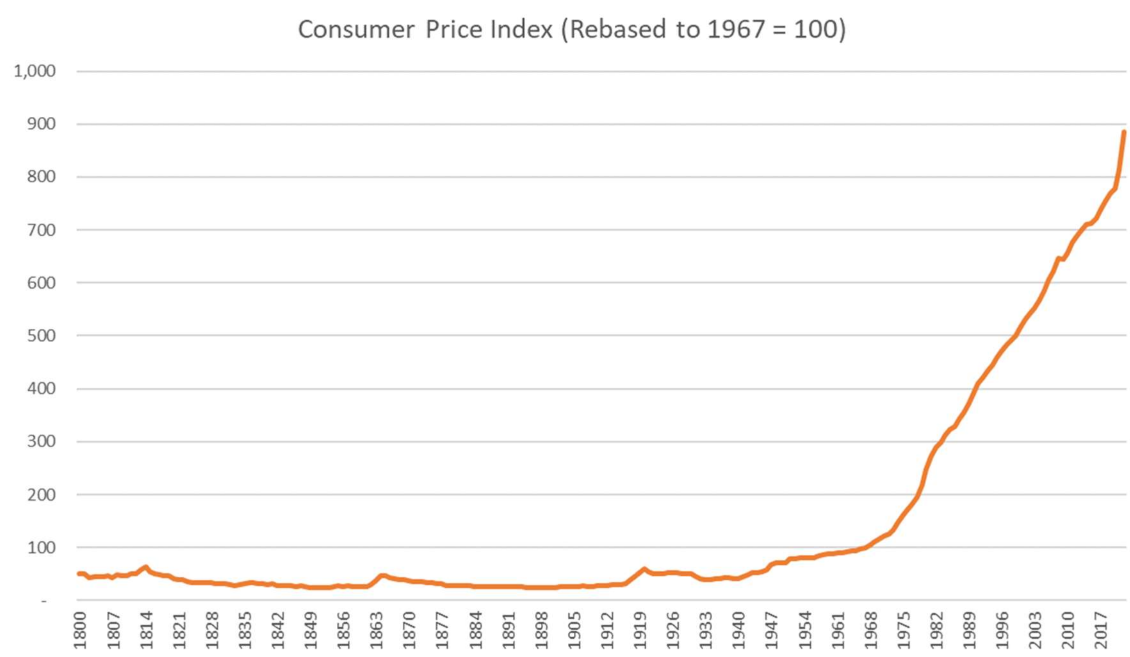
A basic understanding of The Federal Reserve ("Fed")—and their role in managing inflation—is helpful to understand today's financial markets. The key point here is that one of the Fed's primary jobs is to manage inflation.

The Fed was established in 1913, primarily to stabilize the banking system. In 1977 congress gave the Fed what is now commonly called the "dual mandate" of low unemployment and stable prices. In 2020 the Fed clarified that they interpret "stable prices" to be an average of 2% annual inflation. Therefore, when inflation is above 2%, the Fed will increase interest rates[1], which in turn is supposed to reduce demand and thereby lower inflation. This scenario is reversed when inflation is below 2%. In both scenarios, the Fed considers unemployment

[1] It's worth noting that the Fed only directly controls short-term interest rates, not long-term rates. Of course, there is a loose relationship between short-term and long-term rates, and the Fed has some tools for influencing long-term rates, but they do not dictate long-term rates in the same way they do short-term rates.

levels. If unemployment is high, they favor lower interest rates to spur economic growth. And when unemployment is low, they favor higher interest rates to avoid inflation. Thus, inflation and unemployment are seen as the primary indicators of the economy's condition to which the Fed manages.

How well has the Fed done its job of controlling inflation? The chart below shows inflation from 1800 through the first quarter of 2022, according to data from the Minneapolis Federal Reserve Bank.[2] You'll notice that inflation has increased sharply in the last 50 years or so. It's interesting that the 1977 dual mandate was given near the beginning of this sharp increase. In numbers, average annual inflation for 1800–1976 was 0.9% (std dev of 5.9%) whereas from 1977–2022 it was 3.7% (std dev 2.8%). From these numbers, it appears the Fed has done a poor job of keeping prices stable, though they have managed to reduce the volatility of inflation rates (the second derivative of stable prices). Perhaps they favor the low unemployment mandate.



[2] https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator/consumer-price-index-1800-

Being as the Fed is in the business of setting or influencing interest rates, which as we learned above directly affects the pricing of all financial assets, it can be useful for investors to have an understanding of the Fed's likely future course of action. Everything that I have recently read from the Fed leads me to believe that they are strongly committed to reducing inflation, which means increasing interest rates. This year alone, they have increased short-term rates by 3% and will likely increase by another 1% (or more) before the year's end. Taken alone, this would imply further reductions in stock prices. However, stocks are not valued using only one year's interest rates. Rather, the value of a stock is the sum of all discounted future cash flows. While inflation and interest rates are high today, most investors expect inflation will return closer to the Fed's 2% target over time. Many stock valuations already embed this expectation, so only a deviation from this would result in changes to stock prices.

Conclusion

Therefore, based on the expectations embedded in stock valuations and the Fed's apparent commitment to reducing inflation, I continue to believe that for most investors, the best course is to remain invested in good companies, endure the volatility as needed, and wait for panic to leave the markets. In the long run, stocks prices will grow with earnings. The history of American capitalism shows extraordinary resilience. Despite the myriad troubles currently in the world, I have no reason to doubt that in the long term, the market will continue to produce wealth.

As always, I welcome the opportunity to connect with each of you. Please reach out with any questions. Otherwise, I wish you all a joyful holiday season with kith and kin.

Kind regards,
Todd Niemann, CFA