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"It is wise to be fearful when others are greedy, and greedy when others are fearful."

-Warren Buffett

Let us start by wishing everyone a happy and healthy 2019... and saying good riddance to a difficult fourth quarter, when all sectors of the equity market were weak. Given the extreme-sell-off, we are looking forward to prospects for better returns in the New Year.

It seems like a long time ago, but the S&P 500 stock index reached an all-time high a little over three months ago. For the just-concluded fourth quarter, the S&P 500 generated a loss of 16.7%—the worst quarter for the stock market since the fourth quarter of 2008, when the market was down 21.9%.

Looking back, the last two years were polar opposites for equity investors. 2017 was a great year for stocks; not only did the S&P generate 20%+ returns, but performance was nice and smooth. 2018 was much different, obviously; the S&P 500 was down 4.4% for the year, with much higher volatility. Taking both years together, the market has delivered returns slightly lower than the historical average, giving investors hope that reversion to the mean will portend a better year in 2019.

The question, as always, is what happens next. Headlines impact investor sentiment in the short term, leading to the wild swings we have been seeing. Investors have been worrying about trade tensions with China, the U.S. government shutdown, Brexit, the Mueller investigations, tensions in the Middle East and "QuItaly" (the threat of Italy leaving the European Union), to name just a few. But we believe that fundamentals will likely determine results over the longer term. And so, we turn our attention to the fundamentals underpinning the equity markets.

Valuation

Every publicly traded company has two values associated with it: "Market price" is what the stock sells for at any moment in time, and is quoted continuously when the market is open. "Intrinsic value" is what the stock is worth, and is much more subjective. The goal of every value investor—and we count ourselves in this category—is to buy a stock when the market price is less than its intrinsic value, with the premise that the market price will ultimately reach (or even exceed) the intrinsic value.

How to determine the "intrinsic value" of a company is the process that distinguishes one value investor from another. Some focus on book value and are drawn to the price/book ratio. Others focus on earnings, and are drawn to the price/earnings ratio. Others model out a company's free

cash flow into the future, and discount that back to a present value. (That's actually our approach.) The most commonly discussed metric is the price/earnings ratio, which we will refer to here.

Market commentators have noted that stocks may have reached the low end of valuations, indicating support at these levels. At the end of the third quarter, the S&P 500 was trading at roughly 16.6x projected earnings. After the fourth quarter sell-off, the index is trading at closer to 14.2x. Historically, the range has been between 10x and 20x, so the multiple is not dirt cheap, but is certainly not expensive. If the multiple fluctuates around this level, stock prices should be driven by earnings growth (or contraction). Multiple expansion would add to returns over time.

We would note that there may be some flaws with this metric. For example, it does not take into account the state of a company's balance sheet, which can be extremely important (and which may become even more important as the Federal Reserve gets further into its tightening cycle; see discussion below).

Earnings

What drives corporate earnings? The economy will have an important impact, as topline revenue growth for many companies will track the overall economy. Profit margins are critical; these have expanded over the last few years, as wage inflation remained weak, but that may be starting to change. Shrinking share counts (as companies repurchased shares at historically high rates) have contributed to stronger earnings per share (EPS) growth as well. 2018 saw dramatic growth in EPS for S&P 500 companies. The substantial cut in corporate taxes accounted for a good portion of that, and is not likely to be repeated (unless we get another tax cut).

Consensus earnings projections for S&P 500 stocks indicate a growth rate of 4% to 5% for 2019 (and a higher rate for 2020). Will those earnings come through? To some extent, that will depend on whether the U.S. economy enters recession in 2019 and whether profit margins remain stable or continue to grow (or shrink). And it's easy to find opinions, and data, on all sides of these questions. (Even within our team, a healthy debate exists.)

The Economy

The Federal Reserve increased the federal (or fed) funds rate (for the ninth time in recent years) on December 19. In the accompanying statement, they noted that "the labor market has continued to strengthen and that economic activity has been rising at a strong rate." Year-over-year GDP growth in 2018 came in at 2.6% for the first quarter, 2.9% for the second quarter, and 3.0% for the third quarter. Estimates for the fourth quarter average 3.1%. (Data will be released at the end of January.)

The Composite Index of Leading Indicators (published monthly by The Conference Board, an independent research association) is comprised of 10 components that measure economic activity. Many investors look at the year-over-year change in the index as an indicator of future economic activity—when the number is positive, it suggests that the economy will continue to grow; when it is negative, many read it as a sign of an upcoming recession. The most recently reported data

point was 5.2 at the end of November. While down from September and October, the reading was still higher than it has been for most of the last decade.

Some investors are focusing on the dramatic drop in oil prices. West Texas Intermediate crude, the main U.S. oil price, dropped from over \$75 per barrel to under \$43 per barrel during the fourth quarter. These investors say this move signals flagging demand for energy, which in turn portends weak economic growth. In contrast, we believe a massive increase in supply explains most of the drop in the commodity price. Both the U.S. and Saudi Arabia have been producing oil at record levels for much of the past year, and the U.S. has granted waivers to allow Iranian oil into the market as well. Financial speculators who were long crude contracts needed to unwind their positions, which has exacerbated the problem. In reality, however, low oil prices are generally good for consumers (and most economies) around the world.

On the other hand, we are watching a few areas of concern: the Chinese economy, now the second largest in the world, is slowing. Europe is also having difficulties. Here in the U.S., debt has reached record highs and there are early signs of economic weakness. The housing market has been faltering, with new home sales trending down in 2018 after almost a decade of solid improvement. Similarly, U.S. auto sales seem to have peaked after a decade of substantial gains.

Higher interest rates, and increased leverage at companies, have led to stress in the corporate bond market. In fact, the percentage of investment grade bonds that are ranked BBB (the lowest level to still be considered investment grade) is higher than it has been in many years. As we discussed in previous letters, we believe this is fine until the economy hits a speed bump. While bond ratings don't affect the measure of "intrinsic value," this might temporarily impact "market price," creating some investment opportunities but potentially also some (temporary) headaches. We may see added volatility in the bond market, as some bonds that are now rated BBB become "fallen angels" by dropping into the high yield category.

Interest Rates

Another important consideration is the transition from quantitative easing (QE) to quantitative tightening (QT). In a surprise to almost no one, the Fed raised interest rates by 0.25% (25 basis points) in mid-December. And whether Jay Powell, the newest Fed chairman (and a Trump appointee) continues to raise rates in 2019 (and whether he keeps his job) is a headline-grabbing topic around the country (and the world). We thought a little history might be helpful.

The fed funds rate was steady at 5.25% in the 2006-2007 period, but as signs of the Great Financial Crisis began to emerge, the Fed started to reduce that rate, accelerating the reductions when Lehman Brothers filed for bankruptcy. Changing from a specific level to a range, fed funds rate reached 0%-0.25%, by the end of 2008.

With the economy in recession, and fearful of a full-blown depression, the Fed was anxious to provide economic stimulus. Having already lowered the fed funds rate to rock bottom levels, Chair Ben Bernanke embarked on an experiment that came to be called quantitative easing (or QE). Simply put, the Fed started to buy government bonds (and eventually other financial assets) to

force down interest rates and increase the money supply, in the hopes of increasing liquidity and stimulating the economy.

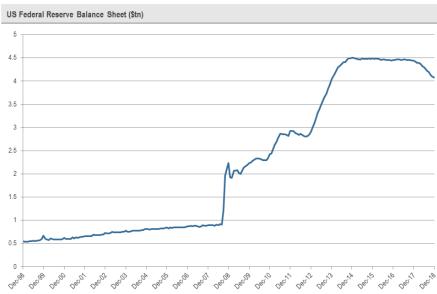
The first round of QE started in late 2008. When the economy did not recover as desired, a second round of quantitative easing, "QE2," began in late 2010. In September 2012, the Fed launched "QE3," declaring it open-ended, and included mortgage-backed securities in the program. (Because of its opened-ended nature, some called it QE-Infinity at the time.)

By spring 2013, things had improved enough that the Fed announced it was ready to "taper" its bond buying. The bond buying did not stop, it only slowed...and the fed funds rate remained at ultralow levels. But in short order, the yield on the 10-year Treasury jumped from 1.65% to 3% in what became known as the "taper tantrum." If you owned a 10-year Treasury at the time, the bond dropped about 10% in value while the 30-year Treasury dropped closer to 20%.

In 2014, Janet Yellen took over as chair of the Fed, and 2015 saw the real start of change in interest rate policies. The Fed's balance sheet peaked in early 2015, and in December 2015, the Fed raised the fed funds rate by 25 basis points for the first time in almost a decade. Moving slowly at first, and more steadily recently, the Fed has now raised rates nine times (including the increase last month). The range for the fed funds rate is currently 2.25% to 2.50%.

QE to QT and Beyond

While the question of further rate increases is now front and center, we believe that it is really the Fed's balance sheet that may be critical. In the nearby chart, you can see how the Fed has quietly started to shrink its balance sheet—a process that is sometimes referred to as quantitative tightening (QT). As the name implies, this is the inverse of QE, intended to drain liquidity and reduce stimulus for the economy.



Source: Bloomberg, Neuberger Berman.

Why is the Fed raising interest rates and embarking on QT? One simple answer may be that it wants to have ammunition when the next recession eventually comes around. The U.S. unemployment rate is now 3.8%, one of the lowest levels of unemployment in close to 50 years. Recent measurements of inflation by the government show a modest pace of 2%, on target with the Fed's stated goals. What better time to "remove the punchbowl"?

A low unemployment rate is seen as a positive for the economy, but we are seeing wage inflation trickle through the economy in labor-intensive areas like construction and service industries. A modest wage increase may be good for workers, but combined with exogenous shocks like higher commodity prices, it could lead to overheating inflation.

What QE Meant for Capital Markets (and What QT Could Mean Going Forward)

Both interest rates (the cost of money) and the Fed's balance sheet (the supply of money) are critical to understanding the financial markets. When the money supply is growing and interest rates are low, as has been the case for the last decade, capital is cheap and easy for fast-growing companies to access. Specifically, low bond yields allow companies to borrow money without needing to generate high levels of return. Additionally, stock investors, facing the prospect of low guaranteed rates in bonds, more often opt for slightly higher return potential in the form of expected stock returns. Instead of requiring high current returns, stock investors become more interested in future earnings streams. A low "discount rate" is applied to those future earnings, making them worth more today, and accordingly the stock prices of quickly growing companies are generally valued higher.

We think this phenomenon has contributed to the startling discrepancy between growth stocks and value stocks over the last decade. For the 10 years ended December 31, 2018, the average annualized return of the S&P 500 Value Index was 11.2%. That's not too shabby, but consider that the S&P 500 Growth Index generated an average annualized return of 14.8% over that same decade.

We believe that both value investors and growth investors can generate attractive returns over the long term, but that value investors could get there with less volatility along the way. After a decade of cheap and easy money... and a decade of growth outperforming value... we think growth stocks will be more sensitive to the increasing cost of money going forward. With the value approach practically discredited, for patient investors this potentially represents huge contrarian opportunity to buy much of the market at a discount. It would not surprise us to see a period when value stocks start to outperform. Remember the fable of the tortoise and the hare: Slow but steady can win the race.

While we hesitate to make predictions about the short term, we do need to have opinions on the longer term. To that end: We do believe that the U.S. economy will continue to thrive over the next decade and beyond, even if QT leads to weaker growth in the near term. We do believe that corporate America will deliver attractive earnings growth over a full investment cycle. And we do believe that, ultimately, the price of a stock will tend to move toward its intrinsic value. Taking

all this into account, we continue to believe that long-term investors who are willing to accept risk in the short term stand to benefit from allocating a portion of their capital to the equity markets.

The right mix of stocks and bonds will be different for each client. It will depend on each client's risk tolerance and investment objectives. Please don't hesitate to schedule a meeting (or a phone call if you're not in the NYC area) to discuss your particular situation in greater detail.

Additionally, we have settled into our new offices (it's been two years now!) and are planning to host a series of small dinners with clients at our headquarters to discuss our outlook on the markets and touch on any topics clients think are important for their financial well-being. If you are interested in joining, or have specific topics you would like to see us address, please get in touch!

And thank you, again, for entrusting us with your investment capital.

Sincerely,

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