2023 Investment Outlook

Aftershocks

"Inflation remains well above our longer-run goal of 2.0%. The inflation data received so far for October and November show a welcome reduction in the monthly pace of price increases but it will take substantially more evidence to give confidence that inflation is on a sustained downward path. With today's action, we have raised interest rates by 4.25% this year. We continue to anticipate that ongoing increases in the target Fed Funds rate will remain appropriate in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2% over time."

- Jerome Powell - Chair, U.S. Federal Reserve

""Earnings don't move the overall market; it's the Federal Reserve Board... focus on the central banks and focus on the movement of liquidity... most people in the market are looking for earnings and conventional measures. It's liquidity that moves market."

- Stan Druckenmiller - Duquesne Capital

"We never know where we are going, but we ought to know where we are. The bottom line for me is that, in many ways, conditions at this moment are overwhelmingly different from – and mostly less favorable than – those of the post-Global Financial Crisis climate."

- Howard Marks - Oaktree Capital

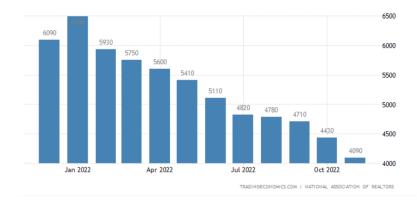
An earthquake is the scariest and most unnerving of weather related disasters because they occur unexpectedly and usually with no advance warning. Most earthquakes last less than 30 seconds but are highly destructive events, depending on the magnitude of the earthquake, as measured by the Richter scale. However, it's the aftershocks that can be even more unsettling. Even though they are usually smaller in scale than the main earthquake, aftershocks become highly anticipated events but whose timing is uncertain. There is also the chance that the first earthquake was just a prelude to a bigger one to follow. Aftershocks are akin to watching a horror movie where the plot is progressing and the viewer knows one of the main character's screen time is going to end soon but doesn't know who it will be or when it will happen.

2022 was a major earthquake for global investors, the first major bear market for financial assets since the 2008 Global Financial Crisis. Inflationary pressures forced the U.S. Federal Reserve (Fed) and other global central banks to reverse long standing, accommodative monetary policy conditions and substantially raise interest rates. It was the pace and size of the interest rate hikes, the largest since 1980, that created the backdrop for large negative returns for both stock and bond returns. Now that a major financial markets earthquake has occurred, 2023 will be about the financial aftershocks to follow. How many financial aftershocks occur and the magnitude of each one will keep investors on edge during 2023.

Historically, it would take 12 to 18 months after the Fed starts increasing interest rates for the impact of higher interest rates to work through the financial system and start to negatively impact the U.S. economy. The Fed typically increases interest rates in 0.25% increments but very high and persistent inflation forced the Fed to act more aggressively and move at a faster pace because they waited too long to act. Since the Fed began raising interest rates in March 2022, it increased interest rates in unusually large increments,

including four 0.75% hikes in a row. The Fed's decision to front load interest rate hikes, a total of 4.25% over just nine months, has had a faster impact on the U.S. economy compared to past interest rate hiking cycles.

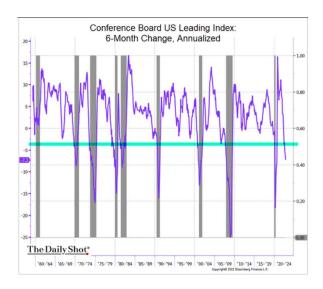
The housing market is a great example of how this economic cycle is playing out faster and with more immediate negative effect. Because the Fed raised interest by 4.25% during 2022, mortgages rates also rose dramatically. Cheap financing quickly turned into expensive financing as the 30-year fixed mortgage rate increased from 3.0% at the beginning of 2022 to nearly 7% before the end of 2022. The rising cost of borrowing to purchase a home has had a large negative impact on the U.S. housing market. As shown in the next chart from the National Association of Realtors, existing homes sales plunged by 35% over the course of 2022.



The slowdown in the housing market is also reflected in new homes traffic data. The next chart on the left from the National Association of Homebuilders survey shows buyer traffic (green line) for new homes plunged during 2022. The data since 1985 shows how buyer traffic and new build housing prices are tightly correlated. If the cost of a monthly mortgage more than doubles, it will significantly impact the number of people that can afford a home at all price points, as shown in the housing affordability index chart on the right. The buyer traffic and affordability data suggests housing prices should see more pressure in 2023, particularly since the Fed has announced additional interest rate hikes are warranted and that it intends to hold interest rates higher for longer. Since housing is typically the largest asset for most Americans, declining home prices will have a negative impact on consumer confidence and spending, creating a potential aftershock risk to the U.S. economy for 2023.

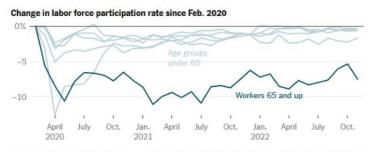


For the broader U.S. economy, the following chart of the Conference Board's leading economic indicators index is showing a significant slowdown over the past six months, another sign that the Fed's large interest rate hikes are having a faster impact on economic activity. Past recessionary periods (grey sections) show larger declines in the leading indicators index than the current decline. As of now, the U.S. is not officially considered to be in a recession. However, the magnitude and pace of the Fed's interest rate hikes during 2022 means there is a strong probability there will be more economic aftershocks in the months ahead. For example, the ISM manufacturing index released on January 4th came in at 48.4. The 50 level is the demarcation between growth and contraction so the manufacturing segment of the economy is now in contraction. The ISM Services reading for December released on January 6th was 49.8, down substantially from the prior month's reading of 56.5 and now also in contraction territory.



A major reason the U.S. economy may avoid a recession is because the jobs market has remained steady and despite a notable slowdown in economic activity in recent months. The U.S. jobs market has shown surprising resiliency and continues to post monthly job gains although the December Non-Farm Payrolls of 223,000 job gains was the lowest monthly reading in two years. However, recent weekly unemployment claims data remains low and the December unemployment rate was 3.5%, the same level it was at before the Covid-19 pandemic began in early 2020. The JOLTS data, which captures the number of job openings nationally, remains very elevated at 10.5 million jobs available or 1.72 jobs for every unemployed worker.

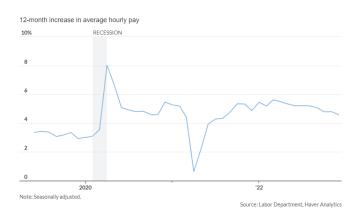
The tight labor market has surprised many economists and the Fed but the following chart helps to explain why the jobs market remains extremely tight. The far left of the chart shows the plunge in employment when the C-19 pandemic hit and how the jobs recovery has played out through the end of 2022. All age groups under age 65 have recovered and most are back to levels prior to March 2020. The dark line at the bottom represents workers ages 65 and older. This age cohort is still significantly below the labor force participation rate prior to the start of the C-19 pandemic. Many over age 65 have elected not to return to the workforce, either due to retirement or deciding not to work due to concerns over C-19 risks. There is also a strong demographic wave of Baby Boomers born between 1946 to 1964 hitting retirement age over the next six years that will keep labor supply tight unless the U.S changes its immigration policies. It is important to note that the Fed hiking interest rates can't change the labor supply situation but it will impact labor demand. For now, the under supply of labor is a bigger issue and may mean employment holds up better than most expect as employers may be inclined to retain workers given that finding qualified candidates for job openings remains a challenge.



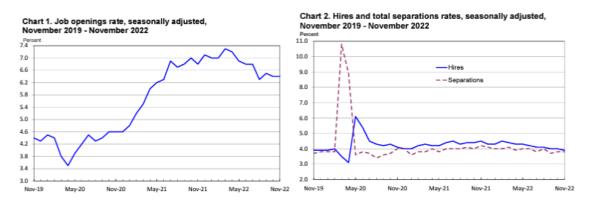
Note: Data is seasonally adjusted. - Source: Bureau of Labor Statistics - By The New York Times

Source: The New York Times

The Fed continues to raise interest rates due to tight labor market conditions and the wage inflation associated with it. The next chart shows average hourly pay on a rolling 12-month basis, with the latest reading for December coming in at 4.6%. Wage gains are still strong (although real wage gains after 7% inflation are negative) but starting to decelerate from March 2022 when annual wage gains peaked at 5.6%. William Dudley, the former head of the N.Y. Federal Reserve Bank, believes it will take an unemployment rate of 4.5% to 5.0% (currently 3.5%) to cool wage inflation down to the 3% to 4% level, which would require monthly job gains to fall below 100,000 per month over a period of time to be achieved.



The next two charts from the Bureau of Labor Statistics shows the job openings (left) compared to the hiring and separations (right) data. A few months after the C-19 pandemic started, the hiring market recovered and has remained strong with separations consistently below new hires. Many workers switched jobs to increase wages during this time of elevated inflation and family budgets being under pressure. The job openings data has softened in recent months but is still very elevated, meaning there are still plenty of jobs available. Even with the economy weakening, the large number of job openings could mean that there will be fewer layoffs in an economic downturn since many businesses have been understaffed for some time. The low weekly unemployment claims data currently supports this view. When the job market softens enough and hirings drop below the separations is probably when wage inflation pressures will ease further. For now, the strong job market and wage inflation are a key focus of the Fed and its current bias to raise interest rates. The Fed's December meeting minutes showed it intends to hold interest rates at a higher level for all of 2023, which would be another reason for more potential aftershocks to occur, especially if accompanied by a more substantial economic slowdown or recession.



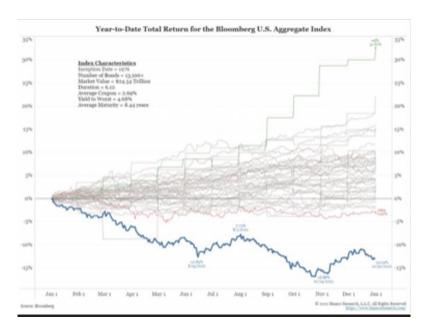
Source: Bureau of Labor Statistics

With the broad U.S. stock market down nearly 20% and the broad U.S. bond market returning -13% during 2022, a traditional 60% stock / 40% bond balanced portfolio had its 3rd worse annual decline since 1950 with only 1974 and 2008 having larger declines. The next chart plots the combination of annual stock and bond returns going back to 1871 and shows how much of an outlier 2022 (red dot, lower left) was for balanced portfolios. It is an exceptionally rare event for both stocks and bonds to generate double digit negative returns in the same year. The vast majority of annual stock and bond return combinations fall in the upper right of the graph, which represents positive returns for both stocks and bonds. Even in years when stock returns are negative, bonds usually have positive returns, as shown in the return observations in the upper left portion of the chart. Since 1871, there were only two other years when both stocks and bonds had negative returns in the same year.



Bonds suffered the proverbial off the Richter scale financial earthquake event in 2022, one of the worst years for bonds in history. The 2022 bond market was akin to the 1906 earthquake that hit San Francisco with the resulting fires destroying 80% of the city. The next chart shows the annual returns of the Bloomberg Aggregate Bond Index since 1976 with each year represented by one line. The blue line at the bottom was 2022 and shows that bonds had the worst return of the past 46 years and by a considerable margin. Even though bond yields were at very low levels at the beginning of 2022 and the risk/return setup

for bonds was unattractive, absolutely no one anticipated this outcome because no one expected the Fed and other central banks to raise interest rates as aggressively as they did during 2022. The 4.25% increase in interest rates during 2022 was the largest annual increase since 1980. Even more defensive balanced portfolios with higher allocations to fixed income than stocks could not avoid double-digit declines last year.

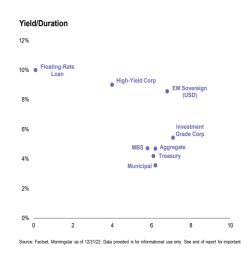


The next table on the left provides a more complete breakout of the entire U.S. bond market by various sectors and maturities. The 2022 return column shows that only very short maturity bonds were able to eke out positive returns while very long maturity bonds were decimated, down 30% to 40%, and many other segments of the bond market were down over 10%. The trailing 3-year return column shows many bond categories have negative returns and some bond categories have negative returns for the trailing 5-year period. Bond investors are not accustomed to bonds generating negative returns over three years, much less for five years.

As bad as 2022 was for bond investors, all bond segments now offer much improved yield opportunities for 2023. The next chart on the right shows the current yields available for the major fixed income sectors. The U.S. Aggregate Bond, which represents the broad investment grade bond market, now has a yield 4.6%, more than double the yield level one year ago. U.S. investment grade corporate bonds now yield 5.4%. Riskier bond categories like emerging markets local currency debt and U.S. high yield debt now offer yields above 8.0%. For investors in a traditional 60/40 balanced portfolio, the 40% of the portfolio allocated to bonds is more likely to deliver positive returns in 2023, barring the continuation of elevated inflation readings. Persistent and elevated inflation data would be the aftershock scenario for bond investors. However, given recent declines in the CPI inflation readings over the past three months and the input prices declines evident in recent ISM data, such an outcome appears to be a low probability.

| @CharlieBilello | Bond ETFs: Durations, Yields and Returns | | | | | | |
|-------------------------------------|--|---------------------|---------------------|--------------------------------|--------|--------|---------|
| Data Source: YCharts as of 12/31/22 | | | | Total Returns (>1 Year = Ann.) | | | |
| Category | Ticker | Duration (Years) | 30-Day SEC Yield | 2022 | 3-Year | 5-Year | 10-Year |
| 1-3 Month Treasury | BIL | 0.1 | 3.8% | 1.4% | 0.6% | 1.1% | 0.6% |
| Floating Rate IG | FLOT | 0.1 | 4.8% | 1.3% | 0.9% | 1.6% | 1.2% |
| Short Duration IG | GSY | 0.6 | 4.2% | 0.0% | 0.6% | 1.5% | 1.4% |
| Leveraged Loans | BKLN | 0.1 | 6.3% | -2.5% | 0.5% | 1.9% | 2.2% |
| 1-3 Year Treasury | SHY | 1.9 | 4.3% | -3.9% | -0.6% | 0.6% | 0.5% |
| Municipal | MUB | 6.4 | 3.2% | -7.3% | -0.6% | 1.2% | 1.9% |
| 3-7 Year Treasury | IEI | 4.5 | 3.8% | -9.5% | -2.0% | 0.2% | 0.6% |
| EM Local Currency | EMLC | 4.7 | 7.0% | -10.6% | -5.8% | -3.2% | -2.6% |
| US High Yield | HYG | 4.0 | 7.9% | -11.0% | -1.2% | 1.5% | 2.9% |
| Commercial Mortgage | CMBS | 4.5 | 3.7% | -11.2% | -2.1% | 0.5% | 1.2% |
| Mortgage Backed | MBB | 6.3 | 2.8% | -11.7% | -3.3% | -0.6% | 0.6% |
| Inflation Protected | TIP | 6.8 | 6.4% | -12.2% | 0.9% | 1.9% | 0.9% |
| International | BNDX | 7.6 | 2.9% | -12.8% | -3.7% | -0.2% | N/A |
| US Aggregate | AGG | 6.3 | 4.0% | -13.0% | -2.9% | -0.1% | 1.0% |
| EM High Yield | HYEM | 3.5 | 8.7% | -13.4% | -2.9% | -0.1% | 2.2% |
| 7-10 Year Treasury | IEF | 7.8 | 3.6% | -15.2% | -3.5% | -0.3% | 0.5% |
| US Investment Grade | LQD | 8.3 | 5.2% | -17.9% | -3.8% | 0.2% | 1.8% |
| EM Sovereign (USD) | EMB | 7.3 | 6.8% | -18.6% | -5.7% | -1.8% | 0.9% |
| 20+ Year Treasury | TLT | 17.6 | 3.9% | -31.2% | -8.4% | -2.7% | 0.2% |
| 25+ Zeros | ZROZ | 26.5 | 3.5% | -41.3% | -12.0% | -4.3% | 0.1% |

Source: Charlie Bilello



Even though the risk/return setup for bonds is more attractive, the return outlook for stocks is much less certain. Just as the Fed's ultra-low interest rates and Quantitative Easing policies drove financial assets higher from 2009 through 2021, the Fed's significant reversal of liquidity support via higher interest rates and Quantitative Tightening during 2022 has the complete opposite effect on stocks. The 2022 stock market decline was about valuation contraction as the S&P 500 Index Price/Earnings (PE) multiple declined from 21.2X at the start of 2022 to 16.7X by year-end. If there is a recession during 2023, the next aftershock for stocks will come from lower corporate earnings estimates. The market is already anticipating that 2023 earnings will be lower than 2022 given the ongoing slowdown in economic data but the two most important questions yet to be answered are how much will corporate earnings decline and what is the potential impact on stock prices?

The next table provides a framework for answering these questions and shows different levels of earnings for the S&P 500 Index. The first line shows the current 2022 S&P 500 Index operating earnings estimate of \$218.44/share (the sum of all stocks in the S&P 500 Index). Assuming 2023 has 0% earnings growth and using the last 25-year average PE of 16.7X for U.S. stocks, then fair value of the S&P 500 Index using these assumptions would be 3,647.95. When this table was created, the S&P 500 Index level was trading at 3,830 so 3,647.95 represents a 4.7% decline from that level. Unless investors are willing to pay a PE multiple higher than 16.7X for stocks, 0% earnings growth offers negative return prospects for U.S. stocks.

| Earnings Decline In 2023 | 2023 S&P Earnings | X 25-Year Average PE Of 16.7 | Decline From Current Level |
|-----------------------------|----------------------|---------------------------------|-------------------------------|
| 0% | \$218.44 | \$3,647.95 | 4.7% |
| 5% | \$207.52 | \$3,465.55 | 9.5% |
| 10% | \$196.60 | \$3,283.15 | 14.3% |
| 13% | \$190.04 | \$3,173.71 | 17.1% |
| 15% | \$185.67 | \$3,100.76 | 19.0% |
| 20% | \$174.75 | \$2,918.36 | 23.8% |

(Source: DK S&P 500 Valuation Tool, Blue-Chip Consensus, Bloomberg)

The remaining lines in the table show various levels of earnings decline for 2023 starting at -5% and down to -20%. These different earnings growth outcomes reflect the potential size of the aftershocks that may arise under different recession scenarios. Assuming the S&P 500 PE multiple holds at the 25-year average of 16.7X, the far right column shows the potential return decline at each level of earnings growth decline. It should be noted that during recessions, investors typically pay a lower PE multiple for stocks because lower earnings makes stocks less valuable as a result.

Even though U.S. stocks experienced a nearly 20% decline in 2022, the U.S. economy is not yet considered to be in a recession. The current Blue Chip consensus estimate for 4Q22 real GDP growth is forecast to be slightly positive. Since the impact on the economy of monetary policy moves occurs with a lag and the Fed expects to make additional interest rate increases, the odds of a recession should increase as 2023 progresses. The ISM readings for December are a sign of decelerating economic growth and indicate more aftershocks may be coming in the months ahead.

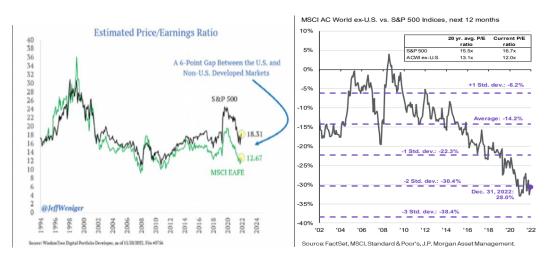
The table below shows how the S&P 500 Index has performed during bull (positive) and bear (negative) markets over the past century. The left side are bull markets, which typically last an average of 51 months and generate an average return of 162%. On the right side are bear markets, which shows they are much shorter in duration than bull markets, with an average length of 20 months and an average decline of 41%. The bear market of 2022 is defined as the January 2022 top to the October 2022 low or nine months. If the U.S economy does officially enter a recession in 2023, history suggests there is potential for more declines ahead for U.S. stocks. It is interesting to note that at the stock market peak in January 2022, the S&P 500 Index level reached 4,797. It would take a 27% gain from the 12/31/22 index level to get back to the prior market peak. In a low growth or negative economic growth scenario for 2023, and with the Fed still raising interest rates, that outcome is highly unlikely to happen.

Bull and bear markets

| Bull markets | | | Bear markets | | | |
|--------------------|-------------|----------------------|----------------|--------------|-----------------------|--|
| Bull begin date | Bull return | Duration (months) | Market peak | Bear return* | Duration (months)* | |
| Jul 1926 | 152% | 37 | Sep 1929 | -86% | 32 | |
| Mar 1935 | 129% | 23 | Mar 1937 | -60% | 61 | |
| Apr 1942 | 158% | 49 | May 1946 | -30% | 36 | |
| Jun 1949 | 267% | 85 | Aug 1956 | -22% | 14 | |
| Oct 1960 | 39% | 13 | Dec 1961 | -28% | 6 | |
| Oct 1962 | 76% | 39 | Feb 1966 | -22% | 7 | |
| Oct 1966 | 48% | 25 | Nov 1968 | -36% | 17 | |
| May 1970 | 74% | 31 | Jan 1973 | -48% | 20 | |
| Mar 1978 | 62% | 32 | Nov 1980 | -27% | 20 | |
| Aug 1982 | 229% | 60 | Aug 1987 | -34% | 3 | |
| Oct 1990 | 417% | 113 | Mar 2000 | -49% | 30 | |
| Oct 2002 | 101% | 60 | Oct 2007 | -57% | 17 | |
| Mar 2009 | 401% | 131 | Feb 2020 | -34% | 1 | |
| Mar 2020 | 114% | 21 | Jan. 2022** | -25% | 9 | |
| Averages | 162% | 51 | - | -41% | 20 | |

Source: Factset, NBER, Robert Shiller, Standard & Poor's, JP Morgan

For investors with a global investment perspective, non-U.S. stocks offer a more compelling risk/reward setup than U.S. stocks. The left chart below shows the PE valuation spread between the S&P 500 Index (black line) and MSCI EAFE Index of developed markets non-U.S. stocks (green line) reached unusually wide levels in recent years. The right side chart indicates how extreme the relative PE valuation relationship has become with non-U.S. stocks trading at a 28% discount compared to the 20-year average PE discount of 14%. The Fed's zero interest rate and QE policies in response to the C-19 pandemic had a much greater positive impact on U.S. stocks, especially technology stocks, causing the PE multiple valuation gap to reach extreme levels. In a rising interest rate environment, U.S. stocks with higher valuations have more headwinds than non-U.S. stocks with lower valuations. In 2022, non-U.S. stocks outperformed U.S. stocks by nearly 5% and it may be the early innings of this trend continuing in 2023.



Summary

With the Fed stating last month that additional interest rate increases are warranted, there is a strong likelihood of more aftershocks to come in 2023 as higher interest rates put more downward pressure on U.S. economic growth. How the job market and wage inflation data plays out will dictate future Fed policy moves but the Fed's own internal forecasts indicate it is close to ending its interest rate hiking policy after another 0.5% to 0.75% of interest rate hikes. Once the Fed steps to the sidelines, the PE multiple compression pressure that U.S. stocks experienced during 2022 from higher interest rates will abate but corporate earnings will then take center stage in 2023. The magnitude of an economic slowdown and the resulting impact on corporate earnings growth will be a key storyline for 2023 and makes for a challenging risk/reward setup for U.S. stocks as does improved return opportunities in others asset classes. Cheaper valuations and higher dividend yields favor non-U.S. stocks on a relative basis, especially if the Fed maintains interest rates at higher levels for longer. Rising interest rates have been mostly discounted in bond prices. As long as the recent trend of weakening inflationary pressures continues, fixed income investors should experience much improved and positive returns during 2023 given higher yields now available. Even cash is no longer trash, with the average money market yield now near 4% and set to go higher as the Fed raises interest rates.

Mark J. Majka, CFA Chief Investment Officer

January 12, 2023

IMPORTANT DISCLAIMER:

This report and all content on mjminvtadvisors.com is presented for educational and/or entertainment purposes only. Under no circumstances should it be mistaken for professional investment advice, nor is it intended to be taken as such. The commentary and other contents simply reflect the opinion of the author alone on the current and future status of the markets and various economies. It is subject to error and change without notice. The presence of a link to a website does not indicate approval or endorsement of that web site or any services, products, or opinions that may be offered by them. Neither the information nor any opinion expressed constitutes a solicitation to buy or sell any securities or investments. Do NOT ever purchase any security or investment without doing your own and sufficient research. None of the parties adding to or affecting the content of mjminvtadvisors.com in any way shall have any liability for any loss sustained by anyone who has relied on the information contained herein. Neither mjminvtadvisors.com nor any of its principals or contributors are under any obligation to update or keep current the information contained herein. The principals and related parties of mjminvtadvisors.com may at times have positions in the securities or investments referred to and may make purchases or sales of these securities and investments. The analysis contained is based on both technical and fundamental research. Although the information contained is derived from sources that are believed to be reliable, they cannot be guaranteed.

FAIR USE NOTICE: mjminvtadvisors.com and reports downloaded from the site contain copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available in our efforts to advance understanding of issues of economic and social significance. We believe this constitutes a 'fair use' of any such copyrighted material as provided for in section 107 of the U.S. Copyright Law. In accordance with Title 17 U.S.C. Section 107, the material on the site and in reports downloaded from the site is distributed without profit. If you wish to use copyrighted material from this site for purposes of your own that go beyond 'fair use', you must obtain permission from the copyright owner.