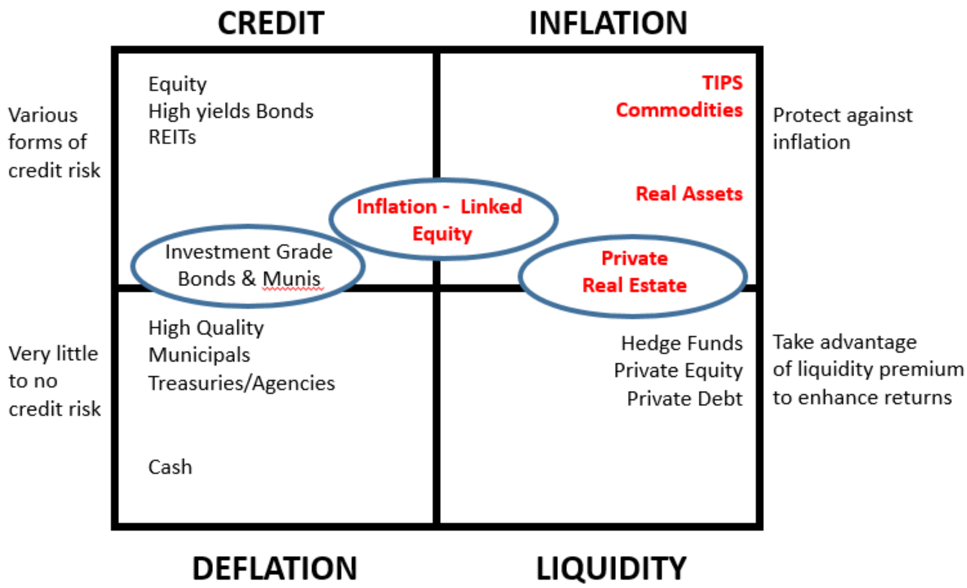
Lynx Investment Advisory

Should We Be Worried About Inflation?

As we approach a full decade after the global financial crisis of 2008, discussions and headlines abound regarding global growth concerns, and fighting deflation by maintaining enough monetary stimulus until certain inflationary targets are met are still ongoing. This is especially prevalent in Europe where such concerns are most acute. Here in the U.S. we have reversed the monetary stimulus tide by raising the Fed funds rate twice, most recently on December 14th, but inflation news has been mostly in the background.

While we do not know when the tide will turn on inflation, we believe it will, and that investors should be prepared. Wage pressures are already rising in the U.S. with unemployment close to a ten-year low as the job market continues to improve. The Treasury breakeven rate, which is the market's expectation of annual inflation over the next ten years, has climbed from 1.6% in September to 1.97% as of this writing. Furthermore, President-elect Trump has telegraphed an aggressive stimulus through tax cuts and infrastructure spending, along with protectionist policies, all potentially inflationary.

As asset allocators concerned about risk, we should be aware of these trends and hedge portfolios to the extent possible. As our clients know, Lynx has maintained an inflation-linked bucket for most of our client accounts, designed to hedge against unanticipated inflation, and in some cases, global uncertainty. With the benefit of twenty-twenty hindsight, there were certainly more productive uses of capital during the last few years than protecting against inflation. But predicting trends is not the point of strategic asset allocation, it is to protect against as many scenarios and shocks as possible. Please see the chart below which illustrates how we view inflation and other risks within an asset allocation framework.



It is important to recognize inflation hedging as part of any strategic asset allocation policy. A properly allocated portfolio, especially one with ongoing spending needs, should address unexpected risks of inflation, deflation, and properly identify the amount of credit risk that is inherent in the underlying investment. It is also important to recognize the potential overlap between the various buckets; inflation hedging assets can offer downside protection in times of crisis, e.g. through gold bullion or Treasury Inflation Securities, or also carry credit risk, through commodity linked equities, MLPs, etc.

The goal of this paper is not to predict when inflation will occur, but to test traditional inflation hedging paradigms by examining historical patterns and correlations to inflation, or Consumer Price Index (CPI) data. And to be clear, the emphasis is on protecting against unexpected inflation which reduces the universe of effective asset classes dramatically.

We have identified certain assets/asset classes that have historically been viewed as investments that react positively to inflation data. Here are just a few that come to mind: broad-based commodities, Treasury Inflation Protected Securities (TIPs), REITS and oil. Are these supported by real data or just perceptions?

We ran a series of correlation studies of these assets, and many more, against CPI (please see chart below of a select few). *

	US CPI NSA	US CPI Less Food & Energy NSA
S&P 500 REITS Sector Index	0.07	-0.06
WTI Cushing Crude Oil Spot Price	0.39	0.14
Barclays US TIPS 0-5Y Total Return Index	0.30	0.06
S&P GS Commodities Total Return Index	0.40	0.13
Case-Shiller U.S. Home Price NSA Index	0.27	0.01

1/1/2003 to 12/20/2016

	US CPI NSA	US CPI Less Food & Energy NSA
S&P 500 REITS Sector Index	0.11	-0.05
WTI Cushing Crude Oil Spot Price	0.39	0.18
Barclays US TIPS 0-5Y Total Return Index	0.31	0.06
S&P GS Commodities Total Return Index	0.40	0.14
Case-Shiller U.S. Home Price NSA Index	0.31	0.06

1/1/2003 to 12/31/2010

Source: Bloomberg

To review, the range of statistical correlations is between -1 to +1. +1 indicates a perfect positive correlation, meaning two variables always move together in the same direction. -1 indicates a perfect negative relationship, two variables always move in opposite directions. A zero correlation indicates no relationship whatsoever. We begin to pay attention when two asset classes exhibit +/- .30 to .50, which indicates a reasonable correlation in either direction. Looking at the correlations against headline CPI (including food and energy), TIPs, commodities, to some extent home prices, and of course, oil, exhibit meaningful correlations to inflation for the time periods indicated. We wanted to test the correlations by removing the last several years, which were dominated by quantitative easing on the part of the Fed, causing many assets to move in tandem. Somewhat surprisingly, the results for both periods were similar, which underscores the consistency of relationship between headline inflation and these asset classes. The correlations against core CPI (less food and energy) are less compelling, but we would argue that headline CPI is more significant for our study given the importance of food and energy to our daily lives.

To summarize, our study concludes that the most effective asset classes to hedge against inflation are commodities, certain real assets such as oil and private real estate, and TIPs. We tested REITs against common perceptions and the statistics indicate that they are not effective hedges against unexpected inflation. While REITS come in many flavors, including hotel, residential, and retail, just to name a few, they vary in their ability to raise rents or leases as an inflationary tool. We have found that this has not translated into investors' experience when unexpected inflation materializes. The intuition behind this is as follows. REITS by structure must distribute at least 90% of their earnings to investors, which means that investors rely on these investments for income as well as appreciation. When inflation expectations change, yield oriented investments generally sell-off in anticipation of tighter monetary policy on the part of the Fed. Since REITs are mostly purchased for yield, we would expect a significant initial adverse reaction to rising rates.

Eventually, REITs would benefit from rent and lease escalators after inflation has been priced in, but only after the initial shock from rising rates has worn off.

In conclusion, referring to our asset allocation framework above, we believe investors should hedge against unexpected inflation by having some combination of commodities/real assets and inflation protected securities whether in the form of individual TIPs or ETFs such as TIPS and TDTT. The percentages will depend on several factors, overall time horizon, spending needs, and risk tolerance. Investors with income and spending needs, such as foundations and other non-profits, may require more from the inflation hedging bucket to offset inflation risk in bonds and other yield sensitive investments.

*While a longer term analysis would have been desired, we were constrained by the dearth of availability of certain index data.