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THE INFLATION PENDULUM

It's not good to have too much or too little inflation. But trying to get a huge pendulum the size of the U.S. economy to settle in the middle is very difficult. What does this challenge mean for investors?

Earlier this year, U.S. consumer price inflation (CPI) moved above expectations. It heightened the possibility the Federal Reserve may raise interest rates faster than anticipated if the upward trend in inflation continues. The Fed's preferred gauge of inflation, the core PCE price index, is also inching up. The Fed welcomes the notion of inflation moving upward toward its 2% target, and it's unlikely that it will be swayed off its course of raising interest rates because of a single inflation reading. But a series of readings above expectations may encourage the Fed to raise interest rates more aggressively.

Consequently, investors have very quickly turned their attention to increasing inflation and the possibility that the Fed may raise interest rates at a faster pace and to a higher level than previously expected.

Inflation affects both fixed income and equity markets

To understand how inflation expectations affect markets, it's important to have a conceptual understanding of the methodology behind the composition of bond yields and equity market valuations.

The yield an investor receives on a bond with a 10-year maturity is a combination of five things:

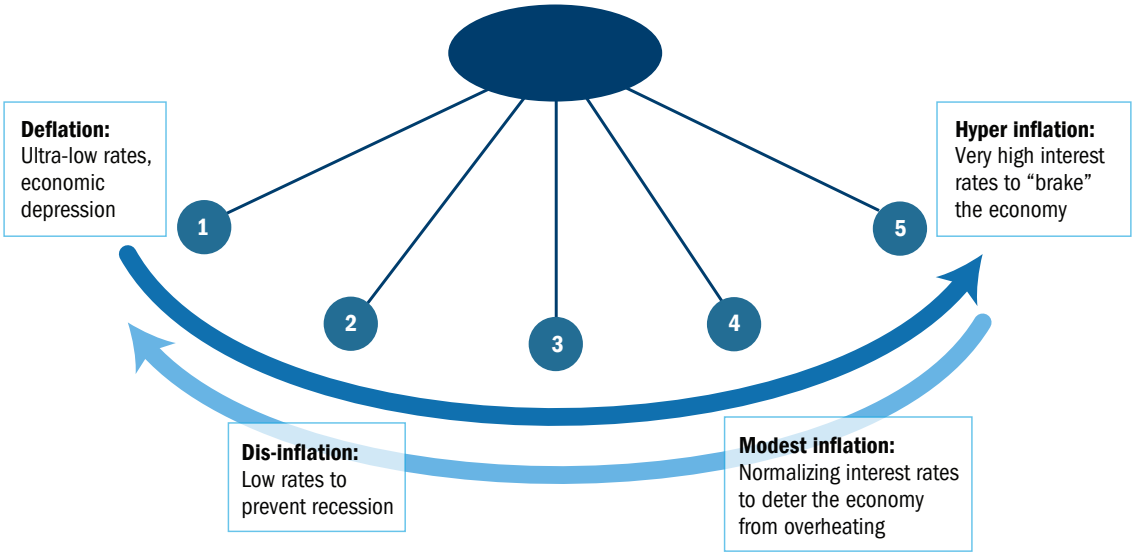
- The current short-term interest rate, determined by the Fed
- Investors' expectations of changes to the Fed's short-term interest rate policy
- A premium to compensate for the risk of changes in inflation, which could erode investment values over the lifespan of the bond more than currently anticipated.
- A premium for the unknown risks an investor takes over the life of the bond, known as the term premium. Predicting what will happen 10 years from now is very difficult, so the yield on a 10-year bond tends to be higher than a 2- or 5-year bond.
- The relative attractiveness of other asset classes. Regardless of the sum of the first four inputs, if investors don't find the resulting yield attractive, they will not purchase the bonds. Yields should rise to reach an equilibrium with investor expectations to attract investors. It could be argued this is covered above, but I think it's important to isolate this consideration.

If expectations about inflation are changing, then investors face uncertainty in all of the above. The resulting bond yield is also a factor in determining the value of equity markets. Equity market valuation is based on forward-looking assumptions on corporate earnings growth discounted by a combination of long-term bond yields and a premium for the equity investors' uncertainty compared with the "guaranteed" nominal returns that fixed-income investors receive from U.S. Treasury bonds. This premium is rather unimaginatively known as the equity risk premia. **Therefore, given the importance of bond yields to equity valuation, equity investors are affected by potential changes in bond yields just as much as fixed-income investors.**

Finding the right level of inflation

Inflation is a tricky issue for monetary authorities and investors. The economy and corporate earnings generally do well in times of moderate inflation because prices and wages rise, but there's a lag that allows corporate profits to rise first. Too much or too little inflation is a bad thing, but trying to get a huge pendulum the size of the U.S. economy to settle in the middle is very difficult. There are just too many forces to assume the whole system can be stable. It inevitably moves through a pendulum's swing, requiring the Fed to adjust the level of interest rates.

The inflation pendulum



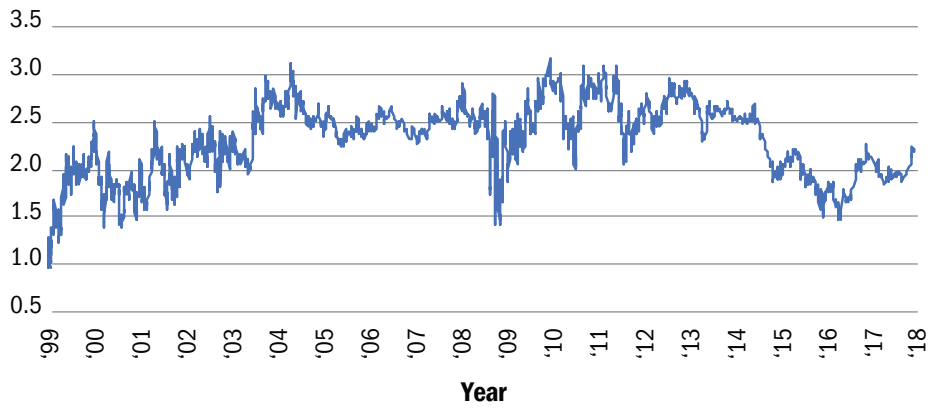
Source: Columbia Threadneedle Investments

What are investors' expectations for inflation?

Investors are clearly expecting inflation to be higher than one or two years ago, but expectations are moderate by longer term historical standards. The drop in energy prices from mid-2014 to early 2016 set inflation expectations back to the levels we saw after the 2008 financial crisis, and it has yet to be fully reversed. I would say current inflation expectations are around position 4 on the pendulum (modest inflation), which is not a particularly troublesome spot for equities.

Below is a chart of forward break-evens, derived from the difference in the real 5-year yield of Treasury Inflation-Protected Securities (TIPS) and nominal 5-year yield on Treasury bonds, which is an indicator the Fed looks at. The idea is to give a sense of longer term inflation expectations, as embedded in the nominal and inflation protected Treasury curves.

Five-year breakeven inflation rate, five years forward (%)



Source: Columbia Threadneedle Investments and Bloomberg as of 02/22/18.

The markets have somewhat priced in the possibility that higher inflation could lead to higher interest rates, which leaves less room for surprising results. For example:

- The number of times the Fed is expected to increase interest rates in 2018 has risen from one to three, with a 20% probability of a fourth increase this year.
- The yield on 2-year Treasury bonds is 20 basis points (or 0.20%) higher today than the yield on 10-year Treasury bonds was six months ago.
- Nominal interest rates, which are the rates before taking inflation into account, are approximately 90 basis points higher whereas real interest rates are approximately 55 basis points higher.
- The term premium has started to move higher in the last six months (although it's still negative).

What remains to be fully tested is whether the shift to higher nominal and real interest rates is compatible with the high valuation of risk-sensitive assets such as equities, investment-grade corporate bonds and high-yield bonds. It's a battle of two narratives:

On one hand, U.S. and global growth is positive and improving. Corporate earnings estimates are growing and default rates on bonds are low. Leverage is high but on the margin is improving, and debt coverage ratios are manageable. On the other hand, interest rates above a certain threshold (3.50% to 4%) may make current equity valuations and credit premiums on bonds look unsustainable.

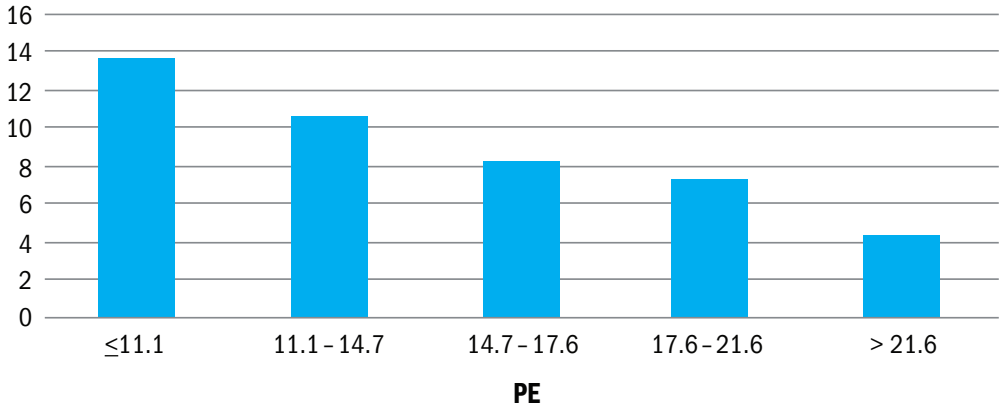
Before considering the merits of these respective narratives, it's important to ask if investors or the Fed have the same degree of certainty about the level of inflation generated by economic activity that we did historically. Secular trends in demographics, increasing automation and the deflationary impact of technological change may make it harder to know if the traditional theories we learn about in economic textbooks still work as expected. Financial markets are embarking on a journey without a map, which may mean that we should have a bigger risk premium to compensate for the increasing uncertainty.

How will the Fed and investors react moving forward?

Considering where inflation currently sits on the pendulum, we can contemplate how the Fed and investors may react to expectations of higher inflation:

- ***The Fed will likely increase interest rates.*** Since much of government, consumer and corporate activity relies on short and long-term borrowing (from credit cards to mortgages) raising the borrowing cost through higher interest rates tends to slow down economic activity.
- ***The debate will heat up on when and by how much the Fed will increase interest rates.*** Both elements are important. Faster, larger changes are generally more disruptive than smaller, less frequent adjustments. It's analogous to braking: If you make slow adjustments as you approach an obstacle instead of slam on the breaks, the car is more stable.
- ***Investors will demand a higher yield to compensate for inflation eroding the value of their capital.*** Because it's difficult to keep the inflation pendulum in the middle, investors assume it's on an upward swing. They think that the momentum may continue for a while and demand a higher yield.
- ***Uncertainty will increase.*** The simple acknowledgement of an interest rate regime change after several years of predicable policy causes uncertainty. Foreign investors have the added complication of anticipating changes in exchange rates. Since the global financial crisis, we've had continual accommodative monetary policy and little decisive fiscal policy. Today, we have a significant shift in fiscal policy from recent tax changes coupled with planned infrastructure stimulus at a time when U.S. monetary policy is tightening.
- ***The relative attractiveness of bonds will increase as yields rise.*** This is particularly true if equities are expensive and either offer low returns, fall in value and/or are increasingly volatile. The current Schiller PE (a cyclically adjusted measure of valuation), per our estimation, is 31. The chart below shows that, at that level, equity investors should expect modest single digit returns on average over the next 10 years. Consequently, if 10-year bond yields rise above 3%, investor preference for bonds versus equities may change.

Average S&P 500 Index 10-year forward return at different cyclically adjusted PE levels (%)



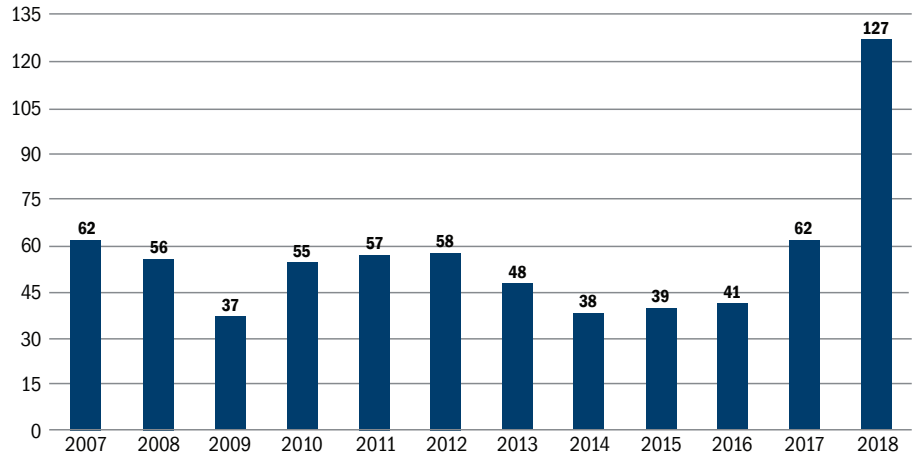
Source: Columbia Threadneedle Investments as of January 31, 2018

A closer look at equities: What are research analysts seeing?

We've already covered how rising inflation, and therefore yields, in isolation are a negative thing for equity valuations. However, yields can't be considered in isolation because earnings growth and confidence (which are compensated for through the equity risk premium) must also be considered. As previously noted, modest wage and price growth is generally good for corporate earnings and the economy. Both growth expectations and confidence are improving, outweighing the effect of rising bond yields on equity valuation.

Recently, confidence in corporate earnings growth has been bolstered by solid economic growth, which has been bolstered by policy actions from Washington. Lower corporate tax rates have resulted in significantly positive revisions to corporate earnings. The chart below highlights that the number of companies issuing positive earnings reports is by far the highest it's been in the last decade.

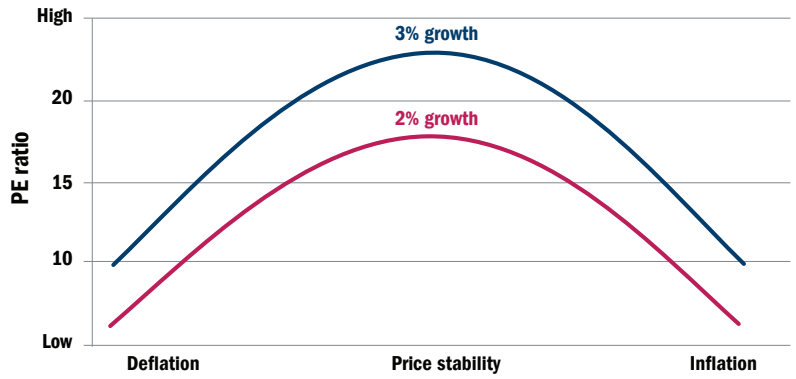
Number of S&P 500 Index companies issuing positive earnings guidance



Source: Columbia Threadneedle Investments and FactSet as of February 15, 2018

The story is still developing, but our research team notes that commentary during the most recent company earnings calls strongly suggest that the largest holders of overseas cash plan to repatriate a significant amount back to the U.S. At a minimum, we view this as an additional modest tailwind to earnings. A poll of Columbia Threadneedle analysts reveals management teams across most industries have turned universally positive, supported by expectations of continued modest growth and benefits from corporate tax reform. Indeed, history suggests rising yields initially support higher equity valuations. The following chart shows that with nearly 3% growth, inflation near the middle of the pendulum can support higher equity valuations.

Effect of growth and inflation on equity valuations



Source: © 2018, Cresmont Research (cresmontresearch.com)

The equity market may be volatile as investors process the interest rate regime change. But ultimately, the normalization of monetary policy is a signal that the economy is on a stable foundation for growth. If inflation and yields keep rising, then equity valuations will eventually suffer because investors anticipate a level of interest rates designed to slow down the economy (somewhere between position 4 and 5 of the pendulum).

Bottom line

Hitting the right inflation target can be a tricky thing and a challenge for investors. In the current environment, although inflation appears to be increasing, it's still not likely to cause 10-year yields to rise to levels that would be problematic for equities. I estimate a problematic level to be a 4% yield, rather than the current 2.9%.

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*In U.S. dollars as of December 31, 2017. Source: Ameriprise Q4 Earnings Release. Contact us for more current data.

The Standard and Poor's (S&P) 500 Index tracks the performance of 500 widely held, large-capitalization stocks.

The core PCE index is personal consumption expenditures (PCE) prices excluding food and energy prices.

A basis point is 1/100th of a percentage.

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