MACKENZIE Investments | CONFIDENCE IN A CHANGING WORLD

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High Stock Valuations can Persist in the Absence of Inflation

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Key Takeaways

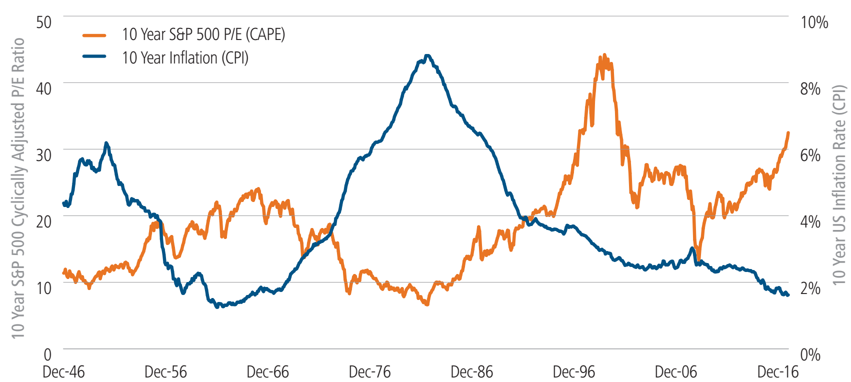
- Current valuations relative to inflation are in line with 100 years of history: when inflation has been low, valuations have been high.
- Inflation has been trending down for the last 40 years, for reasons that may be structural in nature.
- The sustainability of valuations, in our view, is likely tied to the sustainability of the low-inflation environment. We think valuations will continue to adjust to changes in inflation.

In our Market Insights article titled "Are Stocks Richly Valued" (March 2017) we concluded that current market valuations appeared to be reasonable given they were within the historical range when looking at the S&P 500 CAPE (cyclically adjusted price earnings) ratio relative to 10-year inflation rates. In addition, the post-2009 market cycle has been fuelled by earnings growth, not simply multiple expansions, providing foundational support to valuations. If inflation were to go up substantially, we believe market valuations may come under considerable pressure. However, so far this cycle inflation has been unusually low for reasons that may be structural in nature, suggesting that valuations may remain high and potentially grind higher from here.

Revisiting the Inverse Relationship Between Valuations and Inflation

There is a mathematical relationship between market valuations and inflation which provides a rationale for high or low valuations. The chart below shows that the S&P 500 CAPE ratio moves inversely with inflation: when inflation is high, P/E values are low and when inflation is low, P/E values are high.

Another way to view it, when a GIC is yielding 1% instead of 10%, investors will pay more for stocks and stock dividends. Regardless of whether asset price moves are fully or only partially a response to low inflation, it seems reasonable to assume that rising inflation will put downward pressure on asset prices. Understanding the relationship between valuations and inflation provides the backdrop for what we are seeing now: valuations that continue to move higher relentlessly.



Source: Robert Shiller. http://www.econ.yale.edu/~shiller/data.htm. As of December 31, 2017.

What Causes Inflation?

When thinking about the causes of inflation it is helpful to split the economy into monetary and physical (demand and supply) components. We'll start by focusing on the monetary side of the equation. Often monetary policy is viewed as the key determinant of longer-term inflation rates. This view generally comes from fairly simple models of the economy and the clearly correct view that if all else is held constant, a significant increase in the amount of money in the economy should drive prices up. Trivially, if we assume that the number of dollars everyone has doubles tomorrow (say every dollar is split in two and everyone is paid twice as much), then prices should also double rapidly, offsetting the increase. This suggests that inflation should be fairly simple for central banks to control. If they want higher inflation they simply need to increase the supply of money. The problem with this theory is that the amount of money in the economy, and the level of demand for money, is heavily influenced by the broader financial system, not just central bank policies.

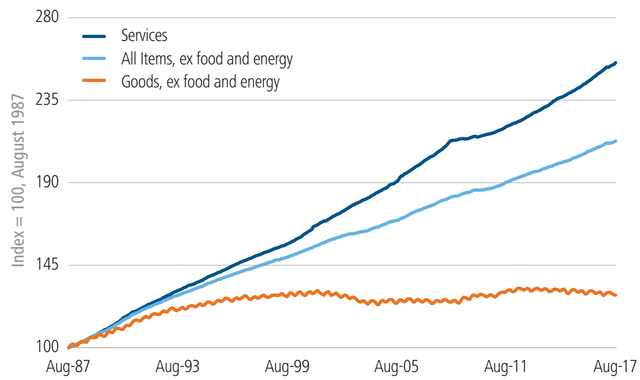
Think about how much money you can access at any time. It's driven by far more than central bank decisions. The value of your assets and the willingness of lenders to provide financing ("tightness of lending") are likely greater determinants. One of the challenges central banks have faced since the global financial crisis, particularly in the United States, is that consumers and banks were repairing their balance sheets and were less willing and able to borrow and lend. This reduced the effectiveness of monetary policy relative to central bank forecasts.

There is also a physical aspect to inflation and it is often missing in simple economic models. Most episodes of severe inflation are touched off by a change on the supply side of the economy. Events like wars and natural disasters have often led to price spikes as the demand for goods abruptly exceeds the reduced capacity of the economy. More recently, we suspect that the supply side has been working in the opposite direction and pushing prices down. After the global financial crisis, there was considerable excess capacity globally as companies had planned for higher levels of demand. Additionally, technological change (e.g., the impact of Amazon.com on retail prices and the impact of Netflix and Google on media) has created deflationary pressures as has the fall in energy prices.

Goods Inflation Near Zero!

There is an additional element to the inflation story that is worth noting. When we look at economic data over the past two decades, there is a striking gap between the inflation rate of goods, which is near zero, and that of services, which has been running at around 2-3% (see chart below). With the rise of outsourcing, goods tend to be produced globally while services tend to remain more local in nature. We suspect that this provides more opportunity for pricing power in service businesses as it limits competition. As a result, we have been favouring service companies, particularly in our non-Canadian investments, as they have enjoyed a mild pricing tailwind.

US Core Inflation: 30 Years



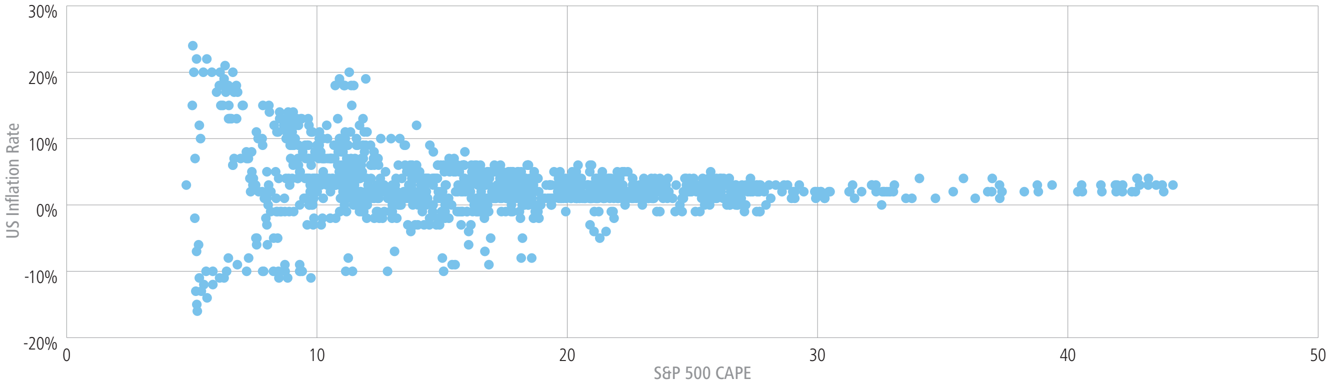
Source: Federal Reserve Bank of St. Louis, Consumer Price Index for All Urban Consumers: Services, All Items Less Food and Energy, Commodities Less Food and Energy Commodities. Data as of August 2017.

To forecast inflation, we would need to correctly predict the relative strength of the monetary and physical sides of the economy, which in our minds is too complex to model. As a result, rather than forecasting, we rely on our companies to tell us what is happening with pricing and costs in their businesses. In addition, we monitor wage inflation because we believe that sustainable inflation is difficult to achieve if incomes are not rising, as consumers will be unable to pay higher prices. To date, we have not seen a meaningful acceleration in inflation in developed markets.

A Clue Valuations can Grind Higher

We continue to monitor inflation but until we see signs of something changing on the inflation and/or economic front, history suggests that valuations can go higher yet. The graph below shows 100 years of market history plotting the S&P 500 CAPE on the horizontal axis relative to 1-year inflation rates on the vertical axis. We see the CAPE has been pushed out close to 45 times earnings as inflation neared zero. We don't believe things are different this time. We think investors continue to adjust to high valuations, a result of low inflation and GIC rates. The sustainability of valuations, in our view, is likely tied to the sustainability of the low-inflation environment. If inflation begins to creep upwards, we expect that equity market valuations will come under pressure.

10-Year Rolling S&P 500 CAPE vs 1-Year US Inflation Rate over 100 Years



Source: Robert Shiller. http://www.econ.yale.edu/~shiller/data.htm. As of December 31, 2017.

At this point, despite the upwards drift in market valuations, we remain almost fully invested. From a medium-term perspective, we suspect that any significant increase in inflation risk will quickly be choked off by central banks. Despite slower than historic global growth and weak current inflation, central banks, led by the US Federal Reserve, have already begun to tighten credit conditions. Given that debt levels remain elevated globally, we suspect that the economy is more sensitive to higher interest rates than in the past and that a sustained tightening cycle will slow growth and inflation, potentially tipping the global economy back into recession.

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