Investment Note

For professional and institutional investors, 9 May 2018

What happens when inflation and rates go up?

In late April we saw the US 10-Year Treasury yield broke above 3%. There has been a lot of discussion in the past weeks regarding the increase in yields across the US Treasury curve. More specifically, the discussion has centered on how the yield curve continues to flatten and whether that will be, as it has been in the past, a signal of an oncoming recession. In this investment note, Philip Petursson, Chief Investment Strategist and the Capital Markets & Strategy Team of Manulife Investments discuss why they expect inflation and the US 10-year Treasury yield to trend higher through 2018. They also share what this scenario would mean to investors' return in 2018.

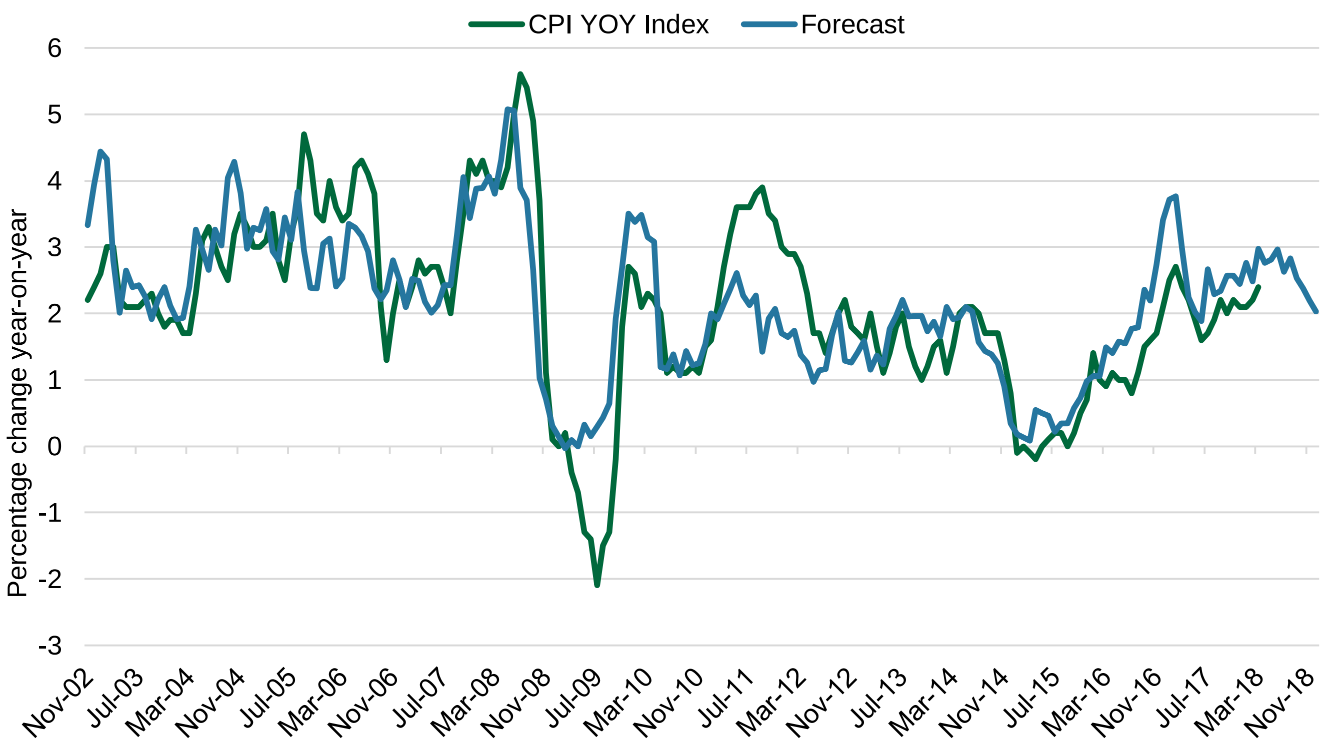
The stock market today is a textbook case of what happens when inflation and rates go up

In late April we saw the US 10-Year Treasury yield break above 3%. There has been a lot of discussion in the past weeks regarding the increase in yields across the US Treasury curve. More specifically, the discussion has centered on how the yield curve continues to flatten and whether that will be, as it has been in the past, a signal of an oncoming recession. To this subject our thoughts are that yes, the yield curve will continue to flatten over the course of next year and yes, it will signal an oncoming recession. The flattening of the yield curve is typical for this stage of the business cycle, rate cycle and market cycle. Historically as the Fed raises rates in response to higher inflation the entire yield curve shifts higher, it flattens as the short end rises faster than the long end, and eventually inverts. However, that is the wrong discussion for today.

In our view, we believe the earliest we may start to see recessionary pressures bubble to the surface is at least 12 months away. Using data going back 40 years each recession was preceded by an inverted yield curve. However, a recession, on average, occurred approximately 15 months following an inversion. Meanwhile, the S&P 500 Index peaked at an average of 11 months following an inversion. Given that we are not yet even at an inverted yield curve, while paying attention to its shape is important, the debate about what it might mean is premature at best and pointless at worst as we believe it will, as it has in the past, indicate an oncoming recessionary environment.

So, if not the shape of the yield curve and the potential for a recession then what should we be paying attention to? Simple, a rising inflation environment and a rising rate environment put downward pressure on stock market valuations. To that end we say the recent volatility in the equity market following the increase in inflation and ascent of the 10-year yield is textbook.

Chart 1: Forecast US CPI versus Actual US CPI[1]



Historically, as inflation rises, as it has, to its current level of 2.4% year on year (as measured by the Consumer Price Index)[2] and, as the Federal Reserve raises rates, the trailing price-to-earning (PE) multiple of the S&P 500 Index tends to fall. So, the response by the equity markets to the 10-year yield rising regardless of whether it is 2.5%, 3% or 3.5% as it may yet be, shouldn't come as a surprise to anyone. Nor should a rising interest rate environment turn investors more cautious or defensive in the near term. In fact, we believe the volatility caused by an increase in rates creates an opportunity for investors to redeploy assets into equities.

This is because the equity markets tend to overshoot – to the upside and downside. In this case we believe an overreaction in markets to the downside in adjusting valuation for a higher rate environment opens an opportunity to add to equities. Our expectation is that any valuation contraction will be more than offset by strong earnings growth over the course of the year.

Here is what we expect over the remainder of 2018.

Inflation will continue to accelerate towards 3% year on year

The CPI is a lagging indicator. It tells us what the trend for inflation was over the past 12 months. Rather we would like to focus on where inflation is going in the coming 12 months as this has more bearing on the direction of the federal funds rate and yield curve. Our inflation model would suggest that we continue to see headline CPI accelerate through to the middle of the year before the base effects take it

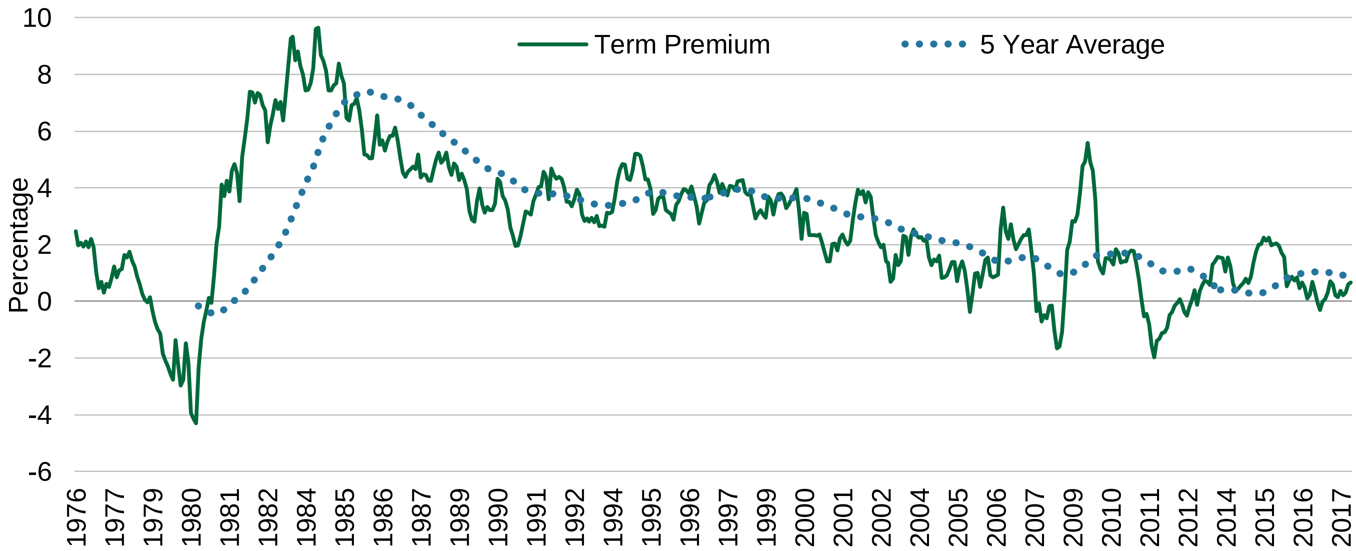
[1] Source: Bloomberg, Manulife Investments, as of 31 March 2018.
[2] Source: Bureau of Labor Statistics, US Department of Labor, 13 April 2018.

lower by year end. However, we believe inflation will continue to accelerate through the year on wage pressure given a continued tight labour market. At the very least it would not surprise us to see CPI above 2.5% and possibly near 2.8% by the middle of summer.

The US 10-Year Treasury Yield will continue to shift higher towards 3.25%-3.5%

The US 10-Year Treasury yield currently sits just under 3% at time of writing.[3] Based on the most recent 5-year average term premium of 90 basis points (bps) (10-year yield over CPI) we believe the US 10-Year Treasury yield will continue to climb towards 3.25% and potentially 3.5%. The current 10-year yield sits approximately 60 bps above CPI. If we assume the term premium normalises to its 5-year average the 10-year yield should be at 3.3%. If we assume inflation trends higher to 2.8% as we noted above then our expectation for the US 10-year yield using a static term premium is 3.4%. In either case, we expect the US 10-year Treasury yield to trend higher through 2018.

Chart 2: Term premium (US 10-year yield less CPI), 1976 to current[4]



S&P 500 Index trailing multiples will contract, and will be offset by earnings growth

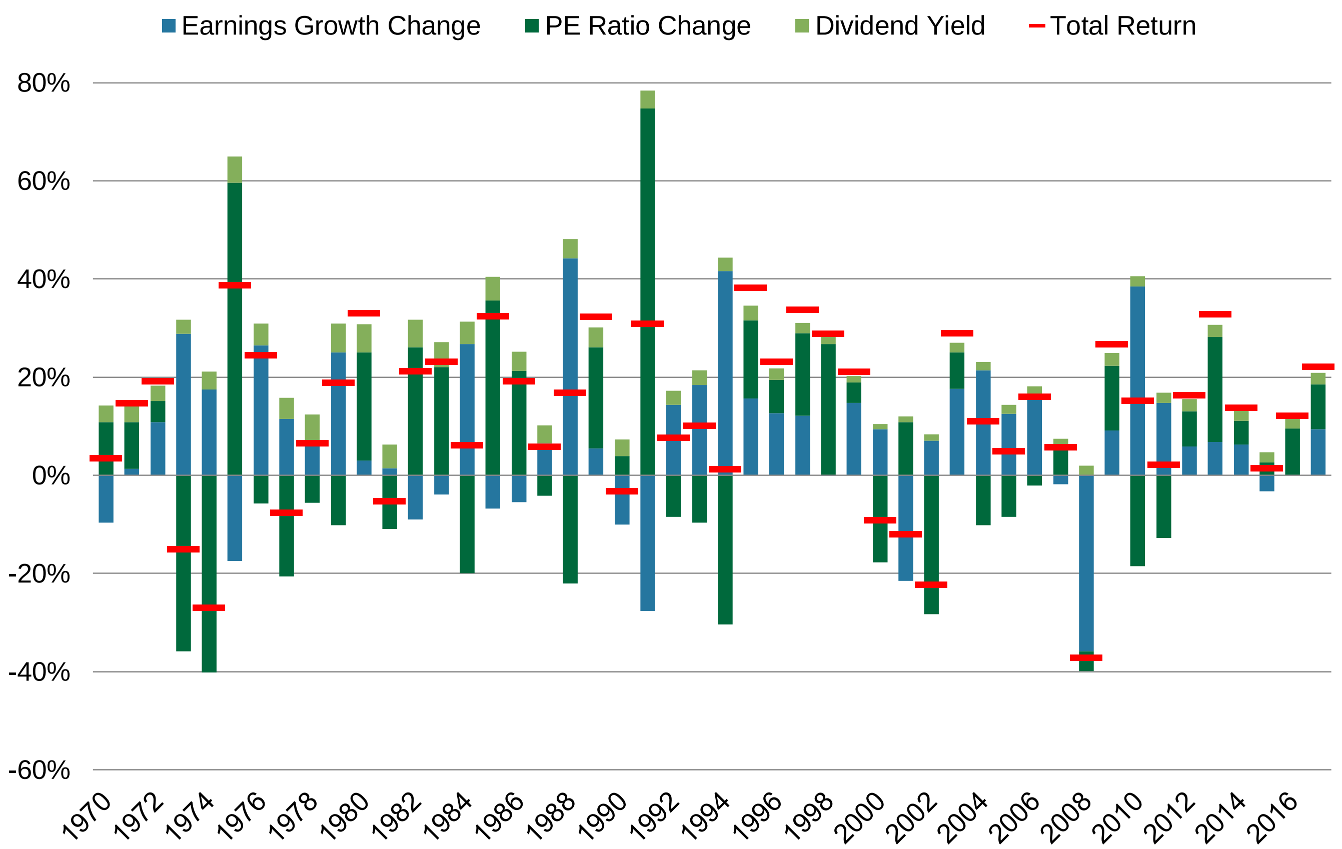
This is our third assumption in what is an otherwise textbook move by markets. We believe equity markets are full or near-fully valued and will be sensitive to a rising inflationary and rising rate environment. The current market situation is reminiscent of 2004. . In 2004, the Fed started its tightening cycle in response to an accelerating inflationary environment. The PE multiple for the S&P 500 Index

[3] Source: Bloomberg, as of 4 May 2018.
[4] Bloomberg, Manulife Investments as of 25 April 2018.

contracted in 2004 by 2.1 points on a trailing basis. 2004 also saw an exceptionally strong year for earnings growth which offset the PE contraction to deliver a total return of 10.9%.

We believe 2018 will be a similar environment of rising inflation, rising rates, contracting PE multiples, but ultimately a positive return for investors driven by strong earnings growth.

Chart 3: Contribution to return by earnings growth, price-to-earnings (PE) ratio and dividends (1970 to 2017)[5]



[5] Source: Bloomberg, Manulife Investments as of 31 December 2017.