Centre Funds Insight – Spring/Summer 2016 Market Review & Outlook – U.S. Treasuries

Interest rate changes are driven by real growth – the demand for loans – and inflation concerns or expectations – as investors expect bond yields to provide some defense against higher future prices. Our discipline (the Interest Rate Scorecard^{SM}) utilizes indicators of growth, inflation expectations and market price based measures of current bond market valuation. The valuation measures are intended to reflect the investor psychology that drives market prices too far at both peaks and troughs.

In the six month period ended March 31, 2016, real growth (GDP adjusted for inflation) at 1.4 percent during the fourth quarter of 2015 disappointed as it came in below current estimates of the U.S. economy's growth potential. Less than stellar growth seemed to reflect, in part, hesitancy on the part of businesses to invest in new facilities. This hesitancy could reflect uncertainty about the sustainability of the recovery, the current business tax environment, and weak demand from the U.S.' main trading partners. The Institute for Supply Management (ISM) Report on Business for Manufacturing[1] actually indicated the manufacturing sector was in contraction during most of the six month time period. And, while consumer spending continued to support overall growth it also subsided somewhat in the year's last quarter.

While the data for real GDP and the manufacturing sector were troubling, other growth related data were more positive. Labor force activity continued to improve with new hiring at a pace – 200,000 per month on average – that in our view is likely to, at least for a short period, carry the unemployment rate below its sustainable level NAIRU (non-accelerating inflation rate of unemployment) of 5 percent. It actually dipped to 4.9 percent at one point before moving marginally higher to 5 percent in the March 2016 reporting period. Additionally, residential building and new home construction, continued to improve though it remains below the "bubble" rate that preceded the "Great Recession." New car sales reached a record level in 2015 and the pace of sales in early 2016 looks strong. Finally, real disposable income grew at a healthy clip in early 2016 though much of it was used for saving or debt reduction rather than for spending. These positive factors – primarily labor force activity – were the basis for the decision on the part of the Federal Reserve's Open Market Committee (FOMC) to begin the process of policy normalization. The Fed began the process with the initial increase of 25 basis points in the target for the federal funds rate which had been at its "zero lower bound" for an extended time period.

On the inflation front, the Federal Reserve's preferred gauge – the price deflator for personal consumption expenditures less food and energy (defined as "core" inflation) – continues at a run rate below the Fed's 2 percent target. Research provided to FOMC members argued that a strong U.S. dollar and the significant decline in energy prices were major contributors to the slow pace of inflation as they found their way into the production costs of "core" goods and services. While the length of time required for these factors to reverse and for inflation to move toward the Fed's target remains a question for policy makers, the view was that the impact of these factors on inflation was transitory. Not surprisingly, inflation expectations, whether Survey or market based, remained well anchored and "too low" – below 2 percent. Fed Chair Janet Yellen commented in various testimonies and speeches that, given the importance of expectations in the actual inflation outcome, Fed policy must be aimed at moving expectations above current levels.

The Interest Rate Scorecard^{SM} is a monthly publication of Centre Asset Management featuring an assessment and analysis of the macroeconomic environment and policy implications for the bond market based on Centre's proprietary investment discipline.

[1] The ISM Manufacturing Index is an index based on surveys of more than 300 manufacturing firms by the Institute of Supply Management. The ISM Manufacturing Index monitors employment, production inventories, new orders and supplier deliveries. A composite diffusion index is created that monitors conditions in national manufacturing based on the data from these surveys.

Low inflation expectations kept down the inflation premium in nominal yields. However, rates exhibited volatile behavior – the yield on the benchmark Constant Maturity 10-year U.S. Treasury fluctuated between 1.6 and 2.4 percent – as investors tried to sort out both the growth related data and the likely future path of monetary policy. Historically, there has been a positive and statistically significant correlation between the federal funds rate and the 10-year U.S. Treasury note yield though it is not clear whether this correlation reflects a market reaction to Fed tightening or Fed validation of existing rate levels or causality running in both directions.

The Interest Rate Scorecard℠ we use reflected the mixed messages from both the data and the Fed and was generally market neutral during the period, earning the portfolio's current yield when no clear and lasting trend in rates had been identified. However, the Scorecard℠ did indicate opportunities to be both negative and positive on the near-term outlook for bond prices during the six months.

Looking forward it seems likely that the U.S. economy will continue to grow at least for a while, that the real rate which serves as the base[2] for the nominal rates observed in the market place may be lower than its historical average, that inflation will begin to accelerate toward the 2 percent target rate, and that monetary policy will continue to be difficult to assess. Regarding growth, the economic trough or low point of the "Great Recession" is dated by the National Bureau of Economic Research (NBER) at June of 2009. So, this recovery is now "long in the tooth" based on historical averages. However, research focused on the relation between the likelihood of a recession and the length of the preceding recovery is consistent with the view that no relationship exists. Economic research over the years has offered many explanations as to why a business cycle might occur but the length of the recovery is not one of them – recoveries don't wear out.

In assessing the economy's current health – the base for future growth – the strength of labor market activity as measured by the official unemployment rate has been called into question. It has been suggested that it is artificially low because of the number of discouraged workers who have dropped out of the labor force and are no longer actively seeking a job and by those who are working part time because full time employment is not available. The seemingly slow pace of wage growth has also been identified as evidence that all is not well on the labor front. If labor force activity is in fact weaker than indicated, the U.S. economy might be more susceptible to a shock and might be pushed back into recession.

Currently, however, the momentum component of the Labor Market Conditions Index[3] at the Kansas City Federal Reserve Bank is positive – above its long term level. It reflects, in part, claims for unemployment insurance that have remained below 300,000 – a key level for labor market health – for the longest period since 1973. The level component is only marginally below its long term average and a major positive contributor to it recently has been the willingness of individuals to leave an existing job in search of a better opportunity – a sign of worker confidence. Additionally, changes in the Richmond Fed's Non-Employment index[4] – designed to capture the effect of labor force reentry – is consistent with the direction of

[2] The economist Irving Fisher posited (the Fisher Equation) that the interest rate (observed in the fixed income market) equals the real rate plus an inflation premium. This relationship provides the conceptual framework for the Interest Rate Scorecard**℠**.

[3] Labor Market Conditions Index (LMCI): An index that tracks changes in the labor market by finding variations from multiple labor indicators. Indicators range from unemployment rates to wages to layoffs to business surveys. The LMCI plays a critical role in helping the Fed with one of its two mandates: ensuring maximum employment.

[4] Richmond's Fed Non-employment Index: An index constructed by the Federal Reserve Bank of Richmond that captures resource utilization in the labor market.

improvement indicated by the official unemployment rate. Furthermore, the U6 unemployment rate[5], which tracks those marginally attached to the labor force as well as those able to find only part time work, has now fallen below 10 percent. While above its pre-crisis unemployment level of about 8 percent, it has declined steadily from its recession peak level of over 17 percent. A trade-off between the official unemployment rate and the U6 could actually be a positive for growth if it occurred as a result of "discouraged workers" again having the confidence to become "job seekers."

Disaggregating data on wage growth suggests that the overall "slowness" may well be attributable to the changing composition of employment. High wage earners did not experience the same degree of unemployment as low wage earners in the recession. As new jobs have been created and lower paid employees have again found work, the impact has been a slower pace of wage growth than might have been anticipated by the pace of hiring and the short term Phillips curve[6] relationship between labor force demand and wage growth. So, while unemployment might be overstated, the labor market seems healthy and continues to improve suggesting that at least for now positive growth will likely continue.

However our glasses are not "rose colored" and there are certainly areas of concern. Resources – both labor and capital – that are now unemployed because of the falloff in activity in the energy patch must be absorbed by other sectors. And, the possibility of a global recession – including the U.S. – can't be dismissed although we think the likelihood is relatively small. The sector primarily impacted by global demand – the manufacturing sector – now accounts for a relatively small percentage of U.S. GDP. And, the most recent ISM report offered some good news in that, at least for one month, the U.S. manufacturing has returned to expansion from contraction.

From a longer term perspective, real interest rates – interest rates adjusted for inflation – are governed by the economy's growth potential. Potential growth in turn is driven by labor force growth and the productivity of the labor force. ***The U.S.' growth potential is being reduced by slower labor force growth. This slowdown is being driven primarily by demographics*** – the aging of the U.S. population – although there could be some cyclical effect – discouraged workers – as well. ***There are also concerns about the slow pace of productivity growth in recent years***. In his recently published book The Rise and Fall of American Growth Economist Robert Gordon has argued that American growth will likely be at a reduced pace going forward as the benefits of existing technology have been exploited. Others have argued however, that the seeming slowdown is illusory because the current methodology for measuring productivity is flawed and that current living standards are not consistent with the slowdown hypothesis. And, still others have argued that the cycle for the exploitation of information related technological advancement in the production process takes longer than many people expected and that big returns will be forthcoming over the next several years.

Finally, while the magnitude of the impact is an issue, there is a view, popularized most recently by the academic authors Reinhart and Rogoff and outlined earlier by Fisher and Minsky, that recessions exacerbated by financial crises can have relatively long lasting effects on economic performance. This hypothesis has recently been examined by Michael Redmond and William Van Zandweghe "The Lasting Damage from the Financial Crisis to U.S. Productivity." The solution – better measurement or confirmation

5 This number reflects the government's "U-6" report, which accounts for the full unemployment picture including those "marginally attached to the labor force," plus those "employed part time for economic reasons."

6 Phillips Curve: An economic concept developed by A. W. Phillips stating that inflation and unemployment have a stable and inverse relationship. According to the Phillips curve, the lower an economy's rate of unemployment, the more rapidly wages paid to labor increase in that economy.

of an actual slowing – is important as the long term real rate of interest reflects potential growth and serves as a basis for Fed policy.

Various economists including Vasco Curdia and John Williams of the San Francisco Federal Reserve Bank have studied the implications of the slowdown in potential growth as well as other factors such as global risk aversion, the global savings glut and "shock factors" like the financial crisis on the "natural or neutral rate of interest". This concept, introduced by the economist Knut Wicksell in the late 1800s, is the real rate of interest that is consistent with full employment and price stability. It is the target in real – inflation adjusted – terms at which the Fed should aim in setting the target level for the federal funds rate – the basis for transmitting monetary policy to the economy. The research generally indicates that the natural rate is not constant – as assumed by John Taylor in formulating his Taylor Rule[7] for Fed policy guidance, has probably declined over time with the decline in the economy's potential growth rate, and can be affected in the short run by cyclical factors.

Janet Yellen has commented on the need for caution in the policy normalization process because of uncertainty as to the level of the natural rate-- it is not observable and must be estimated – to avoid taking an overly restrictive policy stance and cutting short the recovery. Looking forward, it appears that the natural rate is increasing – the U.S. economy is not in a state of secular stagnation – and that a reasonable forecast may be in the 3.5 to 4 percent (with inflation) range over the next two years. While somewhat less than its historical average, this level would indicate considerable further tightening and that significantly higher longer term yields lie ahead.

Regarding inflation, while monetary policy makers continue to pay lip service to Milton Friedman's assertion that the lags between changes in monetary policy and the resulting impact on economic conditions and inflation are "long and variable," an emphasis in policy deliberations remains on being "data dependent." Given the uncertainties surrounding discouraged workers, the headwinds from the strong dollar and weak growth overseas, well anchored inflation expectations and the uncertainty regarding the natural or neutral rate of interest, ***rate data dependency likely implies that the Fed will wait until it sees both overheating in the labor market and the "whites of inflation's eyes" before making significant tightening moves. Further, research on optimal policy responses suggests to us that overshooting of the inflation target may be optimal in speeding the removal of any remaining slack in the economy.***

At least one proponent of such an optimal policy estimates are that any remaining slack could be eliminated by 2016 year-end if the Fed were willing to experience an inflation rate above its target. Given a willingness to conduct policy in this fashion and the momentum in inflation once the process has begun, it seems likely that inflation could move beyond the Fed's two percent target exerting upward pressure on inflation expectations and, ultimately, through the inflation premium, on interest rates. It is important to note that while the Fed can control the front end of the yield curve, rates, starting at about the 2-year maturity, move on changing expectations of growth and inflation. An increase in inflation expectations would likely result in the general cyclical interest rate trend increasing.

Regarding monetary policy assessment, the Fed has started down the path of policy normalization and is unlikely to reverse course barring negative growth – Yellen also ruled out a policy of negative rates in the U.S. Additionally, she has stated the FOMC should be constrained by a fixed rule or policy guide such as the Taylor Rule. Without a clear policy rule or guide such as the Taylor Rule it will be difficult for investors to know how the concerns about growth overseas, the strength of the dollar, global financial market volatility and avoiding asset price bubbles interact with the Fed's dual mandate of maximum employment

[7] Taylor Rule: An interest rate forecasting model invented and perfected by famed economist John Taylor in 1992.

and price stability. Some evidence of this difficulty is provided by the changing probabilities assigned to further tightening this year by the federal funds futures market. The probabilities have fluctuated significantly but two more installments seem probable at this point. However, the current lack of policy clarity will likely produce continued rate volatility as investors attempt to sort out both the message in the data and the Fed's policy response. This volatility would likely increase the potential opportunities for the Fund to benefit from short-term deviations in interest rates.

Assuming continued economic recovery, an upward trajectory in rates is to be expected. However the trend will not be smooth and there will be opportunities to profit from neutral as well as bullish calls. Our investment discipline is designed to identify the risks and opportunities of both any trend and short term deviations in rate behavior utilizing measures of real growth, of inflation expectations, of current market valuation and of the course of Fed policy. It is intended to preserve capital in periods of significant rate increases by decreasing duration but with the flexibility to extend duration or re-enter the market when our discipline suggests lower rates are likely.

What is relevant to the potential success of our discipline for our Fund is that interest rates continue to exhibit cyclical volatility; the business cycle is not dead. Continued cyclical behavior will provide a basis for success even if the longer term equilibrium level of the economy's real rate – due to a reduced real growth potential – is lower. While panic buying can move rates dramatically for short time periods, rate behavior over time in driven by the business cycle.

The Centre Active U.S. Treasury Fund is intended to serve as a core fixed income investment. Over time, it is intended to provide the same yield as the Treasury market with attractive diversification benefits. In addition to its wealth accumulation and diversification objectives, the strategy readily accommodates both systematic and unforeseen cash needs, given the liquidity of the Treasury market. Furthermore, the utilization of Treasury securities within asset allocation provides attractive diversification properties, as the correlation[8] between Treasury market returns and those of the U.S. equity market is, historically, negative during recession related "bear" equity markets.

T. Kirkham Barneby

Fund Manager – Centre Active U.S. Treasury Fund

Investment Director – Fixed Income

Centre Asset Management, LLC

Disclosures

Investors should consider the investment objectives, risks, charges and expenses of the Funds carefully before investing.

To obtain a prospectus containing this and other information, please call 1-855-298 4236 or download the file from www.centrefunds.com. Read the prospectus carefully before you invest.

8 In the world of finance, a statistical measure of how two securities move in relation to each other. Correlations are used in advanced portfolio management.

There is no assurance that this investment philosophy will consistently lead to successful investing. An investment in the Funds involves risk, including loss of principal. Fixed-income securities are subject to repayment risk and the risk of price volatility due to interest rate sensitivity, market perception of the issuer's creditworthiness and general market conditions. As interest rates rise, the value of fixed-income securities typically declines. TIPS are long-duration assets, sensitive to changes in interest rates and, in the short term, can experience substantial fluctuations in price.

The statements and opinions expressed are those of T. Kirk Barneby and are as of the date of this report. All information is historical and not indicative of future results and subject to change. Reader should not assume that an investment in the securities mentioned was or would be profitable in the future. This information is not a recommendation to buy or sell. Past performance does not guarantee future results.

Diversification does not eliminate the risk of experiencing investment losses.

Centre Funds are distributed by ALPS Distributors, Inc. Centre Asset Management, LLC is not affiliated to ALPS Distributors, Inc.

The content of this document is part of the Centre Funds semiannual report covering the six-month period ending March 31, 2016.

T. Kirkham Barneby is a registered representative of ALPS Distributors, Inc.

DRX000528 Exp. 12/31/2016