

THE YIELD CURVE: DIFFERENT THIS TIME?



Ken Leech
Chief Investment Officer

“Have I missed the mark, or, like a true archer, do I strike my quarry? Or am I prophet of lies, a babbler from door to door?”

Ken Leech

- The Treasury yield curve has been the best predictor of all indicators that comprise the Leading Economic Indicators, yet yield-curve flattening is usually strongly resisted by market participants as a harbinger of economic weakness.
- In the flattening preceding 2000, the yield curve was pushed aside because “this time was different.” In 2004- 2006, it was questioned as a “conundrum,” followed by a theory of this-time-it-is-different. Now the way to explain away the yield curve is the enormous buying of government bonds globally by central.
- Despite the change in expectations in Fed policy — favorable for the short end of the yield curve — the back end of the yield curve has rallied even more.
- Our strategy has been to overweight the back end of the yield curve.
- We don’t believe the Fed will raise rates until a few specific conditions are met. We think the Fed is right to be cautious.

This document reflects the opinions, views and analysis of Western Asset regarding conditions in the economy and markets, which are subject to change, and may differ from those of other professional investment managers.



KEN LEECH
Chief Investment Officer

Market Commentary

AUGUST 2016

Executive Summary

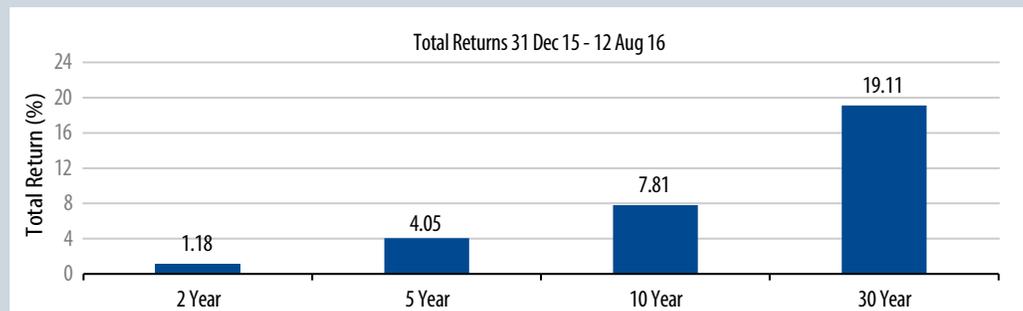
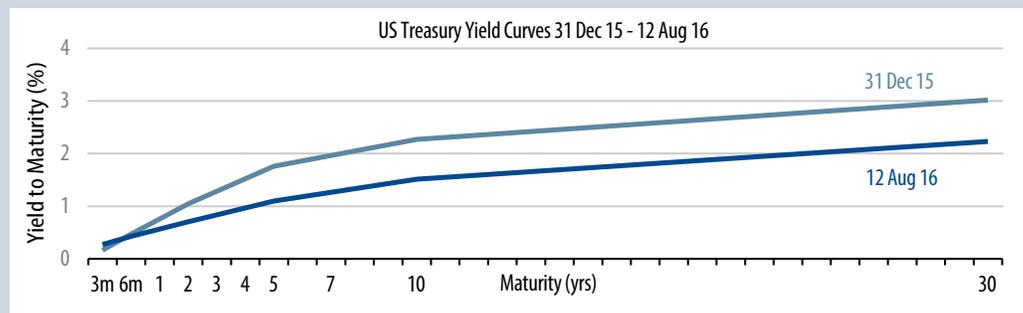
- The Treasury yield curve has been the best predictor of all indicators that comprise the Leading Economic Indicators, yet yield-curve flattening is usually strongly resisted by market participants as a harbinger of economic weakness.
- In the flattening preceding 2000, the yield curve was pushed aside because “this time was different.” In 2004-2006, it was questioned as a “conundrum,” followed by a theory of this-time-it-is-different. Now the way to explain away the yield curve is the enormous buying of government bonds globally by central banks.
- Despite the change in expectations in Fed policy—favorable for the short end of the yield curve—the back end of the yield curve has rallied even more.
- Our strategy has been to overweight the back end of the yield curve.
- We don’t believe the Fed will raise rates until a few specific conditions are met. We think the Fed is right to be cautious.

Have I missed the mark, or, like a true archer, do I strike my quarry? Or am I prophet of lies, a babler from door to door?

~ Cassandra. Aeschylus, Agamemnon 1194

I was recently asked, as part of a panel, to speak to the issue of the flattening yield curve¹. I pointed out that the yield curve is often known as the “Cassandra” of leading indicators. For those of you who remember your mythology, Cassandra’s fate was always to be right, but never to be believed. The Treasury yield curve has been the best predictor of all indicators that comprise the Leading Economic Indicators, yet yield-curve flattening is usually strongly resisted by market participants as a harbinger of economic weakness. After all, flattening usually occurs when the central bank is tightening (because of a view of oncoming strength), while the back end of the curve performs better, suggesting weakness. The central bank in question is in touch with all the available economic data, and it is promoting tightening because the current economic release is firm, clearly implying that if the back end of the curve is performing better, such pessimism must be misplaced. The central bank is moving rates up when the market is trying to move them down. In order to be correct, the central bank has to argue that the back end of the curve is either “wrong,” or driven by other factors. Historical record suggests the market gets this right a high percentage of the time.

Exhibit 1
Change in Yields and YTD Total Returns on US Yield Curve



Source: Bloomberg. As August 12, 2016. **Past performance is no guarantee of future results.** This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

In the flattening preceding the 2000 recession, the yield curve was pushed aside because “this time was different.” Business models based on the revolutionary internet would propel growth while Federal Reserve (Fed)² tightening would have only a modest effect given the enormity of the fast growing return on equity or ROEs³ of the “new economy.” In 2004-2006, the yield curve was questioned at first as a “conundrum.” This was followed by the theory of this-time-it-is-different because of the “global savings glut.”

Currently, the favored way to explain away the yield curve is the unprecedented and enormous buying of government bonds globally by central banks (though a thoughtful examination of central bank policy would acknowledge that short-term rates have been meaningfully suppressed, leaving open the alternative possibility that the yield curve could be even flatter). But the two previous episodes ended in recessions, suggesting that at the least, the yield curve is sending an extremely cautionary signal. While my fellow panelists were polite in acknowledging these points, each went on to explain why this time, it truly is different.

The Fed raised the funds rate 25 basis points (bps)⁴ in December of last year and indicated four more to come in just 2016 alone. Events have changed this plan, and so far the Fed has stood pat. Despite the change in expectations in Fed policy, which has been favorable for the short end of the yield curve, the back end of the yield curve has rallied even more. The flattening effect of this year’s yield curve move can be seen in Exhibit 1 along with the commensurate total returns.

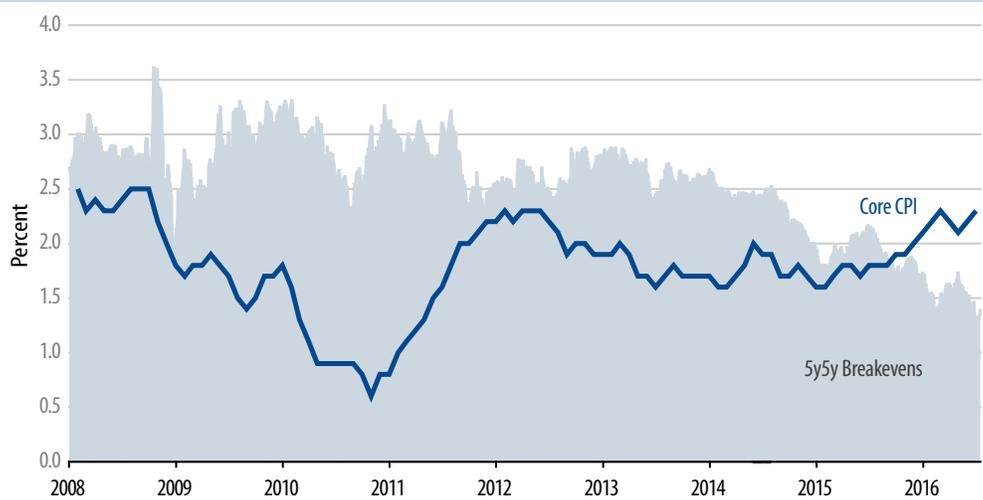
Our strategy has been to overweight the back end of the yield curve. We believe having extra-long maturity Treasury duration⁵ is an important portfolio asset in conjunction with overweights to spread products⁶. While we believe growth is slow but sustainable, we also believe we need to heed the message of the yield curve and protect against downside risks. We are positioned for an economic recovery. We also understand, however, that in the global economy there are strong deflationary⁷ winds blowing, and an important diversified strategy entails owning long Treasury assets.

This approach of risk management is not completely dissimilar to the latest pronouncements by the Fed, as it has endorsed a much more opportunistic approach to Fed policy. Our view is that the Fed would like to raise rates and is looking for an opportunity if all the stars align. If growth is sufficient, if financial conditions are well behaved, and if inflation expectations rise, the Fed will look to hike rates again. But the Fed has two main challenges.

First, growth just won’t cooperate. This year’s growth rate has only been 1%, and it has only been 1.2% over the last year. The Fed has been looking for growth to come in solidly above 2%. Its optimism on growth, as it has been for each of the last five years, has been misplaced. We believe the U.S. economy is running at roughly 1.5%, but with risks to the downside.

The second issue is that market signals for inflation expectations vary spectacularly from the Fed’s projection for inflation. Exhibit 2 highlights the enormity of the chasm between the cyclical inflation narrative of the Fed, and the market-based prices for inflation expectations. The core consumer price index (CPI)⁸ is compared with the five-year forward rate expected by market participants for the CPI⁹. When one looks at the core CPI, one can understand the traditional cyclical argument for tightening. With unemployment below 5%, core inflation, which already may be in a modest uptrend, could quickly move above target. Indeed, the Fed’s models continue to forecast just such an event. Thus, some members of the Fed have suggested the need for imminent tightening. Here too, though, the Fed’s projections have been too high for five years running.

Exhibit 2 5-Year Forward Breakeven Inflation¹⁰



Source: Federal Reserve, Bureau of Labor Statistics. As of July 20, 2016. **Past performance is no guarantee of future results.** This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

"Nevertheless, one cannot rule out a decline in inflation expectations among market participants since last summer."

—Federal Reserve Monetary Policy Report, July 2016

"However, these developments merit close scrutiny, as past experience shows that it is difficult to push inflation back up to the central bank's objective if inflation expectations fall meaningfully below that objective. Japan's experience is cautionary in this regard."

—William Dudley, February 29, 2016

"Unfortunately, the stability of longer-run inflation expectations cannot be taken for granted."

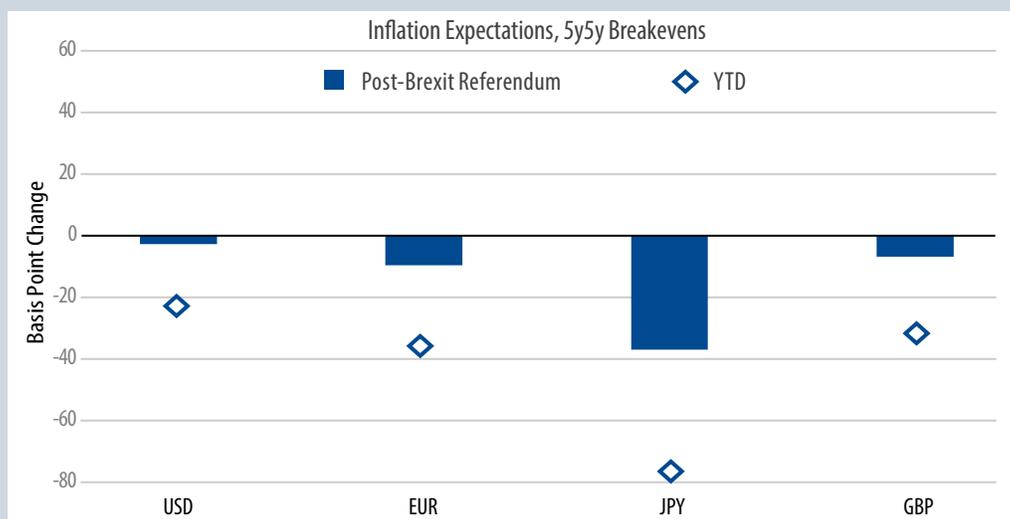
—Janet Yellen, March 29, 2016

The forward indicator in Exhibit 2 calls for just 1.40% CPI in five years' time. The breakeven Treasury inflation markets (a comparison of TIPS¹¹ versus nominal Treasuries) are under the Fed's 2% target across the board. Five-year breakevens are at 1.32%, 10 years at 1.47%, and 30 years at 1.67%. On the one hand, the traditional cyclical argument suggests if the Fed doesn't move rates up quickly, inflation will be above target in short order. The market, on the other hand, is forecasting that inflation will not be above target **for 30 years**. This is an enormous difference. One might even say it suggests a Cassandra-like divergence in expectations.

Fortunately, in our view, the Fed's rhetoric and policy stance have moved in line with mitigating the downward drift in inflation expectations. As the quotes shown in Exhibit 2 reflect, key Fed members have been decidedly cautious about the downward drift in expectations. Given the global downtrend in developed world inflation, which has induced so many of the world's central banks to try to arrest deflationary forces, such caution is clearly warranted.

When Bank of Japan Governor Haruhiko Kuroda talks about policy challenges, he notes inflation expectations. How do you get inflation expectations to change in a society where there has been virtually no inflation in nearly 25 years? When European Central Bank President Mario Draghi talks about inflation expectations, he notes the difficulty of arresting the downward trend in Europe brought about by the absence of inflation

Exhibit 3 Inflation Breakevens



Source: Bloomberg. As of July 20, 2016. **Past performance is no guarantee of future results.** This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

Note: Brexit Referendum occurred on June 23, 2016

for several years, with no immediate relief in sight. In the U.S., the Fed has had the relative luxury of noting that inflation expectations were “well anchored” (at least until recently). With falling inflation expectations in the U.S. alongside falling expectations globally, a reasonable question to ask is whether U.S. monetary policy is accommodative at all?

Exhibit 3 shows the change in inflation expectations in the U.S., Europe, Japan, and Great Britain for the year-to-date and since the momentous Brexit decision. Note that all the changes are downward. Falling inflation expectations remain firmly in place globally. An important aspect of inflation expectations is that they change ever so slowly. This suggests that even were growth to rebound to near the Fed’s goal, inflation expectations would still most likely be well below its 2% target.

Our mantra is that the Fed will not raise interest rates unless and until:

1. Growth comes in line with the Fed’s forecast
2. Financial conditions improve meaningfully
3. Inflation expectations rise

We acknowledge the reasonable argument that financial conditions have improved, and perhaps sufficiently to satisfy the Fed. Growth, however, is still a long way from being acceptable. Even were growth to pick back up, as the Fed continues to forecast, inflation expectations would lag. The markets are strongly signaling the absence of any significant upsurge in inflation. We think the Fed is right to be cautious.

Investment risks

U.S. Treasuries are direct debt obligations issued and backed by the “full faith and credit” of the U.S. government. The U.S. government guarantees the principal and interest payments on U.S. Treasuries when the securities are held to maturity. Unlike U.S. Treasury securities, debt securities issued by the federal agencies and instrumentalities and related investments may or may not be backed by the full faith and credit of the U.S. government. Even when the U.S. government guarantees principal and interest payments on securities, this guarantee does not apply to losses resulting from declines in the market value of these securities.

U.S. Treasury Inflation Protected Securities (“TIPS”) are bonds that receive a fixed, stated rate of return, But they also increase their principal by the changes in the CPI-U (the non-seasonally adjusted U.S. city average of the all-item consumer price index for all urban consumers, published by the Bureau of Labor Statistics). TIPS, like most fixed income instruments with long maturities, are subject to price risk.

Diversification does not assure a profit or protect against market loss.

Outperformance does not imply positive results.

Yields represent past performance and there is no guarantee they will continue to be paid.

Endnotes

- ¹ The **yield curve** is the graphical depiction of the relationship between the yield on bonds of the same credit quality but different maturities.
- ² The **Federal Reserve Board (“Fed”)** is responsible for the formulation of U.S. policies designed to promote economic growth, full employment, stable prices, and a sustainable pattern of international trade and payments.
- ³ **Return on Equity (ROE)** is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation’s profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as: $\text{Return on Equity} = \text{Net Income} / \text{Shareholder's Equity}$.
- ⁴ A **basis point (bps)** is one one-hundredth of one percent (1/100% or 0.01%).
- ⁵ **Duration** is a measure of the price sensitivity of a fixed-income security to an interest rate change. It is calculated as the weighted average of the present values for all cash flows, and is measured in years.
- ⁶ **Spread product** refers to taxable bonds that are not Treasury securities and include securities such as agency securities, asset-backed securities, corporate bonds, high-yield bonds and mortgage-backed securities.
- ⁷ **Deflation** refers to a persistent decrease in the level of consumer prices or a persistent increase in the purchasing power of money.
- ⁸ The **Core Consumer Price Index Inset (Core CPI)** excludes the prices of food and energy, which are volatile on a monthly basis, from the basket of goods used to determine the CPI.
- ⁹ The **Consumer Price Index (CPI)** measures the average change in U.S. consumer prices over time in a fixed market basket of goods and services determined by the U.S. Bureau of Labor Statistics.
- ¹⁰ The **5-year, 5-year forward breakeven inflation rate** is a measure of expected inflation derived from “nominal” Treasury securities and their “real” counterparts — inflation-protected TIPS securities.
- ¹¹ **U.S. Treasury Inflation Protected Securities (“TIPS”)** are bonds that receive a fixed, stated rate of return, But they also increase their principal by the changes in the CPI-U (the non-seasonally adjusted U.S. city average of the all-item consumer price index for all urban consumers, published by the Bureau of Labor Statistics). TIPS, like most fixed income instruments with long maturities, are subject to price risk.

This page intentionally left blank

Brandywine Global
Clarion Partners
ClearBridge Investments
EnTrustPermal
Martin Currie
QS Investors
RARE Infrastructure
Royce & Associates
Western Asset

Legg Mason is a leading global investment company committed to helping clients reach their financial goals through long term, actively managed investment strategies.

- Over \$741 billion* in assets invested worldwide in a broad mix of equities, fixed income, alternatives and cash strategies
- A diverse family of specialized investment managers, each with its own independent approach to research and analysis
- Over a century of experience in identifying opportunities and delivering astute investment solutions to clients

 leggmason.com

IMPORTANT INFORMATION:

All investments involve risk, including possible loss of principal.

The value of investments and the income from them can go down as well as up and investors may not get back the amounts originally invested, and can be affected by changes in interest rates, in exchange rates, general market conditions, political, social and economic developments and other variable factors. Investment involves risks including but not limited to, possible delays in payments and loss of income or capital. Neither Legg Mason nor any of its affiliates guarantees any rate of return or the return of capital invested.

Equity securities are subject to price fluctuation and possible loss of principal. Fixed-income securities involve interest rate, credit, inflation and reinvestment risks; and possible loss of principal. As interest rates rise, the value of fixed income securities falls.

International investments are subject to special risks including currency fluctuations, social, economic and political uncertainties, which could increase volatility. These risks are magnified in emerging markets.

Commodities and currencies contain heightened risk that include market, political, regulatory, and natural conditions and may not be suitable for all investors.

Past performance is no guarantee of future results. Please note that an investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charges.

The opinions and views expressed herein are not intended to be relied upon as a prediction or forecast of actual future events or performance, guarantee of future results, recommendations or advice. Statements made in this material are not intended as buy or sell recommendations of any securities. Forward-looking statements are subject to uncertainties that could cause actual developments and results to differ materially from the expectations expressed. This information has been prepared from sources believed reliable but the accuracy and completeness of the information cannot be guaranteed. Information and opinions expressed by either Legg Mason or its affiliates are current as at the date indicated, are subject to change without notice, and do not take into account the particular investment objectives, financial situation or needs of individual investors.

The information in this material is confidential and proprietary and may not be used other than by the intended user. Neither Legg Mason or its affiliates or any of their officer or employee of Legg Mason accepts any liability whatsoever for any loss arising from any use of this material or its contents. This material may not be reproduced, distributed or published without prior written permission from Legg Mason. Distribution of this material may be restricted in certain jurisdictions. Any persons coming into possession of this material should seek advice for details of, and observe such restrictions (if any).

This material may have been prepared by an advisor or entity affiliated with an entity mentioned below through common control and ownership by Legg Mason, Inc. Unless otherwise noted the "\$" (dollar sign) represents U.S. Dollars.

This material is only for distribution in those countries and to those recipients listed.

ALL INVESTORS IN THE UK, PROFESSIONAL CLIENTS AND ELIGIBLE COUNTERPARTIES IN EU AND EEA COUNTRIES EX UK AND QUALIFIED INVESTORS IN SWITZERLAND:

Issued and approved by Legg Mason Investments (Europe) Limited, registered office 201 Bishopsgate, London EC2M 3AB. Registered in England and Wales, Company No. 1732037. Authorized and regulated by the Financial Conduct Authority. Client Services +44 (0)207 070 7444.

ALL INVESTORS IN HONG KONG AND SINGAPORE:

This material is provided by Legg Mason Asset Management Hong Kong Limited in Hong Kong and Legg Mason Asset Management Singapore Pte. Limited (Registration Number (UEN): 200007942R) in Singapore.

This material has not been reviewed by any regulatory authority in Hong Kong or Singapore.

ALL INVESTORS IN THE PEOPLE'S REPUBLIC OF CHINA ("PRC"):

This material is provided by Legg Mason Asset Management Hong Kong Limited to intended recipients in the PRC. The content of this document is only for Press or the PRC investors investing in the QDII Product offered by PRC's commercial bank in accordance with the regulation of China Banking Regulatory Commission. Investors should read the offering document prior to any subscription. Please seek advice from PRC's commercial banks and/or other professional advisors, if necessary. Please note that Legg Mason and its affiliates are the Managers of the offshore funds invested by QDII Products only. Legg Mason and its affiliates are not authorized by any regulatory authority to conduct business or investment activities in China.

This material has not been reviewed by any regulatory authority in the PRC.

DISTRIBUTORS AND EXISTING INVESTORS IN KOREA AND DISTRIBUTORS IN TAIWAN:

This material is provided by Legg Mason Asset Management Hong Kong Limited to eligible recipients in Korea and by Legg Mason Investments (Taiwan) Limited (Registration Number: (98) Jin Guan Tou Gu Xin Zi Di 001; Address: Suite E, 55F, Taipei 101 Tower, 7, Xin Yi Road, Section 5, Taipei 110, Taiwan, R.O.C.; Tel: (886) 2-8722 1666) in Taiwan. Legg Mason Investments (Taiwan) Limited operates and manages its business independently.

This material has not been reviewed by any regulatory authority in Korea or Taiwan.

ALL INVESTORS IN THE AMERICAS:

This material is provided by Legg Mason Investor Services LLC, a U.S. registered Broker-Dealer, which includes Legg Mason Americas International. Legg Mason Investor Services, LLC, Member FINRA/SIPC, and all entities mentioned are subsidiaries of Legg Mason, Inc.

ALL INVESTORS IN AUSTRALIA:

This material is issued by Legg Mason Asset Management Australia Limited (ABN 76 004 835 839, AFSL 204827) ("Legg Mason"). The contents are proprietary and confidential and intended solely for the use of Legg Mason and the clients or prospective clients to whom it has been delivered. It is not to be reproduced or distributed to any other person except to the client's professional advisers.

* As of June 30, 2016.