A look back at history:

RISING RATES AND THE BOND MARKET

Fixed income’s performance during past interest rate cycles offers valuable context for investors now.

- Historically, the income that bonds produce has offset the impact of rising interest rates on total return.
- Overall, fixed income delivered positive results during the past three Federal Reserve rate tightening cycles.¹
- History suggests there may be benefits to staying put and “riding out” the cycle, instead of rushing for the exits or pursuing a market-timing strategy.
- Active management may benefit investors by providing the flexibility to play defense when rates are rising, as well as the expertise to capture value created amid price volatility.

¹ Performance measured by the Bloomberg Barclays 1–3 Month Treasury Bill Index, the Bloomberg Barclays Intermediate Treasury Index, the Bloomberg Barclays Intermediate U.S. Government/Credit Index and the Bloomberg Barclays U.S. Aggregate Index. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

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. All investments involve risk, including possible loss of principal.

Please refer to page 7 for a Glossary of Terms.

This material is only for distribution in those countries and to those recipients listed. Please refer to the disclosure information on the final page.

IN THE U.S. – INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE
Awaiting the next move

It’s been said that the only guarantee in bond investing is that interest rates will rise and interest rates will fall.

- The Fed has increased its target rate nine times since December 2015, but in early 2019 it signalled a pause to assess developments in the economy.

- Investors are closely monitoring growth and inflation data for indications of how many times, if any, the Fed might raise rates in 2019.

Surprising performance

An analysis of representative index performance provides interesting insight into what investors might expect when interest rates are rising.

- In the three most recent Fed tightening cycles (1994–1995, 1999–2000, 2004–2006), a positive total return resulted as coupon interest payments more than offset price declines.²

- More importantly, index performance was solid across the entire interest rate cycle (defined here as the 12 months preceding the onset of Fed tightening to 12 months after the last rate hike).

- Performance was negative on just a few occasions during the most challenging part of the cycle: from the low in the benchmark 10-year Treasury yield to its high.

The active advantage

In our opinion, an actively managed bond approach offers the potential for a better return than passive index investing. So, while index performance was positive during recent Fed tightening cycles, professional management of diversified fixed-income investments could offer several important potential advantages:

- A degree of diversification that most investors in individual bonds cannot attain on their own.

- The ability to play defense when interest rates are rising, by managing duration, something that a passive index cannot do.

- The expertise to take advantage of values created in all sectors of the market through effective security analysis and sector rotation, potentially enhancing total return.

² Performance measured by the Bloomberg Barclays Intermediate Treasury Index, the Bloomberg Barclays Intermediate U.S. Government/Credit Index and the Bloomberg Barclays U.S. Aggregate Index. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.
A LOOK BACK AT PAST CYCLES

A look back at past periods of Federal Reserve tightening provides valuable insight into what investors might expect as the current cycle plays out.

The 2004–2006 Federal Reserve tightening cycle
Rates rose...

Federal funds rate vs. 10-year Treasury note yield (%)

- The Fed raised the federal funds rate from 1% to 5.25% between June 2004 and June 2006.
- The 10-year Treasury yield oscillated in a fairly tight range between 4.58% when the Fed started raising interest rates and 5.13% when it stopped.

…and the results were...

Comparative total returns (%)

- Positive total returns during the Fed’s tightening cycle.
- Positive total returns from the low to high in the 10-year Treasury yield.
- “Riding it out” resulted in solid returns, with the most diversified index producing the best results.4

Source: Bloomberg. 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. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

3 Reflects performance from the month when 10-year Treasury yields were at a low for the cycle through the month when they peaked for the cycle.
4 From June 2004 through June 2006, the months when the Fed was actively raising interest rates, the Bloomberg Barclays 1–3 Month T-bill Index returned 6.1%, compared with 3.7% for the Bloomberg Barclays Intermediate Treasury Index, 4.6% for the Bloomberg Barclays Intermediate Government/Credit Index and 5.9% for the Bloomberg Barclays U.S. Aggregate Index. From June 2003 to June 2007, the Bloomberg Barclays 1–3 Month T-bill Index returned 12.5% compared with 8.6% for the Bloomberg Barclays Intermediate Treasury Index, 10.6% for the Bloomberg Barclays Intermediate Government/Credit Index, and 12.8% for the Bloomberg Barclays U.S. Aggregate Index.
The 1999–2000 Federal reserve tightening cycle
Rates rose…

- The Fed raised the federal funds rate from 4.75% to 6.5% between June 1999 and May 2000.
- The 10-year Treasury yield increased from a low of 4.42% in October 1998 to a peak of 6.66% in January 2000.

...And the results were...

- Positive total returns during the Fed’s tightening cycle.
- Mixed performance from the low to high in the 10-year Treasury yield.
- “Riding it out” resulted in positive returns across the entire interest rate cycle.⁵

Comparative total returns (%)

<table>
<thead>
<tr>
<th></th>
<th>Treasury bills</th>
<th>Intermediate Treasuries</th>
<th>Intermediate gov/credit</th>
<th>U.S. aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fed tightening cycle 6/30/99–5/31/00</td>
<td>4.9</td>
<td>3.1</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>10-yr yield low to high⁶ 10/30/98–1/31/00</td>
<td>4.9</td>
<td>0.1</td>
<td>0.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>Riding it out 6/30/98–6/30/01</td>
<td>16.7</td>
<td>20.2</td>
<td>20.6</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Source: Bloomberg. 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. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

From June 1999 through May 2000, the months when the Fed was actively raising interest rates, the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 4.9%, the Bloomberg Barclays Intermediate Treasury Index returned 3.1%, the Bloomberg Barclays Intermediate Government/Credit returned 2.4% and the Bloomberg Barclays U.S. Aggregate Index returned 2.4%. From October 1998 through January 2000, the period when the 10-year yield rose by 224 basis points, the Bloomberg Barclays 1-3 Month Treasury Bill Index returned 6%, the Bloomberg Barclays Intermediate Treasury Index returned 0.1%, the Bloomberg Barclays Intermediate Government/Credit returned 0.4% and the Bloomberg Barclays U.S. Aggregate Index returned -0.3%. From June 1998 (a year before the Fed began tightening) to June 2001 (a year after the Fed stopped tightening), the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 16.7%, the Bloomberg Barclays Intermediate Treasury Index returned 20.2%, the Bloomberg Barclays Intermediate Government/Credit returned 20.6% and the Bloomberg Barclays U.S. Aggregate Index returned 20%.

Reflects performance from the month when 10-year Treasury yields were at a low for the cycle through the month when they peaked for the cycle.

⁵ From June 1999 through May 2000, the months when the Fed was actively raising interest rates, the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 4.9%, the Bloomberg Barclays Intermediate Treasury Index returned 3.1%, the Bloomberg Barclays Intermediate Government/Credit returned 2.4% and the Bloomberg Barclays U.S. Aggregate Index returned 2.4%. From October 1998 through January 2000, the period when the 10-year yield rose by 224 basis points, the Bloomberg Barclays 1-3 Month Treasury Bill Index returned 6%, the Bloomberg Barclays Intermediate Treasury Index returned 0.1%, the Bloomberg Barclays Intermediate Government/Credit returned 0.4% and the Bloomberg Barclays U.S. Aggregate Index returned -0.3%. From June 1998 (a year before the Fed began tightening) to June 2001 (a year after the Fed stopped tightening), the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 16.7%, the Bloomberg Barclays Intermediate Treasury Index returned 20.2%, the Bloomberg Barclays Intermediate Government/Credit returned 20.6% and the Bloomberg Barclays U.S. Aggregate Index returned 20%. From June 1999 through May 2000, the months when the Fed was actively raising interest rates, the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 4.9%, the Bloomberg Barclays Intermediate Treasury Index returned 3.1%, the Bloomberg Barclays Intermediate Government/Credit returned 2.4% and the Bloomberg Barclays U.S. Aggregate Index returned 2.4%. From October 1998 through January 2000, the period when the 10-year yield rose by 224 basis points, the Bloomberg Barclays 1-3 Month Treasury Bill Index returned 6%, the Bloomberg Barclays Intermediate Treasury Index returned 0.1%, the Bloomberg Barclays Intermediate Government/Credit returned 0.4% and the Bloomberg Barclays U.S. Aggregate Index returned -0.3%. From June 1998 (a year before the Fed began tightening) to June 2001 (a year after the Fed stopped tightening), the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 16.7%, the Bloomberg Barclays Intermediate Treasury Index returned 20.2%, the Bloomberg Barclays Intermediate Government/Credit returned 20.6% and the Bloomberg Barclays U.S. Aggregate Index returned 20%.
The 1994–1995 Federal Reserve tightening cycle

Rates rose...

Source: Bloomberg. 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. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

...And the results were...

Comparative total returns (%)

Source: Bloomberg Barclays. Past performance is no guarantee of future results. Treasury bills represented by the Bloomberg Barclays 1–3 Month Treasury Bill Index; Intermediate Treasuries represented by the Bloomberg Barclays Intermediate Treasury Index; Intermediate Govt/Credit represented by the Bloomberg Barclays Intermediate U.S. Government/Credit Index; and U.S. Aggregate represented by the Bloomberg Barclays U.S. Aggregate Index. This information is provided for illustrative purposes only and does not reflect the performance of an actual investment. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

- The Fed raised the federal funds rate from 3% to 6% between February 1994 and February 1995.
- The 10-year Treasury yield increased from a low of 5.38% in September 1993 to a peak of 7.90% in November 1994.
- Positive total returns during the Fed’s tightening cycle.
- Modest declines from the low to high in the 10-year Treasury yield.
- “Riding it out” resulted in solid returns, with more diversified indexes producing better results.\(^8\)

\(^7\) Reflects performance from the month when 10-year Treasury yields were at a low for the cycle through the month when they peaked for the cycle.

\(^8\) From February 1994 to February 1995, the period when the Fed was actively raising interest rates, the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 4.6%, the Bloomberg Barclays Intermediate Treasury Index returned 2.2%, the Bloomberg Barclays Intermediate Government/Credit returned 2.2% and the Bloomberg Barclays U.S. Aggregate Index returned 1.9%. From September 30, 1993 to November 30, 1994, the period from the low in 10-year Treasury yields to the peak in 10-year Treasury yields, the Bloomberg Barclays 1–3 Month Treasury Bill Index returned 4.4%, the Bloomberg Barclays Intermediate Treasury Index returned -1.9%, the Bloomberg Barclays Intermediate Government/Credit Index returned -2.1% and the Bloomberg Barclays U.S. Aggregate Index returned -3.5%. From February 1993 to February 1996, the Bloomberg Barclays 1–3 Month T-bill Index returned 11.5%, compared with 17.4% for the Bloomberg Barclays Intermediate Treasury Index. The more diversified Bloomberg Barclays Intermediate Government/Credit Index and Bloomberg Barclays U.S. Aggregate Index did even better, up 18.44% and 20.41%, respectively.
Periods of rising interest rates are a normal part of bond investing, but that doesn’t mean that they don’t create anxiety. However, before making any impulsive moves out of fixed income, you should carefully consider the risks involved in attempting to time moves in and out of the market, including the potential for unwanted taxable events. As you can see from the examples from the previous pages, “riding it out” has made sense in the past.

Yet, these only reflect the performance of passive indexes. While active management and diversified approaches do not guarantee superior or positive performance, we firmly believe they provide the following potential performance-enhancing benefits that are not accessible with passive investments:

**Experience**
Professional management offers access to lessons learned during past cycles.

**Diversification**
Most individual investors do not have the buying power or the access to the issues necessary to properly diversify across multiple issuers, sectors, industry groups, countries and currencies. Diversification does not guarantee a profit or protect against loss.

**Research and analysis**
Actively managed approaches give individual investors access to individual security analysis and sector rotation skills that can enhance the opportunity for growth through a focus on total return instead of just yield.

**Flexibility**
Professional management provides the ability to quickly respond to opportunities in the market that can arise abruptly for many different reasons.

**Risk management**
Including duration management, yield curve positioning and ongoing monitoring and portfolio restructuring based on changing conditions.
**Investment risks**

The opinions and views expressed herein are not intended to be relied upon as a prediction or forecast of actual future events or performance, or a guarantee of future results, or investment advice.

Fixed income securities are subject to interest rate and credit risk, which is a possibility that the issuer of a security will be unable to make interest payments and repay the principal on its debt. As interest rates rise, the price of fixed income securities falls.

Diversification does not assure against market loss.

Outperformance does not imply positive results.

Active Management does not ensure gains or protect against market declines.

There is no guarantee objectives will be met.

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.

**About Western Asset**

Western Asset Management is one of the world’s leading fixed income managers. With a focus on long-term fundamental value investing that employs a top-down and bottom-up approach, the firm has nine offices around the globe and deep experience across the range of fixed income sectors. Founded in 1971, Western Asset has been recognized for an approach emphasizing team management and intensive proprietary research, supported by robust risk management.

---

**Definitions:**

The **Bloomberg Barclays 1–3 Month Treasury Bill Index** is the 1–3 months component of the U.S. Treasury bills index. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

The **Bloomberg Barclays Intermediate Treasury Index** is the intermediate component of the U.S. Treasury index. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

The **Bloomberg Barclays Intermediate Government/Credit Index** is a market value-weighted performance benchmark for government and corporate fixed-rate debt issues (rated Baa/BBB or higher) with maturities between one and 10 years. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

The **Bloomberg Barclays U.S. Aggregate Index** is a bond-based bond index consisting of government, corporate, mortgage and asset-backed issues rated investment grade or higher and having at least one year to maturity. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

A **basis point** is one one-hundredth (1/100 or 0.01) of one percent.

**Duration** is the measure of the price sensitivity of a fixed-income security to an interest rate change of 100 basis points. Calculation is based on the weighted average of the present values for all cash flows.

The U.S. **Federal Reserve**, or “Fed,” is responsible for the formulation of a policy designed to promote economic growth, full employment, stable prices, and a sustainable pattern of international trade and payments.

The **federal funds rate** is the interest rate that banks with excess reserves at a U.S. Federal Reserve district bank charge other banks that need overnight loans.

**Gross domestic product**, or GDP, is the total market value of all final goods and services produced in a country in a given year.

**Maturity** refers to the date on which the principal is required to be paid on a bond.

**Quantitative easing (QE)** refers to a monetary policy implemented by a central bank in which it increases the excess reserves of the banking system through the direct purchase of debt securities.

A **Treasury bill** is a negotiable debt obligation issued by the U.S. government and backed by its “full faith and credit,” and which has a maturity of one year or less.

A **Treasury note** is a negotiable debt obligation issued by the U.S. government and backed by its “full faith and credit,” and which has a maturity of one to 10 years.

**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.

The **U.S. Treasury Department** is responsible for issuing all Treasury bonds, notes and bills; it is responsible for the revenue of the U.S. government.

The **yield curve** shows the relationship between yields and maturity dates for a similar class of bonds.
Legg Mason is a leading global investment company committed to helping clients reach their financial goals through long term, actively managed investment strategies.

- Over $727 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

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, and are subject to change without notice. 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 nor its affiliates or any of its 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): 200007342R) 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, 2, 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 advisors.

* As of December 31, 2018.
© 2019 Legg Mason Investor Services, LLC. Member FINRA, SIPC. Western Asset Management and Legg Mason Investor Services, LLC are subsidiaries of Legg Mason, Inc. 856156 MPX013130 2/19