T. ROWE PRICE INSIGHTS A VIEW FROM GLOBAL FIXED INCOME

The Four U.S. Treasury Yield Phases of a Fed Tightening Cycle

Portfolio managers collaborate to help shape duration positioning.

August 2023

ne of the biggest questions facing fixed income portfolio managers in late July is when to take a strategic long position in U.S. duration. This positioning in the U.S. could bring powerful performance benefits if rates reverse some of their extended, steep increase as the Federal Reserve has raised interest rates since March 2022.

However, the negative carry imposed by the inverted U.S. Treasury yield curve makes being early to add U.S. duration punishing. With the 10-year U.S. Treasury yielding about 100 basis points less than the two-year note in late July, a long position in the 10-year segment involves a very meaningful yield sacrifice if longer-term U.S. Treasuries don't rally to offset the negative carry. In fact, simply holding cash equivalents, such as the three-month U.S. Treasury bill, would yield much more than longer-maturity U.S. Treasury notes.

Our analysis of the 10-year U.S. Treasury yield in past Fed tightening cycles since the early 1980s, led by Portfolio Manager Saurabh Sud, shows that there were typically three distinct phases of yield movements followed by a fourth phase of decreasing yield. These phases varied to some degree based on the Fed's actions and other aspects of the market environment, but they were identifiable across all of the tightening cycles.

Phases of U.S. Treasury yields in historical tightening cycles:

- 1. Strong upward trend in yield as the Fed tightens
- **2.** Long sideways consolidation in yield as the market tries to determine the level of the terminal rate for that cycle

Arif Husain

Head of International Fixed Income and Chief Investment Officer, Fixed Income

- **3.** Final "blow off" move sharply higher in yield around the time of the final Fed hike
- 4. Powerful decrease in yields

Did the 10-year U.S. Treasury's move to a yield well over 4% in early July followed by a quick decrease represent phase three? Only time will tell if the yield will test its recent high of 4.25% in October 2022, but some portfolio managers could have interpreted it as a signal to go long duration in anticipation of the transition to phase four.

Across T. Rowe Price's fixed income platform, portfolio managers and analysts collaborate extensively, seeking better investment decisions as they consider the opinions of colleagues and incorporate them into their own views. However, T. Rowe Price does not have a "house view," and portfolio managers have the freedom to position their strategies in accordance with their mandates and outlooks. Some of our managers have taken divergent strategic positions on U.S. duration.

The Bull Case

U.S. Fixed Income Portfolio Manager Steve Bartolini, while cautious on near-term U.S. Treasury positioning, interprets the yield increase in early July as a potential phase three, leading to a major breakout toward lower rates in phase four. He is accordingly positive on U.S. duration in the medium to longer term. He sees the combination of slowing U.S. growth, lower inflation, and tight Fed monetary policy leading to lower yields and a steeper curve by the end of 2023.

The Bear Case

On the other hand, Global Fixed Income Portfolio Manager Ken Orchard views the early July spike in the 10-year U.S. Treasury yield as part of a prolonged phase three of yield moves, not a quick high that leads to phase four. He doesn't see a catalyst for a U.S. recession, such as an energy price spike, on the medium-term horizon. As a result, his outlook is for higher U.S. Treasury yields, and his portfolios have a shorter-than-benchmark position in U.S. duration.

Our other fixed income portfolio managers may have different combinations of strategic and tactical views on U.S. duration. They also may choose to use tools other than outright duration, such as currency positions or exposure to the sovereign bonds of other countries, to express those outlooks in their strategies.

We believe that the sharing of views across the fixed income platform can lead to better-informed investment decisions, which are ultimately up to the individual portfolio manager. This represents a core strength of active fixed income portfolio management—the ability for a portfolio manager to collaborate with other experts to adapt to changing market environments and position their strategies accordingly.

INVEST WITH CONFIDENCE^{®®}

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.

T.RowePrice®

Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, nor is it intended to serve as the primary basis for an investment decision. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. Past performance is not a reliable indicator of future performance. The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

DISCLOSURE CONTINUES ON THE FOLLOWING PAGE.

T.RowePrice®

Important Information (cont.)

Australia–Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose only. Any strategy and/or any products associated with the strategy discussed herein has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd which is regulated by the Dubai Financial Services Authority as a Representative Office. For Professional Clients only.

EEA–Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.l. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

Hong Kong—Issued by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea-This material is intended only to Qualified Professional Investors. Not for further distribution.

Mainland China—This material is provided to qualified investors only. No invitation to offer, or offer for, or sale of, the shares will be made in the mainland of the People's Republic of China ("Mainland China", not including the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the Mainland China. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the Mainland China. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the Mainland China that are expressly authorized under the laws and regulations of the Mainland China to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the Mainland China. Potential investors who are resident in the Mainland China are responsible for obtaining the required approvals from all relevant government authorities in the Mainland China, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the Mainland China, or nationals with permanent residence in the Mainland China, or to any corporation, partnership, or other entity incorporated or established in the Mainland China.

Malaysia—This material can only be delivered to specific institutional investor. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—ANY STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING DISCUSSED HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore–Issued by T. Rowe Price Singapore Private Ltd. (UEN: 201021137E), 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa–Issued in South Africa by T. Rowe Price International Ltd (TRPIL), 60 Queen Victoria Street, London, EC4N 4TZ, is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (Financial Services Provider (FSP) Licence Number 31935), authorised to provide "intermediary services" to South African Investors. TRPIL's Complaint Handling Procedures are available to clients upon request. The Financial Advisory and Intermediary Services Act Ombud in South Africa deals with complaints from clients against FSPs in relation to the specific services rendered by FSPs. The contact details are noted below: Telephone: +27 12 762 5000, Web: www.faisombud.co.za, Email: info@faisombud.co.za

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

UK—This material is issued and approved by T. Rowe Price International Ltd, 60 Queen Victoria Street, London, EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

© 2023 T. Rowe Price. All Rights Reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc.