Fixed Income

Forecasting U.S. Bond Returns

June 30, 1997

It is difficult to forecast bond market fluctuations, although some research shows that these fluctuations are not fully unpredictable: It is possible to identify in advance periods when the reward for duration extension is likely to be abnormally high or abnormally low.

In this article, we first describe a few variables that have the ability to predict near-term bond market performance. We then show how to combine the information that these predictors provide into a single forecast and, further, into implementable investment strategies. Finally, we back-test the historical performance of these strategies in a realistic out-of-sample setting.

We show elsewhere that intermediate- and long-term bonds earn higher average returns than short-term bonds. This evidence suggests that the long-run bond risk premium is positive. If the risk premium is constant over time, the long-run average risk premium is also our best forecast for the near-term bond market performance.

Steeply upward-sloping yield curves tend to precede high excess bond returns, and inverted yield curves tend to precede negative excess bond returns. It follows then that the risk premium is not constant, and that the current shape of the yield curve provides valuable information about the time-varying bond risk premium. In this article, we show that other variables can enhance the yield curve's ability to forecast near-term excess bond returns.

The predictability of excess bond returns has important implications for investors who are willing to use so-called tactical asset allocation strategies.

This document is not intended to, and does not relate specifically to any investment strategy or product that AQR offers. It is being provided merely to provide a framework to assist in the implementation of an investor's own analysis and an investor's own view on the topic discussed herein.

This document has been provided to you solely for information purposes and does not constitute an offer or solicitation of an offer or any advice or recommendation to purchase any securities or other financial instruments and may not be construed as such. The factual information set forth herein has been obtained or derived from sources believed by the author and AQR Capital Management, LLC ("AQR") to be reliable but it is not necessarily all-inclusive and is not guaranteed as to its accuracy and is not to be regarded as a representation or warranty, express or implied, as to the information's accuracy or completeness, nor should the attached information serve as the basis of any investment decision. This document is not to be reproduced or redistributed to any other person. The information set forth herein has been provided to you as secondary information and should not be the primary source for any investment or allocation decision. Past performance is not a guarantee of future performance. Diversification does not eliminate the risk of experiencing investment losses.

This material is not research and should not be treated as research. This paper does not represent valuation judgments with respect to any financial instrument, issuer, security or sector that may be described or referenced herein and does not represent a formal or official view of AQR. The views expressed reflect the current views as of the date hereof and neither the author nor AQR undertakes to advise you of any changes in the views expressed herein.

The information contained herein is only as current as of the date indicated, and may be superseded by subsequent market events or for other reasons. Charts and graphs provided herein are for illustrative purposes only. The information in this presentation has been developed internally and/or obtained from sources believed to be reliable; however, neither

AQR nor the author guarantees the accuracy, adequacy or completeness of such information. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be relied on in making an investment or other decision. There can be no assurance that an investment strategy will be successful. Historic market trends are not reliable indicators of actual future market behavior or future performance of any particular investment which may differ materially, and should not be relied upon as such. Diversification does not eliminate the risk of experiencing investment losses.

The information in this paper may contain projections or other forward-looking statements regarding future events, targets, forecasts or expectations regarding the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here. The information in this document, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.