

# What the yield curve is—and isn't—telling us

## Introduction

The recent flattening of the U.S. yield curve has left many investors wondering whether a recession is on the horizon and whether they should adjust their portfolios in response. But investors should not overreact, according to Andrew Patterson, senior international economist in Vanguard Investment Strategy Group, and John Madziyire, head of U.S. Treasuries/TIPS in Vanguard Fixed Income Group.

"In the past, inversions of the yield curve have been reasonably reliable indicators of recession," Patterson said. "But interpreting the signals can be challenging, particularly in an environment like this with so much uncertainty over inflation, Federal Reserve policy, the labor market, and now the war in Ukraine. Against this unusual backdrop, we need to be careful in drawing parallels to history."

Yield curves normally slope upward because investors naturally demand a higher return for tying up their principal for longer periods. Longer-term bonds carry a greater risk of exposure to inflation. A steepening curve signals expectations for a healthy economy, whereas a flattening of the curve and, beyond that, an inversion reveal some concerns.

## Recession isn't a foregone conclusion

Historically, an inverted yield curve—where the yield on longer-term Treasury bonds is lower than that of shorter-term Treasury bonds—has foreshadowed a recession in the next year or two. The inversion implies that investors' outlook for the economy over longer periods has deteriorated compared with their near-term views.

But there are several other reasons why part of the yield curve has flattened. The Fed has embarked on quantitative easing (QE) during the last two interest rate cycles. The first came in response to the global financial crisis and the second to the COVID-19 pandemic. As shorter-term Treasury rates approached zero, the Fed could stimulate the economy only by lowering yields on the long end of the curve, thus creating a flatter curve.

In the post-COVID cycle, accelerated QE plus strong demand for Treasuries from overseas markets and pension funds have helped drive down longer-term yields.

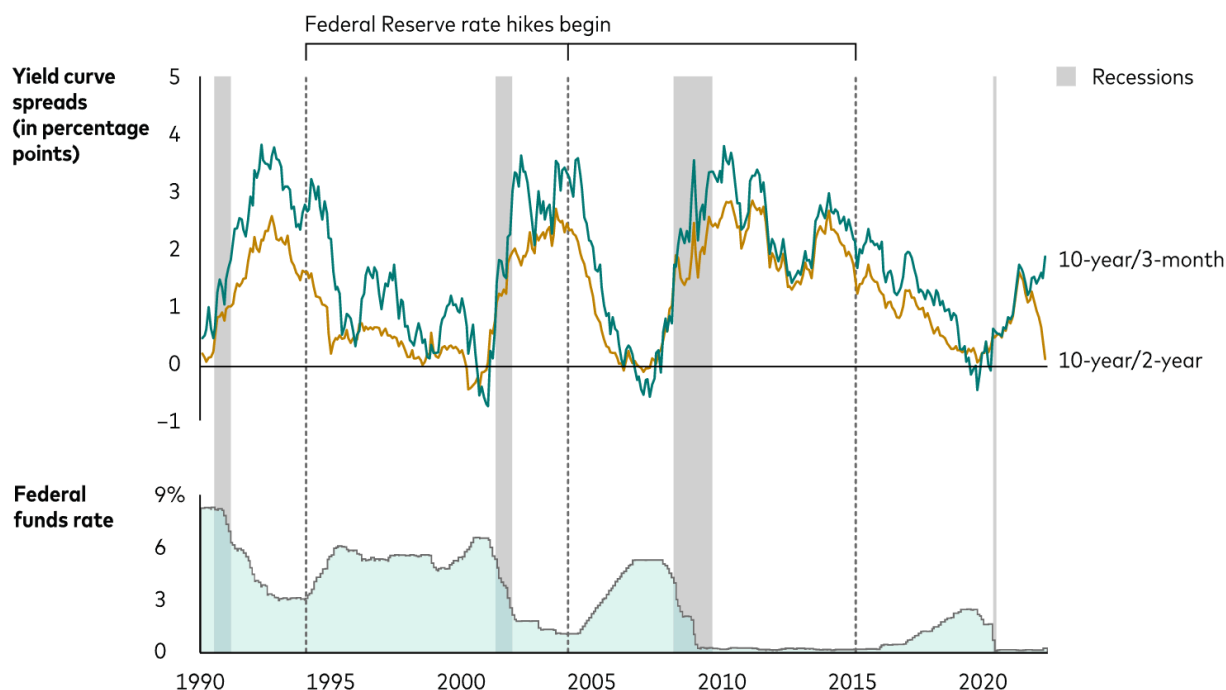
Now the uncertainty over how much the Fed will continue to tighten monetary policy is flattening the curve, this time by short-term rates rising more than longer-term rates. "The Federal Reserve has already signaled its plans to raise rates above the neutral rate to about 2.75%," Madziyire said. "The risk is that with inflation already running at a 40-year high, the Fed may have to raise rates higher than anticipated."

The result has been a rapid narrowing of spreads between 2-year and 10-year Treasury bonds, to just 6 basis points on March 29<sup>1</sup>.

"With the Fed just starting to raise the federal funds rate, a 6-basis-point spread is significantly narrower than normal at this early stage of the cycle," Madziyire said. "Many investors may think a recession is a foregone conclusion."

<sup>1</sup> A basis point is one-hundredth of a percentage point.

## The spread between the 2-year and 10-year Treasuries is at historic lows at this stage of the rate hike cycle



**Note:** A spread is the difference between the yield of a bond with one maturity compared with a bond of another maturity.

**Sources:** Vanguard, based on data as of March 1, 2022, from the U.S. Department of the Treasury, the Federal Reserve, and the National Bureau of Economic Research.

But Madziyire noted that yield curve inversions have typically happened further into an economic expansion when rates were already relatively high.

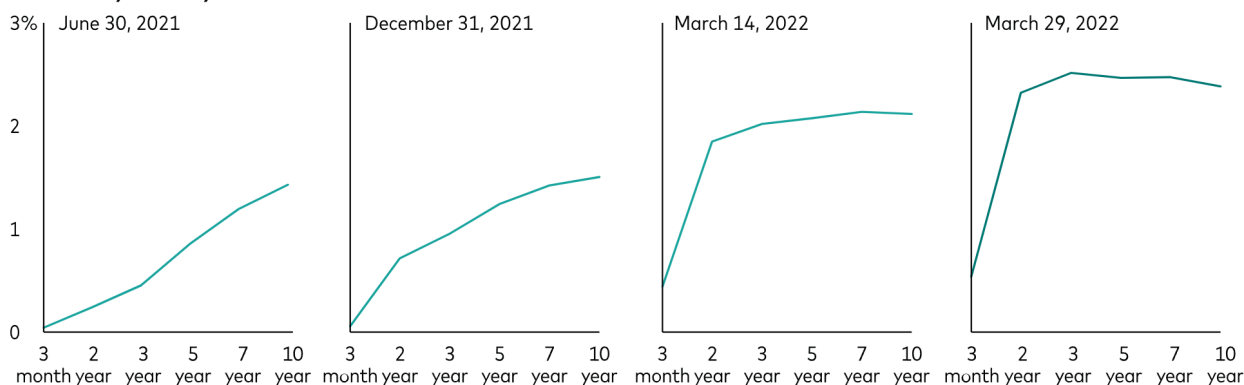
Patterson echoed the point: "Today we're talking about inversions when the federal funds rate remains very close to zero, certainly below anything most people would estimate to be a neutral rate," he said.

The spread between 3-month and 10-year Treasuries may be a better indicator of an economic slowdown—and that spread isn't sending recessionary signals, Patterson said<sup>2</sup>.

"Because the 3-month Treasury is much shorter than the 2-year, it is much more sensitive to Fed policy and reflective of current economic conditions, so its narrowing spread with the 10-year is generally a better indicator of potential recessions," he said. "The 3-month/10-year spread has actually widened in recent weeks, and the yield curve has steepened at the shorter end."

## Mixed signals from a rising, flattening yield curve

### U.S. Treasury nominal yield



Sources: Vanguard, based on data from the U.S. Department of the Treasury.

<sup>1</sup> The neutral rate is typically defined as the equilibrium federal funds rate at which policy is putting neither upward nor downward pressure on the economy.

## What investors might do next

Madziyire said he and his team have been overweighting 10-year bonds and underweighting 2-year bonds. "Given the expected market reaction to the recent and upcoming Fed moves, we expect the rate at which the 2-year goes up to be faster than the rate at which the 10-year bond rises," he said.

He added that investors should continue to hold fixed income in their portfolios despite the short-term challenges associated with a rising rate environment. Short-duration bond portfolios will do relatively well in a diversified portfolio in such an environment because they are less sensitive to rising rates. But even when stock returns and bond returns decline in tandem, bonds provide diversification benefits, as the magnitude of losses in fixed income portfolios is often significantly less than that of stocks.

Rising interest rates can be good for bond investors and savers, as current and future income benefits from being reinvested at higher rates.

"Fixed income investors may feel some pain in the short term," Madziyire said. "But if you are a long-term investor, higher yields mean more income."

### Notes:

- All investing is subject to risk, including the possible loss of the money you invest.
- Diversification does not ensure a profit or protect against a loss.
- Investments in bonds are subject to interest rate, credit, and inflation risk.

## Important Information

VIGM, S.A. de C.V. Asesor en Inversiones Independiente ("Vanguard Mexico") registration number: 30119-001-(14831)-19/09/2018. The registration of Vanguard Mexico before the Comisión Nacional Bancaria y de Valores ("CNBV") as an Asesor en Inversiones Independiente is not a certification of Vanguard Mexico's compliance with regulation applicable to Advisory Investment Services (Servicios de Inversión Asesorados) nor a certification on the accuracy of the information provided herein. The supervision scope of the CNBV is limited to Advisory Investment Services only and not all services provided by Vanguard Mexico.

This material is solely for informational purposes and does not constitute an offer or solicitation to sell or a solicitation of an offer to buy any security, nor shall any such securities be offered or sold to any person, in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities law of that jurisdiction. Reliance upon information in this material is at the sole discretion of the recipient.

Securities information provided in this document must be reviewed together with the offering information of each of the securities which may be found on Vanguard's website: <https://www.vanguardmexico.com/institutional/products/en/list/overview> or [www.vanguard.com](http://www.vanguard.com)

Vanguard Mexico may recommend products of The Vanguard Group Inc. and its affiliates and such affiliates and their clients may maintain positions in the securities recommended by Vanguard Mexico.

ETFs can be bought and sold only through a broker and cannot be redeemed with the issuing fund other than in very large aggregations. Investing in ETFs entails stockbroker commission and a bid-offer spread which should be considered fully before investing. The market price of ETF Shares may be more or less than net asset value.

All investments are subject to risk, including the possible loss of the money you invest. Investments in bond funds are subject to interest rate, credit, and inflation risk. Governmental backing of securities applies only to the underlying securities and does not prevent share-price fluctuations. High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings.

There is no guarantee that any forecasts made will come to pass. Past performance is no guarantee of future results.

Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Funds that concentrate on a relatively narrow market sector face the risk of higher share-price volatility. Stocks of companies are subject to national and regional political and economic risks and to the risk of currency fluctuations, these risks are especially high in emerging markets. Changes in exchange rates may have an adverse effect on the value, price or income of a fund.

The information contained in this material derived from third-party sources is deemed reliable, however Vanguard Mexico and The Vanguard Group Inc. are not responsible and do not guarantee the completeness or accuracy of such information.

This document should not be considered as an investment recommendation, a recommendation can only be provided by Vanguard Mexico upon completion of the relevant profiling and legal processes.

This document is for educational purposes only and does not take into consideration your background and specific circumstances nor any other investment profiling circumstances that could be material for taking an investment decision. We recommend getting professional advice based on your individual circumstances before taking an investment decision.

These materials are intended for institutional and sophisticated investors use only and not for public distribution.

Materials are provided only for the recipient's exclusive use and shall not be distributed to any other individual or entity. Broker-dealers, advisers, and other intermediaries must determine whether their clients are eligible for investment in the products discussed herein.

The information contained herein does not constitute an offer or solicitation and may not be treated as such in any jurisdiction where such an offer or solicitation is against the law, or to anyone for whom it is unlawful to make such an offer or solicitation, or if the person making the offer or solicitation is not qualified to do so.

THESE MATERIALS ARE PROVIDED AT THE REQUEST OF AND FOR THE EXCLUSIVE USE OF RECIPIENT AND CONTAIN HIGHLY CONFIDENTIAL INFORMATION, WHICH SHALL NOT BE REPRODUCED OR TRANSMITTED TO ANY THIRD PARTIES WITHOUT VANGUARD'S PRIOR WRITTEN CONSENT. THE CONTENTS OF THESE MATERIALS SHALL NOT BE UNDERSTOOD AS AN OFFER OR SOLICITATION TO BUY OR SELL SECURITIES IN BRAZIL AND VANGUARD IS NOT MAKING ANY REPRESENTATION WITH RESPECT TO THE ELIGIBILITY OF ANY RECIPIENT OF THESE MATERIALS TO ACQUIRE THE INTERESTS IN THE SECURITIES DESCRIBED HEREIN UNDER THE LAWS OF BRAZIL. SUCH SECURITIES HAVE NOT BEEN REGISTERED IN BRAZIL AND NONE OF THE INTERESTS IN SUCH SECURITIES MAY BE OFFERED, SOLD, OR DELIVERED, DIRECTLY OR INDIRECTLY, IN BRAZIL OR TO ANY RESIDENT OF BRAZIL EXCEPT PURSUANT TO THE APPLICABLE LAWS AND REGULATIONS OF BRAZIL.

PROVIDED AT THE REQUEST OF AND FOR THE EXCLUSIVE USE OF THE RECIPIENT. THE CONTENTS OF THIS DOCUMENT SHALL NOT BE UNDERSTOOD AS AN OFFER OR SOLICITATION TO BUY OR SELL SECURITIES IN BRAZIL AND VANGUARD IS NOT MAKING ANY REPRESENTATION WITH RESPECT TO THE ELIGIBILITY OF ANY RECIPIENT OF THIS DOCUMENT TO INVEST IN SECURITIES DESCRIBED HEREIN.

This document is provided at the request of and for the exclusive use of the recipient and does not constitute, and is not intended to constitute, a public offer in the Republic of Colombia, or an unlawful promotion of financial/capital market products. The offer of the financial products described herein is addressed to fewer than one hundred specifically identified investors. The financial products described herein may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555/2010 and other applicable rules and regulations related to the promotion of foreign financial/capital market products in Colombia.

The financial products described herein are not and will not be registered before the Colombian National Registry of Securities and Issuers (Registro Nacional de Valores y Emisores - RNVE) maintained by the Colombian Financial Superintendency, or before the Colombian Stock Exchange. Accordingly, the distribution of any documentation in regard to the financial products described here in will not constitute a public offering of securities in Colombia.

The financial products described herein may not be offered, sold or negotiated in Colombia, except under circumstances which do not constitute a public offering of securities under applicable Colombian securities laws and regulations; provided that, any authorized person of a firm authorized to offer foreign securities in Colombia must abide by the terms of Decree 2555/2010 to offer such products privately to its Colombian clients.

The distribution of this material and the offering of securities may be restricted in certain jurisdictions. The information contained in this material is for general guidance only, and it is the responsibility of any person or persons in possession of this material and wishing to make application for securities to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for securities should inform themselves of any applicable legal requirements, exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

This offer conforms to General Rule No. 336 of the Chilean Financial Market Commission (Comisión para el Mercado Financiero). The offer deals with securities not registered under Securities Market Law, nor in the Securities Registry nor in the Foreign Securities Registry of the Chilean Financial Market Commission, and therefore such securities are not subject to its oversight. Since such securities are not registered in Chile, the issuer is not obligated to provide public information in Chile regarding the securities. The securities shall not be subject to public offering unless they are duly registered in the corresponding Securities Registry in Chile. The issuer of the securities is not registered in the Registries maintained by the Chilean Financial Market Commission, therefore it is not subject to the supervision of the Chilean Financial Market Commission or the obligations of continuous information.

Esta oferta se acoge a la norma de carácter general No. 336 de la Comisión para el Mercado Financiero. La oferta versa sobre valores no inscritos bajo la Ley de Mercado de Valores en el Registro de Valores o en el Registro de Valores extranjeros que lleva la Comisión para el Mercado Financiero, por lo que tales valores no están sujetos a la fiscalización de ésta. Por tratarse de valores no inscritos, no existe la obligación por parte del emisor de entregar en Chile información pública respecto de esos valores. Los valores no podrán ser objeto de oferta pública mientras no sean inscritos en el Registro de Valores correspondiente. El emisor de los valores no se encuentra inscrito en los Registros que mantiene la Comisión para el Mercado Financiero, por lo que no se encuentra sometido a la fiscalización de la Comisión para el Mercado financiero ni a las obligaciones de información continua.

The securities described herein have not been registered under the Peruvian Securities Market Law (Decreto Supremo No 093-2002-EF) or before the Superintendencia del Mercado de Valores (the "SMV"). There will be no public offering of the securities in Peru and the securities may only be offered or sold to institutional investors (as defined in Appendix I of the Institutional Investors Market Regulation) in Peru by means of a private placement. The securities offered and sold in Peru may not be sold or transferred to any person other than an institutional investor unless such securities have been registered with the Registro Público del Mercado de Valores kept by the SMV. The SMV has not reviewed the information provided to the investor. This material is for the exclusive use of institutional investors in Peru and is not for public distribution.

The financial products described herein may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act 2003 of Bermuda. Additionally, non-Bermudian persons may not carry on or engage in any trade or business in Bermuda unless such persons are authorized to do so under applicable Bermuda legislation. Engaging in the activity of offering or marketing the financial products described herein in Bermuda to persons in Bermuda may be deemed to be carrying on business in Bermuda.

Vanguard does not intend, and is not licensed or registered, to conduct business in, from or within the Cayman Islands, and the interests in the financial products described herein shall not be offered to members of the public in the Cayman Islands.

The financial products described herein have not been and will not be registered with the Securities Commission of The Bahamas. The financial products described herein are offered to persons who are non-resident or otherwise deemed non-resident for Bahamian Exchange Control purposes. The financial products described herein are not intended for persons (natural persons or legal entities) for which an offer or purchase would contravene the laws of their state (on account of nationality or domicile/registered office of the person concerned or for other reasons). Further, the offer constitutes an exempt distribution for the purposes of the Securities Industry Act, 2011 and the Securities Industry Regulations, 2012 of the Commonwealth of The Bahamas.

This document is not, and is not intended as, a public offer or advertisement of, or solicitation in respect of, securities, investments, or other investment business in the British Virgin Islands ("BVI"), and is not an offer to sell, or a solicitation or invitation to make offers to purchase or subscribe for, any securities, other investments, or services constituting investment business in BVI. Neither the securities mentioned in this document nor any prospectus or other document relating to them have been or are intended to be registered or filed with the Financial Services Commission of BVI or any department thereof.

This document is not intended to be distributed to individuals that are members of the public in the BVI or otherwise to individuals in the BVI. The funds are only available to, and any invitation or offer to subscribe, purchase, or otherwise acquire such funds will be made only to, persons outside the BVI, with the exception of persons resident in the BVI solely by virtue of being a company incorporated in the BVI or persons who are not considered to be "members of the public" under the Securities and Investment Business Act, 2010 ("SIBA").

Any person who receives this document in the BVI (other than a person who is not considered a member of the public in the BVI for purposes of SIBA, or a person resident in the BVI solely by virtue of being a company incorporated in the BVI and this document is received at its registered office in the BVI) should not act or rely on this document or any of its contents.

Any person who receives this document in the BVI (other than a person who is not considered a member of the public in the BVI for purposes of SIBA, or a person resident in the BVI solely by virtue of being a company incorporated in the BVI and this document is received at its registered office in the BVI) should not act or rely on this document or any of its contents.

This document does not constitute an offer or solicitation to invest in the securities mentioned herein. It is directed at professional / sophisticated investors in the United States for their use and information. The financial products described herein are only available for investment by non-U.S. investors, and this document should not be given to a retail investor in the United States. Any entity responsible for forwarding this material, which is produced by VIGM, S.A. de C.V., Asesor en Inversiones Independiente in Mexico, to other parties takes responsibility for ensuring compliance with applicable securities laws in connection with its distribution.

**Connect with Vanguard®**

**Vanguard®**

© 2022 The Vanguard Group, Inc. All rights reserved.