

#### RESEARCH

# Is a Yield Curve Inversion Bad for Stock Returns?

May 16, 2022

Many investors see yield curve inversions—when short-term bond yields exceed long-term yields—as foreboding. Do they signal a stock market downturn? Data from the US and other major economies show yield curve inversions have not historically predicted equity market downturns. As markets incorporate news and events around the world, bond yields change, which causes yield curves to change. Historically, the US Treasury yield curve has generally been upward-sloping; however, during several periods, the curve inverted. What can we learn from these examples?

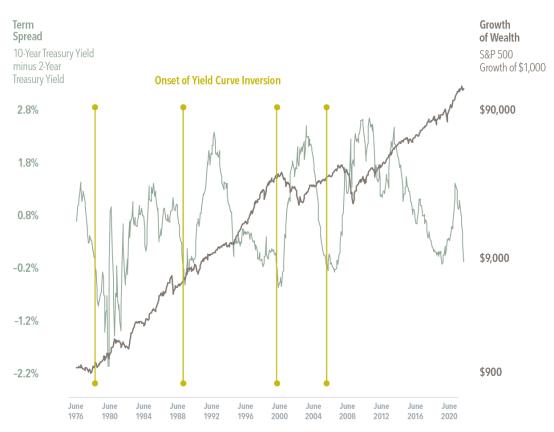
#### THE US MARKET

The inversion prior to the 2008 financial crisis is an interesting case study. As shown in **Exhibit 1**, the US yield curve inverted in December 2005, which was followed by a positive 12-month return for the S&P 500 Index. The yield curve's slope shifted to positive again in June 2007, well prior to the equity market's major downturn from October 2007 through February 2009.

Investors who interpreted the inversion as a sign of an imminent market decline and pulled out of stocks could have missed out on subsequent equity market gains. And if those same investors had bought back into stocks when the yield curve's slope became positive, they would have been exposed to the market downturn that followed.

Exhibit 1
Bent Out of Shape
Relation between yield

Relation between yield curve inversions and US stock market performance. Monthly Data: June 1976– March 2022



# Past performance is no guarantee of future results.

 $US\ Treasury\ yield\ curve\ data\ (monthly)\ obtained\ from\ FRED,\ Federal\ Reserve\ Bank\ of\ St.\ Louis.\ S\&P\ 500\ Index\ ©\ 2022\ S\&P\ Dow\ Jones\ Indices\ LLC,\ a\ division\ of\ S\&P\ Global.\ All\ rights\ reserved.\ Indices\ are\ not\ available\ for\ direct\ investment.$  Their\ performance\ does\ not\ reflect\ the\ expenses\ associated\ with\ the\ management\ of\ an\ actual\ portfolio.

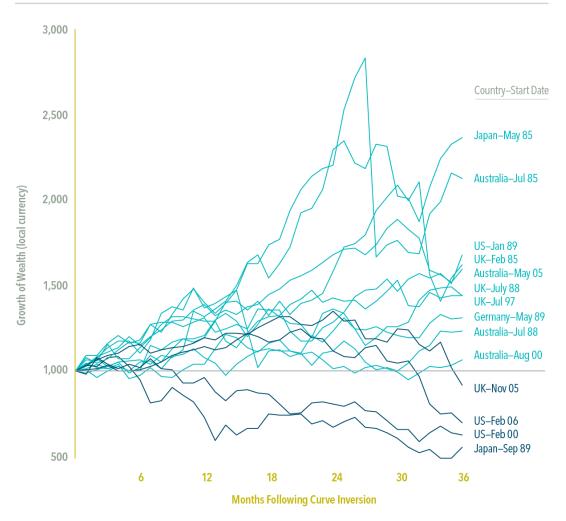
# In 10 out of 14 cases of inversion, local investors would have had positive returns in their home markets after 36 months.

# **INCREASING THE SAMPLE**

The small number of US yield curve inversions over the past 40 years makes it challenging to draw strong conclusions about the effect on stock market performance. We can, however, expand the sample internationally to include yield curve inversions dating back to 1985 in four additional major developed nations. **Exhibit 2** shows the hypothetical growth of wealth of 1,000 units of the country's local currency invested in the local stock market index the month before yield curve inversions began in five major developed nations, including the US, since 1985.

Exhibit 2
Mixed Signals
Stock market performance

Stock market performance in selected developed countries following a yield curve inversion



# Past performance is no guarantee of future results.

Yield curve inversions based on 2-year and 10-year government bond yields for each country. Yields obtained from Reserve Bank of Australia, Bundesbank, Japanese Ministry of Finance, Bank of England, European Central Bank, and US Federal Reserve. Stock returns based on local currency MSCI indices. MSCI Australia Index (gross div., AUD), MSCI Germany Index (gross div., EUR), MSCI Japan Index (gross div., JPY), MSCI United Kingdom Index (gross div., GBP), MSCI USA Index (gross div., USD.) These countries were selected to represent the world's major developed country currencies. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. MSCI data © MSCI 2022, all rights reserved.

In 10 out of 14 cases of inversion, equity investors had positive returns in their home markets after 36 months. This is similar to the historical frequency of positive returns over any three-year span, regardless of the shape of the yield curve.<sup>1</sup> These results show that it is difficult to predict the timing and direction of equity market moves following a yield curve inversion.

Though the data set is limited, an analysis of yield curve inversions in five major developed countries shows that an inversion may not be a reliable indicator of stock

market downturns. So, what can investors do if they are concerned about potential equity weakness? Develop and commit to a long-term plan that is in line with their risk tolerance, look past short-term noise, and focus on investing in a systematic way that will help meet long-term goals.

The data showed a 71% chance (10 of 14) of a three-year positive return following a yield curve inversion. To compare, we measured
returns three years following every month-end between January 1985 and December 2014 in each of the five markets based on the
local currency MSCI indices. The average chance of a three-year positive return in those five markets was 77%.

The information in this material is intended for the recipient's background information and use only. It is provided in good faith and without any warranty or representation as to accuracy or completeness. Information and opinions presented in this material have been obtained or derived from sources believed by Dimensional to be reliable and Dimensional has reasonable grounds to believe that all factual information herein is true as at the date of this material. It does not constitute investment advice, recommendation, or an offer of any services or products for sale and is not intended to provide a sufficient basis on which to make an investment decision. Before acting on any information in this document, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice. It is the responsibility of any persons wishing to make a purchase to inform themselves of and observe all applicable laws and regulations. Unauthorized reproduction or transmitting of this material is strictly prohibited. Dimensional accepts no responsibility for loss arising from the use of the information contained herein.

This material is not directed at any person in any jurisdiction where the availability of this material is prohibited or would subject Dimensional or its products or services to any registration, licensing or other such legal requirements within the jurisdiction.

"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., Dimensional Ireland Limited, DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd, Dimensional Japan Ltd. and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

#### Risks

Investments involve risks. The investment return and principal value of an investment may fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original value. Past performance is not a guarantee of future results. There is no guarantee strategies will be successful.

#### **UNITED STATES**

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Investment products: • Not FDIC Insured • Not Bank Guaranteed • May Lose Value Dimensional Fund Advisors does not have any bank affiliates.

#### CANADA

These materials have been prepared by Dimensional Fund Advisors Canada ULC. The other Dimensional entities referenced herein are not registered resident investment fund managers or portfolio managers in Canada.

This material is not intended for Quebec residents.

Commissions, trailing commissions, management fees, and expenses all may be associated with mutual fund investments. Please read the prospectus before investing. Unless otherwise noted, any indicated total rates of return reflect the historical annual compounded total returns including changes in share or unit value and reinvestment of all dividends or other distributions and do not take into account sales, redemption, distribution, or optional charges or income taxes payable by any security holder that would have reduced returns. Mutual funds are not guaranteed, their values change frequently, and past performance may not be repeated.

#### **AUSTRALIA**

This material is issued by DFA Australia Limited (AFS Licence No. 238093, ABN 46 065 937 671). This material is provided for information only. No account has been taken of the objectives, financial situation or needs of any particular person. Accordingly, to the extent this material constitutes general financial product advice, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to the investor's objectives, financial situation and needs. Investors should also consider the target market determination that has been made for each financial product either issued or distributed by DFA Australia Limited prior to proceeding with any investment. Go to au.dimensional.com/funds to access a copy of the relevant target market determination. Any opinions expressed in this material reflect our judgement at the date of publication and are subject to change.

#### **NEW ZEALAND**

This material is issued by DFA Australia Limited (incorporated in Australia, AFS License No. 238093, ABN 46 065 937 671). This material is provided for information only. This material does not give any recommendation or opinion to acquire any financial product or any financial advice product, and is not financial advice to you or any other person. No account has been taken of the objectives, financial situation or needs of any particular person. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to the investor's objectives, financial situation and needs. Investors should also consider the Product Disclosure Statement (PDS) and for the Dimensional Wholesale Trusts the target market determination (TMD) that has been made for each financial product or financial advice product either issued or distributed by DFA Australia Limited prior to acquiring or continuing to hold any investment. Go to au.dimensional.com/funds to access a copy of the PDS or the relevant TMD. Any opinions expressed in this material reflect our judgement at the date of publication and are subject to change.

### WHERE ISSUED BY DIMENSIONAL IRELAND LIMITED

Issued by Dimensional Ireland Limited (Dimensional Ireland), with registered office 10 Earlsfort Terrace, Dublin 2, D02 T380, Ireland. Dimensional Ireland is regulated by the Central Bank of Ireland (Registration No. C185067).

#### WHERE ISSUED BY DIMENSIONAL FUND ADVISORS LTD.

Issued by Dimensional Fund Advisors Ltd. (Dimensional UK), 20 Triton Street, Regent's Place, London, NW1 3BF. Dimensional UK is authorised and regulated by the Financial Conduct Authority (FCA) - Firm Reference No. 150100.

Dimensional UK and Dimensional Ireland do not give financial advice. You are responsible for deciding whether an investment is suitable for your personal circumstances, and we recommend that a financial adviser helps you with that decision.

Dimensional UK and Dimensional Ireland issue information and materials in English and may also issue information and materials in certain other languages. The recipient's continued acceptance of information and materials from Dimensional UK and Dimensional Ireland will constitute the recipient's consent to be provided with such information and materials, where relevant, in more than one language.

NOTICE TO INVESTORS IN SWITZERLAND: This is advertising material.

#### **JAPAN**

For Institutional Investors and Registered Financial Instruments Intermediary Service Providers.

This material is deemed to be issued by Dimensional Japan Ltd., which is regulated by the Financial Services Agency of Japan and is registered as a Financial Instruments Firm conducting Investment Management Business and Investment Advisory and Agency Business.

Dimensional Japan Ltd.

Director of Kanto Local Finance Bureau (FIBO) No. 2683 Membership: Japan Investment Advisers Association

#### **SINGAPORE**

This material is deemed to be issued by Dimensional Fund Advisors Pte. Ltd., which is regulated by the Monetary Authority of Singapore and holds a capital markets services license for fund management.

This advertisement has not been reviewed by the Monetary Authority of Singapore, and should not be shown to prospective retail investors. FOR PROFESSIONAL INVESTORS IN HONG KONG

This material is deemed to be issued by Dimensional Hong Kong Limited (CE No. BJE760) ("Dimensional Hong Kong"), which is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.

This material should only be provided to "professional investors" (as defined in the Securities and Futures Ordinance [Chapter 571 of the Laws of Hong Kong] and its subsidiary legislation) and is not for use with the public. This material is not intended to constitute and does not constitute marketing of the services of Dimensional Hong Kong or its affiliates to the public of Hong Kong. When provided to prospective investors, this material forms part of, and must be provided together with, applicable fund offering materials. This material must not be provided to prospective investors on a standalone basis. Before acting on any information in this material, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice.

Neither Dimensional Hong Kong nor its affiliates shall be responsible or held responsible for any content prepared by financial advisors. Financial advisors in Hong Kong shall not actively market the services of Dimensional Hong Kong or its affiliates to the Hong Kong public.

dimensional.com

