

Global Insight

Focus Article

Yield curve inversion: A shot across the bow

We believe it will take some doing to get the U.S. into recession from here but are treating the inversion as a wake-up call for equity investors.

Jim Allworth



For important and required non-U.S. analyst disclosures, see page 6

All values in U.S. dollars and priced as of March 31, 2019, market close, unless otherwise noted.



Wealth
Management

Yield curve inversion: A shot across the bow



Jim Allworth
Vancouver, Canada
jim.allworth@rbc.com

Has inversion of the yield curve started the “recession clock”? The closing chapter of all economic cycles is a recession. The recent inversion makes it appropriate to start thinking about that eventuality but we believe it will take some doing to get the U.S. into recession from here. We are content for now with our Market Weight exposure to stocks in a global portfolio.

The Treasury yield curve has inverted—short-term interest rates have moved above long-term rates. Or, more precisely in this case, long-term rates have fallen below short-term rates.

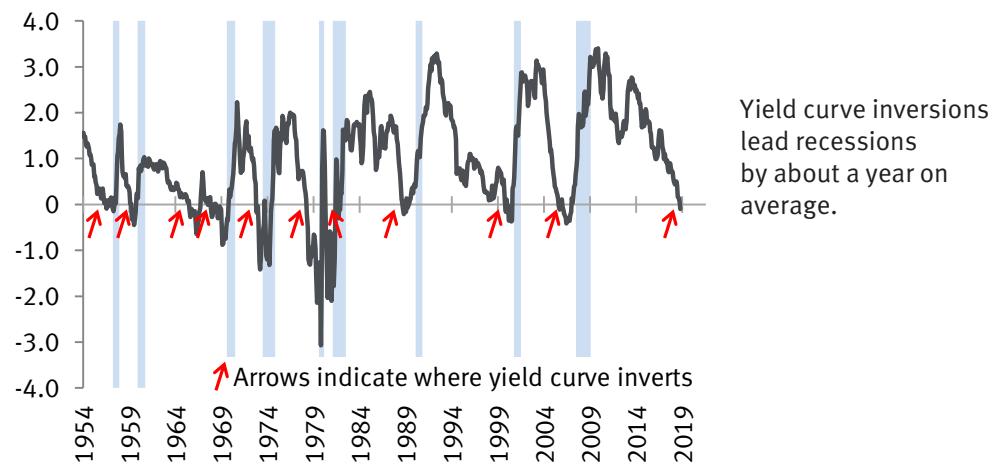
This has garnered a lot of attention because in past economic cycles “inversion” has proven to be a reliable signal that a U.S. recession was on the way—on average about 11 to 14 months from the date of inversion.

Long, bruising equity bear markets, not just in the U.S. but also in Canada, the U.K., Europe, and Japan, have been associated with U.S. recessions. These bear markets have typically started months before the recession gets underway. That makes inversion of the yield curve a valuable early warning signal that a more defensive investment state of mind is called for.

Is the recession clock starting?

The debate is already raging as to what, if any, credence should be given to the yield curve’s signal this time. There are a number of arguments—some very compelling—asserting that this inversion has occurred for very different reasons

Yield differential between the 10-year and 1-year U.S. Treasury notes



Yield curve inversion

than in past cycles and therefore can be safely ignored. Perhaps. But in our experience, arguments like this have always surfaced around the time of previous inversions and, even though the mechanical reasoning was often correct, a recession (and equity bear market) eventually arrived.

There was one exception. The yield curve deeply inverted in 1965 and no recession ensued. However, U.S. GDP growth went from 10.1% (yes, that's no typo, 10.1%) in Q1 1966 to an effective standstill at 0.2% five quarters later. Around that time the stock market corrected by a brisk, but not disastrous, 20%.

Despite the wonderful track record of yield curve inversion as a recession/bear market early warning, we believe the routes taken by the economy and markets this time will undoubtedly wind up being different in some important aspects. That should make investors reluctant to bank everything on a signal given by just one indicator, no matter how historically reliable.

Eric Lascelles, chief economist for RBC Global Asset Management (see "[An aging economic expansion](#)" on page 12), rates 17 different economic variables and concludes that this longest of U.S. economic expansions is in its late-to-end-of-cycle phase. Of course, this last part of the expansion cycle before the next recession arrives could prove to be very drawn out. Certainly the early-cycle and mid-cycle phases were unusually extended.

Our U.S. recession scorecard follows six indicators, all of which have usefully warned of recessions ahead of time. Three (the yield curve, unemployment claims, and the Conference Board Leading Economic Index) have given their signals about a year ahead of the recession getting underway. The other three (see table) typically flash red much closer to the event. To date, only the yield curve has given a warning signal.

Only the yield curve is giving a warning signal

RBC Wealth Management U.S. economic indicator scorecard

| Indicator | Status | | |
|-----------------------------------|---------|--------------|---|
| Yield curve (12-month to 10-year) | - | ✓ | - |
| Unemployment Claims | ✓ | - | - |
| Unemployment Rate | ✓ | - | - |
| Conference Board Leading Index | ✓ | - | - |
| ISM New Orders Minus Inventories | ✓ | - | - |
| Fed Funds vs. Nominal GDP Growth | ✓ | - | - |
| Expansion | Neutral | Recessionary | |

This last part of the expansion cycle could prove to be very drawn out.

Source - RBC Wealth Management, Bloomberg, FRED Economic Data St. Louis Fed

Confidence matters

Indicators aside, we believe it will take some doing to get the U.S. into recession from here. One need only check in on the American consumer who thoroughly dominates the U.S. economy at almost 70% of GDP. Consumers are confident and for many good reasons. The unemployment rate was last below 4% in the mid-1960s; unemployment claims recently hit all-time lows; there are 7.6 million

Yield curve inversion

unfilled jobs on offer, according to the Labor Department; wage rates are rising nicely; home values and other components of household wealth are elevated and don't look frothy or otherwise overly vulnerable; and consumer spending has remained mostly in line with income growth, suggesting household debt has not become unmanageable.

It has usually taken the arrival of tight monetary conditions to tip the economy into recession. "Tight money" has two necessary components: prohibitively high interest rates and banks that have become noticeably more restrictive in their lending practices. Neither is present today and with the Fed apparently on hold for the rest of this year restrictive credit conditions still lie some ways off. Looking at the latest monthly survey of thousands of small and medium-sized U.S. businesses by the National Federation of Independent Business, just 3% of respondents (historically very low) report being unable to get the credit they need, while 51% say they need no credit.

And what does this say for investment strategy?

The "inversion signal" has always been hard for investors to get behind precisely because it has given such a long early warning. It is usually followed by several quarters of positive economic growth—one such interval lasted almost two years. And the stock market typically has some months or even quarters to go before it sets its final high. It is difficult for investors to adopt a defensive approach when the economy continues to perform and earnings look set to go on growing.

For our part, we note that most stock markets are still below last year's highs and about at the same level as 12 months ago. Price-to-earnings multiples are reasonable and no longer as extended as they were in early 2018. We have been impressed by the power and breadth of the liftoff from the ultra-depressed December low point. We expect new highs lie ahead for the U.S. broad averages and for most developed economy stock markets.

We are content for now to maintain our benchmark target weight (Market Weight) exposure to stocks in a global portfolio. However, we are treating the inversion of the yield curve as a "shot across the bow" for equity investors. We expect to counsel the adoption of a progressively more defensive posture over the course of the next six to 12 months.

Research resources

This document is produced by the Global Portfolio Advisory Committee within RBC Wealth Management's Portfolio Advisory Group. The RBC Wealth Management Portfolio Advisory Group provides support related to asset allocation and portfolio construction for the firm's investment advisors / financial advisors who are engaged in assembling portfolios incorporating individual marketable securities. The Committee leverages the broad market outlook as developed by the RBC Investment Strategy Committee, providing additional tactical and thematic support utilizing research from the RBC Investment Strategy Committee, RBC Capital Markets, and third-party resources.

Global Portfolio Advisory Committee members:

Jim Allworth – Co-chair; Investment Strategist, RBC Dominion Securities Inc.

Kelly Bogdanova – Co-chair; Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group U.S., RBC Capital Markets, LLC

Frédérique Carrier – Co-chair; Managing Director, Head of Investment Strategies, Royal Bank of Canada Investment Management (U.K.) Limited

Mark Bayko, CFA – Head, Portfolio Management, RBC Dominion Securities Inc.

Craig Bishop – Lead Strategist, U.S. Fixed Income Strategies Group, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Laura Cooper – Head of FX Solutions and Strategy, Royal Bank of Canada Investment Management (U.K.) Limited

Janet Engels – Head of Portfolio Advisory Group U.S., RBC Wealth Management, RBC Capital Markets, LLC

Tom Garretson, CFA – Fixed Income Portfolio Strategist, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Christopher Girdler, CFA – Fixed Income Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group, RBC Dominion Securities Inc.

Patrick McAllister, CFA – Canadian Equities Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group – Equities, RBC Dominion Securities Inc.

Jay Roberts, CFA – Head of Investment Solutions & Products, RBC Wealth Management Hong Kong, RBC Investment Services (Asia) Limited

Alan Robinson – Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group – U.S. Equities, RBC Capital Markets, LLC

Alastair Whitfield – Head of Fixed Income - British Isles, Royal Bank of Canada Investment Management (U.K.) Limited

The RBC Investment Strategy Committee (RISC) consists of senior investment professionals drawn from individual, client-focused business units within RBC, including the Portfolio Advisory Group. The RISC builds a broad global investment outlook and develops specific guidelines that can be used to manage portfolios. The RISC is chaired by Daniel Chornous, CFA, Chief Investment Officer of RBC Global Asset Management Inc.

Required disclosures

Analyst Certification

All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Important Disclosures

In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC which is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada.

Non-U.S. Analyst Disclosure: Jim Allworth, Mark Bayko, Christopher Girdler, and Patrick McAllister, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; and Frédérique Carrier, Laura Cooper, and Alastair Whitfield, employees of RBC Wealth Management USA's foreign affiliate Royal Bank of Canada Investment Management (U.K.) Limited; and Jay Roberts, an employee of RBC Investment Services (Asia) Limited contributed to the preparation of this publication. These individuals are not registered with or qualified as research analysts with the U.S. Financial Industry Regulatory Authority ("FINRA") and, since they are not associated persons of RBC Wealth Management, they may not be subject to FINRA Rule 2241 governing communications with subject companies, the making of public appearances, and the trading of securities in accounts held by research analysts.

In the event that this is a compendium report (covers six or more companies), RBC Wealth Management may choose to provide important disclosure information by reference. To access current disclosures, clients should refer to <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2> to view disclosures regarding RBC Wealth Management and its affiliated firms. Such information is also available upon request to RBC Wealth Management Publishing, 60 South Sixth St, Minneapolis, MN 55402.

References to a Recommended List in the recommendation history chart may include one or more recommended lists or model portfolios maintained by RBC Wealth Management or one of its affiliates. RBC Wealth Management recommended lists include the Guided Portfolio: Prime Income (RL 6), the Guided Portfolio: Dividend Growth (RL 8), the Guided Portfolio: ADR (RL 10), and the Guided Portfolio: All Cap Growth (RL 12). RBC Capital Markets recommended lists include the Strategy Focus List and the Fundamental

Equity Weightings (FEW) portfolios. The abbreviation 'RL On' means the date a security was placed on a Recommended List. The abbreviation 'RL Off' means the date a security was removed from a Recommended List.

Distribution of Ratings

For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets, LLC ratings of Top Pick/Outperform, Sector Perform, and Underperform most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis.

| Distribution of Ratings - RBC Capital Markets, LLC Equity Research | | | | | |
|--|-------|---------|--|---------|--|
| | | | As of March 31, 2019 | | |
| | | | Investment Banking Services Provided During Past 12 Months | | |
| Rating | Count | Percent | Count | Percent | |
| Buy [Top Pick & Outperform] | 794 | 54.01 | 202 | 25.44 | |
| Hold [Sector Perform] | 589 | 40.07 | 107 | 18.17 | |
| Sell [Underperform] | 87 | 5.92 | 5 | 5.75 | |

Explanation of RBC Capital Markets, LLC Equity Rating System

An analyst's "sector" is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

Ratings: Top Pick (TP): Represents analyst's best idea in the sector; expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio.

Outperform (O): Expected to materially outperform sector average over 12 months. **Sector Perform (SP):** Returns expected to be in line with sector average over 12 months.

Underperform (U): Returns expected to be materially below sector average over 12 months. **Restricted (R):** RBC policy precludes certain types of communications, including an investment recommendation, when RBC is acting as an advisor in certain merger or other strategic transactions and in certain other circumstances. **Not Rated (NR):** The rating, price targets and estimates have been removed due to applicable legal, regulatory or policy constraints which may include when RBC Capital Markets is acting in an advisory capacity involving the company.

Risk Rating: The Speculative risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.

Valuation and Risks to Rating and Price Target

When RBC Wealth Management assigns a value to a company in a research report, FINRA Rules and NYSE Rules (as

incorporated into the FINRA Rulebook) require that the basis for the valuation and the impediments to obtaining that valuation be described. Where applicable, this information is included in the text of our research in the sections entitled "Valuation" and "Risks to Rating and Price Target", respectively.

The analyst(s) responsible for preparing this research report have received (or will receive) compensation that is based upon various factors, including total revenues of RBC Capital Markets, LLC, and its affiliates, a portion of which are or have been generated by investment banking activities of RBC Capital Markets, LLC and its affiliates.

Other Disclosures

Prepared with the assistance of our national research sources. RBC Wealth Management prepared this report and takes sole responsibility for its content and distribution. The content may have been based, at least in part, on material provided by our third-party correspondent research services. Our third-party correspondent has given RBC Wealth Management general permission to use its research reports as source materials, but has not reviewed or approved this report, nor has it been informed of its publication. Our third-party correspondent may from time to time have long or short positions in, effect transactions in, and make markets in securities referred to herein. Our third-party correspondent may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any company mentioned in this report.

RBC Wealth Management endeavors to make all reasonable efforts to provide research simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. In certain investment advisory accounts, RBC Wealth Management or a designated third party will act as overlay manager for our clients and will initiate transactions in the securities referenced herein for those accounts upon receipt of this report. These transactions may occur before or after your receipt of this report and may have a short-term impact on the market price of the securities in which transactions occur. RBC Wealth Management research is posted to our proprietary Web sites to ensure eligible clients receive coverage initiations and changes in rating, targets, and opinions in a timely manner. Additional distribution may be done by sales personnel via e-mail, fax, or regular mail. Clients may also receive our research via third-party vendors. Please contact your RBC Wealth Management Financial Advisor for more information regarding RBC Wealth Management research.

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management's Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our website at <https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2>. Conflicts of interests related to our investment advisory business can be found in Part 2A Appendix 1 of the Firm's Form ADV or the RBC Advisory

Programs Disclosure Document. Copies of any of these documents are available upon request through your Financial Advisor. We reserve the right to amend or supplement this policy, Part 2A Appendix 1 of the Form ADV, or the RBC Advisory Programs Disclosure Document at any time.

The authors are employed by one of the following entities: RBC Wealth Management USA, a division of RBC Capital Markets, LLC, a securities broker-dealer with principal offices located in Minnesota and New York, USA; by RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Toronto, Canada; by RBC Investment Services (Asia) Limited, a subsidiary of RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Hong Kong, China; and by Royal Bank of Canada Investment Management (U.K.) Limited, an investment management company with principal offices located in London, United Kingdom.

Third-party disclaimers

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard & Poor's Financial Services LLC ("S&P") and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

References herein to "LIBOR", "LIBO Rate", "L" or other LIBOR abbreviations means the London interbank offered rate as administered by ICE Benchmark Administration (or any other person that takes over the administration of such rate).

Disclaimer

The information contained in this report has been compiled by RBC Wealth Management, a division of RBC Capital Markets, LLC, from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Wealth Management, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Wealth Management's judgment as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients, including clients who are affiliates of Royal Bank of Canada, and does not have regard to the particular circumstances or needs of any specific person who may read it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. To the full extent permitted by law neither Royal Bank of Canada nor any of its affiliates, nor any other person, accepts any liability whatsoever

for any direct or consequential loss arising from any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior consent of Royal Bank of Canada. In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC. Additional information is available upon request.

To U.S. Residents: This publication has been approved by RBC Capital Markets, LLC, Member NYSE/FINRA/SIPC, which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. RBC Capital Markets, LLC, is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC. International investing involves risks not typically associated with U.S. investing, including currency fluctuation, foreign taxation, political instability and different accounting standards.

To Canadian Residents: This publication has been approved by RBC Dominion Securities Inc. RBC Dominion Securities Inc.* and Royal Bank of Canada are separate corporate entities which are affiliated. *Member-Canadian Investor Protection Fund. ®Registered trademark of Royal Bank of Canada. Used under license. RBC Wealth Management is a registered trademark of Royal Bank of Canada. Used under license.

RBC Wealth Management (British Isles): This publication is distributed by Royal Bank of Canada Investment Management (U.K.) Limited and RBC Investment Solutions (CI) Limited. Royal Bank of Canada Investment Management (U.K.) Limited is authorised and regulated by the Financial Conduct Authority (Reference number: 146504). Registered office: Riverbank House, 2 Swan Lane , London, EC4R 3BF, UK. RBC Investment Solutions (CI) Limited

is regulated by the Jersey Financial Services Commission in the conduct of investment business in Jersey. Registered office: Gaspé House, 66-72 Esplanade, St Helier, Jersey JE2 3QT, Channel Islands, registered company number 119162.

To Hong Kong Residents: This publication is distributed in Hong Kong by Royal Bank of Canada, Hong Kong Branch which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission ('SFC'), and RBC Investment Services (Asia) Limited, which is regulated by the SFC. Financial Services provided to Australia: Financial services may be provided in Australia in accordance with applicable law. Financial services provided by the Royal Bank of Canada, Hong Kong Branch are provided pursuant to the Royal Bank of Canada's Australian Financial Services Licence ('AFSL') (No. 246521).

To Singapore Residents: This publication is distributed in Singapore by the Royal Bank of Canada, Singapore Branch, a registered entity licensed by the Monetary Authority of Singapore. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance. If you have any questions related to this publication, please contact the Royal Bank of Canada, Singapore Branch. Royal Bank of Canada, Singapore Branch accepts responsibility for this report and its dissemination in Singapore.

© 2019 RBC Capital Markets, LLC - Member NYSE/FINRA/SIPC

© 2019 RBC Dominion Securities Inc. - Member Canadian Investor Protection Fund

© 2019 RBC Europe Limited

© 2019 Royal Bank of Canada
All rights reserved
RBC1524