



Perspectives from the Global Portfolio Advisory Committee

April 7, 2022

Inverted curve yields excessive concerns

Atul Bhatia, CFA - Minneapolis

We believe that recent discussions of yield curve inversion as a predictor of recessionary risk have gotten ahead of the data and the economics. It's important to remember that not all curves are created equal and we make the case that the real picture is telling a different story.

Yield curve inversion—when short-term interest rates rise above long-term rates—has occurred before the start of every recession for the past 75 years and has also given advance notice of the serious stock market declines associated with bear markets. On average, an inversion has arrived 11 months before economic contractions and nearly six months before stock market peaks.

Given this track record, it's perhaps understandable that the financial and popular press have now latched on to the measure and routinely cite relative interest rate levels when predicting an "imminent" and "inevitable" recession. But much of the recent reporting has failed to consider the economic logic behind the indicator's predictive power, and we believe the result is a flawed interpretation of the current recessionary probability in the U.S.

Not all curves are created equal

None of the recent commentary that we have seen discussing yield curve flattening and inversion has focused on the difference between 10-year Treasury yields and 3-month borrowing rates. On the one hand, that's not surprising: the 10-year vs. 3-month yield is nowhere near inversion and has been steepening—not flattening—of late. At the same time, this avoidance of the 10-year vs. 3-month difference is surprising: after all, that measure of yield curve steepness forms the basis of most academic research on recession prediction and—not

Yield curve inversion talk looks premature

Our preferred measure is above its historical average



Source - RBC Wealth Management, Bloomberg

coincidentally—serves as the Fed's preferred measure of the yield curve.

Although the press has focused on the recent inversion in the 2-year vs. 10-year segment of the yield curve, there is an economic logic behind the Fed's focus on the 3-month vs. 10-year maturities. Bank loans form a significant

For perspectives on the week from our regional analysts, please see pages 3-4.

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part of the capital structure of many corporations and these are typically linked to short-term borrowing rates such as the 3-month yield. The 10-year yield serves as a reasonable proxy for market growth expectations. So, as 3-month rates rise above 10-year yields, we would not be surprised to see corporate executives shelve capital projects until growth expectations recover, and instead use the funds to pay down short-term loans. This would tend to constrain growth in the economy overall, providing much-needed logic to how a flattening yield curve connects to recession probability. This connection is often missing or glossed over when the press discusses flattening between other points on the yield curve.

Incorporating future policy moves

One potential drawback to using the 3-month rate as the basis of curve measurement is that it's slow to adjust when the Fed signals a major shift in interest rate policy. For this reason, many bond trading desks prefer to look at the 2-year vs. 10-year Treasury yield when discussing inversion, arguing that the 2-year better incorporates market estimates of where short-term interest rates are headed and can give an earlier signal of a potential upcoming recession. One obvious problem with this approach is the difficulty of predicting future Fed policy; after all, few, if any, bond market watchers predicted the last two years of monetary policy.

For our part, we use the difference between 1-year and 10-year government debt as our yield curve measurement. By confining ourselves to the next 12 months, we have better visibility on potential Fed changes, while still generating a signal that has led significant market downturns by nearly six months on average. We then incorporate this yield curve measurement into our U.S. recession scorecard, which includes six other key leading economic indicators. For a full update of our recession scorecard, please see the global equity commentary in this month's Global Insight.

As of the morning of April 7, there is a 0.86 percent positive gap in favor of the 10-year Treasury yield over the 1-year, leaving our measure firmly in what we view as benign territory. If that difference were to narrow to something under 0.3 percent, we would likely shift the yield curve signal to a cautionary neutral view, and if it were to flip negative—where the 1-year yield exceeds the 10-year yield—we would move this indicator to red in the scorecard. That looks to us to be a long way off as things currently stand.

The real picture is different

Another factor in yield curve analysis today is inflation. For most of recent U.S. economic history, inflation was largely an afterthought for most investors. That is clearly not the case today, with the Consumer Price Index rising at the fastest pace in 40 years.

Inflation expectations are driving curve inversion

Real yields show very different picture on relative rates



Source - RBC Wealth Management, Bloomberg

One way to incorporate inflation into our yield curve analysis is to focus on Treasury Inflation-Protected Securities (TIPS), which adjust their cash flows based on changes in consumer prices. These bonds provide us with a so-called "real yield," stripped of inflation's impact. By this measurement, we are also far from a curve inversion; the difference between the 10-year and 2-year real yield, as can be seen in the graph above, is a very healthy 1.37 percent as of today's open. Far from signaling recession, the TIPS market is indicating confidence in the Fed's eventual ability to bring prices under control, a view that is confirmed by other inflation indicators.

Absence of evidence is not evidence of absence

We believe that recent discussions of yield curve inversion as a predictor of recessionary risk have gotten ahead of the data and the economics.

We remain of the view that we will experience positive, but slowing, economic growth in 2022, although we acknowledge higher risks to the expansion particularly in the 2023–2024 time frame.

The main takeaway for most long-term investors, in our opinion, is that there should be a high bar to migrate away from risk assets given the potential harm to long-term portfolio gains. We would consider it unwise for investors to make such a move now, based on the evidence we have seen from recent yield curve moves.

UNITED STATES

Ben Graham, CFA - Minneapolis

- As the Russia-Ukraine conflict continues to age, U.S. equities are on track for their first week of losses in the last four. As of Thursday morning trading, the S&P 500 is down 1.6% this week, outpacing the Nasdaq's 2.6% decline and the small-cap Russell 2000's 4.0% decline. The Dow Jones Industrial Average leads all U.S. major indexes with its 1.5% weekly decline. Value is outpacing growth this week as defensive sectors add ballast to U.S. equity markets. Leadership is evident in Utilities, Health Care, and Consumer Staples, all of which are trading at least 0.8% higher as of Thursday morning trading. Weakness is present in Industrials, Consumer Discretionary, and Tech, as semiconductor stocks declined nearly 5% in one of their worst weeks of 2022.
- Heading into Q1 earnings season, it's interesting to look at market valuations in light of earnings expectations. Specifically, the S&P 500's 2022 price-to-earnings valuation based on consensus earnings estimates has fallen from 23.5x in the early days of January to 19.7x today. The valuation contraction is clear, and is all the more important in light of the index's 6% decline year to date. The reason the price decline is so modest despite the 16% contraction in market multiples is due to the evolution of earnings expectations so far this year. Specifically, 2022 consensus earnings expectations have climbed by \$5 to \$228 so far this year. Therefore, despite the market moving lower thus far in 2022, consensus views on earnings have actually climbed by 2%, resulting in valuations that have declined by more than the market has.
- The weekly initial unemployment claims report showed the economy saw fewer filings than expected with the announced 166,000 coming in well below consensus estimates of 200,000 and marking the lowest level since 1968. Services sector activity was also slightly stronger than anticipated with this week's release of March's ISM Non-Manufacturing Purchasing Managers' Index data registering 58.3, higher than expectations at 58.2 and indicative of an ongoing economic expansion.

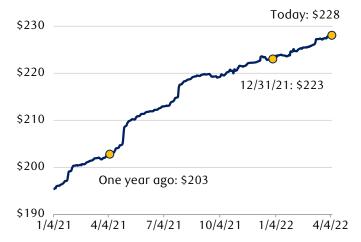
CANADA

Matt Altro & Richard Tan, CFA - Toronto

■ The Bank of Canada's (BoC) Business Outlook Survey (BOS) for Q1 2022 reaffirmed growing expectations that the central bank will announce a 0.5% interest rate hike at its April 13 meeting. The quarterly report aims to identify pain points amongst businesses, as well as gauge

S&P 500 2022 EPS estimates continue to climb

S&P 500 2022 bottom-up consensus EPS estimates



Source - RBC Wealth Management, FactSet; data through 4/6/22

economic conditions based on numerous production, labor, and demand/supply expectations reported by industry executives. The results of the survey paint a picture of a dampening economy, with a record number of firms reporting capacity pressures related to either labor or supply chain issues, and about half expecting sales growth to slow over the next 12 months. On the back of the survey results and a now-unanimous expectation by the big six Canadian banks, the likelihood that Canada will soon see the first 0.5% hike since 2000 appears to be increasing (the BoC typically hikes benchmark rates in 0.25% increments). RBC Economics estimates interest rates could reach 2% by year's end—a further 1.5% above current levels.

■ The S&P/TSX Composite Index advanced nearly 4% in the first quarter of 2022, outperforming the S&P 500 Index by more than 900 basis points (9%) in **Canadian dollar terms.** The variance was driven by the S&P/TSX Composite's higher exposure to the Energy and Materials sectors, which gained approximately 29% and 20%, respectively, and account for roughly 30% of the index on an aggregate basis. On the flip side, Information Technology was the worst-performing sector during the quarter, declining about 35%; however, it is a smaller component of the index at roughly 7%. Overall, while we acknowledge that the U.S. Treasury yield curves have been sending conflicting signals about the economic outlook, we remain constructive on the setup for the Canadian equity market given healthy fundamentals for most sectors and valuations that remain favourable, in our view. In particular, the S&P/TSX Composite is trading at approximately 13.5x 2023 consensus earnings expectations, compared with an average of 17.2x since 2015.

EUROPE

Rufaro Chiriseri, CFA & Thomas McGarrity, CFA – London

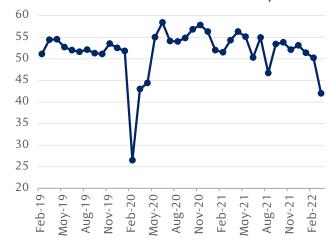
- The CAC 40 French benchmark index underperformed during the week as the market priced in increased political uncertainty and risk following a French presidential election poll pointing to a tight contest between President Emmanuel Macron and far-right populist challenger Marine Le Pen, ahead of the first-round vote this Sunday (April 10). Although polls suggest Macron will retain the presidency, the latest opinion poll showed Le Pen gaining ground, suggesting that if she is voted through to the final run-off on 24 April, then the vote would likely be closer than when the two opposed each other in 2017 election.
- This week, yields on 10-year French government bonds reflected the risks of a tight election contest, as the spreads between 10-year French and German government bonds widened beyond the peak in February to 0.54% from 0.43% prior to the poll indications. These spreads are still moderate when compared to other periods of heightened political risks; however, spreads are likely to remain volatile until the election result is known.
- We think a Le Pen victory would likely be taken negatively by the European equity market given her well-known Eurosceptic leanings. The key risk the market is focused on, in our view, is that a Le Pen presidency could present potential challenges to unity within the EU, which has recently shown strong cohesion and unity in response to Russia's invasion of Ukraine.
- European Central Bank March meeting minutes, released on Thursday, showed a division, as "some of the voting members preferred to set a firm end date for the asset purchase programme (APP) purchases during the summer", while others preferred a "wait and see approach". If the APP ends in the summer, according to some members, there is a clearer path to raising rates in Q3 2022. Following the release of the minutes, expectations for a September rate hike increased and bond yields rose, indicating that the market interpreted the minutes as somewhat hawkish. Some members are pushing for two hikes before the year's end, while others are more cautious due to uncertainties around the war in Ukraine.

ASIA PACIFIC

Jasmine Duan – Hong Kong

■ Asian equities were somewhat under pressure this week as investors worried that aggressive policy tightening by the Federal Reserve could lead to slower growth and hurt company earnings. China extended the COVID-19 lockdown in Shanghai, a major financial center

The Caixin China Services Purchasing Managers' Index fell to the lowest level since February 2020



Source - RBC Wealth Management, Bloomberg; monthly data since 2/28/19

and industrial powerhouse, adding to anxiety over global supply chains and China's growth outlook. The Caixin China Services Purchasing Managers' Index (PMI), a gauge of services sector activity in China, tumbled to 42.0 in March, the lowest level since February 2020, from 50.2 the prior month.

- Following the weak services PMI reading, China's State Council on Wednesday pledged to use monetary policy tools at an "appropriate time" plus other measures to support consumption. The People's Bank of China also unveiled plans to set up a fund to support highly indebted financial institutions, though the fund's size was not revealed.
- China has doubled down on its zero-tolerance approach to curbing COVID-19 infections, and we don't expect it to change any time soon. In our view, future preparation work is needed before transiting to "COVID light" or a gradual reopening. A key is to increase the booster shot vaccination rate, especially for the elderly. Less than 50% of the total population has received the third shot; for people aged 80+, the rate is around 20%.
- Samsung Electronics (0005930 KS), the large South Korean chip and smartphone manufacturer, reported preliminary Q1 earnings that beat analysts' estimates. Operating profit was up 50% to 14.1 trillion won (US\$11.6 billion) and sales advanced 18% to 77 trillion won. The strong performance was helped by robust demand for new smartphone models and memory chips. Datacenter expansions and the global shift to 5G communications continue to spur semiconductor demand. The company expects solid earnings growth in 2022 supported by a healthy rebound in semiconductors and displays in H2 2022.

MARKET Scorecard

Data as of April 6, 2022

Equity returns do not include dividends, except for the Brazilian Ibovespa. Bond yields in local currencies. Copper Index data and U.S. fixed income returns as of Wednesday's close. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/USD is the exception). Currency returns quoted in terms of the first currency in each pairing.

Examples of how to interpret currency data: CAD/USD 0.79 means 1 Canadian dollar will buy 0.79 U.S. dollar. CAD/USD 0.8% return means the Canadian dollar rose 0.8% vs. the U.S. dollar year to date. USD/JPY 123.78 means 1 U.S. dollar will buy 123.78 yen. USD/JPY 7.6% return means the U.S. dollar rose 7.6% vs. the yen year to date.

Source - Bloomberg; data as of 4/6/22 market close

Equities (local currency)	Level	MTD	YTD	1 уг	2 уг
S&P 500	4,481.15	-1.1%	-6.0%	10.0%	68.2%
Dow Industrials (DJIA)	34,496.51	-0.5%	-5.1%	3.2%	52.1%
Nasdaq	13,888.82	-2.3%	-11.2%	1.4%	75.5%
Russell 2000	2,016.94	-2.6%	-10.2%	-10.7%	77.1%
S&P/TSX Comp	21,788.60	-0.5%	2.7%	14.1%	60.3%
FTSE All-Share	4,218.12	0.7%	0.2%	8.2%	37.9%
STOXX Europe 600	455.97	0.0%	-6.5%	4.8%	42.2%
EURO STOXX 50	3,824.69	-2.0%	-11.0%	-3.7%	36.8%
Hang Seng	22,080.52	0.4%	-5.6%	-23.7%	-7.0%
Shanghai Comp	3,283.43	1.0%	-9.8%	-5.7%	18.8%
Nikkei 225	27,350.30	-1.7%	-5.0%	-7.9%	47.2%
India Sensex	59,610.41	1.8%	2.3%	21.2%	116.1%
Singapore Straits Times	3,422.95	0.4%	9.6%	6.7%	38.5%
Brazil Ibovespa	118,227.75	-1.5%	12.8%	0.6%	59.6%
Mexican Bolsa IPC	55,438.73	-1.9%	4.1%	15.5%	61.2%
Gov't bonds (bps change)	Yield	MTD	YTD	1 уг	2 yr
U.S. 10-Yr Treasury	2.592%	25.4	108.2	93.6	192.2
Canada 10-Yr	2.514%	10.9	108.8	102.6	174.9
UK 10-Yr	1.703%	9.3	73.2	90.6	136.9
Germany 10-Yr	0.647%	9.9	82.4	96.3	107.2
Fixed income (returns)	Yield	MTD	YTD	1 уг	2 уг
U.S. Aggregate	3.11%	-1.1%	-6.9%	-5.6%	-4.6%
U.S. Investment-Grade Corp	3.75%	-1.0%	-8.6%	-5.8%	3.4%
U.S. High-Yield Corp	6.09%	-0.2%	-5.0%	-1.4%	24.9%
Commodities (USD)	Price	MTD	YTD	1 уг	2 уг
Gold (spot \$/oz)	1,925.19	-0.6%	5.2%	10.4%	15.9%
Silver (spot \$/oz)	24.45	-1.4%	4.9%	-2.8%	63.0%
Copper (\$/metric ton)	10,433.00	0.6%	7.1%	15.2%	114 20/
Oil (WTI spot/bbl)				13.270	114.2%
Oil (WTI spot/bbl)	96.23	-4.0%	25.0%	62.2%	269.0%
Oil (Brent spot/bbl)	96.23 101.78	-4.0% -5.7%	25.0% 30.9%		
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Oil (Brent spot/bbl)	101.78	-5.7%	30.9%	62.2% 62.2%	269.0% 208.0%
Oil (Brent spot/bbl) Natural Gas (\$/mmBtu)	101.78 6.07	-5.7% 7.5%	30.9% 62.6%	62.2% 62.2% 146.9%	269.0% 208.0% 250.4%
Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Currencies	101.78 6.07 Rate	-5.7% 7.5% MTD	30.9% 62.6% YTD	62.2% 62.2% 146.9%	269.0% 208.0% 250.4% 2 yr
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Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Currencies U.S. Dollar Index CAD/USD	101.78 6.07 Rate 99.6130 0.7976	-5.7% 7.5% MTD 1.3% -0.2%	30.9% 62.6% YTD 4.1% 0.8%	62.2% 62.2% 146.9% 1 yr 7.9% 0.2%	269.0% 208.0% 250.4% 2 yr -1.1% 12.5%
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Oil (Brent spot/bbl) Natural Gas (\$/mmBtu) Currencies U.S. Dollar Index CAD/USD USD/CAD EUR/USD GBP/USD AUD/USD USD/JPY EUR/JPY EUR/GBP EUR/CHF USD/SGD	101.78 6.07 Rate 99.6130 0.7976 1.2538 1.0900 1.3072 0.7512 123.7800 134.9300 0.8339 1.0169 1.3600	-5.7% 7.5% MTD 1.3% -0.2% 0.3% -1.5% -0.5% 0.4% 1.7% 0.2% -1.0% -0.4% 0.4%	30.9% 62.6% YTD 4.1% 0.8% -0.8% -4.1% -3.4% 3.4% 7.6% 3.1% -0.9% -2.0% 0.8%	62.2% 62.2% 146.9% 1 yr 7.9% 0.2% -0.2% -8.2% -5.4% -2.0% 12.8% 3.5% -2.9% -8.0% 1.6%	269.0% 208.0% 250.4% 2 yr -1.1% 12.5% -11.1% 1.0% 6.9% 23.4% 13.3% 14.5% -5.5% -3.7% -5.1%

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As of March 31, 2022

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
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