

CHART OF THE DAY

December 28, 2018

Spotlight on : 10-2 Yield Curve

COMMENT: Both the media and the investment community continue to focus on the yield curve and the prospect of an inversion. This latest week brought us no closer, in fact, spreads widened slightly even though actual rates dropped a fair amount.

Historically, whenever the U.S. Treasuries 10-year yield is less than the 2-year yield, called a yield inversion, an economic recession soon follows. There can be a false positive where a yield inversion does not lead to a recession. But, since the end of World War II, almost every time the yield has inverted, a recession followed. The length of time between the inversion and the commencement of the recession has varied quite widely, from a matter of months to up to two years.

Since the recession of 2008-2009, global economies have shown slow but steady growth, some better than others. A recession now seems to be on the horizon, although the "horizon" could still be a long way off. As we well know, the stock market has been rattled lately, and briefly reached "bear market" territory for some of the indexes. However, with the remarkable recovery in the last few trading days, none of the major indexes are in bear territory now.

A bear market is generally defined as a drop of 20% from the recent high. With just one trading day remaining in 2018, as of the close of December 28, the S&P 500 is down 455 points, or 15.48%, from its all-time high last September. Just a few days ago, it was down 20.06%. The DJIA is currently down 14.43% and the NASDAQ, which was well into bear territory recently, is now down 19.04%. Much of the recent stock market decline has been attributed to the specter and actuality of rising interest rates. However, having reached recent highs around November 8, yields in both the USA and Canada have been declining, significantly.

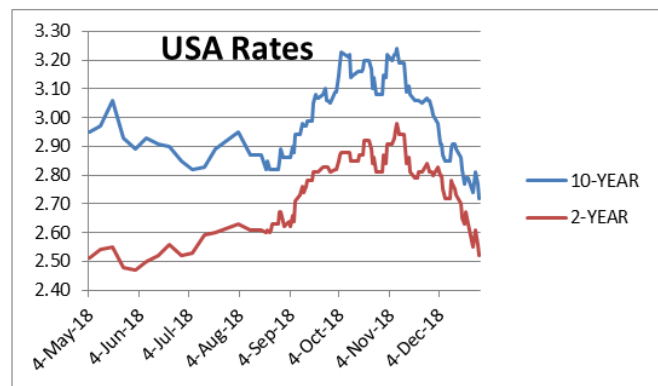
The U.S. 10s, at Friday's close of 2.72%, are back to January 2018 levels. More importantly, the U.S. yield spread has dropped significantly since November 8, from 0.26x to a low of 0.11, although it is currently 0.20x. In Canada, the decline has been even more marked. The Canadas 10-2 yield spread is just 0.09x, also down substantially from the 0.18x a month ago. Inversion in both countries, on the 10-2 metric, is close but not there yet. It is possible that we could stay above the 0.00x inversion level indefinitely.

The bottom line? The yield curve is narrow but still comfortably above the 0.00x level required to denote a recession is near. Our best guess at this point is that a recession, as defined above, will probably not occur until sometime around the end of Q1/2020 until the beginning of Q3/2020 (also see comment on page 5).

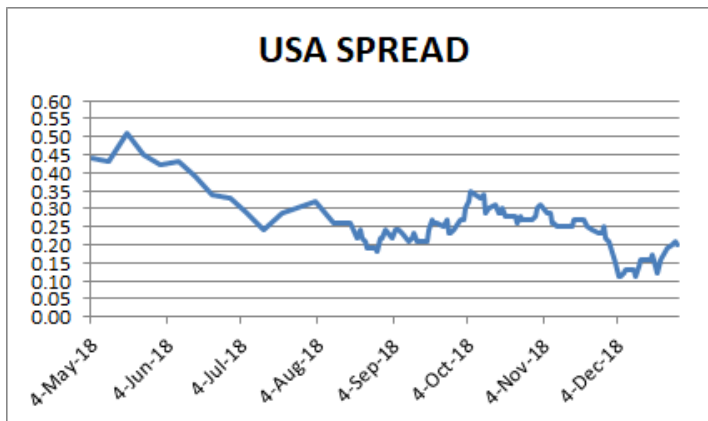
- The 10-year U.S. Treasuries yield whip-sawed all week and ended falling quite sharply the last two days. It closed the week at 2.72% and has not been this low since January 2018.
- The 2-year U.S. Treasuries yield followed the see-saw pattern of its longer-term brother and closed the week at 2.52%, a level not seen since June 29, 2018.
- The 10/2 yield spread (“diff” in the table below) rose this week to 0.20x from 0.16x a week ago.
- The table below shows the trend in rates for the past four weeks.
- The accompanying chart, with plots from the beginning of May, shows the dramatic drop in both the 10-year and the 2-year since their respective highs on November 8.

DATE	USA		
	10-YEAR	2-YEAR	DIFF
30-Nov-18	3.01	2.80	0.21
3-Dec-18	2.98	2.83	0.15
4-Dec-18	2.91	2.80	0.11
5-Dec-18	2.91	2.80	0.11
6-Dec-18	2.87	2.75	0.12
7-Dec-18	2.85	2.72	0.13
10-Dec-18	2.85	2.72	0.13
11-Dec-18	2.89	2.78	0.11
12-Dec-18	2.91	2.77	0.14
13-Dec-18	2.91	2.75	0.16
14-Dec-18	2.89	2.73	0.16
17-Dec-18	2.86	2.70	0.16
18-Dec-18	2.82	2.65	0.17
19-Dec-18	2.77	2.63	0.14
20-Dec-18	2.79	2.67	0.12
21-Dec-18	2.79	2.63	0.16
24-Dec-18	2.74	2.55	0.19
26-Dec-18	2.81	2.61	0.20
27-Dec-18	2.77	2.56	0.21
28-Dec-18	2.72	2.52	0.20

May 1, 2018 - December 28, 2018



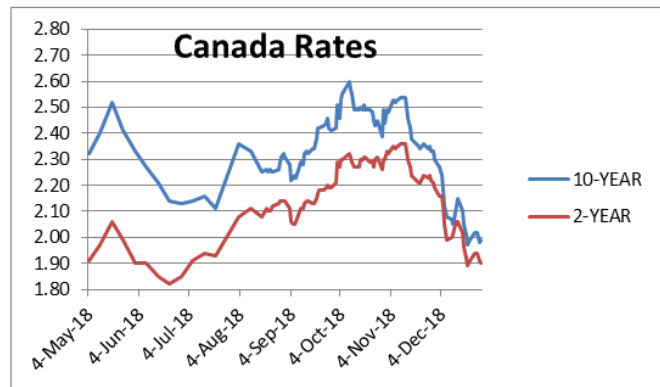
- As the table above shows, the 10-year/2-year spread rose on the first day of the week (the 24th) and then stabilized, closing the week at 0.20x, still well above the 0.00x that denotes the fear level for an impending recession.



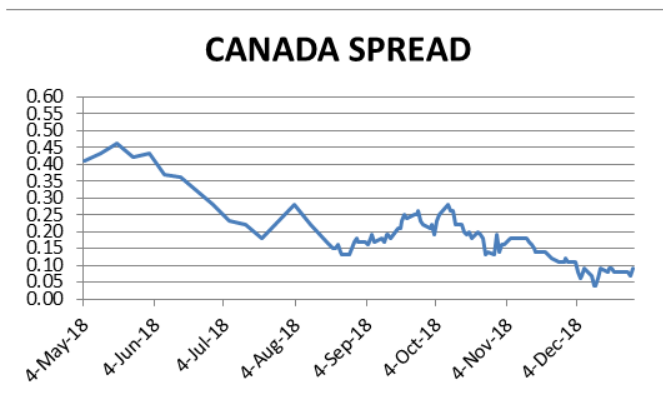
- Both the 10-year and the 2-year Canadian rates did not exhibit as much volatility as its U.S. comparables, but followed the same trend of declining into the week's end.

<u>DATE</u>	<u>CANADA</u>		
	<u>10-YEAR</u>	<u>2-YEAR</u>	<u>DIFF</u>
30-Nov-18	2.30	2.19	0.11
3-Dec-18	2.27	2.16	0.11
4-Dec-18	2.24	2.16	0.08
5-Dec-18	2.18	2.12	0.06
6-Dec-18	2.12	2.05	0.07
7-Dec-18	2.08	1.99	0.09
10-Dec-18	2.07	2.00	0.07
11-Dec-18	2.05	2.01	0.04
12-Dec-18	2.07	2.03	0.04
13-Dec-18	2.12	2.06	0.06
14-Dec-18	2.15	2.06	0.09
17-Dec-18	2.10	2.02	0.08
18-Dec-18	2.05	1.96	0.09
19-Dec-18	2.01	1.92	0.09
20-Dec-18	1.97	1.89	0.08
21-Dec-18	1.99	1.91	0.08
24-Dec-18	2.02	1.94	0.08
26-Dec-18	2.02	1.94	0.08
27-Dec-18	1.98	1.91	0.07
28-Dec-18	1.99	1.90	0.09

May 1, 2018 - December 28, 2018



- The 10-year/2-year spread in Canadian rates has stabilized for a second week in a row, moving within a narrow band and closing at 0.09x.



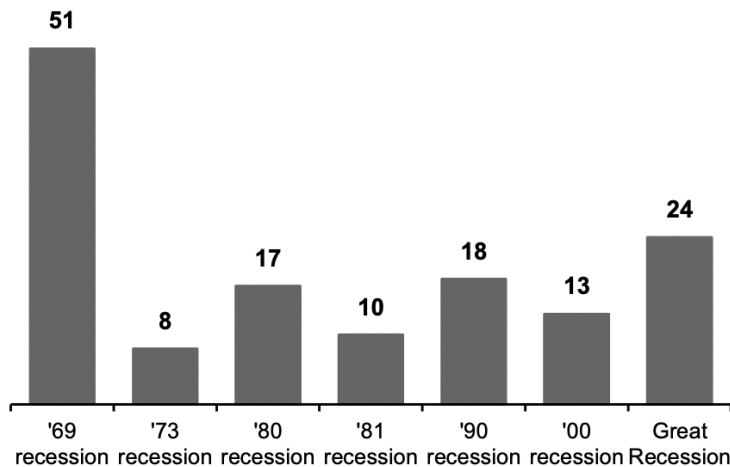
COMMENTARY

- A declining spread that approaches 0.00x or that actually goes negative (or inverts) signifies slowing economic growth and, even, the likelihood of a recession.
- A recession usually occurs a few months (or possibly up to two years) after the yield curve inverts (see the next chart and comment on the following page and the long-term chart on page 5).

- The following chart was produced by J.P. Morgan Asset Management. It shows how long it has taken during each of the last seven recessions from the first yield curve inversion until the actual start of the recession.

CHART OF THE WEEK

Months between the first inversion of the yield curve and the start of a recession

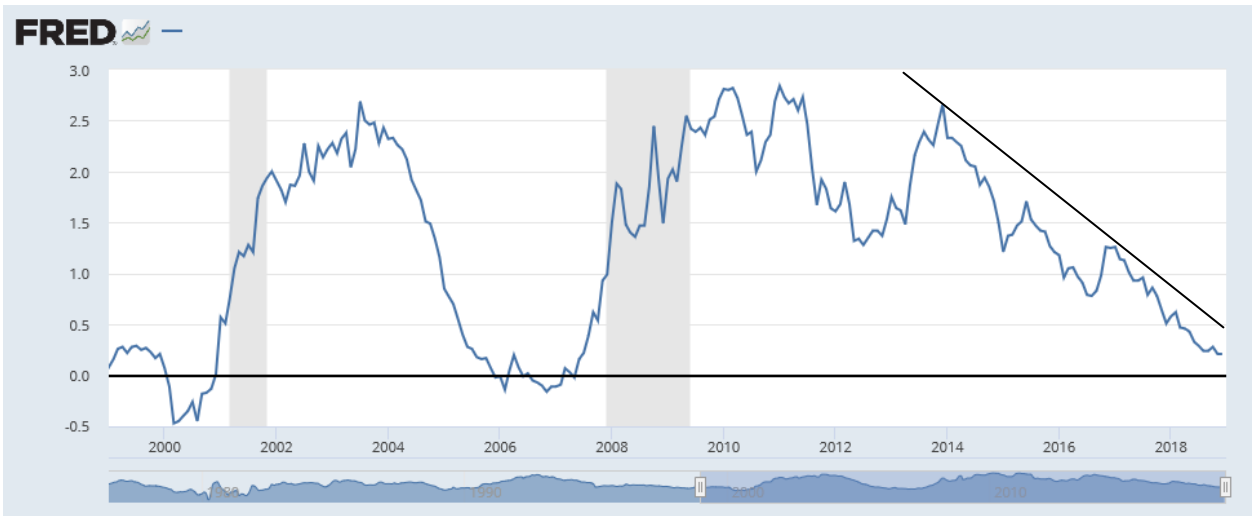


- The average lag-time for all seven recessions was 20 months, although this was skewed somewhat by the 51-month lag shown by the 1969 recession. Omitting it, the average for the remaining six recessions was 15 months.
- Sometimes, a negative yield curve gives a false positive (again, see the long-term chart on page 5).
- A negative or inverted yield curve indicates that long-term debt instruments have a lower yield than short-term debt instruments, given that these debt instruments are of the same or similar credit quality.
- Historically, inversions of the yield curve have preceded most U.S. recessions. Thus, the yield curve is considered an important barometer for predicting business cycle turning points.

<continued>

U.S. Treasuries 10-2 Yield Ratio Since January 1, 1999 (20 Years)

Here is a look at the 10-2 yield curve going back to January 1999. It shows the negative occurrences (below 0.0x) and the corresponding recessions (shaded areas) that soon followed. Currently, despite the falling trend-line, there is still further to go to reach the inversion level and the possibility of a resulting recession. The current ratio is 0.20x, up from 0.16x one week ago.



For greater clarity, let us have a look at the chart for the past five years, corresponding to about the time when the current down-trend started. Since the end of August, the spread rose slightly and then has trended sideways. The overall trend still portends a coming recession, but until it approaches 0.00x, that risk is not on the cards.



<continued>

For a short-term view, here is the chart since the beginning of 2018:



THE EQUITY MARKET

- Everyone is well aware of the recent pull-back in the market averages. A “correction” is denoted by a decline of 10%. A “bear market” represents a decline of 20%. The NASDAQ was recently bear market territory, but is now just out of it. The S&P 500 Index also briefly entered bear territory but has rallied out of it. The Dow Jones Industrial Average did not quite make it to being in a bear market and it, too, has risen in the last few days. We were close to experiencing the end of the longest stock market up-trend in history, but the recent sharp advance may have prolonged it. To qualify as a “bear”, the market would have to stay below -20% for at least a month. A couple of days does not make the grade. However, an economic recession is looming. Even though the U.S. economy is still humming along, there are a few signs cropping up to suggest that overall growth in 2019 will slow. In addition, after such an extended period of growth, it is natural to expect, eventually, that the economy will fall into recession. As the long-term chart above shows, once the 10-2 yield curve goes negative, an economic recession soon follows, but it is not coincidental and, interestingly, the recession occurs well after the yield curve has returned to positive and started a sharp rise. Also, as shown in early 2006 in the long-term chart above, it can give a false positive.

- Here is a recent quote from JP Morgan: Investors tend to fear yield curve inversion, looking at it as a signal that a recession is looming. However, we believe investors should not over-react to these recent moves for a few reasons. First, a flattening of the yield curve is common during rate hiking cycles, which is where we are today. Second, this time around, the shape of the curve has been distorted by central bank asset purchases around the world, making it a less trustworthy predictor of a recession. Lastly, the curve can stay flat for a long time before inverting and, even then, a recession can take a while to arrive. Over the last 7 recessions, it has taken an average of 20 months between the first inversion of the curve and the start of a recession.

<continued>



CONCLUSION

- Despite the discouraging down-trend that is currently occurring, U.S. economic growth still continues positively and, therefore, the possibility of a near-term recession in the United States still seems remote at this point. However, using the JP Morgan 20-month statistic as a yard-stick, a recession could occur in the USA sometime in the middle of 2020.
- If the statistic that causes a skewing in the calculation of the average is removed, the recalibrated average is 15 months, or around the end of Q1/2020.

Bob Weir, CFA
Contributing Analyst

***e*RESEARCH DISCLAIMER**

*e*Research is engaged solely in the provision of equity research to the investment community. *e*Research provides published research and analysis to its Subscribers on its website (www.eresearch.ca), and to the general investing public through its extensive electronic distribution network and through newswire agencies.

With regards to distribution of its research material, *e*Research makes all reasonable efforts to provide its publications, via e-mail, simultaneously to all of its Subscribers.

*e*Research does not manage money or trade with the general public, provides full disclosure of all fee arrangements, and adheres to the strict application of its Best Practices Guidelines.