RECESSION BAROMETER

April 12, 2019

Spotlight on : 10-2 Yield Curve

COMMENT: *Comments about an inversion and a subsequent recession that circulated at the end of March/beginning of April have dissipated and the world has turned to other concerns. The inversion in question reflected the short-lived 10-year yield falling below the 3-month yield. The 10Y/3M is but one of many yield comparisons that could be made. Indeed, the 5-year/2-year yield comparison shows that an inversion has been in place since March 2.*

Our preference is to use the more widely-accepted 10-year/2-year yield comparison. This metric is still well above levels marking an inversion and, indeed, the "spread" widened this past week. As shown on the next page, our current "guess" for a recession in the USA is the summer of 2020. The commencement of that recession, which almost all investment gurus and market pundits assume will happen, is a continual moving target.

Just because an inversion occurs, it is not automatic that a recession follows. When one does occur, the average lag time is 15 to 20 months. See the JP Morgan commentary on the following page. Further, if an inversion occurs for just one day, is it automatic that the recession count-down begins at that point? Or, should there be a certain number of days of a continuous inversion to give confirmation? At least a week would be a minimum, and a two-week period would be satisfactory.

This week, we are again providing various yield curve scenarios in order to gauge what is happening in the interest rate market. As will be shown, one could draw different conclusions depending upon which yield curves are chosen to best represent the current situation. For us, we think that maybe all three of the yield curve metrics analyzed should be inverted before sounding the alarm. As set out below, we looked at 10-year/2-year, 10-year/3-month, and 5-year/2-year.

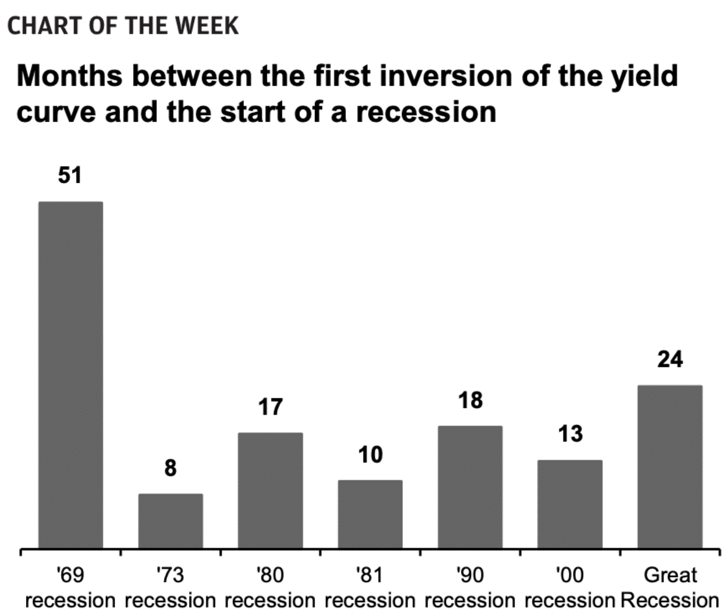
Last week saw rates rise somewhat in both the USA and Canada, and the "spread" did likewise in both countries. The USA 10-year closed the week at 2.56% (2.50%) and the 2-year closed at 2.40% (2.35%), with a spread of 0.16x (0.15x). For Canadas, the 10-year was at 1.72% (1.69%) and the 2-year at 1.59% (1.58%), for a spread of 0.13x (0.11x).

Our "recession barometer" kicks in when the "spread" between the 10-year rate and the 2-year rate for Treasuries in the USA and Government of Canada Bonds in Canada reach 0.00x, which means that the yield on the 10s equals the yield on the 2s. If the 10s yield less than the 2s, an "inversion" occurs and then it is likely that a recession will soon follow.

Historically, inversions of the yield curve (the spread) have preceded most U.S. recessions. Thus, the yield curve is considered an important barometer for predicting business cycle turning points.

JP Morgan Recession Forecast Chart

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.



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.

Recession Forecast

The following chart shows when a recession could occur for various post-inversion dates. For inversion, we are using the 10-year/2-year metric. Our current "guess" is 15 months post-inversion (shown in Red). This is a "moving target" and will change with each ensuing month. It will also change with changes in global economic conditions.

Forecasting the Commencement of a Recession

If an inversion occurs during the current month …	… then a recession will begin at stated date projections.					
Current Month	**Inversion +12 Months**	**Inversion +15 Months**	**Inversion +18 Months**	**Inversion +24 Months**	**Inversion +30 Months**	**Inversion +36 Months**
April/2019	April/2020	**July/2020**	Oct/2020	April/2021	Oct/2021	March/2022

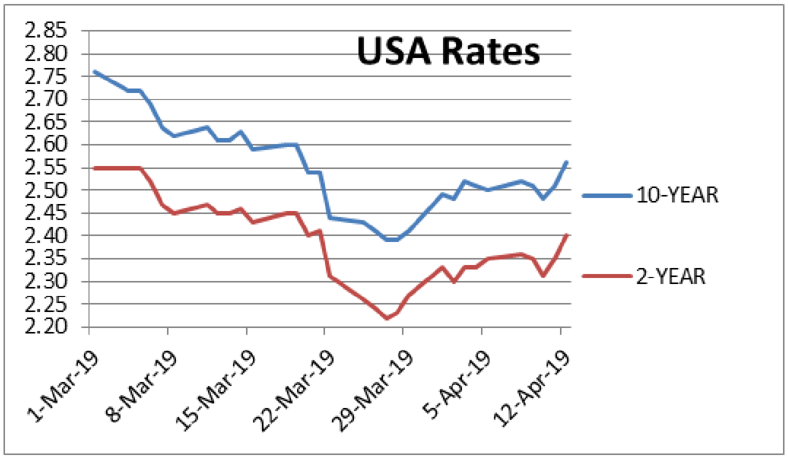
Source: eResearch

March/April Readings of Rates and Yields (10y/5y/2y/3m)

Set out below are a series of charts showing the yield rates since March 1, 2019 for (1) 10-year/2-year, (2) 10-year/3-month, and (3) 5-year/2-year.

1. 10-Year/2-Year

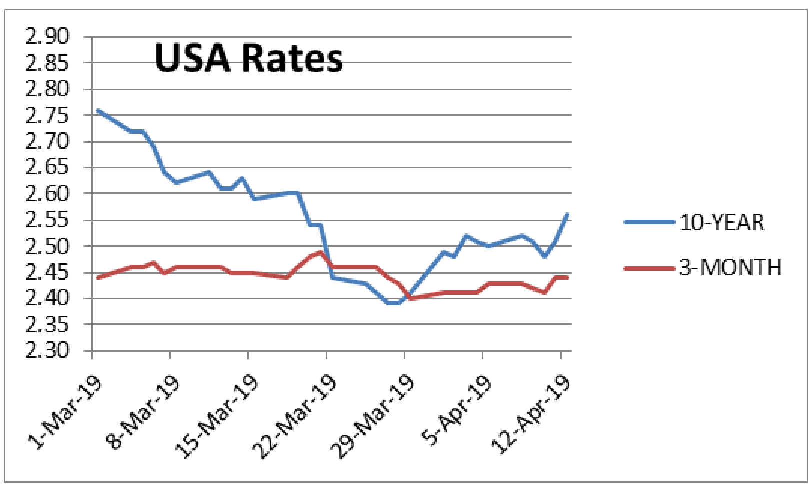
March 1, 2019 – April 12, 2019



COMMENT: *Both the 10-year and the 2-year yield rates rose last week.*

2. 10-Year/3-Month

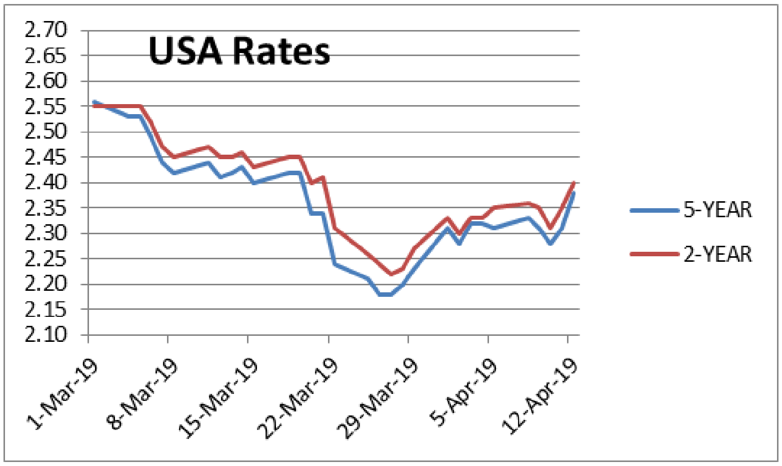
March 1, 2019 – April 12, 2019



COMMENT: Since the inversion two weeks ago, the 10-year yield has regained its rightful spot and has widened the spread with the 3-month yield.

3. 5-Year/2-Year

March 1, 2019 – April 12, 2019

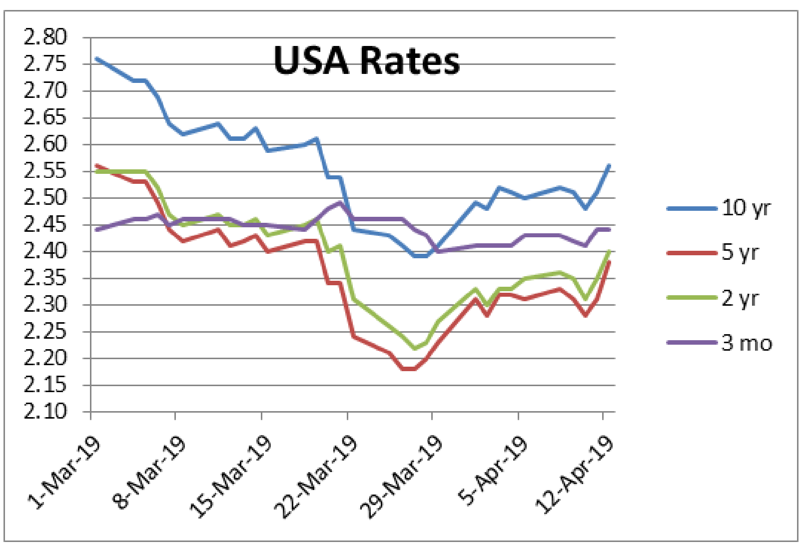


COMMENT: *The 5-year/2-year yields remain in an "inversionary" state; however, the gap narrowed this past week. Will it revert to "normal"?*

4. 10-Year/5-Year/2-Year/3-Month

The next chart puts all four metrics together in the same chart.

March 1, 2019 – April 12, 2019



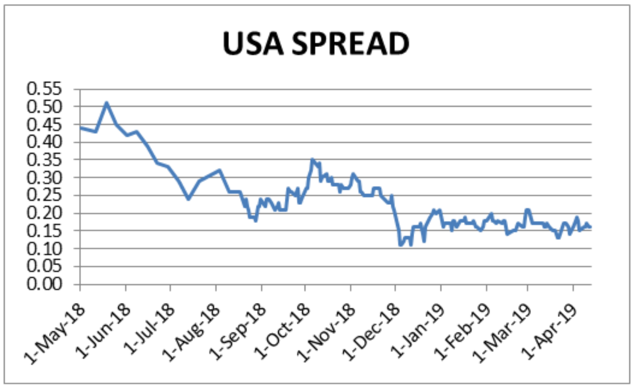
COMMENT: *The 3-month continues to be "out of whack" with the 5-year and the 2-year, and the 2-year is the same with the 5-year. If the trend of the last two weeks continues, the metrics could all get back "into sync".*

Spreads

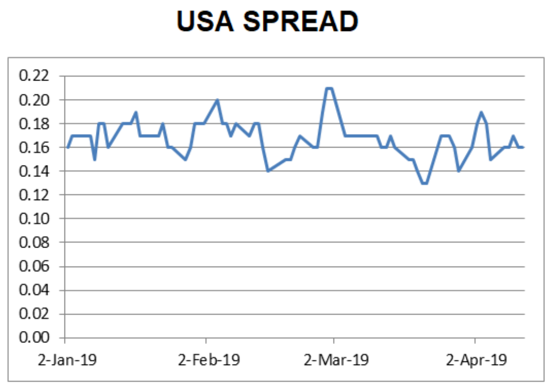
The following charts show the all-important "spreads" in 10-year/2-year yield rates for U.S. Treasuries and for Government of Canadas. There are two time reference points: May 1, 2018 and January 2, 2019.

U.S. Treasuries

May 1, 2018 – April 12, 2019



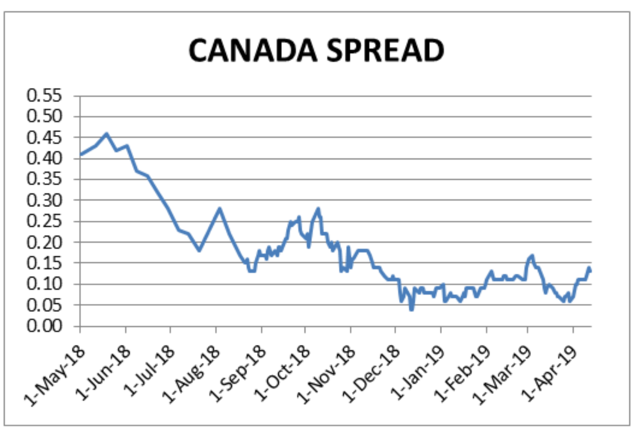
January 2, 2019 – April 12, 2019



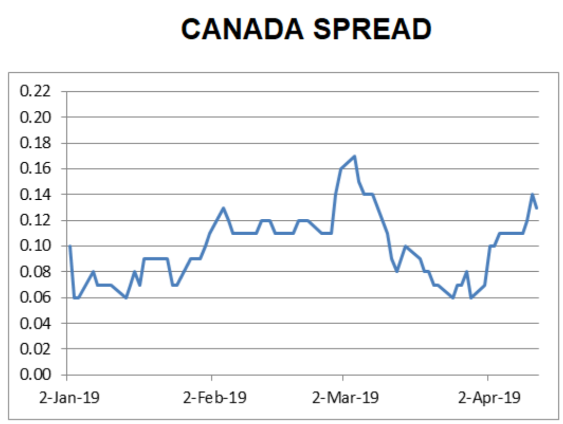
COMMENT: *The spread declined from May 1, 2018 and bottomed at 0.11x in early December. Since the beginning of 2019, the spread has moved in a fairly narrow range. The current spread is 0.16x.*

Government of Canada Bonds

May 1, 2018 – April 12, 2019



January 2, 2019 – April 12, 2019



COMMENT: *Similar to Treasuries, Canadas also declined since May 1, 2018. It reached its bottom at the same time, at 0.04x. The current spread is 0.13x.*

Conclusion

Our preference is for the 10-year/2-year yield comparison to be the benchmark for determining an "inversion" and its subsequent prediction of a recession. However, given that the 5-year/2-year comparison has been in inversion for more than a month, there should be some cause for concern. Certainly, if all three of the above comparisons were inverted, that would be compelling.

We end with a recent quote from JP Morgan on the yield curve:

> 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.

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