RECESSION BAROMETER

March 15, 2019

Spotlight on : 10-2 Yield Curve

COMMENT: *Rates in the USA fell on Friday to their lowest level since early January. Rates in Canada remained fairly constant. The spread in the USA remained constant at 0.16x-0.17x, whereas in Canada, it fell on Monday, then moved in a narrow band to close at 0.10, down from 0.14x the previous week. Our U.S. and Canadian charts on the following pages show the respective trends in the rates of the two countries very clearly.*

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. Below, we provide various date projections for a possible recession following an inversion.

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. However, it is important to note that, sometimes, a negative yield curve gives a false positive (see the long-term charts on pages 5 and 6).

The yield curve for the 10s/2s is currently 0.16x in the United States and is 0.10x in Canada. The high-low for the year 2019 is 0.21x-0.11x in the USA and is 0.17x-0.06x in Canada.

The following chart shows when a recession could occur for various post-inversion dates. 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

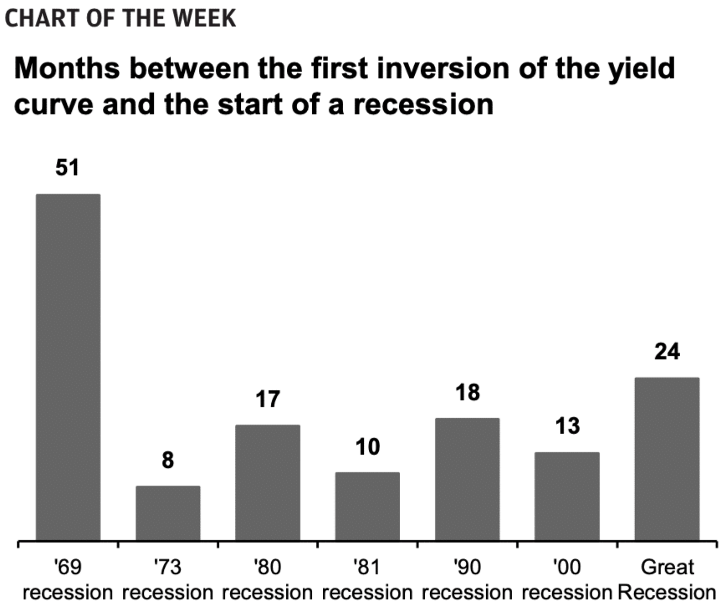
If an inversion occurs during the current month …	… then a recession will begin at stated date projections.					
Current Month	**Inversion +12 Months**	**Inversion +15 Months**	**Inversion +18 Months**	**Inversion +24 Months**	**Inversion +30 Months**	**Inversion +36 Months**
March/2019	March/2020	**June/2020**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

Source: eResearch

***e*Research Corporation**
100 University Avenue, 5th Floor • Toronto, Ontario • M5J 1V6
www.eresearch.ca

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.

Sometimes, a negative yield curve gives a false positive (see the long-term charts on pages 5 and 6).

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.

Here is a recent quote from JP Morgan on the yield curve:

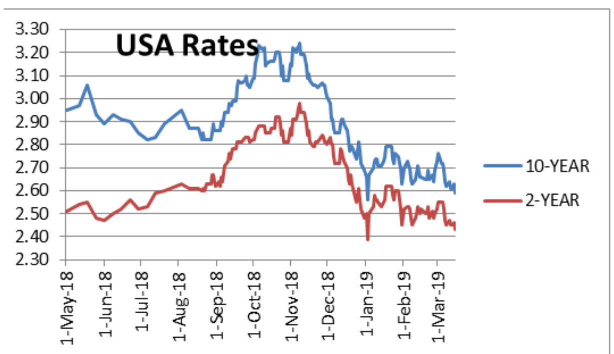
Investors tend to fear yield curve inversion, looking at it as a signal that a recession is looming. However, we believe investors should not over-react to these recent moves for a few reasons. First, a flattening of the yield curve is common during rate hiking cycles, which is where we are today. Second, 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.

LATEST READINGS OF RATES AND YIELDS

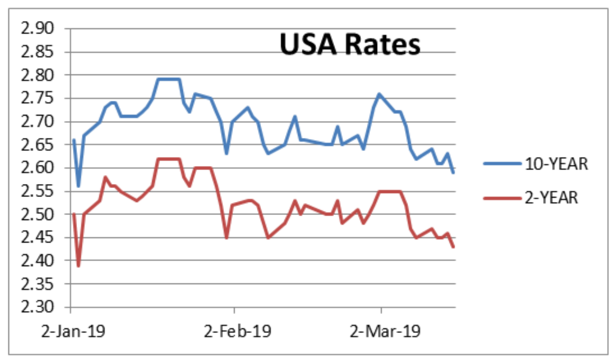
1. U.S. Treasuries

- The 10-year U.S. Treasuries yield stayed fairly constant this past week, until Friday when it moved quite a bit lower. It closed the week at 2.59%, down from 2.64% on the previous Friday
- The 2-year U.S. Treasuries yield followed suit, closing at 2.43%, down from 2.47%.
- The 10/2 yield spread stayed constant all week at 0.16x-0.17x.
- The first two charts below show the trend in rates since May 1, 2018 and January 2, 2019. The longer-term chart shows that rates rose sharply in September and peaked in October-November. The subsequent decline had rates at a low in early January, and they are heading back there. Rates shown on the short-term chart, on the right, declined in each of the last two weeks.

May 1, 2018 – March 15, 2019

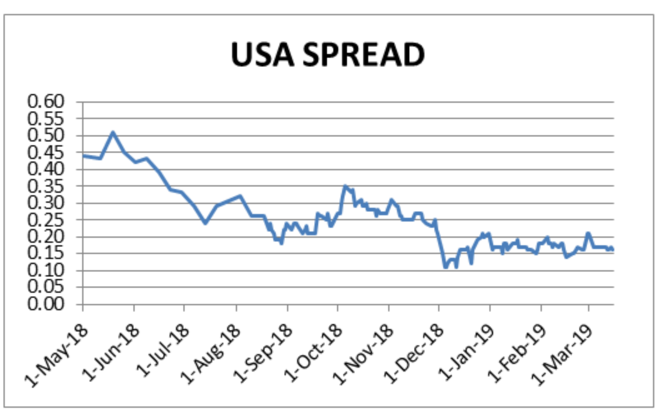


January 2, 2019 – March 15, 2019

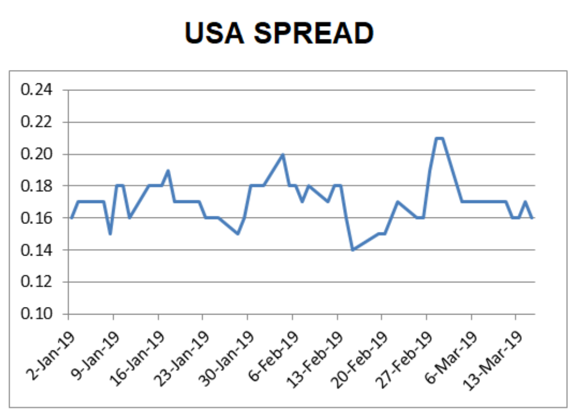


- The next two charts show the "spread" between the 10-year and the 2-year yields. The longer-term chart shows that the spread has declined and reached a low last December of 0.11x. Since then, it has gyrated within a narrow band and closed at 0.16x. The short-term chart shows that rates stayed constant at 0.16x-0.17x all week, after declining from a year high of 0.21x. When the spread gets to "zero", an inversion is imminent. There is still a long way to go.

May 1, 2018 – March 15, 2019



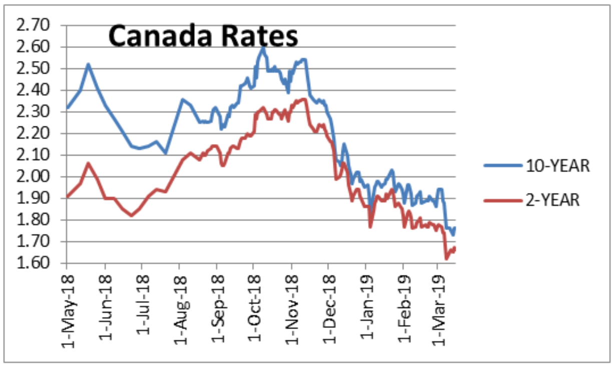
January 2, 2019 – March 15, 2019



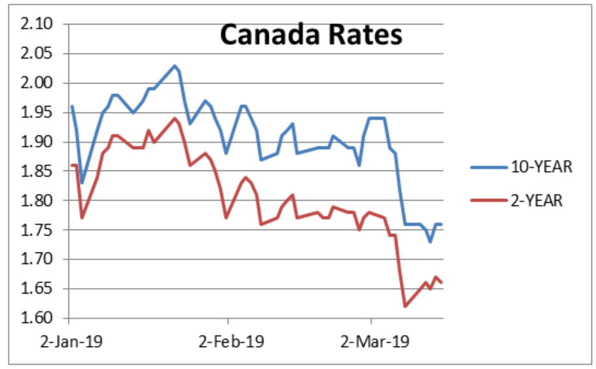
2. Government of Canadas

- The first two charts for Canadas mirror the U.S. Treasuries experience in that rates have declined consistently since last October-November. Unlike falling Treasuries, Canadas have blipped up this past week.

May 1, 2018 – March 15, 2019

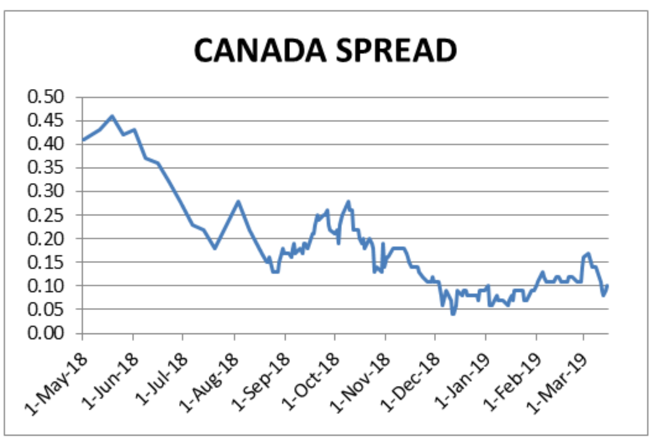


January 2, 2019 – March 15, 2019

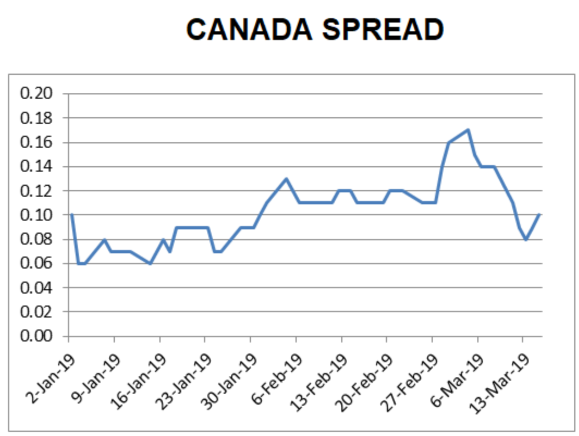


- As shown on the second set of charts, the “spread” on Canadas is less than for Treasuries, and the Canadas’ spread has been less stable than Treasuries since year-end. It rose a little at the end of January and become stable at a higher level, until the past three weeks. Last week, the spread lowered perceptibly. It is down from a year high of 0.17x and now sits at 0.10x, but still well above recession levels of 0.00x.

May 1, 2018 – March 15, 2019



January 2, 2019 – March 15, 2019



<continued>

The following two charts, on this and the next page, show the "spread" between 10-year Treasuries and 2-year Treasuries, i.e., the yield on 10 year Treasuries minus the yield on 2-year Treasuries. When the spread gets to 0.00x, an economic recession follows, but not always immediately and, sometimes but rarely, not at all.

In the two charts below, the shaded vertical lines represent recessions. The blue chart line is the spread and, when it is below the horizontal black line at zero, it represents an "inversion".

There is a close relationship between an inversion and a near-term subsequent recession.

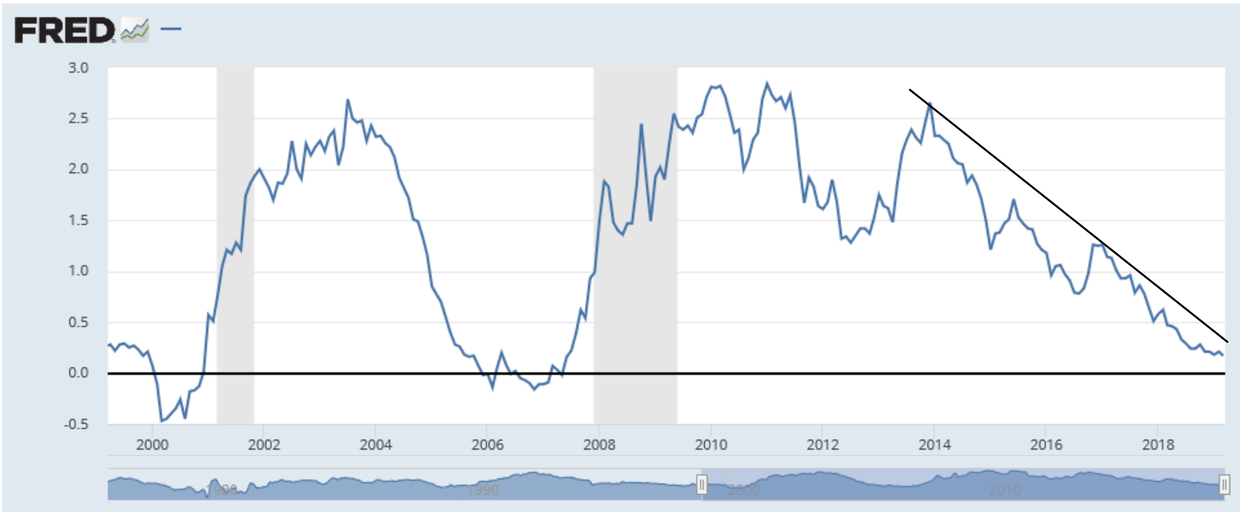
U.S. Treasuries 10-2 Yield Ratio Since March 15, 1979 (40 Years)

Here is the 10-2 yield curve going back 40 years to March 1979. See the comment about inversions and recessions that accompanies the next chart on the following page.

Source: Federal Reserve Bank of St. Louis

U.S. Treasuries 10-2 Yield Ratio Since March 15, 1999 (20 Years)

Here is a look at the 10-2 yield curve going back 20 years to March 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 0.16x, down from 0.17x a week ago, but comfortably above the 0.00x inversion level.



CONCLUSION

- The lower-trending spread curved down slightly last week. Although there is still evidence of strong U.S. economic growth, there are a few worries cropping up. Despite all of the political shenanigans occurring at many levels of the U.S. government, the stock market remains strong and interest rates and, therefore, inflation remain under control. Still, signs of global slowing could start to impact the USA as well as slower growth from its own making. At this point, the possibility of a near-term recession in the United States seems remote. Still, our concerns for global economic growth, North American economic growth, the possibility of dysfunctional government in the USA from time to time, and the negative effects of trade wars and ignoble tariffs, cause us to consider the possibility of a recession hitting U.S. shores in 12-15 months after a 10/2 yield curve inversion occurs. We are not near an inversion yet, although the trend moved lower again last week.

Bob Weir, CFA: Contributing Analyst

---

*e*RESEARCH DISCLAIMER