RECESSION BAROMETER

March 22, 2019

Spotlight on : 10-2 Yield Curve

COMMENT: *Rates in both the USA and Canada fell sharply on Friday to their lowest levels in the past twelve months. More importantly, the "spread" between the 10-year and the 2-year bills narrowed in both countries in this past week.*

In the USA, 10-years closed the week at 2.44% and 2-years closed at 2.31%, a spread of 0.13x. For Canadas, 10-years were at 1.67% and 2-years at 1.60%, for a spread of 0.07x.

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.

An interesting point: for quite a few weeks, the yield on 5-year Treasuries AND Canadas has been well below 2-year Treasuries and Canadas. On the 5-year/2-year basis, both countries are in recession. However, the 10-year/2-year indicator is the more widely used "recession"barometer".

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.

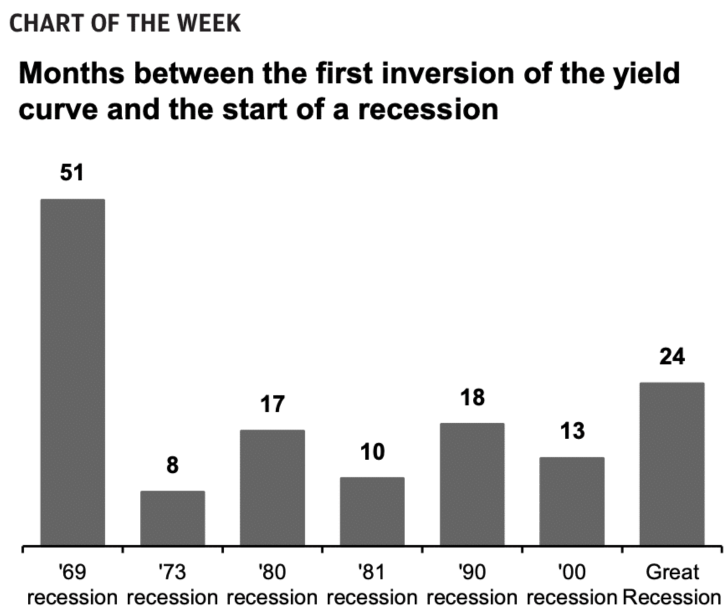
Forecasting the Commencement of a Recession

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

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.

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

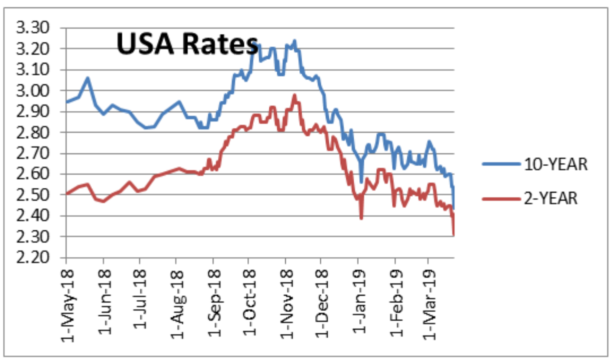
Investors tend to fear yield curve inversion, looking at it as a signal that a recession is looming. However, we believe investors should not over-react to these recent moves for a few reasons. First, a flattening of the yield curve is common during rate hiking cycles, which is where we are today. Second,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

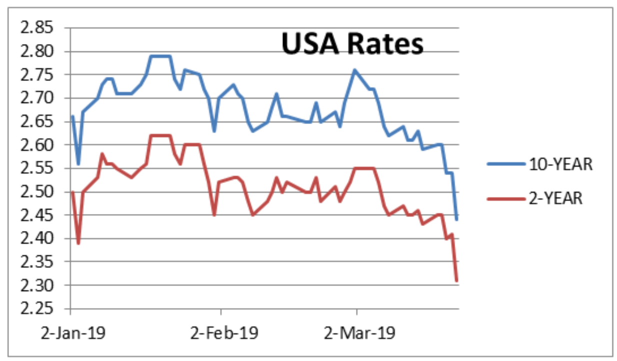
1. U.S. Treasuries

- The 10-year U.S. Treasuries yield “fell off a cliff” this past week, closing down 15 basis points, to 2.44% from 2.59%.
- The 2-year U.S. Treasuries yield followed suit, but with not quite as much velocity. The yield was down 12 basis points to 2.31% from 2.43%.
- The 10/2 yield spread, with significance, contracted to 0.13x from 0.16x.
- 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, which has now been superseded. Rates shown on the short-term chart, on the right, also show the sharp drop this past week.

May 1, 2018 – March 22, 2019

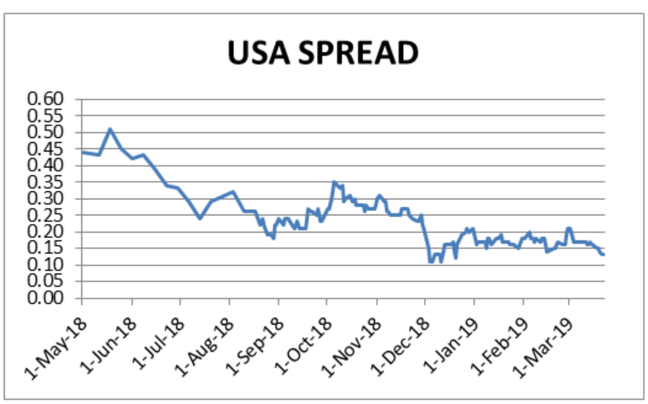


January 2, 2019 – March 22, 2019

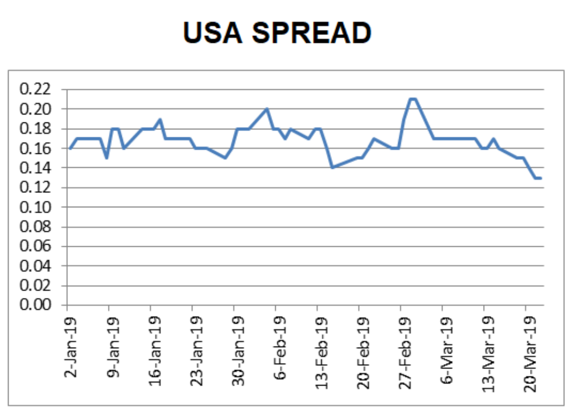


- The next two charts show the “spread” between the 10-year and the 2-year yields. The longer-term chart shows that the spread has declined and reached a low last December of 0.11x. Since then, it has gyrated within a narrow band but dropped this past week to close at 0.13x. The short-term chart shows the drop since the recent 0.21x high in mid-February to the current 0.13x. If and when the spread gets to “zero”, an inversion is imminent. There is still quite a ways to go.

May 1, 2018 – March 22, 2019



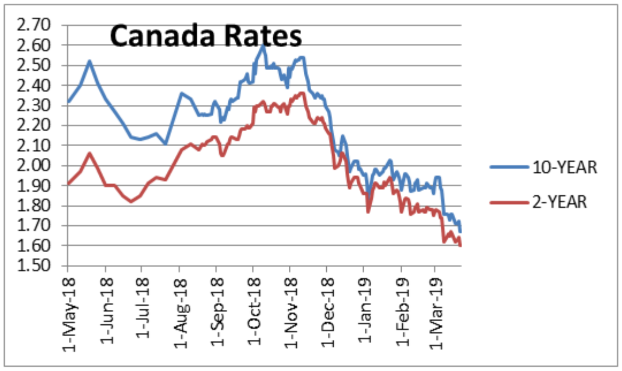
January 2, 2019 – March 22, 2019



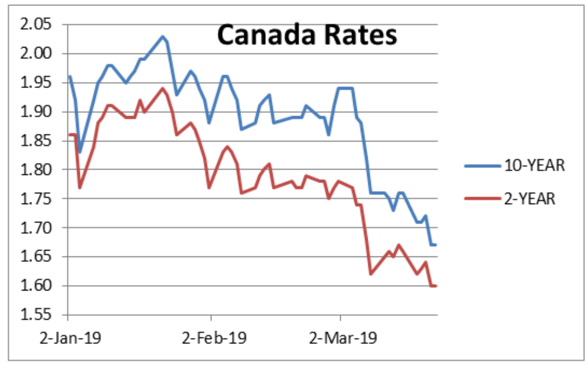
2. Government of Canadas

- The first two charts for Canadas, not surprisingly, mirror the U.S. Treasuries experience in that rates have declined consistently since last October-November. Also like Treasuries, Canadas fell quite a bit this past week.

May 1, 2018 – March 22, 2019

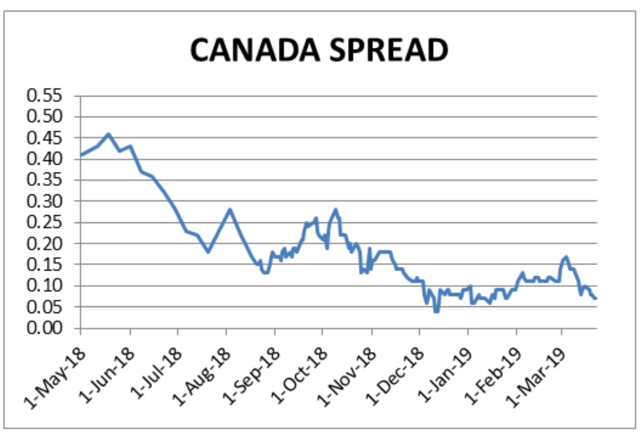


January 2, 2019 – March 22, 2019

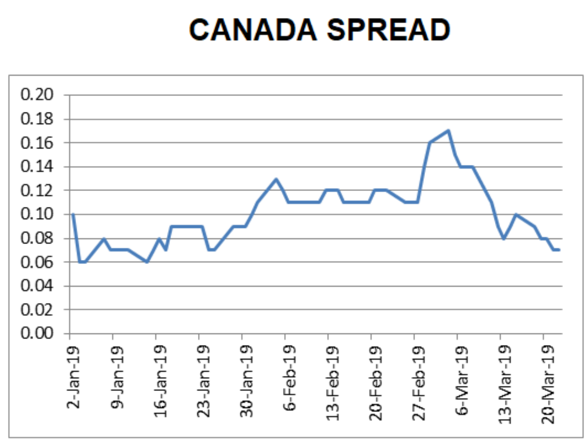


- As shown on the second set of charts, the "spread" on Canadas is less than for Treasuries, and the Canadas' spread has been slightly less stable than Treasuries since year-end. It rose a little at the end of January but is now retracing to approach the December low. It is down from a year high of 0.17x and now sits at 0.07x, but still well above recession levels of 0.00x.

May 1, 2018 – March 22, 2019



January 2, 2019 – March 22, 2019



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3. Comparison Since March 1

The following table shows 10-year and 2-year rates for Treasuries and Canadas as well as the differential between the two since March 1, 2019.

DATE	USA			DATE	CANADA			USA - CANADA		
	10-YEAR	2-YEAR	DIFF		10-YEAR	2-YEAR	DIFF	10-YEAR	2-YEAR	DIFF
1-Mar-19	2.76	2.55	0.21	1-Mar-19	1.94	1.78	0.16	0.82	0.77	0.05
4-Mar-19	2.72	2.55	0.17	4-Mar-19	1.94	1.77	0.17	0.78	0.78	0.00
5-Mar-19	2.72	2.55	0.17	5-Mar-19	1.89	1.74	0.15	0.83	0.81	0.02
6-Mar-19	2.69	2.52	0.17	6-Mar-19	1.88	1.74	0.14	0.81	0.78	0.03
7-Mar-19	2.64	2.47	0.17	7-Mar-19	1.82	1.68	0.14	0.82	0.79	0.03
8-Mar-19	2.62	2.45	0.17	8-Mar-19	1.76	1.62	0.14	0.86	0.83	0.03
11-Mar-19	2.64	2.47	0.17	11-Mar-19	1.76	1.65	0.11	0.88	0.82	0.06
12-Mar-19	2.61	2.45	0.16	12-Mar-19	1.75	1.66	0.09	0.86	0.79	0.07
13-Mar-19	2.61	2.45	0.16	13-Mar-19	1.73	1.65	0.08	0.88	0.80	0.08
14-Mar-19	2.63	2.46	0.17	14-Mar-19	1.76	1.67	0.09	0.87	0.79	0.08
15-Mar-19	2.59	2.43	0.16	15-Mar-19	1.76	1.66	0.10	0.83	0.77	0.06
18-Mar-19	2.60	2.45	0.15	18-Mar-19	1.71	1.62	0.09	0.89	0.83	0.06
19-Mar-19	2.60	2.45	0.15	19-Mar-19	1.71	1.63	0.08	0.89	0.82	0.07
20-Mar-19	2.54	2.40	0.14	20-Mar-19	1.72	1.64	0.08	0.82	0.76	0.06
21-Mar-19	2.54	2.41	0.13	21-Mar-19	1.67	1.60	0.07	0.87	0.81	0.06
22-Mar-19	2.44	2.31	0.13	22-Mar-19	1.67	1.60	0.07	0.77	0.71	0.06

- In just three weeks, the 10-year Treasuries yield has declined from 2.76% to the current 2.44%, a difference of 32 basis points and equal to 11.6%.
- The 2-year Treasuries yield has declined from 2.55% to the current 2.31%, a difference of 24 basis points and equal to 9.4%.
- As a consequence, the spread has declined from 0.21x to the current 0.13x, a difference of 0.08x and equal to 38.1%.
- Canadas have had a similar but not identical experience, which is to be expected.
- Interestingly, on Monday and Tuesday this past week, the difference between the yield on 10-year Treasuries and 10-year Canadas reached a multi-year high of 0.89x. By Friday, this had dropped to 0.77x as Treasuries tumbled more than Canadas.
- The "difference" between the "differences" has stayed fairly constant within a narrow range.

<continued>

CONCLUSION

- The lower-trending spread for both Treasuries and Canadas dropped substantially last week. However, the numbers are nowhere near inversion levels. A recession in North America is still a distant possibility.

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