

November 18, 2019

# Spotlight on: Yield Curve Ratios - Canada

### **Key Interest Rate Ratios**

There is no change in our basic premise that Canada is heading for an Economic Recession, because our key interest rate metrics ALL remain inverted. Our best guess for when an Economic Recession might occur is between November 2020 and April 2021. (see also Page 7.)

Although nothing to do with our recession expectation, Canadian interest rates have been quite volatile recently and, over the last two weeks, they have increased notably.

### 1. 10-Year/2-Year Ratios

The following table shows the interest rates and the accompanying Spreads for selected days since October 1.

	10-Year	2-Year	Spread
October 1	1.37%	1.58%	-0.21X
October 29	1.62%	1.71%	-0.09x
November 1	1.42%	1.52%	-0.10X
November 8	1.61%	1.63%	-0.02X
November 12	1.58%	1.58%	0.00x
November 13	1.60%	1.59%	0.01X
November 14	1.55%	1.57%	-0.02X
November 15	1.47%	1.53%	-0.06x

**Observations**: The Spread narrowed from -0.21x on October 1 to 0.00x and 0.01x on November 12 and 13, respectively. Going positive means that the lengthy Inversion concluded. However, this was only temporary because, for the next two days, it was inverted again, at -0.06x on November 15.

The following chart shows the Spread in the 10-Year/2-Year interest rate ratio since October 1. There has been a steady narrowing of the Spread and, as shown, it very recently came out of Inversion for two days.

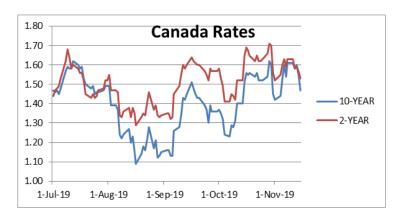
October 1, 2019 - November 15, 2019

### 10-Year/2-Year CANADA SPREAD



Let us have a look, in chart form, at the actual interest rates for these two metrics, and we are going to look at them over a slightly longer time-frame, since July 1.

July 1, 2019 - November 15, 2019



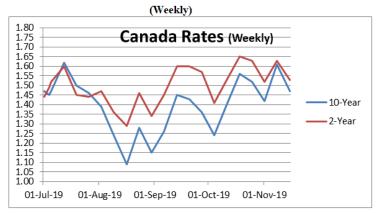
**Observations**: Around the beginning of August, the 10-year rate declined appreciably below the 2-year rate. This is Inversion and the two rates are said to be inverted.

eResearch put Canada on Recession Alert on August 8 when our key interest rate metric, the 10-year/2-year yield curve ratio, stayed inverted for ten consecutive business days. Historically, economic recessions have occurred some 15 to 20 months after an interest rate Inversion occurs. This means a possible Economic Recession in Canada could occur between November 2020 and April 2021. (See Page 7.)

The above chart is based on daily closings of the two interest rates. On the next page, we show the same chart using weekly closing rates. The weekly closes shows the difference between the two interest rates more clearly.

July 1, 2019 - November 15, 2019

Canada Rates: 10-Year/2-Year



The two charts below show the Spread for the 10-year/2-year ratio since July 1, 2019. The chart on the left uses daily closing rates, while the chart on the right uses weekly closing rates. The horizontal **Red** line marks the Inversion level, i.e., Inversion has occurred when the **Blue** line is below the **Red** line. The purpose of showing the two charts is that one must be careful when using data. On the daily (left) chart, Inversion occurs at the right side of the chart, but it does not show on the weekly (right) chart because the two-day retreat from Inversion occurred intra-week.

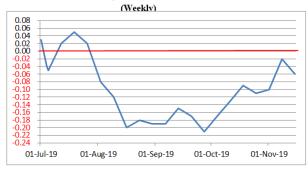
July 1, 2019 - November 15, 2019

### 10-Year/2-Year CANADA SPREAD



July 1, 2019 - November 15, 2019

### Canada Spread: 10-Year/2-Year

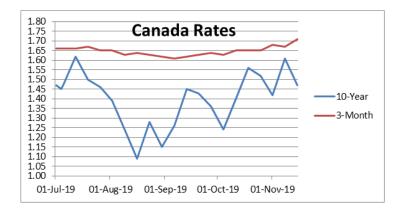


## 2. 10-Year/3-Month Ratios

In the first chart below, we will look at the actual interest rates for the 10-year and 3-month metrics since July 1, and then that will be followed by the chart that shows the Spread.

July 1, 2019 - November 15, 2019

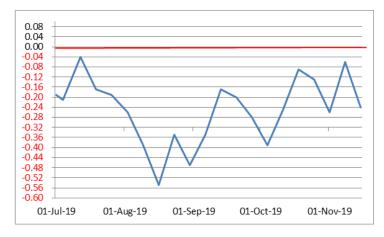
Canada Rates: 10-Year/3-Month



**Observations**: The above chart shows weekly closes for the 10-year and the 3-month interest rates. Since July 1, the 10-year rate has been below the 3-month rate, which is exactly opposite of "normal". The Inversion actually occurred on May 23 and it has remained that way ever since.

July 1, 2019 - November 15, 2019

## Canada Spread: 10-Year/3-Month



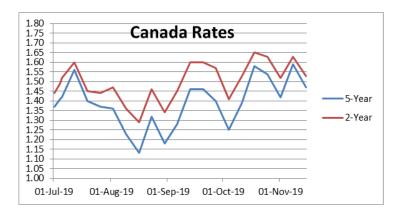
**Observations**: The chart above shows the 10-year/3-month Spread on a weekly basis. The second chart looks remarkably similar to the chart above it. No surprise! The similarity exists because the 3-month interest rate, being short-term, does not exhibit much volatility. The **Blue** line has to rise above the **Red** line in order to exit the current state of Inversion. It does not look like a promising likelihood at the moment.

### 3. 5-Year/2-Year Ratios

Same story for the 5-year/2-year interest rate comparison. The 5-year interest rate has been lower than the 2-year interest rate, which is opposite of what would be expected.

July 1, 2019 - November 15, 2019

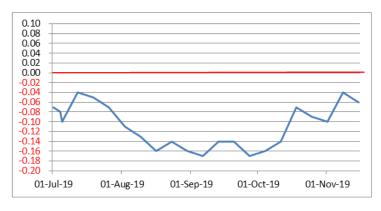
Canada Rates: 5-Year/2-Year



As the next chart shows, the ratio has been inverted continually since July 1. (The actual Inversion occurred in 2018, although there have been spasmodic times during 2019 when the ratio was neutral at 0.00x or actually slightly positive.)

July 1, 2019 - November 15, 2019

Canada Spread: 5-Year/2-Year



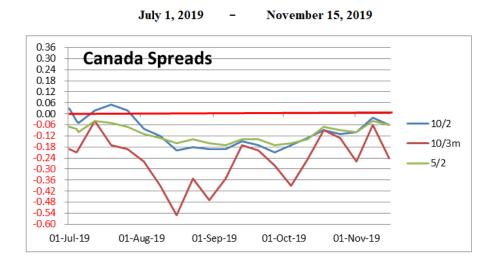
### 4. Summary of 10Y/2Y; 10Y/3M; and 5Y/2Y Ratios

The next chart puts all of the interest rate metrics on the same chart.

July 1, 2019 November 15, 2019 1.80 Canada Rates 1.70 3-Month 1.60 1.50 2-Year 1.40 5-Year 1.30 10-Year 1.20 1.10 1.00 01-Jul-19 01-Sep-19 01-Oct-19 01-Nov-19 01-Aug-19

**Observations**: A comparison of the 10-year (**Purple** line) and the 5-year (**Green** line) interest rate trends is not one that we have focused on. However, looking at the chart above, it is clearly visible that the two interest rates have practically mirrored each other since the beginning of August. In the same time-frame, the 2-year (**Rust** line) has stayed mostly well above the other two, although the difference has narrowed lately. The 3-month (**Blue** line) has stayed fairly flat but is showing a slight rising tendency lately.

The next chart shows the Spreads for the three ratios. All are below the Inversion (Red) line.



**Observations**: The 10-year/2-year and the 5-year/2-year have followed each other fairly closely since the beginning of August. They both look like they are trying to escape Inversion. The 10-year/3-month has been much more volatile, remains well below the Inversion line, and is heading down again.



### **Recession Barometer: Canada**

In Canada, we have already started our Count-Down to a possible recession. This was based on the 10-year/2-year Government of Canada bonds exhibiting Inversion for ten consecutive business days, which it did on August 8. (Our alternative criterion is that the 10/2 must be inverted for 20 out of 30 consecutive business days, and this has also occurred.)

#### Forecasting the Commencement of a Recession in Canada

Using e Research

criteria, an inversion in Canada occurred on August 8, 2019

Historically, a recession begins 15 to 20 months hence

 Inversion
 Inversion
 Inversion

 Occurred
 +15 Months
 +20 Months

 August 8, 2019
 November/2020
 April/2021

Source: eResearch

We define an Economic Recession as being characterized by two consecutive quarters of negative GDP growth. That would mean that, to meet the first recessionary date of November 2020, Q2/2020 and Q3/2020 would have to experience negative GDP growth. To meet the April 2021 date, Q4/2020 and Q1/2021 would need to experience negative GDP growth. Between those dates, the other scenario to define a recession is negative GDP growth in Q3/2020 and Q4/2020.

Bob Weir, CFA: Contributing Analyst

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