

## Manitoba Hydro's Forecast of Key Economic and Financial Indicators

Manitoba Hydro's forecast of key economic and financial indicators are based on a consensus view of several independent sources including Canada's primary financial institutions and several other independent sources, all of which are well known and respected. Consensus forecasts are compiled for employment, population, housing, Manitoba disposable income, real gross domestic product (GDP), the consumer price index (CPI), GDP price deflators, interest rates, and exchange rates. The consensus forecasts of interest rates and exchanges rates are updated quarterly whereas the consensus forecast of economic indicators are typically prepared once a year in the spring.

The economic indicators are derived from the following forecasting sources which were available in the spring of 2018: IHS, The Conference Board of Canada, Spatial Economics, BMO Nesbitt Burns, CIBC, Desjardins, Laurentian, Royal Bank of Canada, Scotiabank, National Bank, and TD Bank. The forecast of key economic indicators has been provided in **Table 1** below. Where applicable, these forecast values were used to develop the 2018 Natural Gas Volume Forecast included in the 2018/19 Current Outlook and 2019/20 Approved Budget.

The forecast of the 3-month T-bill rate and the Canadian long-term bond 10 year+ rate for both 2018/19 and 2019/20 has been provided in **Table 2** and **Table 3** below. These forecasts reflect the consensus view from the same forecasting sources, where available, as at the end of December 2018. These values were used to derive Manitoba Hydro's borrowing costs for the 2018/19 Current Outlook and 2019/20 Approved Budget.

Copies of the publically available source interest rate forecasts are provided at the end of this appendix. For forecasters that provided end of period rates, rates are adjusted to a comparable average period basis. For example, end of period rates for Q1 and Q2 are averaged for a Q2 average period forecast. The interest rates in Tables 2 & 3 represent a 4-quarter or 12-month average.

The Manitoba credit spread and the Provincial Guarantee Fee (PGF) are added to the consensus Canadian benchmark rate to arrive at Manitoba Hydro's forecasted borrowing costs. **Table 4** summarizes Manitoba Hydro's borrowing costs included in 2018/19 Current Outlook and 2019/20 Approved Budget.

In conjunction with the quarterly refresh of the interest rate forecast, the 2018/19 Current Outlook reflects actual changes to Centra's long-term debt portfolio to the end of Q3. The 2018/19 forecast for Manitoba Hydro's Canadian BA rate (used for new floating rate debt) and Manitoba Hydro's Canadian 10+ rate (used for new fixed rate debt) reflects the consensus view of the Q4 forecast to the end of the fiscal year.

**TABLE 1 – MANITOBA/CANADA ECONOMIC INDICATORS (SPRING 2018) -- FISCAL YEAR**

Year	Manitoba					Canada			US
	Man. Real GDP % chge	Man. CPI % chge	Man. Real Disposable Income % chge	Man. Population '000s	Man. Residential Customers '000s	Cdn. Real GDP % chge	Cdn. CPI % chge	Cdn. GDP Price Deflator % chge	US GDP Price Deflator % chge
1991/92	-2.3	3.8	-2.2	1 110	389	-1.1	4.4	2.5	3.0
1992/93	0.7	1.9	-0.2	1 114	391	1.1	1.6	1.5	2.4
1993/94	1.1	2.4	-0.5	1 119	394	3.1	1.5	1.3	2.3
1994/95	2.9	1.6	0.0	1 125	396	4.7	0.4	1.6	2.1
1995/96	0.6	2.5	-0.9	1 130	398	1.7	2.1	2.2	2.0
1996/97	3.0	2.5	-0.9	1 135	400	2.4	1.7	1.8	1.8
1997/98	4.3	1.5	0.2	1 136	404	4.5	1.4	0.7	1.6
1998/99	3.7	1.5	2.7	1 139	405	3.7	0.9	-0.2	1.1
1999/00	2.1	2.2	2.5	1 144	408	5.5	2.2	2.9	1.6
2000/01	3.4	2.5	0.9	1 148	411	4.5	2.7	4.4	2.4
2001/02	1.2	2.1	3.2	1 153	413	1.6	2.2	0.2	2.1
2002/03	1.6	2.3	1.4	1 158	415	3.1	3.0	2.8	1.6
2003/04	1.6	0.9	1.6	1 166	419	1.6	1.9	2.5	2.0
2004/05	2.5	2.7	1.5	1 174	422	3.5	2.2	3.5	3.0
2005/06	3.0	2.4	0.8	1 180	426	3.3	2.3	3.1	3.2
2006/07	3.4	2.0	4.2	1 185	430	2.0	1.9	2.7	3.0
2007/08	2.8	1.9	4.6	1 191	434	2.1	2.1	3.5	2.4
2008/09	2.7	2.2	3.3	1 200	440	0.0	2.2	2.2	1.8
2009/10	0.5	0.6	3.4	1 212	444	-2.0	0.4	-0.7	0.5
2010/11	2.5	1.0	3.4	1 224	448	3.4	2.0	2.6	1.6
2011/12	2.6	2.8	1.6	1 238	453	3.0	2.8	3.1	2.1
2012/13	2.9	1.6	3.5	1 254	459	1.6	1.2	1.2	1.8
2013/14	2.5	2.4	1.7	1 269	465	2.7	1.1	1.6	1.6
2014/15	1.9	1.5	2.0	1 285	471	2.4	1.8	1.3	1.7
2015/16	1.6	1.3	3.9	1 301	477	0.8	1.2	-0.6	1.1
2016/17	2.0	1.4	1.8	1 323	483	1.8	1.5	1.3	1.5
2017/18	1.6	1.7	2.8	1 342	489	3.3	1.6	2.0	1.8
<b>Forecast</b>									
2018/19	1.8	2.1	1.0	1 359	496	2.1	2.1	2.1	2.1
2019/20	1.6	2.0	1.0	1 376	502	1.8	2.0	2.1	2.2
2020/21	1.7	2.0	1.2	1 393	508	1.8	1.9	2.1	2.3
2021/22	1.7	2.0	1.4	1 409	514	1.6	1.8	2.0	2.3
2022/23	2.0	2.1	1.5	1 425	520	1.8	2.0	2.0	2.2
2023/24	1.8	2.1	1.6	1 441	526	1.9	2.0	2.0	2.2
2024/25	1.6	1.9	1.8	1 457	531	1.9	2.0	1.9	2.0
2025/26	1.6	1.9	1.8	1 473	537	1.9	2.0	1.9	2.0
2026/27	1.6	1.9	1.8	1 489	543	1.9	2.0	1.9	2.0
2027/28	1.6	1.9	1.8	1 505	549	1.9	2.0	1.9	2.0
2028/29	1.6	1.9	1.8	1 520	554	1.9	2.0	1.9	2.0
2029/30	1.6	1.9	1.8	1 536	560	1.9	2.0	1.9	2.0
2030/31	1.6	1.9	1.8	1 551	565	1.9	2.0	1.9	2.0
2031/32	1.6	1.9	1.8	1 565	571	1.9	2.0	1.9	2.0
2032/33	1.6	1.9	1.8	1 580	576	1.9	2.0	1.9	2.0
2033/34	1.6	1.9	1.8	1 595	582	1.9	2.0	1.9	2.0
2034/35	1.6	1.9	1.8	1 609	587	1.9	2.0	1.9	2.0
2035/36	1.6	1.9	1.8	1 623	592	1.9	2.0	1.9	2.0
2036/37	1.6	1.9	1.8	1 637	597	1.9	2.0	1.9	2.0
2037/38	1.6	1.9	1.8	1 650	602	1.9	2.0	1.9	2.0

**TABLE 2 – CANADIAN 3 MONTH T-BILL RATE % (WINTER 2018)**

Forecaster	Date of Forecast	End of Period or Average	2018			2019				2020
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BMO Nesbitt Burns	14-Dec-18	Average	1.21	1.46	1.66	1.75	1.90	2.00	2.15	2.25
CIBC	17-Dec-18	End of Period	1.21	1.46	1.66	1.87	2.15	2.23	2.23	2.15
Desjardins	13-Dec-18	End of Period	1.21	1.46	1.66	1.72	1.93	2.13	2.25	2.40
Laurentian	25-Oct-18	End of Period	1.21	1.46	1.66	1.82	2.00	2.13	2.25	2.31
National Bank	1-Dec-18	End of Period	1.21	1.46	1.66	1.80	2.07	2.28	2.42	2.44
Royal Bank	7-Dec-18	End of Period	1.21	1.46	1.66	1.65	1.80	2.05	2.18	2.33
Scotiabank	7-Dec-18	End of Period	1.21	1.46	1.66	1.72	1.93	2.18	2.43	2.68
TD Bank	13-Dec-18	End of Period	1.21	1.46	1.66	1.82	2.07	2.19	2.32	2.44
IHS Global Insight	10-Dec-18	Average	1.21	1.46	1.66	1.83	2.01	2.26	2.51	2.76
Conference Board	14-Dec-18	Average	1.21	1.46	1.66	1.88	1.96	2.06	2.23	2.38
<b>EO 2018 - December</b>			<b>2018/19</b>				<b>2019/20</b>			
			<b>1.55</b>				<b>2.20</b>			

*Note: In the case where source forecasts are provided as end of period, the 2018 Q4 end of period actual rate of 1.65% was averaged with the source forecasters' end of period rate for 2019 Q1 in order to approximate an average period 2019 Q1 forecast rate.*

**TABLE 3 – CANADIAN LONG TERM BOND 10 YR+ RATE % (WINTER 2018)**

Forecaster	Date of Forecast	End of Period or Average	2018			2019				2020
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BMO Nesbitt Burns	14-Dec-18	Average	2.33	2.29	2.37	2.28	2.39	2.53	2.63	2.73
CIBC	17-Dec-18	End of Period	2.33	2.29	2.37	2.33	2.54	2.61	2.59	2.55
Desjardins	13-Dec-18	End of Period	2.33	2.29	2.37	2.35	2.60	2.79	2.93	3.04
Laurentian	25-Oct-18	End of Period	2.33	2.29	2.37	2.45	2.73	2.80	2.88	2.93
National Bank	1-Dec-18	End of Period	2.33	2.29	2.37	2.27	2.42	2.59	2.83	2.98
Royal Bank	7-Dec-18	End of Period	2.33	2.29	2.37	2.36	2.66	2.86	2.93	3.00
Scotiabank	7-Dec-18	End of Period	2.33	2.29	2.37	2.26	2.41	2.63	2.78	2.84
TD Bank	13-Dec-18	End of Period	2.33	2.29	2.37	2.33	2.56	2.74	2.88	2.95
IHS Global Insight	10-Dec-18	Average	2.33	2.29	2.37	2.76	2.91	3.01	3.07	3.13
Conference Board	14-Dec-18	Average	2.33	2.29	2.37	2.80	3.15	3.50	3.68	3.79
<b>EO 2018 - December</b>			<b>2018/19</b>				<b>2019/20</b>			
			<b>2.35</b>				<b>2.85</b>			

*Note: In the case where source forecasts are provided as end of period, the 2018 Q4 end of period actual rate of 2.19% (average of 2.11% for Canada 10 year and 2.27% for Canada 30 year) was averaged with the source forecasters' end of period rate for 2019 Q1 in order to approximate an average period 2019 Q1 forecast rate.*

**TABLE 4 – MANITOBA HYDRO’S FORECASTED INTEREST AND EXCHANGE RATES INCORPORATED INTO THE 2018/19 CURRENT OUTLOOK AND THE 2019/20 APPROVED BUDGET – CONSENSUS FORECASTS AVAILABLE AS AT THE END OF DECEMBER 2018**

	CAN Short-Term Interest Rate				CAN Floating Debt Interest Rate						CAN Fixed Debt Interest Rate				U.S. - Cdn Exchange Rate
	Consensus Benchmark 90 Day T-Bill Rate*	Manitoba Spread	PGF	MH Interest Rate	Consensus Benchmark 90 Day T-Bill Rate**	Spread from CAN T-Bill to CAN BA Rate	CAN 90 Day BA Rate	Average Margin Level	PGF	MH Interest Rate	Consensus Benchmark Long Term Bond 10+ Rate**	Manitoba Spread	PGF	MH Interest Rate	
2018/19	1.53		1.00	2.55	1.79	0.61	2.40	0.49	1.00	3.89	2.42	1.03	1.00	4.45	1.31
2019/20	2.21		1.00	3.20	2.21	0.48	2.70	0.49	1.00	4.19	2.84	0.98	1.00	4.80	1.30

\* 2018/19 consensus rate calculated using 12 month average (Q1 - Q3 actuals and Q4 forecast)

\*\* 2018/19 consensus rate calculated using forecast data to the end of the fiscal year (Q4 forecast)

# Canadian Economic Outlook

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December 14, 2018

	Q1	Q2	Q3	2018 Q4	Q1	Q2	Q3	Q4	2019 Q1	Q2	Q3	Q4	2020 Q1	Q2	Q3	Q4	2017	2018	2019	2020	
<b>Production</b> <i>q/q % chng : a.r.</i>																					
Real GDP (chain-weighted)	1.7	2.9	2.0	1.5	1.0	2.5	2.2	1.9	1.6	1.6	1.6	1.5	3.0	2.1	1.8	1.7					
Final Sales	1.4	3.9	3.1	2.4	1.9	1.6	1.8	1.6	1.6	1.6	1.6	1.5	2.1	2.5	2.2	1.6					
Final Domestic Demand	2.2	1.8	-0.1	1.8	2.1	1.7	1.8	1.5	1.6	1.6	1.6	1.5	3.1	2.5	1.6	1.6					
Consumer Spending	1.5	2.3	1.2	1.6	2.1	1.6	1.6	1.4	1.4	1.4	1.4	1.4	3.6	2.2	1.7	1.4					
Durables	1.4	0.6	-2.7	1.5	1.8	1.7	1.5	1.5	1.3	1.3	1.3	1.3	7.1	1.8	1.0	1.4					
Nondurables	0.5	1.0	1.7	1.8	2.6	1.6	1.6	1.3	1.4	1.3	1.3	1.3	2.7	1.8	1.8	1.3					
Services	2.0	3.3	1.4	1.6	1.9	1.6	1.6	1.4	1.5	1.5	1.5	1.5	3.3	2.6	1.7	1.5					
Government Spending	2.3	1.2	1.9	2.5	2.2	1.8	2.0	2.0	1.8	1.8	1.8	1.8	2.7	3.1	2.0	1.9					
Business Investment	13.0	1.0	-7.1	3.0	3.8	3.8	3.2	2.9	2.8	2.3	2.3	2.0	2.5	5.1	1.9	2.7					
Non-residential Construction	5.7	0.3	-5.2	1.0	4.0	4.0	3.5	3.0	3.0	2.5	2.5	2.0	1.1	3.2	1.9	2.9					
Machinery and Equipment	25.5	2.0	-9.8	6.0	3.5	3.5	2.8	2.8	2.5	2.0	2.0	2.0	4.7	8.0	2.0	2.5					
Residential Construction	-7.9	-0.1	-5.9	0.0	0.0	0.0	0.5	0.0	1.0	1.0	1.0	1.0	2.4	-1.0	-0.7	0.7					
Exports	2.3	13.0	0.9	2.7	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	1.1	3.2	2.7	2.1					
Imports	4.7	5.9	-7.8	1.0	2.6	2.4	2.1	2.0	2.1	2.0	2.0	2.0	4.2	3.2	1.0	2.1					
<i>2007 \$ blns (contribution in pts : a.r.)</i>																					
Inventory Change	16.6	13.5	6.6	2.5	-2.5	1.9	4.0	5.6	5.6	5.6	5.6	5.6	17.6	9.8	2.2	5.6					
Contribution to GDP Growth	0.1	-0.6	-1.3	-0.9	-1.0	0.8	0.4	0.3	0.0	0.0	0.0	0.0	0.8	-0.4	-0.4	0.2					
Net Exports	-24.3	-14.0	1.0	3.7	2.8	2.5	2.6	2.8	2.7	2.7	2.7	2.7	-8.3	-8.4	2.7	2.7					
Contribution to GDP Growth	-0.8	2.0	3.0	0.5	-0.2	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-1.1	-0.1	0.5	0.0					
<i>\$ blns : a.r. (growth in q/q % chng : a.r.)</i>																					
Nominal GDP	2,190	2,215	2,242	2,238	2,257	2,283	2,306	2,328	2,348	2,368	2,389	2,409	2,138	2,221	2,294	2,379					
Growth	2.9	4.6	5.0	-0.7	3.5	4.7	4.1	3.8	3.5	3.5	3.5	3.5	5.6	3.9	3.3	3.7					
Real GDP	2.3	1.9	2.1	2.0	1.8	1.7	1.8	1.9	2.0	1.8	1.6	1.5									
<i>q/q % chng : a.r.</i>																					
GDP Price Index	1.5	1.5	3.0	-2.3	2.5	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2.6	1.8	1.4	1.9					
CPI All Items	3.6	1.1	2.6	0.8	1.8	2.2	2.3	2.1	2.0	1.9	2.0	2.1	1.6	2.2	1.8	2.1					
Ex. Food and Energy	2.7	0.8	2.5	1.9	2.4	1.9	2.0	2.1	2.1	1.9	2.0	2.1	1.6	1.9	2.0	2.0					
Food Prices	0.9	1.5	3.3	2.2	2.7	2.2	1.8	2.1	2.0	2.1	1.8	2.1	0.0	1.7	2.3	2.0					
Energy Prices	16.9	5.6	1.8	-13.9	-6.5	5.0	6.7	2.0	1.4	2.3	2.4	2.0	5.4	6.9	-2.1	2.7					
Services	4.2	2.7	4.8	0.3	1.9	2.4	2.3	1.5	1.9	2.4	2.3	1.5	2.2	2.7	2.1	2.0					
CPI All Items	2.1	2.3	2.7	2.0	1.6	1.8	1.7	2.1	2.1	2.1	2.0	2.0									
CPIX8	1.3	1.4	1.6	1.7	1.8	2.1	2.2	2.2	2.1	2.2	2.0	2.1	1.1	1.5	2.0	2.1					
New Core CPIs	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.2	2.0	2.1	1.5	2.0	2.1	2.1					
<i>y/y % chng : avg.</i>																					
<b>Financial</b> <i>% : quarterly avg.</i>																					
Overnight Rate	1.25	1.25	1.50	1.75	1.75	2.00	2.00	2.25	2.25	2.50	2.50	2.50	0.71	1.44	2.00	2.44					
3-Month T-Bill	1.14	1.21	1.47	1.65	1.75	1.90	2.00	2.15	2.25	2.40	2.40	2.40	0.69	1.35	1.95	2.35					
90-Day BAs	1.67	1.74	1.95	2.20	2.35	2.50	2.55	2.70	2.75	2.90	2.90	2.90	1.15	1.90	2.50	2.85					
10-Year Bond Yield	2.24	2.28	2.28	2.35	2.20	2.30	2.45	2.55	2.65	2.65	2.60	2.50	1.78	2.30	2.35	2.60					
10-Year BBB Corporate Spread	1.68	1.80	1.83	2.00	2.20	2.25	2.30	2.30	2.30	2.30	2.30	2.30	1.83	1.83	2.26	2.30					
<i>bps</i>																					
Canada/US Spread	-44	-66	-61	-70	-73	-78	-90	-88	-96	-81	-77	-76	-26	-60	-82	-82					
90 Day	-52	-64	-65	-71	-75	-74	-72	-70	-68	-67	-65	-63	-55	-63	-73	-66					
10 Year																					
<i>\$ blns : a.r. (share in % of GDP)</i>																					
<b>Foreign Trade</b>																					
Current Account Balance	-69.3	-66.7	-41.4	-56.7	-56.3	-56.7	-58.0	-58.9	-58.3	-57.1	-56.0	-54.6	-60.1	-58.5	-57.5	-56.5					
Share of GDP	-3.2	-3.0	-1.8	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.4	-2.3	-2.3	-2.8	-2.6	-2.5	-2.4					
Merchandise Balance	-35.0	-22.7	-6.9	-21.4	-19.8	-19.0	-19.1	-19.0	-19.4	-19.6	-19.8	-20.0	-24.6	-21.5	-19.2	-19.7					
Non-Merchandise Balance	-34.3	-44.0	-34.5	-35.3	-36.5	-37.7	-38.9	-39.9	-38.9	-37.5	-36.1	-34.6	-35.5	-37.0	-38.3	-36.8					
<i>quarterly avg.</i>																					
US\$	79.1	77.5	76.5	75.9	74.4	74.2	74.5	74.7	74.9	75.2	75.4	75.7	77.1	77.3	74.5	75.3					
	US\$/C\$	1.265	1.291	1.307	1.317	1.343	1.347	1.343	1.339	1.334	1.330	1.326	1.321	1.298	1.295	1.343	1.328				
Yen	¥/C\$	85.7	84.6	85.3	85.8	83.7	83.0	82.7	82.4	82.2	82.1	82.0	81.9	86.5	85.3	82.9	82.0				
Euro	€/\$	1.55	1.54	1.52	1.50	1.53	1.52	1.53	1.55	1.55	1.55	1.56	1.46	1.53	1.53	1.55					
<i>y/y % chng</i>																					
<b>Incomes</b>																					
Corporate Profits Before Tax	-3.6	5.6	18.8	13.5	17.3	13.3	7.7	8.9	7.6	6.1	4.8	3.5	34.0	8.4	11.6	5.5					
Corporate Profits After Tax	-2.2	1.6	16.9	3.0	8.2	7.7	5.8	8.9	7.6	6.1	4.8	3.5	15.8	4.5	7.6	5.5					
Personal Income	5.3	4.7	3.9	2.3	2.5	2.7	3.0	3.9	4.0	3.8	3.6	3.5	4.6	4.0	3.0	3.7					
Real Disposable Income	3.6	2.8	1.1	0.4	1.2	1.1	1.3	1.8	2.0	1.7	1.6	1.5	3.4	1.9	1.4	1.7					
Savings Rate	1.3	1.0	0.8	0.3	0.0	0.1	0.2	0.3	0.4	0.4	0.5	0.6	1.5	0.9	0.2	0.5					
<i>% : quarterly avg.</i>																					
<i>quarterly avg. (000s and mlns are a.r.)</i>																					
<b>Other Indicators</b>																					
Unemployment Rate	5.8	5.9	5.9	5.7	5.7	5.6	5.6	5.5	5.5	5.5	5.6	5.6	6.3	5.8	5.6	5.6					
Housing Starts	225	219	197	211	210	207	204	200	200	200	200	200	220	213	205	200					
Existing Home Sales	-14.8	-13.8	-4.0	-12.2	0.0	3.4	-1.6	0.4	2.2	2.3	1.8	1.8	-4.5	-10.9	0.5	2.0					
MLS Home Price Index	5.7	0.9	2.3	1.8	-0.3	-0.5	1.0	2.1	2.2	1.8	1.9	2.2	13.2	2.7	0.5	2.0					
Motor Vehicle Sales	2.13	2.04	2.02	2.00	1.96	1.95	1.95	1.95	1.92	1.90	1.90	1.90	2.07	2.05	1.95	1.90					
<i>q/q % chng : a.r.</i>																					
Employment Growth	0.1	0.7	1.3	1.9	0.9	1.1	1.1	1.0	0.5	0.4	0.5	0.9	1.9	1.3	1.2	0.7					
Industrial Production	4.0	3.2	3.0	-1.7	-2.0	1.8	2.2	1.8	2.4	1.8	1.6	1.6	4.9	2.5	0.5	2.0					
Federal Budget Balance																	-0.9	-0.8	-0.9	-0.8	
<i>% of FY GDP</i>																					

Please refer to page 2 for Important Disclosures

# United States Economic Outlook



Our key forecasts for the U.S. economy

December 14, 2018

	Q1	Q2	Q3	2018 Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019	2020
<b>Production</b>	q/q % chng : a.r.															
Real GDP (chain-weighted)	2.2	4.2	3.5	2.6	1.9	2.4	2.0	1.9	1.8	1.6	1.4	1.3	2.2	2.9	2.4	1.7
Final Sales	1.9	5.4	1.2	2.8	2.4	2.1	1.9	1.8	1.8	1.6	1.3	1.3	2.2	2.8	2.4	1.7
Final Domestic Demand	1.9	4.0	3.1	3.3	2.6	2.3	2.1	1.9	1.9	1.7	1.4	1.4	2.5	3.0	2.7	1.8
Consumer Spending	0.5	3.8	3.6	3.2	2.4	2.3	2.1	2.0	2.1	1.8	1.4	1.4	2.5	2.7	2.7	1.9
Durables	-2.0	8.6	3.9	3.0	2.0	2.0	1.8	1.7	1.6	1.6	1.4	1.3	6.8	5.5	2.8	1.6
Nondurables	0.1	4.0	5.3	4.0	2.4	2.3	2.0	2.0	2.0	1.4	1.4	1.3	2.1	3.0	3.1	1.8
Services	1.0	3.0	3.1	3.0	2.5	2.4	2.2	2.1	2.2	2.0	1.4	1.4	2.0	2.2	2.6	2.0
Government Spending	1.5	2.5	2.6	4.2	3.1	2.1	1.9	1.5	1.0	1.1	1.1	1.1	-0.1	1.8	2.7	1.3
Business Investment	11.5	8.7	2.5	3.9	3.0	2.6	2.1	2.0	2.0	1.9	1.8	1.7	5.3	6.8	3.2	2.0
Non-residential Construction	13.9	14.5	-1.7	2.0	3.0	2.2	1.9	1.8	1.8	1.6	1.5	1.4	4.6	5.6	2.5	1.7
Equipment	8.5	4.6	3.5	3.5	3.0	2.5	1.9	1.8	1.8	1.7	1.6	1.5	6.1	7.2	2.9	1.8
Intellectual Property	14.1	10.5	4.3	6.0	3.0	3.0	2.4	2.3	2.3	2.3	2.2	2.2	4.6	7.1	4.0	2.3
Residential Construction	-3.4	-1.3	-2.6	-3.0	1.0	1.7	1.7	1.7	1.6	1.6	1.6	1.6	3.3	-0.1	-0.1	1.6
Exports	3.6	9.3	-4.4	4.0	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	3.0	4.2	2.1	2.0
Imports	3.0	-0.6	9.2	6.1	3.2	3.1	3.0	2.7	2.4	2.3	2.2	2.1	4.6	4.8	4.2	2.5
	2009\$ bns : a.r. (contribution in ppts : a.r.)															
Inventory Change	30.3	-36.8	86.6	76.0	51.0	61.0	65.0	68.0	68.0	68.0	69.0	70.0	21.5	37.9	61.3	68.8
Contribution to GDP Growth	0.3	-1.2	2.3	-0.2	-0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Net Exports	-902.3	-841.0	-945.8	-973.0	-985.7	-999.0	-1012.2	-1022.8	-1031.5	-1039.3	-1046.3	-1052.4	-858.7	-915.5	-1004.9	-1042.3
Contribution to GDP Growth	0.0	1.2	-1.9	-0.6	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.5	-0.2
	\$ bns : a.r. (growth in q/q % chng : a.r.)															
Nominal GDP	20,041	20,412	20,660	20,912	21,103	21,337	21,549	21,758	21,966	22,156	22,337	22,518	19,485	20,506	21,437	22,244
Growth	4.3	7.6	5.0	5.0	3.7	4.5	4.0	3.9	3.9	3.5	3.3	3.3	4.2	5.2	4.5	3.8
Real GDP	y/y % chng															
	2.6	2.9	3.0	3.1	3.0	2.6	2.2	2.0	2.0	1.8	1.7	1.5				
<b>Inflation</b>	q/q % chng : a.r.															
GDP Price Index	2.0	3.0	1.7	2.4	1.8	2.1	2.0	2.0	2.1	1.9	1.9	1.9	1.9	2.3	2.1	2.0
Core PCE Deflator	2.2	2.1	1.5	1.7	2.9	2.2	2.1	2.2	2.3	1.9	2.0	2.0	1.6	1.9	2.2	2.1
CPI All Items	3.5	1.7	2.0	1.8	1.9	2.2	2.1	2.1	2.1	1.8	1.9	1.9	2.1	2.4	2.0	2.0
Ex. Food and Energy	3.0	1.8	2.0	2.1	2.9	2.2	2.1	2.2	2.3	1.9	2.0	2.0	1.8	2.1	2.3	2.1
Food Prices	1.5	1.7	1.4	0.7	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	0.9	1.4	1.8	2.0
Energy Prices	12.7	0.2	2.8	1.3	-8.3	2.8	2.7	1.3	1.2	1.2	1.2	1.2	8.0	7.5	-0.6	1.5
Services	3.2	2.4	2.5	2.6	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.7	2.8	2.3	2.0
CPI All Items	y/y % chng															
	2.3	2.6	2.6	2.2	1.8	2.0	2.0	2.1	2.1	2.0	2.0	2.0				
Ex. Food and Energy	y/y % chng															
	1.9	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.1	2.1	2.0				
Core PCE Deflator	y/y % chng															
	1.7	1.9	2.0	1.9	2.0	2.1	2.2	2.3	2.2	2.1	2.1	2.0				
<b>Financial</b>	% : quarterly avg.															
Fed Funds Rate	1.46	1.71	1.96	2.21	2.38	2.54	2.71	2.88	3.13	3.13	3.13	3.13	1.00	1.83	2.63	3.13
90-Day T-Bill	1.58	1.87	2.08	2.35	2.45	2.70	2.90	3.05	3.20	3.20	3.15	3.15	0.95	1.95	2.75	3.20
3-Month Libor	1.91	2.34	2.34	2.60	2.80	3.00	3.15	3.30	3.50	3.50	3.50	3.50	1.26	2.30	3.05	3.50
10-Year Bond Yield	2.76	2.92	2.93	3.05	2.95	3.05	3.15	3.25	3.35	3.35	3.25	3.15	2.33	2.90	3.10	3.25
10-Year BBB Corporate Spread	ppts															
	1.40	1.56	1.61	1.75	1.95	2.10	2.15	2.20	2.35	2.35	2.35	2.35	1.61	1.98	2.14	2.35
<b>Foreign Trade</b>	\$ bns : a.r. (share in % of GDP)															
Current Account Balance	-487	-406	-530	-495	-521	-537	-553	-567	-580	-587	-594	-600	-449	-480	-545	-590
Share of GDP	-2.4	-2.0	-2.6	-2.4	-2.5	-2.5	-2.6	-2.6	-2.6	-2.7	-2.7	-2.7	-2.3	-2.3	-2.5	-2.7
Merchandise Balance	-883	-813	-933	-916	-938	-953	-969	-983	-995	-1007	-1019	-1029	-807	-886	-961	-1013
Non-Merchandise Balance	396	407	403	421	417	416	416	415	416	420	425	429	358	407	416	422
	quarterly avg.															
Yen	¥/US\$															
	108	109	112	113	113	112	111	110	110	109	109	108	112	110	111	109
Euro	US\$/€															
	1.23	1.19	1.16	1.14	1.14	1.13	1.14	1.16	1.16	1.17	1.17	1.18	1.13	1.18	1.14	1.17
Pound	US\$/£															
	1.39	1.36	1.30	1.28	1.24	1.23	1.26	1.29	1.31	1.32	1.33	1.35	1.29	1.34	1.26	1.33
Trade-Wt. Dollar (broad)	Jan '97=100															
	117.6	121.0	125.1	127.7	129.2	129.8	128.8	127.4	126.7	126.3	125.8	125.4	122.1	122.9	128.8	126.0
<b>Commodity Prices</b>	quarterly avg.															
WTI Spot	US\$/bbl															
	62.9	67.9	69.7	60.6	58.0	62.7	64.3	63.0	62.0	62.0	62.0	62.0	50.9	65.3	62.0	62.0
Henry Hub Spot	US\$/mmbtu															
	3.1	2.9	2.9	3.7	3.5	3.0	3.1	3.2	3.3	3.3	3.3	3.3	3.0	3.1	3.2	3.3
<b>Incomes</b>	y/y % chng															
Pre-Tax Profits with IVA and CCA	5.9	7.3	10.3	9.1	8.8	6.8	4.3	4.0	4.1	3.8	3.7	3.5	3.2	8.2	5.9	3.8
Personal Income	4.3	4.5	4.4	4.2	3.9	4.0	4.0	3.8	3.7	3.7	3.6	3.6	4.4	4.3	3.9	3.7
Real Disposable Income	2.8	2.7	2.7	2.9	2.4	2.3	2.1	1.8	1.6	1.6	1.6	1.6	2.6	2.8	2.1	1.6
Savings Rate	% : quarterly avg.															
	7.2	6.7	6.3	6.3	6.2	6.1	6.0	5.9	5.7	5.7	5.7	5.8	6.7	6.6	6.0	5.7
<b>Other Indicators</b>	quarterly avg. (mlns are a.r.)															
Unemployment Rate	percent															
	4.1	3.9	3.8	3.7	3.6	3.5	3.5	3.5	3.5	3.5	3.6	3.7	4.4	3.9	3.5	3.6
Housing Starts	mlns															
	1.32	1.26	1.22	1.24	1.26	1.24	1.23	1.21	1.21	1.22	1.22	1.22	1.21	1.26	1.24	1.22
Existing Home Sales	mlns															
	5.51	5.41	5.27	5.31	5.39	5.36	5.34	5.33	5.34	5.35	5.36	5.37	5.54	5.38	5.36	5.36
Home Prices (Case-Shiller)	y/y % chng															
	6.6	6.5	5.6	4.5	3.3	3.2	3.6	3.5	3.3	3.2	3.1	3.0	5.9	5.8	3.4	3.1
Motor Vehicle Sales	mlns															
	17.2	17.2	17.0	17.4	16.7	16.5	16.4	16.2	16.1	16.0	16.0	16.0	17.2	17.2	16.4	16.0
	q/q % chng : a.r.															
Civilian Employment	2.7	1.2	1.1	2.5	1.2	1.0	0.9	0.9	0.8	0.6	0.5	0.5	1.3	1.6	1.3	0.7
Industrial Production	2.5	5.2	4.7	2.7	3.1	2.5	2.4	2.2	1.9	1.6	1.6	1.6	1.6	3.9	3.1	1.9
<b>CBO Budget Deficit</b>	% of GDP															
													-3.5	-4.0	-4.6	-4.6

Shaded values represent forecasts

Please refer to page 2 for Important Disclosures



# Rates Scenario



## Interest Rate Forecasts

Percent (averages)

	Actual	Forecasts							2019		2020
	2018 Nov	2018 Dec	2019 Jan	Feb	Mar	Apr	May	Jun	Q3	Q4	Q1
<b>Cdn. Yield Curve</b>											
Overnight	1.75	1.75 <sup>1</sup>	1.75	1.75	1.75	2.00	2.00	2.00	2.00	2.25	2.25
3 month	1.71	1.65	1.65	1.75	1.80	1.90	1.90	1.90	2.00	2.15	2.25
6 month	1.90	1.80	1.90	1.95	2.00	2.10	2.10	2.10	2.20	2.35	2.45
1 year	2.13	2.00	2.05	2.10	2.15	2.20	2.20	2.25	2.30	2.40	2.50
2 year	2.27	2.05	2.10	2.15	2.15	2.20	2.25	2.30	2.35	2.45	2.55
3 year	2.28	2.05	2.10	2.15	2.15	2.20	2.25	2.30	2.35	2.45	2.55
5 year	2.34	2.05	2.10	2.15	2.20	2.20	2.25	2.30	2.35	2.45	2.60
7 year	2.36	2.10	2.15	2.15	2.20	2.25	2.25	2.30	2.40	2.50	2.60
10 year	2.41	2.15	2.15	2.20	2.25	2.30	2.30	2.35	2.45	2.55	2.65
30 year	2.46	2.30	2.35	2.35	2.40	2.45	2.50	2.50	2.60	2.70	2.80
1m BA	2.10	2.20	2.20	2.25	2.35	2.40	2.40	2.40	2.45	2.60	2.65
3m BA	2.22	2.25	2.25	2.35	2.40	2.50	2.50	2.50	2.55	2.70	2.75
6m BA	2.34	2.35	2.45	2.45	2.50	2.55	2.55	2.55	2.70	2.80	2.90
12m BA	2.56	2.55	2.60	2.65	2.70	2.70	2.75	2.75	2.80	2.85	3.00
Prime Rate	3.95	3.95	3.95	3.95	3.95	4.20	4.20	4.20	4.20	4.45	4.45
<b>U.S. Yield Curve</b>											
Fed funds	2.13	2.38	2.38	2.38	2.38	2.38	2.63	2.63	2.88	2.88	3.13
3 month	2.37	2.40	2.40	2.40	2.50	2.60	2.70	2.70	2.90	3.05	3.20
6 month	2.52	2.55	2.55	2.60	2.70	2.75	2.80	2.85	2.95	3.15	3.25
1 year	2.70	2.70	2.70	2.75	2.80	2.85	2.90	2.95	3.05	3.15	3.30
2 year	2.86	2.75	2.80	2.85	2.85	2.90	2.95	3.00	3.05	3.20	3.30
3 year	2.91	2.75	2.80	2.85	2.85	2.90	2.95	3.00	3.10	3.20	3.30
5 year	2.95	2.80	2.80	2.85	2.90	2.90	2.95	3.00	3.10	3.20	3.30
7 year	3.04	2.85	2.85	2.90	2.90	2.95	3.00	3.05	3.10	3.20	3.30
10 year	3.12	2.90	2.95	2.95	3.00	3.05	3.05	3.10	3.15	3.25	3.35
30 year	3.36	3.15	3.20	3.20	3.25	3.30	3.30	3.35	3.40	3.50	3.60
1m LIBOR	2.32	2.45	2.45	2.45	2.55	2.60	2.70	2.70	2.90	3.10	3.25
3m LIBOR	2.65	2.80	2.80	2.80	2.85	2.95	3.00	3.00	3.15	3.30	3.50
6m LIBOR	2.86	2.90	2.90	2.85	2.95	3.05	3.15	3.10	3.35	3.45	3.65
12m LIBOR	3.12	3.10	3.15	3.05	3.15	3.25	3.35	3.30	3.50	3.55	3.75
Prime Rate	5.25	5.50	5.50	5.50	5.50	5.50	5.75	5.75	5.85	6.00	6.25
<b>Other G7 Yields</b>											
ECB Refi	0.00	0.00 <sup>1</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
10yr Bund	0.38	0.25	0.30	0.35	0.35	0.40	0.45	0.50	0.55	0.70	0.70
BoE Repo	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00
10yr Gilt	1.44	1.35	1.40	1.40	1.45	1.45	1.50	1.50	1.55	1.65	1.65
BoJ O/N	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	0.00	0.00
10yr JGB	0.10	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16

<sup>1</sup> actual value for December 2018

## MARKET CALL

- We were among the most dovish forecasters for North American central banks, but markets have moved in a hurry to share that view, or even take it further. Stateside, the Fed no longer seems to be at risk of blindly overshooting the neutral rate, and we trimmed our 2019 forecast to only one further hike after this week's likely move, while leaving a small cut in place for 2020, as a signpost that we still see a mid-cycle ease when fiscal policy tightens. We also trimmed our peak Treasury yields as the Fed's downgraded view on where neutral sits will also impact market views.
- We're sticking to our prior call for two further Bank of Canada hikes, hitting a peak rate of 2.25% in the first half, but still at that level through 2020, a long way from the roughly 3% rate that the central bank saw as neutral only two months ago. Frankly, we're less assured about the timing of coming hikes, as we're publishing ahead of key indicators for October, and we'll also need to see at least a partial recovery in global oil prices to get the first of the hikes. Given those clouds, we see more risk of only one hike than three moves from here.
- If Poloz manages to squeeze in a hike while the Fed is on hold, it will also be because oil prices and other data have also turned a bit brighter. That would support a temporary rebound in the Canadian dollar, but one we don't see as sticking. Canada's track record on exports, and the need for improvement on that front as housing slows, suggests that we need to be on the topside of 1.30 to be competitive.

## INTEREST & FOREIGN EXCHANGE RATES

END OF PERIOD:	2018	2019				2020			
	14-Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
<b>CDA</b> Overnight target rate	1.75	2.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
98-Day Treasury Bills	1.63	2.10	2.20	2.25	2.20	2.10	2.05	2.00	1.95
2-Year Gov't Bond	2.02	2.50	2.55	2.40	2.30	2.25	2.20	2.15	2.05
10-Year Gov't Bond	2.11	2.50	2.65	2.65	2.50	2.45	2.40	2.35	2.20
30-Year Gov't Bond	2.28	2.45	2.55	2.60	2.60	2.65	2.65	2.55	2.50
<b>U.S.</b> Federal Funds Rate	2.125	2.375	2.625	2.625	2.625	2.625	2.375	2.375	2.375
91-Day Treasury Bills	2.42	2.35	2.65	2.70	2.80	2.60	2.40	2.25	2.25
2-Year Gov't Note	2.73	3.00	3.25	3.20	3.10	2.85	2.65	2.55	2.50
10-Year Gov't Note	2.88	3.15	3.35	3.35	3.25	3.10	3.05	2.90	2.80
30-Year Gov't Bond	3.14	3.25	3.40	3.45	3.45	3.45	3.25	3.10	3.00
Canada - US T-Bill Spread	-0.79	-0.25	-0.45	-0.45	-0.60	-0.50	-0.35	-0.25	-0.30
Canada - US 10-Year Bond Spread	-0.78	-0.65	-0.70	-0.70	-0.75	-0.65	-0.65	-0.55	-0.60
Canada Yield Curve (10-Year — 2-Year)	0.09	0.00	0.10	0.25	0.20	0.20	0.20	0.20	0.15
US Yield Curve (10-Year — 2-Year)	0.15	0.15	0.10	0.15	0.15	0.25	0.40	0.35	0.30
<b>EXCHANGE RATES</b>									
CADUSD	0.75	0.77	0.76	0.76	0.75	0.75	0.76	0.76	0.77
USDCAD	1.34	1.30	1.31	1.32	1.34	1.33	1.32	1.31	1.30
USDJPY	113	112	110	108	106	105	104	102	100
EURUSD	1.13	1.15	1.18	1.20	1.22	1.25	1.26	1.25	1.24
GBPUSD	1.26	1.32	1.37	1.41	1.44	1.45	1.46	1.45	1.44
AUDUSD	0.72	0.74	0.75	0.76	0.77	0.78	0.79	0.79	0.80
USDCHF	1.00	0.98	0.95	0.95	0.93	0.92	0.92	0.93	0.94
USDBRL	3.90	3.90	3.70	3.90	4.10	4.00	3.95	3.90	3.80
USDMXN	20.3	20.2	19.7	19.7	20.1	20.3	20.3	20.7	21.0





**TABLE 1**  
**Key interest rates**

END OF PERIOD IN %	2018				2019				2020			
	Q1	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>United States</b>												
Federal funds	1.75	2.00	2.25	2.50	2.75	2.75	3.00	3.25	3.50	3.50	3.50	3.25
<b>Canada</b>												
Overnight funds	1.25	1.25	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.50	2.50	2.25
<b>Zone euro</b>												
Refinancing rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.25	0.25	0.50	0.50
<b>United Kingdom</b>												
Base rate	0.50	0.50	0.75	0.75	0.75	0.75	1.00	1.00	1.25	1.25	1.50	1.50
<b>Japan</b>												
Main key rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	0.00	0.00	0.00

f: forecasts  
Sources: Datastream and Desjardins, Economic Studies

**TABLE 2**  
**Fixed income market**

END OF PERIOD IN %	2018				2019				2020			
	Q1	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
<b>UNITED STATES</b>												
<b>Treasury bills</b>												
3-month	1.73	1.93	2.19	2.45	2.60	2.70	2.95	3.20	3.30	3.30	3.20	2.90
<b>Federal bonds</b>												
2-year	2.27	2.53	2.82	2.90	3.05	3.10	3.25	3.40	3.50	3.50	3.30	3.00
5-year	2.55	2.73	2.95	2.95	3.15	3.20	3.35	3.50	3.60	3.60	3.35	3.00
10-year	2.75	2.86	3.06	3.05	3.25	3.35	3.50	3.60	3.70	3.70	3.45	3.15
30-year	2.97	2.99	3.21	3.30	3.45	3.55	3.70	3.75	3.80	3.80	3.60	3.30
<b>Yield curve slopes</b>												
5-year - 3-month	0.82	0.80	0.76	0.50	0.55	0.50	0.40	0.30	0.30	0.30	0.15	0.10
10-year - 2-year	0.47	0.33	0.24	0.15	0.20	0.25	0.25	0.20	0.20	0.20	0.15	0.15
30-year - 3-month	1.24	1.06	1.02	0.85	0.85	0.85	0.75	0.55	0.50	0.50	0.40	0.40
<b>CANADA</b>												
<b>Treasury bills</b>												
3-month	1.10	1.26	1.59	1.70	1.80	2.05	2.20	2.30	2.50	2.50	2.45	2.15
<b>Federal bonds</b>												
2-year	1.77	1.91	2.21	2.10	2.25	2.40	2.50	2.65	2.80	2.80	2.60	2.30
5-year	1.96	2.06	2.33	2.15	2.35	2.50	2.65	2.80	2.90	2.90	2.65	2.30
10-year	2.09	2.17	2.42	2.20	2.45	2.65	2.80	2.90	3.05	3.05	2.80	2.55
30-year	2.23	2.20	2.41	2.35	2.55	2.75	2.95	3.05	3.15	3.15	2.95	2.70
<b>Yield curve slopes</b>												
5-year - 3-month	0.86	0.80	0.74	0.45	0.55	0.45	0.45	0.50	0.40	0.40	0.20	0.15
10-year - 2-year	0.32	0.26	0.21	0.10	0.20	0.25	0.30	0.25	0.25	0.25	0.20	0.25
30-year - 3-month	1.13	0.94	0.82	0.65	0.75	0.70	0.75	0.75	0.65	0.65	0.50	0.55
<b>Yield spreads (Canada—United States)</b>												
3-month	-0.63	-0.67	-0.60	-0.75	-0.80	-0.65	-0.75	-0.90	-0.80	-0.80	-0.75	-0.75
2-year	-0.50	-0.62	-0.61	-0.80	-0.80	-0.70	-0.75	-0.75	-0.70	-0.70	-0.70	-0.70
5-year	-0.59	-0.67	-0.62	-0.80	-0.80	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70
10-year	-0.66	-0.69	-0.64	-0.85	-0.80	-0.70	-0.70	-0.70	-0.65	-0.65	-0.65	-0.60
30-year	-0.74	-0.79	-0.80	-0.95	-0.90	-0.80	-0.75	-0.70	-0.65	-0.65	-0.65	-0.60

f: forecasts  
Sources: Datastream and Desjardins, Economic Studies



# Laurentian Bank Securities ECONOMIC RESEARCH AND STRATEGY

## Forecasts Tables

Canadian Economic Outlook											
	(q/q saar)					annual average				Q4/Q4	
	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2017	2018	2019	2020	2017	2018
<b>Real GDP</b>	1.7	1.4	2.9	2.2	2.1	3.0	2.1	2.1	1.9	3.0	2.2
Consumer Expenditure	2.2	1.0	2.6	1.2	1.7	3.5	2.0	1.8	1.7	3.4	1.6
Business Investment	7.4	11.2	1.7	9.8	4.9	2.5	7.2	5.4	5.0	8.6	6.8
Non-residential structures	4.0	8.2	2.2	3.0	5.0	0.7	5.4	5.3	6.2	6.4	4.6
Machinery and equipment	14.5	16.4	1.4	12.0	5.0	6.0	9.5	4.9	3.8	12.9	8.5
Residential Investment	13.5	-10.5	1.1	2.0	3.0	2.9	0.1	1.3	1.0	4.6	-1.2
Government Spending	4.5	2.8	1.0	2.7	2.7	2.6	2.9	2.1	2.1	3.3	2.3
Exports	3.9	2.4	12.4	1.3	4.7	1.0	3.1	3.0	2.1	0.5	5.1
Imports	7.7	4.3	6.5	-7.1	5.2	3.6	3.4	2.2	2.1	6.9	2.0
Total CPI Inflation *	1.8	2.1	2.3	2.7	2.4	1.6	2.4	2.1	2.0	1.8	2.4
Unemployment rate (%)*	6.0	5.8	5.9	5.9	5.9	6.3	5.9	5.8	5.7	--	--
Employment	2.6	0.1	4.1	1.3	0.8	1.9	1.2	0.9	0.7	2.1	0.7
Housing Starts (in 000s)*	229	225	219	196	210	220	213	205	200	--	--
Res. Transactions (units, 000s)**	132	115	111	118	--	516	462	494	515	--	--
Res. Housing Prices (yoy %)	9.2	7.6	4.3	1.8	--	12.1	--	--	--	--	--
Nominal GDP	6.3	3.1	5.1	3.6	2.8	5.4	4.0	3.7	3.9	4.9	3.7

\*Average for the period. \*\*total for the period

Updated: October 2018

Financial Forecasts													
	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	20Q4
<b>Canada</b>													
<b>Overnight Rate Target</b>	<b>0.50</b>	<b>0.50</b>	<b>1.00</b>	<b>1.00</b>	<b>1.25</b>	<b>1.25</b>	<b>1.50</b>	<b>1.75</b>	<b>2.00</b>	<b>2.00</b>	<b>2.25</b>	<b>2.25</b>	<b>2.75</b>
3-Month Treasury Bills	0.53	0.71	1.00	1.05	1.10	1.26	1.58	1.75	2.00	2.00	2.25	2.25	2.75
2-Year Bond	0.75	1.09	1.50	1.67	1.77	1.92	2.21	2.35	2.50	2.50	2.70	2.70	3.05
5-Year Bond	1.11	1.39	1.75	1.86	1.96	2.06	2.33	2.45	2.60	2.60	2.75	2.75	2.85
10-Year Bond	1.62	1.77	2.09	2.04	2.09	2.17	2.42	2.55	2.70	2.75	2.85	2.90	3.10
30-Year Bond	2.30	2.14	2.47	2.27	2.23	2.20	2.42	2.50	2.70	2.75	2.85	2.90	3.15
<b>United States</b>													
<b>Federal Funds Rate Target*</b>	<b>1.000</b>	<b>1.250</b>	<b>1.250</b>	<b>1.500</b>	<b>1.750</b>	<b>2.000</b>	<b>2.250</b>	<b>2.500</b>	<b>2.750</b>	<b>3.000</b>	<b>3.000</b>	<b>3.000</b>	<b>3.250</b>
3-Month Treasury Bills	0.75	1.01	1.04	1.37	1.70	1.89	2.15	2.40	2.70	3.00	3.05	3.05	3.30
2-Year Bond	1.24	1.37	1.49	1.88	2.27	2.53	2.82	3.00	3.25	3.40	3.40	3.40	3.50
5-Year Bond	1.92	1.88	1.92	2.19	2.56	2.73	2.95	3.15	3.40	3.50	3.50	3.50	3.60
10-Year Bond	2.40	2.30	2.33	2.41	2.75	2.86	3.06	3.20	3.50	3.70	3.70	3.70	3.75
30-Year Bond	3.02	2.84	2.86	2.74	2.97	2.99	3.21	3.40	3.60	3.80	3.80	3.80	3.90
<b>Canadian Dollar (US\$/C\$)</b>	<b>0.75</b>	<b>0.77</b>	<b>0.80</b>	<b>0.80</b>	<b>0.78</b>	<b>0.76</b>	<b>0.77</b>	<b>0.80</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>	<b>0.82</b>
<b>S&amp;P 500 Index</b>	2363	2423	2519	2674	2641	2718	2914	2800	2850	2900	2950	3000	3150
<b>TSX Index</b>	15548	15182	15635	16209	15367	16278	16073	16500	17250	18000	18500	19000	20000
<b>Oil WTI (US\$/barrel)</b>	50.5	46	52	60	65	74	73	67	67	67	67	67	67

Quarter-end data

Updated: October 2018 \* Upper bound of the target range for the Fed funds rate.



# Monthly Economic Monitor

## United States Economic Forecast

<i>(Annual % change)*</i>						<i>Q4/Q4</i>		
	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
Gross domestic product (2012 \$)	1.6	2.2	2.9	2.3	1.9	3.0	1.8	1.8
Consumption	2.7	2.5	2.6	2.3	1.9	2.6	1.8	1.8
Residential construction	6.5	3.3	0.1	0.5	1.4	(1.8)	1.5	1.5
Business investment	0.5	5.3	6.6	2.0	1.4	5.7	1.6	1.7
Government expenditures	1.4	(0.1)	1.7	2.3	1.6	2.4	2.0	1.2
Exports	(0.1)	3.0	4.2	1.8	0.9	3.2	1.2	1.0
Imports	1.9	4.6	4.5	2.2	1.1	3.3	1.2	1.0
Change in inventories (bil. \$)	23.4	22.5	36.7	39.8	25.1	66.5	32.7	23.8
Domestic demand	2.3	2.5	2.9	2.2	1.7	2.8	1.8	1.7
Real disposable income	1.7	2.6	2.7	1.8	1.7	2.6	1.7	1.7
Household employment	1.7	1.3	1.5	1.1	1.0	1.5	1.0	0.9
Unemployment rate	4.9	4.4	3.9	3.6	3.5	3.8	3.6	3.5
Inflation	1.3	2.1	2.4	2.3	2.4	2.3	2.6	2.3
Before-tax profits	(1.1)	3.2	8.3	6.6	4.1	9.6	4.5	3.7
Federal balance (unified budget, bil. \$)	(587.0)	(666.0)	(779.0)	(981.0)	(1,020.0)	...	...	...
Current account (bil. \$)	(432.9)	(449.1)	(434.4)	(436.8)	(437.0)	...	...	...

\* or as noted

## Financial Forecast\*\*

	<i>Current</i>							
	<i>12-05-18</i>	<i>Q1 2019</i>	<i>Q2 2019</i>	<i>Q3 2019</i>	<i>Q4 2019</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
Fed Fund Target Rate	2.25	2.50	2.75	3.00	3.00	2.50	3.00	2.75
3 month Treasury bills	2.38	2.46	2.72	2.93	2.93	2.45	2.93	2.72
Treasury yield curve								
2-Year	2.80	2.93	2.99	3.19	3.25	2.87	3.25	2.71
5-Year	2.79	3.06	3.11	3.33	3.36	2.85	3.36	3.00
10-Year	2.91	3.21	3.31	3.46	3.48	3.00	3.48	3.24
30-Year	3.16	3.41	3.54	3.68	3.69	3.39	3.69	3.44
Exchange rates								
U.S./Euro	1.13	1.15	1.19	1.22	1.23	1.15	1.23	1.23
YEN/U.S.\$	113	114	115	115	113	114	113	113

\*\* end of period

## Quarterly pattern

	<i>Q1 2018</i>	<i>Q2 2018</i>	<i>Q3 2018</i>	<i>Q4 2018</i>	<i>Q1 2019</i>	<i>Q2 2019</i>	<i>Q3 2019</i>	<i>Q4 2019</i>
	<i>actual</i>	<i>actual</i>	<i>actual</i>	<i>forecast</i>	<i>forecast</i>	<i>forecast</i>	<i>forecast</i>	<i>forecast</i>
Real GDP growth (q/q % chg. saar)	2.2	4.2	3.5	2.3	1.7	2.0	1.9	1.6
CPI (y/y % chg.)	2.3	2.6	2.6	2.3	1.9	2.3	2.5	2.6
CPI ex. food and energy (y/y % chg.)	1.9	2.2	2.2	2.2	2.1	2.3	2.5	2.6
Unemployment rate (%)	4.1	3.9	3.8	3.8	3.7	3.7	3.6	3.6

National Bank Financial

# Monthly Economic Monitor

## Canada Economic Forecast

(Annual % change)*						Q4/Q4		
	2016	2017	2018	2019	2020	2018	2019	2020
Gross domestic product (2012 \$)	1.1	3.0	2.1	1.8	1.7	2.1	1.8	1.5
Consumption	2.1	3.6	2.2	1.5	1.2	1.7	1.4	1.0
Residential construction	3.5	2.4	(0.9)	(1.5)	(1.9)	(2.9)	(2.0)	(1.8)
Business investment	(9.9)	2.5	5.0	1.0	3.7	1.9	2.9	3.2
Government expenditures	1.2	2.7	3.0	2.0	1.7	1.7	2.3	1.2
Exports	1.3	1.1	3.3	4.1	3.1	4.8	3.7	3.5
Imports	(0.0)	4.2	3.2	1.6	2.1	0.8	3.0	2.0
Change in inventories (millions \$)	2,291	17,582	10,025	1,166	1,316	3,362	658	957
Domestic demand	0.6	3.1	2.5	1.4	1.4	1.4	1.6	1.1
Real disposable income	(0.7)	3.4	2.1	1.6	1.5	0.9	1.6	1.5
Employment	0.7	1.9	1.2	0.9	0.8	0.7	0.8	0.7
Unemployment rate	7.0	6.3	5.9	5.7	5.7	5.8	5.7	5.7
Inflation	1.4	1.6	2.3	2.1	2.2	2.2	2.4	2.2
Before-tax profits	6.4	20.1	5.1	7.5	4.2	10.0	5.0	3.5
Current account (bil. \$)	(64.9)	(60.1)	(56.9)	(45.0)	(37.0)	....	....	....

\* or as noted

## Financial Forecast\*\*

	Current							
	12-05-18	Q1 2019	Q2 2019	Q3 2019	Q4 2019	2018	2019	2020
Overnight rate	1.75	1.75	2.00	2.25	2.50	1.75	2.50	2.50
3 month T-Bills	1.67	1.96	2.18	2.38	2.46	1.68	2.46	2.29
Treasury yield curve								
2-Year	2.06	2.20	2.27	2.42	2.69	2.05	2.69	2.69
5-Year	2.08	2.22	2.35	2.48	2.81	2.08	2.81	2.89
10-Year	2.13	2.31	2.44	2.66	2.93	2.19	2.93	3.07
30-Year	2.26	2.40	2.52	2.73	3.00	2.28	3.00	3.13
CAD per USD	1.34	1.30	1.27	1.27	1.28	1.32	1.28	1.32
Oil price (WTI), U.S.\$	53	65	68	71	68	62	68	62

\*\* end of period

## Quarterly pattern

	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019
	actual	actual	actual	forecast	forecast	forecast	forecast	forecast
Real GDP growth (q/q % chg. saar)	1.7	2.9	2.0	1.9	0.9	2.4	1.8	2.0
CPI (y/y % chg.)	2.1	2.3	2.7	2.2	1.7	2.0	2.0	2.4
CPI ex. food and energy (y/y % chg.)	1.8	1.8	2.1	2.0	1.6	2.0	1.9	2.2
Unemployment rate (%)	5.8	5.9	5.9	5.8	5.8	5.8	5.7	5.7

National Bank Financial



RBC ECONOMICS | RESEARCH

FINANCIAL MARKET FORECASTS

December 7, 2018

Interest rates (% , end of quarter, )

	Actual			Forecast									Actual		Forecast	
	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	20Q1	20Q2	20Q3	20Q4	2017	2018	2019	2020
<b>Canada</b>																
Overnight	1.25	1.25	1.50	1.75	1.75	2.00	2.25	2.25	2.50	2.75	2.75	2.75	1.00	1.75	2.25	2.75
Three-month	1.10	1.26	1.59	1.65	1.65	1.95	2.15	2.20	2.45	2.70	2.70	2.75	1.06	1.65	2.20	2.75
Two-year	1.78	1.91	2.21	2.05	2.20	2.35	2.40	2.45	2.70	2.85	2.90	3.00	1.69	2.05	2.45	3.00
Five-year	1.97	2.07	2.34	2.15	2.35	2.55	2.70	2.75	2.95	3.10	3.10	3.15	1.87	2.15	2.75	3.15
10-year	2.09	2.17	2.43	2.20	2.45	2.75	2.90	2.90	3.05	3.20	3.30	3.30	2.04	2.20	2.90	3.30
30-year	2.23	2.20	2.42	2.35	2.60	2.85	2.95	2.95	3.10	3.25	3.30	3.30	2.27	2.35	2.95	3.30
Yield curve (10s-2s)	31	26	22	15	25	40	50	45	35	35	40	30	35	15	45	30
<b>United States</b>																
Fed funds*	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.00	4.00	1.50	2.50	3.50	4.00
Three-month	1.73	1.93	2.19	2.35	2.65	2.90	3.15	3.35	3.60	3.85	3.85	3.85	1.39	2.35	3.35	3.85
Two-year	2.27	2.52	2.81	2.90	3.10	3.25	3.40	3.60	3.80	4.00	3.95	3.90	1.89	2.90	3.60	3.90
Five-year	2.56	2.73	2.94	3.10	3.25	3.40	3.55	3.65	3.85	4.05	4.00	3.95	2.20	3.10	3.65	3.95
10-year	2.74	2.85	3.05	3.30	3.45	3.60	3.70	3.75	3.90	4.05	4.05	4.00	2.40	3.30	3.75	4.00
30-year	2.97	2.98	3.19	3.50	3.65	3.75	3.80	3.85	3.95	4.05	4.05	4.00	2.74	3.50	3.85	4.00
Yield curve (10s-2s)	47	33	24	40	35	35	30	15	10	5	10	10	51	40	15	10
<b>Yield spreads</b>																
Three-month T-bills	-0.63	-0.67	-0.60	-0.70	-1.00	-0.95	-1.00	-1.15	-1.15	-1.15	-1.15	-1.10	-0.33	-0.70	-1.15	-1.10
Two-year	-0.49	-0.61	-0.60	-0.85	-0.90	-0.90	-1.00	-1.15	-1.10	-1.15	-1.05	-0.90	-0.20	-0.85	-1.15	-0.90
Five-year	-0.59	-0.66	-0.60	-0.95	-0.90	-0.85	-0.85	-0.90	-0.90	-0.95	-0.90	-0.80	-0.33	-0.95	-0.90	-0.80
10-year	-0.65	-0.68	-0.62	-1.10	-1.00	-0.85	-0.80	-0.85	-0.85	-0.85	-0.75	-0.70	-0.36	-1.10	-0.85	-0.70
30-year	-0.74	-0.78	-0.77	-1.15	-1.05	-0.90	-0.85	-0.90	-0.85	-0.80	-0.75	-0.70	-0.47	-1.15	-0.90	-0.70

Note: Interest Rates are end of period rates. \* Top of 25 basis point range

Exchange rates (end of quarter, )

	Actual							Forecast					Actual		Forecast	
	17Q1	17Q2	17Q3	17Q4	18Q1	18Q2	18Q3	18Q4	19Q1	19Q2	19Q3	19Q4	2016	2017	2018	2019
AUD/USD	0.76	0.77	0.78	0.78	0.77	0.74	0.72	0.72	0.68	0.67	0.67	0.67	0.72	0.78	0.72	0.67
USD/CAD	1.33	1.30	1.25	1.26	1.29	1.31	1.29	1.33	1.35	1.34	1.33	1.33	1.34	1.26	1.33	1.33
EUR/USD	1.07	1.14	1.18	1.20	1.23	1.17	1.16	1.13	1.10	1.10	1.13	1.16	1.05	1.20	1.13	1.16
USD/JPY	111.4	112.4	112.5	112.7	106.3	110.8	113.7	114.0	117.0	119.0	122.0	125.0	117.0	112.7	114.0	125.0
USD/CNY	6.88	6.77	6.63	6.51	6.29	6.62	6.87	6.90	7.10	7.25	7.40	7.50	0.69	6.51	6.90	7.50
USD/CHF	1.00	0.96	0.97	0.97	0.95	0.99	0.98	1.00	1.04	1.05	1.04	1.03	1.02	0.97	1.00	1.03
GBP/USD	1.26	1.30	1.34	1.35	1.40	1.32	1.30	1.27	1.24	1.22	1.24	1.25	1.24	1.35	1.27	1.25

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TD Bank - Dec 13 2018

DESC	Q4-2018	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	Q1-2021	Q2-2021	Q3-2021	Q4-2021	Q1-2022	Q2-2022	Q3-2022	Q4-2022	Q1-2023	Q2-2023	Q3-2023	Q4-2023	Q1-2024	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025	Q3-2025	Q4-2025
Fed Funds Target Rate	2.50	2.50	2.75	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
US 3-mth T-Bill Rate Forecast	2.35	2.53	2.78	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.78	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
US 2-yr Gov't Bond Yield Forecast	2.80	2.85	2.90	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.80	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
US 5-yr Gov't Bond Yield Forecast	2.85	2.90	2.95	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.95	2.90	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
US 10-yr Gov't Bond Yield Forecast	3.00	3.05	3.10	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.10	3.05	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
overnight target	1.750	2.000	2.000	2.250	2.250	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500
CAN 3-mth T-Bill Rate Forecast	1.88	2.00	2.13	2.25	2.38	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
CAN 2-yr Gov't Bond Yield Foreca	2.05	2.20	2.35	2.45	2.50	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55
CAN 5-yr Gov't Bond Yield Foreca	2.10	2.30	2.45	2.55	2.65	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
CAN 10-yr Gov't Bond Yield Forec	2.20	2.40	2.55	2.70	2.80	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
Oil - West Texas Intermediate Cus	60.00	58.00	61.00	64.00	65.00	65.33	65.98	66.31	66.64	66.97	67.31	67.65	67.98	68.32	68.67	69.01	69.35	69.70	70.05	70.40	70.75	71.11	71.46	71.82	72.18	72.54	72.90	73.27	
USD per CAD	0.758	0.763	0.769	0.775	0.781	0.787	0.789	0.791	0.792	0.794	0.795	0.796	0.797	0.798	0.799	0.800	0.800	0.801	0.802	0.802	0.802	0.803	0.803	0.804	0.804	0.804	0.804	0.805	0.805
USD per GBP	1.280	1.300	1.310	1.320	1.330	1.340	1.350	1.360	1.370	1.380	1.390	1.400	1.410	1.420	1.430	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440	1.440
Unemployment Rate (%)	3.748	3.632	3.612	3.618	3.639	3.691	3.760	3.843	3.883	3.916	3.937	3.971	4.000	4.029	4.060	4.108	4.121	4.139	4.159	4.177	4.182	4.186	4.206	4.198	4.190	4.181	4.188	4.177	4.166





Interest Rate Outlook												
	2018				2019				2020			
	Q1	Q2	Q3	Q4*	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
<b>Canada</b>												
Overnight Target Rate	1.25	1.25	1.50	1.75	2.00	2.00	2.25	2.25	2.50	2.50	2.50	2.50
3-mth T-Bill Rate	1.10	1.26	1.59	1.66	2.00	2.13	2.25	2.38	2.50	2.50	2.50	2.50
2-yr Govt. Bond Yield	1.77	1.91	2.21	2.06	2.20	2.35	2.45	2.50	2.55	2.55	2.55	2.55
5-yr Govt. Bond Yield	1.96	2.06	2.33	2.07	2.30	2.45	2.55	2.65	2.70	2.70	2.70	2.70
10-yr Govt. Bond Yield	2.09	2.17	2.42	2.12	2.40	2.55	2.70	2.80	2.85	2.85	2.85	2.85
30-yr Govt. Bond Yield	2.23	2.20	2.41	2.27	2.55	2.75	2.95	3.05	3.10	3.10	3.10	3.10
10-yr-2-yr Govt Spread	0.32	0.26	0.21	0.06	0.20	0.20	0.25	0.30	0.30	0.30	0.30	0.30
<b>U.S.</b>												
Fed Funds Target Rate	1.75	2.00	2.25	2.50	2.50	2.75	3.00	3.00	3.00	3.00	3.00	3.00
3-mth T-Bill Rate	1.73	1.93	2.19	2.38	2.53	2.78	2.90	2.90	2.90	2.90	2.90	2.90
2-yr Govt. Bond Yield	2.27	2.52	2.81	2.77	2.85	2.90	2.95	2.95	2.95	2.95	2.95	2.95
5-yr Govt. Bond Yield	2.56	2.73	2.94	2.77	2.90	2.95	3.00	3.00	3.00	3.00	3.00	3.00
10-yr Govt. Bond Yield	2.74	2.85	3.05	2.91	3.05	3.10	3.15	3.15	3.15	3.15	3.15	3.15
30-yr Govt. Bond Yield	2.97	2.98	3.19	3.15	3.30	3.35	3.40	3.40	3.40	3.40	3.40	3.40
10-yr-2-yr Govt Spread	0.47	0.33	0.24	0.14	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
<b>Canada-U.S. Spreads</b>												
Can - U.S. T-Bill Spread	-0.63	-0.67	-0.60	-0.72	-0.53	-0.65	-0.65	-0.52	-0.40	-0.40	-0.40	-0.40
Can - U.S. 10-Year Bond Spread	-0.65	-0.68	-0.63	-0.79	-0.65	-0.55	-0.45	-0.35	-0.30	-0.30	-0.30	-0.30

F: Forecast by TD Bank Group as at December 2018. All forecasts are end-of-period.  
Source: Bloomberg, Bank of Canada, Federal Reserve, TD Economics. \* Spot rate as at December 12, 2018 with the exception of policy rates.

Foreign Exchange Outlook													
Currency	Exchange rate	2018				2019				2020			
		Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
<b>Exchange rate to U.S. dollar</b>													
Japanese yen	JPY per USD	106	111	113	113	110	107	106	105	104	103	103	102
Euro	USD per EUR	1.23	1.17	1.16	1.14	1.16	1.18	1.20	1.21	1.22	1.23	1.24	1.25
U.K. pound	USD per GBP	1.40	1.32	1.31	1.26	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37
<b>Exchange rate to Canadian dollar</b>													
U.S. dollar	USD per CAD	0.78	0.76	0.77	0.75	0.76	0.77	0.78	0.78	0.79	0.79	0.79	0.79
Japanese yen	JPY per CAD	82.4	84.3	87.8	84.7	84.0	82.3	82.2	82.0	81.9	81.3	81.1	80.8
Euro	CAD per EUR	1.59	1.53	1.50	1.52	1.52	1.53	1.55	1.55	1.55	1.56	1.57	1.58
U.K. pound	CAD per GBP	1.81	1.73	1.69	1.69	1.70	1.70	1.70	1.70	1.70	1.71	1.72	1.73

F: Forecast by TD Bank Group as at December 2018. All forecasts are end-of-period.  
Source: Bloomberg, Bank of Canada, Federal Reserve, TD Economics. \* Spot rate as at December 12, 2018.

Commodity Price Outlook												
	2018				2019				2020			
	Q1	Q2	Q3	Q4F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Crude Oil (WTI, \$US/bbl)	63	68	70	60	58	61	64	65	65	66	66	66
Natural Gas (\$US/MMBtu)	3.10	2.82	2.90	3.85	3.70	3.60	3.50	3.40	3.30	3.32	3.33	3.35
Gold (\$US/troy oz.)	1329	1306	1213	1225	1240	1275	1300	1325	1350	1355	1362	1367
Silver (US\$/troy oz.)	16.74	16.56	15.02	14.60	15.25	16.00	16.50	17.00	17.50	17.75	17.70	17.70
Copper (cents/lb)	316	312	277	280	284	294	302	306	308	310	311	314
Nickel (US\$/lb)	6.01	6.56	6.02	5.58	5.90	6.12	6.35	6.49	6.46	6.49	6.52	6.65
Aluminum (cents/lb)	98	102	93	91	97	98	99	101	101	102	102	103
Wheat (\$US/bu)	7.42	7.46	6.70	6.92	6.94	6.94	7.02	7.05	7.00	6.95	6.95	6.90

F: Forecast by TD Bank Group as at December 2018. All forecasts are period averages.  
Source: Bloomberg, TD Economics, USDA (Haver).





**Conference Board - Dec 14 2018**

Description:	Canada - 3 Month Treasury Bill ()	Exchange Rate (U.S./Canada)	United States - 3 Month Treasury Bill ()	Canada, Federal Bonds: Long-Term ()	Canada, Federal Bonds: 10 Years ()
Mnemonic:	RTB90	PFX	USRTB90	RGOCL	RGOC10
2018.01	1.151	1.26483333	1.58333337	2.32666667	2.21
2018.02	1.249	1.29116667	1.87666667	2.30333333	2.22666667
2018.03	1.499	1.30693333	2.07666659	2.34666667	2.34
2018.04	1.72	1.318795	2.33	2.45	2.38
2019.01	1.876609	1.343031	2.58809	2.841988	2.748655
2019.02	1.959942	1.335061	2.787257	3.222544	3.07921
2019.03	2.064109	1.312693	2.861424	3.599627	3.406294
2019.04	2.230775	1.290154	2.861424	3.771849	3.578516
2020.01	2.376609	1.28065	2.861424	3.891294	3.69796
2020.02	2.564109	1.275507	2.861424	4.010044	3.81671
2020.03	2.793275	1.271102	2.861424	4.023238	3.829905
2020.04	2.939109	1.267683	2.86059	4.028794	3.83546
2021.01	2.959942	1.265008	2.859757	4.029488	3.836155
2021.02	2.959942	1.261874	2.859757	4.029488	3.836155
2021.03	2.959942	1.260011	2.859757	4.029488	3.836155
2021.04	2.959942	1.258174	2.859757	4.029488	3.836155
2022.01	2.959942	1.255122	2.859757	4.029488	3.836155
2022.02	2.959942	1.252095	2.859757	4.029488	3.836155
2022.03	2.959942	1.249097	2.859757	4.029488	3.836155
2022.04	2.959942	1.246125	2.859757	4.029488	3.836155
2023.01	2.959942	1.243625	2.859757	4.029488	3.836155
2023.02	2.959942	1.241068	2.859757	4.029488	3.836155
2023.03	2.959942	1.237778	2.859757	4.029488	3.836155
2023.04	2.959942	1.234518	2.859757	4.029488	3.836155