

Supply Challenges Bite

- **No major changes to the outlook for Canada and the United States. Exceptionally strong recovery still expected this year and next.**
- **Supply challenges are temporarily pushing inflation above central bank targets and are increasingly difficult for firms to manage. We think supply will gradually rise to meet demand as the summer progresses, but it may be possible that shortages of goods and materials act as a brake on growth in the interim.**
- **Our rate calls remain unchanged: The Bank of Canada is forecast to raise its policy rate in 2022-Q3, and the Federal Reserve will likely begin tapering in January 2022 before raising interest rates in 2023-Q2.**

There are no material changes to our US and Canada outlook this month. Economic indicators continue to suggest a strong rebound is underway, though Canadian data are muddled by the impact of COVID restrictions in April and May. In the Canadian context, solid progress on the vaccination front and sharp reductions in new infections have led many provinces to announce gradual re-opening plans which suggest that much of the economy will be re-opened by the end of the summer. This should allow a forceful rebound in the sectors that continue to be deeply affected by COVID. This is all contingent, of course, on continued progress in the fight against the virus.

There are three big uncertainties facing the forecast for Canada and the US. How temporary will the current overshoot of inflation be? Associated with that question, will supply rebound fast enough to facilitate the growth in demand we anticipate? Finally, how quickly will labour markets improve?

On inflation, the most recent inflation readings in Canada and the US clearly point to an acceleration in inflation that exceeds inflation targets. We view these exceptional pricing pressures as temporary, as do the Bank of Canada and the Federal Reserve, but believe inflation will slow yet remain sustainably above targets once these impacts pass and output gaps move into excess demand (expected at the end of this year in Canada). In the meantime, shortages of inputs and the consequent increase in their prices are leading to a rapid adjustment in consumer prices. In the US, these price pressures are exacerbated by a high number of job vacancies that are putting upward pressure on wages.

There is not yet compelling evidence that supply challenges are abating. In Canada, for example, the economy-wide inventory-to-sales ratio is at the lowest level since 2014. In relation to sales, retail inventories are at their lowest level ever. In the US, a record share of firms are indicating that backlogs of orders are rising and that customer inventories are too low. And of course, commodity prices continue to suggest that demand exceeds supply in some sectors. We remain comfortable with our view that supply will increase enough to attenuate the temporary and substantial overshoot of inflation targets, but this appears to be a riskier call the more data we get.

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In Canada, labour markets remain deeply affected by the pandemic and associated mobility restrictions. In May, employment was 3% below pre-pandemic levels, as the third wave resulted in a deterioration from the March result, which had pointed to employment being only 1.5% below pre-pandemic levels. The weakness in employment is concentrated in certain industries and types of workers, but we anticipate that employment will rebound strongly in months to come as mobility restrictions are lifted. That is certainly the pattern observed in the previous waves. In the US, nonfarm employment remains stuck at about 5% below pre-pandemic levels despite a record rate of job openings.

There remains a sharp divergence between employment and inflation outcomes in Canada and the US, complicating the task of the Bank of Canada and the Fed. This is particularly so in the US considering the relative underperformance of employment. In view of our growth outlook, we anticipate that labour market outcomes will improve substantially as the year progresses, even as wage growth picks up. Given that, and our forecast that core measures of Canadian inflation will be sustainably at 2% by the third quarter of this year, we still expect the Bank of Canada will raise interest rates in 2022-Q3. The Federal Reserve is forecast to raise interest rates in 2023-Q2 given the lagged employment recovery relative to Canada, but we expect it will begin tapering asset purchases next January. At this point, the upside surprise to inflation suggests that risks to the rate calls appear skewed to the upside, both in terms of timing of the initial move but also the speed at which rates will rise when they do move.

International	2010–19	2019	2020	2021f	2022f	2010–19	2019	2020	2021f	2022f
	Real GDP (annual % change)					Consumer Prices (y/y % change, year-end)				
World (based on purchasing power parity)	3.7	2.8	-3.3	6.2	4.5					
Canada	2.2	1.9	-5.3	6.1	4.0	1.7	2.1	0.8	3.2	2.4
United States	2.3	2.2	-3.5	6.8	4.1	1.7	2.0	1.2	3.9	2.2
Mexico	2.7	-0.2	-8.3	5.3	2.1	4.0	2.8	3.2	4.7	3.6
United Kingdom	1.8	1.4	-9.8	6.1	5.1	2.1	1.3	0.6	1.7	2.0
Eurozone	1.4	1.3	-6.7	4.2	3.9	1.3	1.3	-0.3	1.6	1.3
Germany	2.0	0.6	-5.1	3.5	3.9	1.3	1.5	-0.3	2.2	1.4
France	1.4	1.8	-8.0	5.8	3.8	1.2	1.5	0.0	1.5	1.1
China	7.7	6.0	2.3	8.5	5.9	2.7	4.5	0.2	2.0	2.6
India	7.0	4.7	-7.1	9.3	7.0	6.8	7.4	4.6	4.7	5.3
Japan	1.2	0.0	-4.7	2.7	1.7	0.6	0.8	-1.2	0.8	1.0
South Korea	3.3	2.0	-0.7	3.7	2.7	1.7	0.7	0.5	2.0	2.1
Australia	2.6	1.9	-2.4	4.6	2.1	2.1	1.8	0.9	2.3	2.1
Thailand	3.6	2.3	-6.1	2.8	4.0	1.5	0.9	-0.3	0.8	1.7
Brazil	1.5	1.4	-4.1	4.1	2.8	5.9	4.3	4.5	6.0	4.3
Colombia	3.7	3.3	-6.8	6.0	4.0	3.9	3.8	1.6	3.5	3.0
Peru	4.5	2.2	-11.1	9.9	2.6	2.9	1.9	2.0	3.0	2.6
Chile	3.3	0.9	-5.8	7.5	3.5	2.9	3.0	3.0	3.0	3.0
Argentina	1.4	-2.1	-9.9	4.0	3.1	26.1	53.8	36.1	48.0	37.1
Commodities										
	(annual average)									
WTI Oil (USD/bbl)	74	57	39	59	62					
Brent Oil (USD/bbl)	82	64	43	62	65					
WCS - WTI Discount (USD/bbl)	-18	-14	-12	-13	-15					
Nymex Natural Gas (USD/mmbtu)	3.39	2.53	2.02	2.85	2.70					
Copper (USD/lb)	3.10	2.73	2.80	3.80	4.00					
Zinc (USD/lb)	1.02	1.16	1.03	1.25	1.20					
Nickel (USD/lb)	7.00	6.31	6.25	7.50	7.25					
Iron Ore (USD/tonne)	101	93	109	142	100					
Metallurgical Coal (USD/tonne)	179	185	127	125	140					
Gold, (USD/oz)	1,342	1,393	1,771	1,837	1,850					
Silver, (USD/oz)	21.64	16.21	20.48	28.31	32.00					

Sources: Scotiabank Economics, Statistics Canada, BEA, BLS, IMF, Bloomberg.

North America	2010-19	2019	2020	2021f	2022f	2010-19	2019	2020	2021f	2022f
	Canada					United States				
	(annual % change, unless noted)					(annual % change, unless noted)				
Real GDP	2.2	1.9	-5.3	6.1	4.0	2.3	2.2	-3.5	6.8	4.1
Consumer spending	2.5	1.7	-5.9	4.5	4.8	2.4	2.4	-3.9	7.7	3.7
Residential investment	2.5	-0.2	4.1	20.6	-3.2	4.4	-1.7	6.1	14.9	3.3
Business investment*	2.6	0.5	-11.9	3.0	4.3	5.0	2.9	-4.0	9.2	4.8
Government	1.2	1.7	0.4	4.8	1.5	0.0	2.3	1.1	2.9	4.3
Exports	3.4	1.3	-10.0	6.0	8.3	3.8	-0.1	-12.9	6.6	6.8
Imports	3.7	0.4	-11.2	6.5	7.3	4.5	1.1	-9.3	14.6	5.8
Inventories, contribution to annual GDP growth	0.1	0.2	-1.7	0.4	0.4	0.2	0.0	-0.7	0.4	0.2
Nominal GDP	4.0	3.6	-4.6	11.5	6.4	4.0	4.0	-2.3	10.0	7.5
GDP deflator	1.7	1.7	0.7	5.1	2.4	1.7	1.8	1.2	3.1	3.3
Consumer price index (CPI)	1.7	1.9	0.7	2.8	2.6	1.8	1.8	1.3	3.8	2.8
Core inflation rate**	2.7	1.9	1.8	2.2	2.4	1.6	1.7	1.4	2.6	2.3
Pre-tax corporate profits	6.3	0.6	-4.0	36.2	5.2	5.2	0.3	-5.8	10.0	4.9
Employment	1.3	2.2	-5.1	4.1	3.3	1.5	1.3	-5.7	2.0	2.9
Unemployment rate (%)	6.9	5.7	9.6	7.6	5.8	6.2	3.7	8.1	5.6	4.0
Current account balance (CAD, USD bn)	-57.0	-47.4	-40.1	14.2	17.8	-411	-480	-647	-846	-876
Merchandise trade balance (CAD, USD bn)	-13.1	-15.4	-37.5	17.7	27.9	-764	-864	-916	-1118	-1184
Federal budget balance (FY, CAD, USD bn) ***	-20.9	-39.4	-354.2	-154.7	-59.7	-830	-984	-3,132	-3,393	-1,508
percent of GDP	-1.2	-1.8	-16.1	-6.3	-2.3	-4.8	-4.6	-15.0	-14.7	-6.1
Housing starts (000s, mn)	201	209	219	257	215	0.99	1.29	1.40	1.58	1.52
Motor vehicle sales (000s, mn)	1,818	1,914	1,564	1,750	1,973	15.7	16.9	14.4	16.5	17.5
Industrial production	2.4	-0.2	-8.3	5.6	4.1	1.7	-0.8	-7.2	6.3	4.2
	Mexico									
	(annual % change)									
Real GDP	2.7	-0.2	-8.3	5.3	2.1					
Consumer price index (year-end)	4.0	2.8	3.2	4.7	3.6					
Current account balance (USD bn)	-19.7	-3.8	26.0	-20.7	-23.9					
Merchandise trade balance (USD bn)	-5.6	5.4	34.0	-9.8	-19.8					

Sources: Scotiabank Economics, Statistics Canada, CMHC, BEA, BLS, Bloomberg. *For Canada it includes capital expenditures by businesses and non-profit institutions.
 ** US: core PCE deflator; Canada: average of 3 core measures published by the BoC. *** In order to align with US reporting, as of the August 2020 issue of Scotiabank's Forecast Tables, Canadian Federal and Provincial Budget Balances for FY2020/21 are noted in calendar year 2020, FY2021/22 in calendar year 2021.

Quarterly Forecasts	2019				2020				2021				2022			
Canada	Q4	Q1	Q2	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f			
Real GDP (q/q ann. % change)	0.4	-7.9	-38.0	41.7	9.3	5.6	1.4	9.5	4.4	3.6	2.9	2.3	2.5			
Real GDP (y/y % change)	1.7	-0.4	-12.6	-5.1	-3.1	0.3	13.5	6.4	5.2	4.7	5.1	3.3	2.8			
Consumer prices (y/y % change)	2.1	1.8	0.0	0.3	0.8	1.4	3.4	3.1	3.2	2.8	2.5	2.5	2.4			
CPI-common (y/y % change)*	1.9	1.7	1.4	1.4	1.4	1.4	1.8	1.9	2.0	2.0	2.1	2.2	2.3			
Average of new core CPIs (y/y % change)	1.9	1.8	1.7	1.7	1.8	1.8	2.2	2.3	2.3	2.4	2.4	2.5	2.5			
CPIXFET (y/y % change)	1.9	1.8	1.0	0.6	1.1	1.0	2.0	2.1	2.2	2.3	2.4	2.4	2.5			
Unemployment Rate (%)	5.7	6.4	13.1	10.1	8.8	8.4	8.0	7.3	6.7	6.2	5.9	5.7	5.6			
United States	Q4	Q1	Q2	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f			
Real GDP (q/q ann. % change)	2.4	-5.0	-31.4	33.4	4.3	6.4	7.8	9.9	6.6	2.9	1.4	1.3	1.3			
Real GDP (y/y % change)	2.3	0.3	-9.0	-2.8	-2.4	0.4	12.4	7.1	7.7	6.8	5.1	3.0	1.7			
Consumer prices (y/y % change)	2.0	2.1	0.4	1.3	1.2	1.9	4.7	4.8	3.9	3.5	3.0	2.4	2.2			
Total PCE deflator (y/y % change)	1.5	1.7	0.6	1.2	1.2	1.8	3.8	3.8	3.3	3.1	2.7	2.3	2.2			
Core PCE deflator (y/y % change)	1.6	1.8	1.0	1.4	1.4	1.6	3.3	2.9	2.6	2.4	2.3	2.3	2.2			
Unemployment Rate (%)	3.6	3.8	13.1	8.8	6.8	6.2	5.8	5.4	4.9	4.5	4.1	3.8	3.7			

* Refers to BoC's common component of CPI inflation, average of 3 core measures published by the BoC, CPI ex. food, energy and indirect taxes. Sources: Scotiabank Economics, Statistics Canada, BEA, BLS, Bloomberg.

	2019		2020			2021				2022			
Central Bank Rates	Q4	Q1	Q2	Q3	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Americas	(% , end of period)												
Bank of Canada	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75
US Federal Reserve (upper bound)	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Bank of Mexico	7.25	6.50	5.00	4.25	4.25	4.00	4.00	4.00	4.00	4.25	4.75	5.00	5.50
Central Bank of Brazil	4.50	3.75	2.25	2.00	2.00	2.75	4.25	5.75	6.25	6.50	7.00	7.00	7.00
Bank of the Republic of Colombia	4.25	3.75	2.75	1.75	1.75	1.75	1.75	2.00	2.50	3.00	3.50	4.00	4.00
Central Reserve Bank of Peru	2.25	1.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50
Central Bank of Chile	1.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.25	1.50	1.75
Central Bank of Argentina	55.00	38.00	38.00	38.00	38.00	38.00	40.00	44.00	48.00	50.00	50.00	50.00	50.00
Europe													
European Central Bank MRO Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
European Central Bank Deposit Rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
Bank of England	0.75	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Asia/Oceania													
Reserve Bank of Australia	0.75	0.25	0.25	0.25	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Bank of Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
People's Bank of China	4.15	4.05	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85
Reserve Bank of India	5.15	4.40	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.25	4.50	4.75	5.00
Bank of Korea	1.25	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00
Bank of Thailand	1.25	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00
Currencies and Interest Rates													
Americas	(end of period)												
Canadian dollar (USDCAD)	1.30	1.41	1.36	1.33	1.27	1.26	1.21	1.20	1.19	1.18	1.18	1.21	1.21
Canadian dollar (CADUSD)	0.77	0.71	0.74	0.75	0.79	0.80	0.83	0.83	0.84	0.85	0.85	0.83	0.83
Mexican peso (USDMXN)	18.93	23.67	22.99	22.11	19.91	20.43	20.00	20.58	20.73	20.84	21.03	21.17	21.25
Brazilian real (USDBRL)	4.02	5.21	5.47	5.61	5.19	5.63	5.07	4.85	4.72	4.67	4.51	4.52	4.56
Colombian peso (USDCOP)	3,287	4,065	3,758	3,828	3,428	3,663	3,753	3,458	3,450	3,438	3,425	3,413	3,400
Peruvian sol (USDPEN)	3.31	3.43	3.54	3.60	3.62	3.74	3.84	3.77	3.65	3.65	3.63	3.62	3.60
Chilean peso (USDCLP)	753	854	821	784	711	719	720	720	720	720	720	710	700
Argentine Peso (USDARS)	59.87	64.40	70.46	76.18	84.15	91.99	95.80	99.70	106.10	108.30	107.20	105.00	101.40
Europe													
Euro (EURUSD)	1.12	1.10	1.12	1.17	1.22	1.17	1.20	1.22	1.23	1.25	1.25	1.24	1.24
UK pound (GBPUSD)	1.33	1.24	1.24	1.29	1.37	1.38	1.43	1.47	1.48	1.49	1.49	1.50	1.50
Asia/Oceania													
Japanese yen (USDJPY)	109	108	108	105	103	111	108	107	106	105	108	110	110
Australian dollar (AUDUSD)	0.70	0.61	0.69	0.72	0.77	0.76	0.78	0.80	0.80	0.79	0.79	0.78	0.78
Chinese yuan (USDCNY)	6.96	7.08	7.01	6.79	6.53	6.55	6.60	6.40	6.40	6.50	6.50	6.60	6.60
Indian rupee (USDINR)	71.4	75.5	75.5	73.8	73.1	73.1	74.0	72.0	72.0	73.0	73.0	74.0	74.0
South Korean won (USDKRW)	1,156	1,219	1,203	1,170	1,086	1,132	1,160	1,120	1,120	1,140	1,140	1,160	1,160
Thai baht (USDTHB)	30.0	32.8	30.9	31.7	30.0	31.3	31.0	30.2	30.2	30.6	30.6	31.0	31.0
Canada (Yields, %)													
3-month T-bill	1.66	0.21	0.20	0.12	0.07	0.09	0.10	0.15	0.15	0.20	0.35	0.60	0.90
2-year Canada	1.69	0.42	0.29	0.25	0.20	0.22	0.35	0.50	0.75	0.90	1.20	1.40	1.65
5-year Canada	1.68	0.58	0.36	0.35	0.39	0.99	0.85	1.20	1.45	1.55	1.60	1.70	1.80
10-year Canada	1.70	0.69	0.53	0.56	0.68	1.56	1.45	1.65	1.80	1.85	1.90	1.95	2.00
30-year Canada	1.76	1.30	0.99	1.11	1.21	1.98	2.00	2.05	2.10	2.10	2.15	2.15	2.15
United States (Yields, %)													
3-month T-bill	1.51	0.05	0.14	0.09	0.08	0.01	0.05	0.10	0.10	0.10	0.10	0.10	0.15
2-year Treasury	1.57	0.25	0.15	0.13	0.12	0.16	0.20	0.40	0.55	0.70	0.90	1.10	1.25
5-year Treasury	1.69	0.38	0.29	0.28	0.36	0.94	0.80	1.05	1.30	1.35	1.45	1.55	1.70
10-year Treasury	1.92	0.67	0.66	0.68	0.91	1.74	1.55	1.80	2.10	2.15	2.20	2.25	2.30
30-year Treasury	2.39	1.32	1.41	1.46	1.64	2.41	2.20	2.30	2.40	2.50	2.55	2.60	2.60

Sources: Scotiabank Economics, Bloomberg.

The Provinces	(annual % change except where noted)											
Real GDP*	CA	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	
2010–19	2.2	1.0	2.3	1.1	0.7	1.9	2.3	2.1	2.2	2.6	2.8	
2019	1.9	4.0	5.1	2.4	1.2	2.7	2.1	0.6	-0.7	0.1	2.7	
2020e	-5.3	-5.3	-3.0	-3.2	-3.7	-5.3	-5.8	-4.8	-5.2	-8.2	-3.8	
2021f	6.1	3.8	5.0	5.2	5.4	6.9	5.8	5.7	5.5	6.2	6.4	
2022f	4.0	2.5	3.2	3.4	3.3	3.8	4.3	3.5	3.6	4.2	4.4	
Employment												
2010–19	1.3	0.6	1.5	0.3	0.0	1.2	1.4	0.9	0.8	1.2	2.0	
2019	2.2	1.1	3.3	2.3	0.8	2.0	2.8	1.0	1.9	0.7	3.0	
2020	-5.1	-5.7	-3.2	-4.7	-2.6	-4.8	-4.8	-3.7	-4.7	-6.6	-6.6	
2021f	4.1	3.4	3.3	4.7	4.1	4.3	3.7	3.7	3.3	4.4	5.3	
2022f	3.3	1.3	2.5	2.6	2.3	3.2	3.6	3.0	2.9	3.7	3.4	
Unemployment Rate (%)												
2010–19	6.9	13.3	10.6	8.7	9.4	7.1	7.0	5.6	5.3	6.2	6.1	
2019	5.7	12.3	8.7	7.4	8.1	5.1	5.6	5.3	5.6	7.0	4.7	
2020	9.6	14.1	10.4	9.8	10.0	8.9	9.6	8.0	8.4	11.4	8.9	
2021f	7.6	12.5	8.3	7.9	8.2	6.3	8.1	6.3	6.2	9.2	6.7	
2022f	5.8	12.1	7.4	6.9	7.3	4.9	6.0	4.9	4.9	7.0	4.9	
Motor Vehicle Sales (units, 000s)												
2010–19	1,818	33	7	51	41	432	715	55	53	237	194	
2019	1,914	34	8	53	41	454	789	53	46	227	214	
2020	1,564	28	7	44	34	376	612	46	40	186	180	
2021f	1,750	32	9	50	40	425	673	52	45	216	208	
2022f	1,973	34	9	55	44	480	764	56	50	244	235	
Budget Balances, (CAD mn)												
2019**	-39,400	-1,383	22	3	49	4	-8,672	5	-319	-12,152	-321	
2020	-354,200	-1,644	-120	-706	-13	-6,240	-38,468	-2,080	-1,865	-20,192	-8,144	
2021f	-154,700	-826	-112	-585	-245	-12,250	-33,100	-1,597	-2,611	-18,221	-9,698	
2022f	-59,700	-587	-46	-218	-296	-8,500	-27,700	-374	-1,685	-10,982	-5,484	

* Based on preliminary estimates of real GDP by industry for all provinces but Quebec and Ontario. ** NL budget balance in 2019 is net of one-time revenue boost via *Atlantic Accord*.

Sources: Scotiabank Economics, Statistics Canada, CMHC, Budget documents; Quebec budget balance figures are after Generations Fund and Stabilization Reserve transfers.

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