

Canada's Fakelation Delivers A Market Head Fake

- **Statistics Canada is understating Canadian inflation....**
- **....by a lot, and by the most in the pandemic so far**
- **fwiw, officially reported inflation met expectations**

Canadian CPI, m/m / y/y %, November:

Actual: 0.2 / 4.7

Scotia: 0.2 / 4.7

Consensus: 0.2 / 4.7

Prior: 0.7 / 4.7

Canadian core CPI, y/y % change, November:

Average: 2.7 (prior 2.7)

Weighted median: 2.8 (prior 2.8)

Common component: 2.0 (prior 1.8%)

Trimmed mean: 3.4 (prior 3.4%)

Official inflation landed on the screws last month, but diverging core readings added a tiny amount of intrigue to the picture. Canadian short-term yields rallied and CAD depreciated despite weak US retail sales. Why? Two reasons. One is that this market reaction was likely due in part to position covering by market participants that have grown accustomed to looking at consensus estimates and expecting more. Today they didn't get that. Nuances—like how Canadian inflation is likely understated anyway—don't capture market minds in the moment.

Markets also responded this way because they got fake data on what's really going on with Canadian inflation. Before turning to the details, the bigger issue is that last month led to the biggest understatement of Canadian inflation to date. It's worth a reminder of why official Canadian inflation continues to be plagued by uncertainties and is probably understated. By a lot.

- For one thing, StatsCan still excludes one of the hottest areas of inflation in North America, namely used cars and trucks. Chart 1 provides one measure that skyrocketed last month with a 9.5% m/m SA gain while the y/y reading is up by about 38%. The month-over-month change more than doubled the previously largest pandemic-era single-month rise of 4% back in March.

So what? Well, if we applied a similar weight to that which the US BLS applies to used vehicles that it includes in US CPI (about 3.35%) and used this measure of used vehicle prices in Canada, then Canadian headline inflation would be higher by 0.3% m/m SA and about 1.3 pts in year-over-year terms. If we crudely tacked that onto official CPI at 4.7% then the resulting ~6% y/y inflation rate would be very close to the US at 6.8%.

Why do the US and UK include used vehicles in their inflation readings, but Statistics Canada does not? The only answer the agency has given in the past is that they don't have reliable data for used vehicle prices. The US and UK have had such data for years and years so frankly that excuse has worn a

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Chart 1

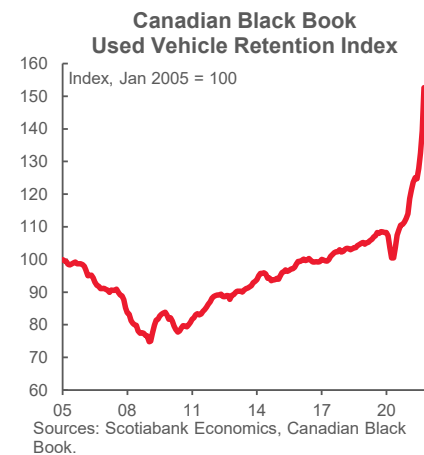


Chart 2

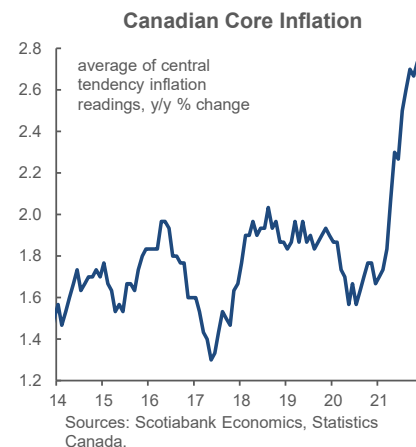
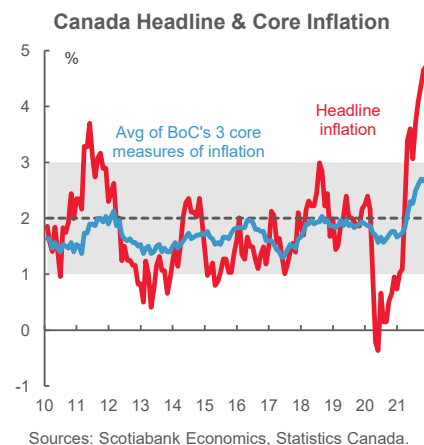


Chart 3



little thin by now. We don't know if the measure cited in chart 1 is the best measure for used vehicle prices but the absence of an effort to include some measure in CPI is unacceptable.

The issue is hugely important at a time of heightened sensitivity toward inflationary pressures. Many things hinge upon accurate inflation readings, yet in Canada, markets and mainstreet businesses and consumers are not being well served by this ongoing omission. Inflation bonds priced off official CPI are at risk of being materially mispriced. Anything indexed to cost-of-living measures in CPI—from wage settlements to indexed transfers—will be based off incorrect inflation figures. Monetary policy decisions affecting the cost of borrowing are the other obvious example of something that needs accurate inflation gauges.

- For another, when StatsCan adjusted spending weights in CPI to reflect pandemic realities, they adjusted them starting in July 2021 CPI onward; all prior weights are still set at well before pre-pandemic spending levels. The agency said they'd have other measures with real-time spending patterns available later in the year. We're still waiting.
- Third, recall the flap over adjustments to seasonal treatment of some parts of the basket earlier in the year when StatsCan made changes, caused a flap with the BoC and others because apparently it wasn't well communicated in advance, then under pressure went back to the prior seasonal treatments by revising a couple of days later with the promise to revisit the issue in future. We're still waiting.

In all, review the details below if so inclined, but I have weakened trust in Canadian inflation data and think it is very likely to be materially understated. This isn't the place to re-hash other arguments, but regular readers probably know that I've also felt that the central bank's tendency to talk through evolving inflation went too far.

Average core inflation was unchanged at 2.7% y/y. Chart 1 shows a slight up-tick but that's only apparent if we go to the second decimal point.

ALL THE MILDLY RELEVANT DETAILS!

Charts 2 and 3 show where we are in tracking inflation in Canada. Average core inflation using the BoC's central tendency measures was unchanged at 2.7% y/y and so was headline inflation at 4.7% y/y.

In seasonally adjusted terms, m/m CPI was up 0.3% while simple core ex-food and energy was up 0.1% m/m SA which is soft. Across components in seasonally adjusted terms clothing/footwear prices were up 1.3% m/m to lead the upsides, while recreation/education/reading led the downsides at -0.6% m/m. Soft breadth.

For more details in terms of what's driving official inflation please see the charts on the following pages and the detailed table at the back that breaks down the basket with mini-charts for each component and z-scores to show how today's moves by component compare to statistical norms over different time periods.

Where to from here? I hope the BoC doesn't pounce on these figures as evidence that inflation is stabilizing or turning lower. For one thing, it's mismeasured as explained. For another, we're at a point of transition; if omicron further damages supply chains and the economy moves into excess demand alongside maximum employment and beyond as we think it will in 2022, then another up-leg of inflation drivers may be ahead. The transitory debate is about the full cycle; not just one report.

Chart 4

November Detailed Category 12-Month Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

Chart 5

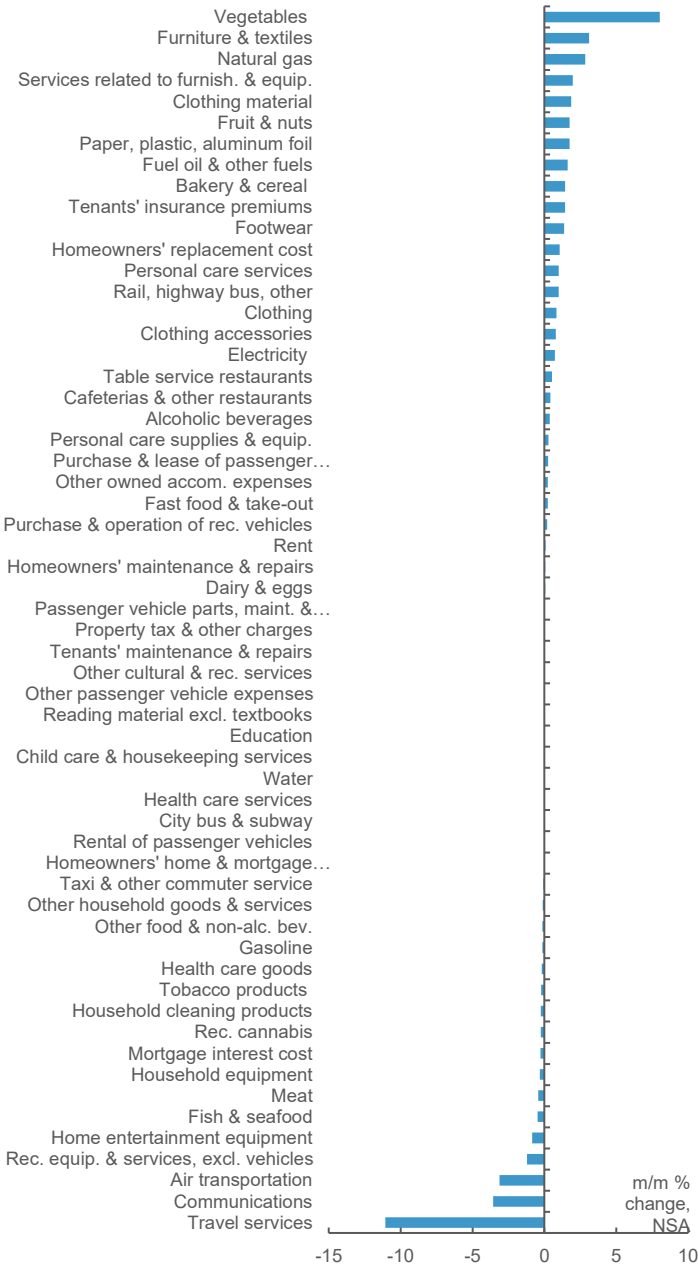
November Detailed Category Contributions to 12-Month Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

Chart 6

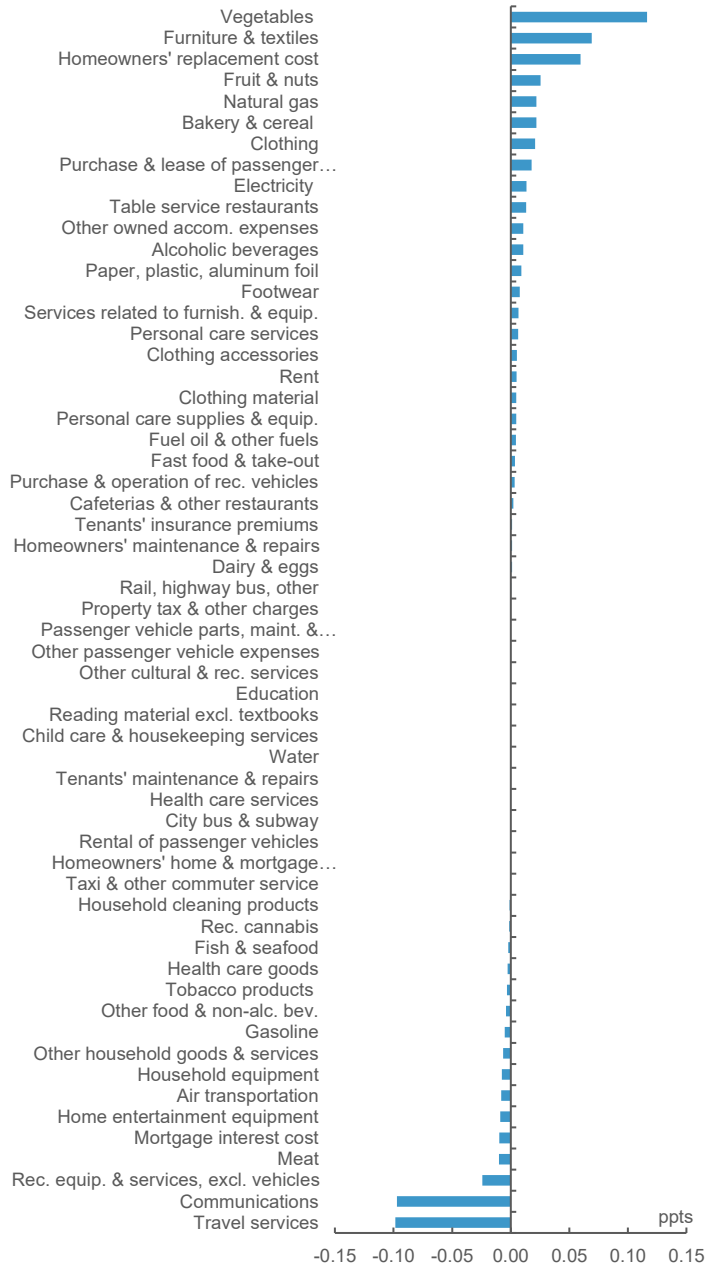
November Detailed Category Monthly Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

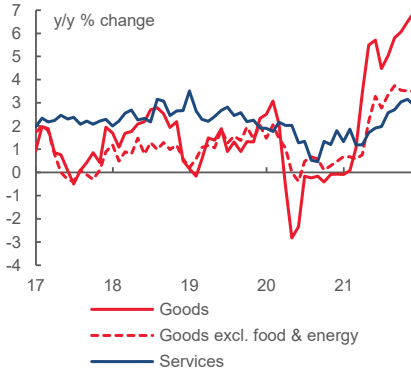
Chart 7

November Detailed Category Contributions to Monthly Change in Canadian CPI



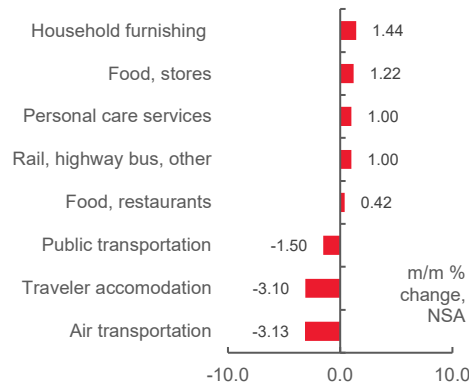
Sources: Scotiabank Economics, Statistics Canada.

Chart 8 Canadian Goods & Services Inflation



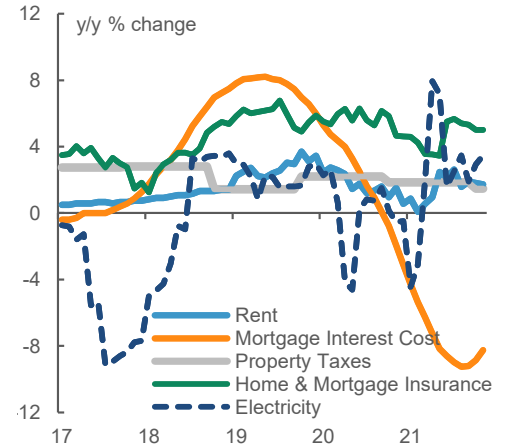
Sources: Scotiabank Economics, Statistics Canada.

Chart 9 High-Contact and Reopening Component Inflation



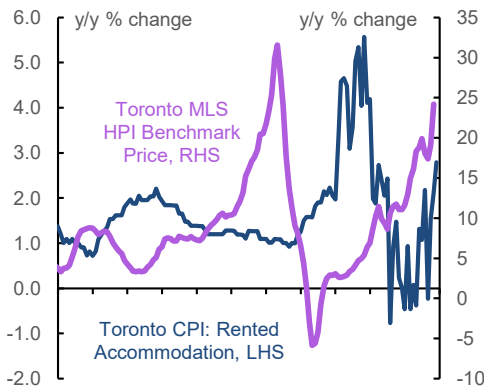
Sources: Scotiabank Economics, Statistics Canada.

Chart 10 Housing-Related Inflation



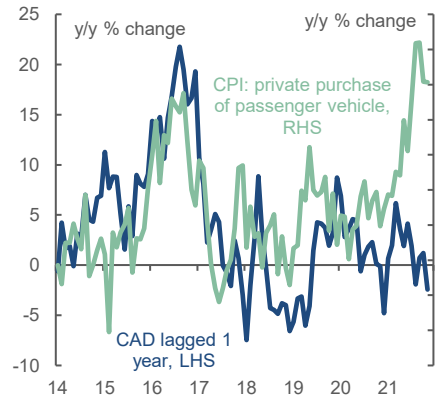
Sources: Scotiabank Economics, Statistics Canada.

Chart 11 Rent Inflation Following House Prices



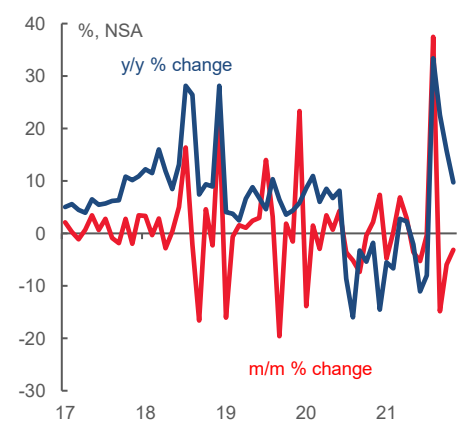
Sources: Scotiabank Economics, Statistics Canada, CREA.

Chart 12 Auto Price Inflation and the C\$



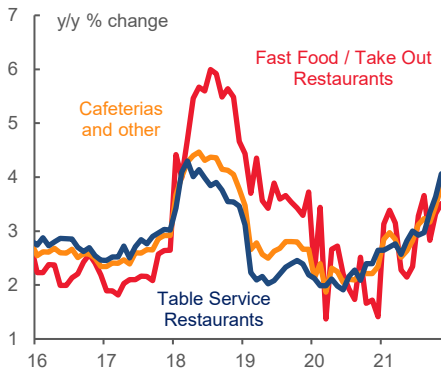
Sources: Scotiabank Economics, Statistics Canada, Bank of Canada.

Chart 13 Canadian Air Transportation CPI



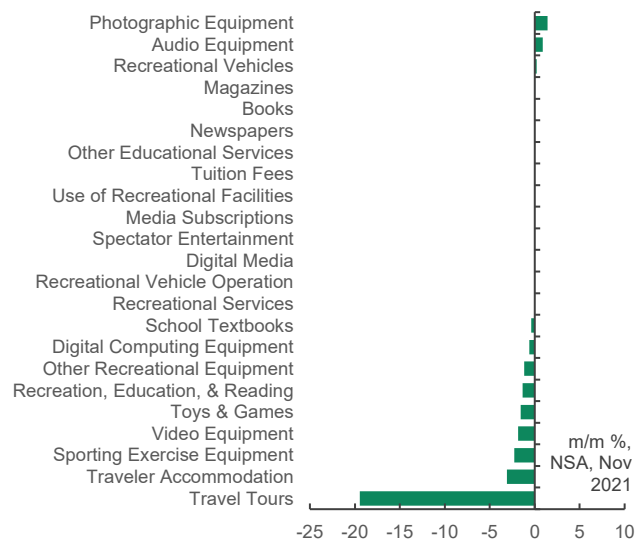
Sources: Scotiabank Economics, Statistics Canada.

Chart 14 Food Purchased from Restaurants Inflation



Sources: Scotiabank Economics, Statistics Canada.

Chart 15 Breakdown of Monthly Changes within Recreation Education and Reading CPI Category



Sources: Scotiabank Economics, Statistics Canada.

Nov 2021			Weighted Contributions (ppts)*			5-Year Pre-Pandemic			10-Year Pre-Pandemic					
CA INFLATION COMPONENT BREAKDOWN	y/y % change	10-year trend	Pandemic trend (Jan 2019–Present)	m/m % change, NSA	m/m % change, SA**	Weights (%)	y/y	m/m	2015–2019 avg. y/y	Std. Dev.	Z-Score	2011–2019 avg. y/y	Std. Dev.	Z-Score
Food	4.4			0.9	0.4	16.24	0.72	0.15	2.1	1.7	1.4	2.2	1.5	1.5
Food, stores	4.7			1.2		11.74	0.55	0.14	1.7	2.4	1.2	2.0	2.0	1.3
Meat	9.0			-0.4	-0.1	2.32	0.21	-0.01	2.5	3.6	1.8	3.4	3.6	1.6
Fish & seafood	2.5			-0.5	-1.2	0.44	0.01	0.00	2.9	1.4	-0.3	2.8	2.5	-0.1
Dairy products & eggs	3.6			0.1	-0.3	1.62	0.06	0.00	0.2	1.5	2.2	0.6	1.5	2.0
Bakery & cereal products	4.1			1.4	1.5	1.52	0.06	0.02	0.5	2.1	1.8	1.2	2.3	1.2
Fruit, fruit prep. & nuts	3.3			1.8	0.2	1.44	0.05	0.03	1.8	4.4	0.3	2.0	3.5	0.4
Vegetables & vegetable prep.	2.9			8.0	2.1	1.45	0.04	0.12	4.9	6.4	-0.3	3.6	5.8	-0.1
Other food & non-alcoholic beverages	4.4			-0.1	0.1	2.96	0.13	0.00	1.0	1.5	2.2	1.3	1.7	1.8
Food, restaurants	3.8			0.4		4.50	0.17	0.02	3.0	0.7	1.3	2.6	0.7	1.7
Table service restaurants	4.1			0.5		2.46	0.10	0.01	2.9	0.6	2.2	2.6	0.6	2.3
Fast food & take-out	3.5			0.2		1.48	0.05	0.00	3.2	1.2	0.2	2.6	1.2	0.8
Cafeterias & other restaurants	3.8			0.4		0.56	0.02	0.00	3.0	0.6	1.4	2.6	0.7	1.7
Shelter	4.8			0.3	0.3	30.03	1.45	0.10	1.8	0.6	5.2	1.7	0.8	4.0
Rented accomm.	1.8			0.0		6.63	0.12	0.00	1.3	0.8	0.7	1.3	0.6	0.8
Rent	1.7			0.1		6.47	0.11	0.00	1.3	0.8	0.6	1.3	0.6	0.7
Tenants' insurance premiums	5.1			1.4		0.09	0.00	0.00	1.1	1.6	2.5	0.3	1.6	2.9
Tenants' maintenance & repairs	2.7			0.0		0.06	0.00	0.00	2.2	1.0	0.5	2.6	2.2	0.0
Owned accomm.	5.3			0.4		19.73	1.04	0.07	2.3	0.4	7.0	1.7	0.8	4.3
Mortgage interest cost	-8.3			-0.3	-0.2	3.43	-0.28	-0.01	2.1	3.6	-2.9	-0.1	3.6	-2.3
Homeowners' replacement cost	13.5			1.1	1.1	5.61	0.76	0.06	1.9	1.7	6.9	2.1	1.5	7.7
Property tax & other charges	1.5			0.0	0.1	3.40	0.05	0.00	2.4	0.6	-1.7	2.8	0.7	-1.8
Homeowners' home & mortgage insurance	5.0			0.0	0.0	1.38	0.07	0.00	5.2	2.3	-0.1	4.5	2.6	0.2
Homeowners' maintenance & repairs	1.9			0.1	0.0	1.66	0.03	0.00	2.0	1.1	0.0	2.0	1.4	-0.1
Other owned accommodation expenses	13.3			0.3	0.1	4.26	0.57	0.01	2.0	1.2	9.4	2.4	2.0	5.5
Water, fuel, & elec.	8.9			1.1		3.67	0.33	0.04	0.8	2.1	3.8	2.5	3.4	1.9
Electricity	3.5			0.7	0.5	1.85	0.06	0.01	1.2	4.4	0.5	2.5	3.8	0.3
Water	1.8			0.0	0.2	0.77	0.01	0.00	3.7	0.9	-2.0	4.9	1.4	-2.2
Natural gas	18.9			2.9	2.9	0.77	0.15	0.02	-1.3	9.0	2.2	0.4	10.6	1.7
Fuel oil & other fuels	47.8			1.6	1.6	0.28	0.13	0.00	-0.1	15.5	3.1	5.1	14.2	3.0
Household operations, furniture & equipment	1.6			-0.2	0.0	14.89	0.24	-0.02	1.2	1.0	0.4	1.4	0.9	0.2
Household ops.	0.2			-0.9		9.79	0.02	-0.09	1.3	1.1	-1.0	2.1	1.3	-1.5
Communications	-7.2			-3.6	-3.6	2.73	-0.20	-0.10	0.0	2.8	-2.6	1.5	2.9	-3.1
Child care & housekeeping services	2.9			0.0	0.2	0.78	0.02	0.00	3.4	1.4	-0.4	3.3	1.3	-0.3
Household cleaning products	-0.2			-0.2	-0.8	0.45	0.00	0.00	1.3	1.9	-0.8	0.8	1.9	-0.5
Paper, plastic, aluminum foil	3.8			1.7	0.8	0.52	0.02	0.01	2.2	2.2	0.7	2.0	2.0	0.9
Other household goods & services	4.2			-0.1	0.2	5.31	0.22	-0.01	1.8	0.5	5.0	2.4	1.1	1.7
Household furnishings & equip.	4.7			1.4		5.10	0.24	0.07	0.8	1.7	2.3	0.1	1.6	2.9
Furniture & textiles	7.2			3.1		2.22	0.16	0.07	0.4	2.1	3.2	-0.3	2.1	3.5
Household equipment	2.4			-0.3	0.2	2.40	0.06	-0.01	0.9	1.7	0.9	0.0	1.8	1.3
Services related to furnishings & equipment	4.8			2.0	0.9	0.34	0.02	0.01	2.4	1.8	1.3	2.7	2.9	0.7
Clothing & footwear	0.7			0.9	1.3	4.0	0.03	0.04	0.6	1.2	0.1	0.3	1.4	0.3
Clothing	-0.5			0.8	0.0	2.50	-0.01	0.02	0.5	1.6	-0.6	-0.3	2.1	-0.1
Footwear	2.2			1.4	2.3	0.57	0.01	0.01	0.4	1.2	1.6	0.1	1.4	1.5
Clothing accessories	2.6			0.8		0.67	0.02	0.01	1.0	1.8	0.9	2.3	2.6	0.1
Clothing material	4.3			1.9		0.26	0.01	0.00	2.2	0.7	3.1	2.7	1.2	1.4

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Transportation	10.0			0.0	0.4	16.0	1.59	0.00	1.7	3.1	2.6	2.3	3.0	2.6
Private trans.	10.2			0.1		15.3	1.56	0.01	1.3	3.2	2.8	2.2	3.2	2.5
Purchase, lease, rental of passenger vehicles	6.4			0.3		6.81	0.43	0.02	2.3	1.5	2.7	1.9	1.6	2.7
Purchase & lease of passenger vehicles	6.0			0.3		6.77	0.41	0.02	2.3	1.5	2.5	1.9	1.6	2.5
Rental of passenger vehicles	60.4			0.0	-0.2	0.04	0.02	0.00	1.4	5.2	11.4	1.2	4.1	14.5
Operation of passenger vehicles	13.8			-0.1		8.44	1.16	-0.01	0.7	5.7	2.3	2.4	5.4	2.1
Gasoline	43.6			-0.1	2.6	3.57	1.56	-0.01	-0.6	13.5	3.3	3.0	12.2	3.3
Passenger vehicle parts, maintenance & repairs	3.8			0.0	0.1	2.48	0.09	0.00	1.9	0.3	5.4	1.6	0.8	2.8
Other passenger vehicle expenses	-4.0			0.0	0.0	2.40	-0.10	0.00	2.4	2.2	-3.0	2.6	2.0	-3.3
Public trans.	4.6			-1.5		0.71	0.03	-0.01	4.8	3.9	-0.1	3.4	3.7	0.3
Local & commuter transportation	-2.8			0.0	0.2	0.25	-0.01	0.00	1.5	0.5	-8.8	2.2	1.2	-4.3
City bus & subway	-3.6			0.0		0.20	-0.01	0.00	2.1	0.7	-7.6	2.8	1.4	-4.4
Taxi & other commuter service	0.5			-0.1		0.05	0.00	0.00	0.1	0.8	0.5	0.9	1.2	-0.3
Inter-city transportation	9.2			-2.6	-1.3	0.30	0.03	-0.01	6.2	5.7	0.5	3.9	5.8	0.9
Air transportation	9.7			-3.1		0.26	0.03	-0.01	6.5	6.2	0.5	4.0	6.4	0.9
Rail, highway bus, other	-0.1			1.0		0.04	0.00	0.00	2.7	1.8	-1.6	2.0	4.2	-0.5
Health & personal care	2.7			0.1	0.1	4.68	0.1	0.01	1.4	0.4	3.3	1.3	0.9	1.6
Health care	2.2			-0.1		2.34	0.1	0.00	1.3	0.6	1.5	1.1	0.8	1.3
Health care goods	1.0			-0.2	-0.2	1.41	0.0	0.00	0.5	0.7	0.8	-0.1	1.1	1.1
Health care services	3.9			0.0	0.2	0.93	0.0	0.00	2.5	0.6	2.5	2.9	0.8	1.3
Personal Care	3.1			0.5		2.34	0.1	0.01	1.5	0.5	3.0	1.5	1.2	1.4
Personal care supplies & equipment	2.8			0.3	0.2	1.71	0.0	0.00	0.4	0.9	2.6	0.5	1.6	1.4
Personal care services	3.1			1.0	0.6	0.63	0.0	0.01	2.9	0.7	0.3	2.7	1.4	0.3
Recreation, education & reading	2.5			-1.3	-0.6	9.40	0.2	-0.13	1.7	0.8	1.1	1.3	0.9	1.5
Recreation	2.8			-1.71		7.30	0.20	-0.12	1.4	1.0	1.4	0.6	1.2	1.7
Recreational equipment & services, excl. vehicles	-1.0			-1.2	0.1	2.03	0.0	-0.02	-0.8	1.6	-0.1	-2.2	2.0	0.6
Purchase & operation of recreational vehicles	9.2			0.2	0.6	1.65	0.2	0.00	2.6	1.8	3.6	1.9	2.0	3.8
Home entertainment equipment	-0.2			-0.9	-1.3	1.03	0.0	-0.01	-3.8	2.0	1.8	-4.9	2.2	2.1
Travel services	-7.2			-11.1	-0.7	0.89	-0.1	-0.10	0.8	2.9	-2.7	0.4	2.8	-2.7
Other cultural & rec. services	4.3			0.0	0.2	1.70	0.1	0.00	3.5	1.1	0.8	3.4	1.4	0.7
Educ. & reading	2.1			0.00		2.10	0.04	0.00	2.5	1.4	-0.3	3.0	1.1	-0.8
Education	2.1			0.0	0.2	1.82	0.0	0.00	2.4	1.4	-0.2	3.0	1.2	-0.7
Reading material excl. textbooks	2.8			0.0	0.0	0.28	0.0	0.00	3.8	2.8	-0.4	3.2	2.9	-0.1
Alcoholic beverages, tobacco & rec. cannabis	2.6			0.2	0.2	4.80	0.1	0.01	3.2	1.2	-0.5	2.7	1.3	-0.1
Alcoholic beverages	1.6			0.37		2.85	0.05	0.01	1.7	0.5	-0.3	1.4	0.7	0.3
Alc. beverages served in licensed establishments	2.3			0.5	0.1	0.55	0.0	0.00	1.8	0.6	0.8	2.0	0.7	0.4
Alc. beverages purchased from stores	1.6			0.4	0.4	2.30	0.0	0.01	1.7	0.7	-0.2	1.1	1.1	0.5
Tobacco products	8.1			-0.22		1.44	0.12	0.00	5.6	2.1	1.2	4.8	2.8	1.2
Cigarettes	8.2			-0.2		1.34	0.1	0.00	5.6	2.1	1.2	4.8	2.8	1.2
Other tobacco products & supplies	7.6			-0.2		0.11	0.0	0.00	5.6	2.0	1.0	4.9	2.6	1.0
Rec. cannabis	-8.1			-0.26		0.50	-0.04	0.00						

*Number may not add due to rounding

** Only available for components that are tracked on a seasonally adjusted basis.

Sources: Scotiabank Economics, Statistics Canada.

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