Scotiabank

GLOBAL ECONOMICS

SCOTIA FLASH

September 20, 2022

Contributors

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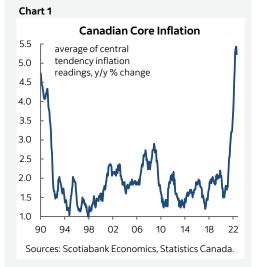
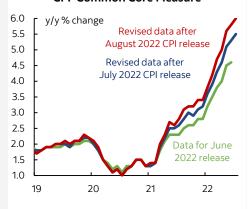


Chart 2 Significant Revisions to the BoC's CPI-Common Core Measure



 $Sources: Scotiabank \ Economics, \ Statistics \ Canada.$

Canadian Inflation's Facts, Fiction and Hopes

- Headline CPI performed as expected...
- ...but what grabbed market attention was lower core inflation...
- ...that prompted large rallies in bonds and a weaker currency
- Is this the start of an ebbing trend or a flash in the pan?
- Markets revert back to pricing a 50bps hike by the BoC

CDN CPI m/m % NSA // y/y %, August:

Actual: -0.3 / 7.0 Scotia: -0.2 / 7.0 Consensus: -0.1 / 7.3

Prior: 0.1 / 7.6

Average 'Core' CPI: 5.2 y/y (5.4% prior, revised from 5.3%)

A hyper-sensitive market trained by central banks to pay excessive attention to the latest backward-looking inflation print was thrown into rally mode after CPI. The two-year yield dropped by about 12bps at first and then reined that in to a post-data rally of about 7bps and CAD depreciated by almost half a penny in the wake of the August readings.

BANK OF CANADA IMPLICATIONS

What the readings do is to take out pricing that was starting to lean toward something bigger than a 50bps move at the October 26th decision and bring it back to our call for 50. Some of that may also be wrong-footed positioning perhaps gone too far.

Still, there is a lot of ground to be covered between now and that meeting including domestic and external data, the Fed, and market developments. Another inflation print arrives one week before the October decision. Today's number is probably best positioned as just a marker on the highway toward the next decision in about five weeks time. There is less acute pressure on the BoC to hike by more than 50 at the next meeting than is facing the Fed tomorrow since the BoC already has a 75bps spread over the Fed into the FOMC.

Further, if the BoC comes through on a pause signal at the October meeting it could a) be vulnerable to the implications of a Fed that's likely not prepared to go there which could test the limits of BoC independence from the Fed, and b) could ease financial conditions relative to market pricing at a curious time that could raise doubts about the BoC's commitment to fighting inflation to the end after it blew it throughout 2021 and early 2022.

FACTS: INFLATION SOFTENED IN AUGUST

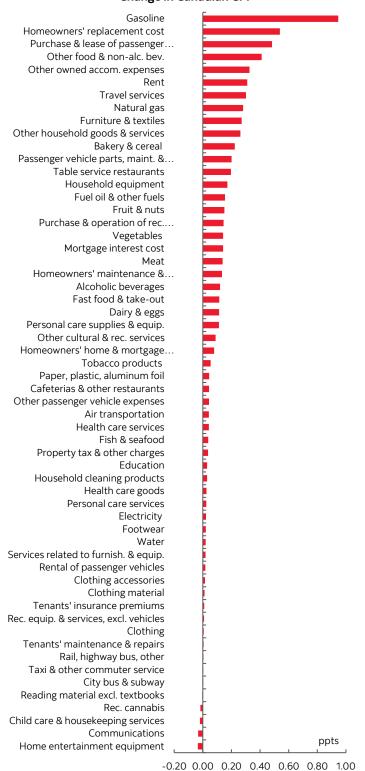
Headline CPI largely met my expectations for a drop of -0.3% m/m NSA (Scotia -0.2%, consensus -0.1%) and cooler year-ago reading at 7% y/y (7.3% consensus, 7.6% prior). If that had been it then markets might not have had this reaction, but average core inflation also ebbed a touch and that was what caught attention.

Headline wasn't the issue to markets because it was widely expected to be softer and significantly due to lower gasoline prices, year-ago base effects and seasonally soft prices in a typical August.

What did catch attention is that the average of the BoC's three central-tendency measures of 'core' inflation slipped to 5.2% from an upwardly revised 5.4% the prior month. With good glasses you can spot the downward wiggle on chart 1. Given how the figures are calculated this is not due to year-ago spot base effects but reflects the gradual

Chart 3

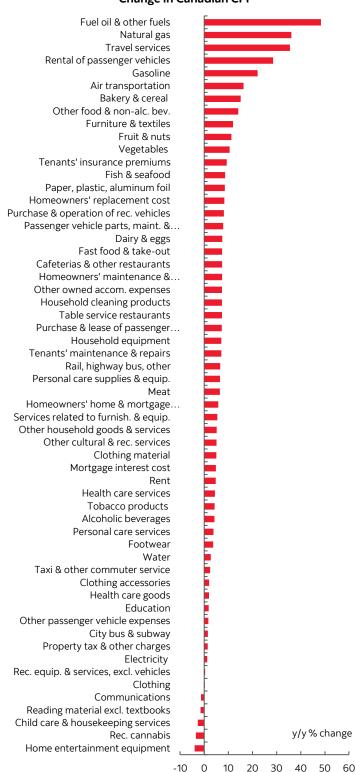
August Detailed Category Contributions to 12-Month Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada

Chart 4

August Detailed Category 12-Month Change in Canadian CPI

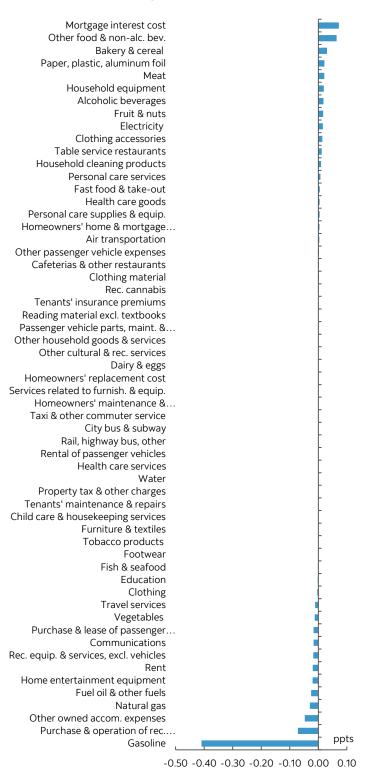


Sources: Scotiabank Economics, Statistics Canada.



Chart 5

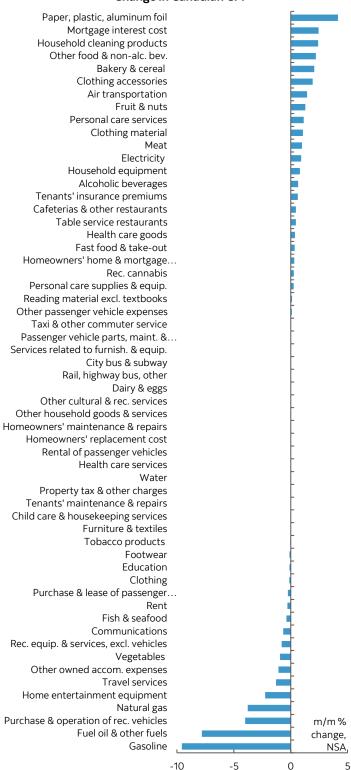
August Detailed Category Contributions to Monthly Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada

Chart 6

August Detailed Category Monthly Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

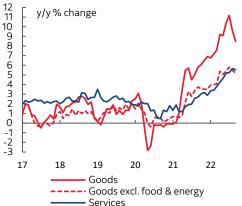
influences of month-over-month compounded Chart 7 adjusted changes over a twelve-month period.

FICTION: COMMON COMPONENT'S UNRELIABILITY

Then again, 'cooled' core inflation may be only until the next revisions. At issue is common component CPI which is gauge that has essentially lost any credibility with market participants. Frequent and longstanding revisions have the gauge bouncing all over the map. This time it was revised up a half point to 6% y/y in July and who knows how today's common component CPI reading for August will be revised next time. We're dealing with serial revisions to the revisions in a factor model that includes among its components what happened to CPI and its variability and adjusts in lagging fashion. Chart 2 shows what's going on. The BoC needs to address how it has over-complicated core inflation and what measures it follows.

Other core measures also softened. Monthover-month annualized CPI ex-food and energy was up by 2.6% at a seasonally adjusted and annualized pace for the softest gain since February 2021 and only a tick lower than the October-November readings of last year. CPI excluding the 8 most volatile items also ebbed to 2.5% m/m SAAR for the softest reading since February 2021.

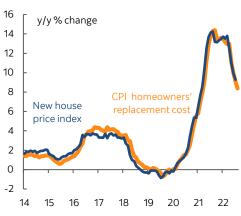
Canadian Goods & Services Inflation



Sources: Scotiabank Economics, Statistics Canada.

Chart 8

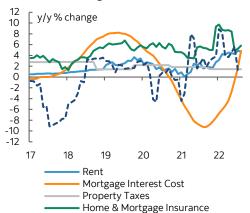
Housing's Inflation Factor



Sources: Scotiabank Economics, Statistics Canada.

Chart 9

Housing-Related Inflation

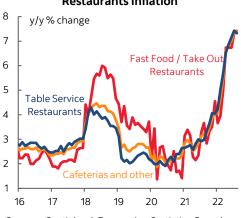


Sources: Scotiabank Economics, Statistics Canada.

--- Electricity

Chart 10

Food Purchased from Restaurants Inflation



Sources: Scotiabank Economics, Statistics Canada.

The breadth of the price changes was also on the softer side. Charts 3 and 4 on the next page break down the CPI basket in unweighted terms and in terms of weighted contributions to overall inflation. Charts 5 and 6 on the following page do the same thing in year-over-year terms.

DETAILS

Chart 7 shows that goods price inflation is ebbing in year-ago terms but almost entirely due to food and energy prices. Service price inflation is not ebbing.

Housing's role continues to turn more disinflationary and sooner in Canada than in the US given the differences in how the two countries capture housing in inflation statistics. Canada mainly relies upon homeowners' replacement cost which uses Statcan's house-only component of the new house price index as its prime input. Chart 8 shows the connections. The US uses owners' equivalent rent and that typically lags well after repeat sales prices are waning which isn't happening yet.

Rent inflation continues to climb (chart 9) but also note that other housing-related components have pulled off prior peaks like managed electricity prices that I have a feeling will be rising again.

Restaurants remain a source of upward pressure upon price inflation (chart 10).

Pandemic affected categories are significantly reflected in chart 11 that breaks down the recreations, reading and education category that includes several leisure activities. Travel tours pricing fell sharply as peak travel season wanes. RVs pricing did likewise. Traveller accommodation prices continue to rise but at a mild pace.

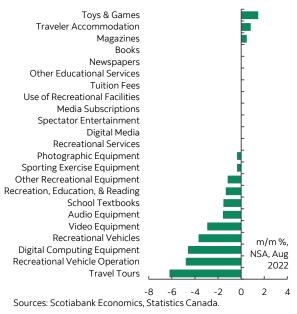
HOPES: IS THIS THE BEGINNING OF THE END TO INFLATION'S SURGE?

Today's reading may signal that core inflation is cresting but there are obviously massive cautions around arguing as much. Those cautions include:

- It's just one month and one that's coming off a summertime party by a nation
 that went into it with a serious case of covid cabin fever. We've seen a lot of head
 fakes in the pandemic and need a trend.
- August is not a month to point to in evaluating that trend since it can tend to be
 a month of transitions toward new vehicle line-ups and sticker pricing,
 discounting of summer clothing to make way for winter offerings, and transitions
 from summer vacation mode to back to work and school as examples that can
 make it difficult to evaluate durable underlying price pressures. I'm not sure I
 trust the seasonal adjustments to spending patterns that have been thrown into
 turmoil during the pandemic.
- There are still upside risks to inflation going forward. One is uncertainty around
 energy prices into the winter months partly as Europe's struggles spill over. How
 this disrupts supply chains is a risk. Another is drought in the US and Europe that
 may drive global food prices higher. The effects these possible moves on
 inflation have upon a) expectations and b) pass-through into core will be
 evaluated.

Chart 11

Breakdown of Monthly Changes within Recreation Education and Reading CPI Category



There remain long wave inflation risks. I still believe that we are at a highly nascent stage of global inflationary pressures that should
counsel central banks to avoid prematurely declaring inflation's surge above targets to be done. Easing financial market conditions and
chumping out on rate hikes at the first whiff of tea cups being broken risks allowing inflation to potentially rise from the dead again
later.

We'll soon test the BoC's tolerance toward allowing the currency to sink if it dovishly pivots while the Fed is some ways from doing so itself. On that note, it's onto tomorrow's FOMC.

Please see the accompanying table that provides richer detail across components with micro-charts and z-score measures of outlier movements compared to recent norms.

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September 20, 2022

Aug 2022						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 c	m/m % hange, SA**	Weights (%)	у/у	m/m	2015–2019 avg. y/y	Std. Dev.	Z-Score	2011–2019 avg. y/y	Std. Dev.	Z-Score
Food	9.8	~~~		0.8	1.0	15.94	1.56	0.13	2.1	1.7	4.5	2.2	1.5	5.2
Food, stores	10.8	~~~		1.0		11.14	1.20	0.11	1.7	2.4	3.7	2.0	2.0	4.3
Meat	6.5			1.0	1.5	2.14	0.14	0.02	2.5	3.6	1.1	3.4	3.6	0.9
Fish & seafood	8.7	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~	-0.4	-0.4	0.44	0.04	0.00	2.9	1.4	4.0	2.8	2.5	2.3
Dairy products & eggs	7.5			0.0	-0.4	1.52	0.11	0.00	0.2	1.5	4.7	0.6	1.5	4.6
Bakery & cereal products	15.1		^	2.1	1.6	1.48	0.22	0.03	0.5	2.1	7.0	1.2	2.3	5.9
Fruit, fruit prep. & nuts	11.2	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	1.3	1.4	1.34	0.15	0.02	1.8	4.4	2.1	2.0	3.5	2.6
Vegetables & vegetable prep.	10.5	~~~~~		-0.9	1.8	1.35	0.14	-0.01	4.9	6.4	0.9	3.6	5.8	1.2
Other food & non-alcoholic beverages	14.1			2.2	2.7	2.91	0.41	0.06	1.0	1.5	8.5	1.3	1.7	7.4
Food, restaurants	7.4	^		0.5		4.80	0.35	0.02	3.0	0.7	6.6	2.6	0.7	6.6
Table service restaurants	7.3	^		0.4		2.68	0.20	0.01	2.9	0.6	8.1	2.6	0.6	7.4
Fast food & take-out	7.4			0.3		1.54	0.11	0.01	3.2	1.2	3.5	2.6	1.2	4.1
Cafeterias & other restaurants	7.4	^		0.5		0.58	0.04	0.00	3.0	0.6	7.1	2.6	0.7	6.8
Shelter	6.6			-0.1	-0.1	29.80	1.98	-0.02	1.8	0.6	8.2	1.7	0.8	6.2
Rented accomm.	4.9			-0.2		6.77	0.33	-0.01	1.3	0.8	4.5	1.3	0.6	6.1
Rent	4.7 ——			-0.3		6.57	0.31	-0.02	1.3	0.8	4.2	1.3	0.6	5.7
Tenants' insurance premiums	9.3	an more		0.6		0.11	0.01	0.00	1.1	1.6	5.1	0.3	1.6	5.6
Tenants' maintenance & repairs	7.1 ~~~	transman.	~	0.0		0.08	0.01	0.00	2.2	1.0	4.7	2.6	2.2	2.1
Owned accomm.	6.2			0.2		19.46	1.20	0.03	2.3	0.4	9.2	1.7	0.8	5.4
Mortgage interest cost	4.8		•	2.4	2.4	2.94	0.14	0.07	2.1	3.6	0.8	-0.1	3.6	1.4
Homeowners' replacement cost	8.4			0.0	0.0	6.44	0.54	0.00	1.9	1.7	3.9	2.1	1.5	4.2
Property tax & other charges	1.5			0.0	0.1	2.47	0.04	0.00	2.4	0.6	-1.7	2.8	0.7	-1.8
Homeowners' home & mortgage insurance	5.8	m		0.3	0.3	1.37	0.08	0.00	5.2	2.3	0.3	4.5	2.6	0.5
Homeowners' maintenance & repairs	7.4 ~~	·····	^	0.0	0.0	1.81	0.13	0.00	2.0	1.1	4.8	2.0	1.4	3.7
Other owned accomodation expenses	7.4			-1.1	-0.6	4.43	0.33	-0.05	2.0	1.2	4.5	2.4	2.0	2.5
Water, fuel, & elec.	12.3 ~~~	~~~~~~		-1.2		3.57	0.44	-0.04	0.8	2.1	5.5	2.5	3.4	2.9
Electricity	1.2	mayor		0.9	1.0	1.75	0.02	0.02	1.2	4.4	0.0	2.5	3.8	-0.3
Water	2.7	~~~		0.0	0.2	0.72	0.02	0.00	3.7	0.9	-1.1	4.9	1.4	-1.5
Natural gas	36.1	· · · · · · · · · · · · · · · · · · ·	·····	-3.8	-3.8	0.78	0.28	-0.03	-1.3	9.0	4.1	0.4	10.6	3.4
Fuel oil & other fuels	48.4	*******		-7.8	-7.8	0.32	0.15	-0.03	-0.1	15.5	3.1	5.1	14.2	3.0
Household operations, furniture & equipment	5.1			0.2	0.3	14.50	0.74	0.03	1.2	1.0	3.7	1.4	0.9	4.2
Household ops.	3.0	mummur	~~~~	0.1	0.0	9.30	0.28	0.01	1.3	1.1	1.5	2.1	1.3	0.7
Communications	-1.3	A	······	-0.7	-0.7	2.54	-0.03	-0.02	0.0	2.8	-0.5	1.5	2.9	-1.0
Child care & housekeeping services	-2.7 ~~~			0.0	0.2	0.76	-0.02	0.00	3.4	1.4	-4.4	3.3	1.3	-4.5
Household cleaning products	7.3 ~~~		~~~~~	2.4	2.7	0.40	0.03	0.01	1.3	1.9	3.2	0.8	1.9	3.4
Paper, plastic, aluminum foil	8.5 ~~			4.2	4.6	0.52	0.04	0.02	2.2	2.2	2.8	2.0	2.0	3.3
Other household goods & services	5.1	· · · · · · · · · · · · · · · · · · ·		0.0	0.2	5.11	0.26	0.00	1.8	0.5	7.0	2.4	1.1	2.6
Household furnishings & equip.	9.2		^	0.4	0.2	5.20	0.48	0.02	0.8	1.7	4.9	0.1	1.6	5.7
Furniture & textiles	11.9 ~~~		^	0.0		2.28	0.27	0.00	0.4	2.1	5.4	-0.3	2.1	5.7
Household equipment	7.1~~			0.8	0.2	2.42	0.17	0.02	0.9	1.7	3.7	0.0	1.8	3.9
Services related to furnishings & equipment	5.4			0.0	0.2	0.35	0.17	0.02	2.4	1.7	1.6	2.7	2.9	0.9
Clothing & footwear	1.4	mmmy		0.3	-0.1	4.3	0.06	0.01	0.6	1.2	0.6	0.3	1.4	0.8
Clothing	0.2/-	manne	~~~~~	-0.1	0.0	2.73	0.01	0.00	0.5	1.6	-0.1	-0.3	2.1	0.2
Footwear	3.7	mannen		-0.1	-0.4	0.57	0.02	0.00	0.4	1.2	2.9	0.1	1.4	2.5
Clothing accessories		mmm.		1.9	5.4	0.75	0.02	0.01	1.0	1.8	0.6	2.3	2.6	-0.1
Clothing material				1.1		0.73	0.02	0.00	2.2	0.7	4.2	2.7	1.2	2.0
Ciotimia illateriai	3.0	many was		1.1		0.23	0.01	0.00	۷.۷	U./	4.2	2.1	1.2	2.0

Scotiabank...

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Transportation	10.3		^	-2.5	-1.1	16.9	1.75	-0.43	1.7	3.1	2.8	2.3	3.0	2.7
Private trans.	10.2	~~~~~~	^	-2.8		16.1	1.65	-0.44	1.3	3.2	2.8	2.2	3.2	2.5
Purchase, lease, rental of passenger vehicles	7.4	my many	~~~~	-0.3		6.71	0.50	-0.02	2.3	1.5	3.4	1.9	1.6	3.4
Purchase & lease of passenger vehicles	<u>7.3</u>	my my my my	~~~ ~	<u>-0.2</u>		6.65	0.48	-0.02	<u>2.3</u>	<u>1.5</u>	<u>3.3</u>	<u>1.9</u>	<u>1.6</u>	<u>3.3</u>
Rental of passenger vehicles	<u>28.5</u>			<u>0.0</u>	<u>1.2</u>	0.06	0.02	0.00	<u>1.4</u>	<u>5.2</u>	<u>5.2</u>	<u>1.2</u>	<u>4.1</u>	<u>6.7</u>
Operation of passenger vehicles	12.5	**************************************		-4.5		9.37	1.17	-0.42	0.7	5.7	2.1	2.4	5.4	1.9
<u>Gasoline</u>	<u>22.1</u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<u>-9.6</u>	<u>-6.5</u>	<u>4.28</u>	0.95	-0.41	<u>-0.6</u>	<u>13.5</u>	<u>1.7</u>	<u>3.0</u>	<u>12.2</u>	<u>1.6</u>
Passenger vehicle parts, maintenance & repairs	<u>7.9</u>	•		<u>0.0</u>	0.4	2.56	0.20	0.00	<u>1.9</u>	<u>0.3</u>	<u>17.2</u>	<u>1.6</u>	0.8	<u>8.0</u>
Other passenger vehicle expenses	<u>1.7</u>			<u>0.1</u>	0.1	2.53	0.04	0.00	2.4	<u>2.2</u>	<u>-0.3</u>	2.6	<u>2.0</u>	<u>-0.4</u>
Public trans.	8.8	the same		0.8		0.82	0.07	0.01	4.8	3.9	1.0	3.4	3.7	1.5
Local & commuter transportation	2.0			0.0	0.2	0.28	0.01	0.00	1.5	0.5	1.1	2.2	1.2	-0.2
<u>City bus & subway</u>	1.5	-		0.0		0.17	0.00	0.00	2.1	0.7	-0.8	2.8	1.4	-0.9
<u>Taxi & other commuter service</u>	2.4	~~~~		0.0		0.11	0.00	0.00	0.1	0.8	2.9	0.9	1.2	1.3
Inter-city transportation	13.7	the same		1.2	3.9	0.37	0.05	0.00	6.2	5.7	1.3	3.9	5.8	1.7
Air transportation	16.3	the second		1.4		0.26	0.04	0.00	6.5	6.2	1.6	4.0	6.4	1.9
Rail, highway bus, other	6.6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	0.0		0.07	0.00	0.00	2.7	1.8	2.2	2.0	4.2	1.1
Health & personal care	4.4	~~~~~~~	~~~~	0.4	0.3	4.62	0.2	0.02	1.4	0.4	7.4	1.3	0.9	3.6
Health care	3.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.2		2.26	0.1	0.00	1.3	0.6	2.9	1.1	0.8	2.3
Health care goods	2.0	man and a second		0.4	0.3	1.31	0.0	0.00	0.5	0.7	2.1	-0.1	1.1	1.9
Health care services	4.4		,	0.0	0.3	0.96	0.0	0.00	2.5	0.6	3.4	2.9	0.8	2.0
Personal Care	5.8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.6		2.36	0.1	0.01	1.5	0.5	8.1	1.5	1.2	3.7
Personal care supplies & equipment	6.6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.3	0.6	1.72	0.1	0.00	0.4	0.9	6.5	0.5	1.6	3.7
Personal care services	3.8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1.1	0.7	0.64	0.0	0.01	2.9	0.7	1.3	2.7	1.4	0.8
Recreation, education & reading	5.7			-1.3	-0.1	9.29	0.5	-0.12	1.7	0.8	5.2	1.3	0.9	5.2
Recreation	6.8			-1.59		7.43	0.51	-0.12	1.4	1.0	5.3	0.6	1.2	5.0
Recreational equipment & services, excl. vehicles	0.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	-0.8	0.0	2.18	0.0	-0.02	-0.8	1.6	0.8	-2.2	2.0	1.3
Purchase & operation of recreational vehicles	8.1			-4.0	-1.9	1.78	0.1	-0.07	2.6	1.8	3.0	1.9	2.0	3.2
Home entertainment equipment	-4.0			-2.2	-1.7	0.88	0.0	-0.02	-3.8	2.0	-0.1	-4.9	2.2	0.4
Travel services	35.5			-1.3	5.9	0.85	0.3	-0.01	0.8	2.9	11.8	0.4	2.8	12.5
Other cultural & rec. services	5.1	mulm		0.0	0.3	1.75	0.1	0.00	3.5	1.1	1.5	3.4	1.4	1.3
Educ. & reading	1.4			-0.12		1.86	0.03	0.00	2.5	1.4	-0.9	3.0	1.1	-1.4
Education	1.9			-0.1	0.2	1.60	0.0	0.00	2.4	1.4	-0.4	3.0	1.2	-0.9
Reading material excl. textbooks	-1.5	manner war		0.1	0.1	0.26	0.0	0.00	3.8	2.8	-1.9	3.2	2.9	-1.6
Alcoholic beverages, tobacco & rec. cannabis	3.5			0.4	0.4	4.63	0.2	0.02	3.2	1.2	0.3	2.7	1.3	0.6
Alcoholic beverages	4.3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.65		2.83	0.12	0.02	1.7	0.5	4.9	1.4	0.7	3.9
Alc. beverages served in licensed establishments	3.7	·		0.7	0.4	0.67	0.0	0.00	1.8	0.6	3.0	2.0	0.7	2.4
Alc. beverages purchased from stores	4.5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.6	0.3	2.16	0.1	0.01	1.7	0.7	4.2	1.1	1.1	3.2
Tobacco products	4.3	mmm.		-0.04		1.28	0.05	0.00	5.6	2.1	-0.6	4.8	2.8	-0.2
Cigarettes	4.3	mmm		0.0		1.16	0.0	0.00	5.6	2.1	-0.6	4.8	2.8	-0.2
Other tobacco products & supplies	4.4	mmm		-0.1		0.11	0.0	0.00	5.6	2.0	-0.6	4.9	2.6	-0.2
Rec. cannabis	-3.5	tra	~~~	0.27		0.50	-0.02	0.00						

Sources: Scotiabank Economics, Statistics Canada.

^{*}Number may not add due to rounding

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

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