# **Scotiabank**

# **GLOBAL ECONOMICS**

# **SCOTIA FLASH**

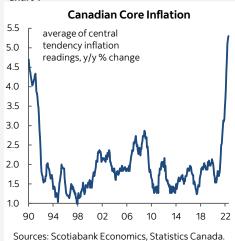
August 16, 2022

### **Contributors**

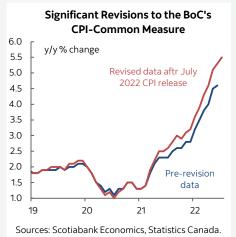
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#### Chart 1



### Chart 2



# Rising Canadian Core Inflation and Whether Common Component CPI is of Any Use

- Average core inflation continues to climb...
- ...and put further pressure on the BoC...
- ...to move into restrictive territory with another +75bps move
- Large, ongoing revisions to common component CPI...
- ...keep raising average core inflation estimates...
- ...and question the usefulness of the measure

# CDN CPI m/m % NSA // y/y %, July:

Actual: 0.1 / 7.6 Scotia: 0.4 / 7.8 Consensus: 0.1 / 7.6 Prior: 0.7 / 8.1

Average 'Core' CPI: 5.3% y/y (5.2% prior, revised up from 5.0%)

Core inflation continues to creep higher to new records each month as inflationary pressures rise and broaden (chart 1). That lends itself toward expectations for another large hike of 75bps at the September 7<sup>th</sup> meeting that is mostly but not fully priced in OIS markets.

I think the market reaction was generally sensible. GoC two-year yields have climbed about 10bps and the C\$ appreciated by about a quarter of a cent on a USDCAD basis. The new information incrementally reinforces a strong tightening bias.

The Bank of Canada won't care about the headline softening. They'll be more concerned about ongoing upward pressure upon core measures. The data lends itself to a 75bps move on September 7th that would bring the policy rate closer to being in very mildly restrictive territory given estimates of the neutral policy rate range of 2–3%. Unlike the Fed, there isn't much on the agenda between now and then that could be incrementally impactful. This is the last CPI reading before that meeting and the next jobs report arrives two days after the decision. Plus, the September meeting is a statement-only affair with a day-after presser to be hosted by an as-yet undisclosed Governing Council member, sans forecast (unlike the Fed that will also update the SEP in September but on the 21st and hence after the BoC). There are no scheduled BoC speakers between now and the blackout period that commences one week prior to the decision.

### IS COMMON COMPONENT CPI OF ANY USE?

Average 'core' inflation—an average of the three central tendency measures—moved materially higher to 5.3% and with the prior month revised up two-tenths to 5.2% y/y. The prior month's revision is because they keep messing with common component CPI that was revised up from 4.6% to 5.3% which is large. This issue is worth exploring further before turning toward other details.

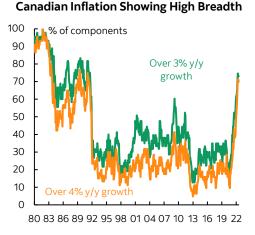
The challenges with common component CPI run much deeper. Chart 2 shows the impact of cumulative upward revisions to this measure dating back to May 2021. The original reading for January 2022 was 2.3% y/y and cumulative revisions have taken that up to 3.6 which in the world of inflation estimates is huge. For February it's now 3.9% versus the 2.6% original reading. For March it's 4.3% versus 2.8, for April it's 4.6% versus 3.2% and for May it's 5.1% versus 3.9%.

So what's going on here? I don't know of another country that is messing with its core inflation readings like this while offering little useful explanation other than a remark that the black box changed again:

"In the case of CPI-common, revisions are due to the statistical technique used, as the factor model is estimated over all available historical data."

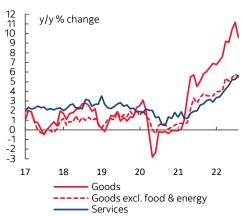
Wonderful, just sweep it under the rug. One possible explanation is that common component CPI has been getting revised higher as the mean and variance of headline CPI have been moving higher which serve as model inputs to the constantly re-estimated common component CPI inflation factor model. This raises the issue of how useful a measure of 'core' inflation is if it simply follows headline CPI in lagging fashion through model revisions. I'm unsure of the degree to which this explanation is valid for chronic upward revisions and so there should be further explanation offered by either StatCan or the Bank of Canada if they wish this measure to have any credibility with market participants and policymakers especially since there is still a segment of market opinion that (wrongly imo) believes the BoC pays more attention to common component CPI than the other measures.

# Chart 3



Sources: Scotiabank Economics, Statistics Canada.

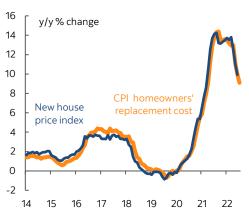
# Chart 4 Canadian Goods & Services Inflation



Sources: Scotiabank Economics, Statistics Canada.

## Chart 5

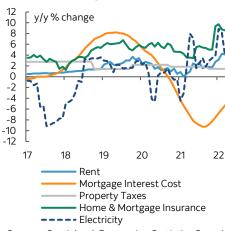
# **Housing's Inflation Factor**



Sources: Scotiabank Economics, Statistics Canada.

# Chart 6

## Housing-Related Inflation



Sources: Scotiabank Economics, Statistics Canada.

In the meantime, I would advise placing greater emphasis upon other core readings like trimmed mean (5.4% y/y), weighted median CPI (5.0% y/y), and simpler measures dating back to before the BoC over complicated things to no apparent benefit with its central tendency gauges.

The hot core readings are also seen in simpler gauges and there remains an ongoing case for sticking with those gauges in keeping with many other countries. Simple CPI ex-food-and-energy was up 6.1% m/m SAAR which picked up from 5.2% the prior month. CPI excluding the 8 most volatile items was up 5% m/m SAAR and matched the prior month's estimate. CPIX was up 5% m/m SAAR from 5.9% the prior month. In all of these cases, the rates have cooled from their peaks in March when the economy was reopening from omicron restrictions, but they are all vastly higher than the BoC's 2% headline CPI target over the medium-term that uses the core readings as an operational guide. The fact that these m/m SAAR core readings are still running at the hot rates that existed on a trend basis before omicron reopening effects should give little to no comfort to doves.

# **OTHER DETAILS**

Breadth remains very high (chart 3).

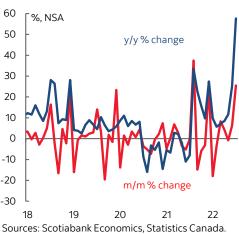
Both services and core goods inflation continue to push higher (chart 4). The driver of weaker all-in goods inflation is weaker commodities, but underlying inflationary pressures remain hot.

Chart 5 shows that housing is cooling as an inflationary driver, at least the way it's captured in Canada. Canada captures housing inflation using the house-only component of builder prices (ie: ex-land) as a driver of homeowners' replacement cost and builder price inflation has

been ebbing. Canada does not use owners' equivalent rent like the US BLS does.

Chart 6 shows other housing-related contributions to CPI inflation. Mortgage interest cost is rising with rate hikes and with much greater upward pressure forthcoming from this reading, but the BoC clearly looks through the directly measured effects of their rate hikes on inflation. Rent has cooled at least for now, but weakening housing markets may keep upward pressure upon this component. Housing's influences upon CPI inflation nevertheless run much deeper given direct and indirect effects not well captured by just looking at builder prices.

# Chart 7 Canadian Air Transportation CPI 60 [% NSA



Across other components, airfare continues to soar (chart 7).

Auto price inflation remains disconnected from CAD changes because of supply chain issues that have made it a seller's market (chart 8), but even if supply chain issues continue to gradually improve the next upward leg could come from the lagging effects of CAD weakness upon the next couple of years of new models introduced around late summer into the Fall.

Food inflation remains hot (chart 9).

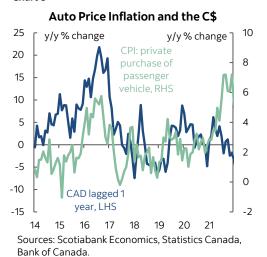
The recreation/reading/education category saw big gains in travel-related categories (chart 10).

Chart 11 shows a breakdown of the CPI basket in y/y terms and chart 12 does the same thing but in terms of weighted contributions to inflation by category.

Chart 13 shows a breakdown of the CPI basket in m/m NSA terms and chart 14 does the same thing in terms of weighted contributions.

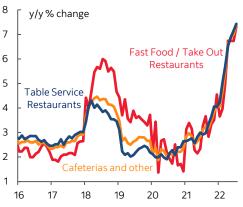
Please also see the accompanying table that provides a detailed breakdown of the basket including various other measures and micro charts.

#### Chart 8



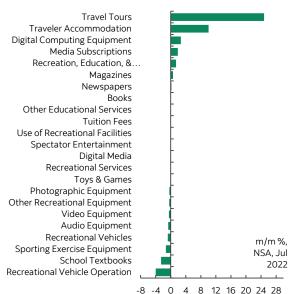
#### Chart 9

# Food Purchased from Restaurants Inflation



Sources: Scotiabank Economics, Statistics Canada.

# Chart 10 Breakdown of Monthly Changes within Recreation Education and Reading CPI Category

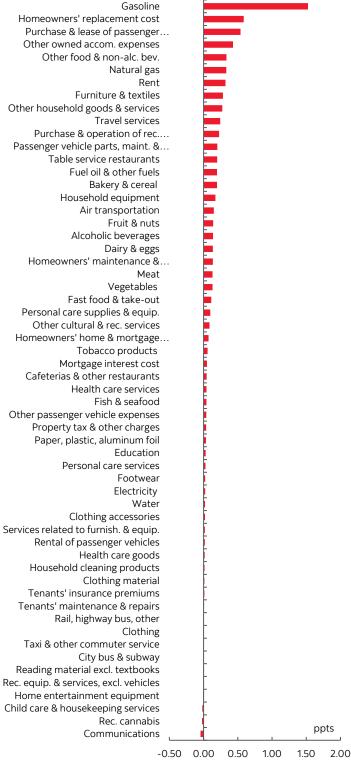


3

Sources: Scotiabank Economics, Statistics Canada

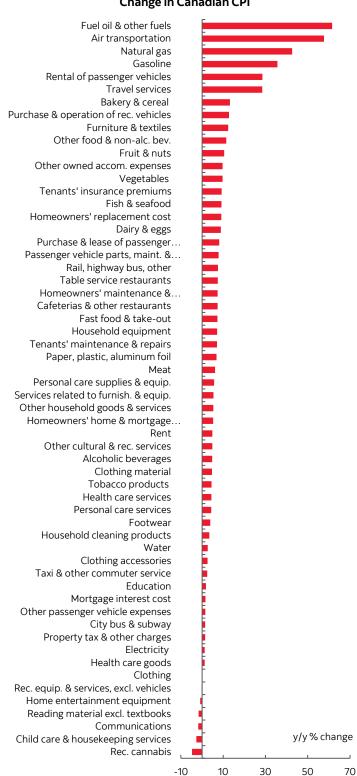
## Chart 12 Chart 12





Sources: Scotiabank Economics, Statistics Canada.

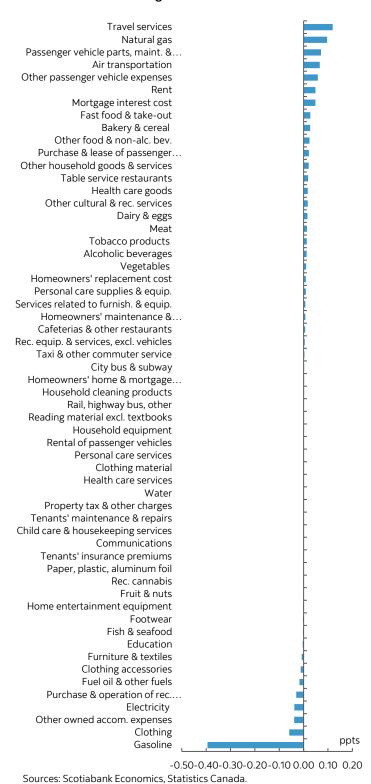
# July Detailed Category 12-Month Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

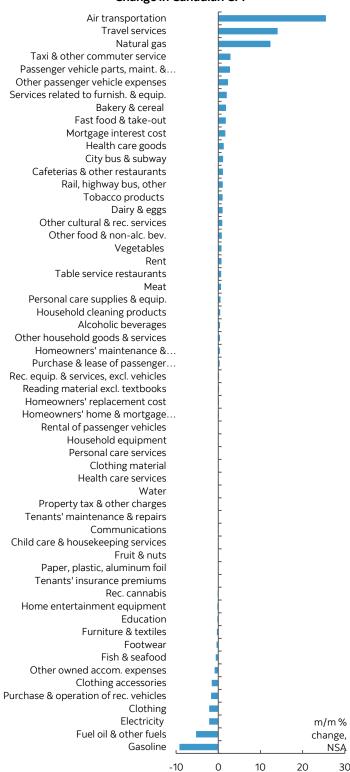
### Chart 13

# July Detailed Category Contributions to Monthly Change in Canadian CPI



## Chart 14

# July Detailed Category Monthly Change in Canadian CPI



Sources: Scotiabank Economics, Statistics Canada.

# **Scotiabank**...

August 16, 2022

Jul 2022						Weighted Contributions (ppts)*			5-Year Pre-Pandemic			10-Year Pre-Pandemic		
CA INFLATION COMPONENT BREAKDOWN	y/y % change	10-year trend	demic trend 19–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	9.2		~~	0.9	0.7	15.94	1.47	0.14	2.1	1.7	4.1	2.2	1.5	4.8
Food, stores	9.9		~~	8.0		11.14	1.10	0.09	1.7	2.4	3.4	2.0	2.0	3.9
Meat	6.1		~~~	0.6	-0.3	2.14	0.13	0.01	2.5	3.6	1.0	3.4	3.6	0.8
Fish & seafood	9.2	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	-0.6	0.0	0.44	0.04	0.00	2.9	1.4	4.4	2.8	2.5	2.6
Dairy products & eggs	8.9	many and a second	~~~	1.0	0.7	1.52	0.13	0.02	0.2	1.5	5.7	0.6	1.5	5.5
Bakery & cereal products	13.2			1.8	1.5	1.48	0.19	0.03	0.5	2.1	6.1	1.2	2.3	5.1
Fruit, fruit prep. & nuts	10.4	my more man	~~~~	-0.1	0.6	1.34	0.14	0.00	1.8	4.4	2.0	2.0	3.5	2.4
Vegetables & vegetable prep.	9.7		~~~	0.8	0.2	1.35	0.13	0.01	4.9	6.4	0.7	3.6	5.8	1.0
Other food & non-alcoholic beverages	11.5		••••	0.8	1.0	2.91	0.33	0.02	1.0	1.5	6.8	1.3	1.7	5.9
Food, restaurants	7.3			1.0		4.80	0.35	0.05	3.0	0.7	6.5	2.6	0.7	6.5
Table service restaurants	7.4			0.7		2.68	0.20	0.02	2.9	0.6	8.3	2.6	0.6	7.5
Fast food & take-out	7.3		~~~	1.8		1.54	0.11	0.03	3.2	1.2	3.4	2.6	1.2	4.1
Cafeterias & other restaurants	7.4			1.1		0.58	0.04	0.01	3.0	0.6	7.0	2.6	0.7	6.7
Shelter	7.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.4	0.4	29.80	2.08	0.11	1.8	0.6	8.8	1.7	0.8	6.7
Rented accomm.	4.9			0.7		6.77	0.34	0.05	1.3	8.0	4.6	1.3	0.6	6.2
Rent	4.9			0.7		6.57	0.32	0.05	1.3	0.8	4.4	1.3	0.6	5.9
Tenants' insurance premiums	9.3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	^	-0.1		0.11	0.01	0.00	1.1	1.6	5.1	0.3	1.6	5.5
Tenants' maintenance & repairs	7.1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	^_^	0.0		0.08	0.01	0.00	2.2	1.0	4.7	2.6	2.2	2.1
Owned accomm.	6.3		^	0.1		19.46	1.23	0.02	2.3	0.4	9.5	1.7	0.8	5.6
Mortgage interest cost	1.7			1.7	1.7	2.94	0.05	0.05	2.1	3.6	-0.1	-0.1	3.6	0.5
Homeowners' replacement cost	9.1			0.1	0.1	6.44	0.59	0.01	1.9	1.7	4.3	2.1	1.5	4.7
Property tax & other charges	1.5		<b></b>	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	5.2	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~	0.1	0.1	1.37	0.07	0.00	5.2	2.3	0.0	4.5	2.6	0.3
Homeowners' maintenance & repairs	7.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.4	0.3	1.81	0.13	0.01	2.0	1.1	4.8	2.0	1.4	3.7
Other owned accomodation expenses	9.7			-0.9	-1.0	4.43	0.43	-0.04	2.0	1.2	6.4	2.4	2.0	3.7
Water, fuel, & elec.	14.5			1.3		3.57	0.52	0.04	0.8	2.1	6.5	2.5	3.4	3.5
Electricity	1.3	www.	~~~	-2.2	-2.2	1.75	0.02	-0.04	1.2	4.4	0.0	2.5	3.8	-0.3
Water	2.7	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.0	0.1	0.72	0.02	0.00	3.7	0.9	-1.1	4.9	1.4	-1.5
Natural gas	42.6	manner		12.4	12.4	0.78	0.33	0.10	-1.3	9.0	4.9	0.4	10.6	4.0
Fuel oil & other fuels	61.6		^	-5.3	-5.3	0.32	0.20	-0.02	-0.1	15.5	4.0	5.1	14.2	4.0
Household operations, furniture & equipment	5.0			0.1	-0.1	14.50	0.73	0.01	1.2	1.0	3.7	1.4	0.9	4.1
Household ops.	2.7	manner m		0.2		9.30	0.25	0.02	1.3	1.1	1.2	2.1	1.3	0.5
Communications	-1.8	- Manual	~~~~	0.0	0.0	2.54	-0.04	0.00	0.0	2.8	-0.6	1.5	2.9	-1.2
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	3.5	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	~~~	0.5	0.6	0.40	0.01	0.00	1.3	1.9	1.2	0.8	1.9	1.4
Paper, plastic, aluminum foil	6.8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-0.1	-0.3	0.52	0.04	0.00	2.2	2.2	2.1	2.0	2.0	2.4
Other household goods & services	5.3	many many	^	0.4	0.4	5.11	0.27	0.02	1.8	0.5	7.4	2.4	1.1	2.7
Household furnishings & equip.	9.3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-0.1		5.20	0.48	0.00	0.8	1.7	5.0	0.1	1.6	5.8
Furniture & textiles	12.4		^	-0.3		2.28	0.28	-0.01	0.4	2.1	5.6	-0.3	2.1	5.9
Household equipment	7.2	manner of the second		0.0	0.1	2.42	0.17	0.00	0.9	1.7	3.8	0.0	1.8	3.9
Services related to furnishings & equipment	5.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		2.0	1.2	0.35	0.02	0.01	2.4	1.8	1.6	2.7	2.9	0.9
Clothing & footwear	1.4	mmmmy	~~	-1.7	-0.5	4.3	0.06	-0.07	0.6	1.2	0.7	0.3	1.4	0.8
Clothing	0.1	Jan-my manner	~~~	-2.2	-0.7	2.73	0.00	-0.06	0.5	1.6	-0.2	-0.3	2.1	0.2
Footwear	3.9		~~	-0.4	0.7	0.57	0.02	0.00	0.4	1.2	3.1	0.1	1.4	2.7
Clothing accessories	2.6	mymmw	~~~	-1.6		0.75	0.02	-0.01	1.0	1.8	0.9	2.3	2.6	0.1
Clothing material		www.		0.0		0.23	0.01	0.00	2.2	0.7	3.8	2.7	1.2	1.8

# **Scotiabank**...

August 16, 2022

Jul 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 % nange, SA**	Weights (%)	у/у	m/m	2015–2019 avg. y/y	Std. Dev.	Z-Score	2011–2019 avg. y/y	Std. Dev.	Z-Score
Transportation	14.4	······································		-1.2	-0.6	16.9	2.43	-0.20	1.7	3.1	4.1	2.3	3.0	4.1
Private trans.	13.7	· · · · · · · · · · · · · · · · · · ·		-1.8		16.1	2.21	-0.30	1.3	3.2	3.9	2.2	3.2	3.6
Purchase, lease, rental of passenger vehicles	8.4	mannamana	~~~ <b>~~</b>	0.4		6.71	0.56	0.03	2.3	1.5	4.0	1.9	1.6	4.0
Purchase & lease of passenger vehicles	<u>8.1</u>	mannaman	~~~~~	<u>0.3</u>		6.65	0.54	<u>0.02</u>	<u>2.3</u>	<u>1.5</u>	<u>3.9</u>	<u>1.9</u>	<u>1.6</u>	<u>3.8</u>
Rental of passenger vehicles	<u>28.5</u>			<u>0.0</u>	<u>1.0</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	18.1	my many many		-3.3		9.37	1.69	-0.31	0.7	5.7	3.1	2.4	5.4	2.9
<u>Gasoline</u>	<u>35.6</u>	manne.		<u>-9.2</u>	<u>-7.5</u>	<u>4.28</u>	<u>1.52</u>	<u>-0.39</u>	<u>-0.6</u>	<u>13.5</u>	<u>2.7</u>	<u>3.0</u>	12.2	<u>2.7</u>
Passenger vehicle parts, maintenance & repairs	<u>7.9</u>	~~~~~~~.		<u>2.8</u>	<u>1.5</u>	<u>2.56</u>	0.20	<u>0.07</u>	<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>1.6</u>	- manual of the same of the sa		<u>2.3</u>	<u>2.3</u>	2.53	0.04	<u>0.06</u>	2.4	<u>2.2</u>	<u>-0.4</u>	2.6	<u>2.0</u>	<u>-0.5</u>
Public trans.	26.9	thurst	mm.	13.0		0.82	0.22	0.11	4.8	3.9	5.7	3.4	3.7	6.4
Local & commuter transportation	2.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1.9	1.4	0.28	0.01	0.01	1.5	0.5	1.1	2.2	1.2	-0.2
City bus & subway	1.5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1.1		0.17	0.00	0.00	2.1	0.7	-0.8	2.8	1.4	-0.9
Taxi & other commuter service	2.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		2.9		0.11	0.00	0.00	0.1	0.8	2.9	0.9	1.2	1.3
Inter-city transportation	48.5	MayenMen	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	21.2	23.5	0.37	0.18	0.08	6.2	5.7	7.4	3.9	5.8	7.6
<u>Air transportation</u>	57.7	Mymm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	25.5		0.26	0.15	0.07	6.5	6.2	8.3	4.0	6.4	8.3
Rail, highway bus, other	7.5	- Mysser	~~~~~	1.1		0.07	0.01	0.00	2.7	1.8	2.7	2.0	4.2	1.3
Health & personal care	3.9			0.6	0.4	4.62	0.2	0.03	1.4	0.4	6.3	1.3	0.9	3.1
Health care	2.4	man man man	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.8		2.26	0.1	0.02	1.3	0.6	2.0	1.1	0.8	1.6
Health care goods	1.2	man man man	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1.3	1.4	1.31	0.0	0.02	0.5	0.7	1.0	-0.1	1.1	1.2
Health care services	4.4			0.0	0.2	0.96	0.0	0.00	2.5	0.6	3.4	2.9	0.8	2.0
Personal Care	5.3	manner of the same		0.4		2.36	0.1	0.01	1.5	0.5	7.1	1.5	1.2	3.3
Personal care supplies & equipment	5.7	manuman.	~~~	0.5	0.1	1.72	0.1	0.01	0.4	0.9	5.6	0.5	1.6	3.2
Personal care services	4.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.0	0.2	0.64	0.0	0.00	2.9	0.7	2.0	2.7	1.4	1.2
Recreation, education & reading	6.2			1.4	0.6	9.29	0.6	0.13	1.7	0.8	5.8	1.3	0.9	5.8
Recreation	7.3		~~~~	1.71		7.43	0.54	0.13	1.4	1.0	5.8	0.6	1.2	5.4
Recreational equipment & services, excl. vehicles	-0.2	my pharman	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.2	0.0	2.18	0.0	0.00	-0.8	1.6	0.4	-2.2	2.0	1.0
Purchase & operation of recreational vehicles	12.7	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-1.7	-0.3	1.78	0.2	-0.03	2.6	1.8	5.5	1.9	2.0	5.6
Home entertainment equipment	-0.9	······································		-0.2	-1.0	0.88	0.0	0.00	-3.8	2.0	1.4	-4.9	2.2	1.8
Travel services	28.5	manner.	~~~	14.1	7.9	0.85	0.2	0.12	0.8	2.9	9.4	0.4	2.8	10.0
Other cultural & rec. services	4.8	marmon		1.0	0.6	1.75	0.1	0.02	3.5	1.1	1.3	3.4	1.4	1.1
Educ. & reading	1.4			-0.18		1.86	0.03	0.00	2.5	1.4	-0.9	3.0	1.1	-1.4
Education	1.9			-0.2	0.1	1.60	0.0	0.00	2.4	1.4	-0.4	3.0	1.2	-0.9
Reading material excl. textbooks	-1.6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	0.2	0.2	0.26	0.0	0.00	3.8	2.8	-2.0	3.2	2.9	-1.7
Alcoholic beverages, tobacco & rec. cannabis	3.8			0.5	0.6	4.63	0.2	0.02	3.2	1.2	0.5	2.7	1.3	8.0
Alcoholic beverages	4.8	manner.	~~~~	0.43		2.83	0.14	0.01	1.7	0.5	6.0	1.4	0.7	4.7
Alc. beverages served in licensed establishments	5.5	· • • • • • • • • • • • • • • • • • • •		0.1	0.2	0.67	0.0	0.00	1.8	0.6	6.0	2.0	0.7	5.0
Alc. beverages purchased from stores	4.7	manner of the same	~~~~	0.5	0.5	2.16	0.1	0.01	1.7	0.7	4.7	1.1	1.1	3.4
Tobacco products	4.5	more .		1.04		1.28	0.06	0.01	5.6	2.1	-0.5	4.8	2.8	-0.1
Cigarettes	4.5	more of		1.0		1.16	0.1	0.01	5.6	2.1	-0.5	4.8	2.8	-0.1
Other tobacco products & supplies	4.7	mm.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.1		0.11	0.0	0.00	5.6	2.0	-0.4	4.9	2.6	-0.1
Rec. cannabis	-4.7	M	~~~	-0.13		0.50	-0.02	0.00						

Sources: Scotiabank Economics, Statistics Canada.

<sup>\*</sup>Number may not add due to rounding

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

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