

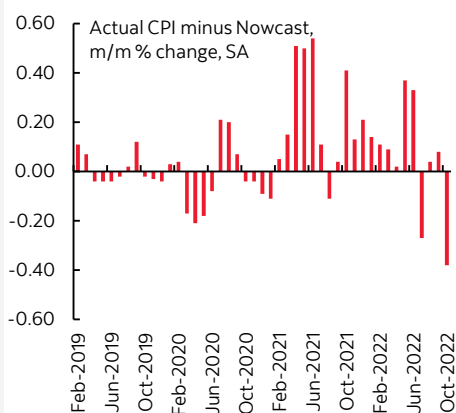
#### Contributors

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Chart 1

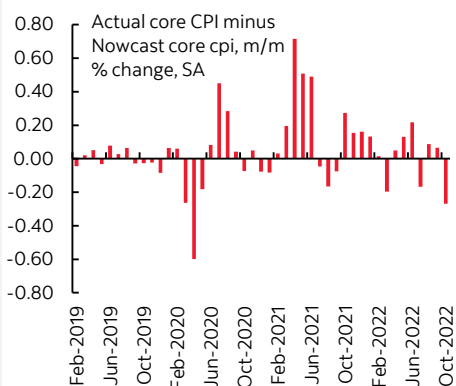
#### Spread Between Nowcast and Actual CPI



Sources: Scotiabank Economics, Bloomberg.

Chart 2

#### Spread Between Nowcast and Actual Core CPI



Sources: Scotiabank Economics, Bloomberg.

## Is US Inflation Ebbing or Another Headfake?

- Inflation surprised well below nowcasts while remaining above target...
- ...prompting a massive risk-on rally across asset classes...
- ...that may be overdone...
- ...if this just proves to be a third head fake this year
- PCE inflation and one more CPI report arrive before the Fed's next decision
- The main drivers of everyone's views on inflation in 2023

#### US CPI, m/m % SA // y/y %, October:

Actual: 0.4 / 7.7  
Scotia: 0.8 / 8.1  
Consensus: 0.6 / 7.9  
Prior: 0.4 / 8.2

#### US core CPI, m/m % SA // y/y %, October:

Actual: 0.3 / 6.3  
Scotia: 0.6 / 6.6  
Consensus: 0.5 / 6.5  
Prior: 0.6 / 6.6

US CPI significantly undershot expectations and drove a massive rally in a rare undershoot of inflation nowcasts and everyone's forecasts. The undershoot to the Cleveland Fed's nowcast was the biggest since it became available (chart 1). The undershoot by core CPI compared to the same nowcast source was the biggest since the start of the pandemic (chart 2). My own tracking was also too high, so misery abounds this morning but with plenty of company apparently. The two-year yield dropped off a cliff and fell by 27bps with the 10-year yield declining by 22bps in the aftermath. The dollar depreciated by about 2.2% on a DXY basis. The S&P 500 shot higher by 4.4% compared to yesterday's close. If that then we'll see if the Fed allows easing financial conditions at this stage.

Furthermore, pricing for the Fed funds target rate reverted to +50bps on December 14th followed by halfway between 25 and 50 at the next meeting on February 1st and shifted pricing for the terminal rate down to between 4¼% and 5% by March. President Biden was sounding rather cocky when he said "Today's report shows that we are making progress on bringing inflation down, without giving up all of the progress we have made on economic growth and job creation."

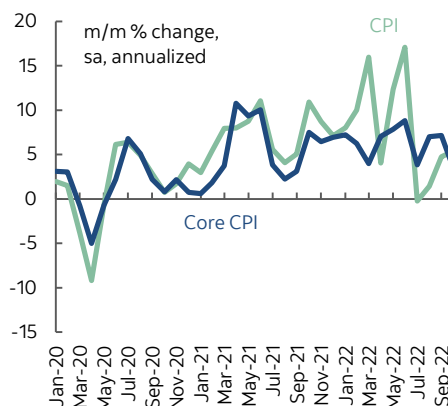
#### TWO CAUTIONS

Chart 3 shows the volatility in month-over-month annualized inflation readings. Every down month this year like this one has been followed by a surge the next time. Woo hoo inflation's ebbing, whoops it's not, rinse, repeat. I'll cover the drivers below after an important caution. I think the massive market reaction is a combination of a hope-driven rally and positioning squeeze much more than is sensible with the modest new evidence at hand. There are two reasons for this.

One is that we don't know if the relatively soft core inflation reading is simply a third head

Chart 3

#### US CPI & Core CPI

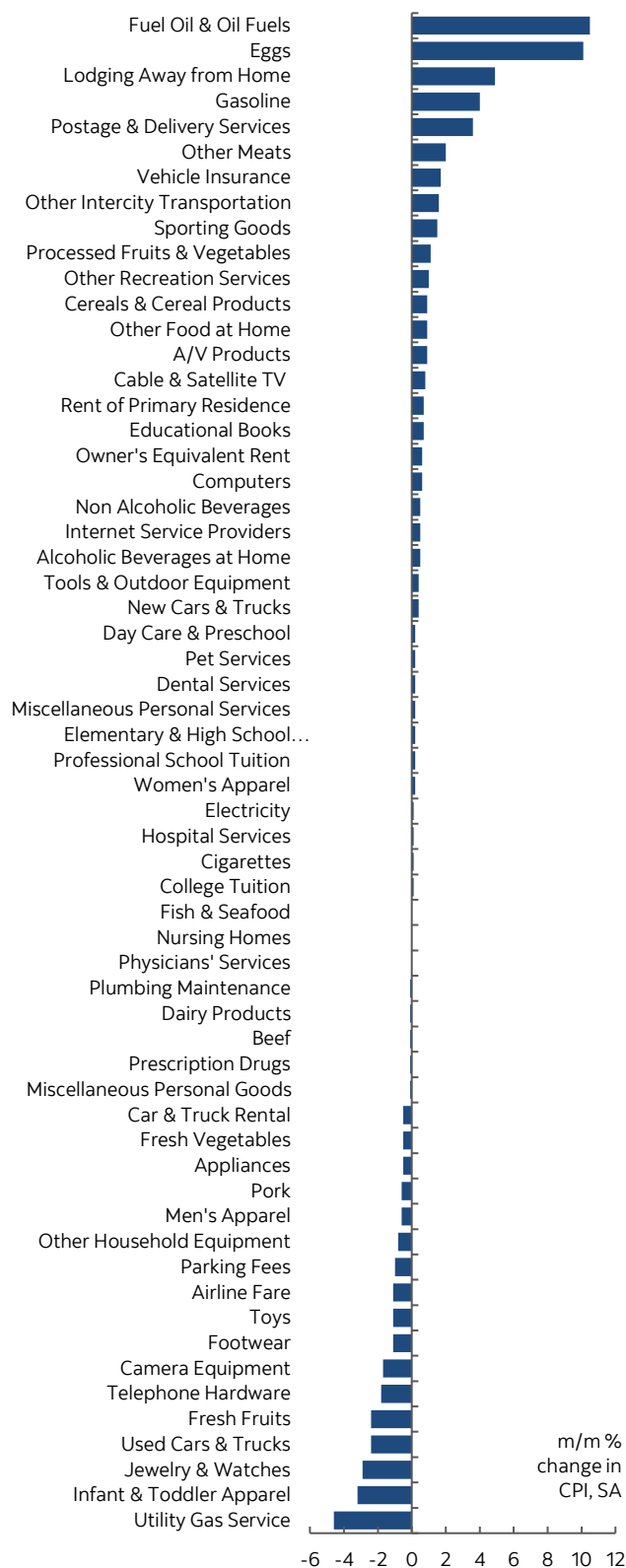


Sources: Scotiabank Economics, BLS.

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Chart 4

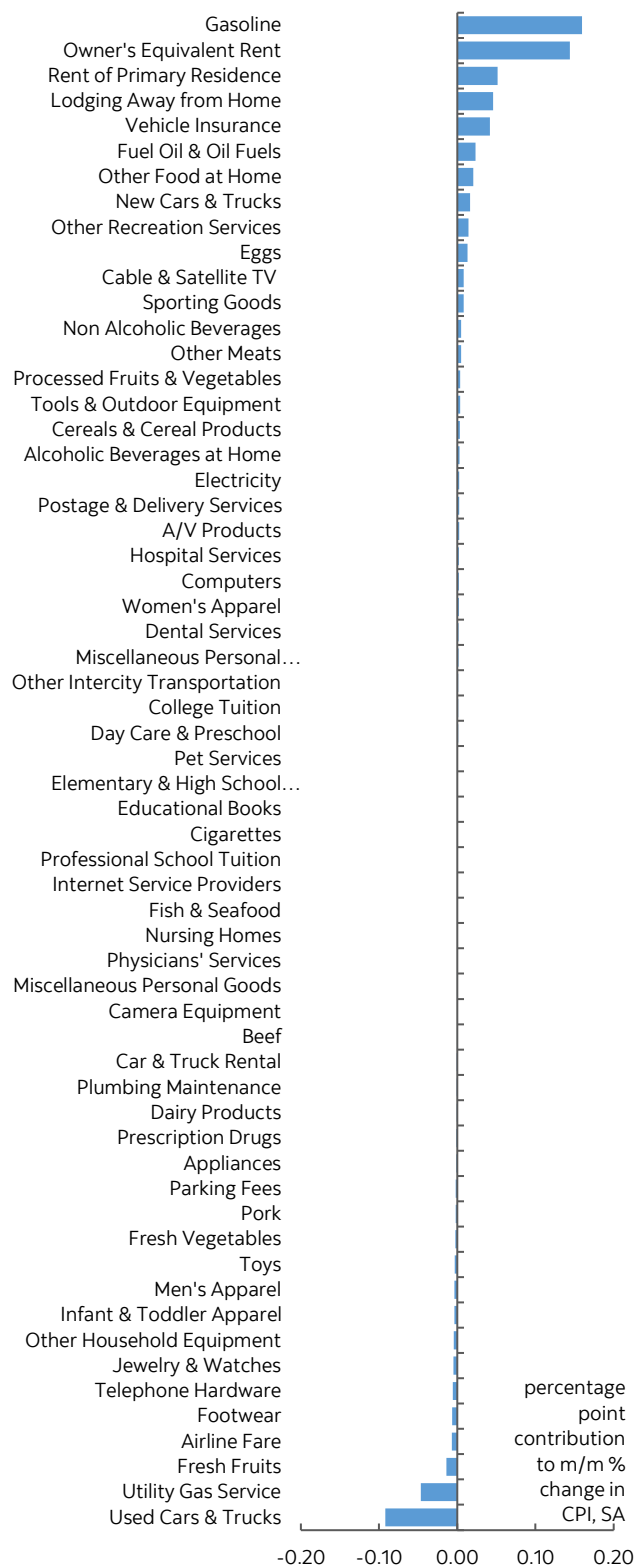
## October Changes in US Headline CPI Categories



Sources: Scotiabank Economics, US BLS.

Chart 5

## October Weighted Contributions to Monthly Change in US Headline CPI



Sources: Scotiabank Economics, US BLS.

Chart 6

### October 12-Month Changes in US Headline CPI Categories

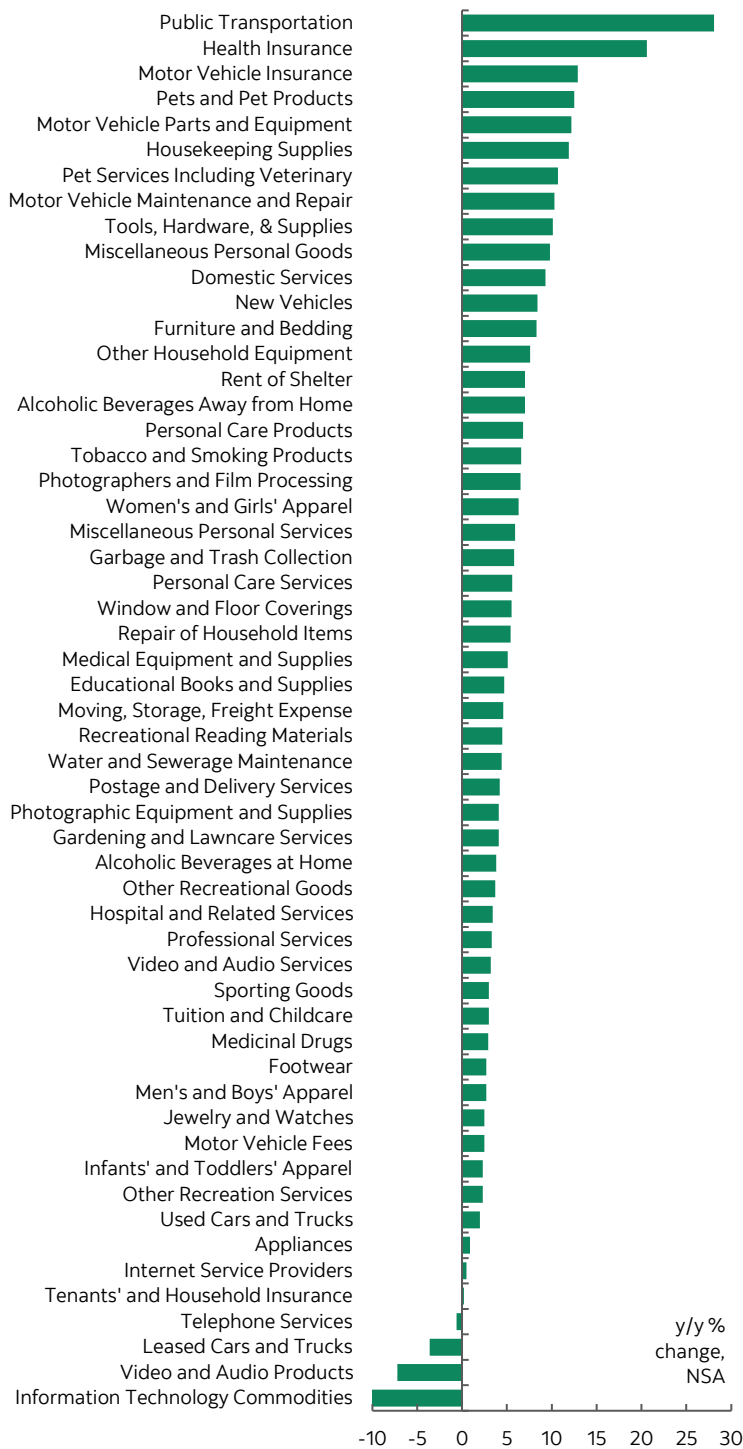


Chart 7

### October Weighted Contributions to the 12-Month Change in US Headline CPI



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fake this year and at risk of being a repeat of the prior two occasions that were surrounded by otherwise hot readings. Recall that the softer than expected 0.3% m/m core reading in July prompted a sucker's rally and stridently premature declarations of victory over inflation before a pair of 0.6% prints followed. String a few together and then we'll see.

Second is that we'll get another CPI report on the eve of the next FOMC meeting on December 14<sup>th</sup>. Recall that FOMC participants submit their forecasts and 'dots' on the Friday before the start of the meeting on Tuesday but can change their forecasts and dots right up to the eve of the decision (ie: Tuesday night). There is probably going to be a high bar to risking abrupt changes to what they submit after the next batch of inflation readings, but it's possible if CPI surprises in either direction again. I suspect the way we're leaning now is toward 50bps in December pending further information and possibly higher terminal rate guidance in the dots based on Powell's recent press conference.

## DETAILS

Charts 4 and 5 show the unweighted m/m price changes and the weighted contributions to the overall m/m change in CPI inflation respectively. Charts 6 and 7 do likewise for year-over-year measures.

So what drove the undershoot? See the next page's collection of charts. Both core goods inflation (ex-food and energy) and core services inflation (ex energy services) decelerated. It's pretty rare so far during the pandemic to see both effects moving in similar directions (chart 8).

Food inflation ebbed a bit by landing at 0.6% m/m and while still hot, the deceleration was driven by groceries (0.4% m/m) as food away from home including take-out was up by a still hot 0.9%. Year-over-year food inflation may be cresting at least for groceries (chart 9).

Apparel prices fell 0.7% m/m mostly due to men's clothing and footwear. Perhaps milder than usual weather in the northern states contributed to this and we'll have to see the holiday shopping effect into the next couple of reports. Chart 10 shows the plateauing apparel price inflation.

Owners equivalent rent (chart 11) was up by 0.6% m/m which was 0.1–0.2 points softer than prior months while still hot.

Pandemic related categories were mixed. Airfare fell 1.1% but at a puny 0.6% weight which had it contributing nothing, although its year-over-year climb is not yet abating (chart 12). Car rental prices fell 0.5% m/m, but lodging prices were up by a large 4.9% m/m.

Rent was also solid at 0.7% m/m.

New and used vehicle prices were up 0.4% m/m and down 2.4% m/m respectively, but their modest weights of around 4% each resulted in little net contribution to the overall change in CPI. Both are ebbing influences in year-over-year terms (chart 13).

Medical insurance premiums also softened (chart 14).

## THE MAIN DRIVER OF THE CONSENSUS 2023 INFLATION FORECAST

Everyone is forecasting cooler inflation into next year with consensus forecast CPI to end 2023 at 3% and Scotia Economics at 3.5%. Almost all shops within Bloomberg's consensus foresee inflation ending next year at between 2½% y/y and 4% y/y. Multiple forecast methods are used by various shops, but most of this consensus view can be derived through the simplest of all approaches.

Letting just base effects and average monthly CPI seasonality work through the next year's numbers would alone have CPI inflation ending 2023 at about 3¾% y/y which would be just under half of the present rate (chart 15). In reality, the key will be the reasonableness of assuming simple mean reversion toward normal seasonality in prices changes month to month in the context of the humbling nature of forecasting inflation over time. We'll see if that kind of guesswork—if it proves correct—would be enough to motivate Fed policy easing.

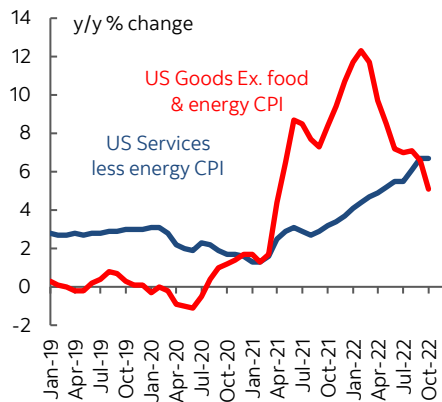
Please see the accompanying table at the back that includes further details with micro charts and z-score measures of deviations from norms.

Chart 15

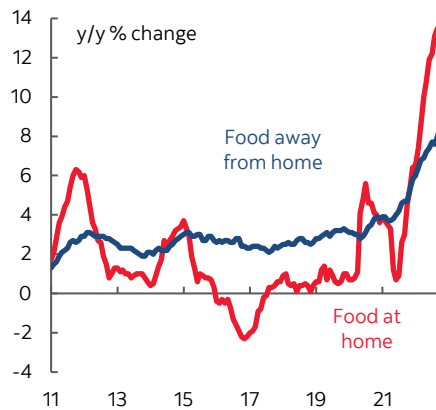
### US Inflation Under Only Base Effects and Normal Seasonality



Sources: Scotiabank Economics, Statistics Canada.

**Chart 8**
**US Goods vs Services Inflation**


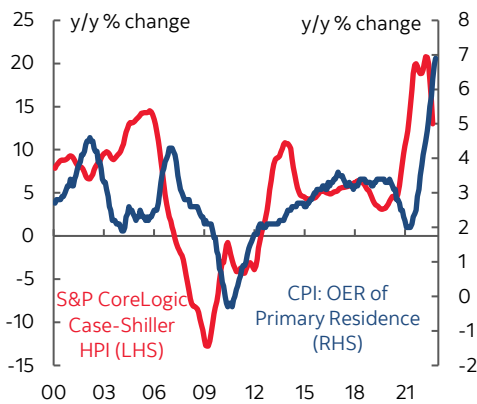
Sources: Scotiabank Economics, BLS.

**Chart 9**
**US Food Prices**


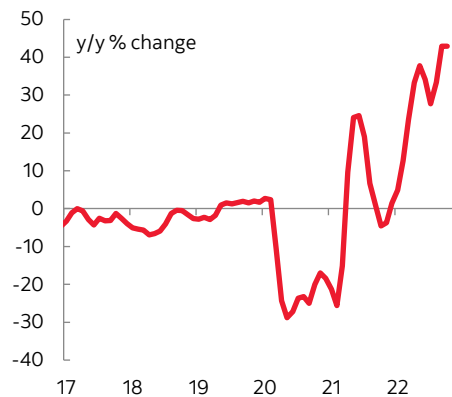
Sources: Scotiabank Economics, BLS.

**Chart 10**
**US Apparel**

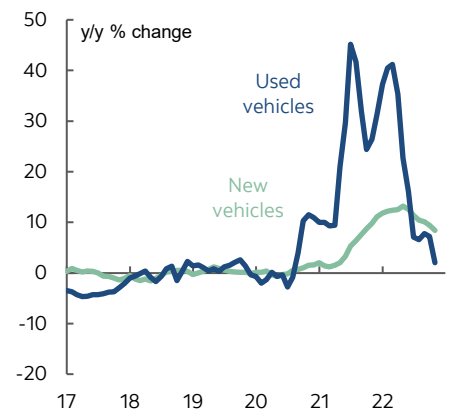

Sources: Scotiabank Economics, BLS.

**Chart 11**
**OER Still Running Hot**


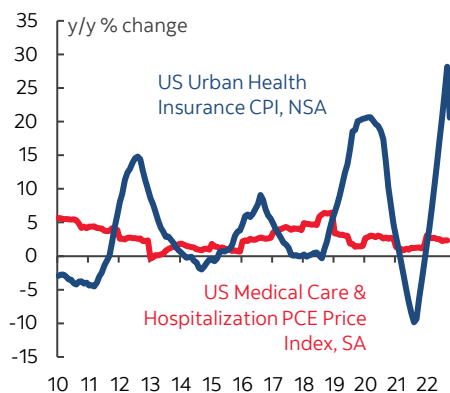
Sources: Scotiabank Economics, BLS, S&amp;P.

**Chart 12**
**US Airfare**


Sources: Scotiabank Economics, BLS.



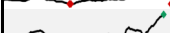



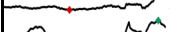



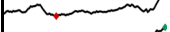
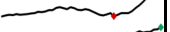

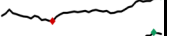
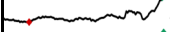
















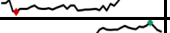




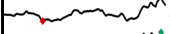












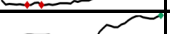








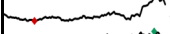
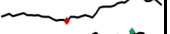


**Chart 13**
**New vs Used Vehicle Inflation**


Sources: Scotiabank Economics, BLS.



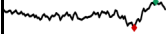





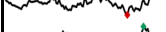
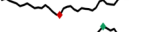












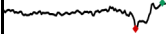





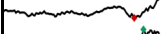
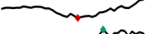


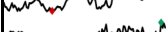




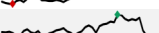




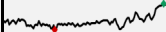







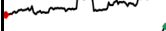


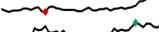


**Chart 14**
**US Medical Care Insurance Inflation**


Sources: Scotiabank Economics, US BLS, US Bureau of Economic Analysis.

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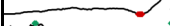








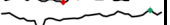
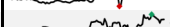

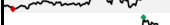











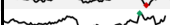










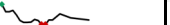


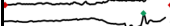



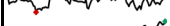

















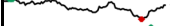

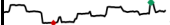

Oct 2022				Weighted Contributions (ppts)*			5-Year Pre-Pandemic			10-Year Pre-Pandemic			
US INFLATION COMPONENT BREAKDOWN	y/y % change	10-year trend	Pandemic trend (Jan 2019–Present)	m/m % change	Weights (%)	y/y	m/m	2015–2019 avg. y/y	Std. Dev.	Z-Score	2011–2019 avg. y/y	Std. Dev.	Z-Score
Food	10.9			0.6	13.71	1.49	0.08	1.3	0.8	12.6	1.7	1.1	8.1
Food, home	12.4			0.4	8.51	1.05	0.03	0.2	1.1	10.8	1.2	1.9	6.0
Cereals & bakery products	15.9			0.8	1.11	0.18	0.01	0.4	0.9	17.7	0.9	1.7	8.9
Meats, poultry, fish & eggs	8.0			0.6	1.90	0.15	0.01	-0.2	3.2	2.5	2.1	3.9	1.5
Dairy & related products	15.5			-0.1	0.81	0.12	0.00	-0.6	1.6	10.0	1.1	3.1	4.6
Fruits & vegetables	9.3			-0.9	1.43	0.13	-0.01	0.4	1.7	5.2	1.0	2.0	4.1
Non-alcoholic bevarages	12.7			0.5	0.98	0.12	0.00	0.6	1.0	11.6	0.5	1.6	7.7
Other food at home	15.4			0.9	2.28	0.35	0.02	0.5	0.6	23.2	1.0	1.6	9.2
Food, away	8.6			0.9	5.20	0.45	0.05	2.7	0.3	19.9	2.5	0.5	11.7
Full services meals & snacks	9.0			1.1	2.41	0.22	0.03	2.6	0.4	17.4	2.4	0.5	13.2
Limited services meals and snacks	7.1			0.8	2.51	0.18	0.02	2.8	0.3	13.3	2.5	0.7	6.5
Food at employee sites and school	95.2			3.8	0.07	0.07	0.00	2.8	2.4	37.8	2.8	1.9	48.1
Food from vending machines & mobile vendors	11.2			3.7	0.04	0.00	0.00	3.1	1.0	8.2	2.5	1.3	6.7
Other food away from home	5.4			0.2	0.17	0.01	0.00	2.5	1.3	2.2	2.3	1.0	3.1
Energy	17.6			1.8	8.01	1.41	0.14	-1.9	10.0	2.0	1.6	9.6	1.7
Energy comm.	19.3			4.4	4.31	0.83	0.19	-2.8	17.0	1.3	3.0	17.1	1.0
Fuel oils & other fuels	44.2			10.5	0.22	0.10	0.02	-2.3	15.8	2.9	2.7	14.4	2.9
Motor fuel	18.1			4.0	4.09	0.74	0.16	-2.8	17.1	1.2	3.0	17.3	0.9
Gasoline	17.5			4	3.99	0.70	0.16	-2.8	17.1	1.2	3.0	17.4	0.8
Energy serv.	15.6			-1.2	3.70	0.58	-0.04	0.0	2.4	6.4	0.5	2.7	5.7
Electricity	14.1			0.1	2.69	0.38	0.00	0.5	1.5	9.2	1.0	1.7	7.9
Utility (piped gas service)	20.0			-4.6	1.02	0.20	-0.05	-1.4	7.5	2.8	-0.9	7.3	2.9
All items less food and energy	6.3			0.3	78.29	4.93	0.23	2.0	0.2	19.1	1.8	0.4	11.0
Commodities less food and energy	5.1			-0.4	21.18	1.08	-0.08	-0.3	0.4	13.9	0.2	0.9	5.5
Household furnishings	8.8			-0.2	3.79	0.33	-0.01	-0.8	1.2	8.0	-0.9	1.2	8.1
Window & floor coverings	5.5			0.5	0.30	0.02	0.00	-2.3	1.7	4.5	-2.8	1.8	4.7
Furniture & bedding	8.3			-1.2	0.98	0.08	-0.01	-0.3	1.7	5.0	-0.9	2.1	4.4
Appliances	0.9			-0.5	0.25	0.00	0.00	-1.2	3.1	0.7	-1.6	3.0	0.8
Other household equipment	7.6			-0.1	0.56	0.04	0.00	-3.5	1.8	6.0	-3.7	1.5	7.6
Tools & hardware	10.1			0.4	0.94	0.10	0.00	-0.1	1.0	9.8	-0.3	1.2	8.5
Housekeeping supplies	11.9			0.7	0.95	0.11	0.01	0.3	1.2	9.7	0.4	1.3	8.8

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Apparel	4.1			-0.7	2.48	0.10	-0.02	-0.5	1.0	4.7	0.3	1.7	2.2
Men's & boys apparel	2.7			-0.6	0.62	0.02	0.00	-0.3	1.5	2.0	0.5	2.3	1.0
Women's & girls apparel	6.3			0.2	0.99	0.06	0.00	-1.3	1.9	4.1	-0.1	2.5	2.5
Footwear	2.7			-1.1	0.60	0.02	-0.01	0.2	1.3	1.9	0.8	1.7	1.2
Infant & toddler's apparel	2.3			-3.2	0.12	0.00	0.00	0.4	3.8	0.5	0.5	3.6	0.5
Jewelry & watches	2.5			-2.9	0.16	0.00	0.00	1.0	3.4	0.4	1.5	3.8	0.3
Trans. less fuel	5.5			-0.9	8.41	0.46	-0.08	-0.3	0.9	6.6	0.4	1.5	3.4
New vehicles	8.4			0.4	4.06	0.34	0.02	0.1	0.7	12.6	0.8	1.2	6.2
Used cars & trucks	2.0			-2.4	3.83	0.08	-0.09	-1.3	2.1	1.6	1.1	4.8	0.2
Motor vehicle parts & equipment	12.2			0.3	0.43	0.05	0.00	0.2	1.1	11.3	0.9	2.2	5.2
Medical comm.	3.1			0.0	1.47	0.05	0.00	2.1	1.7	0.6	2.3	1.5	0.6
Medicinal Drugs	2.9			0.0	1.37	0.04	0.00	2.2	1.8	0.4	2.3	1.6	0.4
Medical equipment & supplies	5.1			-0.6	0.10	0.01	0.00	0.4	1.2	3.8	0.3	1.2	4.0
Recreation comm.	4.3			0.7	1.88	0.08	0.01	-2.6	1.1	6.5	-2.3	0.9	7.3
Video & audio products	-7.2			0.9	0.28	-0.02	0.00	-10.1	2.4	1.2	-9.2	2.2	0.9
Pets & pet products	12.5			1.3	0.57	0.07	0.01	0.4	1.5	8.2	0.5	1.5	8.2
Sporting goods	3.0			1.6	0.54	0.02	0.01	-0.7	1.5	2.4	-0.6	1.2	3.0
Photographic Equipment & supplies	4.1			-1.7	0.02	0.00	0.00	-1.7	4.6	1.3	-3.0	4.0	1.8
Recreational reading materials	4.5			-1.0	0.10	0.00	0.00	1.6	1.9	1.6	1.5	1.8	1.7
Other recreational goods	3.7			-0.9	0.38	0.01	0.00	-6.5	1.3	7.6	-5.2	1.7	5.1
Educ. & communication comm.	-9.1			-0.9	0.75	-0.07	-0.01	-3.7	1.0	-5.3	-3.5	0.9	-6.2
Educational books & supplies	4.7			0.2	0.09	0.00	0.00	2.2	3.0	0.8	3.6	2.7	0.4
IT commodities	-10.8			-1.0	0.67	-0.07	-0.01	-6.1	1.9	-2.5	-6.8	1.8	-2.2
Alcohol	5.0			0.8	0.87	0.04	0.01	1.3	0.3	10.8	1.4	0.4	9.9
Alcoholic beverages at home	3.8			0.5	0.58	0.02	0.00	0.8	0.6	5.0	0.8	0.5	5.7
Alcoholic beverages away from home	7.0			1.2	0.29	0.02	0.00	1.9	0.5	11.0	2.2	0.7	7.2
Other goods	7.2			0.6	1.35	0.10	0.01	1.4	0.9	6.8	1.4	0.7	8.1
Tobacco & smoking products	6.6			0.3	0.52	0.03	0.00	4.3	1.5	1.5	4.4	3.8	0.6
Personal care products	6.8			0.4	0.65	0.04	0.00	-0.3	0.6	12.2	-0.1	0.8	8.4
Miscellaneous personal goods	9.8			1.9	0.18	0.02	0.00	-2.4	3.1	4.0	-1.7	2.4	4.8



November 10, 2022

Oct 2022				Weighted Contributions (ppts)*			5-Year Pre-Pandemic			10-Year Pre-Pandemic			
US INFLATION COMPONENT BREAKDOWN	y/y % change	10-year trend	Pandemic trend (Jan 2019–Present)	m/m % change	Weights (%)	y/y	m/m	2015–2019 avg. y/y	Std. Dev.	Z-Score	2011–2019 avg. y/y	Std. Dev.	Z-Score
Services less energy services	6.7			0.5	57.11	3.83	0.29	2.8	0.2	16.7	2.4	0.6	6.8
Shelter	6.9			0.8	32.62	2.25	0.26	3.3	0.2	21.5	2.5	1.2	3.8
Rent of shelter	7.0			0.7	32.26	2.26	0.23	3.3	0.2	20.0	2.5	1.2	3.8
<u>Rent of primary residence</u>	<u>7.5</u>			<u>0.7</u>	<u>7.35</u>	<u>0.55</u>	<u>0.05</u>	<u>3.7</u>	<u>0.1</u>	<u>28.5</u>	<u>2.9</u>	<u>1.1</u>	<u>4.1</u>
<u>Lodging away from home</u>	<u>5.9</u>			<u>4.9</u>	<u>0.93</u>	<u>0.05</u>	<u>0.05</u>	<u>2.3</u>	<u>2.0</u>	<u>1.8</u>	<u>2.2</u>	<u>2.2</u>	<u>1.7</u>
<u>OER of residences</u>	<u>6.9</u>			<u>0.6</u>	<u>23.98</u>	<u>1.65</u>	<u>0.14</u>	<u>3.2</u>	<u>0.2</u>	<u>18.1</u>	<u>2.4</u>	<u>1.1</u>	<u>4.2</u>
Tenants' & household insurance	0.2			0.3	0.36	0.00	0.00	1.4	1.2	-1.0	2.3	1.5	-1.3
Water, sewer, trash collection	4.8			0.0	1.09	0.05	0.00	3.6	0.6	2.1	4.3	1.0	0.5
Water & sewage maintenance	4.4			-0.1	0.78	0.03	0.00	4.0	0.8	0.5	4.8	1.4	-0.3
Garbage & trash collection	5.8			0.5	0.31	0.02	0.00	2.5	1.5	2.3	2.5	1.1	3.0
Household ops.	6.6			0.1	0.83	0.05	0.00	3.8	1.3	2.2	2.6	1.6	2.5
Domestic services	9.3			0.6	0.24	0.02	0.00	2.0	1.1	6.9	1.6	1.0	7.4
Gardening & lawn care	4.1			0.2	0.30	0.01	0.00	4.3	2.7	-0.1	2.8	2.6	0.5
Moving, storage, freight	4.6			0.1	0.10	0.00	0.00	5.6	3.9	-0.3	3.3	3.9	0.3
Repair of household items	5.4			0.1	0.11	0.01	0.00	4.8	2.1	0.3	4.2	2.0	0.6
Medical serv.	5.4			-0.6	6.89	0.37	-0.04	2.9	1.0	2.6	3.0	0.8	2.8
Professional Services	3.3			0.2	3.47	0.11	0.01	1.5	0.9	1.9	1.8	0.8	1.8
Hospital & related services	3.4			-0.2	2.51	0.09	-0.01	3.8	1.1	-0.4	4.5	1.3	-0.9
Health insurance	20.6			-4.0	0.92	0.19	-0.04	5.0	5.8	2.7	3.6	6.0	2.8
Transportation serv.	15.2			0.8	5.95	0.90	0.05	2.6	1.1	11.5	2.6	1.0	13.0
Leased cars & trucks	-3.6			-0.5	0.76	-0.03	0.00	0.5	3.0	-1.4	-1.6	3.2	-0.6
Motor vehicle maintenance & repair	10.3			0.7	1.07	0.11	0.01	2.2	0.7	11.6	2.0	0.6	14.4
Motor vehicle insurance	12.9			1.7	2.46	0.32	0.04	5.5	2.6	2.8	4.8	2.0	3.9
Motor vehicle fees	2.5			-0.3	0.50	0.01	0.00	1.8	0.7	1.0	2.2	1.9	0.2
Public transportation	28.1			0.5	0.90	0.25	0.00	-1.2	1.5	19.4	1.0	3.6	7.6
Recreation serv.	3.9			0.8	3.11	0.12	0.02	2.6	0.7	2.0	2.3	0.7	2.1
Video & audio services	3.2			0.7	1.13	0.04	0.01	2.7	1.4	0.3	2.6	1.3	0.4
Pet services	10.7			0.2	0.52	0.06	0.00	3.1	0.8	9.9	3.3	0.9	8.0
Photo services	6.5			0.3	0.03	0.00	0.00	-0.2	2.0	3.4	0.8	1.8	3.1
Other recreation services	2.3			1.0	1.43	0.03	0.01	2.4	0.6	-0.1	1.7	1.1	0.5
Educ. & communication serv.	1.3			0.1	5.28	0.07	0.01	0.4	1.3	0.7	1.1	1.3	0.2
Tuition, school fees, child care	3.0			0.1	2.50	0.08	0.00	2.8	0.6	0.4	3.3	0.8	-0.5
Postage & delivery	4.2			3.6	0.08	0.00	0.00	2.3	2.0	1.0	3.3	2.0	0.5
Telephone services	-0.6			-0.1	1.78	-0.01	0.00	-2.4	3.0	0.6	-1.3	2.4	0.3
Internet services	0.5			0.5	0.91	0.00	0.00	-0.2	1.5	0.5	0.1	1.3	0.3
Other personal serv.	5.8			0.4	1.35	0.08	0.01	2.7	0.7	4.6	2.4	0.6	5.4
Personal care services	5.6			0.2	0.54	0.03	0.00	2.3	0.7	4.7	1.8	0.8	4.6
Miscellaneous personal services	5.9			0.5	0.82	0.05	0.00	2.9	0.9	3.3	2.7	0.7	4.4

\*Number may not add due to rounding

Sources: Scotiabank Economics, BLS.



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