# The Rise (And Fall?) of Inflation in Canada: A Detailed Analysis of Its Post-Pandemic Experience

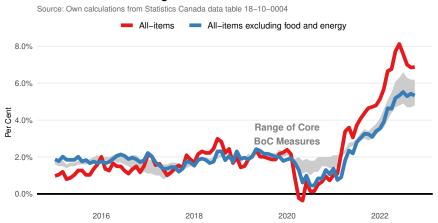
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## Rapid Increase in Canada's Inflation Rate

#### Year-over-Year Change in Consumer Prices in Canada



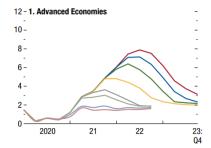
### **IMF** Inflation Forecasts

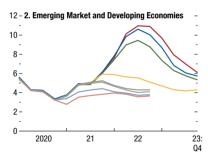
Figure 1.1.1. Headline Inflation Forecasts (Percent)

Source: IMF World

Economic Outlook,
October 2022

— Oct. 2022 WE0 — Jul. 2022 WE0 Update
— Apr. 2022 WE0 — Jan. 2022 WE0 Update
— Oct. 2021 WE0 — Jul. 2021 WE0 Update
— Apr. 2021 WE0 — Jan. 2021 WE0 Update

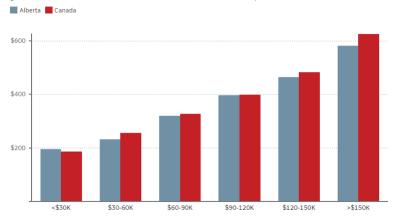




## The Cost to Typical Households

#### How much more you're paying because of high inflation

Depending on your annual household income, you could be paying roughly \$200 to \$600 a month more for goods and services due to inflation. You can hover over the bars to see specific amounts.



Calculations from Statistics Canada SPSM/D version 29.0, using product-specific inflation rates for May 2022.

Chart: @trevortombe • Source: Statistics Canada • CBC News



## A Defining Political Issue

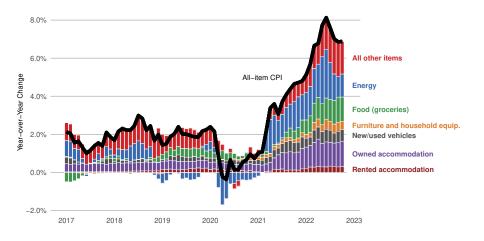


## A Defining Political Issue

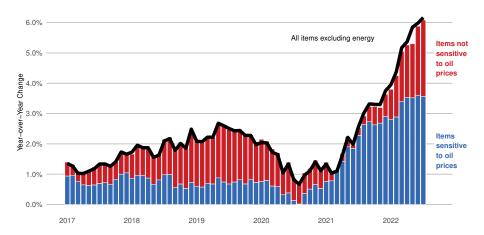


## **Potential Drivers of Rising Inflation**

## Contribution of selected items



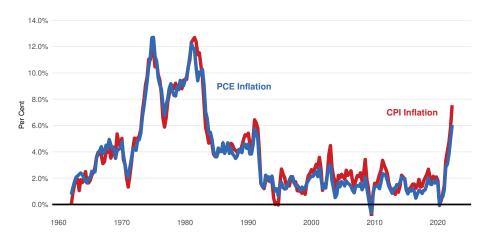
## Sensitivity to oil prices



## Personal Consumption Expenditure (PCE) deflator

- Detailed Household Final Consumption Expenditure (nearly 100 specific items)
- Each item: quarterly expenditures + real expenditures at constant prices
  - obtain both price and quantity changes for each item

## PCE vs CPI inflation



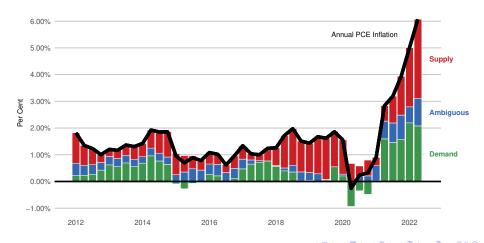
## Supply vs Demand Shock

supply-driven, demand-driven, or ambiguous

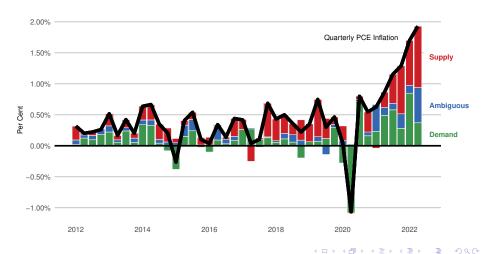
Following Shapiro (2022), categorise changes for each item as

- Based on whether unexpected changes in quantity and price are in the same direction (demand) or not (supply).
  - deviations from historically (10-year rolling window) normal changes in quantities and prices

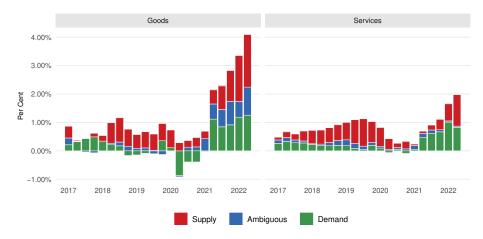
# Contribution of Supply and Demand Shocks to PCE Inflation (Annual)



# Contribution of Supply and Demand Shocks to PCE Inflation (Quarterly)



# Further Decomposition (Goods vs Services)

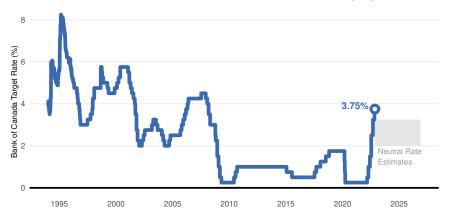


## Will Inflation Fall?

# Monetary Policy is Tightening Quickly

#### Bank of Canada Target Rate (%)

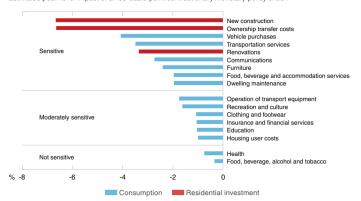
Source: Statistics Canada data table 10-10-0139. Neutral rate estimates from Faucher et al. (2022).



# Monetary Policy Affects Some Items More Than Others (From the October 2022 BoC MPR)

#### Chart 15: Rising rates affect spending on housing and big-ticket consumption items

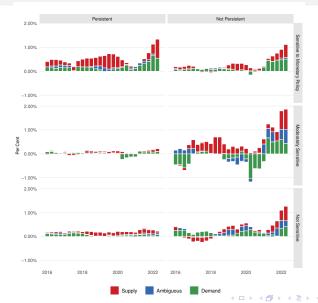
Estimated peak-level impact of a 100-basis-point contractionary monetary policy shock



Note: For more details, see T. Chernis and C. Luu, "Disaggregating household sensitivity to monetary policy by expenditure category," Bank of Canada Staff Analytical Note No. 2018-32 (October 2018).

Sources: Statistics Canada and Bank of Canada calculations and estimates

## Interest Sensitivity and Inflation Persistence



## Potential Encouraging News in the Recent Data

#### Monthly Change in the Bank of Canada's Core Inflation Measures

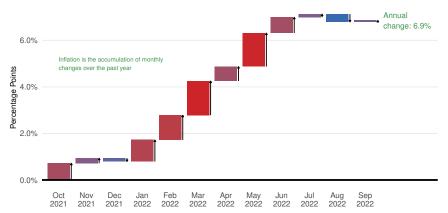
Reflects the month-over-month annualized change in CPI-median and CPI-trim CPI-Median - CPI-Trim 7.5% 5.0% Percent 2.5% 0.0% 2010 2015 2020



## Year-over-Year Comparisons Change Slowly

#### Contribution to Canada's 6.9% Inflation Rate in September 2022

Source: own calculations from Statistics Canada data table 18-10-0004



## Year-over-Year Comparisons Change Slowly

#### Contribution to Canada's 6.9% Inflation Rate in October 2022

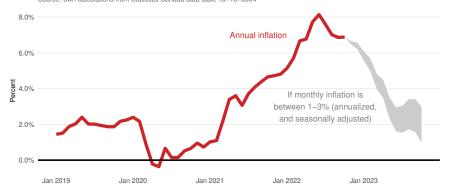
Source: own calculations from Statistics Canada data table 18-10-0004 Annual change: 6.9% 6.0% Inflation is the accumulation of monthly Percentage Points changes over the past year 2.0% Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct 2021 2021 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022



## Year-over-Year Comparisons Change Slowly

#### Year-over-Year Changes in Consumer Prices in Canada

Source: own calculations from Statistics Canada data table 18-10-0004



## Concluding Thoughts

While much uncertainty remains, our paper provides a rich exploration of both key drivers of high inflation and its potential future.

### In particular,

- A small number of items account for most of the rise
- Oil prices may account for most of the non-energy inflation
- Supply-side factors account for most of the recent increase
- Time and monetary policy may prove effective

We also show the value of measuring PCE inflation in addition to CPI

## Thank You!

#### Questions?

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