

CPI Case Study

Consumer Price Index affects our quality of life - A review of its relationship to unemployment rate, shelter, income and crime rate in Canada.

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Introduction



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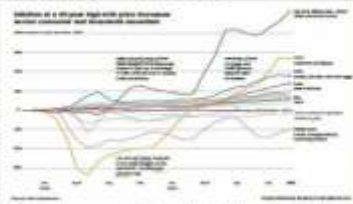
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The New York Times

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David Corrig

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What is CPI?

The Consumer Price Index (CPI) is a measure that tracks the average change in prices over time for a basket of consumer goods and services, indicating the cost of living and inflation trends.

Notes: All years in this document covers 2012 to 2022.

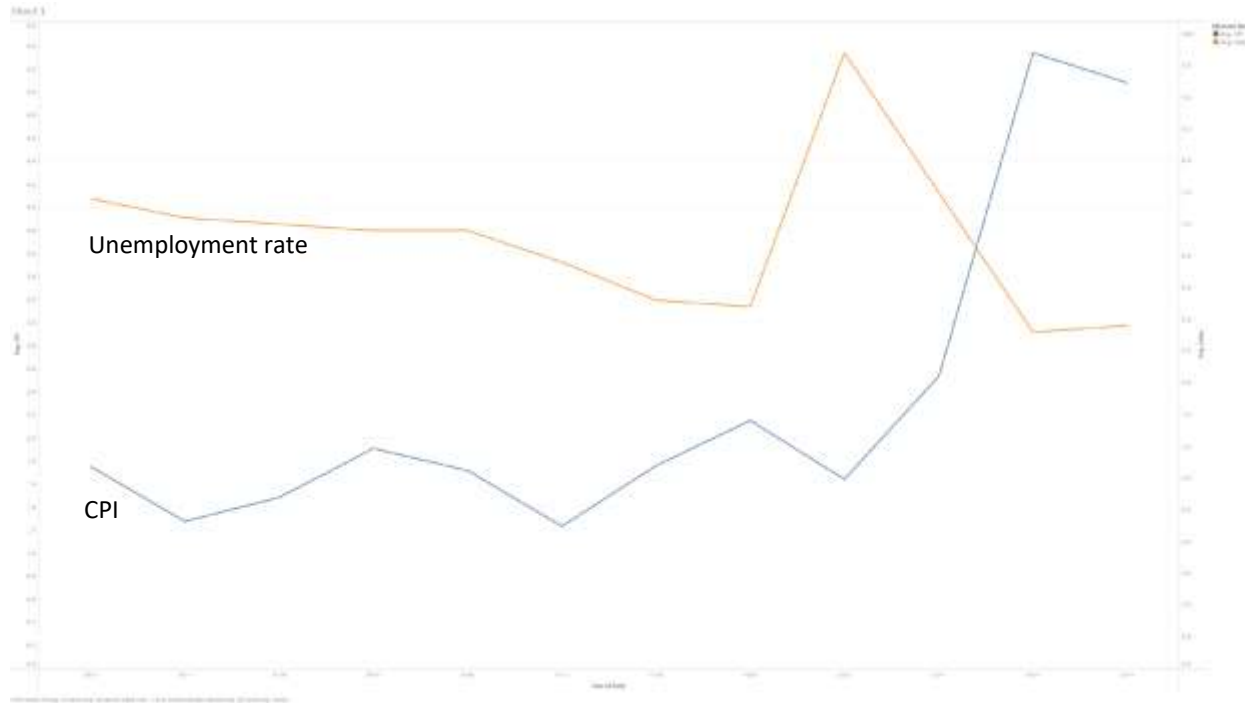
Source: <https://www150.statcan.gc.ca>, Bank of Canada ,www.ctvnews.ca



CPI and Unemployment Rate In Canada

2012 to 2023

The Cost of Living is Pushing More Canadians to Work



CPI Trend:

CPI rises, indicating increasing inflation, especially towards the later period.

Unemployment Rate Trend:

Unemployment fluctuates without a consistent trend, showing job market variability. The rate peaked in 2020.

Correlation Analysis:

A moderate negative correlation (-0.51) between CPI and Unemployment Rate suggests that as inflation rises, unemployment tends to decrease.

Economic Interpretation:

Higher CPI necessitates increased household income for living standards, potentially boosting workforce participation. Balanced CPI growth can stimulate employment.





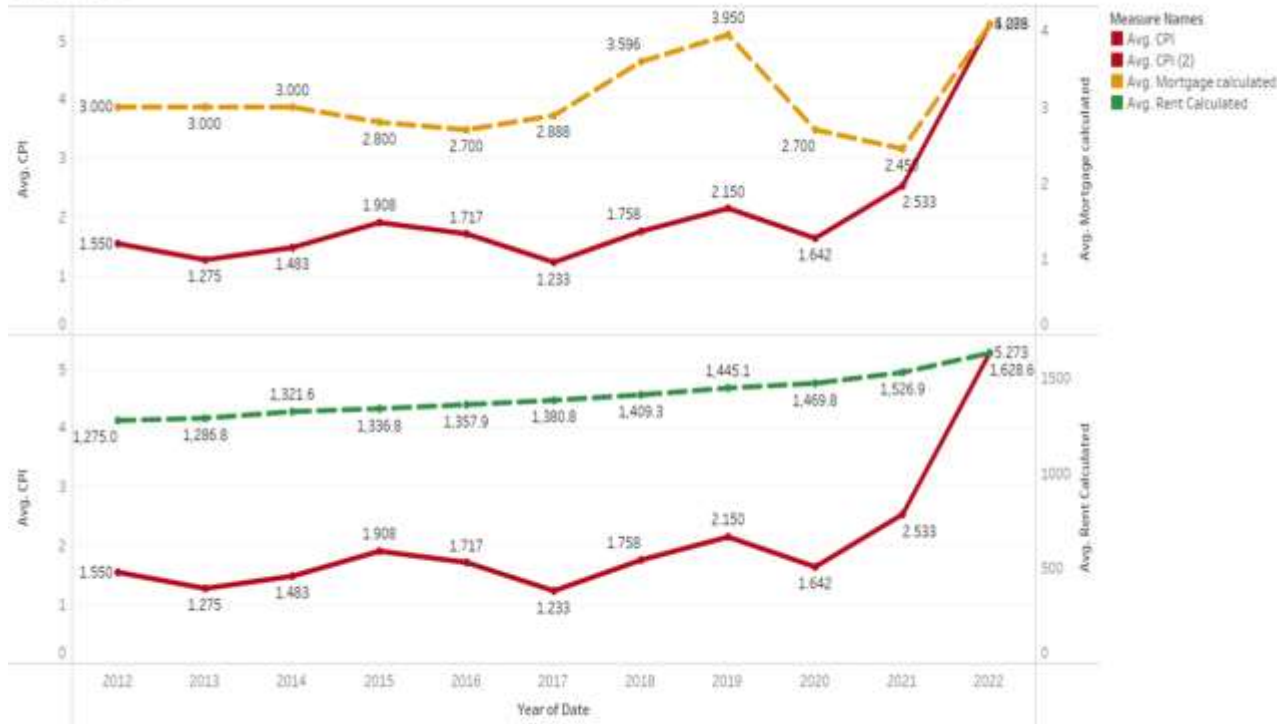
CPI and Shelter in Canada

2012 to 2022

Renting is the preferred option over owning a home in the face of inflation



Shelter & CPI



The trends of Avg. CPI, Avg. Mortgage calculated, Avg. CPI and Avg. Rent Calculated for Date Year. Color shows details about Avg. CPI, Avg. Mortgage calculated, Avg. CPI and Avg. Rent Calculated.

CPI Trend:

Over the past 10 years, the CPI trend for shelter has exhibited a steady increase, indicating a gradual rise in housing-related costs.

Renting vs Owning:

The trend between renting and owning, considering CPI, suggests that renting has maintained a relatively stable cost-effectiveness compared to the potentially fluctuating expenses associated with homeownership.

Correlation Analysis:

the correlation analysis between shelter costs and CPI indicates a steady alignment, highlighting a consistent relationship between housing-related expenses and overall consumer price trends.

Economic Inflation on shelter:

Results in higher costs for housing-related expenses, encompassing rent or mortgage payments, property taxes, and maintenance, contributing to an overall increase in the financial burden of securing housing.

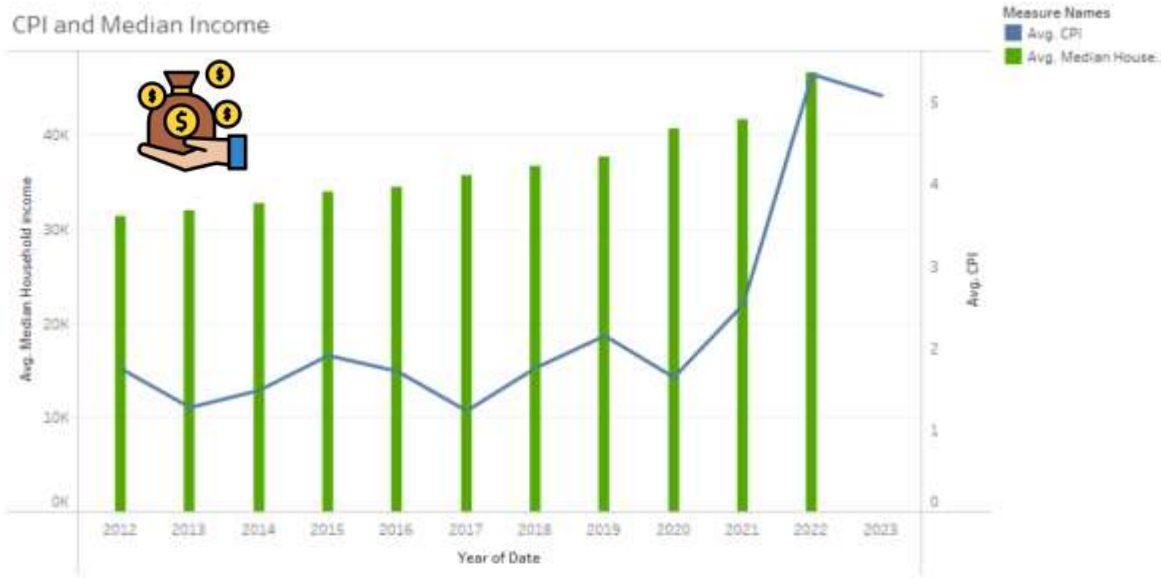


CPI and Income in Canada

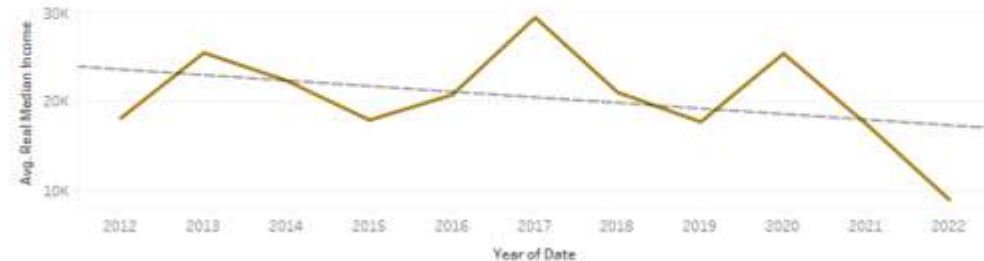
2012 to 2023

The economic well-being of Canadians has declined

CPI and Median Income



Real Income Adjusted to Inflation



Trends

CPI Trends:

Steady upward trend in Consumer Price Index (CPI), indicating a general increase in the cost of living.

Income Growth:

Positive trend in Median Household Income, suggesting an improvement in household financial well-being.

Correlation Trends:

Both CPI and Median Household Income show an upward correlation, but establishing direct causation requires further analysis.

Inflation on Cost of living

Consider the impact of inflation on purchasing power; if income growth doesn't keep pace with inflation, households may experience a decrease in real income.

It's important to consider the impact of inflation on purchasing power. While income is rising, if it doesn't keep pace with inflation, households may experience a decrease in real income, affecting their standard of living.



CPI and Crime Rate in Canada

2012 to 2022

Ontario, BC & Alberta Most Dangerous Places to Live in Canada

Key Drivers

Population & Crime rate Increase due to;

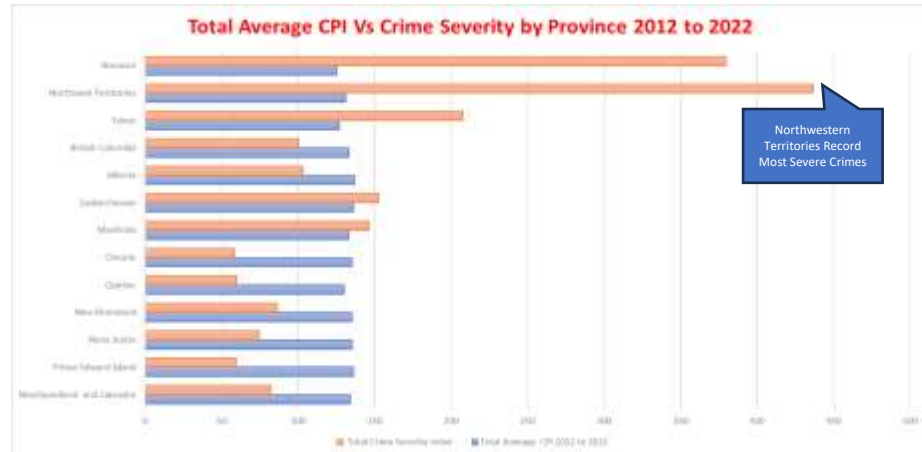
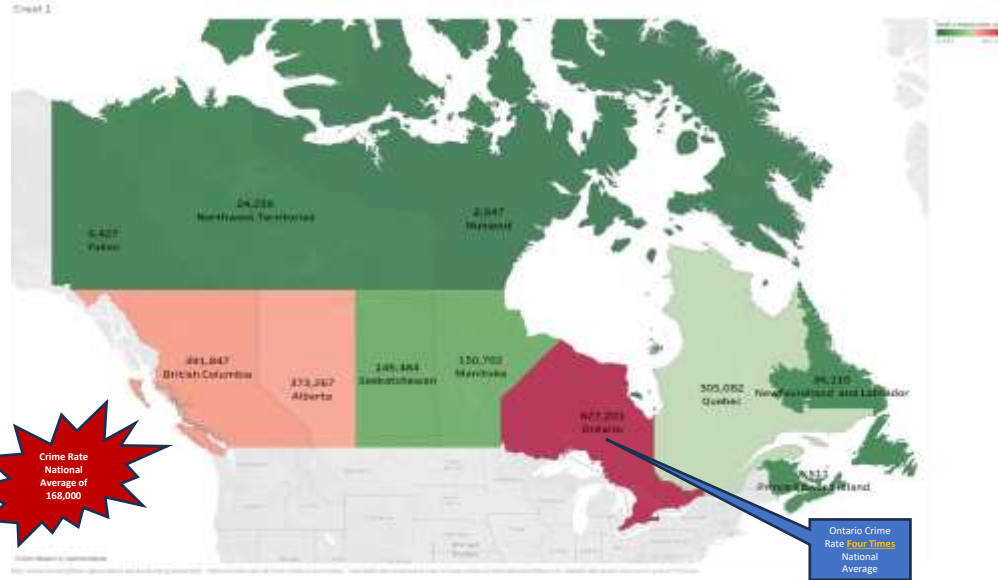
- ✓ Increase in temporary immigration numbers.
- ✓ Urbanization due to industrialization.
- ✓ The region is a vast area of arable land which also helps encourage population density.
- ✓ Ontario is also known for its natural diversity, including vast forests, beautiful provincial parks, four of the five Great Lakes and the world-famous Niagara falls.

- Popular crimes in the most dangerous places include- theft, breaking and entering.
- Rural Canada notorious for severe crimes- Homicide, manslaughter, robbery etc.
- Ontario, British Columbia & Alberta in top 5 Provinces with highest CPI index in Canada.
- Quebec safest place in Canada- 3% of total population are crime victims.



Notes: All years in this document covers 2012 to 2022.

Source: <https://www150.statcan.gc.ca>, Bank of Canada



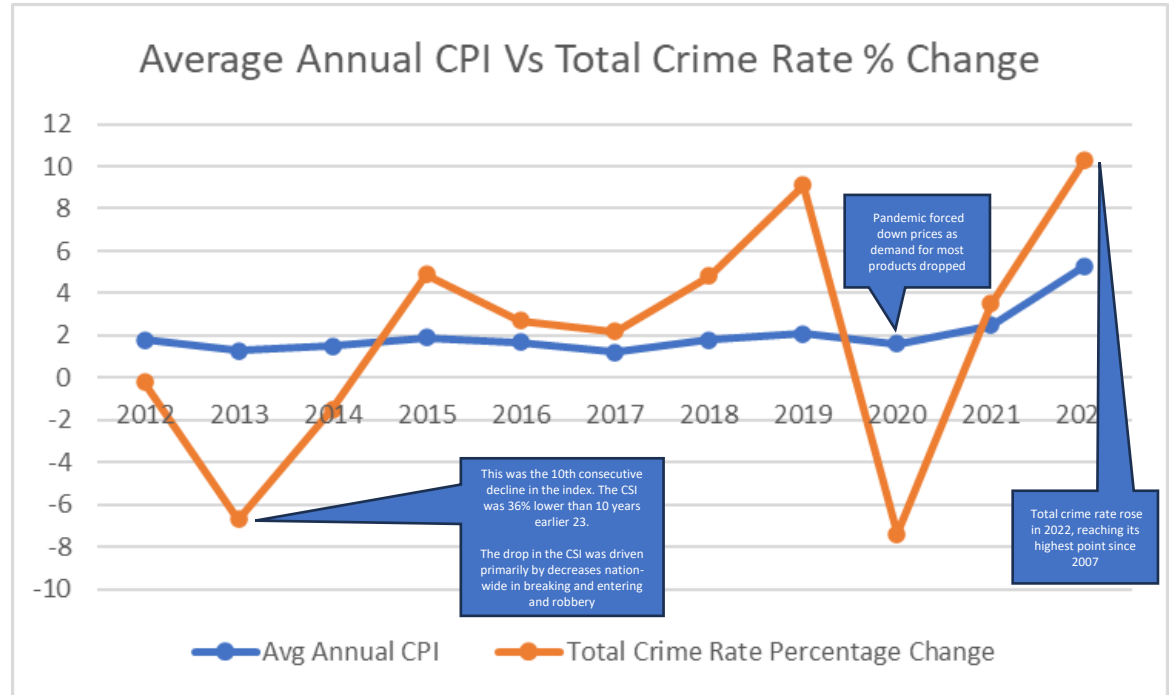
Crime follows Population Growth and Inflation

- **Upward inflationary pressures due to;**

- ✓ Supply chain disruptions, inflation is also impacted by several other factors such as food prices, gasoline prices, house prices, homeowner replacement costs, energy prices, and motor vehicles costs.
- ✓ In 2021, global food prices rose 'sharply', according to a recent report by United Nations (UN). The agency's Food Price Index showed a 28% increase since 2020. The reason for this jump was the high cost of inputs, ongoing pandemic, and volatile climatic conditions.
- ✓ Car prices have been impacted by chip shortages, resulting in the highest costs and shortage of new vehicles.

- **Increase in crime rate often caused by poverty or lack;**

- ✓ The increase in crime is attributed to several factors, including the pandemic, economic instability, and social inequality.
- ✓ The pandemic has led to increased stress and anxiety, which can contribute to an increase in crime.
- ✓ Economic instability can also lead to an increase in crime, as people may turn to illegal activities to make ends meet.
- ✓ Social inequality can also contribute to an increase in crime, as people who feel marginalized or disenfranchised may be more likely to engage in criminal activity



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Source: <https://www150.statcan.gc.ca>, Bank of Canada ,www.ctvnews.ca



Conclusion



The interplay between CPI and unemployment rates reflects the complex economic landscape, where *inflation can both challenge and stimulate* the job market.




The strong correlation between CPI and shelter costs highlights the *pivotal role of housing* in the nation's inflation dynamics, emphasizing the *need for effective housing affordability policies*.



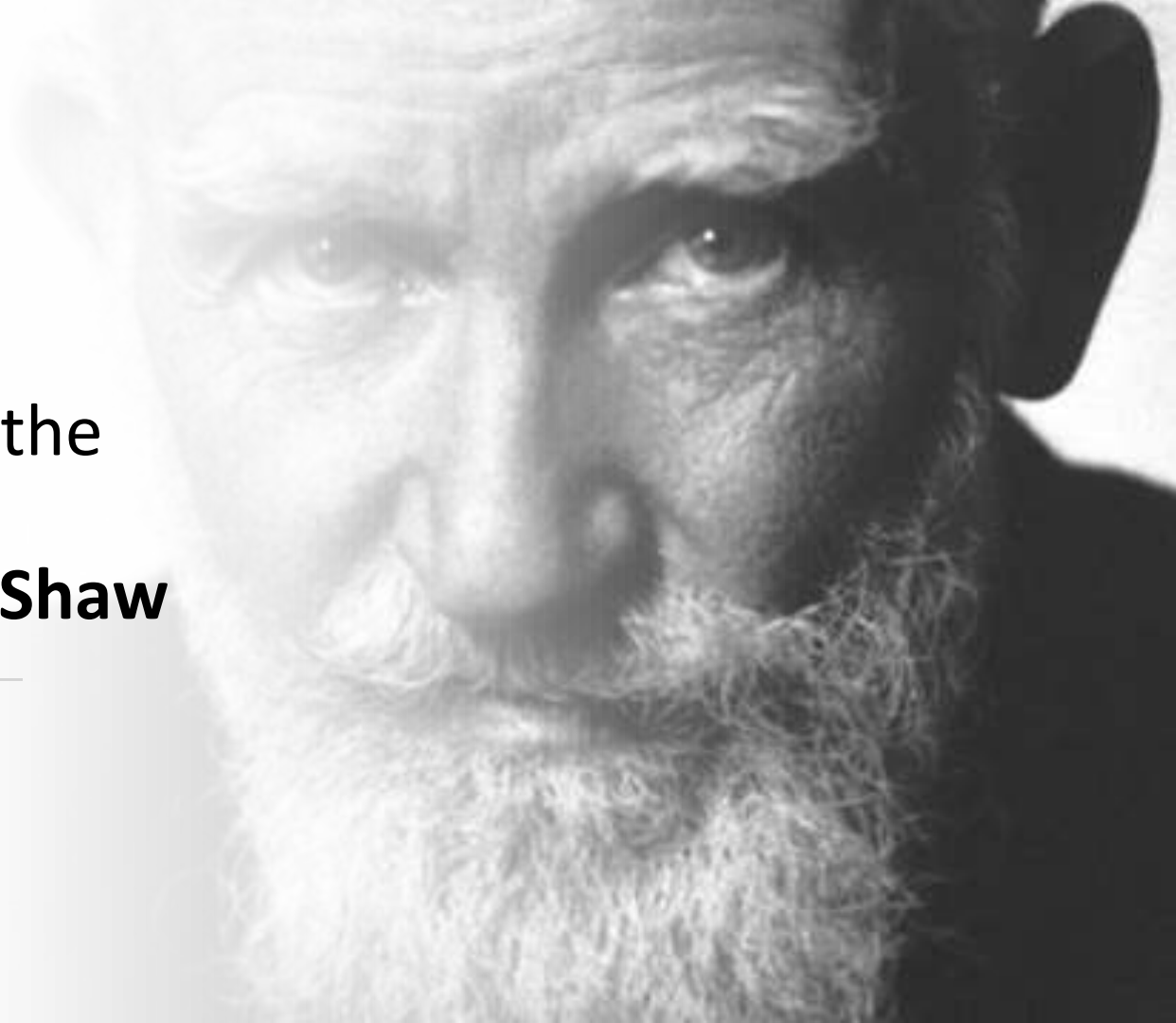
While incomes rise, they may not keep pace with inflation, leading to a decrease in real *purchasing power* and impacting overall household living standards.



Economic challenges, marked by rising CPI and supply issues, *exacerbate social inequalities*, contributing to urbanization, population shifts, and *a discernible rise in diverse criminal activities*.



“Lack of money is the
root of all evil.”
- **George Bernard Shaw**



Bibliography

Data sources from:

- <https://www150.statcan.gc.ca/>
- [Canada Mortgage Rates History \(1975 to 2024\) \(wowa.ca\)](#)

