

Inflation of Egg Prices Across Canadian Grocery Stores*

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After the COVID-19 pandemic, inflation has been a large economic issue for the majority of Canadians. This analysis studies the inflation of egg prices in 2024 and finds that prices have decreased compared to mid 2024. By understanding how the prices of staple grocery items fluctuate, we can gauge the effect of inflation on the general Canadian consumer.

Introduction

Groceries in Canada have been one of the consumer goods most affected by inflation. According to the Bank of Canada, the main reason for this is because grocery prices are affected by factors such as “cost of energy, labor, and transportation”, (Bank of Canada 2024). Past inflation trends in the United States show that groceries most affected by inflation are eggs, dairy products, and lettuce. In 2022, egg prices increased by 60% in the United States (CNBC 2023). This analysis studies Canadian egg prices as they are a common good most people buy and they are heavily impacted by inflation. Another reason why groceries are very expensive is because there is limited competition in the grocery market. Loblaws essentially dominates Canada’s market and practices price gouging (Appel 2024).

Data

The data for this analysis was sourced from Jacob Filipp’s Project Hammer, (Filipp 2024). SQL was used to clean and derive data related to egg prices. All figures were made using R (R Core Team 2021).

*Code available at : <https://github.com/redpinecube/grocery>

Vendor

12 Unit Egg Cartons sold in Canada have 2 main vendors : Loblaw's and NoFrills. This is a bit misleading since Loblaw's owns NoFrills but their prices are quite different as seen in Figure 1. However, price inflation and deflation seem to follow a similar trend for both vendors. In August 2024, average egg prices were the highest. Interestingly, the two vendors had similar prices in March.

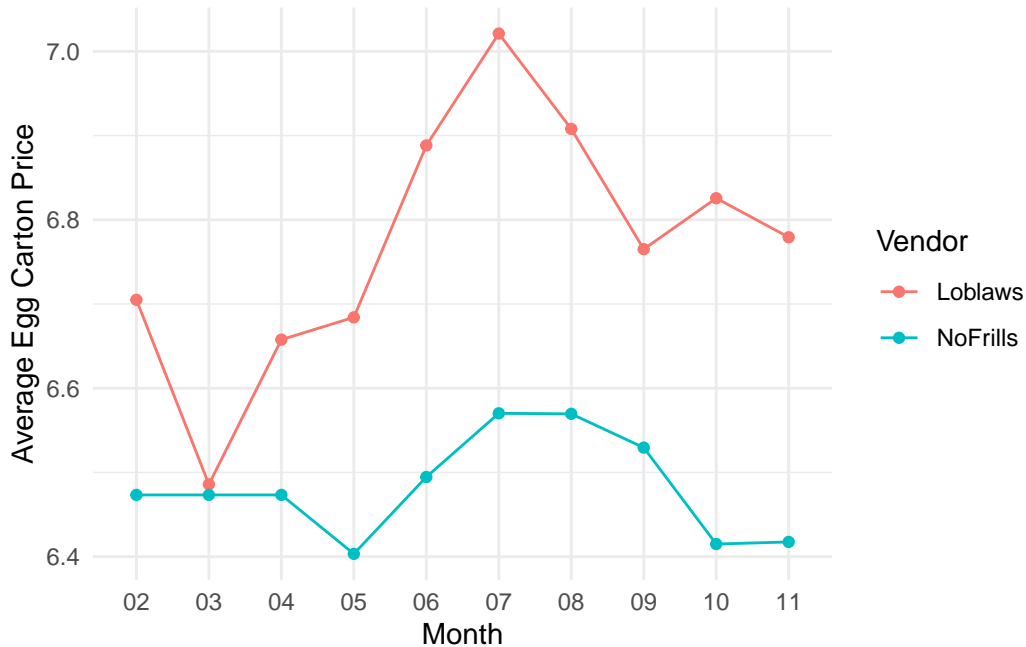


Figure 1: Average Egg Carton Prices By Vendor in 2024

Brand

The main brands that sell 12 unit egg cartons in Canada are : Burnbrae Farms, Goldegg, Gray Ridge, No Name, PC Blue Menu, PC Organics, President's Choice, and Rowe Farms. As seen in Figure 2, Burnbrae Farms is the most susceptible to price changes while No Name and the PC brands have remained consistent. Most prices by brand have started to dip towards the end of 2024 or are remaining consistent.

Egg Size

Some common egg sizes are : extra large, large, medium, small, and super sized. As seen in Figure 3, medium sized eggs and jumbo sized eggs are the most expensive eggs. Small eggs

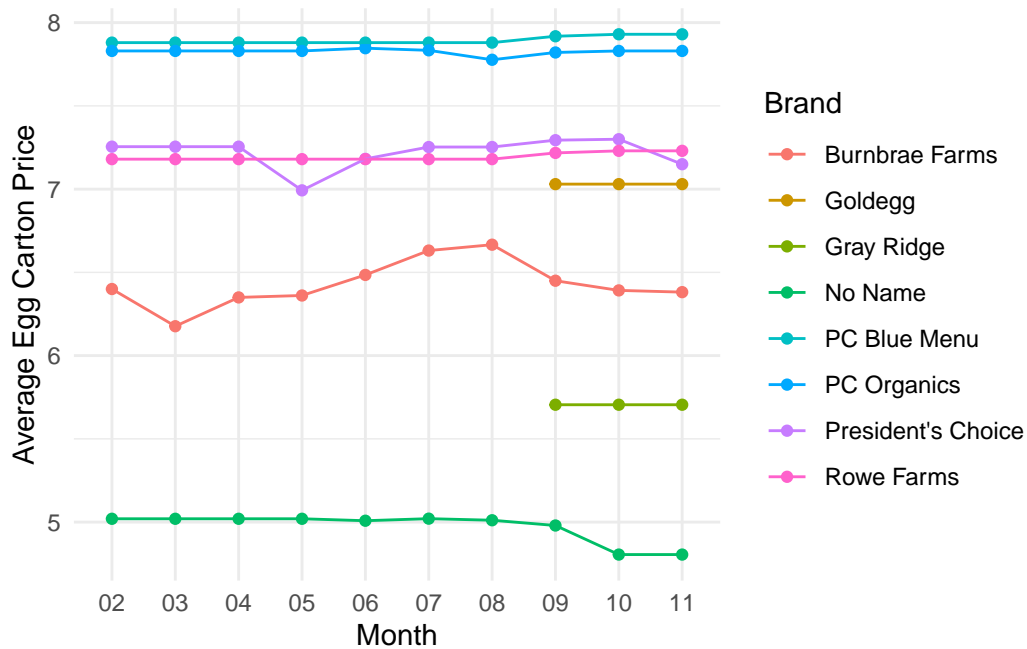


Figure 2: Average Egg Carton Prices By Brand in 2024

are cheaper than large eggs. Interestingly, the prices of extra large eggs have fallen in the past few months.

Measuring egg size categorically like this isn't the best data format as measurements like this can be subjective and change from brand to brand. These measurements are a weaker estimate, compared to measurements of weight.

Results

The biggest factor that affect egg prices is the vendor. As we can see from Figure 1, Loblaw's essentially dictates what prices eggs should have. If we see egg prices by brand, they are mostly stable. In the earlier months of the year prices were relatively lower than prices in the middle of the year. Prices are also decreasing towards the end of the year. The cheapest eggs are available from No Name and the most expensive eggs are the eggs from PC Blue and PC Organics. Smaller eggs are also cheaper than larger eggs. Using these results consumers can make more educated food choices to save money.

Discussion

The best way to reduce prices is to get rid of the Canadian grocery monopoly. Unfortunately, this is pretty difficult for the average consumer so some actionable ideas are to buy groceries from the brand No Name. Some other ideas are to eat more plant based meals, buy groceries that last longer such as beans and rice in bulk, and meal planning in advance, (Hughes 2024).

This analysis is not perfect due to missing data and bias. Outside of these major grocery chains, there are many smaller farmers who sell their food locally, their prices are not reflected in the data. Additionally, to understand the whole picture of food prices its important to take food substitutions into consideration. When prices are very high, people may opt to use food substitutions, this analysis fails to take food substitutions into account.

There is also a correlation between size and price but there are also some discrepancies which may be the result of egg quality. This factor wasn't taken into account in the analysis. We can't say that larger egg sizes cause higher prices.

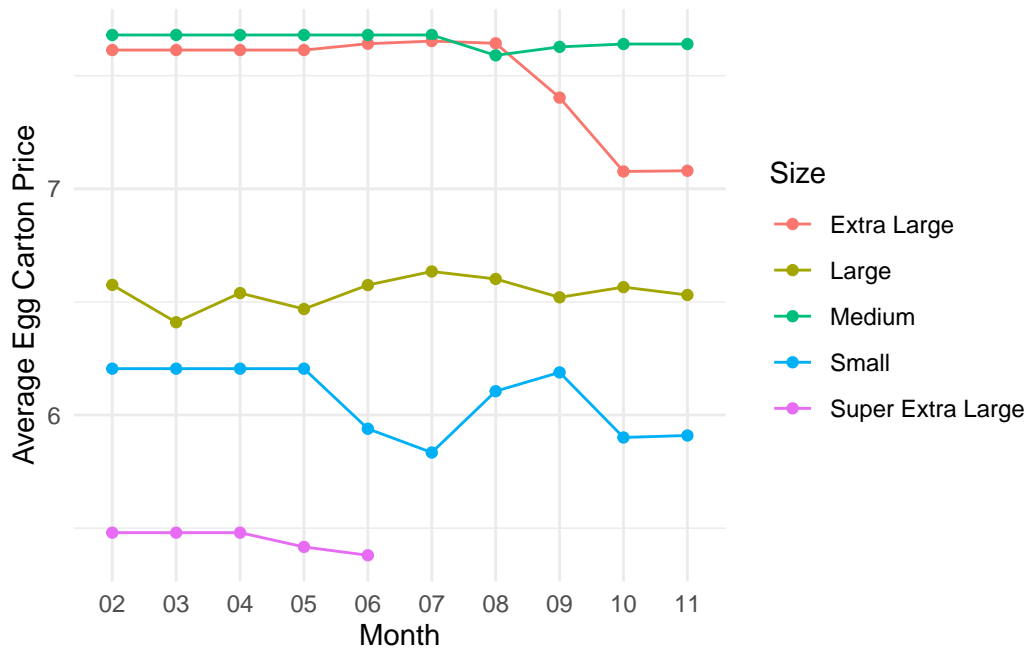


Figure 3: Average Egg Carton Prices By Egg Size in 2024

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