

My title*

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First sentence. Second sentence. Third sentence. Fourth sentence.

1 Introduction

Egg prices have fluctuated in recent years due to various economic and environmental factors (Bundale 2023). In Canada, egg pricing and marketing are regulated by the government. According to Ministry of Agriculture, Food and Agribusiness and Ministry of Rural Affairs (2023), the Canadian Hatching Egg Producers (CHEP) determines annual national production levels for hatching eggs with input from an advisory committee composed of industry and government representatives. These numbers are then allocated to provinces and adjusted throughout the year to meet demand. However, as Filipp (2024) noted, research on Canadian grocery food prices remains limited.

This paper examines the factors influencing egg prices in Canada. This approach aims to identify areas that could explain recent price trends, providing a foundation for future studies on the Canadian egg market.

[Results paragraph]

The remainder of this paper is structured as follows: Section 2 provides an overview of the data. We then present our results in **?@sec-result** and discuss the implications, limitations, and future research directions in **?@sec-discussion**.

The data gathering and analysis is done in R (R Core Team 2023) with the following packages: knitr (Xie 2014), tidyverse (Wickham et al. 2019), ggplot2 (Wickham 2016), dplyr (Wickham et al. 2023), arrow (Richardson et al. 2024), here (Müller 2020) and lubridate (Grolemund and Wickham 2011).

*Code and data are available at: <https://github.com/yulexun/projecthammer>.

2 Data

2.1 Measurement

The raw data is obtained in SQLite form from Filipp (2024)’s website named Project Hammer. The raw dataset contains two tables. The first table contains various product, product names, and the vendor of the products. The second table contains old and current price, as well as price per unit.

2.2 Cleaning

We clean the data with the `clean_data.sql` script and the `exploratory_data_analysis` R script. We retrieve data related to “White Eggs” and “Brown Eggs” from two tables, `raw` and `product`, with the following steps:

- Selects various columns including `nowtime`, `vendor`, `product_id`, `product_name`, `brand`, `current_price`, `old_price`, `units`, and `other`.
- Converts `price_per_unit` to a numeric format, stripping out symbols (like \$ and /item) and renaming it as `price_per_unit_numeric`.
- Joins `raw` and `product` tables on `product_id`.
- Filters for products containing “White Eggs” or “Brown Eggs” in their names and ensures `price_per_unit` is not NULL.

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