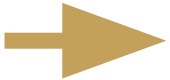
Exploring Economic Data

LHL P3, Option 1

Project Flow

STEP 1

- Viewing dataset
- Reading questions
- Loading data into Tableau



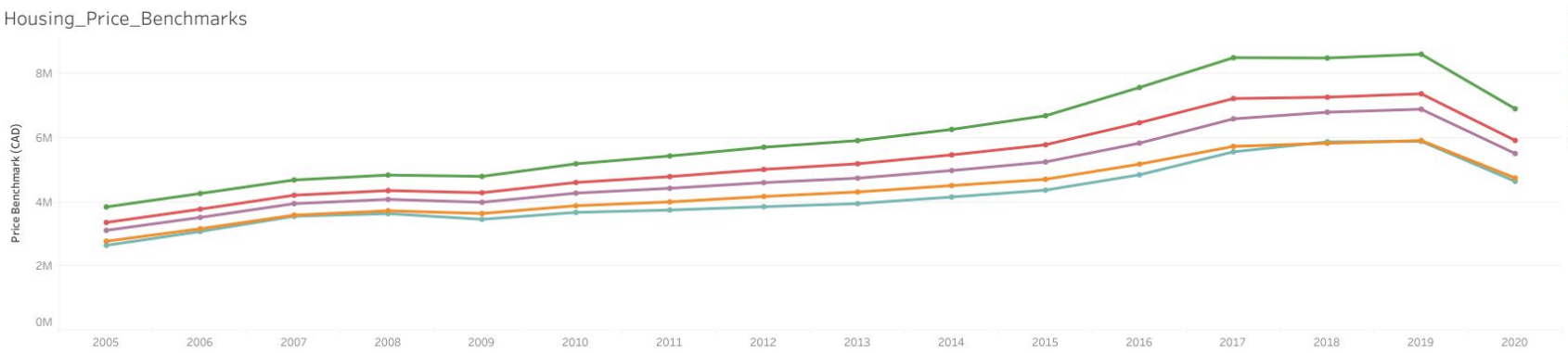
STEP 2

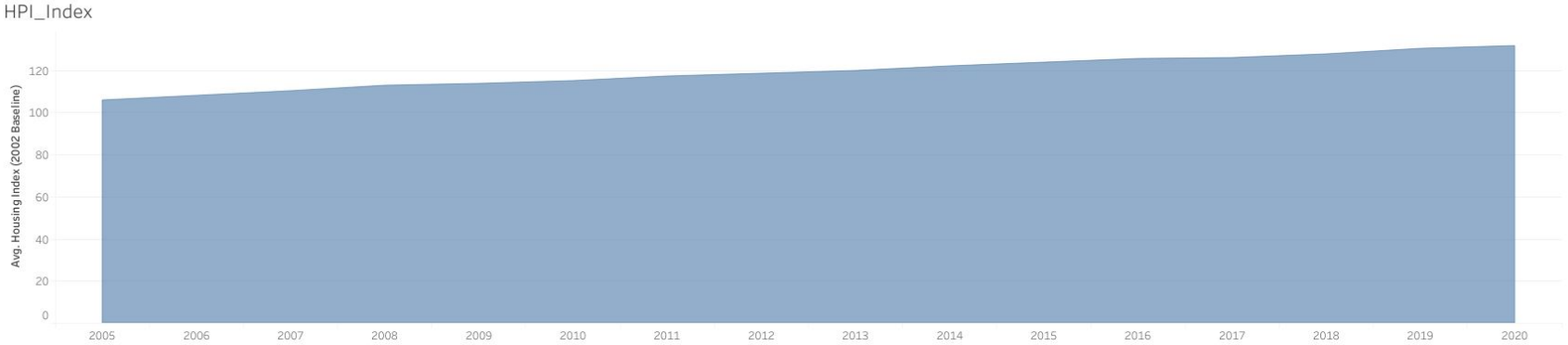
- Making visuals
  - Parameters
  - Calculations
  - Adjusting datatypes

STEP 3

- Interpreting visuals to answer questions

Visuals

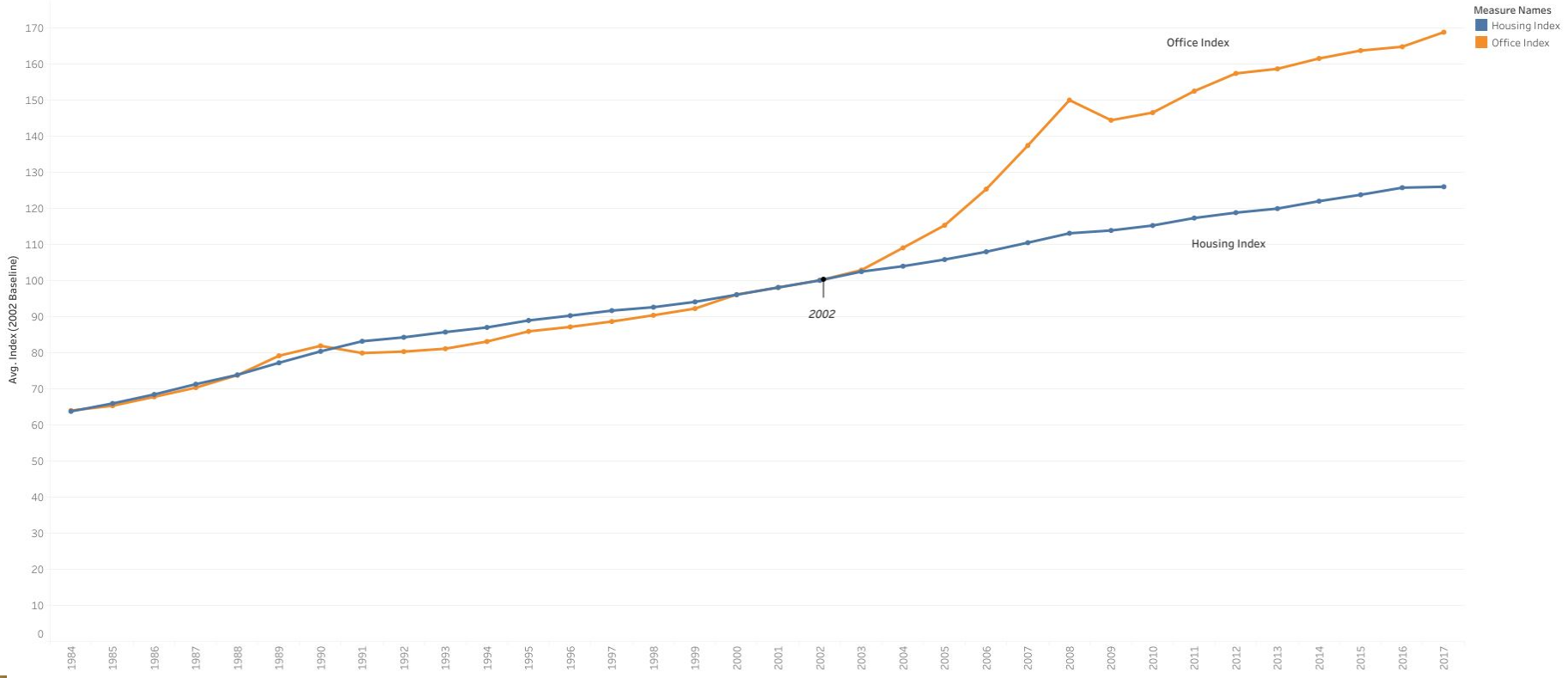




Comparing HPI and Housing Benchmark Prices

- 2009, 2020: There are dips in housing prices despite the Housing Index increasing
- 2015-2017: More growth in housing price than Housing Index

OI_vs_HPI

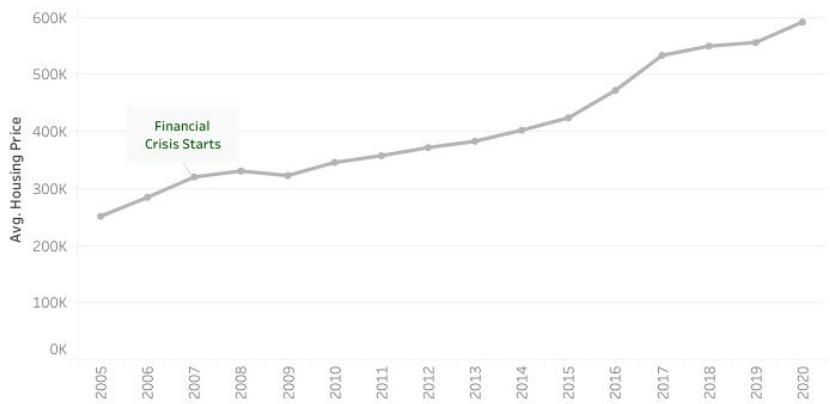


Comparing HPI and Office Prices

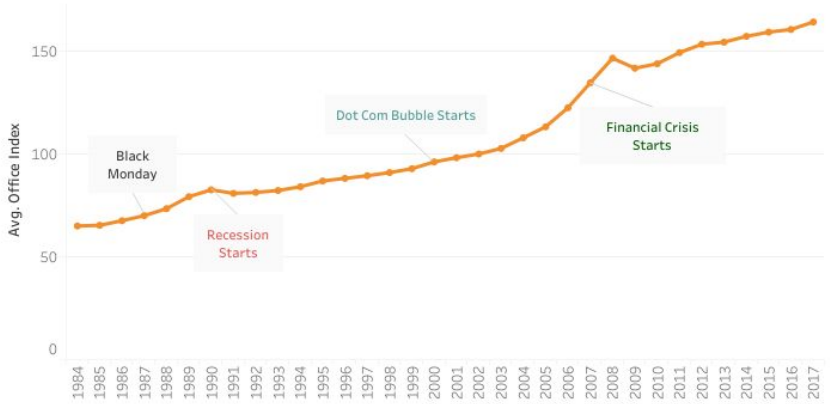
- Baseline for indices is 2002
- Office prices grow much faster than housing prices

Economic Crises

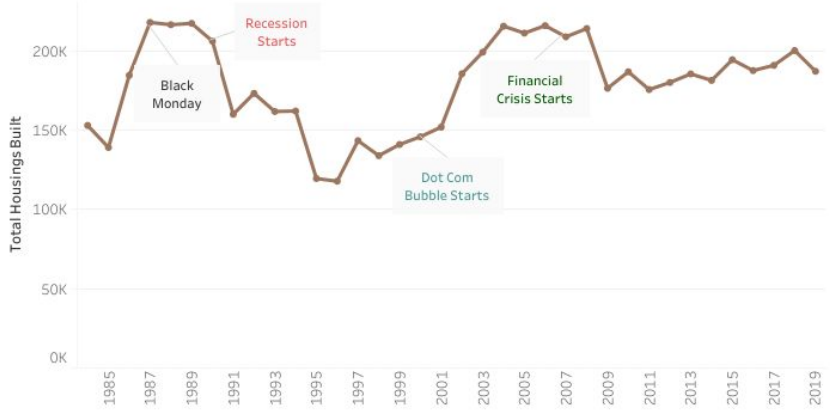
Aggregate_Housing_Benchmarks



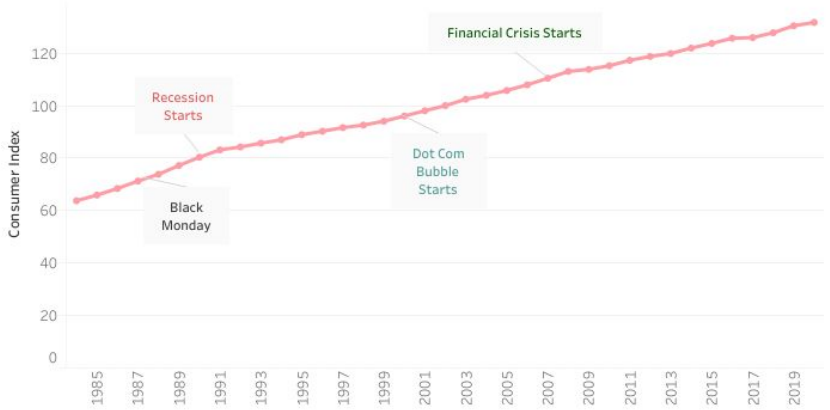
Office_Index



House_Constructions_Canada

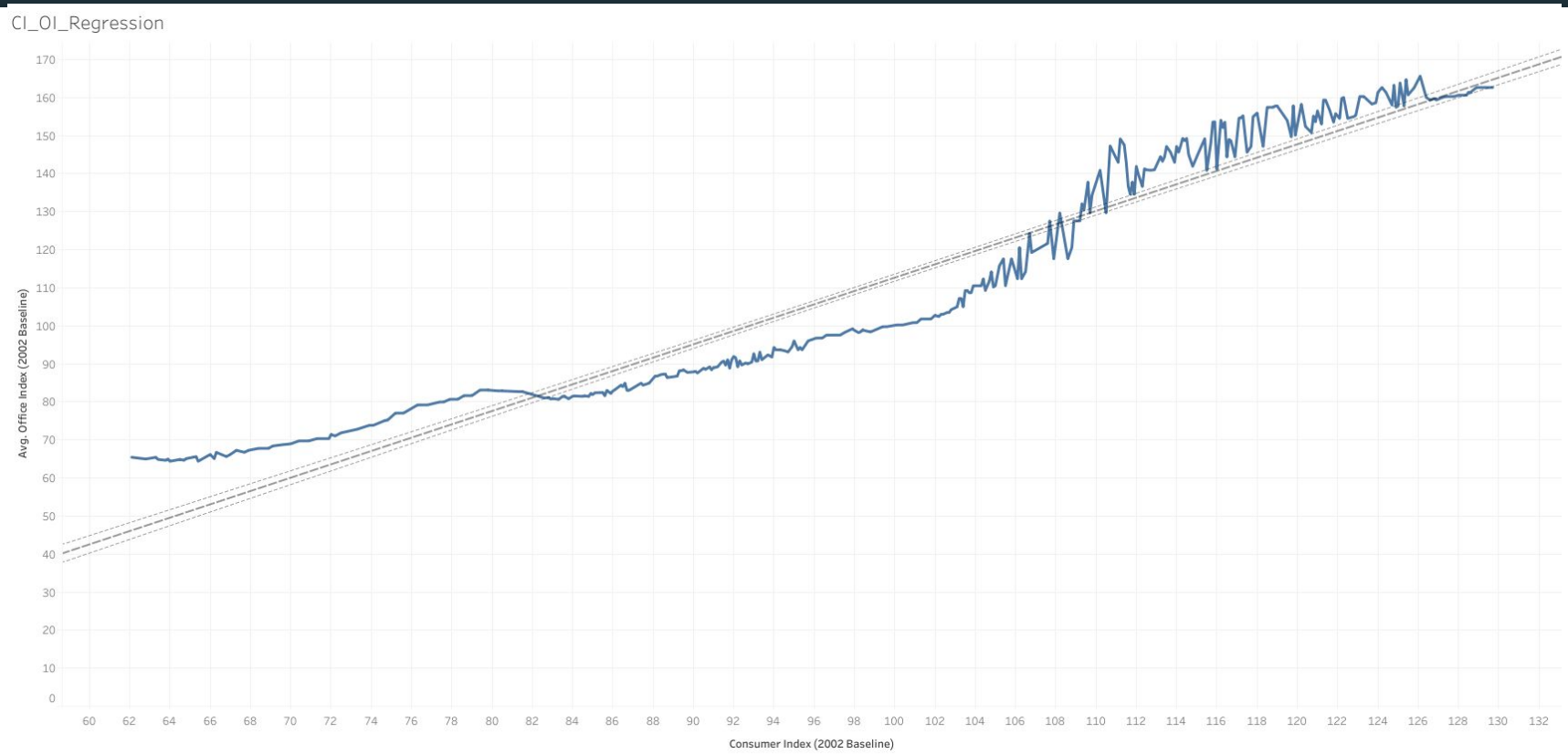


Consumer_Index



1. Black Monday (1987)
2. Recession (early 1990s)
3. Dot Com Bubble (2000 - 2002)
4. Financial Crisis (2007 - 2009)

- House Construction plateau after Black Monday
- Office Index slightly affected by Recession, especially compared to Consumer Index
- Recession and Housing Construction drop
- Financial Crisis; Office Index drops a couple years later, and Housing Construction drops soon after as well



Linear Regression between Consumer Index and Office Index

- P-Value < 0.0001
- R-Squared: 0.9289

- Relatively strong linear relation

Interesting Trend from Regression

- A linear relationship between Consumer Index and and Office Prices means that the proportion of offices being purchased by the population is generally the same.

- HYPOTHESIS: For something like constructing offices, it is favorable for the government to control the Price Index of offices so they can easily estimate how many need to be made, and how many are being bought sold. It avoids over-construction and under-selling.
    - Analysis of related economic indices that relate to Consumer Index would be a way to test this

Afterword

Problems, and How to Improve

- Data formatting of data set provided
  - Some data types required adjustments
  - Difficult to make some visualizations in Tableau
- Understanding the data terminology (business terms)

- Creating a strong final dashboard
  - Animations of some dynamic views
  - Summarizes my findings much more easily
- Reformat and clean the data set, in order to more easily create visualizations