

# Housing Research

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8/17/2023

## Target question:

The goal of this report is to identify and possibly rank contributing factors to large national increases in average home prices. Additionally policy suggestions will be made in accordance to this finding in the conclusion section.

## Step 1: Import data

### Response Variable:

Change in Median home price.

### Predictor Variables:

1. Inflation.
2. Average 30 year mortgage rate.
3. National unemployment rate
4. National housing inventory
5. United States building permits

TODO: Data cleaning, Inflation uses year per row, mhp uses quarter per row, choose one. mort\_30 data needs to be thinned to quarter values. mhp will be used to create month over month price differences.

I will use date, Quarter for each dataframe: quarter year. ex: Q1 1965

```
# Start: Jan 1914, End: Dec 2022, Monthly.
natl_infl<- read_csv('US_inflation.csv', show_col_types = FALSE)

# Start: Jan 1963, End: Apr 2023, Quarterly.
mhp <- read_csv('median_home_price.csv', show_col_types = FALSE)

# Start: Apr 1971, End: Aug 2023. Weekly.
mort_30 <- read_csv('mortgage_30.csv', show_col_types = FALSE)

# Start: Jan 1950, End: Dec 2022, Monthly.
unemploy <- read_csv("US_unemployment.csv", show_col_types = FALSE)
```