

Real-estate in Fortune 500 Cities

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Business Problem

A real estate investment firm is exploring housing markets in U.S. cities with Fortune 500 companies.

Key Question: Does a larger Fortune 500 presence drive higher housing prices?

Decision Need: Which city offers the best balance of corporate presence and housing affordability for investment?

Executive Summary

Methodology:

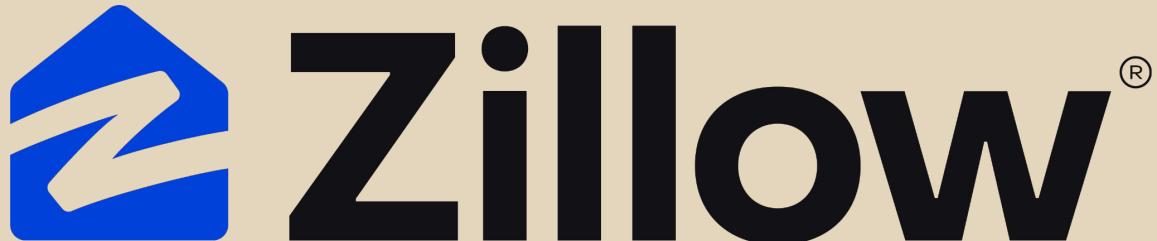
Our analysis utilized multiple linear regression with train-test validation, utilizing log transformations to address skewness in the data. We also tested both continuous and categorical fortune 500 variables while controlling for population and crime rates.

Recommendation:

If looking to invest in lower priced homes, choose Atlanta, GA.

If looking for higher priced homes, choose San Francisco, CA.

Data Journey



kaggle



Data Journey

Initial Predictors:

- City - Large and Small metropolitan areas
- State - U.S. State the city is located in
- Median_Price - The median house price of a single-family home in a given city
- Fortune_500_Count - Number of Fortune 500 companies in a given city
- Population - Number of people in a given city
- Violent_Crime - Number of violent crimes committed in a given city

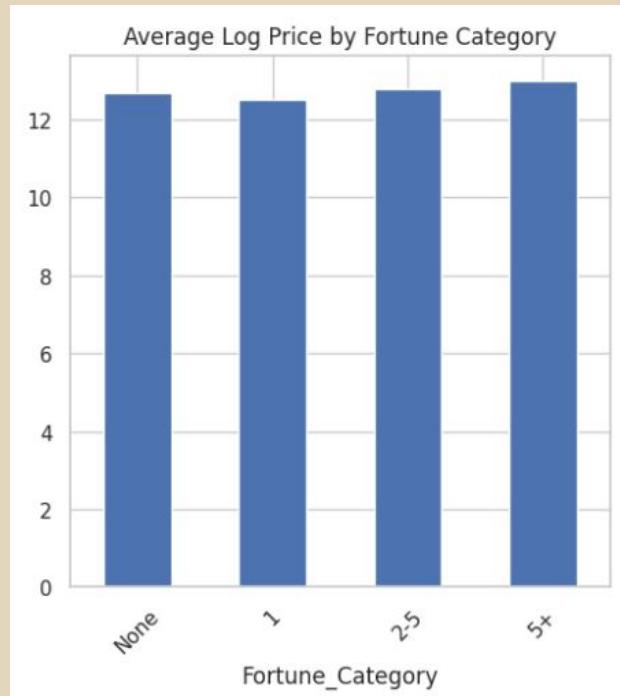
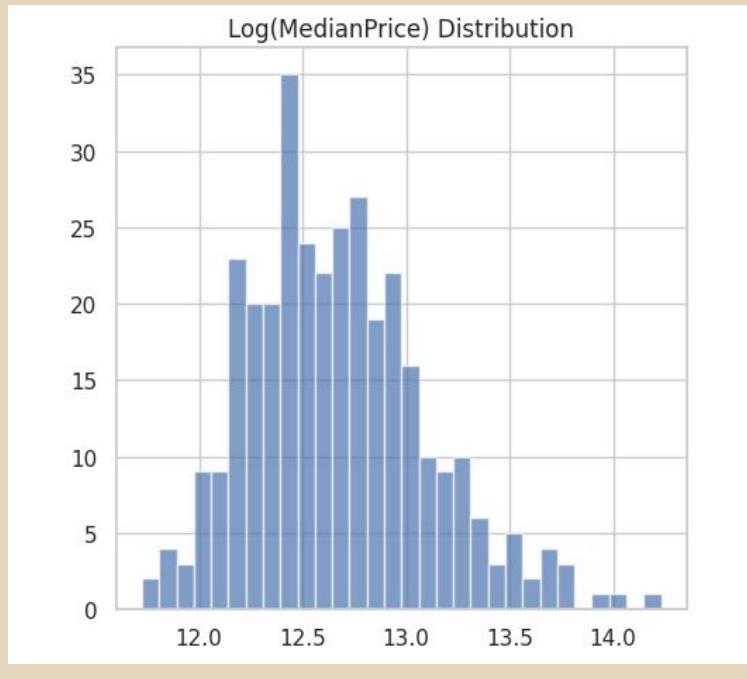
After cleaning, the data totaled 335 cities observed

Data Assumptions

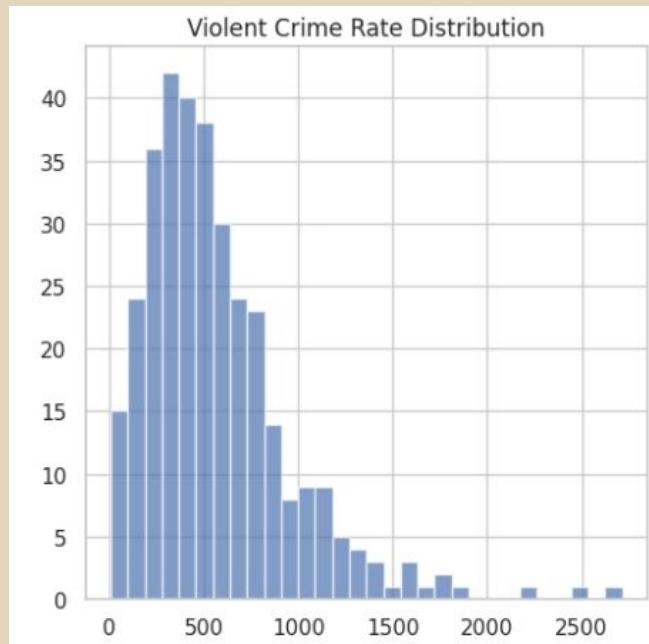
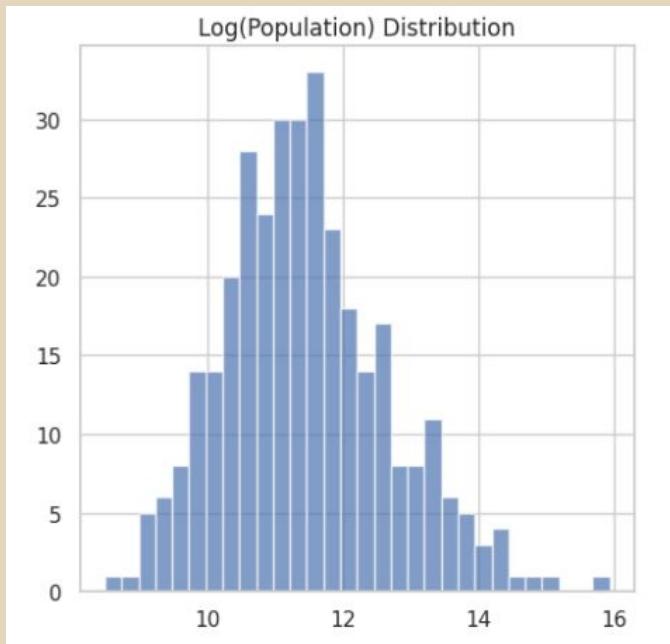
- Constructed dataset with data drawn from November 2024, joined on State and City
- Other predictors were considered, but were dropped due to the addition of excessive null values. Fewer predictors introduces more bias
- We assume outlier cities represent true variation



Median Price



Price Drivers



Interval Estimates



Conclusion/Next Steps

- There is not significant relationship between Fortune 500 and median price.
- **Drivers:** Population and violent crime have a greater impact on median house price.
- **Recommendation:** Focus on investing in housing with low median price and low crime, such as Atlanta, GA as they will likely increase in value over time.

QUESTIONS?