



ZILLOW REAL ESTATE PRICES FORECAST



Agenda

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Introduction

In the dynamic world of real estate investment, making informed decisions is paramount to success

A market analysis is conducted to identify areas of high demand and growth for optimal investment.



Problem Statement

What are the top 5 best locations to invest in?

The main focus is to leverage time series modeling techniques to forecast real estate prices for the top 5 best zip codes to invest in.



Objectives

- To evaluate Return on Investment (RoI).
- To identify underlying patterns, trends, and seasonality.
- To build a time series predictive model and forecast prices.
- To evaluate the model's performance.



Data Understanding

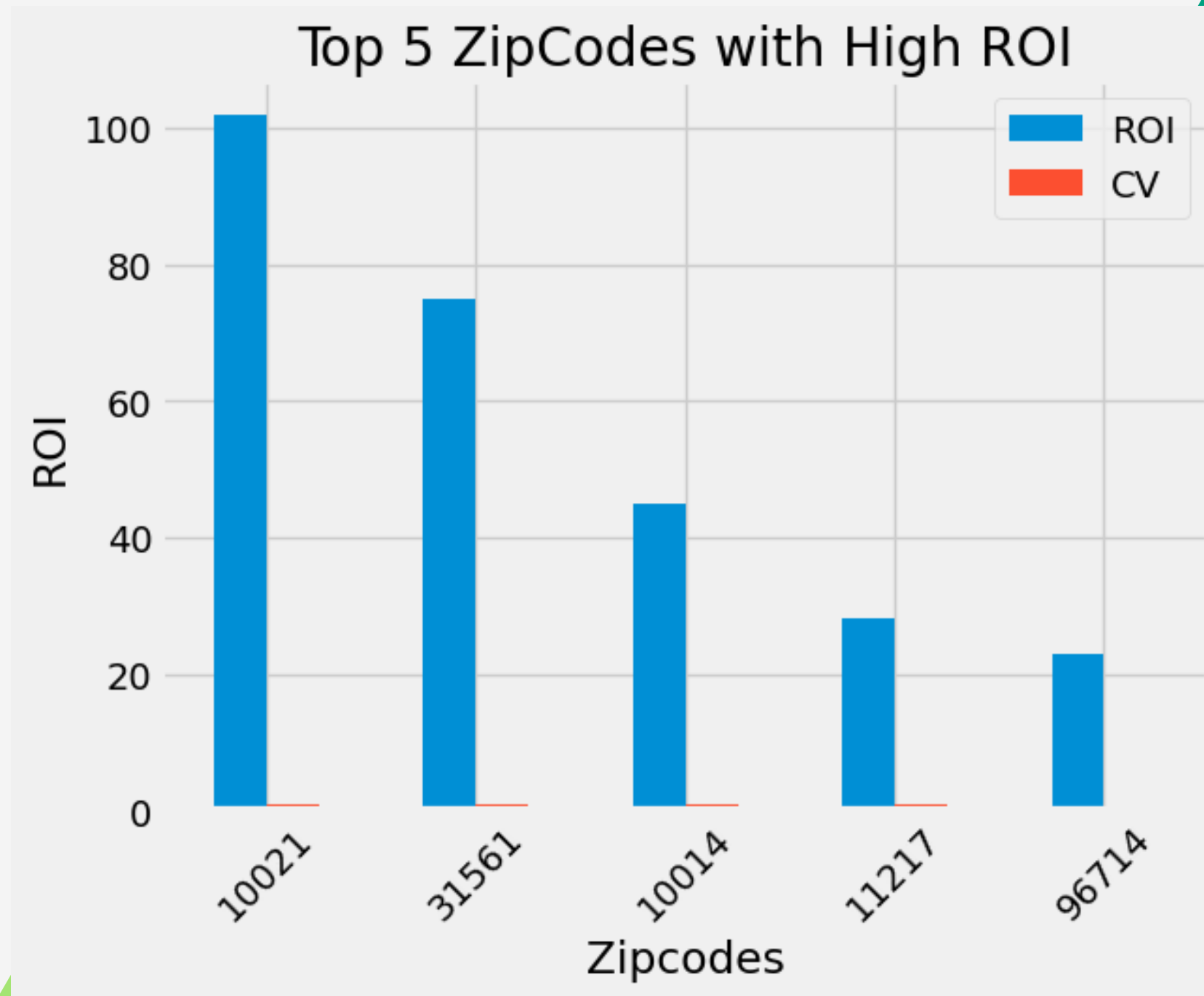
The dataset consists of historic median house prices from over 14,000 regions in the USA.

It covers a time period of 22 years, specifically from April 1996 to April 2018.



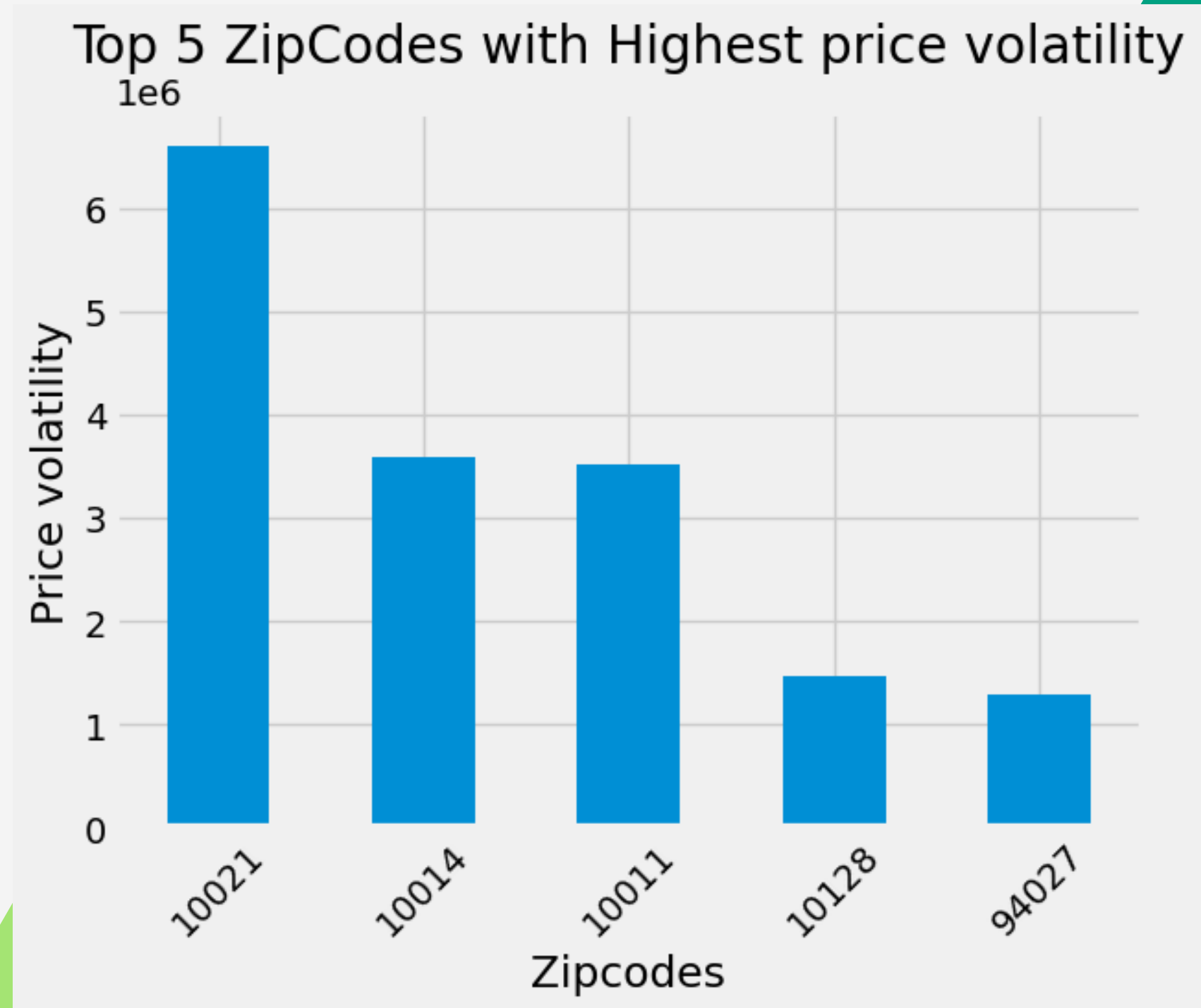
Data Analysis

The plot shows The top 5 zip codes that had the highest ROI and low CV(risk).



Data Analysis

The plot shows The top 5 zip codes that had the highest price volatility.



Modeling

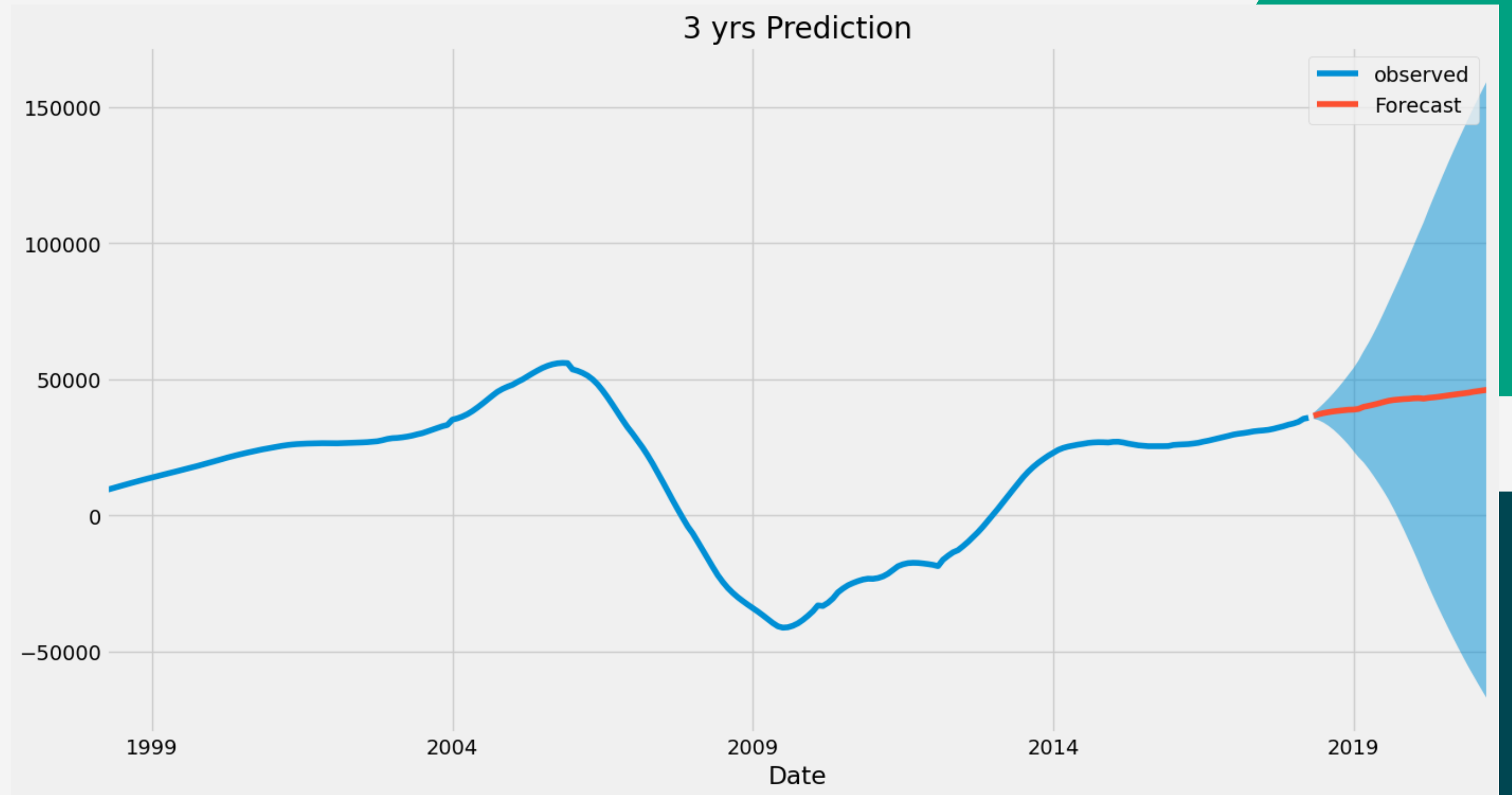
The final Model had an absolute percentage error of approximately 5%.

Forecasted values deviate from the actual values by around 5% on average.



Forecast

Predicts an upward trend in the future.



Conclusion

- The final Model had a good fit.
- The model had an absolute percentage error of approximately 5%.
- Investment decisions should balance risk-return trade-offs by considering both ROI (return potential) and CV (risk).
- A positive correlation between ROI and CV means the higher risk the higher the ROI.



Recommendations

- The company should look to invest in these three cities; **New York**; 10021, 10014, 11217, **Sea Island**; 31561 **Kilauea**; 96714. New York potentially being the most profitable
- Avoid the city of Atherton due to the high price volatility and low returns.
- Other factors like amenities, infrastructure development, and urbanization should be looked into.



THANK YOU.

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