Spatio-Temporal Modeling of California Real Estate Investment Activity - Executive Summary

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Opportunistic real estate investors seek out markets where the current market value of properties is less then their intrinsic value, and profit from an eventual market correction over time. To identify these markets, an investor must look for property specific factors, like its price and condition, a rather costly and time consuming process. However, to assess whether a market is actually undervalued or simply a poor market, an investor must identify broader characteristics, such as the economic health and demographic of a region, in order to find areas where market dislocations will eventually correct. This project focuses on finding these kinds of broader market drivers behind overall real estate investment activity in California over the past 15 years.
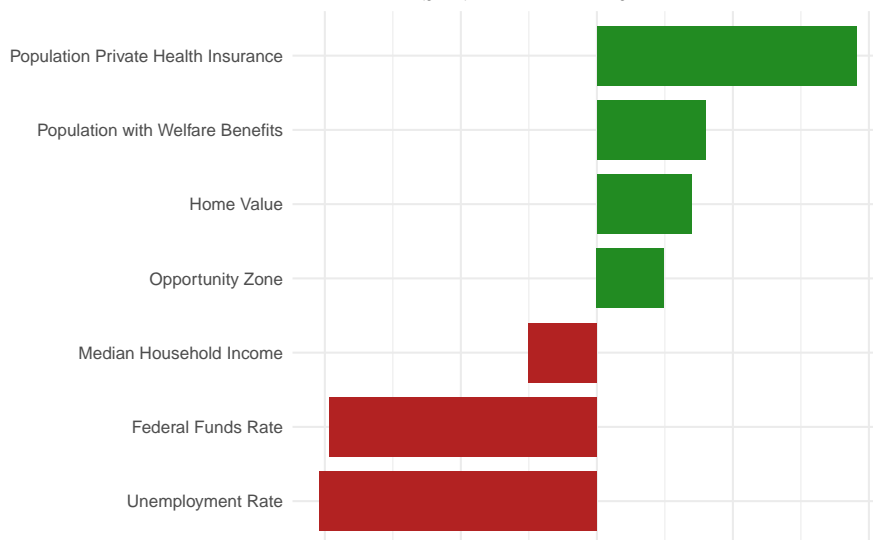
This project makes use of historical real estate deal data from Preqin, combined with economic and demographic variables from the Bureau of Economic Analysis, U.S Census Bureau, IRS, Zillow, and the Federal Reserve. The project employs a statistical model that identifies the most important variables that drive deal volume over towns in California, while also capturing the spillover effect between neighborhoods, and how market momentum drives investor action.

Key findings from the project suggest the strongest drivers of overall investor activity in a town are macroeconomic, such as regional unemployment rates, and federal interest rates, which have negative effects on deal activity when they rise. However, several socioeconomic factors have significant negative and positive effects on deal activity. Variables like a town's population on welfare benefits, overall home value, and tax deductions for investment ("Opportunity Zones") contribute to deal activity. The project also finds that the spillover effect between towns is significant for towns near each other, particularly within 20km.

Overall, while it is difficult to make conclusions about positive and negative drivers opportunistic investors specifically, the report still identifies what factors are important for all types of investors in the market.

Strongest Predictors of Deal Volume in California
Positive effects (green) drive deal volume; negative effects decrease deal volume

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