

Project: The Effect of Rent Control on Housing Prices

The property price and the demand for properties in Dublin is one of the most prominent discussion of the hour. The advancement of Ireland at a global stage in the field of technology, healthcare and education sector has attracted national and international talents around the world to visit, study and work in Ireland especially in last four to five years. Accommodation is the basic need and due to the increased demand, the rental and housing prices rose at a great pace and there was a need to control this exponential rise, leading to the emergence of rent control policies as an initial solution to these problems. This project aims at drilling deep into the roots of rent control policies, its implementation and impact on rental and housing market. This area of rent control was under study in other parts of the globe using regression models of statistical and machine learning techniques but there was no significant work carried out for Irish market thus this project being the new chapter in Irish rental and housing market with respect to rent control policies. “The Local Electoral Areas were categorised as rent pressure zones (RPZ) where rents are highest and rising where households are having greatest difficulty finding affordable accommodation” (RTB,2016). The impact of rent control was determined by comparing the housing prices in rent pressure zones and non-rent pressure zones and assessing the reasons behind the same. The implementation aspect of this project includes data sourcing from daft.ie using python web scrapping, data cleaning and feature engineering using R, application of machine learning models using R-shiny package in R studio and visualization with tableau. Models were built using Multiple linear regression, Gradient boosting machine, Random forest and Neural networks, outputs of all the models were compared where Random forest performed better than the rest of the models with the correlation value of 0.74 between predicted and actual values. Later results are analysed and interpreted using tableau software. After analysing the results, it was concluded that the rent control had an impact on housing market in reducing the number of properties sold in rent pressure zones though it did not result in decline of average housing prices, but it did arrest the exponential price growth in rent pressure zones.