

Abstract

It is essential to control for property price determinants since there could be created the price bubble, and its burst would have harmful effects on the economy. Thus, this bachelor thesis aims to show the best determinants and models for forecasting the apartment prices in Czechia and its regions with the use of panel data and time series from the Czech Statistical Office. After stating hypotheses of variable's expected impacts on apartment prices, the most important determinants appeared to be the average wage, unemployment rate, natural population growth, and the building plot price. The best results are found by using econometric regressions as the fixed effects, the first differences or the classical ordinary least squares method. I also use the heteroskedasticity and autocorrelation consistent standard errors for better robustness of coefficients. Moreover, the lasso method is applied for dealing with multicollinearity and over-fitting, which are fixed by the variable selection. In most cases, the lasso improved prediction accuracy. However, the first difference regressions worsen the forecasts after the lasso penalisation.