Abstract: This thesis evaluates the usefulness of vector and Bayesian vector autoregression in forecasting inflation in the Czech republic one year ahead. The usefulness is measured by statistics which are based on pseudo out of sample prediction. Many VAR and BVAR models are estimated during analysis and the ones with the best properties are chosen. Thus the model is found by data mining. As useful as this could be, reader should have its limitations in mind. The prior used in BVAR is a modification of standard Minnesota prior. If national bank is credible enough, inflation should not be far from bank's target. Prior is thus modified in the way, which places more emphasis on inflation targeting. At the end those pseudo out of sample VAR and BVAR models proved to be better than random walk or AR process. However, the models differ based on the evaluation period we choose. If the time of financial crisis is also included in estimating process, prediction for 2016 are overestimated. Only one model gives quite good estimates – our modified prior model.

Keywords: forecasting, inflation, Bayesian vector autoregression, modified Minnesota prior