

Abstract

The gross domestic product (GDP) is an essential measure of the state of economic activity and serves as a crucial tool for policymakers, investors, or businesses. However, the official GDP estimate in the Czech Republic is only available with a lag of approximately 60 days, and the Czech National Bank (CNB) announces its GDP forecast once in each quarter. This thesis focuses on predicting GDP growth in the current quarter, referred to as nowcasting. I employ several methods to nowcast the real GDP growth in the Czech Republic in a pseudo-real-time setting and compare their performance. Additionally, I investigate the possibility of creating an ensemble model by using a weighted average of several nowcasting models. The results suggest that the Dynamic Factor Model (DFM) performs best in the GDP nowcasting task, and its predictive accuracy is comparable with the official CNB nowcast. Furthermore, the model averaging process yields accuracy close to the best individual model while addressing model uncertainty. The GDP nowcast of the DFM will be made available to the public in real-time on a website and updated with a daily frequency.