Abstract

In recent years, due to developments in information technology, large-dimensional datasets have been increasingly available. In particular, there is a large dataset of Chinese monthly data collected by the government and private sector that can be used to provide a timely and more accurate forecast of Chinese macroeconomy. Forecasts can be updated as soon as the recent monthly data being available. This helps us to notice the changes once the economic signals are coming. To exploit this large amount of information, we need an appropriate econometric model. Simple regression models or time series models, such as vector autoregression, face degrees of freedom and multi-collinearity problem and cannot incorporate more than a few variables. To solve the problem, this project focuses on one of the widely-used approaches, the factor model, and shows how it can be used in forecasting Chinese nominal GDP. We will show the steps in the forecast process and discuss the possible future works.