

## Abstract

This thesis examines the applicability of Google Econometrics – the use of search volume data of particular queries as explanatory variables in time series modeling – in the case of the Czech Republic. We analyze the contribution of Google data by comparing out-of-sample nowcasting performance and in-sample fit with control variables in three related areas: using an autoregressive model for unemployment, vector autoregression and logit models for GDP and household consumption, and Granger causality test for consumer confidence.

The improvement in quality of unemployment nowcasting is modest but statistically significant; sentiment index based on Google queries shows reciprocal relationship with the official Consumer Confidence Indicator, and it also provides superior nowcasts for household consumption as well as in-sample fit in logit models; its performance in GDP nowcasting is average among control variables. These conclusions proved stable also on an extended dataset.

In overall, the results suggest that Google Econometrics is applicable also to the Czech Republic, despite the fact that the internet penetration rate and Google popularity was lower over the analyzed period compared with developed economies where these methods were usually tested. In the future, Google data may be used together with other leading and coincident indicators to assess the current state of Czech macroeconomic variables that are available with a delay or with a lower frequency.