

Microdata Imputations and Macrodata Implications: Evidence from the Ifo Business Survey

Christian Seiler*

Ifo Institute

Poschingerstr. 5, 81679 Munich
+49(0)89/9224-1248

Christian Heumann

Department of Statistics,
University of Munich

Ludwigstr. 33, 80539 Munich
+49(0)89/2180-3697

Abstract

A widespread method for now- and forecasting economic macro level parameters such as GDP growth rates are survey-based indicators which contain early information in contrast to official data. But surveys are commonly affected by nonresponding units which can produce biases if these missing values can not be regarded as missing at random. As many papers examined the effect of nonresponse in individual or household surveys, only less is known in the case of business surveys. So, literature leaves a gap on this issue. For this reason, we analyse and impute the missing observations in the Ifo Business Survey, a large business survey in Germany. The most prominent result of this survey is the Ifo Business Climate Index, a leading indicator for the German business cycle. To reflect the underlying latent data generating process, we compare different imputation approaches for longitudinal data. After this, the microdata are aggregated and the results are compared with the original indicators to evaluate their implications on the macro level. Finally, we show that the bias is minimal and ignorable.

JEL Code: C81, C83

Key words: Business survey, Longitudinal data, Imputation, Nonresponse

* corresponding author, Email: seiler@ifo.de