Estimating monthly Labour Force Figures during the COVID-19 pandemic in the Netherlands Jan van den Brakel Statistics Netherlands and Maastricht University

Official monthly statistics about the Dutch labour force are based on the Dutch Labour Force Survey (LFS). The LFS is a continuously conducted survey that is designed as a rotating panel. Data collection among selected households is based on a mixed-mode design based on web interviewing, telephone interviewing an face-to-face interviewing. Monthly estimates about the labour force are obtained with a structural time series model.

Due to the COVID-19 pandemic, the Netherlands went in a lockdown on March 16, 2020. Due to this lockdown, face-to-face interviewing stopped. It is anticipated that this has a systematic effect on the outcomes of the LFS. At the same time, it can be expected that the lockdown effects the real monthly labour force figures. The lockdown indeed marked a sharp turning point in the evolution of these series and strongly increases the dynamics in the figures of the labour force series.

In this paper it is explained how Statistics Netherlands produces monthly labour force figures during the COVID-19 pandemic. It is shown how the sudden change in the mode effects, because face-to-face interviewing stopped, is separated from real period-to-period changes in the labour force figures. It is also explained how the time series model is adapted to the increased dynamics in the labour force figures. Finally the value of timely single month figures during such crisis is emphasized, by comparing the single month figures with rolling quarterly figures. The latter come with a delay of one month and suppress real evolutions.

Keywords: Structural time series models, mode effects, rotating panel design, labour force survey, discontinuities