The design of the Finnish Labour Force Survey (LFS) is a complex rotating panel. Survey is repeated over time with partially overlapping samples. In the case of repeated surveys with partial overlapping, it has been seen that to utilize entire information collected in the previous waves is very advantageous (for example Singh et al., 2001). Currently, the Finnish LFS uses the generalized regression (GREG) estimator. It is based only on the current quarter's data. The LFS does not use the fact that 60% of the LFS sample is common between consecutive quarters to improve estimates. Exploiting sample overlap over time to improve efficiency of estimates can be done via calibration by using a certain composite estimator. A method termed regression composite (RC) estimator extends the GREG-estimator in the sense that it takes advantage of the correlations over time induced by sample overlap to achieve gains in efficiency. The RC-estimator introduced by Singh, Kennedy and Wu (2001), Fuller and Rao (2001) and Gambino, Kennedy and Singh (2001). Methods have also been studied in Bocci and Beaumont (2005). The RC-estimator can be computed by adding control totals and auxiliary variables to the current GREG-estimation program (for example CLAN). Use of additional control totals based on previous quarter's estimates, and that the auxiliary variables associated with these estimated control totals.

Key words: Complex rotating panel; Auxiliary information; Composite estimation.

References: