# Estimation of wealth on spatially disaggregated levels in Germany based on the Household Finance and Consumption Survey (HFCS)

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**Abstract:**
The Deutsche Bundesbank and other central banks are supposed to report the wealth distribution. For instance, the European Household Finance and Consumption Network reports median values of net wealth by countries and different demographics. However, when the sample size is below 25 estimates are not published. The Deutsche Bundesbank reports on a regional level only indicators for four regions (north, west, south and east). One option to tackle the problem of small sample sizes when the interest lies on subpopulations is to use small area estimation methods. These methods combine the existing survey data with administrative or census data.

In this presentation we use Fay-Herriot (FH) type models in order to get reliable estimates for the mean of household net wealth in the German federal states and 96 planning regions using the HFCS data. As the HFCS faces item non-response, the missing values are imputed by multiple imputation. Therefore, we propose a FH estimator that additionally accounts for the variability due to the multiple imputation. The estimators are based on a logarithmic transformation and meets a benchmarking constraint for internal (national) consistency. Finally, we give an outlook to other indicators like the Gini coefficient or the wealth head count ratio.

**Key words:** Indicators, Model-based estimation, Official statistics, Small area estimation