Ideas for bachelor thesis topics:

## Inheritance and consumption

Does the household's consumption change after an inheritance? The strength of the change is, among other things, an indication of whether the inheritance was already expected. The investigation would probably be possible with EVS or HFCS data.

## Descriptive analysis of the reaction of rich taxpayers to tax changes

Simple description using taxpayer panel data.

**Income distribution in Germany considering housing costs**Verwendung von SOEP data, possibly also EVS data. See Moretti, 2013.

## **Development of housing costs**

Empirical studies on the share of housing costs in the household budget over time, e.g. with the help of microcensus data.

### Time zones and stock exchanges

Do asynchronous summer/winter time changes on two exchanges have an impact on the return correlation of securities traded on both exchanges?

## LASSO

Evaluation of LASSO estimation results in the case of (co)integrated data or GARCH effects by Monte Carlo simulations.

### Tuition fees and wage distribution

Is there a relationship between wage distribution and tuition fees in an international comparison of several countries? VAR analysis with causality test based on international data. The data situation could be a problem.

## Are subjectively expected income fluctuations autoregressive?

Do subjectively expected variances of income depend on (squared) past income shocks? Possible data source: NBER Survey of Economic Expectations, see also literature on "income uncertainty".

### Work duration and wage level

What is the empirical relationship between the wage level and the duration of work (e.g. hours/week)? Simple non-parametric descriptor of appropriate data, without attempting to establish a causal relationship.

# Ideas for master thesis topics:

### Structural microsimulations

Use of reinforcement learning methods for microsimulation.

## **Return modelling**

Modelling of return time series by a Student-t-distribution with a time-variable latent number of degrees of freedom (and constant or time-variable scale parameter). The number of degrees of freedom is modelled as in the standard model with stochastic volatility as an AR(1) process.

## Misspecified state space models

Systematic investigation of the specification error of a state space model with random walk coefficients when the true model has AR(1) coefficients. Analysis by Monte Carlo simulations.

## Forecast models for commodity prices

e.g. with LASSO and other machine learning approaches.

## **Education and economic shocks**

Can economic shocks serve as instruments for estimating the returns to education? Idea: A recession leads to more education because school leavers cannot find a job. The better education is later reflected in a higher return to education.

## Multivariate density forecast

Use of the PIT for linear combinations. Linear combinations take us from the multivariate to the univariate. If the multivariate specification is correct, all linear combinations must result in i.i.d. [0,1]-distributed PITs.

### **Income mobility**

Is there a link between the Eppstein-Zin utility function and the income mobility measure?