## Research Project: Socio-Demographic Differences in HANK Models and the Transmission of Monetary Policy in the Euro Area

What impact does household heterogeneity have on the transmission of monetary policy? Conventional New Keynesian macroeconomic models, which examine the transmission of monetary policy to aggregate output, employment, and prices, typically assume a representative household and do not account for household heterogeneity. However, households differ in terms of income, wealth, gender composition, and age structure, leading to a different consumption behavior (consumption patterns) and inflation rates. To address this, the so-called HANK (Heterogeneous Agent New Keynesian) models were developed. So far, these models primarily focus on differences in household income and wealth. This research project aims to extend HANK models by incorporating additional dimensions, such as income- and wealthspecific consumption patterns, as well as the fact that households experience different inflation rates. In this project, the effects of these different consumption structures and inflation heterogeneity on the transmission of monetary policy will be analyzed. This allows conclusions to be drawn for the optimal implementation of monetary policy and potential distribution effects of monetary policy to be analyzed. At a later stage of this research project, HANK models will be extended to include sociodemographic differences such as gender composition and the age structure of households.

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