Description for the general public

The scientific goal of the project is to analyze the existence and direction of the relationship between the age structure of the population and the level of inflation, as well as to show its implications for the practice of monetary policy. The analysis will be conducted on selected countries of Central and Eastern Europe.

The existing literature suggests that the relationship between demography and the level of inflation actually exists. However, authors of various studies obtain mixed and sometimes even contradictory results in terms of its direction. The aim of the project is therefore, to - at least partially - fill these research gaps.

There are two hypotheses in the project:

H1. The age structure of the population affects the level of inflation in the economy. An increase in the proportion of older people in the society translates into an increase in deflationary pressures.

H2. An increase in the dependency ratio reduces the effectiveness of monetary policy transmission mechanism.

Current demographic projections show that in the future in most European countries the proportion of older people will increase. This suggests that in the long term population aging will have an impact not only on the state of public finances and such obvious macroeconomic variables as GDP growth, but also on the inflation rate. In the long term, the authorities responsible for conducting monetary policy will therefore be forced to take demographics into account (stronger than ever before) in making economic decisions.

The relationship between the age structure of the population and inflation rate has not been neither sufficiently discussed on theoretical level, nor examined empirically. In addition, in the analyzes little scope is set on Central and Eastern Europe economies. Meanwhile, according to Eurostat forecasts, in the perspective of 2060, in the European Union the highest proportion of people aged 65 years and over will be in Slovakia. Among other Central and Eastern Europe countries this proportion will be higher than the EU-average also in Poland, Bulgaria, Estonia, Croatia, Slovenia, Hungary and Romania. Even fewer studies analyze the relationship between the age structure of the population and monetary policy, especially the effectiveness of its channels. The issues that will be covered in this project are not only still insufficiently analyzed, but also (as population aging is already influencing various factors of the economy), they gain on importance from the point of view of both economic theory and economic practice.