## Systemic risk in the negative nominal interest rates environment Description for the general public – Preludium 13

Central banks in order to meet their inflation targets, in post-crisis period, has started to use unconventional monetary policy tools. This necessity arose from the fact that their main tool – which is nominal interest rate – was approaching zero while in the literature prevailed the view that it cannot be negative. However, some of central banks – including most notably the European Central Bank – have lowered a part of official interest rates below zero. In consequence, this raised the question regarding consequences of such a move – particularly to the scope of finance, which is based on non-negativity of nominal interest rates. The experience to date suggest that transmission of negative rates has taken place in much the same way as the positive one, so far. Nevertheless, literature more often points the potential negative consequences of such a monetary policy, particularly in term of higher risk.

Taken above into consideration, the goal of this project is to precisely assess the potential consequences of negative interest rates policy. Specifically, the project aims to deliver a quantification of this relationship as evaluated from the perspective of overall macroeconomic risk category, i.e. systemic risk. In order to achieve that, the project propose two-level analysis of the problem – from micro- and macroperspective. The part of research aiming at microanalysis is based on individual data of banking sector of the Euro Area. It delivers an econometric approach in order to investigate the transmission of negative interest rates on individual banks' characteristics depending – above others – on their internal features. Macroanalysis, in turn, will be based on economic new-keynesian model extended in a way capturing financial relations. In both of these concepts it is planned to incorporate the quantification of systemic risk following the literature view. Specifically, this will take into consideration the scale of connections in the sector and allow to decompose the overall level of systemic risk into smaller categories. What is crucial, such an approach should deliver an answer to the question how significant is the part of systemic risk coming directly from negative interest rates policy.