DESCRIPTION FOR THE GENERAL PUBLIC (IN ENGLISH)

Economic uncertainty is a particularly important economic category present in theoretical (Ellsberg 1961, Dequech, 1999) and empirical studies (Bloom 2009, Baker et al., 2016, Kang et al., 2016). It is considered that economic uncertainty has an adverse effect both on households (restrictions on consumption) and on firms (restrictions of investment) and, thus, influences, among others, employment, production and inflation. The consensus regarding the definition of economic uncertainty has not been reached so far: in the Knightian tradition it is a "non-quantitive" variable (Knight, 1921), while in the more recent literature attempts are made to measure uncertainty. Popular approaches include: economic and political uncertainty (the EPU index) (Baker et al., 2016), financial uncertainty (the VIX index), and uncertainty related to credit risk. In the literature, however, there is no discussion that takes into account uncertainty related to the functioning of commodity markets.

The objective of the project is to construct a measure which reflects uncertainty prevailing in global commodity markets and to examine the impact of such uncertainty on economic activity and financial processes in countries at different levels of economic development.

Realisation of the project will be carried out in two stages. During the first stage the measure of uncertainty in global commodity markets will be constructed, its characteristics will be examined and reactions of uncertainty in global commodity markets to supply shocks in these markets will be assessed. During the second stage the focus will be placed on the impact of global commodity markets uncertainty on economic activity and financial processes in the world economy as well as in country groups identified according to their level of economic development and the degree of openness of the economy.

Why does uncertainty in commodity markets is crucial for economic activity? Frist, processes occurring in commodity markets (price volatility and supply shocks) may be considered independent of economic policy run by individual countries. At the same time, one could reasonably expect that they exert influence on economic and financial processes in these countries since it is rather difficult to find a country that is not a net importer or exporter of some energy commodity. Second, commodity markets have a broad geographical scope because commodities traded in these markets are produced in different countries and on different continents. Thus, uncertainty in commodity markets can potentially spread all over the world and especially in groups of countries that are open to international capital flows and/or foreign trade. Constructing a measure of uncertainty that is based on price volatility in commodity markets is, therefore, an undertaking aimed at the development of a universal measure of economic uncertainty, whose influence on economic activity and financial processes can be potentially observed in many countries.

Four important arguments justify the realisation of the proposed project and make it pioneering in its nature. First, the objective of the project is to develop the measure of uncertainty in commodity markets and to compare it with the existing measures of uncertainty.

Second, there exists a gap in empirical studies oriented towards the examination of an impact of various dimensions of uncertainty on economic activity and financial processes: the problem is that the dimension of uncertainty that is related to the functioning of commodity markets has not been adequately examined.

Third, the focus on uncertainty related to commodity markets makes it possible to analyse country groups whose economic performance highly depends on developments in commodity markets. These groups include, in particular, net importers and exporters, countries that are closed to capital flows (and, thus, resilient to financial aspects of globalisation) but, at the same time, actively participate in international trade, and countries that specialize in production/exports of commodities. Such studies seem to be non-existent, despite the fact that their results could contribute to the greater understanding of economic and financial cycles.

Fourth, the research project will be carried out with the use of modern econometric techniques, thus, potential nonlinearities in the impact of uncertainty in commodity markets on real and financial processes and the existence of cross-sectional dependence in panel data will be adequately modelled.