

## **DESCRIPTION FOR THE GENERAL PUBLIC**

### **Constructing and testing country-specific measures of economic uncertainty**

The principal reason for tackling the problem of measuring economic uncertainty is that the traditional volatility measures used to estimate economic uncertainty are currently not working. After the global financial crisis of 2007-2008, the main economic indicators like inflation and economic growth had shown only negligible dynamics for most countries, unlike in earlier years when they were much more volatile. However, the economic climate is highly uncertain as terrorist threats, the lack of any clear Brexit policy, fiscal problems in some European Union countries, the lack of clear migration policy in Europe, and political instability in some regions all tell us that ‘there is something in the air’. This uncertain climate is causing long-term investment projects to be delayed or cancelled, particularly those of international nature and in politically risky places, while firms and households build up their savings for ‘a rainy day’, often in gold, the price of which has increased significantly. Other similar precautionary moves are also evident. This prompts the question of how to evaluate this uncertainty caused by ‘something is in the air’ and its economic effect.

This project concentrates on developing and evaluating measures which might help in assessing the degree of this general uncertainty. Some measures have already been proposed that are based on analysing the frequency of newspaper articles or Google searches related to uncertainty. However, the computer methods used so far have been identifying the nature of an article by searching for the appearance of a combination of words related to economics and uncertainty, like ‘economic’ in association with ‘uncertainty’ or ‘terrorist threat’, or similar. Such actions might lead to wrong identification, as some words might be used in an ironic context, or have multiple meanings, etc.. Consequently, laborious and in consequence expensive human validation of the computer results was necessary. Within this project, however, more advanced methods of constructing such indices by identification more general text patterns will be developed and applied to construct measures of uncertainty for Poland and Russia that are based on searches of local language newspapers. Developing measures of uncertainty using local language newspapers poses additional challenges, like possible bias caused by linguistic, sociological and political factors. The measures constructed within the project will be compared with those obtained using the more traditional approach of assessing uncertainty by analysing forecast errors of main economic indicators like inflation, output and government bonds. Intuitively, the greater the uncertainty, the more likely it is we will err when forecasting the future.

As the criteria for evaluating and selecting the best measure, we will look at how it conforms with the countercyclicality hypothesis of uncertainty, which states that uncertainty is smaller in boom times, and bigger in depressions. There may be some lags in this relation, which might help us to predict changes in business cycles.