DESCRIPTION FOR THE GENERAL PUBLIC

Fluctuations in commodity prices exert a large impact on the global economy, mainly due to energy demand in the industry as well as the sizeable role of oil in transportation costs. At household level, commodity prices influence the costs of living both directly (ie. through petrol prices) and indirectly (through their impact on costs of producing consumer goods). At a firm level, they are an important factor determining profits. For instance, in the airline industry, profits depend heavily on prices of jet fuel, hence oil price forecasts are used to set tariffs and assess aircraft purchasing strategy. In turn, car manufacturers use oil price forecasts to design new products with fuel economy in focus.

For the above reasons, understanding commodity price dynamics and the ability to formulate their reliable forecasts are important to many economic agents. For companies, they are helpful in assessing strategic policies or investment decision with long term impact. For countries, in which exports of commodities is an important source of revenues their price forecasts are useful in predicting the budget balance. Ultimately, for central banks, they would help in assessing the future path of inflation, gross domestic product or external imbalances, hence would allow for a better conduct of monetary policy.

The reference benchmark in commodity price forecasting is a simple no-change forecast, assuming that the future price will stay at the current level. It turns out that constructing econometric or economic models that can consistently outperform the no-change forecast is a real challenge. In the project we plan to address this issue and conduct a comprehensive study, using a large set of forecasting models and methods to verify whether it is possible to forecast the prices of main commodities (oil, gold, copper) better than with the no-change method. The results of the study will allow us to identify the best performing methods in terms of out-of-sample accuracy, but also to better understand the dynamics of commodity prices. It could be noted that the results of the study can be exploited in practise in decision-taking process.