## STRUCTURAL CHANGE IN THE POLISH ECONOMY: LESSONS FROM THE FIRST DECADES OF TRANSITION AND PERSPECTIVES ON THE FUTURE

At the beginning of the period of transition Poland and other CEE economies were confronted with many difficult economic and social problems. Moreover, there was a lack of a suitable economic theory on how to successfully conduct the change from a centrally planned to a market economy. One of the major consequences of the process of transition for the Polish economy was structural change which led to, inter alia, de-industrialization – a significant reduction in the production capacity and output of industrial sectors. This entailed the redirection of economic activity to other sectors, especially services. This, in turn, was accompanied by the ongoing process of globalization, which led to a significant rise in economic openness as well as an increase in the number of people traveling abroad and a rise in information flows. The process of structural change in the Polish economy was shaped by the inflow of EU structural funds, the reorganization of the financial market and opening it to foreign capital. To enhance sustainable economic development through this economic transformation and the corresponding structural change there needs to be not only an analysis of historical data but also of relevant scenarios and an attempt to predict what future outcomes will results from current measures and economic policy.

With this in mind this research project aims at an analysis of the ongoing process of structural change in the Polish economy in transition. This project is one of the first detailed studies to deal with a thorough multistage empirical analysis of the structural change in Poland in transition. The research will be carried out in two main directions: (1) a deep analysis of recent historical data and (2) the construction of predictions/simulations for the upcoming stages of transition. We will use advanced quantitative tools – input-output (IO) models - to analyse recent data from input-output tables, which provide detailed information on the interdependencies between all sectors of the economy. Wassily Leontief (1905–1999) developed the fundamentals of modern IO analysis and received the Nobel Prize in Economics in 1973 for this achievement. 11 years later, Richard Stone, a researcher developing IO methodology, especially in the field of social accounting, also received the Nobel Prize in Economics, which underlined the importance of IO models in economic research. The value added by the project arises from the fact that it provides pioneering model-based insights into specific and detailed quantitative aspects of the costs and benefits resulting from the current and further stages of structural change. The latter is important not only for researchers but also policymakers. The expected empirical results will fill gaps in the economic literature about Poland. However, some research aspects will have international significance, i.e. methodological aspects, e.g. the construction and first empirical application of a new version of a nonlinear endogenous dynamic IO model with layers of techniques.

To the best of our knowledge in case of CEE transition economies a research project similar to the one proposed here has never been conducted, most likely due to the lack of a sufficient amount of detailed data. The recently launched World Input-Output Database (WIOD), which consists of a series of detailed and reliable databases and covers 27 EU countries and 13 other major countries in the world, seems to be the long-awaited solution to this problem and will facilitate important (from theoretical and practical points of view) national and international analyses. The availability of sufficiently long time series of IO data along with well-established availability of static and dynamic IO models for an in-depth analysis of structural change ensures that the scientific goal of the project will be successfully achieved. It must be underlined that the value added by this research project also follows from the fact that in contrast with most previous IO research we do not restrict ourselves only to the application of static IO models but also aim to focus on the dynamic framework. This way, besides an analysis of historical data (the static approach) we will make use of the capability of dynamic IO models to provide forecasts and simulations of further stages of transition.

To summarize, a better understanding of the nature of structural change in transition along with formulating predictions for the upcoming decades seems important not only for researchers but also for policymakers in Poland. The results of the project should prove valuable for actual planning problems in Poland, which will have a significant, positive social impact. On the other hand, the methodological suggestions and improvements proposed in the research project may well be of international significance and thus deserve to be published in decent economic journals.