Research on causes and consequences of a choice of exchange rate regime are not only an important topic of international macroeconomics, but can also be interesting for the public at large, particularly when a change of the exchange rate regime is considered, e.g. when deciding about the monetary integratio nwith the euro area.

There are two important problems that make the research on the way an economy functions under alternative exchange rate arrangements difficult and result in mixed empirical evidence. First, the definition of alternative exchange rate regimes is not uncontroversial. As pointed out by Rose (2011, p. 652) "[w]hile a fixed exchange rate with capital mobility is a well-defined monetary regime, floating is not; thus, it is unclear whether it is theoretically sensible to compare countries across exchange rate regimes." Second, empirical analyses are complicated by the fact that officially announced (de jure) exchange rate regime and the regime actually adopted (de facto) could be different. According to Levy-Yeyati and Sturzenegger (2005, p. 1603-1604) in many cases "words" can be inconsistent with "deeds" and this can be an explanation for "the relatively weak empirical findings linking exchange rate regimes with macroeconomic performance."

The research objective of this project is to construct a new de facto exchange-rate-regime classification that is firmly embedded in actual macroeconomic policy. Thanks to this the classification will be reliable, i.e. it will reflect actual actions undertaken by monetary authorities in order to control the exchange rate. Two additional objectives include drawing comparison between classification obtained and existing classifications and an application of the new classification to examine the relation between exchange rate flexibility and output volatility.

This project is in the field of basic research because it builds on the extant theoretical considerations and empirical findings on differences between de jure and de facto exchange rate arrangements and at the same time is oriented at providing new, better and more reliable classification of actual exchange rate regimes. Moreover, research will be based on a new set of high quality data to construct the actively managed component of reserves. Its changes are a better description of reserves usage which in turn is important when classifying exchange rate regimes. Concerns referred to in the literature, i.e. unclear definition of exchange rate regimes and divergencies between de jure and de facto regime, will be mitigated thanks to the use of alternative statistical methods to identify types of de facto regimes and to investigate the relation between exchange rate arrangements and output volatility.

There are four reasons behind choosing the research offered within this project. First, research fills the gap in the literature since a classification based on a new dataset on reserves (available within the Special Data Dissemination Standard developed by the International Monetary Fund) has not been proposed so far. The good thing about these data is that they allow to isolate those changes in foreign exchange reserves that are due to active reserve management and not e.g. movements of exchange rates. Moreover, a relatively broad set of statistical methods of data clustering will be used in the research. These have been applied in the literature on de facto exchange-rate-regime classifications to a very limited extent so far.

Second, the authors project will construct a continuous measure of exchange rate flexibility. Though measures of that kind have already been proposed in the literature, they were based on variability of the exchange rate only. The measure offered in this project will be based on the data on foreign exchange reserves as well. This will make it possible to build a continuous classification of exchange rate regimes.

Third, this project is in line with an important strand of the literature which examines a relation between exchange rate system and macroeconomic performance. The current state of research is far from being satisfactory. Empirical evidence is not unambiguous on the issue whether the fixed exchange rate contributes to output stability or contrary, enhances its variability. An important problem is that there are disagreements between alternative de facto exchange-rate-regime classifications. Thus, the need of further researches relying on more sophisticated classifications has been expressed in the literature. This research project comes up to these expectations as the new classification will be built on new and high quality data and with the use of well-founded alternative statistical methods.

Fourth, the realisation of this project will result in an objective description of actual actions of monetary authorities that are oriented at having control over the exchange rate. Moreover, it will deepen our understanding of relationships between exchange rate arrangements and real processes. Good understanding of those relations is of utmost importance in the world which is still plagued with financial crises and will be useful when working on an economic policy that is well-suited to social preferences.