

ABSTRACT

Credit risk tracking and quantification play important roles in risk management and they are not applied only by financial institutions on microeconomic level, but also by central banks on the background of aggregated data. This master thesis deals with the analyses of shocks of given significant macroeconomic variables and their reply on changes of households' and firms' defaulted, non performing loans in Slovakian banking sector. In introductory part, the method of data handling is described, because of their inconsistency in the given field of research. That is caused on one hand by the post-transformational consolidation process of Slovakian banking sector and on the other hand by legislative shifts and changes in calculation methodology of non performing loans.

The main aim of the thesis is not to describe and interpret most precisely the economic relations that could influence the level of non performing loans, but the effort to widen the range of credit risk stress testing possibilities in Slovakian banking sector. In order to check the macroeconomic variables' significance, OLS regression is used. Important part of the stress tests is the application of Monte Carlo method which simulates high number of stress scenarios and macroeconomic variables' shocks and therefore helps to improve the description of the Δ NPL indicator behavior.

Conclusion deals with the possibility of credit risk stress testing use in Slovakian and Czech aggregated sectors of firms and households. Main reason of the try is the fact that both countries had to face very similar challenges and problems during the post-transformation era. Moreover, the feasibility of the application of pooled OLS regression method was proven after the modification of the data and achievement of their homogeneity in order to obtain regression coefficients of significant macroeconomic variables' influence on non performing loans for both sectors of firms and households.