

Abstract

This study aims to estimate the ratio of non-performing loans to total loans (NPL ratio), its determinants and its response to different macroeconomic shocks. As the last financial crises had negative impact on the economy of many countries of the world, we have to strive for preventive measures that would help us to fully or at least partly avoid future crises. It should be achieved by sound risk management practices of all financial institutions.

Important part of these risk management practices shall be – among others - stress tests that would test the health of the institution under severe conditions and negative shocks. For this study the vector autoregression model (VAR methodology) is used to see the response of credit risk (in terms of NPL ratio) to macroeconomic shocks in the Czech Republic. The variables used for this study are quarterly time series data of the period from 2002 to 2011 (GDP, inflation rate, unemployment rate, koruna exchange rate (CZK/USD), and interest rate). For each of these variables the impulse response function was created, to show the impact of macroeconomic shocks and the speed of adjustment of NPL ratio to these shocks.

Keywords: Financial Crises, Credit Risk Management, Non-performing loans, Macroeconomic Shocks, Czech Republic, VARs