

Stress testing is a general term for framework that can assess possible impact of an adverse shock on the financial health and a capital adequacy of a financial institution or whole financial system. Because credit risk is typically the most important risk for a bank and many international surveys describe the credit risk stress testing as one of the least developed, it is be the main topic of this thesis.

The thesis concentrates on the micro level stress tests that are run by each individual bank. It describes the whole credit risk stress testing procedure, Basel II regulatory requirements, the importance for an institution and offers examples of stress tests.

The first significant contribution to the topic is a survey of the practice in the mayor Czech banks that analyze whether they are influenced in their credit risk stress testing framework by their parents or the supervisory institution, whether the stress techniques and scenarios vary across the Czech banks considerably and whether the scenarios changed in some way before or during the current crisis.

The other contributive part contains a model of stress test on a real corporate credit portfolio of one Czech bank, which uses data on PD for different level of segmentation of this portfolio. The scenarios used are the most actual forecasts of the Czech National Bank. Based on results from this model it is shown how the correctly applied bottom-up approach to stress testing is important for a precise estimation of the minimum capital requirement under stress.