Abstract

Credit risk represents one of the most significant risks which a bank must face, and therefore, its intention is effectively manage and measure this risk. However, management and measurement methods are supervised and influenced by national regulators. Banking regulatory supervision plays a significant role among others in determining minimum capital requirements that serve as buffer against losses stemming from credit risk. This thesis provides theoretical foundation of regulatory approaches – standardized and internal rating based (IRB) approach – used for quantification of regulatory capital to credit risk as well as empirical application of such approaches on created portfolio of corporate loans. As a part of IRB method I suggested a model composed of financial ratios estimating probability of default using logistic regression. I founded out that rather the use of combination of financial ratios from different groups of ratios with slight dominance of profitability ratios forms final model. Therefore, superiority of solvency ratios in modelling cannot be proved on my portfolio. After estimating and determining necessary parameters I quantified the minimum regulatory capital requirements to credit risk under standardized and IRB approaches prescribed by Basel III. In the end, the results are compared with conclusion that more risk sensitive approach is favorable in terms of less required capital for selected portfolio of corporates.