Abstract

The aim of this thesis is to address the implications of Basel III regulation on counterparty credit risk. We analysed the development of OTC market, we addressed systemic risk and the way how central counterparties could mitigate or spread the contagion among banks. We used simulated data to develop a stress test model to find out the impact of counterparty credit risk on banks' capital requirements, in case the interest rate increased extensively. Six possible scenarios of interest rate levels were developed with ascending order of the IR level. From these scenarios we computed the exposure levels and credit valuation adjustment (CVA) as the market value of counterparty credit risk. We came to the following conclusions: (1) Czech banks have enough capital to withstand any interest rate increase in any scenario. (2) Banks with high exposure to derivatives like Bank of America, Citibank and JP Morgan would face severe problems if the interest rate increased. (3) There is no direct correlation between credit valuation adjustment and interest rate, the CVA increases faster with the increase of the interest rate.