## ABSTRACT

INDAH DWI ASTUTI, 3125111208. Reserve Requirement Analysis using The Loan and Deposit's Rate Change based on Monti-Klein Model of Bank's Profit Function. Thesis. Faculty of Mathematics and Natural Sciences, State University of Jakarta. 2015.

Bank Indonesia, a Central Bank in Republic of Indonesia, is a financial institution authority which is responsible to achieve and maintain currency stability in Indonesia. Every commercial bank in Indonesia has obligations to Bank Indonesia, one of the obligations is reserve requirement saving. Explanation of the provisions contained in Bank Indonesia Regulations number 12/19/PBI/2010 about Reserve Requirement of Commercial Bank for Bank Indonesia in Rupiah and foreign exchange. The amount of reserve requirement which has to be paid by any commercial bank is affected by bank's rate and bank's Loan to Deposit Ratio value. These effects could be observed by how the loan and deposit's rate change affects the value of GWM is represented by the value of LDR. This thesis will build the dynamics system of loans and deposits volume based on the Monti-Klein models and then calculate the GWM LDR with different the loan and deposit's rate. By observing the graph generated from the model, this thesis shows that the greater the loan's rate change, the bigger amount of reserve requirement that must be stored in Bank Indonesia. But, the greater the deposit's rate change, the bigger amount of reserve requirement that must be stored in Bank Indonesia.

**Keywords** : Bank Indonesia, *Reserve Requirement*, *Loan to Deposit Ratio*, the *loan's rate*, the deposit's rate, Monti-Klein.