SUMMARY

GUSTIYAN TAUFIK MAHARDIKA. Fluctuation Analysis of The United States Dollars Towards Rupiah At The Time of Subprime Mortgage Crisis 2007 – 2013. Supervised by HERMANTO SIREGAR and DEDI BUDIMAN HAKIM.

In a floating exchange rate system, exchange rate fluctuates due to macroeconomic conditions that occur. Macroeconomic conditions coupled with uncertainty (shock) in the form of financial crisis, may result in exchange rate fluctuation for example a depreciation. In 2007, a financial crisis occurred in the United States (U.S.) in the form of sub-prime mortgage crisis. This crisis affects the exchange rate of countries other than the U.S., including Indonesia. Factors that affect the exchange rate are typically macroeconomic factors, but a shock in the form of crisis can also affect the exchange rate. Therefore, this study is based on the analysis of fluctuations that attempt to explain how the macroeconomic factors and also the crisis influence the fluctuations of exchange rate. Through this study, it is expected that it can be used for companies that associate with exchange rates to minimize the risks that arise in trading through implementing futures contracts or hedging, and for monetary policy makers to take appropriate policies related to exchange rate fluctuations.

This study aims to analyze the fluctuations in exchange rates during and after the subprime mortgage crisis. Where one of these goals is to analyze how macroeconomic factors influence the exchange rate fluctuations. And the other goal to determine whether the subprime mortgage crisis had a significant impact on exchange rate fluctuations. Also, from this study, it is expected to formulate a managerial implementation for parties concerned with exchange rate fluctuation. By analyzing the exchange rate, the individual or company that has the exchange rate as a component in their business, can then decide on the right policy to conduct.

This study uses the analyses of error correction model (ECM). ECM is a multiple linear regression method which states that between the dependent variable and the independent variable there exists a long-term cointegration. Cointegration can be seen from the value of the error correction term (ECT) or error correction components. The error correction term has to be significant in the estimation and has a negative value. The data used to estimate the model are nominal exchange rate (as well as the nominal variables) and real exchange rate (as well as the real variables).

The model that used real variables did not have a long-term cointegration with the real exchange rate. The model that used nominal variables proved to have a long-term cointegration with the nominal exchange rate. The variables that affect the nominal exchange rate significantly in the long term are constant value, trend, the money supply, economic growth and central bank interest rates. Based on estimates of short-term exchange rate models, the factors that influence the nominal exchange rate in the short term are money supply, current account, central bank interest rates, and the error correction term. The current account has no influence on the nominal exchange rate. This is due to the role of financial markets are getting bigger, so the surplus or deficit of capital more determines the currency exchange instead of the surplus and deficit goods transactions.

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The subprime mortgage crisis dummy variable did not have a significant effect in the short term and the long term on the nominal exchange rate. This can be caused by the subprime mortgage crisis that did not affect the nominal exchange rate directly. This can be explained. This crisis is a crisis in the U.S. that is caused by liquidity problems. Therefore, this crisis will affect the U.S. dollar value directly. The change in the exchange rate against U.S. dollar is due to inflation caused by rising prices of imported goods and domestic products. The increase in the price of imported goods is the result of the depreciation of foreign currencies and the U.S. dollar due to the increase in domestic product raw materials for these products are imported.

Based on the analysis that has been conducted on the variables that affect the exchange rate, several managerial implications can be formulated that can be carried out by parties interested in knowing the direction of exchange rate movements. Exporters or importers can use the analyses to determine whether to use forward exchange contracts or forward contracts option. For individuals and financial institutions (banks) that are diversifying their portfolios and make additional investments over risky assets such as foreign exchange trading to use this analysis whether to buy, sell or hold. And for the central bank, it is hoped that the analyses can be used control the exchange rate whether overvalued or undervalued by analysing through factors that can be controlled by them. By knowing the factors that significantly influence the exchange rate, it can control the exchange rate by conducting macroeconomic policy based on the factors that influence it such as money supply and interest rates.

Keywords : Error Correction Model, Exchange Rate, Subprime Mortgage Crisis, Currency, Dollar U.S. Dollar, Analysis of Fluctuation.