



**FACULTY OF ECONOMICS
ANDALAS UNIVERSITY**

Thesis

**Analysis of Factors Affecting Exchange Rate of Rupiah against
Japanese Yen, Period 1997 – 2008**

BY

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Analysis of Factors Affecting Exchange Rate of Rupiah against Japanese Yen, Period 1997 - 2008

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ABSTRACT

This research attempts to analyze which factors can affect exchange rate of rupiah against Japanese yen over 1997q4 until 2008q1. This research employs Error Correction Model (ECM) in order to see the relationship between exchange rate and macroeconomic fundamentals such as money supply, interest rate, and income both in short run and long run. The result shows that in the short run, interest rate significantly affects exchange rate of rupiah against Japanese yen, while money supply and income do not significantly affect exchange rate of rupiah against Japanese yen. In the long run, money supply and income significantly affect exchange rate of rupiah against Japanese yen, while interest rate does not significantly affect exchange rate of rupiah against Japanese yen.

Keywords: Exchange rate, macroeconomic fundamentals.

This thesis has been presented before the examiners in the Thesis Examination and successfully passed the Thesis Examination on March 6, 2009.

The Abstract has been approved by the advisor and the examiner.

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CHAPTER I

INTRODUCTION

1.1 Background

Global economy causes the development of economic system to become more openly between countries. The open economy brings economic impact that is the happening of international trade between countries in the world. The problem from international trade is the difference of currency used by each country. The difference of currency used either importer country or exporter country generates the difference of currency exchange rate. Therefore, the effort to reach for benefit of global economy is started with determining the exchange rate at beneficial level. The determination of exchange rate becomes an important consideration for a country that involved in international trade because exchange rate can offset the effect on an international competitiveness of a country.¹

Exchange rate movements are the most important factors affecting sales and profit, capital budgeting plans and the value of international investments. In this respect, changes in exchange rates have a significant impact on the world's political and economic stability and the welfare of individual countries.²

Important position of exchange rate in international trade and economic stability result the growth of various concepts related to the exchange rate determination. The concepts relating to determination of exchange rate started to

¹ Hallwood C.P., and Macdonald, Ronald, 1994, *International Money and Finance*, 2nd Edition, Cambridge: Blackwell Publisher Inc, pp. 22.

² Bitzenis, Aristidis, and Marangos, John, 2007, "The Monetary Model of Exchange Rate Determination: The Case of Greece (1974-1994)," *Int. J. Monetary Economics and Finance*, Vol. 1, No. 1, pp. 57-88.

get a big attention from the economist especially since the birth of floating exchange rate system in the year 1973. Since that time, some of countries let their exchange rate to have fluctuated as according to fluctuation of variables affecting exchange rate.

There are various concepts for determining exchange rate which have been developed; they are Purchasing Power Parity (PPP) approach, the concept Balance of Payment approach, and monetary approach. In monetary approach, the exchange rate as the relative price of two currencies is affected by the supply and demand for money in the two countries. Monetary approach has two basic fundamentals that are applying of purchasing power parity theory and the existence of stable money demand functions for the domestic and foreign economies.

When the financial crises occurred in 1997, rupiah depreciated and continued to depreciate and exceeded the upper limit of the intervention band. Bank Indonesia decided to replace managing floating exchange rate system with free floating exchange rate system on August 14, 1997. Indonesia was the worst sufferer in the Asian crisis. The nominal exchange rate jumped from Rp 3.169,04 per 100 JPY at the fourth quarter of 1997 to Rp 7.172,12 per 100 JPY at the first quarter of 1998.

The implementation of free floating exchange rate system in Indonesia causes the fluctuation of exchange rate in market become volatile by the effect of macroeconomic fundamentals which are money supply and income level.³ The change of money supply and income will affect the fluctuation of exchange rate.

³ Hallwood C.P., and Macdonald, Ronald, 1994, *International Money and Finance*, 2nd Edition, Cambridge: Blackwell Publisher Inc, pp. 25.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Since Indonesia implemented free floating exchange rate system, increasing attention has been given to the problem of exchange rate determination under free floating exchange rates. One of the most significant approaches to determine exchange rate is the use of macroeconomic fundamentals to explain the movement of the exchange rates.

This research examines the nature of linkages between exchange rate and money supply, income, and interest rate. In this research, Error Correction Model is employed to see the effect of macroeconomic fundamentals on exchange rate of rupiah against Japanese yen in short run and long run using time series data over the fourth quarter of 1997 to the first quarter of 2008.

Overall, the research's finding suggests that in the short run, there is positive and significant relationship between interest rate and exchange rate of rupiah against Japanese yen. One percent increase in interest rate will increase exchange rate of rupiah against Japanese yen by 0.001796 percent.

In the long run, money supply and income significantly affect exchange rate of rupiah against Japanese yen, while interest rate does not significantly affect exchange rate of rupiah against Japanese yen. One percent increase in money supply will increase exchange rate of rupiah against Japanese yen by 2,2548 percent. One percent increase in income will increase exchange rate of rupiah against Japanese yen by 0.7996 percent.

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