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EXCHANGE RATE AND TRADE BALANCE NEXUS IN ASEAN-5

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Abstract

This study analyzes the short run as well as long run impact of exchange rates changes towards trade balances for ASEAN-5 member countries, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand. The stationary test, Johansen-Juselius cointegration test and Granger causality test have been utilized in the study. For the sample period from 1970 to 2004, empirical results indicate that although there is a lacking of long run stable relationship among the exchange rates and trade balances in the ASEAN-5 economies, the exchange rates do have ability to influence trade balances in these countries in the short run except for Indonesia. This implies that the policy makers could use discretionary monetary and fiscal policies to affect the external trade performance in these ASEAN countries. Therefore, the corresponding governments should adopt the appropriate exchange rate regime wisely in boosting the economy and improving the trade deficit for the countries.

JEL Classifications: F10; F31; O52
Keywords: Exchange rate; Trade balance; ASEAN-5 countries

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1. Introduction

Currency exchange value, commonly known as exchange rate, has a very important role in achieving monetary stability and supporting other economic activities. A stable exchange rate is essential to create a favorable climate to boost the business activities in a country. Many countries have embarked on different approaches in trying to stabilize

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the exchange rate against its major trading partners. As referring to the Leduc (2001), a report from the International Monetary Fund (IMF) showed that 67 countries pegged their currency, 8 worked with the currency boards, 37 used currency from another country or were part of a monetary union and 73 used flexible arrangement.

As the term of globalization became the famous trend in the world economy, trade liberalization and economy integration continued to expand throughout the century. Thus, corporate nowadays are operating in an environment where exchange rate changes might affect their policy decisions and competitiveness in the market place. Therefore, it was not surprising that the study of exchange rate has been one of the most central areas of economic research over the past few decades. Furthermore, understanding the nature of the exchange rate is essential in achieving internal stability and balance of payments equilibrium in a country.

The relationship between exchange rate and trade balance has become an eminent topic since the early year. Few hypotheses have been created based on previous study on this particular relationship such as J-curve effects in the short run and Marshall-Lerner condition in the long run. According to Koray and McMillin (1998), the J-curve effects have been generated as most of the economics believed that depreciation (appreciation) of the domestic currency against other currencies improves (deteriorates) the trade balance in the long run, but worsen (improves) it in the short run. The explanation of J-curve is based on assumption that the depreciation of the domestic currency caused the prices of import good increased while the price of export goods remains unchanged. Consequently, the trade balance has been deteriorating in the short run. However, export and import quantities adjustment over times to change in relative prices will lead to an improvement in the trade balance in long run. As quoted from Rincon (1988), Marshall-Lerner condition states for a positive effect of devaluation on the trade balance, and absolutely for stable exchange market, the total value of demand elasticity for export and import must exceed unity. Furthermore, Marshall-Lerner condition is holds where there is an excess supply for foreign exchange when the exchange rate is above the equilibrium level and excess demand when it is below.

The causal relationship between the exchange rate and trade balance has been widely discussed in previous studies. Most of the researches signified that exchange rate could influence trade flow in a country. For instant, Himarios (1989) had investigated whether the devaluation of the currency will affect real magnitude of the trade balance and result indicated that the coefficient of the real exchange rate showed significant relationship with the trade balance. Research by Humpage (1998) showed that all the exchange rate systems and managements

have associated with balance of payments. Rincon (1998) also found that exchange rate has a significant relationship on the short- and long-run behavior of Columbia's trade balance. Besides that, Baharumshah (2001) stated that a positive long-run relationship between exchange rate and trade balance has been found in the bilateral trade between Thailand and Malaysia with one of their major trading partners - Japan. A study done by Onafowora (2003) revealed that continued depreciation for East Asian countries currencies has led to an improvement of their trade balances. On the other hand, Stucka (2004) who examined on the effects of exchange rate change towards trade balance in Croatia with six major trading partners has discovered the evidence of the J-curve effect.

Nevertheless, some researchers wonder whether exchange rate changes able to improve or worsen trade balances as empirical evidences showed that not all countries' trade balances were affected by the changes in exchange rate. For example, Brahmasrene (2002) discovered that the real exchange rates changes have significant impact on trade balances in some countries, but not in all countries. On the other hand, Bahmani-Oskooee and Goswami (2004) investigated the impact of exchange rate towards Japan's bilateral trade flows with her nine major trading partners that include Australia, Canada, France, Germany, Italy, the Netherlands, Switzerland, UK, and the US using the ARDL approach. The results revealed that when trade flows are measured in terms of foreign currency or reserve currency, Japan's exports are not sensitive to real exchange rate in most cases. This indicates that the direction of the impact of exchange rate changes on the trade balance is vague.

This study intends to investigate the impact of exchange rate on the trade balance in the context of ASEAN-5 countries, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand, with respect to one of their major trading partners - US. Most of the ASEAN-5 countries enjoyed the trade surplus where the export is greater than import, and generally, it views as a favorable sign from the perspective of economist. However, country might not remain trade surplus all the time if there were not well managed. Thus, study on the relationship of exchange rate and trade balance is necessary where the policy maker in a country might be able to monitor the flow of trade balance through exchange rate adjustment.

After the financial crisis in 1997, most of the ASEAN-5 countries have changed their monetary policy in controlling their economy situation. Be one of the important tools of monetary policy, exchange rate regime has played a vital role in helping these countries to cope with the crisis. For example, Malaysia has adopted the fixed exchange rate policy for foreign trade; meanwhile Indonesia and Thailand floating their exchange rates with the support from IMF. Besides that, ASEAN-5