

**AN EMPIRICAL INVESTIGATION OF RINGGIT MALAYSIA**

**By**

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SCHOOL OF ECONOMICS, FINANCE, AND BANKING

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## ABSTRACT

This study investigates factors that influence the Malaysian exchange rate using quarterly data from 1996Q1 to 2015Q2. The Johansen-Juselius cointegration test is used to assess the long run equilibrium relationship between the Malaysian exchange rate, government consumption, trade openness and net foreign assets. The long run VECM results indicate that the government consumption, the trade openness and the net foreign assets are the factors that significantly influence the Malaysian exchange rate. The government consumption and the trade openness have negative relationships with the Malaysian exchange rate, while the net foreign assets is found to have a positive influence on the Malaysian exchange rate. This study provides insights for the policy maker to justify the factors that influence the exchange rate and use the factors as a channel to influence the Malaysian exchange rate. Results of this study enhance existing limited knowledge of the exchange rate study using the BEER model in determining factors that influence the Malaysian exchange rate, and the period of study covers a number of situation where the Malaysian exchange rate had a significant drop in value.

Keywords: Exchange rate, BEER model, cointegration, variance decomposition



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## ABSTRAK

Kajian ini mengkaji faktor-faktor yang mempengaruhi kadar tukaran Malaysia dengan menggunakan data suku tahunan dari 1996Q1 hingga 2015Q2. Ujian kointegrasi Johansen-Juselius digunakan untuk mengkaji hubungan ekuilibria jangka panjang antara kadar tukaran Malaysia, perbelanjaan kerajaan, keterbukaan dagangan dan aset asing bersih. Dapatan jangka panjang VECM menunjukkan bahawa perbelanjaan kerajaan, keterbukaan dagangan dan aset asing bersih merupakan faktor yang signifikan dalam mempengaruhi kadar tukaran Malaysia. Perbelanjaan kerajaan dan keterbukaan dagangan mempunyai hubungan negatif dengan kadar tukaran Malaysia, manakala aset asing bersih mempunyai hubungan yang positif dengan kadar tukaran Malaysia. Kajian ini membantu pembuat polisi dalam mengenal pasti faktor-faktor yang mempengaruhi kadar tukaran dan menggunakan faktor-faktor tersebut sebagai salah satu kaedah untuk mempengaruhi kadar tukaran Malaysia. Dapatan kajian ini meningkatkan lagi pengetahuan sedia ada berkaitan dengan penggunaan model BEER dalam menentukan faktor-faktor yang mempengaruhi kadar tukaran Malaysia di samping tempoh kajian meliputi keadaan di mana kadar tukaran Malaysia mengalami kejatuhan nilai yang signifikan.

Kata kunci: kadar tukaran, model BEER, kointegrasi, penguraian varians



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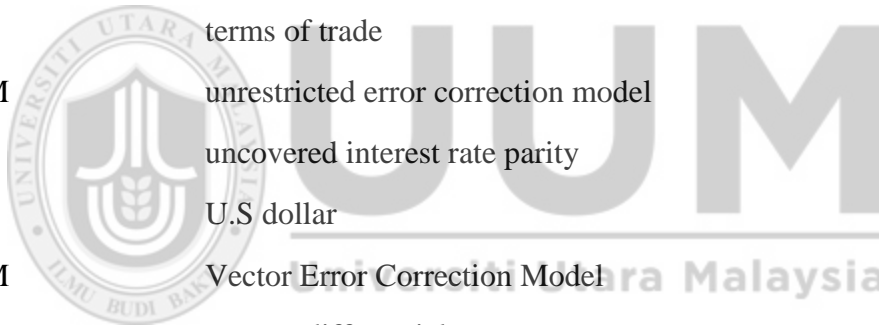


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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Explanation</b>
BEER	behavioural equilibrium exchange rate
BNM	Bank Negara Malaysia
B-S effect	Balassa-Samuelson effect
CCR	Canonical Cointegrating Regressions test
CNER	rate of change in nominal exchange rate
DEER	desired equilibrium exchange rate
DR	real interest rate differential
ECM	error correction mechanism approach
ERER	equilibrium real exchange rate
FEER	fundamental equilibrium exchange rate
GDP	Gross Domestic Product
GOV	government consumption
INVGDP	ratio of investment to GDP
LOOP	law of one price
NATREX	natural rate of exchange
NEER	nominal effective exchange rate
NFA	net foreign assets
NFI	net income from foreign countries
NKI	net foreign capital inflow
O	real oil price
OECD	Organization for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
OPEN	trade openness
PD	productivity differential
PEER	permanent equilibrium exchange rate
PPP	purchasing power parity

PROD	productivity differential
R	real interest rate differential
RCG	ratio of government consumption to GDP deflator
REER	real effective exchange rate
RER	real exchange rate
RES	difference between the changes in reserve
RESBAL	resources balance
RIRD	real interest rate differential between domestic and world real interest rate
RM/MYR	Ringgit Malaysia
SGD	Singapore dollar
TB	trade balance
TOT	terms of trade
UECM	unrestricted error correction model
UIP	uncovered interest rate parity
USD	U.S dollar
VECM	Vector Error Correction Model
RD	reserve differential
DOLS	Dynamic Ordinary Least Square



# CHAPTER 1

## INTRODUCTION

### 1.0 Background of the Study

Exchange rates play a significant role in international trade transactions and investment (Doidge, Griffin and Williamson, 2006). An exchange rate is the price of a currency against another currency. Foreign exchange rate can be expressed in direct and indirect quotations. Direct quote is defined as domestic currency per unit of foreign currency while indirect quote is defined as foreign currency per unit of domestic currency. Likewise, an exchange rate can further be divided into nominal effective exchange rate (NEER) and real effective exchange rate (REER). NEER is the exchange rate value against a weighted average of the country's trading partners' currencies while REER is the inflation adjusted NEER by country's trading partners' currency index in international market (Kakkar and Yan, 2014). REER that made up of average real exchange rate (RER) between trading partner's countries according to trade shares can be used to measure the exchange rate misalignment (Cato, 2007).

Foreign exchange market is a form of global decentralized made up of supply and demand of currencies (Ickes, 2006; Sharma and Rai, 2014). Foreign exchange market that work twenty-four hours in seven days is the largest financial market in the world (Eun and Resnick, 2014). It facilitates the transfer of purchasing power, finances international trade and minimizes foreign exchange risk. The foreign exchange market is made up of two tiers: the wholesale market and the retail market which can be segregated into international banks,

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