



**GRANGER CAUSALITY: EXCHANGE RATE AND MACROECONOMIC  
VARIABLES MOVEMENTS IN SINGAPORE**

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## **ABSTRACT**

The purpose of this study is to analyze the direction of causation between exchange rate and selected macroeconomics variables. In order to assess whether there is any potential impact between the variables, a Granger-causality analysis has been carried out to test the impact. It is to clarify how this variable factors and exchange rate movement impact each other. Unites State is taken as a base country to measure the exchange rate movement. The conclusion that can be drawn are exchange rate can predict the movements of industrial production and inflation rate but not vice versa. However, the reverse causation happen at the other lags between inflation rate to exchange rate. Another two variables, money supply and unemployment rate, the results also indicate the unidirectional causality where the causal relationship exist between these two variables towards exchange rate but not vice versa.

# **CHAPTER 1: INTRODUCTION**

## **1.1 Introduction**

The exchange rate behaviour can be a crucial significance towards the economy. Generally, this is because exchange rate can give an impact towards many factors or otherwise, such as interest rate, industrial production, import and export, employment opportunities and others. According to Saeed (2012), exchange rate fluctuation can affect the value of global investment portfolio as competitiveness related to import and exports, international reserves and government debt that is related to the value of the country's own currency. When exchange rate fluctuate this can create a role in eliminating imbalances in international trade. Factor that might influence exchange rate may change over the time. When exchange rate are affected by the independent variables, the exchange rate will fail to keep their explanatory power if there is changes in economic condition or modification in policy of foreign exchange rate setting by central bank. This paper aims to examine the granger causality between exchange rate to selected macroeconomic variables such as industrial production, money supply, inflation rate, and unemployment rate.