

## The Effect of Real Effective Exchange Rate on Balance of Payments in Thailand

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Article Info Abstract: Volume 83 **Purpose:** This study tends to examine the impact of Real Effective Exchange Rate Page Number: 10243 - 10255 (REER) on the balance of payment of Thailand through studying the concept of the **Publication Issue:** real effective exchange rate and balance of payment within the economy of March - April 2020 Thailand. Design: The study has adopted the quantitative approach where the data was gathered through the websites for the last 59 years i.e. from 1960 to 2018, therefore, the source of data collection was secondary. The study has adopted the VECM model, JJ cointegration and Granger Causality for the purpose of analysing the time series data. Findings: The findings of this research suggests that there is a significant impact of the real effective exchange rate, inflation and GDP on the balance of payment of Thailand in both long term and short term. Article History Limitation: The study is limited to the economy of Thailand. Additionally, the Article Received: 24 July 2019 number of variables used were limited in the study. Revised: 12 September 2019 Accepted: 15 February 2020 Keywords: Real effective exchange rate, inflation, balance of payment, GDP, Publication: 12 April 2020 Thailand.

#### I. INTRODUCTION

Thailand is one of those South-East Asian countries that has evolved from an agricultural economy to the industrial-based economy. It has been evident that the growth rate in Thailand has increased drastically based on the increase in production and exports globally. According to the study conducted by Dai, Delpachitra & Cottrell (2017), the domestic market demand in Thailand has expanded over the past few years where the economy of the country has shown a growth rate of 125.7 percent since the year 2006. Ultimately, this has made the country highly dependent on its external trade that could be its exports as the country has become an industrialised economy. Based on the study conducted by Suwanhirunkul & Masih (2018), despite the GDP growth of Thailand and its openness within the trade economy, there might be a significant impact on the exchange rate fluctuations in terms of trade and trade flaws. Based on the study conducted by Guzman

Ocampo & Stiglitz (2018), exchange rate volatility has a negative impact on the trade of a region in terms of the higher uncertainty in a trade that affect both volume and variability of the trade flows.

It has been observed that the US and Japan are two main markets of Thailand's exports that means the economy of the country heavily relies on these two markets. Any turning events in either of these markets in terms of the negative impact on their economies will adversely impact the growing exports of Thailand and will also give drastic damage to its economy (Gabriel, Jayme & Oreiro, 2017). It could impact the exchange rates in terms of increase in these rates that would significantly impact the balance of payments of the country. According to the study conducted by Soleymani, Chua & Hamat (2017), the real effective exchange rate is directly related to the currency of the country as the impact on the real effective exchange rate could also impact the currency of the country in a negative manner. However, the identification of the



impact of the exchange rate volatility on the flow of the trade could lead towards enabling the government of Thailand towards having effective planning and exchange rate risk management (Ho, 2018). But it has been observed that the government is yet incapable of manage the exchange rate risks and making effective trade policies that might be impactful for the economy of Thailand in a negative manner.

There is also a problem observed within the lack of effective management within the governmental authorities of Thailand in terms of identifying risks associated within the openness of the trade and also managing the balance of payments in terms of not increasing it. According to the study conducted by Nusair & Olson (2019), despite the economic growth through the manufacturing sector of Thailand that has given a boost to the exports of the country, Thailand has experienced chronic deficits in trade. This deficit in trade partly depleted the foreign exchange reserves of the country and also impacted its ability to maintain its foreign exchange rate. It has been a belief of the economic experts that the financial crisis that occurred in Thailand mainly happened due to the heavy outflows of the short term capital (Kubo, 2017). It shows that the government was unable to control these aspects that led to an economic recession in the country. However, since then the government has been trying to reduce the balance of payment via different strategies and to stabilize its economy on the basis of effective strategies.

Based on the problem identified, this particular study tends to examine the impact of real effective exchange rate on the balance of payment of Thailand through studying the concept of the real effective exchange rate and balance of payment within the economy of Thailand. Moreover, this study aims to study the relationship of the real effective exchange rate and payment balance on the overall economic growth of the country based on its economic transformation from being an agricultural economy to a manufacturing economy. This could help the Thailand governmental authorities to identify the

issues that are based on the trade deficit and also to recommend how trade deficits could be lowered through using a VAR/ VECM approach. This study is also focused on the impact of real effective exchange rate on the major trading partners of Thailand that might get affected due to the higher balance of payment of the country that might lead towards critical economic crisis within the region.

#### II. Literature Review

The REER is the total average sum of currency of the country which is related to the basket or index of other main coinages of the country. That weighted average is defined by relating the comparative balances of the business of currency of the country in opposition of every country within that index (Patel, Wang & Wei, 2019). By creating the REER index where the mutual or bilateral exchange rates are measured for the comparative shares of the trade. There are different elements besides the trade that can influence the REER. The REER does not take into a variation of prices which are related to the account, tariffs and other related factors which are influencing the trade. Moreover, if the prices are greater in one country as compared to another country, a trade might reduce in the country with greater prices and they affect the REER (Ibarra & Blecker, 2016). Similarly, the volume of trade being completed with the country can be influenced by the majority of factors. The weighting employed in the calculation of REER has to be attuned depict any variations in the business. Also, adjusting the monetary policy of the central bank, which can decrease or increase the rates of interest in their native country (Eke, Eke & Obafemi, 2015). As an outcome, the flow of money could enhance to the countries with the greater rates as stockholders chase yield and hence reinforcing the exchange rates of the currency. The REER would be affected, but it would have not much to do with the business and more to do with the interest rates of the market (Yaqi & Bing, 2018). It has been depicted by Ahmad et al. (2014) that the Balance of Payments (BOP) is significant and positively associated with the rate of



exchange. Hence, the firmness of the exchange rates might originate the positive environment by inspiring the investment, and this can enhance the BOP.

# H1: The Real Effective Rate (RER) has a significant impact on the balance of payment.

The BOP may decline because the local inflation encourages the spending of import, given that the imports seem comparatively cheaper, and reduces sales related to the export, as exports look more expensive in the overseas (Odili, 2014). The exchange rate is the basic macroeconomic factor that leads the depositors and stockholders on the best direction to incursion the stability amongst their business partners. The BOP is illustrated as the state affairs of the country on in the global business. Therefore, the relationship exists amongst the BOP and exchange rate since there cannot be global trade if the country's currency is not estimated in the other country for the allowance of businesses across the borders. Moreover, the internal balance denotes to the stage of economic activity reliable with the adequate control of inflation. In contrast, the external balance refers to the BOP deficit of sustainable and equilibrium account financed permanently by the predictable inflow of the capital (Oladipupo, 2011).

The study was given by Gebremariam, Batu & Tola (2018) that the current account deficit is employed to forecast the deficit of budget and vice versa along with the real gross domestic product (GDP) is employed to predict the inflation and vice-versa. In contrast, there is a unidirectional relation amongst those particular variables. Basically, the relationship amongst the inflation and BOP is negative and with the help of similar consequences, it helps to control the association amogst the RER and BOP. On the other side, there are various companies which replied unflatteringly to the inflation for the various causes. The first reason is that inflation diminishes the confidence of the people along with the expenses and decline the collective demand (Guzman, Ocampo & Stiglitz, 2018). The other reason is that inflation enhances the cost and decreases the competitiveness and eventually which leads to the dropping demand. In the last, the companies might expect that the rate of interest will have to increase to deal with the inflation and this weakens the risktaking mind-set of the people (Economic Online Website, 2020). Hence, inflation controls the BOP and the RER.

## H2: Inflation controls the association between the RER and the BOP.

The research proposed by Koirala (2018) the REER has a positive influence on the real GDP. Therefore, the relationship between the GDP and REER is positive. On the basis of the outcomes, the researcher defines the mechanism related to the transmission of REER by the collective demand and this statement is mutual and linked with the conventional techniques to RER.

In this modern era, the RER has become a central focus and major emphasis in the recent rules and discussion of the policies in the emerging nations. This emphasis is mainly due to the two causes in which one with the enhanced focus on the development related to the development and the disassembling challenges related to the non-tariff and tariff, therefore, the character of the RER in the development and growth has achieved and enhanced significance. The other is the fast liberalization of the investment accounts in the emerging nations and the increasing size and pace of the global flows of capital (Rasheed et al., 2019). Hence, the influence of the RER fluctuates on economic activities has experienced the basic transformation. In light of research conducted by Ghosh et al. (2014) that the exchange rate the selection of the exchange rate system preserves a midpoint stage in the environment of the post crises for the developing economies. In specific, there is an important division amongst the economists and decision-makers concerning the influence of the economic growth its on the balance of payment. control This comprehends related to the control of economic growth on the RER and BOP.



# H3: Economic growth controls the association between the RER and the BOP.

When it comes to the impact of the REER on balance payments, there are various studies that describe its impacts and relationship in an extensive manner. According to the study conducted by Gebremariam, Batu & Tola (2018), the REER has a significant influence on the BOP of a country in terms of the direct impact on the currency of that region. Moreover, it could also influence the economic growth of that region in a direct way. Based on the study conducted by Arize, Malindretos & Igwe (2017), globalisation has impacted the association amogst the REER and BOP in two distinct manners. However, the trade growth that occurs within the industrial sector is making the trade balances large and having high sensitivity towards the movement of real exchange rate movements. The study conducted by Romelli, Terra & Vasconcelos (2018) states that fluctuations within the RER could have a drastic effect on the trade ballances in terms of increasing it that could lead towards the higher trade deficit.

Various studies have numerous arguments based on the impact of real effective exchange rate on balance payments where some studies indicate a positive impact and some studies state a negative influence related to the economic development of the region. The research conducted by Qiang et al (2019), the view of the movements in the real exchange rates could benefit the global rebalancing is based on two primary assumptions. The first assumption is based on the significant difference of real exchange rate from the fundamental value that remains consistent with internal and external imbalances. However, the second assumption is based on the higher sensitivity of the balance of trade of a country towards the movement within the real exchange rates (Missio, Araujo & Jayme, 2017). Therefore, it depends on specifically on the emerging markets in terms of their governmental policies for controlled prices and capital control that could result in significant deviations of the real exchange from the

fundamental values of the country in terms of its long-term trade.

#### III. THEORETICAL FRAMEWORK

There are some theories that describe the economic impact of a country in terms of the relationship between real effective exchange and balance of payments. Some of these theories include Theory of Globalisation and Dependency Theory that talk about the economic development of a country through the influence of globalisation and also the dependence of emerging and growing economies on the rich and developed state.

### A. Theory of Globalisation

The theory of globalisation is based on the integration and interaction among different nations, organisations and governments around the world. According to the study conducted by Gozgor & Ranjan (2017), the influence of globalisation has increased primarily due to the advancement within transportation and communication-based the technologies that have led towards the growth of international trades and cultures. It has been evident that the economic globalisation has grown due to the increasing influence of interconnectedness of different economies through trading and exchange of resources within different countries in order to lead towards global growth.

This theory of globalisation can be implemented within this specific study as it is primarily based on trade and the real effective exchange rate. Based on the study conducted by Sae-Lim & Jermsittiparsert (2019), there is no economy that could operate in isolation that shows the higher dependency of national economies on other developed economies in form of trade and resource exchange. Thailand, being a manufacturer economy heavily relies on its trading partners that include USA and Japan that shows the higher influence of these countries on the economic growth of Thailand in terms of the real effective exchange rate and the balance of payment.



## B. Dependency Theory

Dependency theory talks about the dependency of countries facing economic crisis specifically countries in the third world on the developed countries in order to attain economic growth. Based on the study conducted by de Oliveira (2018), dependency theory aims to reduce inequalities and unequal distribution of resources within different nations of the world and also to lead countries towards economic growth on the basis of increasing trade and commerce and also through the exchange of resources. According to the dependency theory, economic and political relationships are highly important for countries to develop and also there is a need for an integrated approach in order to remove equality barriers globally.

This theory can be applied within this study as this study is related to the impact of these real exchange rate and balance of payments. Based on the study conducted by Chamchong (2019), Thailand has a high dependency on USA and Japan as it is one of the growing economies in South East Asia that could be influenced by having such huge trade partners that could facilitate its economy and could reduce the balance of payment within the trade of the

country. Therefore, this theory could be used to understand the inequality reduction within the country and to make it progress internationally.

## **Conceptual Framework**

The conceptual framework for this study can be identified from Figure 1 which outlines the independent and dependent variables of the study. The purpose of this study is to identify the effect of real effective exchange rates on the balance of payments in the context of Thailand. Therefore, as highlighted in the conceptual framework, the real effective exchange rate has been considered as the independent variable. In addition to this, for the purpose of quantitatively measure the variable of the real effective exchange rate, two control variables have been considered in this model. These control variables include inflation and real GDP. The real effective exchange rate is denoted by all these control variables which are used for the determination of examining the association with the balance of payments. Moreover, the balance of payments has been considered as the dependent variable in this study.



Figure 1: Conceptual Framework of the Study

## Methods

This study is based on the quantitative data which has been obtained from the secondary sources and for this purpose, the design of this study is quantitative. The data analysis and data collection have been discussed in the further sections.

## C. Data collection

The purpose of this study is to examine the effect of the real effective exchange rate on the balance of



payment in the context of Thailand. For this purpose, the quantitative data of Thailand was required for the selected variables. The variables of the study include real effective exchange rate (REER), inflation, real GDP and balance of payments in the percentage of GDP. The data for these four variables related to Thailand was extracted from the World Bank for 59 years from the period of 1960-2018.

#### D. Data Analysis Method

For the purpose of analyzing the data, the researcher has conducted the unit root testing in which the Augmented Dickey-Fuller test has been conducted for the purpose of testing either the data has unit root or not (Al-Smadi and Malkawi, 2020; Bekhet and Al-Smadi, 2015). In addition to this, the descriptive statistics have also been conducted by the researcher for the purpose of identifying the mean and standard deviation of the variables. Moreover,

the Johansen Co-integration has also been conducted by the researcher for the purpose of identifying the co-integrating relationships among the variables on the basis of existing co-integrating vectors in the variables. Therefore, the VECM model has been used in this study which does not require to be stationary and is also not limited to assumption (Bekhet, Matar and Yasmin., 2017; Bekhet and Al-Smadi, 2017). This is due to the reason that processing the time series data is one of the attributes of vector error correction model (VECM) while providing meaningful results because the issue of unit root is addressed by the error correction model. In this manner, this paper has used VECM for the purpose of estimating the extent to which the balance of payments of Thailand are affected by the real effective exchange rate, inflation and Log GDP growth. The equation for the model is provided as follows equation (1).

$$\widehat{BOP}_t = \alpha + \beta_1 RER_t + \beta_2 INF_t + \beta_3 GR_t + \epsilon_t \tag{1}$$

Therefore, in following paper VECM was used to investigate either variations into gold prices have influence over the return on capital market return. Thus, the general form of the VECM model could be formulated as in equation (2).

$$\Delta BOP_{t} = \mu_{1} + \sum_{j=1}^{k} \beta_{11} \Delta BOP_{t-j} + \sum_{j=0}^{k} \beta_{12} \Delta RER_{t-j} + \sum_{j=0}^{k} \beta_{12} \Delta INF_{t-j} + \sum_{j=0}^{k} \beta_{12} \Delta GR_{t-j} + \Pi_{i} ECM_{t-1} + \varepsilon_{t}$$
(2)

Where,  $\mu$  denote intercept;  $\beta 11$ ,  $\beta 12$  represent the short-run coefficients of the variables; and  $\Pi i$  represents the coefficients of the error correction terms (ECM<sub>t-1</sub>) that are used to explore the long-run relationship and  $\epsilon t$  represent the error term.

#### **Findings and Analysis**

#### E. Descriptive

The descriptive statistics of the variables can be identified from Table 1 where is it evident that the mean of Balance of Payments is -2.802% which shows the average value of BOP for 59 years. In addition to this, the standard deviation of the balance

of payments was computed to be 6.47% which depicts that the balance of payment will deviate from 6.47%. On the other hand, the mean value of GDP was calculated to be \$129,232,143,955 which depicts the average GDP in US\$ for 59 years. Moreover, the standard deviation of the GDP was computed to be \$143,147,785,091 which depicts that the GDP will deviate from \$143,147,785,091.

Furthermore, the mean for Inflation was calculated to be 53.80 which shows that the average inflation for 59 years in Thailand has been 53.80 base pint index. On the other hand, the standard deviation for the inflation was computed to be 35.17 base point index. This depicts that the inflation in Thailand can deviate from 35.17 base point index. Lastly, the



mean for real effective exchange rate was calculated to be \$27.55 which shows that the average exchange rate in the country has been \$27.55. On the other hand, the standard deviation for the real effective exchange rate was calculated to be 7.319. This shows that the real effective exchange rate will deviate from \$7.319. These figures can be identified from Table 1 presented below:

	BOP (% of GDP	GDP (US\$)	INFLATION (Base Index)	RER
Mean	-2.802	\$129,232,143,955	53.806	27.553
Median	-4.073	\$131,595,341,818.91	47.002	25.340
Maximum	12.529	\$2,760,747,471.89	112.47	44.430
Minimum	-11.726	\$2,760,747,471.89	10.211	20.340
Std. Dev.	6.472	\$143,147,785,091	35.176	7.319
Skewness	0.637	1.128208	0.273	0.753
Kurtosis	2.350	3.060946	1.679	2.286
Jarque-Bera	5.032	12.52553	5.024	6.833
Probability	0.080	0.001906	0.081	0.032

## Table 1 Descriptive Statistics

## F. Augmented Dickey-Fuller Test

The unit root is considered as the core concept to forecast or predict for estimating the value on the basis of previous patterns. In contrast to this, it can be assumed when there is no random walk with the drift which refers to the presence of systematic pattern within the time series data for the purpose of making it impossible for ordinary inferential statistics in order to estimate the future values based on the historical values (Al-Smadi and Omoush, 2019; Paparoditis and Politis, 2018). Therefore, for the purpose of detecting the unit root, the Augmented Dickey-Fuller (ADF) was used by the researcher.

Augmented Dickey-Fuller test statistic	t-Statistic	Prob.*
BOP	-2.083	0.25
Log GDP	2.098	0.99
Inflation	0.786	0.99
RER	-1.123	0.70

Table 2 Augmented Dickey-Fuller (ADF)

The results of ADF can be demonstrated on the basis of Table 1 where the null hypothesis is based on that there is presence of unit root in the time series data while the alternate hypothesis is that there is no unit root in the data. On the other hand, the t-statistics of balance of payments, Log GDP, inflation and real effective exchange rate were identified as - 2.083 [p= 0.25], 2.098 [p= 0.99], 0.786 [p= 0.99] and -1.123 [p= 0.70]. Since the p-value of all the

variables of the study is greater than the selected level of alpha i.e. 0.05, therefore, it can be stated that there is presence of unit root in time series data and thus, the null hypothesis is failed to reject (Islam et al., 2018). In this manner, the ordinary least square (OLS) and vector autoregressive (VAR) model are both not applicable due to the presence of unit root in the data.



#### G. Johansen Cointegration

The Johansen cointegration is the inferential technique used for the purpose to identify the cointegration relationship among the variables on the basis of existing cointegrating vectors in the variables. In contrast to the correlation, the cointegration defines the variables sensitivity to mean value while explaining that either the distance among the variables remains the same over the period of time (Guirguis, 2018). Therefore, the researcher has conducted cointegration for the purpose of detecting the presence of cointegrating vectors specifically due to non-stationary data. The results of this test can be identified in Table 3.

No. of CE(s) Hypothesized	Eigenvalue	Trace Statistic	Critical Value (0.05)	Prob.**
None *	0.305657	55.10125	47.85613	0.0090
At most 1 *	0.268280	34.30825	29.79707	0.0141
At most 2 *	0.227844	16.50386	15.49471	0.0351
At most 3	0.030497	1.765414	3.841466	0.1839

Table 3: Johansen Cointegration

From the table above, it can be identified that the eigenvalue for 'none' cointegrated equation is 0.305 and the critical value is 47.856 while the probability is 0.009. On the other hand, the eigenvalue At most 1 is computed to be 0.268 and the critical value is 29.79 while the probability is 0.01. Moreover, the eigenvalue of At most 2 was calculated to be 0.227 and the critical value is 15.49 while the probability is 0.035. Therefore, this depicts that there is a long term impact of real effective exchange rate, inflation and LOG GDP on the balance of payment. This is due to the reason that there is sufficient evidence in order to claim that there are at least three cointegration vectors present in the variables (Naidu, Pandaram and Chand, 2017). The presence of cointegrating vectors indicates that Thailand's balance of payments is cointegrated with the real effective exchange rate, inflation and GDP in the long run equilibrium. Hence, the real effective

exchange rate, inflation and Log GDP could be used for the purpose of reverting back to the balance of payments.

### H. Granger Causality

The Granger causality is a hypothesis statistical technique used for the purpose of assessing the usefulness of variables in order to estimate one variable through another variable based on the concept of cause and effect. This concept is drawn from the economics as suggested by Clive Granger that the regression uses the correlation for the purpose of estimating the future values however, the causation can make the estimation more effectively (Appiah, 2018). The results of Granger causality among the variables have been demonstrated in Table 3.

Null Hypotheses	Obs	F-Statistic	Prob.
Inflation does not Granger Cause BOP	57	7.21930	0.144
BOP does not Granger Cause INFLATION		0.40656	0.6680
RER does not Granger Cause BOP OF GDP	57	5.19883	0.503
BOP OF GDP does not Granger Cause RER		0.89027	0.4167

#### Table 4 Granger Causality



LOG(GDP) does not Granger Cause BOP	57	13.2719	0.000
BOP does not Granger Cause LOG(GDP)		4.35356	0.0179
REER does not Granger Cause Inflation	57	1.73042	0.33
Inflation does not Granger Cause REER		1.24362	0.2968
LOG(GDP) does not Granger Cause Inflation	57	8.89434	0.0005
Inflation does not Granger Cause LOG(GDP)		0.77341	0.4667
LOG(GDP) does not Granger Cause RER	57	3.73404	0.0305
RER does not Granger Cause LOG(GDP)		2.76565	0.0722

Four null hypotheses have been rejected which include LOG GDP does not granger the BOP as fstatistics was computed to be 13.271 [p=0.00], BOP does not granger the LOG GDP as f-statistics was computed to be 4.353 [p=0.017]. However, there is a bidirectional causality between BOP and GDP which depicts that there is short term and significant impact of LOG GDP on the balance of payment. This depicts that the LOG GDP does granger cause the BOP, inflation and RER of Thailand and can be used for the purpose of estimating and predicting the inflation and balance of payments in the short run.

## I. Vector Error Correction Model (VECM)

The Vector error correction model (VECM) is considered as an upgraded version of the vector autoregressive (VAR) model as the VAR model is restricted to the process of time series data without the unit root. In additiotn to this, the VECM model is used when cointegrating relationships exists (Nasi, 2019). Therefore, the VECM model has been used by the researcher despite the presence of unit root in the time series data of this study. The results of VECM are presented below in Table 5.

	BOP (% of	Inflation	RER	LOG GDP
	GDP)			
R-squared	0.390489	0.324010	0.168925	0.370698
Adj. R-squared	0.271236	0.191751	0.006324	0.247574
Sum sq. resids	417.7591	90.35554	194.3770	0.304830
S.E. equation	3.013589	1.401517	2.055623	0.081405
F-statistic	3.274476	2.449813	1.038892	3.010764
Log likelihood	-135.7280	-92.85578	-114.3051	66.51335
Akaike AIC	5.204573	3.673421	4.439468	-2.018334
Schwarz SC	5.566243	4.035090	4.801138	-1.656664
Mean dependent	0.312928	1.805357	0.204107	0.089784
S.D. dependent	3.530130	1.558927	2.062154	0.093846

#### Table 5: Model Specification

From the table 5, it can be identified that the coefficient of determination of the model is 0.390 demonstrating that 39% variance of the balance of payments can be explained by the real effective exchange rate, inflation and LOG GDP. However, this coefficient of variance was decreased after the

adjustment by 0.271 while indicating the 27.1% variance of balance of payments explained by other variables of the study. In addition to this, Table 6 demonstrates the effect of each variable on the balance of payments.



Cointegrating Eq:	CointEq1
BOP (-1)	1
INFLATION(-1)	-0.249011
	(0.07164)
	[-3.47594]
REAL_EFFECTIVE_EXCHANGE_RATE(-1)	-0.329378
	(0.12828)
	[-2.56760]
LOG(GDPCURRENT_US\$_(-1))	2.552690
	(1.41023)
	[ 1.81012]
С	-37.85473

*Table 6 Cointegration equation* 

The coefficients indicate that if there is a one-unit change in inflation, real effective exchange rate and LOG GDP, then it could influence the change of -0.249 [t-stats= -3.475], -0.329 [t-statistics= -2.567] and 2.55 [t-statistics = 1.81]. Therefore, this implies that there is major effect of inflation, RER and LOG GDP on the BOP of Thailand as the t statistics of all the effects is greater than the absolute value of 1.65 (CI= 90%). This depicts that the effect of real effective exchange rate, inflation and LOG GDP is significant in the short run.

#### IV. SUMMARY OF HYPOTHESIS

The proposed hypothesis in this study were presented in the tabular form which can be identified from the Table 7. From the table below, it can be identified that all the hypothesis of the study were accepted as the RER has a significant impact on the BOP. In addition to this, the inflation also controls the relationship between the real effective rate and the balance of payment. Moreover, the economic growth also controls the association between the RER and the BOP.

Hypotheses	Proposition	Results
	The real effective rate has a significant impact on the balance of	Accepted
$H_1$	payment.	
	Inflation controls the relationship between the real effective rate and the	Accepted
$H_2$	balance of payment.	
	Economic growth controls the relationship between the real effective	Accepted
H <sub>3</sub>	rate and the balance of payment.	

Table 7 Summary of Hypothesis



## Recommendations

Based on the above discussion and analysis, there are several recommendations for the government of Thailand pertaining to the economic conditions of the country in relation to the balance of payments particularly. These recommendations have been provided below:

- It is recommended for the government of Thailand to focus more on the stability of the real effective exchange rate as it will help the country in terms of maintaining the balance of payments. This is due to the reason that if the exchange rate is low in the country, it will result in the less inflow of currency in the country which will impose difficulty on the country's balance of payments.
- It is also recommended for the government of Thailand to focus on the low inflation rate. This is due to the reason that the increased inflation in the country results in greater imports which increases the outflow of cash. In this manner, the company would be able to maintain the balance of payment by reducing the number of imports.

## Conclusion

This study has focused on identifying the consequence of the RER on the BOP in the context of Thailand. Other than the RER and BOP, the inflation and LOG GDP were both used as the controlled variables in the study. The findings of the study suggests that there is a substantial impact of real effective exchange rate, inflation and LOG GDP have a long term influence on the Thailand's BOP. This shows that all the independent variables of the study are likely to affect the economic conditions and growth of Thailand's economy.

Based on the analysis of the study, it has been identified that there is a substantial impact of RER on the BOP of Thailand. In addition to this, it has also been identified that there is also significant impact of inflation on the balance of payment of the

country. Similarly, the significant impact of LOG GDP was also found on the balance of payment. Therefore, it is recommended for the country to focus on the stability of exchange rates for the purpose of increasing the inflow of cash in the country. Additionally, it is also recommended for the country to control the rate of inflation for the purpose of minimising the dependency on the imports. This is due to the reason that less number of imports will result in a decreased outflow of cash.

## V. LIMITATIONS

This study has focused on identifying the effect of the real effective exchange rate on the balance of payments in the context of Thailand. However, there are certain limitations of the study which restricts the scope of this study. Firstly, the study has focused only on one country to identify the influence of exchange rates on the balance of payments. On the other hand, the study has included a few variables for the purpose of identifying the impact. Lastly, the study has involved the historical data for the purpose of carrying out the analysis. Therefore, the data from primary sources of information must also be considered for the purpose of making significant contributions to the area of study.

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