



Faculty of Economics and Business

**THE IMPACT OF FOREIGN ECONOMIC FACTORS  
TOWARDS TOURISM RECEIPTS IN MALAYSIA: INDONESIA,  
THAILAND, PHILIPPINES AND VIETNAM**

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**(Business Economics)**

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TOURISM RECEIPTS IN MALAYSIA: INDONESIA, THAILAND,  
PHILIPPINES AND VIETNAM**

**GOH MOI LEE**

This project is submitted in partial fulfilment of  
the requirement for the degree of Bachelor of Economics with Honours  
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Faculty of Economics and Business  
UNIVERSITI MALAYSIA SARAWAK

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## Statement of Originality

The work described in this Final Year Project, entitled  
**“THE IMPACT OF FOREIGN ECONOMIC FACTORS TOWARDS  
TOURISM RECEIPTS IN MALAYSIA: INDONESIA, THAILAND,  
PHILIPPINES AND VIETNAM”**

is to the best of author’s knowledge that of the author except  
where due to reference is made.

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24 July 2020

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Goh Moi Lee

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## **ABSTRACT**

### **THE IMPACT OF FOREIGN ECONOMIC FACTORS TOWARDS TOURISM RECEIPTS IN MALAYSIA: INDONESIA, THAILAND, PHILIPPINES AND VIETNAM**

By

Goh Moi Lee

This study is conducted to examine the impact of tourism receipts in Malaysia towards foreign economic factors in Indonesia, Thailand, Philippines and Vietnam countries. Many benefit will be obtain by access to foreign economy factors. There are many factors obstruct the ability in attract tourism to visit Malaysia countries. The macroeconomics determinants are gross domestic product, inflation rate, and exchange rates with the time series from 2003 to 2017, annually. The method that adopted are panel unit root tests, panel cointegration tests, FMOLS, and panel Granger causality. The study findings are that all exogenous variables are cointegrated. However, in the short run, there is only unidirectional causal relationship.

## **ABSTRAK**

### **KESAN EKONOMI FAKTOR ASING TERHADAP PENERIMAAN PELACONGAN DI MALAYSIA: INDONESIA, THAILAND, PHILIPPINES AND VIETNAM**

Oleh

Goh Moi Lee

Kajian ini dijalankan bagi tujuan mengenalpasti kesan penerimaan pelancongan di Malaysia terhadap ekonomi faktor asing: Indonesia, Thailand, Philippines dan Thailand. Banyak manfaat yang dapat diperolehi dengan mengenalpasti ekonomi factor asing. Terdapat banyak factor yang menghalang keupayaan dalam menarik pelancong dating ke negara Malaysia. Antara penentu makroekonomi adalah produk domestik dasar, kadar inflasi, keterbukaan, dan kadar pertukan mata wang asing. Kajian ini meliputi data dari tahun 2003 hingga 2017. Kaedah yang digunakan adalah panel ujian unit akar, ujian kointegrasi panel, FMOLS, dan panel Granger sebab akibat. Dapatan kajian ini adalah bahawa semua pembolehubah eksogen berkointegrasi. Walaubagaimanapun, dalam jangka pendek, hanya ada satu arah hubungan sebab dan akibat.

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## **List of Abbreviations**

CI	Capital Investment
CPI	Consumer Price Index
CD	Cross-sectional dependence
CCE	Common Correlated Effects
DOT	Department of Tourism
ECT	Error Correction Term
ER	Exchange Rate
GDP	Gross Domestic Product
G&S	Goods and Service
IFS	International Financial Statistic
ILO	International Labour Organization
IR	Inflation Rate
IMF	International Monetary Fund
IDR	Indonesia Rupiah

MTPB	Malaysia Tourism Promotion Board
VMY	Visit Malaysia Year
MTTP	Malaysia Tourism Transformation Programme
MYR	Malaysia Ringgit
PHP	Philippines Peso
PPP	Purchasing Power Parity
PSA	Philippine Statistics Authority
REER	Real exchange rate
THB	Thailand Baht
TDGVA	Tourism Direct Gross Value Added
TIEZA	Tourism Infrastructure and Enterprise Zone Authority
TR	Tourism Receipts
UN	United National
VDN	Vietnam Dong
VECM	Vector Error Correction Model
WTO	World Trade Organization
WDI	World Development Indicator

## **CHAPTER 1**

### **INTRODUCTION**

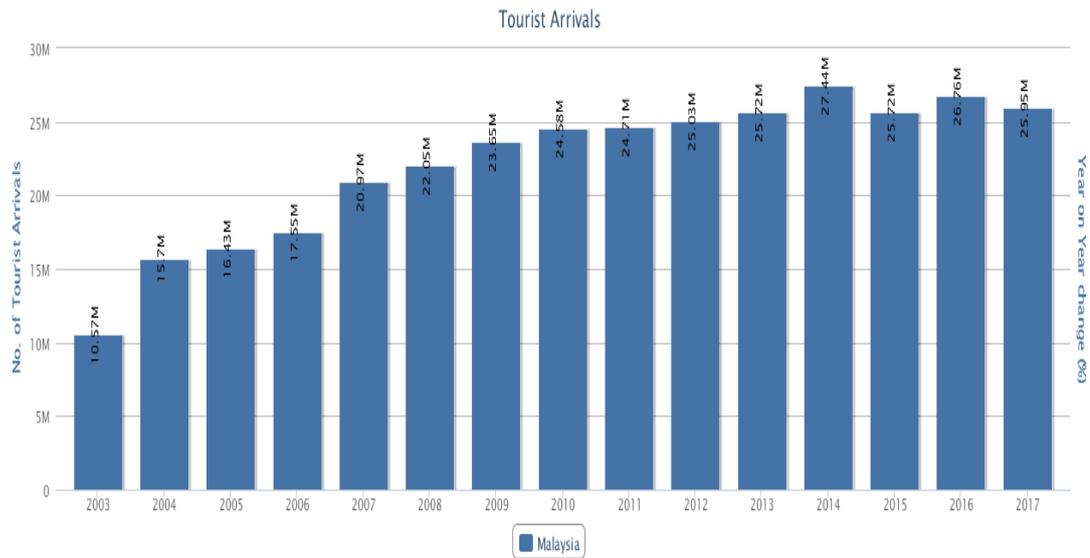
#### **1.0 Introduction**

This chapter will briefly introduce directly or indirectly about the tourism receipts in Malaysia. In the background of the study will focus on introduce on the variables that been used as the dependent variable (Tourism Receipt in Malaysia) and independent variable (Gross Domestic Product, Inflation Rate and Exchange Rate) for this study. Besides, problem statement that been founded and objective of this study are also explained in this chapter.

#### **1.1 Introduction to the Tourism Industry in Malaysia**

In the world today, tourism is a major industry that achieved major development economically in every country. According to the World Tourism Organization (2007), tourism is one of the faster growing sectors in an economy and the main source of income for most of the developing countries. Tourism industry well known in worldwide because it is world's biggest export earner. Tourism is one of the primary sources of income for Malaysia. Presently, in Malaysia tourism among the quickest developing in services sector, and the second largest gross domestic product (GDP) which is contributing those industries.

**Figure 1.1: Tourist Arrivals in Malaysia from year 2003 to 2017**



*Sources: Tourism Malaysia*

According to the Malaysia Tourism Promotion Board (MTPB), Malaysia has attract about 10.2 million international tourist arrivals in year 2000 staying an average of 5.8 nights in Malaysia from 4.8 nights in 1980. In term of growth of tourist arrivals in Malaysia, tourism industry accomplished favourably as reflected. For instance, in Figure 1.2 shows that Malaysia attracted only 10.57 billion tourist arrivals for year 2003. Nevertheless, in 2017 this figure has declined to 25.95 million from 26.76 million tourists in year 2016.

**Figure 1.2: Tourism Receipts in Malaysia from year 2003 to 2017**



*Source: Tourism Malaysia*

Figure 2 shows that tourism receipt contribute to Malaysia GDP and its growth rate from 2003 to 2017. It is obvious that the contribution of tourism receipt had increased steadily over time and noticeable that there were drop in year 2015. Tourism profit from foreign arrivals increase from 21.29 billion ringgit to 82.17 billion ringgit in year 2003 to 2017. Besides that, there is huge development in tourism industry which extension of the operations has also led positively. But the development takes place not only in tourism industry, it also undergoing in sub-sectors like the tour industry hotel, restaurants, travel and, retail and as well as transports.

To sustain the huge growth in tourism industry, the number of tourist arrival plays an important role. This is because number of tourists who came to visit Malaysia resembles tourists' direct expenditures during their vacation to that particular country and state. The major contribution from tourist receipts is significantly towards national

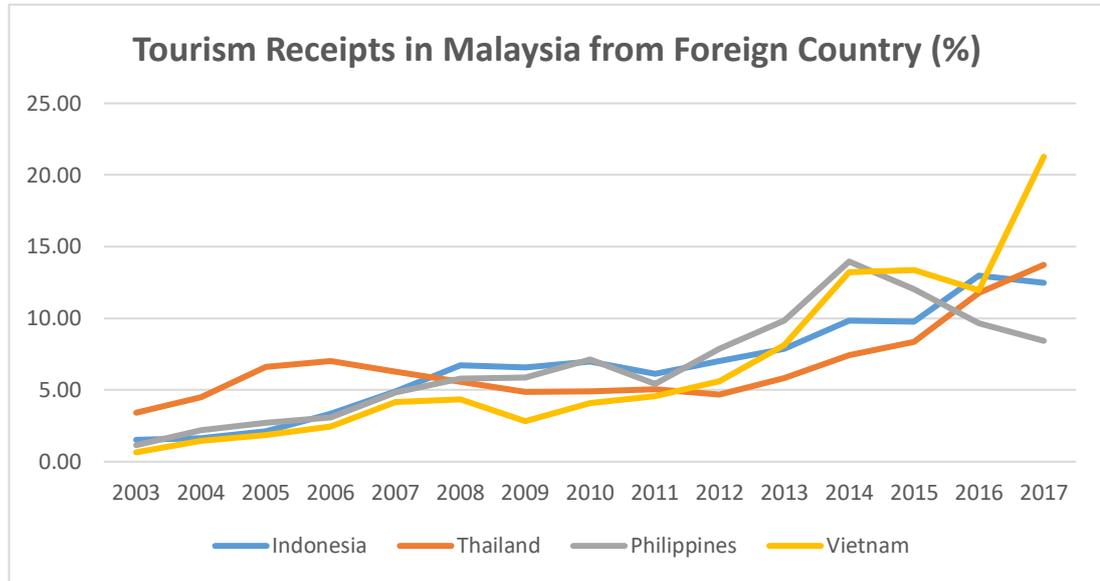
income. The main purpose of revenue earned from tourists' receipts is to enhance the economics of country to attain its status in 2020 as a high-income economy (Malaysia Tourism, 2019). Thus, as recommendation many types of tourism packages should introduced by promoting or attracting international tourists.

## **1.2 Background of study**

Tourists especially from ASEAN countries travelling the high number of the total tourists to Malaysia. This sector may become a major contributor to Malaysia's economy and driving force in the future. In Malaysia, there are plenty of tourism opportunities to offer that have yet to be explored, such as nature and cultural-based resources. Eventually, the rise of the global tourism market gives Malaysia an opportunity to take advantage of the untapped market. (Abas Said, 1999).

### 1.2.1 Tourism Receipt

**Figure 1.3: Tourism Receipt from Indonesia, Thailand, Philippines and Vietnam**



Sources: World Bank Data

Figure 1.3 plots the number of the tourism receipts from four different countries, Indonesia, Thailand, Philippines and Vietnam in Malaysia from year 2003 to 2017. By looking at the chart, one can indicate that the tourist receipts form Indonesia had recorded the highest spending in year 2016 with 8821.5 million (12.98%). For 2007, the tourism receipts form Indonesia are 3340.5 million (4.92%) and had increases to 4758.7 million (7.00%) in year 2010. However, the receipt faces dropped in year 2011 at 4161.2 million (6.12%) from a year before. The number of receipt keep on increases until it fall again in year 2015 with the total amount of 6643.0 million (9.77%) when compare to year 2014. In year 2017, the receipt slightly dropped from Indonesia with decreases from 8821.5 in year 2016 to 8482.8 million.

Form the graph shows that tourist receipts from Thailand had started increasing with the respective number of 1034.30million (3.42%) in year 2003 to 4154.90 million (13.73%) in 2017. In year 2007, the number of tourism receipts are 1895.8 million (6.27%) and had slightly decreases to 1468.7 million (4.85%) in year 2009. Started from year 2012, the tourism receipt from Thailand keep on increases until it achieved the highest number of tourism receipts at 4154.9 million (13.73%) in year 2017. The fluctuation in the tourism receipts from Thailand happened due to the several promotion in visiting neighbouring country.

Philippines tourist receipts had plots the highest receipts in 2014 with the approximately 1790.2 million (13.96%). In year 2003, the tourism receipts recorded the lowest receipt with only 147.8 million (1.15%). From the graph indicates that there are rapidly increases in tourism receipts from year 2011 to 2014 with the different amount of 1094.9 million (8.54%) that received by Malaysia. However, started from year 2014 to 2017, there are slightly decreases about 710.4 million (39.68%). The tourism receipt from Philippines shows the fluctuation from year 2003 to 2017 due to the relationship of supply and demand in the sector, the result shows that the increases in tourism is effected by economics. Consequently, the number of tourist will changes due to the time period of stay and their spending pattern. Meanwhile, the systematic characteristics of the economy decide their tendency to recirculate such expenditures internally are determined by demand or supply factors.

Vietnam country identify that in figure 1.3 the tourist receipt from Vietnam had increased steadily from the time period. In 2003, the country shows the lowest

contribution in Malaysia Tourism Receipts with only 27.8 million (0.66%). However, there were shown dropped in year 2009 with only 119.2 million (2.81%) due to the effect of the Global Financial Crisis. In year 2007, the number of tourism receipts are recorded 176.5 million (4.16%) and had increased to 901.7 million (21.28%). The fluctuation of the tourism receipt occurred in the Vietnam can be happened because of the crisis that Vietnam faces during the period.

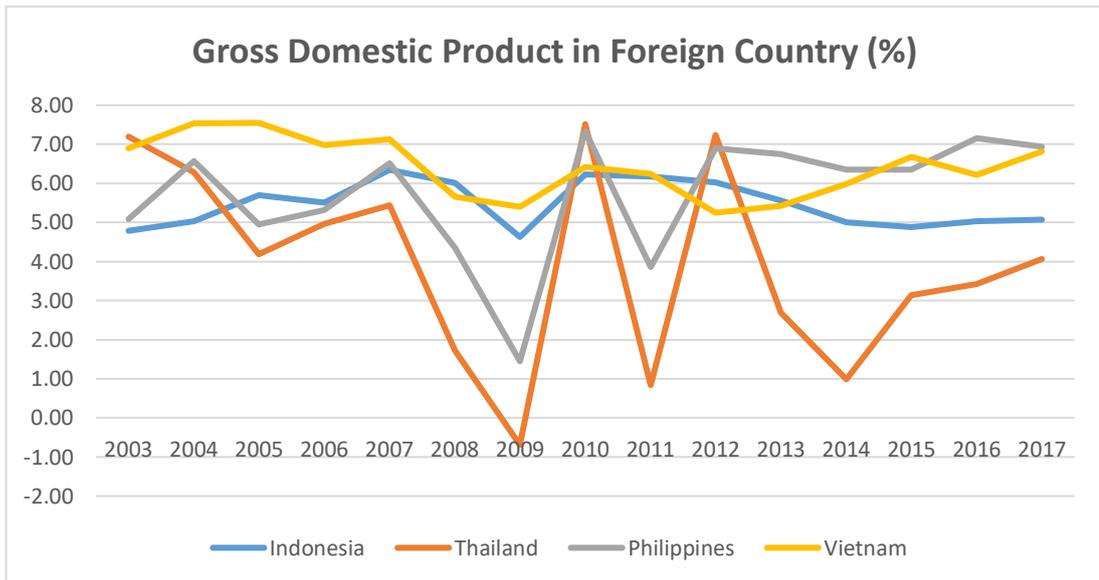
In additional, Tourism Malaysia (2015) announced that, because of the strong promotion for Visit Malaysia Year (VMY) in 2014, tourist receipts increased by 10.0% to 72.0 billion. On other hand, tourist receipts slightly decrease to 69.1 billion in 2015 (Tourism Malaysia, 2016). The decreases in total contribution to GDP, tourist receipts and employment in the tourism sector can be due to the security problem in Sabah and incidents in airway, causes the global economy slowdown that has affected arrivals of tourist in Malaysia (Star Online, 2016). However, Tourism Malaysia (2016) said a fair comparison of the years 2015 and 2013, in which there was no special financial allocation for promotion activities, had increased tourist receipts in 2015 by 5.6% as compared to 2013. Meanwhile, as compared to 2015, tourist receipts rose by 18.8% to RM82.1 billion in 2016 (Tourism Malaysia, 2017). The depreciation of MYR increase the spending for international visitor to spend in Malaysia.

### **1.2.2 Gross Domestic Product**

One of the best way to measure the economy is by Gross Domestic Product. GDP also known as the total value of everything produced within the country. If they

are within the borders of the country, the government counts its production as GDP. Thus, GDP are used as one of the independent variables.

**Figure 1.4: Gross Domestic Product in Indonesia, Thailand, Philippines and Vietnam**



Source: World Bank Data

Figure 1.4 shows the Growth Domestic Product (GDP) in Indonesia, Thailand, Philippines and Vietnam from year 2003 to 2017. From the figure shows that Indonesia GDP had increased for the time period. However there are noticeable that a few slightly dropped in 2009 and 2015 at respectively percentage of 4.63% and 4.88%. The late 2000s in specifically on the economic slowdown occurred in the timeframe from 2011 to 2015 as well as the slow process of economic growth that started from 2016. The slowdown in economic growth of Indonesia happened during the New Order government, and causes a consequences of the Asian Financial Crisis (Indonesia Investment, 2019). According to World Bank Country Director for Timor-Leste and

Indonesia, Indonesia's cautious economic management has paid off. Despite outflow of capital from the emerging-markets in 2018 greater than during the 'taper tantrum' in 2013, economy in Indonesia remains strong, thus helping to decrease the poverty until reached the lower record at 9.7 % in 2018.

The figure 1.4 plots that Thailand Growth Domestic Product (GDP) has had increased rapidly for the time period. However, the lowest GDP in Thailand are noticeable in 2009 with the approximately percentage of -0.69% because of Global Financial Crisis that affected Thailand's major trading partner countries significantly. As a result, the Thai exports shrank sharply, also caused continuing impacts on manufacturing outputs, trust in business, as well as investment and domestic consumption. Even though Thailand's GDP is not as high as other countries GDP, there figure shows the steadily increases from year 2003 to 2017. Afterward, the economy experienced fluctuation because of the severe floods monsoon in 2011. A year after, the economy was able to bounce back and expanded by 6.5%. Nevertheless, political issue that emerged in the country last year (2012) caused slower growth at 2.9% in 2013. Thailand main contributors are tourism, transportation, retail sales, and banking and finance. Focus Economics (2019) estimated that tourism is one of the biggest contributors to the sector, whereas its share alone in total GDP is about 10%. The economy was on a growth path in May 2014 but, due to the military coup, about 3% is still low and the GDP gap was negative until mid-2017.

Philippines shows the higher GDP in year 2010 when compare to the year before and after until 2017. In 2009, Vietnam having a dropped in GPD and slowly

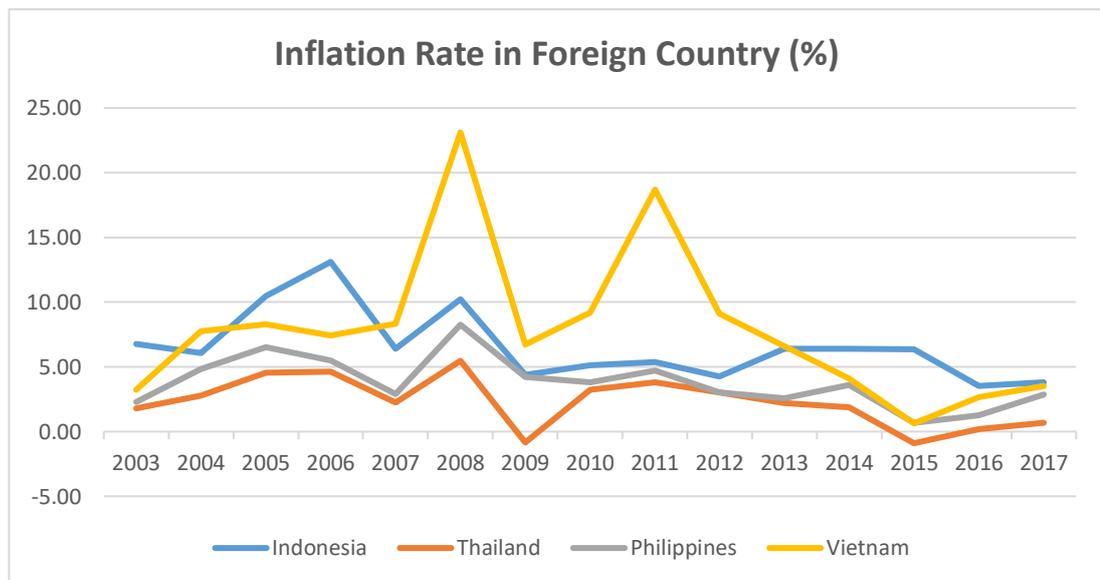
increases until its reach the higher GDP at year 2010. Hence, the data shows the fluctuation occurred during the 15 years before. According to the Philippine Statistics Authority (PSA), the contribution of Tourism Direct Gross Value Added (TDGVA) to total GDO is calculated, tourism contribute about 8.6% in 2016 to the economy. This occur since investment in the Philippine Tourism Industry is regulated by the Tourism Infrastructure and Enterprise Zone Authority (TIEZA), a government agency that created by the Tourism Act of 2009 under the Department of Tourism (DOT). It is expected that the budget of Philippines will increase during the next financial year in light of increasing tourism in the Philippines. (ASEAN Briefing, 2018).

Vietnam provided GDP steadily increases every year. Started from year 2003, Vietnam GDP had slowly increases about 6.9% to 6.81% in 2017. The decrease in the Vietnam GDP are about 0.0.9% in the time periods (15 years). It is indicate that the Vietnam are trying to increase its GDP every year and inward. This is because the industrial growth in Vietnam is based on its export-oriented policy. The nation became a member of the World Trade Organization (WTO) in 2007 and its overall export value had exceeded 70.6% of GDP by 2010, with a highly open economy. The momentum of the industry shows that Vietnam has been on right track for the last 20 years with respect to its industrial policy (African development bank group, 2018). Extensive market-oriented and outward-looking economic policies has had achieved sustainable and balanced economic growth in Vietnam. Vietnam therefore needs to modernize economics institutions, particularly in terms of monetary management and fiscal management, and implement open market orientation and outward looking reforms to sustain growth and improve its quality (IMF, 2019).

### 1.2.3 Inflation Rate

Some of the studies believe that the tourism industry are important factor in determining inflation either in short run or long run. Therefore, governments focus on appropriate measurement to ensure that the increases in tourism industry are not responding to the inflation. High economic growth can be detrimental to the economy as it affected by the inflation. The negative effects of the tourism industry on the economy is fascinating in this regard. The inexorable growth of the tourism industry is likely to be disadvantageous as it can lead to inflation. This are concerned because tourists will spend their money most on the accommodation, lodging, foods, clothes, and etc. This can lead to an increase in aggregate demand, which result in inflation (Hanafiah et al. 2010).

**Figure 1.5: Inflation Rate in Indonesia, Thailand, Philippines and Vietnam**



Sources: World Bank Data

Figure 1.5 plot the inflation rate in Indonesia, Thailand, Philippines and Vietnam from year 2003 to 2017. The figure shows there were rapidly changes in year 2003 to 2017 for Indonesia with the rate of 6.76% to 3.81%. The inflation shown the fall until it reach a 3.53% in 2016 before slowly rose at 3.81% in 2017. The level and volatility for Indonesia's inflation rate are historically higher than peer emerging nations. While other emerging markets had inflation rates of between 3% and 5%, per year. Therefore, Indonesia's inflation rate averaged annual about 8.5% over the same period from 2005 to 2014. Indonesian inflation has been under control since 2015 but also indicates as the largest economy in Southeast Asia.

Inflation rate in Thailand indicate the country facing ups and downs changes in time period. The lowest inflation rate shown in 2015 with only -0.9% while the highest is in 2008 with the percentage of 5.47%. Thailand facing a fluctuation of the inflation rate within the period. The higher inflation came despite the growth rate easing in December as a result of lower prices of energy and cheaper agricultural for certain products due to excess supply. (Bangkok Post, 2019). Given the rise of foreign commodity prices since the second half of 2016, rates are still much lower than before 2014. A decrease in the number of foreign tourists associated with political instability also generated downward pressure between 2013 and 2014. The inflation in Thailand was affected by government aimed at alleviating the high cost of living, particularly in 2008, and an increase in the excise tax on alcoholic beverages.

Graph of Inflation rate in Philippines shown the fall until it reach a 0.67% in 2015 before slowly rose at 2.33% in 2017. Noticeable the high inflation rates reported under President Ferdinand Marcos during 1970s and 1980s. The problem were fuelled by various factors such as the peso devaluation, increasing world oil prices, massive government spending, and a series of typhoons. Inflation rates also fell in after global rice crisis due to an influx of rice imports and the global financial crisis that slowed down the economic growth in Philippines. Other problems also contribute to inflation, such as the impact of the tax reform legislation on the price of petroleum products, the weakening peso, and the inflation expectations by individuals in the study. These include recent development in prices and costs, expectations for aggregate demand and production, pressures on the labor market, monetary and financial market conditions, economic trends and the international climate.

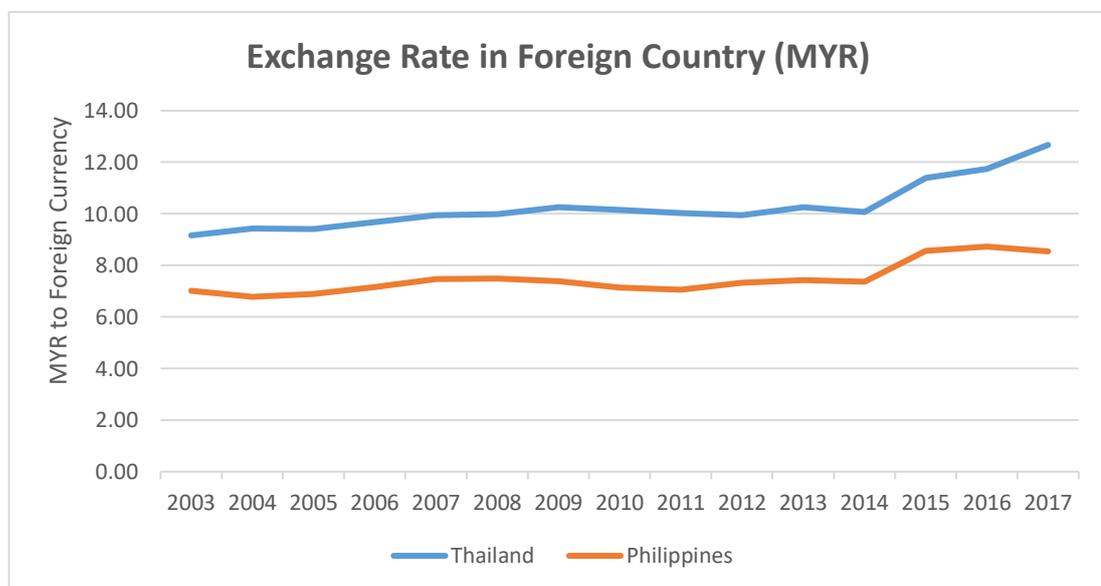
For Vietnam, the inflation rate indicates there were rapidly changes in year 2003 to 2011 with the rate of 3.24% to 18.68%. The worse inflation rate was in 2008 during the Globle Financial Crisis were most of the country are affected during the year. The inflation shown the fall until it reach a 0.19% in 2015 before slowly rose at 4.09% in 2017. The Vietnam facing a rapidly fluctuation in 5 years before it getting stable again for the next 6 years. Inflation in Vietnam was the strongest in a decade, and exceeded those in other emerging Asia markets. Engaged in market-oriented capitalism with Vietnamese characteristics, the government is vulnerable to an increasing gap between rich and poor. According to Jonathan Pincus, senior economist for UN Development Program in Hanoi, the government is to reassure the poor that they benefited from the economic growth of 8%.

### 1.2.4 Exchange Rate

The studies claimed that the real effective exchange rate was included to overcome with potential omitted variables issue and compensate for external competitiveness. (Balaguer et al., 2002). The higher exchange rate of foreign currencies against Malaysia Ringgit has attracted tourists from these regions to visit Malaysia.

**Figure 1.6: Exchange Rate for Malaysia Ringgit to Thailand Baht & Philippines**

**Peso**



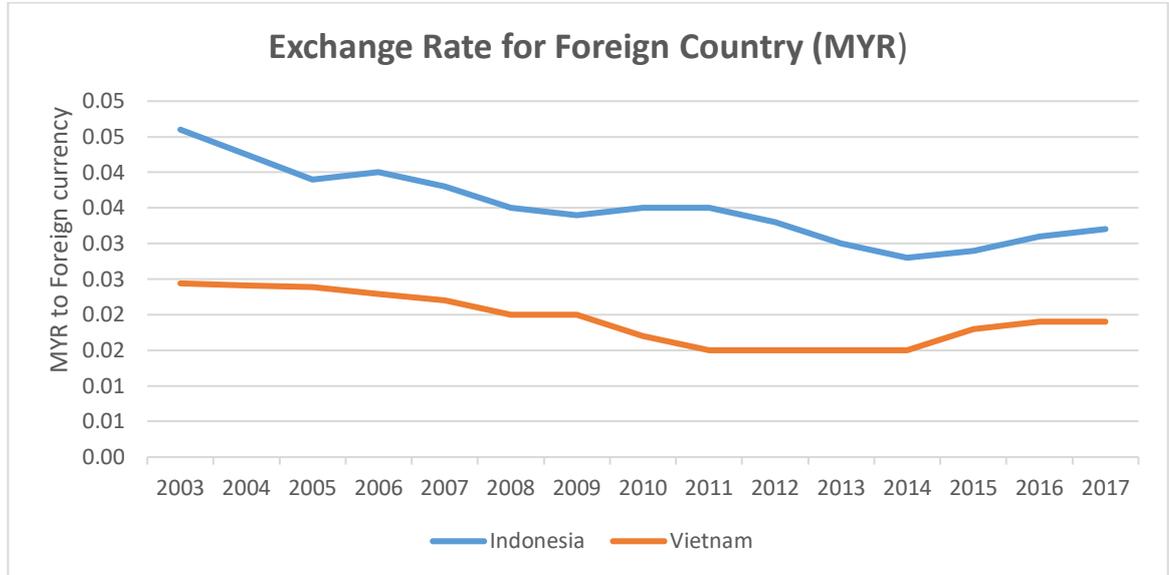
*Sources: Central Bank of Malaysia*

Figure 1.6 shows the exchange rate of the Malaysia Ringgit (MYR) with Thailand Baht (TBH) and Philippines Peso (PHP) from year 2003 to 2017. The graph indicates the amount of Malaysia currency giving out to the foreign currencies which is 100 THB and 100 PHP. Value of Malaysia Ringgit is more expensive when compare

to Thailand Baht since it indicates that less than 10 MYR will have the nearest amount of the 100THB. In 2017, the currency of Thailand was appreciation when Malaysia Ringgit recorded 12.67 MYR equal to 100 THB which higher value in THB when compare to the year before. The figure shown that the Thailand currency had facing the steadily along the time period. Along the year, the lowest exchange rate or appreciation in currency was recorded in year 2003 with amount of 9.16 MYR to 100 THB. Deflationary pressure was also generated by Baht' appreciation along with the expansion of the current account surplus and the inward portfolio or indirect investment (Somruedi. B. 2019).

Figure 1.6 plots the exchange rate of the Malaysia Ringgit (MYR) with Philippines Peso (PHP) from year 2003 to 2017. From the graph shows that value of Malaysia Ringgit is more expensive when compare to Philippines since it shows that less than 10 MYR will give out to have the nearest amount of the 100 PHP. In 2016, the currency of Philippines is valuable as it recorded to the amount of 8.73 MYR which the higher when compare to the year before. The figure also shown that the Philippines currency had facing the fluctuation along the time period. Along the year, the lowest exchange rate was recorded in year 2014 at currency of 7.37 MYR to 100 PHP where the currency getting expensive or appreciated. According to the Ben Diokno, in press briefing Malacanang (2017) told that depreciation in peso are favourable to Philippines exports sector, which will then create more jobs. This families of OFWs depreciation because of the increase their purchasing power (Jose Galang, 2017).

**Figure 1.7: Exchange Rate for Malaysia Ringgit to Indonesia Rupiah & Vietnam Dong**



*Sources: Central Bank of Malaysia*

Figure 1.7 shows the exchange rate of the Malaysia Ringgit (MYR) with Indonesia Rupiah (IDR) and Vietnam Dong (VDN) from year 2003 to 2017. The graph indicates the amount of Malaysia currency giving out to the Indonesia currency, 100 IDR. Value of Malaysia Ringgit is more expensive when compare to Indonesia Rupiah since it indicates that about 0.0327 MYR will have the same amount of the 100 IDR. In 2003, the currency of Indonesia was the higher (valuable) when compare to the year after. The fluctuation in the Indonesia currency are happened in the time period. Along the year, the lowest exchange rate was recorded in year 2014 at currency of 0.0267 MYR to 100 IDR. Therefore, Indonesia facing depreciation in rupiah currency due to the political uncertainty in 2014 and this shows a negative impact on the rupiah rate. According to Agus Martoeardojo, Governor of the Central Bank of Indonesia, the

rupiah faces a difficult time due to foreign and domestic troubles. (Indonesia Investor, 2019)

Figure 1.7 plots the exchange rate of the Malaysia Ringgit (MYR) with Vietnam Dong (VDN) from year 2003 to 2017. The graph indicates the amount of Malaysia currency giving out to the foreign currency which is 100 VDN. Value of Malaysia Ringgit is more expensive when compare to Philippines since it indicates that less than 0.0178 MYR will give out to have the same amount of the 100 PHP. Started from 2003 to 2011 the Vietnam currency are facing the depreciation with the recorded the changes form 0.0215 MYR to 0.0148 MYR. In 2012 the currency shows the slowly increases until it reach 0.0189 MYR in 2017. The figure shown that the Dong currency faces depreciated with Vietnam stock market has fallen 21% from its record in 2017 as investors grow nervous about the effect of trade tariffs on the global supply chain and its economy. (Michael, 2018)

### **1.3 Problem Statement**

The study of impacts on tourisms industry and macroeconomics factors always been studied among the academic. In general, most of the researcher studies the factor on increasing the tourism development instead of focus on the variables such as tourism arrival, tourism receipt and the exchange rate. To sustain the tourism development in 2020, government under the Malaysia Tourism Transformation Programme (MTTP) was designed to exploit the tourism sector's growth potential. (Aissa Mosbah. et al., 2014). The tourisms industry continued to significantly contribute economic development of the country by 14.9% as compare to 10.4% in

2005 (Bernama, 2018). From that, we realise Malaysia have the most favourite places where it can attract more tourists especial from Indonesia, Thailand, Philippines and Vietnam. Hence, the relationship between tourism impacts on the macroeconomics factors show the positive relationship for both. This is the reason why tourism impact become one of the famous study since year before.

Moreover, there are only few studies that had been done in examining Malaysia's tourism-led growth hypothesis. Most researcher focus on the tourism industry contribution by stated, and a research regarding the whole country are done few years back. Hence, the question that is will be answer in this study includes:

- i. How does the economics growth In Indonesia, Philippines and Thailand affects Malaysia's tourism receipts?
- ii. How do the Malaysia's tourism receipt influenced by inflation rate in Indonesia, Philippines, Thailand and Vietnam country?
- iii. How does exchange rate play an important role to increase the Tourism Receipts in Malaysia?

## **1.4 Objectives of the Study**

### **1.4.1 General Objectives**

The general objective in this study is to investigate the impact on the macroeconomic factor in foreign country contributed by Indonesia, Philippines, Thailand, and Vietnam country towards Malaysia's tourism receipts.

### **1.4.2 Specific Objectives**

The specific objectives for the study are as follows:

- i. To analyse the relationship between Malaysia tourism receipts and GDP in Indonesia, Philippines, Thailand and Vietnam.
- ii. To examine the relationship of inflation rate in Indonesia, Philippines, Thailand, and Vietnam with Malaysia tourism receipts.
- iii. To investigate the long-run relationship of foreign exchange rate and Malaysia tourism receipt.

### **1.5 Significance of the Study**

The study of the impact of the tourism receipts in Malaysia that influence by foreign economic factors will make the better understanding for individuals and community about the factors that influence directly and indirectly on tourism receipts in Malaysia. It is important to know that tourism receipts is one of the important factor that can make economic growth in Malaysia. Besides that, the fluctuation in tourism sectors can be determined to help the policy maker to come out with the solution that can increase the amount of local and foreign tourist in Malaysia. Other than that, this study is also beneficial by giving the opportunity to the private sector in maintaining and creating a sustainable tourism development in Malaysia which can help them to gain more profit for their organizations.

This study also investigates which variables has the most impact on Malaysia's tourism receipts. These acknowledgments can assist the government and policy makers in Malaysia to come out with the alternative and solution to maximize the impacts in Malaysia, generally. They can use the information compiled in this study to come up with new plans or reinforce existing policies to maximize the benefits gain. This can be done through the tourism sectors in terms of tourism contribution towards the revenue in Malaysia.

## **1.6 Organization of the Study**

This study focuses on the impact of foreign economic factors towards tourist receipts in Malaysia. Chapter 1 is related to the introduction about the impact of tourist receipts in Malaysia towards foreign economic factors. Chapter 1 then divided into 5 parts which are background of the study, problem statement, objective, significance of study and last but not least is organization on the study.

Chapter 2 in this paper focuses on the literature review on the economic factors towards tourism receipts in Malaysia that are related to this study. In this chapter, there will be four parts which are introduction, theoretical framework, empirical evidence and concluding remark. Whereas chapter 3 will explain the methodology that will be used to conduct the analysis for this study. The dependent variable that will be used in this study is Tourism Receipts (TR), meanwhile the independent variables are Gross-Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER).

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter will provide a comprehensive review about the previous theoretical and empirical study that has been conducted related to tourism industry, tourism receipts in Malaysia and macroeconomics factor. Since many of the researcher had study about correlation for the tourism receipts and macroeconomics factor. The literature review will provide the foundation for methodology for conducting the relationship in dependent variable (Malaysia' tourism receipts) and independent variable (GDP, Inflation rate and Exchange Rate).

#### **2.1 Theoretical Review**

##### **2.1.1 Tourism Industry**

Tourism industry is well-known industries that contribute to the economics growth in many countries. Many past studies had included tourism industry in their research including Lau et al. (2008), Eugenio et al. (2004) and Bouzahzah & Younesse (2013), Puah et al. (2014),. The study of tourism industry by Lau et al. (2008) found that tourism industry is one of the income earners that attracts great interest from a policy perspective for continuous economic growth in state. The leading service industries was considered a key source of economic growth in the world economy.

The results also supported by Du et al. (2014) in his recent study when he found that an increased tourism production is related to GDP increases.

However, tourism industry is also founded as an important industry which actually increase the economic in the country. This can be founded in Eugenio et al. (2004) study where the researcher finding shows that the tourism industry is responsive to economic growth in medium and low income countries, however, not necessarily in developed countries in Latin America. In contrast, development of the tourism sector are not stimulated to economic growth if there is a disadvantages of comparative in the industry. This had been further supported by Chiu and Yeh (2017) where both of them found that when the tourism industry faces a trade deficit and a competitive disadvantage, even there are more tourist arrivals and receipts also not directly lead to the high GDP.

### **2.1.2 Tourism Receipt**

In the analysis of tourism-led growth, number of researchers used tourism receipts in their studies. This included researcher of Eugenio et al. (2004), Puah et al. (2014), and Chiu and Yeh (2017), to investigate the impacts of economic growth in certain country. According to their studies, tourism receipts have a significant impact on economic growth. For example, Eugenio et al. (2004) found that spending by international tourists will stimulate the development of tourism as well as investment in human capital, thereby contributing significantly to economic growth. In particular, Puah et al. (2014) proves that tourist receipts and capital investment in the tourism

sector are major components of sustainable growth in the tourism sector. During the tourist trips to the country of destination, tourist receipts reflect tourists' direct expenses.

On the other hand, to enhance the tourism receipts in the country, government and NGOs should take the role and cooperate to establish a variety of the tourism product and activities. This is one of the way to attract more visitors and encourage them to increase their expenditure in the travel destination (Du et al. 2014). Logically, when the goods and services in developing countries are able to meets the tourism demand in terms of price and quality, tourism expenditure would increase. Therefore, ecotourism is one of the Southeast Asia's strengths and the member states have agreed to support ecotourism within this region (Ruekeith, 2014). Hence, a varieties of tourism packages such as *Cuti-Cuti Malaysia* was establish and promoted in 2015 to encourage more local Malaysians and international tourists to travel to nearby places in the Malaysia for their next weekend getaway. As a result, the government can gain more income through the tourist spending therefore fostering economic growth (Lau, 2008).

### **2.1.3 Inflation Rate**

Theoretically, inflation is one of the economics factor that influences tourism demand in the industry. This is because, inflation reflects a decreases in the purchasing power per unit of money and led to the fluctuation in the tourism receipts. According to the Addington (1993), inflation is generally defined as a sustained rise in the overall

price level and may be a consequence of several factors, which are ultimately captured by changes in costs, or by demand-side influences. This is also supported by Hafiz et al. (2010) where they found that an increase in the rate of inflation or the CPI leads to a reduced number of people who visit a country.

The fall in inflation brings a major impact on tourism market. One might interpret inflation as being directly linked to consumer purchasing power. When inflation goes up, the tourist's purchasing power falls and most of them do not want to visit those destinations where they find out they need to face the cost to stay and fly to the country. However, when inflation decreases, more tourists will visit the host country where they find the country is less costly in terms of accommodation and transportation (Teles, 2004; Tang & Lean, 2007). This is strongly supported by Dwyer and Forsyth (2009) since tourists normally spend a limited amount of time abroad, it is unlikely inflation will have a significant impact unless the host country experiences hyper-inflation or some other local economic crisis.

Nevertheless, the tourism sector is shown to be one of the first casualties of economic growth in periods of high inflation or deflation especially in the developing countries. A study of Inflation-led growth by Emanuel (2002), tourists can also prevent currency conversion fees or poor conversion rates and have a better understanding of the real cost of things relative to their country of origin. Based on these factors alone, dollarization would initially seem to attract more visitors to the country. Therefore, dollarization is clearly a way of preventing monetary instability and citing evidence

that while inflation declines significantly after dollarization, gross domestic product is rising (Bloch et al. 2005).

#### **2.1.4 Exchange Rate**

Generally, exchange rate is one of the main factor that influences the tourism demand. This is because, any change in the exchange rate will cause the tourist currency to depreciation or appreciation. A study by Khadaroo and Seetanah (2007) found that tourism demand in choosing their destination can be influenced by the changes of exchange rates. Changes in exchange rates impacts on the currency value of the country of origin. This had been supported by Crouch (1993) where the changes in exchange rates will affect the price of international travel and tourism industry in the country. As a tourist's destination country, the economics effect a wider range of international tourism and this can be seen through the number of tourist arrivals, the average length of stay reception or tourism expenditure, and other facilities. Thus, one of the important determination of travel destination is exchange rates (Webber, 2001).

On other hand, increasing in total tourist arrivals result will led to the increases in tourist receipts. Thus, exchange rate give strong impact to the tourist decision and to the option of destination (Chong, Lean & Hooy, 2014). Agiomirgianakis, Serenis and Tsounis (2015) agreed by saying a higher exchange rate will affect the travel performance of a country and thus result in a change in their business. Tourists were choose a country with lower fluctuation of exchange rate compare to country with high exchange rate fluctuation. In other words, travellers or tourists from the develop

countries were preferred to choose to travel to a country which is less wealthy due to the lower exchange rate of the money currency (Lean, Chong & Hooy, 2014).

Fluctuation in exchange rates may influence the valuation of the currency. Particularly when appreciation in the tourist currency or currency depreciation in the destination can prompt more people to travel. Therefore, the flows of foreign currency offerings will influence the appreciation of destination countries' currency exchange rate (Obstfeld and Rogoff, 1996). The conventional theories suggest the exchange rate of demand contributed to the influx of tourists. In the study by Afdi et al. (2012), the growth of foreign exchange and the movement of the rupiah between 1998 and 2010 did not necessarily constitute an ideal form of relationship, in line with the context set out above.

## **2.2 Empirical Evidence**

This section will review the past studies that are related to the relationship between TR, GDP, IR and ER from different countries. In this section also consist of the studies with the different type of time periods and approaches or methods used by the researcher in their past study.

A study on the effect of the tourism on Malaysia's local economy was conducted by Puah, Jong, Norazirah and Shafinar (2018). The study uses Malaysia as their main observation due to the higher potential in Malaysia GDP. Methodology approach that been used are Unit Root test, Causality test and Diagnostic tests. The

time series data from year 1995 to 2016 of tourist receipt (TR), capital investment (CI) as independent variable and real Malaysia GDP as a dependent variable are used to compare which country are more causality to tourism industry. The researchers found that the results of the approached where the TR and CI in the tourism sector have major positive results on Malaysia's economic growth. This implies that tourism-led growth in Malaysia does exist. Also relevant is the allocation of capital investments in the tourism sector will make sure that the growth of the tourism sector is sustainable and resource utilization at the optimum level. Therefore, human capital investment in the sector is important as well, because the tourism industry includes industries which need different kinds of human resources either directly or indirectly.

Hooi, Sio & Chee (2014) execute a study on the tourism and economics growth by comparing two countries, Malaysia and Singapore. The comparison of the two country is to measure which country are more causality. This study based on time series analysis and data collected between years 1980 to 2009 at International Financial Statistics (IFS). Variables used are number of foreign tourist arrivals, tourism receipts, real GDP, REER and total trade for both Malaysia and Singapore countries. The study shows that real GDP were represented as the output variable. Thus, the researcher claimed that hypothesis of economic growth through tourism is supported in Malaysia, while the long-run hypothesis of tourism-driven economics growth for tourism receipts is shown in Singapore. For other variables, REER plays an important role in the tourism sector in Singapore and Malaysia, where it is crucial to maintain a competitive exchange rate to support the tourism industry. The data

calculated by dividing the nominal GDP with CPI in the 2005 base year and expressed in millions of dollars in local currency.

Furthermore, a study also conducted by Mehmet. Et al. (2014) to examine the correlation between TR and GDP over time in South Africa. Recently, the causal link between tourism receipts and GDP has become a main focus in economics growth in tourism. Thus, the researcher used annual data with the time period of 1960 to 2011. Based on a finding in VECM, the researcher using rolling windows and time-varying coefficient approach to evaluate the parameter stability and causality of Granger due to the sensitivity of the causal link. Hence, the results from the full-sample VECM shows that there is no causality in South Africa between TR and GDP, although results from the time-varying coefficients model based on the state-space representation show that tourism receipts have positive expectation on GDP for the period 1985 and 1990. The researcher also found that full-time samples of different causality tests showed bidirectional causality between TR and GDP economically driven tourism growth.

Another studies about the tourism and GDP had conducted by Arslanturk et al. (2011) in Turkey. To test the finding, researchers also using the rolling windows and coefficients methods to investigate causality of variables based on Vector Error Correction Model especially between GDP and TR in Turkey from year 1963 to 2006. They results shows that GDP has not predictive power for tourism receipts, and after early the 1983s even tourism receipt positively Granger causes GDP. This indicates that the receipts from tourism have a positive results on Turkey's economic growth.

Similar finding to the study in Mediterranean country by Alper (2014). The study examine the correlation between tourism development and economic growth in the Mediterranean countries such as Croatia, Portugal, Bulgaria, Malta, Egypt, Tunisia, Cyprus, Italy, Greece, and Spain. In the study, researcher used the newly developed panel Granger causality tests for the year 1995 to 2010. From the study, result in Portugal indicate that there are bidirectional causality between economic growth and tourism development, while Tunisia, Greece, Spain, Cyprus, Bulgaria, Croatia, Italy, and have a unidirectional causal nexus from economic growth to tourism development. For the seven countries, the growth-led tourism hypothesis is endorsed. On the other hand, Malta and Egypt do not have a causal relationship. This indicates that not all country growth are depending on the tourism sector.

The study of Inflation rate and tourism industry are widely been done by many researchers for example, study by M. S. Shari et al. (2017), where the researcher looks for the importance of the tourism sector in contributed to economic growth among the developed and developing countries using inflation as independent variables. Nevertheless, information on the degree to which tourism industry can affect inflation, is still scare. This study uses the ARDL approach as a quantitative approach for year 1986 to 2014. Also included are a several variables such as economic growth, money supply, government spending, and interest rate. The results shows in short-run and long-runs, the tourism industry plays an important role in assessing inflation. Therefore, governments should take appropriate steps in deciding that any expansion of the tourism sector able to prevent inflation.

The previous studies of Hanafiah et al. (2010) used Gravity model to estimate tourism demand in Malaysia from year 1993 till 2007. Finding indicates that the economic factors and travelling decision among the tourists are strongly related. Tourism were motivated by high population rates, lower inflation, high gross national income, and short haul destination to visit Malaysia at the same time. Due to the economic crisis that Malaysia faces before shows that tourism demand from the ASEAN countries is adversely affected but has a positive relationship with the western and other countries. Therefore, the government of Malaysia can still count on the tourism industry as a means to sustain the economy due to regional economic crisis.

Even the correlation between foreign trade and economic growth were founded in recent years as a wide application in the literature. Salih et al (2011) had employs the bounds test for cointegration and causality test to examine a long-run relationship between trade, tourism and real income growth in Cyprus. Results found that trade, tourism, and real income growth are cointegrated among the variables. Granger causality test results shows that real income growth generate growth in international trade and foreign tourist arrivals to the island. In addition, case of Cyprus which is growth in international trade also triggers an increase in international tourist arrivals and finally, real import growth stimulate growth in real exports in.

### **2.3 Concluding Remark**

To conclude, there are many studies that have been done by the other researchers on tourism receipts and macroeconomics factors of the country. By using the different time period, variables and methodologies, most of the result shown that

there are positive correlation between the tourism receipts and macroeconomics factors. Many past studies have shown that various indicator can be used to estimating the TR, GDP, IR, ER in the study. This strengthens the concept of economic factors affecting the tourism industry in several country. Table 2.1 are the summary of the finding of past study under the topic of the tourism with different analysis approaches.

To further estimate the impacts of tourism receipts in Malaysia towards economic factors in foreign country, several approaches will be used in this study. Next chapter three will be explained more about the methodologies and approaches that be used in the study to estimate the variables of TR, GDP, IR and ER.

## 2.4 Summary of the Literature Reviews

**Table 2.1: Summary of the Literature Review**

<b>Authors (Year)</b>	<b>Objective</b>	<b>Data</b>	<b>Methodology</b>	<b>Variables Used</b>	<b>Conclusion</b>
Even Lau, Hu Sing Sing & Oh Swee Ling (2008)	To investigate co-movement and causality from tourist arrival to economic growth in the estimated period.	Time series on the list of Tourist Arrival from year 1972 to 2004 (32 years).	<ul style="list-style-type: none"> <li>• Univariate Unit Root analysis.</li> <li>• Cointegration analysis.</li> <li>• Granger Causality analysis</li> </ul>	<p><b>Dependent:</b> Sarawak's GDP</p> <p><b>Independent:</b> Tourist Arrival</p>	✓ Positive relationship between Sarawak's economic growth and tourist arrival.
Puah Chin Hong, Jong Meng Chang, Shafinar Ismail & Norazirah Ayob (2018)	To investigate tourism-led growth from the perspective of Malaysia.	Malaysian Tourism Receipt data from 1995 to 2016 (21 years).	<ul style="list-style-type: none"> <li>• Autoregressive Distributed Lag (ARDL),</li> <li>• Causality Test,</li> <li>• Diagnostic Tests</li> </ul>	<p><b>Dependent:</b> Malaysia GDP (GDP)</p> <p><b>Independent:</b> Tourist receipts (TR)</p>	✓ Tourist receipts and capital investment in the tourism sector have significantly positive effect on Malaysia's economic growth.

				& capital investment (CI)	
Ruwan Ranasinghe & M.G.P. Sugandhika (2017)	To analyzed the contribution of tourism income for the growth Sri Lank economy using time series analysis using data from 2970 to 2017.	Time series analysis using the data from year 1970 to 2017 (47 years).	<ul style="list-style-type: none"> <li>• Unit root test,</li> <li>• Regression model</li> </ul>	<p><b>Dependent:</b> Tourism Income</p> <p><b>Independent:</b> FDI, inflation rate, political stability, GDP, and direct &amp; indirect employment.</p>	<ul style="list-style-type: none"> <li>✓ Correlated between political stability and variables, such as FDI, inflation rate, political stability, GDP and direct and indirect employment.</li> </ul>
Ehsan Salimi Soderjani, Davoud Mahmoudinia, & Farshid Pourshahabi (2011)	To investigate the correlation for 17 MENA between economic growth and tourism receipts	Annually time period from years 1995 to 2007 (12 years) for MENA zone.	<ul style="list-style-type: none"> <li>• Panel Unit root Test,</li> <li>• Panel Cointegration test,</li> <li>• Panel Casuality test</li> </ul>	<p><b>Dependent:</b> Tourism receipts</p> <p><b>Independent:</b> Economic growth &amp; exchange rate</p>	<ul style="list-style-type: none"> <li>✓ Tourism receipts and economic growth shows a bidirectional causality in both long-run &amp; short-run</li> <li>✓ Exchange rate and GDP are unidirectional causality.</li> <li>✓ Economic growth, exchange rate, &amp; tourism receipts are</li> </ul>

					cointegrated with each other in long run.
T. Salha Tunku Ahmad, R. Razali, & M. S. Shaari, (2017)	To examine potential factor of tourism towards inflation.	Time series from years 1986 until 2014 (28 years).	<ul style="list-style-type: none"> <li>• Autoregressive Distributed Lag (ARDL),</li> <li>• unit root tests</li> </ul>	<p><b>Dependent:</b> Inflation Rate</p> <p><b>Independent:</b> Government spending money supply, GDP, &amp; inflation rate.</p>	<ul style="list-style-type: none"> <li>✓ Tourism industry's expansion can cause by inflation in short-runs and long-runs,</li> <li>✓ Government spending and economic growth does not have any significant impact on inflation.</li> </ul>
Enn Lun Young (2014)	To examine how inflation have the contribution of innovation to the tourism demand to the European countries.	Time series for years 1988 to 2010 (22 years) in 14 countries.	<ul style="list-style-type: none"> <li>• Feasible Generalized Least Squares (FGLS)</li> </ul>	<p><b>Dependent:</b> Tourism Demand</p> <p><b>Independent:</b> Costs, inflation, innovation, tourism demand</p>	<ul style="list-style-type: none"> <li>✓ Results indicate relationship between effects of innovation on the tourism demand to the European countries are significant, although inflation costs have larger, longer, and negative effect to the tourism industry.</li> </ul>

Ghifani Azhar, Haryo Kuncoro, & K. Dianta A. Sebayang (2018)	To investigate the impacts between exchange rates and tourist arrivals in Indonesia.	Data from year 2004 to 2016 (monthly).	<ul style="list-style-type: none"> <li>• VAR (Vector Auto-regressive) model.</li> <li>• Granger causality test</li> </ul>	<p><b>Dependent:</b> Tourist Arrivals</p> <p><b>Independent:</b> Exchange Rate</p>	<ul style="list-style-type: none"> <li>✓ Relationship between tourist arrival &amp; exchange rate are insignificant.</li> <li>✓ Granger causality shows that there are causality relationship in tourist arrivals to exchange rates. Therefore, VAR model supported the results.</li> </ul>
Addington Coppin (1993)	To examine the inflation in the tourism-dependent economy of Barbados during the 1980s.	Times series from year 1980 to 1885 (Quarterly).	<ul style="list-style-type: none"> <li>• Autocorrelation of the residuals</li> <li>• Durbin Watson d Statistic</li> </ul>	<p><b>Dependent:</b> Economy Growth</p> <p><b>Independent:</b> Inflation Rate &amp; Interest Rate</p>	<ul style="list-style-type: none"> <li>✓ The findings reveal strong, seasonal patterns to inflation, the latter suggesting that domestic prices were impacted by institutional processes such as the government's annual budget.</li> <li>✓ Low inflation in Barbados was due to good economic</li> </ul>

					management may be unsubstantiated.
Mohd Fauzi Mohd Harun, & Mohd Hafiz Mohd Hanafiah (2010)	To examine the relationship between the economic factors & tourism demand in Malaysia.	Time series data from year 1993 till 2007 (14 years).	<ul style="list-style-type: none"> <li>Gravity model</li> </ul>	<p><b>Dependent:</b> Tourism Demand in Malaysia</p> <p><b>Independent:</b> Income, distance, price, exchange rate, CPI, population and economic crisis</p>	<ul style="list-style-type: none"> <li>✓ Lower inflation, high gross national income, high population rates and short haul destination influenced tourist to visit Malaysia.</li> <li>✓ Demand for tourism from the ASEAN countries had negative impact but had positive relationship with the western and other continents during economics crisis.</li> </ul>
Ghulam Mustafa Shaikhc , Muhammad Saeed Meoa , Salman Masood Sheikha, Mohammad	To investigate the asymmetric impacts of oil prices, inflation and exchange rate on tourism	The annual data in Pakistan for year 1980 to 2015 (35 years).	<ul style="list-style-type: none"> <li>Unit root test</li> <li>Cointegration &amp; dynamic multipliers ( Nonlinear ARDL)</li> </ul>	<p><b>Dependent:</b> Tourism demand</p> <p><b>Independent:</b> Inflation rate, CO2 emissions, exchange</p>	<ul style="list-style-type: none"> <li>✓ Tourism demand is more appropriate for the analysing non-linear dynamics between tourism demand and certain</li> </ul>

Ashraful Ferdous Chowdhuryb , Mubbshar Alid and (2018)	demand in Pakistan.		<ul style="list-style-type: none"> <li>• Nonlinear autoregressive distributed lag (NARDL)</li> </ul>	rate, institutional quality & oil prices,	macroeconomic factors because of deceptive use in asymmetric ARDL method.
Mohamed Bouzahzah & Younesse El Menyari (2013)	To identify the impacts of tourism activity on the economic growth in Morocco and Tunisia.	Annual period 1980 to 2010.	<ul style="list-style-type: none"> <li>• Vector Error Correction (VECM)</li> <li>• Cointegration Test</li> <li>• Causality Approach</li> </ul>	<b>Dependent:</b> GDP in Morocco and Tunisia  <b>Independent:</b> REER & Real tourism receipts	✓ Granger test results is only valid for short-run and in the long-run, and unidirectional causality between economic growth & international tourism receipts.
Alper Aslan (2013)	To test the relationship between tourism development & economic growth in the Mediterranean country	Data from period 1995 to 2010 (15 years).	<ul style="list-style-type: none"> <li>• Panel causality tests</li> </ul>	<b>Dependent:</b> GDP in Mediterranean countries  <b>Independent:</b> Consumption & Policy implementation	✓ Portugal shows a bidirectional relationship nexus in tourism development and economic growth  ✓ Unidirectional relationship for Cyprus, Spain, Greece, Tunisia, Italy, Bulgaria & Croatia.

					✓ Result shows no causal relationship for Egypt & Malta.
Hakan Eryuzlu, Veli Yilanci, & Mahmut Bilen (2017)	To examine the causality for the 12 Mediterranean between economic growth and tourism development	Data from year 1995 to 2012 (17 years)	<ul style="list-style-type: none"> <li>Panel Granger causality tests</li> </ul>	<p><b>Dependent:</b> GDP in Mediterranean</p> <p><b>Independent:</b> Tourism Development</p>	✓ Bidirectional causality relationship between tourism development and economic growth in Mediterranean.
Salih Katircioglu (2011)	To investigate long term relationship between, real income growth, tourism, trade, and the direction of causality in Cyprus.	Time series data for the period 1960 to 2005 (45 years)	<ul style="list-style-type: none"> <li>Cointegration Test</li> <li>Granger causality tests</li> </ul>	<p><b>Dependent:</b> GDP in Cyprus</p> <p><b>Independent:</b> Tourism, trade and trade volume (exports plus imports), total number of international tourists visiting and accommodating in tourist</p>	<p>✓ Result shows there is co-integration of tourism, real income growth and trade.</p> <p>✓ Real GDP are affected by international trade and tourist arrivals to the island.</p>

<p>Rana Ejaz Ali Khan, &amp; Qazi Muhammad Adnan Hye (2012)</p>	<p>To examine long term relationship between tourism income and the economic growth in Pakistan</p>	<p>Annual time series data of 1971 to 2008 (37 years).</p>	<ul style="list-style-type: none"> <li>✓ Cointegration tests</li> <li>✓ Rolling windows bounds test</li> </ul>	<p><b>Dependent:</b> GDP in Pakistan</p> <p><b>Independent:</b> Exchange rate &amp; consumer price index</p>	<ul style="list-style-type: none"> <li>• Strong relationship between income from tourism and economic growth for the time period except for years 2006, 2007, and 2008 due to the war on terrorism &amp; earthquake in northern Pakistan.</li> </ul>
<p>Renee Van Eyden, Mehmet Balcilar, Rangan Gupta &amp; Roula Inglesi-Lotz (2014)</p>	<p>To examine the time varying linkages in South Africa between tourism receipts and GDP</p>	<p>Time series data in year 1960 to 2011 (51 years) for South Africa.</p>	<ul style="list-style-type: none"> <li>• Granger non-causality tests</li> <li>• ADF unit root test</li> <li>• Parameter stability</li> </ul>	<p><b>Dependent:</b> Real GDP in South Africa</p> <p><b>Independent:</b> Real Tourism Receipts</p>	<ul style="list-style-type: none"> <li>✓ VECM shows that there is no correlation between tourism receipts and GD.</li> <li>✓ Time-varying coefficients model shows tourism receipts have positive impact content for GDP in time period.</li> <li>✓ Strong causality of bidirectional between tourism receipts and GDP happened.</li> </ul>

## **CHAPTER 3**

### **DATA METHODOLOGY**

#### **3.0 Introduction**

Chapter three will explain on how the research is conducted and how the data been analyzed. Research methodology is beneficial evidence for the readers or other researchers in order to identify and explain on what method to be used in the research to be carried out which is related to the study.

#### **3.1 Data & Sample**

This study is focusing on the time series data for the period 2003 to 2017 in foreign country, Indonesia, Thailand, Philippines and Vietnam. Besides, the study is to discover the impact of tourism receipts in Malaysia by investigate which variables given a more impact to the tourism receipts. In this study, the variable that been use are Gross Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER). The data were collected from Malaysia Tourism Statistic and World Bank Data & World Development Indicator (WDI).

In this study, a panel data is being used. Panel data is data on one or more variables observed at the same period. The sample of this study comprise of 4 countries with the three differences economic factors as a variables. Therefore, three economic

factors in foreign country has been selected. The categories are Gross Domestic product (GDP), Inflation Rate (IR) and Exchange Rate (ER).

### **3.2 Research Design**

The objective of this study is to examine the impacts of foreign economics factor to the tourism receipts in Malaysia. The study is using quantitative data which is acquired from the secondary information sources. The secondary sources help to explain and support the primary data. It is the data that already collected and recorded by others to be a reference.

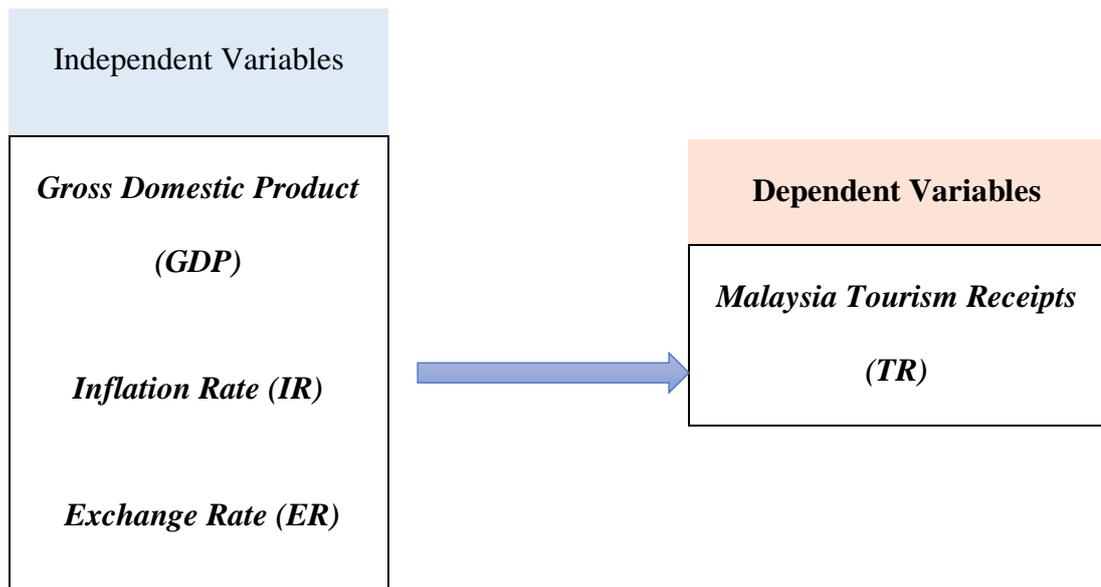
The sample of the study is from economy World Bank data and Malaysia Tourism data. The study will be focus on the economics factor in foreign country. There are four countries within the different economics factor. This study will select three variables such as GDP, IR and ER. Hence, the time frame from this study will be from year 2003 to 2017.

### **3.3 Research Framework**

Research framework is developed based on foundation of theory that can be applied to research and investigation. Theoretical framework used by the researcher to understand the relationship between the variables of theory and to predict the type of relationships that existing among the variables. The study of dependent variables is refers to the Malaysia Tourism Receipt as the measurement of economy growth. For

independent variables are focusing in the economics factor in the foreign country such as Gross Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER). The theoretical framework is as follow:

**Figure 3.1: Research Framework**



### 3.4 Selection of Measurements

In order to being consistent with past studies, the variables that being used in this study were designated based on the literature review as follow:

#### 3.4.1 Dependent Variables

In this study, the dependent variable is the Malaysia's Tourism Receipt. Dependent variable is variable which the researcher is concerned with for the study.

This variable is depends on other variables and highly influenced by independent variables.

#### **3.4.1.1 Tourism Receipts**

According to Puah et al. (2018), international tourism receipts are international inbound tourist spending, includes payments to regional foreign travel carriers. The receipts consist of any other prepayments made in the country of destination for providing the goods or services. Certain countries does not include the passenger transport items in the receipts. However, share of exports is measured as a ratio of G&S exports that included all transactions between residents of a country and the world. This also involving a changes in ownership from residents to non-residents of commodities sent for processing and repairs, general merchandise, services and non-monetary gold.

#### **3.4.2 Independent Variables**

Independent variables are the variables that affected the dependent variables. It is used by the researcher and even can manipulate and control them. This is because these variables do not depend on other variables. It is measured to know its effect on dependent variables.

### **3.4.2.1 Gross Domestic Product (GDP)**

GDP is primarily used to measure the wellbeing of the country. It is the monetary value of all the finished G&S produced within the boundaries of a country in a particular time period and includes manufactured by the citizens and foreigners of the country within its borders. GDP formula are widely used, which is based on the money spent by different groups that participating in the economy. Below are the formula of the GDP;

$$\mathbf{GDP = C + G + I + NX}$$

#### **Where**

**C** = Consumption of G&S

**G** = Government expenditures

**I** = Investments

**NX** = Net Exports or a country

### **3.4.2.2 Inflation Rate (IR)**

The rate of inflation is the amount of price increases or decrease over specified period, typically a month or a year. The percentage shows how quickly prices have rose during the period. Inflation lowers the purchasing power of each currency unit, resulting the increases in the prices of G&S over time. The formula for measuring the Inflation Rate are as below:

$$((C - B)/B) \times 100$$

Where;

B = Starting number of inflation rate

C = Ending number of inflation rate

### **3.4.2.3 Exchange Rate (ER)**

Exchange rate is the price implied by the currency in terms of another currency, or against a basket of other currencies. Exchange rates can be added against another currency, or fixed to the value of gold. In which case, rather than continuously fluctuating over time for a period of time. The formula for calculating the Exchange Rate are:

$$\text{Foreign Currency/Malaysia Currency}$$

### **3.5 Estimation Model**

The study is conducted to find the relationships between dependent variables and independent variables. The independent variables in this study are Gross Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER) while Tourism Receipt in Malaysia works as dependent variables. The success of this study depends on how the data process conducted and how it can be applied to the regression. Thus, the associations between dependent and independent variables in this research can be

examined. In this paper, researcher wants to examine the determinants that influences the Tourism Receipts in Malaysia. Moreover, researcher also wants to investigate which economics factor are strongly correlated with the Tourism Receipt. Thus, the regression model in this study is written as below:

$$TR_{i,t} = \beta_0 + \beta_1 GDP_{1it} + \beta_2 IR_{2it} + \beta_3 ER_{3it} + \epsilon_{it} \quad (1)$$

Where tourism receipts stands to TR, while *i* referring for the country, *t* refers for the year, and the variables are defined as follows:-

$TR_{i,t}$  = Tourism receipts *i* at time *t*

$GDP_{i,t}$  = Gross Domestic Product in Foreign Country *i* at time *t*

$IR_{i,t}$  = Inflation Rate in Foreign Country *i* at time *t*

$ER_{i,t}$  = Exchange Rate Foreign Country *i* at time *t*

$\beta_0$  = Intercept coefficient

$\epsilon_{it}$  = Random error term for firm *i* at time *t*.

$\beta_1, \beta_2, \beta_3, \beta_4$  = coefficient of the regression model.

### 3.6 Types and Source of Data

The data be used in this study are time series data from year 2003 to 2017. The data are takes from the Malaysia Tourism Statistic and World Bank Data. All the independent variables data, which consists of the Gross Domestic Product (GDP), Inflation Rate (IR) are taken from World Bank data while Exchange Rate (ER) was

taken from the Malaysia Tourism data. The data for the dependent variable, tourism receipts (TR) are taken from the Malaysia Tourism Data based on the time period.

### **3.7 Data Analysis**

In the study, the data analysis used are panel test and diagnostic test. Panel analysis consist of the test in Panel Unit Root test, Panel Cointegration test and Panel Granger Causality test. For the diagnostic test will also be used to test its heteroscedasticity and serial correlation of the residual. All of this data analysis will be done with the help of E-Views 10 software program.

#### **3.7.1 Panel Unit root Test**

Unit root test is a first steps before cointegration test to investigate the non-stationarity of the variables in level & first different. A panel individual unit root tests in this study was using Levin et al. (2002) and Im et al. (2003) test based on the researcher of Laura (2006). Therefore, null hypothesis for unit root test is non-stationary. In the level form, all the variables must in non-stationary but shows the statically significant at the first difference of the variables. Thus, we must reject the result for null hypothesis at the 5% of level when the variables are taken in first difference. Hence, the variables are integrated of order one or I (1). The formula for the unit root test can be express ad below:

$$y_{it} = (1 - \phi_i)\mu_i + \phi_i y_{i,t-1} + \varepsilon_{it} \quad i = 1, 2, \dots, N, t = 1, 2, \dots, T \quad (2)$$

$$\Delta y_{it} = \alpha_i + \beta_i y_{i,t-1} + \varepsilon_{it} \quad (3)$$

Where initial values of  $y_{it}$ , are assumed to be given. (2) can be expressed (3). The  $\alpha_i = (1 - \phi_i)\mu_i$ ,  $\beta_i = (1 - \phi_i)$  and  $\Delta y_{it} = y_{it} - y_{i,t-1}$ . The null hypothesis of unit roots can then be written as  $H_0: \beta_i = 0$  for all  $i$ .

### 3.7.2 Panel Cointegration Test

Cointegration test is the second step after unit root to examine the long run relationship or cointegrated among variables. In cointegration test, we use Pedroni (1999 & 2004) and Koa (1999) test for variables in this study. This approach more significantly compare to the conventional cointegration tests that applied on a single series of the country. Therefore, Pedroni (1999 & 2004) are employed a several test statistics to examine the residuals for stationary of the variables. Due to Pedroni (1999 & 2004), LLC and IPS tests are more accurate for small sample properties than the other tests.

$$\Delta y_{it} = w_i y_{it-1} + \sum_{k=1}^k \delta_{iL} \Delta y_{it-L} + \phi_i z_{it} + \varepsilon_{it} \quad (4)$$

Where  $z_{it}$  is a vector of deterministic terms, and  $\phi_i$  is the corresponding vector of estimated coefficient. The  $w_i$  coefficients are substitutions for  $\rho_i - 1$  while  $k$  is the lag length. Under the null hypothesis ( $H_0$ ) the time series are believed non-stationary, while the alternative assumes the time series are stationary. Thus, the hypotheses of cointegration can be expressed as below:

Ho :  $w_i = 0$ , no cointegration (no long run)

Ha :  $w_i < 0$ , cointegration exists (has long run)

### 3.7.3 Panel Fully Modified OLS (FMOLS) Estimates

Philips and Hansen (1990) initially introduced and developed the FMOLS methods to estimate a single cointegrating relationship which has a combination of  $I(1)$ . The FMOLS method generates accurate estimates for limited sample size and provides a check for robustness of the results. According to Kenney & Nnamdi (2019), panel group mean FMOLS is used to find out the long run estimates of the cointegrating relationship, which following the work by Pedroni (1999, 2004) and Koa (1999). The FMOLS procedure accommodates the heterogeneity that is typically appears in both long run cointegrating relationships and transitional serial correlation dynamics.

### 3.7.4 Panel Granger Causality Test

Granger causality test is using to estimating the vector error correction (VECM). The significant of the  $I(1)$  variables provides evidence on the direction of the short-run causation while the significant of the t-statistics on the one period ECT,  $\mathcal{E}_0$  denotes long-run causation. The short run causality can be tested the optimal lag according to Schwarz criterion is 2. Below are the equation that be written;

$$\Delta TR_t = \alpha_0 + \sum_{k=1}^a \phi_1 \Delta TR_{t-1} + \sum_{k=1}^b \phi_2 \Delta GDP_{t-1} + \sum_{k=1}^c \phi_3 \Delta ER_{t-1} + \sum_{k=1}^d \phi_4 \Delta IR_{t-1} + \mu_1 ECT_{t-1} + \varepsilon_0 \quad (5)$$

Where the symbol of  $\Delta$  consider as lag order with the assumption to be identical for all individuals. Estimated coefficient is shows as  $\alpha_0$  , while a, b, c, and d, are optimal lag of variables and k in period t.  $\mu_1$  used to check the single period reaction of a departure from equilibrium of the dependent variables. Therefore, coefficients are allowed to differ across individuals but are assumed time invariant (Granger, 1969).

### 3.8 Concluding Remark

This chapter emphasize the research design and methodology used in the study. Data analysis is important to find out the relationship between dependent variables and independent variables. In this chapter also has explanation about the independent variables and dependent variables that been used in this study. This includes the panel analysis of unit root test, cointegration test and granger causality test in this study.

The result of the data analysed will be further explained in Chapter 4 which are in chapter result and discussion. In chapter 4 will also identify the correlation between the dependent and independent variables in this study and the main economics factors that influencing the tourism receipts at Malaysia.

## CHAPTER 4

### RESEARCH FINDING & DISCUSSION

#### 4.0 Introduction

In this chapter, the results of the study will be presented. Those tests were depends on the annual data of four countries, Indonesia, Thailand, Philippines, and Vietnam which cover variables of Tourism Receipts (TR), Gross Domestic Product (GDP), Inflation Rate (IR) and Exchange Rate (ER). Data were analysed using panel analysis based on the empirical test of unit root test, cointegration test, Fully Modified OLS Estimates and granger causality test.

#### 4.1 Panel Unit Root Results

Table below indicates the unit root results of the Levin et al. (2002) and Im et al. (2003) tests. Based on the results, it summarized the variables are stationary in their first difference  $I(1)$ . Stationary of variables normally will happen at first difference,  $I(1)$ , seldom in level form. Hence, the result in the first difference must be rejected. In order to determine whether the variables have or do not have unit root, the result in intercept and trend and intercept must be the same for either in level form or first different. The panel unit root tests provide strong evidence in support that all the four variables do not have a unit root and all the variables are integrated of order one.

According to Levin et al. (2002) and Im et al. (2003), suggests that there are non-stationary in level form, but become stationary after first differencing  $I(1)$ . Thus, all the variables in first difference should be stationary or no unit root exist. In LLC and IPS tests, majority of the variables are smaller than the significant value in significant level of 5% (1.96) in  $I(0)$  of both individual intercept and individual intercept and trend, which means that variables are not stationary and had existence of unit root. In first difference  $I(1)$ , all the variables are larger than significant value, hence the null hypothesis of unit root exists is rejected. Therefore, concluded that all variables are stationary in  $I(1)$ , which unit root does not exist. In conclude, the findings that all the variables have the same order of integration allowed us to continue with cointegration test.

**Table 4.1: Levin, Lin & Chu (LLC) Panel Unit Root Test Results**

Variables	Test Statistics	
	Levin, Lin & Chu	
	Level	
	Individual Intercept	Individual Intercept & Trend
$\Delta LTR$	-0.27838 (0.3904)	0.04390 (0.5175)
$\Delta LGDP$	-1.05673 (0.1453)	-0.13198 (0.4475)
$\Delta LIR$	-0.86873 (0.1925)	-0.53838 (0.2951)
$\Delta LER$	0.25219 (0.5996)	0.58256 (0.7199)
	1 <sup>st</sup> Difference	
$\Delta LTR$	-3.81047 (0.0001)**	-3.37717 (0.0004)**

$\Delta$ LGDP	-9.98170 (0.0000)**	-9.79122 (0.0000)**
$\Delta$ LIR	-9.49669 (0.0000)**	-7.61832 (0.0000)**
$\Delta$ LER	-3.85396 (0.0001)**	-4.23561 (0.0000)**

Notes: The LLC investigate the null hypothesis of non-stationary of variables. The parenthesized values are the probability of rejection. Asterisks (\*\*) indicates statistically significant at 5% level.

**Table 4.2: IM, Pasaran and Shin (IPS) Panel Unit Root Test Results**

Variables	Test Statistics	
	IM, PESARAN AND SHIN	
	Level	
	Individual Intercept	Individual Intercept & Trend
$\Delta$ LTR	-0.47970 (0.3157)	0.54372 (0.7067)
$\Delta$ LGDP	-0.61664 (0.2687)	-0.13366 (0.4468)
$\Delta$ LIR	1.54315 (0.9386)	0.42966 (0.6663)
$\Delta$ LIR	-0.10749 (0.4572)	-1.07691 (0.1408)
	1 <sup>st</sup> Difference	
$\Delta$ LTR	-3.24808 (0.0006)**	-1.94137 (0.0261)**
$\Delta$ LGDP	-7.70709 (0.0000)**	-6.49201 (0.0000)**
$\Delta$ LER	-2.01413 (0.0220)**	-2.37117 (0.0089)**
$\Delta$ LIR	-7.37417 (0.0000)**	-5.75250 (0.0000)**

Notes: The IPS investogate the null hypothesis of non-stationary of variables. The parenthesized values are the probability of rejection. Asterisks (\*\*) indicates 5% significant level.

## 4.2 Panel Cointegration Test Results

The result of panel cointegration test shows that the null hypothesis of no cointegration cannot be rejected for all variables at 5% significant level. Pedroni (1999 & 2004) test is used for cointegration testing in panel data to assess the cointegration between variables. The result is determined by taking the majority number on which the variables is reject or do not reject. Moreover, Kao (1999) study is carried out to support the Pedroni (1999 & 2004) research results. There are a total seven panel cointegration tests in the Pedroni test, which is seven statistics about cointegration (Pedroni, 1999 & 2004). The tests can be categorized into two dimensions, within dimension (panel tests) and between dimensions (group tests).

From the panel cointegration results, which is determining the strong evidence to reject the null hypothesis of no cointegration of seven statistics provided by Pedroni (1999 & 2004). As refer to Table 4.3, the results shows that there are only two out of seven statistics are rejected with 5% significance level which is panel LLC and IPS statistics. And for the group PP and ADF statistic are rejected with 10% significance level. Thus, it shows that the statistic have strong evidence to reject the null hypothesis,  $H_0$  of no cointegration. Meanwhile, in Kao (1999) test, the probability is also smaller than level of significant, thus must be rejected. Hence, found that LGDP, LIR, and LER are cointegrated in the multi-country panel setting for the sample period and moving together. Hence, the results indicated that the variables do share a long run equilibrium relationship between the countries.

**Table 4.3: Panel Cointegration Results**

<b>A. Pedroni Residual Cointegration Test</b>	
Panel cointegration statistic (within-dimension)	
Panel v-statistic	-0.5935 (0.7236)
Panel PP-statistic	0.2151 (0.5852)
Panel PP-statistic	-1.6883 (0.0457)**
Panel ADF-statistic	-1.7036 (0.0442)**
Group mean panel cointegration statistic (between-dimension)	
Group rho-statistic	1.3419 (0.9102)
Group PP-statistic	-1.4359 (0.0755)*
Group ADF-statistic	-1.3452 (0.0893)*
<b>B. Koa Cointegration Test</b>	
ADF	-2.7112 (0.0034)**

Notes: Lag truncations for Pedroni statistics is 2 while Kao ADF statistic is 3. Asterisks (\*\*) indicates 5% significant level where (\*) indicates 10% significant level.

### **4.3 Fully Modified OLS Estimates**

Fully modified OLS (FMOLS) is adopted followed by Pedroni (1999) to obtain long run estimates of the cointegrating relationship (Kenney and Nnamdi, 2019). The long run estimates for the panel of TR are presented in Table 4.4. In the equation with TR as dependent variable, it is seen that the estimated coefficients for IR and ER are in negative and significant, while coefficient for GDP is positive but not significant.

The values of the approximate coefficients denote the magnitudes of elasticity, as the variables are in log forms.

The result shows the elasticity estimate of TR in Malaysia with respect to IR is -0.3837, means that when one percent rise in IR of foreign countries will decrease the TR of Malaysia by 0.38 percent. This supports the conventional view that there exists correlation between TR and IR. In other words, when the inflation rate in foreign country increase, the TR in Malaysia decrease due to the less purchasing power of the tourist in Malaysia. The evidences also can be found on part research by Eugenio et al. (2004); Lau et al. (2008); Du et al. (2014); Puah et al. (2014), and Chiu & Yeh (2017).

For ER, the elasticity estimate of TR in Malaysia with respect to ER is -2.5061, indicating that when ER in foreign country raise by one percent, will leads to the decrease in TR of Malaysia by 2.51 percent. This indicate that when value of the MYR increases, tourists need to pay more to have a Malaysia currency. Thus, purchasing power of tourist in Malaysia country will decrease, especially when value of Malaysia Ringgit is higher than currency in tourist countries. This finding is supported by Vita & Kyaw (2013), when the currency of the country devalues, international tourism become less expensive, leading to increased foreign tourists visiting that country. This results also tally to the past study results of Teles, (2004); Tang & Lean (2007); and Dwyer & Forsyth (2009). This supports the conventional view that there exists strong correlation between TR in Malaysia with ER of foreign countries.

Moreover, findings show that GDP in foreign country is positive but not significant to TR in Malaysia. This denotes that GDP in respective country is one of the important criteria for the tourist but not directly affect the decision of the tourist's purchasing power and TR inflows in Malaysia. Hence, foreign tourist do handle, IR and ER of their country as a criteria in decision making on visiting Malaysia but not for GDP.

**Table 4.4: Fully Modified OLS Estimates Results**

	$\Delta LGDP$	$\Delta LIR$	$\Delta LER$
Panel Group	0.2218	-0.3787	-2.5061
	(0.2312)	(0.0272)**	(0.0000)**

Notes: Variables are in log form. Asterisk (\*\*) shows significance at 5 % level.

#### 4.4 Panel Granger Causality Result

The empirical findings presented in Table 4.5 are summarized as follows. The coefficient of the error correction term (ECT) is statistically significant, indicating there is a long run causality relationship running from the variables TR, GDP, IR, ER. Besides, there seems to be a strong short run causal relationship running from coefficients of the three variables. Furthermore, there is short-run causality running from GDP to IR, and ER to TR. These causality is unidirectional causality between GDP to IR, and ER to TR.

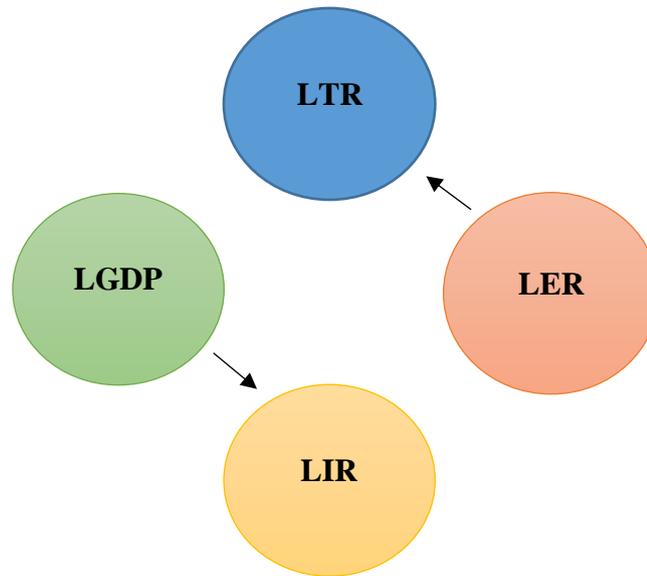
Moreover, TR and IR appears to be the initial receiver of any exogenous shocks which disturb the equilibrium of the panel system. This is evidenced in the statistically significant ECT in the TR and IR equation in the panel system. The coefficient of ECT in TR equation is 0.0979 indicating that about 9.79% of the adjustment is completed in a year. However for IR, the coefficient of ECT is 0.7297 means that about 72.97% of the adjustment is completed in a year. Hence, the directions of causal relationship in Table 4.5 are graphically illustrated in Figure 4.1.

**Table 4.5: Panel Granger Causality Results**

Dependent Variables	$\chi^2$ statistics				ECT	
	$\Delta$ LTR	$\Delta$ LGDP	$\Delta$ LIR	$\Delta$ LER	Coefficient	T-Statistic
$\Delta$ LTR	-	0.0015 (0.9694)	0.1225 (0.7263)	4.6566 (0.0309)**	-0.0979**	-2.0301
$\Delta$ LGDP	1.3907 (0.2383)	-	0.2212 (0.6281)	0.8126 (0.3673)	-0.0118	-0.0920
$\Delta$ LIR	0.2474 (0.6189)	6.3722 (0.0116)**	-	0.0036 (0.9524)	-0.7297**	-4.2427
$\Delta$ LER	0.2608 (0.6096)	0.6610 (0.4162)	0.2117 (0.6455)	-	0.0327	2.8416

Note: The  $\chi^2$  - statistic tests the joint significance of the lagged values of the independent variables, and the significance of the error correction term(s);  $\Delta$  is the first difference operator; figures in the parentheses are the  $p$ -values. Asterisk (\*\*) denotes the 5% significant level.

**Figure 4.1: Direction of Causal Relationship**



Notes: —→ denotes unidirectional causal relationships respectively.

#### **4.5 Concluding Remarks**

To concluded, this study is to find the impacts of tourism receipts in Malaysia that influenced by foreign economic factors which cover Indonesia, Thailand, Philippine, and Vietnam during 2003 to 2017. The data used in this study which is recorded annually. The dependent variable is Tourism Receipts, while the independent variables are gross domestic product, inflation rate, and exchange rate of foreign country. This study adopted panel analysis approach, where the involved tests are panel unit root tests, panel cointegration tests, FMOLS, and panel Granger causality.

The estimation on four countries, Indonesia, Thailand, Philippines, and Vietnam is done to ensure that the variable of GDP will not dominate the findings in this study. This is because GDP in foreign country has not affected directly to the Tourism Receipts in Malaysia. In panel unit root tests, all the variable are integrated at order one in first difference,  $I(1)$ . Moreover, in panel cointegration tests, variables are integrated. The finding of cointegration test prove that the variables of TR, GDP, IR, and ER from foreign country are cointegrated in long run.

In FMOLS finding, LIR and LER of foreign countries show negatively significant relationship to TR in Malaysia, whereas LGDP of foreign countries is positively insignificant to TR in Malaysia. In addition, for panel Granger causality, there are unidirectional causality between variables of LGDP to LIR and LER to LTR in short run where for the long run relationship, variables of TR, and IR shows a significant. Hence, IR and ER are the importance criteria to increase TR in Malaysia while GDP of foreign countries to Ringgit Malaysia does not dominate the findings in my study.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATION**

#### **5.0 Introduction**

In chapter five, the details on this study, started from chapter one to four will be in summarized. This chapter shall presents the conclusion remark, policy implementation & recommendation, suggestion for future study, and limitation of study. The objective of this study is to empirically identify the correlation between tourism receipts in Malaysia towards the foreign economic factors.

#### **5.1 Summary and Conclusion**

This study is to find out the impacts of foreign economics factor towards tourism receipts in Malaysia for four foreign countries, Indonesia, Thailand, Philippines, and Vietnam by applying a panel analysis approach. The time series of the data is for 15 years (2003-2017), where there are 60 observation. Besides, the data is recorded annually. The macroeconomics determinations are GDP, IR, and ER. GDP is a GDP of foreign country per capital as proxy. IR and ER is using the measurement of CPI.

In the macropanel model, the methodology adopted are panel analysis of unit root tests, cointegration tests, FMOLS, and granger causality tests. This paper has found and presented evidence that inflation rate and exchange rate is the important

factors to increase the TR inflows in Malaysia. Besides, the findings showed that all of the variables are stationary at I(1). On the other hand, panel cointegration tests indicate that there is a significant between Malaysia's tourism receipts, GDP, IR, and ER for foreign country.

Moreover, the FMOLS estimation results shows only IR and ER are negatively significant to TR inflows in the long run, while for GDP of foreign countries does not show significant to TR, although GDP is in positive relationship with TR. Subsequently, the panel Granger causality results shows that causality linkage runs from GDP to IR, and ER to TR only in short run. Another explanation is there are only two unidirectional causality in short run as well.

## **5.2 Policies Implementation and Recommendation**

### **5.2.1 Tourism Receipts**

According to ILO (2014), tourism will increase jobs creation in tourism related economies. About 230 million works are created in the tourism sector which represent approximately to 6% to 7% of the global workforce. In the policies of supply side and demand side, increases in the tourist arrival can increase the demand for domestic services and goods, hence, in order to meet the high demand, supply must increase at the same time. Furthermore, increase in tourism might cause a lower unemployment rate as evidenced in a study by Jebabli et al. (2014). Thus, tourism has more potential to contribute to poverty reduction besides provide better education for the work force in tourism.

In consequence, to be an International tourist attractions, the policy maker in Malaysia should focus on factors that can attribute to increase number of tourist. Concentrate more on neighboring countries for example, can contribute more to the tourism growth besides maintaining stability of currency and controlling the cost of living in Malaysia. Since AirAsia is known as the world best low cost airline, ease of online accommodation, and tour booking, many travellers have more interest in visiting to Malaysia. Thus, government can improve the development in infrastructures and also transportation in order to attract more tourist. Besides, government can develop a comprehensive mass rapid transit system or Global Positioning System (GPS) that can connecting the entire city state to enable visitors to explore the places that they are interested with, hence, idea of walking guides can be implemented. Besides, provide more information centers especially about the tourists' safety since more of tourists are risk averse, may increase the numbers of tourist in the long run.

### **5.2.2 Gross Domestic Product**

In term of GDP, the policy that can be done is when the salary or wages of the worker increases, GDP of the country will also be increase. This is because the increase in salary adjustment will no doubt have positive impacts on the economy of the country. The government has made it clear that to stimulate domestic demand, thus, we can putting more income in the consumer's pockets. This is reflected in the implementation of the Minimum Wage Policy in a concerted and national effort to

increases wages in the country as part of the New Economic Model and the Government move to drive the Country to a High Income by 2020.

Furthermore, government attempt to influence economic growth with supply side and demand side policies through expansionary fiscal policy. Thus, in order to encourage the spending and increase disposable income, it can be done by cutting the taxes. Lower taxes, however would increase the budget deficit and result in higher borrowing. Therefore, the expansionary fiscal policy is most appropriate in a recession when consumer spending fall. Besides, expansionary monetary policy can help to boost domestic demand by cutting interest rates. Stability is a key role of the government in ensuring economic and political normal economic activity to occur. Policy instability and conflict will deter investment and economic growth.

### **5.2.3 Inflation Rate**

Inflation has become one of the debatable issues in such literature. Even though the government has had reactions through both monetary and fiscal tools, but in most cases it has normally acted lately or passively. It is very easy to recognize and embrace the reality for fiscal tools, because it takes time to authorize and enforce a change in the fiscal plan. But monetary tools are also seen to be carried out at a considerable lag after the first signs of inflation occur. It can be explained the fact that inflation specification is still a contentious problem where the government is very reluctant to acknowledge the inflation situation. Indeed, changes are intended to make interest rates more comparable to the current inflation, rather than a tightening monetary policy

intervention to counter inflation. Even though the effect of a changes in interest rate is rather weak, however, the monetary tools are not a really ones to respond quickly as planned.

By joining the WTO in recent event, the foreign exchange markets in 2009 and 2010 and the Global Economic Crisis as well as the possibility of returning to inflation posed more problems for macroeconomic management and in particular, for managing inflation. Over the past few years, many changes in macroeconomic economic policy and environment have increased the need for a systematic and comprehensive approach to identify main inflation macro determinants in the new country context. The inflation which is mainly not up-to-date with recent events and changes, focuses on demand-pull factors of inflation and ignores the cost-push factors. For supply side considerations, it only concern on the inclusion of world prices.

#### **5.2.4 Exchange Rate**

Furthermore, tourism activities influences exchange rate in Malaysia. Meanwhile, fluctuations of exchange rate or relative price changes affect the selection of destination country for a tourist. Tourists from higher relative value currency of countries will have more interest to visit Malaysia, a lower relative value of MYR. Besides, Malaysia also adopts the regulated floating exchange rate regime to guarantee the stability of domestic price. In addition, ER plays an important role to Malaysia's tourism development, where it help to control a competitive exchange rate is crucial

to boosting the tourism sector. Thus, higher interest rate in monetary policy could draw foreign capital indrawn which would later boost the local currency.

The appreciation of the currency in the origin country against the currency of destination may attract foreign tourists because their purchasing power has risen and they will be able to buying more services and goods. According to PPP, exchange rate either appreciation or depreciation often represents the inflation rates in the origin's country and the country of destination. Thai tourists, for example affected by the wealth effect, where they believe they are richer as their real income rises and travel to Malaysia more frequently in the short term. However, travellers from Thailand are also responsive to travel costs changes, where they can visit Malaysia using their own transportation. Moreover, goods and services are comparatively cheaper in Malaysia, and this will attract more tourists to Malaysia. Therefore, increase in promotion of Malaysia's tourism is parallel with the spread of information about Malaysia regarding safety of the destination.

### **5.3 Suggestion for Future Study**

For future research on this topic, I recommend to increase the number of countries that could include other Asia countries. This can help to produce more results from more countries which could be more constructive for economic policy makings. In terms of the variables, find more suitable independent variables will help the researcher to find out more accuracy, and outstanding result.

Besides, the research can further use the micropanel approach instead of macropanel. This is because in panel data analysis, nowadays is more towards random and fixed effects models. In macropanel approach, there is more things can be explore rather than just follow the steps hardly. Not only that, I will like to suggest to have the research widely and not only focus on determinants, and should expand to study others possibility. As an example, the negative impact of the tourist visit form difference country also can be included.

#### **5.4 Limitation of Study**

Throughout completing this study, there were several limitation such as the data of these four countries are not complete. Since quantitative data are been used in this study, some of the data of the variables only available for recent years and there are some missing data within the years for certain country. Due to the limitation for the time series on study, it is difficult to have a real balanced data if the research is done from the earlier years.

Others limitation in the study also due to the limitation on the available software. In this research study, Eviews 10 is used to estimate the results. However, Eviews 10 is unable to conduct many tests, especially if micropanel approach is used. For example STATA is better for removing heteroscedasticity through white test and helps to choose fixed or random effect through Hausman test which is evaluated through commands. Therefore, STATA is more preferable, instead of Eviews.

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