

THE EFFECTS OF MACROECONOMICS AND FINANCIAL STABILITY ON  
PURCHASING POWER COMPETITIVENESS IN MALAYSIA AND THAILAND

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## DEDICATION

This dissertation is sincerely dedicated to my family, supervisors, lecturers and teachers, who have taught me to trust Allah, to believe in myself, to never stop seeking knowledge, to manage my time properly, to work hard and to surrender (*tawakkal*) to the will of Allah. It is also dedicated to all my friends who have inspired and encouraged me to complete this dissertation.

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## **ABSTRACT**

In order to align its economic development with the pillar objectives of ASEAN Economic Community 2025, ASEAN members, especially Malaysia and Thailand, need to ensure the macroeconomic and financial factors are stable, controlled, and support all their development plans. The purchasing power competitiveness becomes a crucial factor in the global economic environment because the world is connected in trade, finance, and social aspects. This study investigates the impact of macroeconomic and financial stability on purchasing power competitiveness in Malaysia and Thailand between January 1994 and March 2020. The multilateral exchange rate, trade openness, world oil prices, overnight policy rate, stock market index, and world crude palm oil prices are considered in this study. Firstly, the traditional and nonlinear unit root tests were employed to validate the hypothesis of purchasing power parity. Secondly, the study applied the nonlinear Autoregressive Distributed Lag (NARDL) in proving the existence of the nonlinear structure and serial independence in the variable's series data. Furthermore, the study utilized the nonlinear Hatemi-J causality to prove the variables' positive and negative causality effects. The study's findings confirmed evidence of an asymmetric relationship between the variables, and nonlinear causality verified a bidirectional relationship. Therefore, a change in any of these macroeconomic and financial variables, whether the trade openness, world oil prices, overnight policy rate, stock market index or crude palm oil prices, would influence the purchasing power competitiveness in Malaysia and Thailand in the long-run and short-run. Therefore, the policymakers in both countries should consolidate and reconsider an underlying policy and strategies to stabilize the value of purchasing power competitiveness and vice versa, as targeted.

## ABSTRAK

Bagi menelaraskan pembangunan ekonomi selari dengan objektif tersasar Komuniti Ekonomi ASEAN 2025, anggota ASEAN khususnya Malaysia dan Thailand perlu memastikan faktor makroekonomi dan kewangan yang stabil, terkawal dan menyokong segala rancangan pembangunan. Daya saing kuasa beli menjadi faktor terpenting dalam persekitaran ekonomi global kerana dunia saling berhubung antara satu sama lain dalam aspek perdagangan, kewangan dan sosial. Kajian ini bertujuan untuk mengkaji kesan faktor makroekonomi dan kestabilan kewangan terhadap daya saing kuasa beli di Malaysia dan Thailand antara Januari 1994 dan Mac 2020. Kadar pertukaran pelbagai hala, keterbukaan perdagangan, harga minyak dunia, kadar dasar semalaman, indeks pasaran saham dan harga minyak sawit mentah dunia dipertimbangkan dalam kajian ini. Pertama, ujian punca unit tradisional dan tidak linear digunakan untuk mengesahkan hipotesis pariti kuasa beli. Kedua, kajian menggunakan *Nonlinear Autoregressive Distributed Lag* (NARDL) bagi membuktikan kewujudan struktur tidak linear dan kebebasan bersiri dalam data siri pembolehubah. Akhir sekali, kajian ini menggunakan ujian penyebab tidak linear Hatemi-J dalam membuktikan kesan penyebab positif dan negatif antara pembolehubah. Hasil dapatan kajian mengesahkan bukti kewujudan hubungan asimetri dan hubungan dua hala antara pembolehubah kajian. Oleh itu, perubahan pada mana-mana pembolehubah makroekonomi dan kewangan ini sama ada keterbukaan perdagangan, harga minyak dunia, kadar dasar semalaman, indeks pasaran saham atau harga minyak sawit mentah, akan berupaya mempengaruhi daya saing kuasa beli di Malaysia dan Thailand dalam jangka masa panjang dan pendek. Oleh itu, penggubal dasar di kedua-dua negara harus menyatukan dan mempertimbangkan semula dasar dan strategi asas dalam menstabilkan nilai daya saing kuasa beli dan sebaliknya, sebagaimana yang disasarkan.

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## LIST OF ABBREVIATIONS

NER	-	Nominal Exchange Rate
RER	-	Real Exchange Rate
REER	-	Real Effective Exchange Rate
GDP	-	Gross Domestic Products
SEA	-	Southeast Asian
AFC	-	Asian Financial Crisis
GFC	-	Global Financial Crisis
OPEC	-	Organization of the Petroleum Exporting Countries
CPC	-	Commodity Prices Crisis
MYR	-	Malaysia Ringgit
THB	-	Thai Baht
AEC	-	ASEAN Economics Community
KLSE	-	Kuala Lumpur Stock Exchange
SET	-	Stock Exchange of Thailand
SWP	-	Sectorial Work Plans
OPR	-	Overnight Policy Rate
MITI	-	Ministry of Trade and Industries
MATRADE	-	Malaysia External Trade Development Cooperation
ASW	-	ASEAN Single Window
ACTS	-	ASEAN Customs Transit System
AWSC	-	ASEAN Wide Self-Certification
ASSIT	-	ASEAN Trade Repositories and Solutions for Investment, Services and Trade
GCFC	-	Gross Fixed Capital Formation
HDI	-	Human Development Index
GNI	-	Gross Nominal Income
GCR	-	Global Competitiveness Report
NESDC	-	National Economic and Social Development Council
NESDB	-	National Economic and Social Development Board

BOT	- Bank of Thailand
LOP	- Law of One Prices
PPP	- Purchasing Power Parity
BOP	- Balance of Payment
MA	- Monetary Approach
APPP	- Absolute PPP
RPPP	- Relative PPP
ADF	- Augmented Dickey-Fuller
KPSS	- Kwiatkowski-Phillips-Schmidt-Shin
BDS	- Brock, Dechert and Scheinkman
FADF	- Fourier Augmented Dickey Fuller
FKPSS	- Fourier Kwiatkowski-Phillips-Schmidt-Shin
CPI	- Consumer Pricing Index
NARDL	- Nonlinear Autoregressive Distributed Lag
CPO	- Crude Palm Oil
DOSM	- Department of Statistics Malaysia

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

Purchasing power is one of the most imperative issues for business and end-users, not only for the international markets but also for the local market. Purchasing power is one of the essential factors that is taken into consideration in determining products price for nations. Other than purchasing power, fitting products price normally considers the cost of products, profit margin, market demand and supply, policies and competitiveness level in the market. Purchasing power refers to the capacity of the local currency to buy a certain quantity of products and services offered in the country and it reflects the intrinsic value of local currency unit in comparison to the quantity of goods or services offered in the local market (Friedmen, 1977). Meanwhile, external purchasing power refers to the ability of a local currency to buy any amount of goods and services offered in the international market and it reflects the buying power of the nation in the comparison with other currencies (Bickerdike, 1922).

External purchasing power is expressed in two types of exchange rates which symbolize the value of nation local currency unit as compared to foreign currencies unit. They are nominal exchange rate (NER) and real exchange rate (RER) where both NER and RER are known as bilateral exchange rates. NER refers to the unit number of foreign currencies that can buy by local unit currency which is basically the numerical foreign unit currency as compared to the numerical local unit currency. Normally, it is expressed using two quotations which is the price quotation or quantity quotation. Meanwhile, RER refers to the intrinsic value of local currency unit as compared to the unit number of foreign goods or services offered in the international market. It shows the value of the local unit currency in terms of the quantity of foreign tradable goods and services. The bigger the quantity of foreign

goods and services means the higher the purchasing power of local unit currency. However, for the most part, the economists, financiers and policymakers are more interested in real effective exchange rate (REER) while evaluating the currencies misalignment and real external purchasing power competitiveness. REER is the weighted average of RER of all trading partners for the country and it demonstrates the country's external competitiveness in terms of purchasing power. REER is known as a trade-weighted index and a multilateral exchange rate.

According to Nielsen (2015), purchasing power is crucial to a nation because it portrays the buying capacity value rotation in a certain market. The production of goods and services is meaningless if there is no purchasing power in the market to support the goods and services produced. Thus, this issue was discussed by many researchers worldwide especially in the context of internalization and globalization. Along these lines, fluctuation of local currency unit is highlighted as one of the contributors to these issues. In fact, the significance of local currency unit is recognized universally in valuing the purchasing power competitiveness and economic growth of a nation. An imbalance of exchange rate as well as purchasing power competitiveness indicators will create discrepancies in the entire functioning of the economy of a country and consequently, price of goods and services offered will be increased or decreased depending on the types of imbalances that occur.

The relationship between the country's economic growth especially on the macroeconomics and financial indicators and purchasing power competitiveness has been frequently analysed with mixed results. Some of the researchers found there is no significant relationship between macroeconomics and financial indicators and purchasing power competitiveness while some others found positive relationship between these indicators. However, most of the researchers found negative relationships between these indicators. Undeniably, appreciation and depreciation of the purchasing power competitiveness have both positive and negative impact on the economy of a country.

Many researchers tried to examine the relationship between economic growth and purchasing power competitiveness by finding a threshold rate of purchasing



power indicator which is suitable to promote economic growth. However, there are still issues and controversies about the actual rate, value and impact of these indicators due to weak significant relationships between the variables. Regardless of the empirical results, the importance of stable purchasing power competitiveness to a country cannot be denied. Mubarik and Riazuddin (2005), Gillman et al. (2004), Gylfason and Herbertsson (2001), Bruno and Easterly (1998), Ghosh and Phillip (1998) and Lucas (1973) concluded that uncontrolled purchasing power competitiveness indicators will harm the economic growth as well as the long-term economic development of the country.

Misalignment of purchasing power competitiveness indicators may have a devastating effect to the economic development of a country and society well-being, especially in terms of the economic production, product prices and circulation of money in the country. The prices of goods and services especially imported products become low due to appreciation of local currency unit and this will force down the public demand and government expenditure to the local products market as compared to international products market. At the same time, the local export goods become expensive and less competitiveness in the international market. As a result, many local firms, companies and manufacturers have to shut down their operations and production, which will eventually create unemployment issues and negative impact on redistribution of income and wealth among the population in the country.

Depreciation of purchasing power competitiveness reinforces the local economic activities due to imported products become more expensive, thus the society will be gearing to the local spending activities and directly supporting the local industries productions. At the same time, the country's exported products become cheaper and are more competitive in the international markets. Therefore, the country Gross Domestic Products (GDP) will grow as a result of increasing of money circulation in the local market and improves the country's economic growth.

In principle, an appreciation of purchasing power competitiveness significantly strains the underlying economy as many industries become internationally uncompetitive and thousands of jobs will be lost. Meanwhile,

depreciation value of purchasing power competitiveness promotes export and increases country's savings, but it can adversely affect as imported raw material, overseas shopping and travel become more expensive. Thus, the value of purchasing power competitiveness in the foreign exchange market is an important instrument in a government's toolkit as well as a key consideration in setting up a monetary policy. In addition, an appreciation or depreciation of purchasing power competitiveness is affected by several key economic and financial variables such as trading volume, cost of borrowing, investment rate of return, price of products, commodity prices, future employment prospects, country policies and many others.

## **1.2 Purchasing Power Competitive in Malaysia and Thailand**

Throughout the period of 1994 to 2020, both countries recorded unstable REER values, but Thailand has more stable REER value especially in the 20th century as compared to Malaysia. Undeniably, in the late 1997 and early 1998, both countries experienced the weakest index points of REER due to Asian financial crisis (AFC). However, both countries recovered quite promptly from the AFC impact around the 2<sup>nd</sup> quarter (Malaysia) and 3<sup>rd</sup> quarter (Thailand) of 1998. Throughout the period (see Figure 1.1), the highest value of Thailand REER was recorded in 2<sup>nd</sup> quarter 1997 (a quarter before AFC begin) with the value of 122.12 points, while the lowest value was recorded in the 1<sup>st</sup> quarter 1998 with the value of 68.24 points. After that, it remained with the average between 84 and 96 points until the 4<sup>th</sup> quarter of 2006. With the right monetary and fiscal policies implemented, Thailand slowly climbed up the REER points beginning with 97.36 points in the early 2007 to 109.64 points in the end of 2020.

Similar to Thailand, Malaysia recovered its REER from the AFC impact in the 2<sup>nd</sup> quarter of 1998, a quarter earlier from Thailand. Starting from that period, Malaysia keeps maintained its REER value with the average 95 to 104 points until 1<sup>st</sup> quarter 2015. However, beginning in the 3<sup>rd</sup> quarter of 2015, Malaysia REER started to decline and hovering around 84.32 to 84.96 until end 2020 due to anticipated

internal and external issues such as oil crisis, heightened uncertainty in the financial markets, strengthening of the hard currencies, trade war between US and China, immigration issues and uncertainty on new government administration.

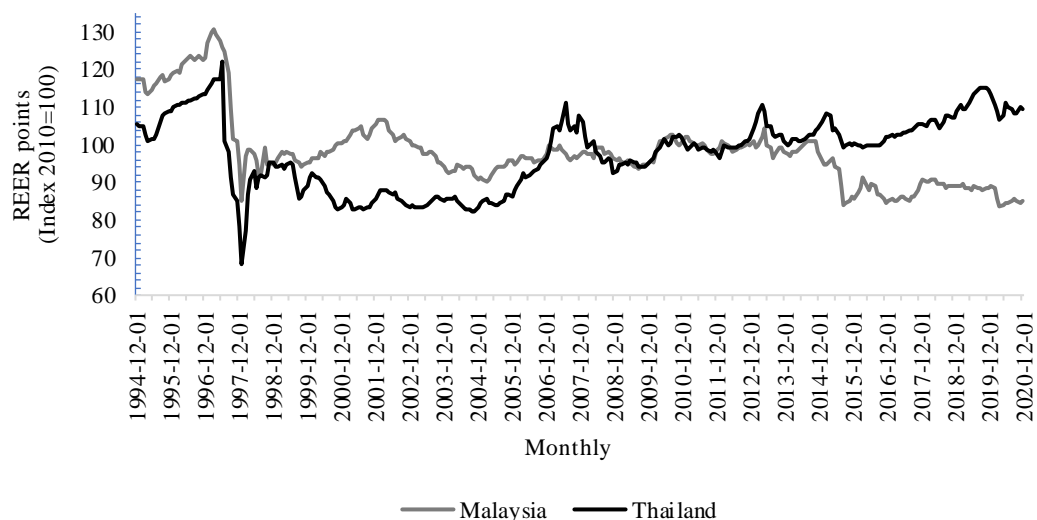


Figure 1.1 REER for Malaysia and Thailand, 1994 – 2020.

Source Federal Reserve Economic Data, (FRED, 2021).

### 1.3 Macroeconomic and Financial Indicators in Malaysia and Thailand

In aligning with the ASEAN Economic Community (AEC) 2025 Blueprint, Malaysia and Thailand have slowly transformed their economy from predominantly agriculture-based to manufacturing-based, however the transition seemed to create a side effect on the country macroeconomic and financial indicators specially to net trade, commodity prices, interest rate, stock market index and so on. Malaysia and Thailand net trade was fluctuating from 1994 to 2020. Throughout this period, there were more than five significant changes in net trade. The most notable was during 2011 to 2014 where the net trade declined from USD 14,407.12 million in 2011 to USD 1,065.34 million in 2013 and then drastically increased to USD 9,464.50 million in 2014 for Malaysia, while from USD 1,736.68 million in 2011 to USD -4,484.50 million in 2013 and rise to USD 1,271.34 million in 2014 for Thailand. Generally, this dramatic fluctuation was occurred due to the declining export of

electric and electrical sector which almost one-third of total exports, however the increases of hydrocarbon sector filling the void of that export in ensure the positive net trade for both countries.

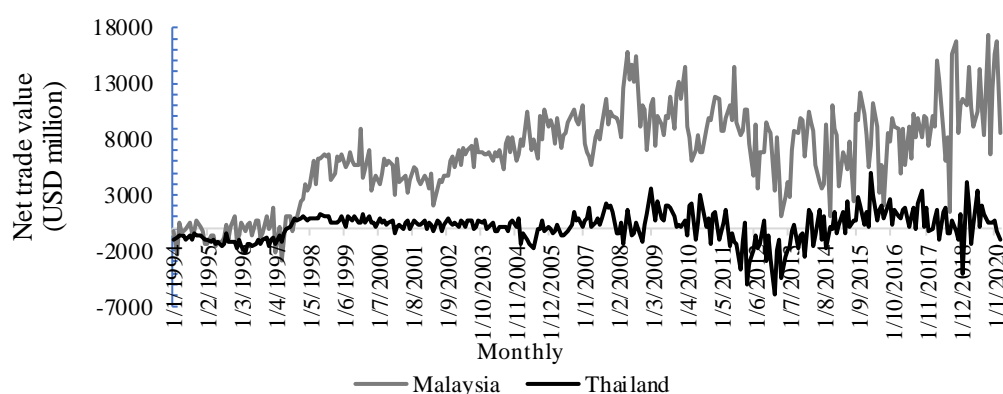


Figure 1.2 Net Trade for Malaysia and Thailand, 1994 – 2020.

Source MATRADE and Bank of Thailand (2021).

In addition, both of country also needs to growth up the total food import due to low food production from the agriculture sector in satisfying the national consumptions, a string of transition from agriculture-based to the manufacturing-based. Hirschmann (2019) revealed the Malaysia food import increases by almost 42.12% from MYR 36.09 billion in 2012 to MYR 51.29 billion in 2017. This phenomenon stimulates an increase of local and imported food prices which is directly disturbed the fluctuated value of interest rate in harmonize the fluctuation of inflation rate. As specified in the Figure 1.3, the 3-months overnight policy rate (OPR) significantly fluctuated for both country from 1994 to 2020, although in small percentages at the end of period. There were a few series of major fluctuations, but the highest fluctuation was in 1997 to 1998, possibly because of the AFC effects.

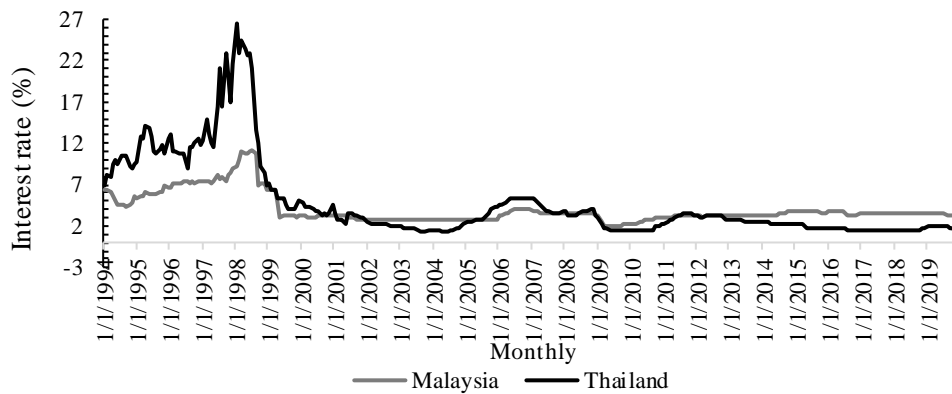


Figure 1.3 3-Months OPR for Malaysia and Thailand, 1994 – 2020.

Source MATRADE and Bank of Thailand (2021).

Although, Malaysia and Thailand are being 2<sup>nd</sup> and 4<sup>th</sup> of oil producer countries in the Southeast Asian (SEA), the local oil prices in Malaysia and Thailand also sensitive to the movement of world basket oil prices. This is due to the fact that oil is the main source of transportation energy in most of the countries in the world including Malaysia and Thailand, therefore any oil crisis will have an adverse impact to economic development as well as to political stability especially during the 21<sup>st</sup> century internationalization wave. History shows that the world has faced a series of oil shock starting from 1970 until 2020 as per Figure 1.4. Most of the oil crisis was caused by changes in of the policies by Organization of the Petroleum Exporting Countries (OPEC), relaxing of geopolitical concerns and oversupply due to the booming US production.



Figure 1. 4 Monthly World Oil Price USD Per Barrel, 1994 – 2020.

Source IMF primary commodities prices (2021).

Even though Malaysia and Thailand are the major producer of crude palm oil in the world, but the prices of crude palm oil are fluctuating based on the world basket commodities prices. These inconstant of crude palm oil price has a huge impact on the country net trade, local spending and at the same time affects the country economic growth and development. Worsen the situation with the banned of crude palm oil export from the SEA countries because of deforestation and biodiversity forest has reduced both country income and directly inhibit the economic growth of both countries. This situation will shrink the value of palm oil industry which is contributed almost 38% and 27% of the value of Malaysia and Thailand agricultural export and constituted approximately 2% to 5% of both country GDP before.

As specified in the Figure 1.5, Kuala Lumpur Stock Exchange (KLSE) and Stock Exchange of Thailand (SET) was seen highly fluctuated throughout the period of January 1994 to March 2020. Before the AFC, the monthly stock price index of SET seen leded the monthly stock price index of KLSE, however KLSE has overtaken the position and remained until April 2019. The roughly fluctuation of KLSE and SET was due to war trade tension between US-China speculation, Brexit, banned of crude palm oil by EU and uncertainty of new policies by the new government especially in Malaysia (Bangkok post, 2019, MarketWatch, 2019 and

Shukry et al., 2019). Apart from that, Malaysia and Thailand also in the process of re arrange a new cabinet for a new government after several times changes reins of government in the 2019 and 2020.

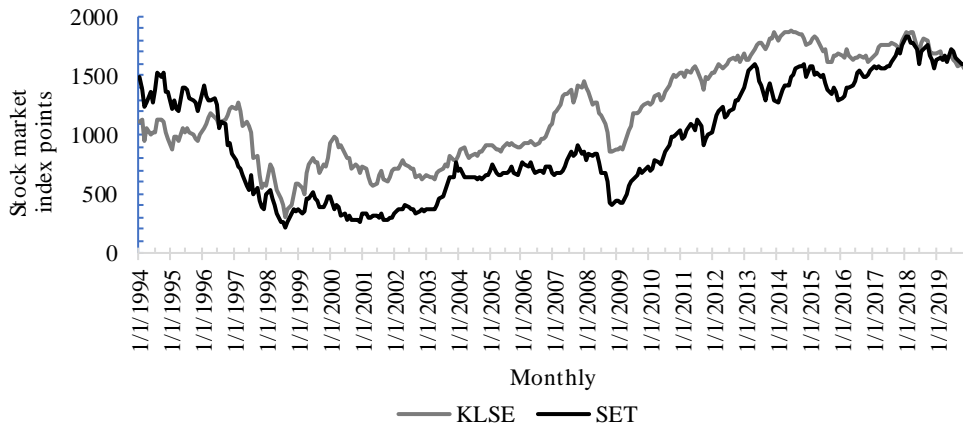


Figure 1. 5 Stock Market Index for Malaysia and Thailand, 1994 – 2020.

Source KLSE/SET (2021).

#### 1.4 Problem Statement

Economic growth is a very crucial indicator for the development of any country in the world. The most common proxy used for country economic growth is GDP. Thus, an increment in the GDP shows good overall economic condition of the country. However, the purchasing power competitiveness indicators such as purchasing power competitiveness can dampen the economic growth if not properly managed by the relevant authorities. Generally, the purchasing power competitiveness of most SEA countries was quite volatile and this created an atmosphere of economic uncertainty atmosphere even though they have recovered from the AFC. There were a few series of major fluctuations, but the highest fluctuation was on 2008 to 2009, possibly because of the 2008 Global Financial Crisis (GFC). Excessive risk allowed by commercial banks, mingled with the bursting housing bubble in the US caused the securities value which was tied to the US real estate to plummet and severely ruined many financial institutions globally.

This was followed by oil price deterioration in mid-2014 which cause an adverse effect to the world economy, including the SEA countries. The oil crisis was caused by changes in of the policies by Organization of the Petroleum Exporting Countries (OPEC), relaxing of geopolitical concerns and oversupply due to the booming United State of America production.

Crude oil prices dropped to below USD 40 per barrel at the end of 2015 which was almost below than 49% of the international crude Brent oil benchmark average for 2010 to 2014. Several SEA countries are oil exporter, thus the oil crisis has caused the purchasing power competitiveness indicators to fluctuate significantly especially on the exchange rate indicator due to international transactions. Although there were several minor crises until 2020, they did not cause major impact to the purchasing power competitiveness indicators of SEA countries.

In fulfilling the requirement of AEC 2025, Malaysia and Thailand must ensure their economic stability is on track with a suitable composition of growth rate, development programme and controlled macroeconomic indicators paralleled with stable financial indicators to boost up their economic growth. However, as per others SEA countries, Malaysia and Thailand also experienced highly unstable fluctuations local currency unit (against USD) exchange rate from the 1960 to 2020. Malaysia Ringgit (MYR) and Thai Baht (THB) have been continuously showing major fluctuations although after recovery from the AFC in 1997. MYR value has depreciated by almost -7.67% from MYR 3.91/USD 1 in 2015 to MYR 4.21/USD 1 in 2020. Meanwhile, Thailand maintained its local currency value which appreciated in the range of + 3.71% from THB 34.25/ USD 1 in 2015 to THB 33.01/ USD 1, in 2020. Although Malaysia and Thailand faced the same crisis, but the impact on their currencies was different.

Besides, the trade value for both countries also erratic from 1994 to 2020 with the approximately between surplus + USD 17, 325 billion and deficit -USD 2, 880.56 billion for Malaysia, while between surplus + USD 4, 111.06 billion and deficit -USD 5, 916.56 billion for Thailand. In addition to that, the energy prices (crude oil and crude palm oil) also fluctuated between USD 138.44 per barrel and



USD 10.77 per barrel for crude oil, and USD 1, 248.11 per contract and USD 185.07 per contract for crude palm oil. Malaysia and Thailand also facing unpredictable stock market with the index of average between the highest +1,835.66 point and the lowest -214.53 of the same periods.

Lessons from the past reveal that there is a possibility for the uncontrolled value of purchasing power competitiveness which can create an imbalance of economic fluctuations and financial crisis, similar to the 1997 financial crisis (AFC). Therefore, analysing the impact of macroeconomic and financial stability indicators such as trade openness, oil prices, interest rate (proxy by OPR), stock market index and commodity prices (crude palm oil) is crucial in order to stabilize the purchasing power competitiveness indicators especially for Malaysia and Thailand which is identified as major economies among SEA countries. Although numerous studies have been conducted on factors affecting the fluctuations of purchasing power competitiveness, each country has its unique economic characteristics that can create various effects on their purchasing power competitiveness value. This gap could be able explain why the fluctuating value of purchasing power competitiveness still remained a challenge especially for Malaysia and Thailand.

Thus, the purpose of this study is to evaluate the relationship between selected macroeconomic and financial stability indicators and purchasing power competitiveness in Malaysia and Thailand. In addition, the study also examines the dynamic relationship, elasticity and causality of macroeconomic and financial indicators towards stability of purchasing power competitiveness. Specifically, this study examines the impact and causality of the selected macroeconomic and financial stability indicators on purchasing power competitiveness in Malaysia and Thailand.

## **1.5 Research Questions**

The key objective of this study is to provide an integrated and comprehensive approach in understanding the role of the selected stability variables on the purchasing power competitiveness of Malaysia and Thailand. More specifically, this study expands upon the existing knowledge on finance-economic nexus by answering the following questions:

- (a) Does purchasing power parity valid in case of Malaysia and Thailand market?
- (b) What is the effect of selected macroeconomic stability variables on the purchasing power competitiveness in Malaysia and Thailand?
- (c) Does financial stability variable have asymmetric effect on the purchasing in the Malaysia and Thailand?
- (d) How causal relationship between selected macroeconomic and financial stability variables on the purchasing power competitiveness in Malaysia and Thailand?

## **1.6 Research Objectives**

The broad objective of this study is to investigate the relationship between selected macroeconomics and financial stability variables on the purchasing power competitiveness in the context of Malaysia and Thailand. The specific objectives are:

- (a) to investigate the validity of purchasing power parity theory hypothesis on the Malaysian and Thailand country based on the USD currency unit.
- (b) to identify the effect of macroeconomics stability variables on the purchasing power competitiveness in Malaysia and Thailand.

- (c) to analyse the asymmetric effect of financial stability variables on the purchasing power competitiveness in Malaysia and Thailand.
- (d) to examine causal relationship between selected macroeconomic and financial stability variables on the purchasing power competitiveness in Malaysia and Thailand

## **1.7 Significance of the Study**

There are several past studies which examined the macroeconomic and financial variables that affect purchasing power competitiveness fluctuation such as Barbosa et al. (2018), Chen and Liu (2018), AbuDalu and Ahmed (2014) and Chowdhury (2012). However, according to Khan and Senhadji (2001), every country has its own unique macroeconomics and financial characteristics that differently affect the internal and external purchasing power. Hence, this study aims to provide a better understanding and offer insights on how selected macroeconomic and financial stability variables play a crucial role in affecting the fluctuation of purchasing power competitiveness in Malaysia and Thailand. As mentioned in the earlier section, changes in the value of purchasing power competitiveness are essential in providing guidelines as well as a signal to the potential investors, importers, exporters, researchers and regulators; especially to the policymakers such as central banks, stock exchanges and securities commissions for their decision making particularly in spending, investing and business expansion for the betterment of the country.

Furthermore, this study focuses on investigating the impact of stable macroeconomic and financial variables on purchasing power competitiveness. Thus, the findings from this study are expected to enhance the understanding of the role of stability macroeconomic and financial variables especially on the issues of asymmetric effect in the short-term and long-term periods. In addition, this study also analyses the causality relationship between the two variables. This study also contributes to observing the direction of the stability macroeconomic and financial

variables in the relationship with purchasing power competitiveness, especially in the Malaysia and Thailand.

The validity of the multilateral exchange rate currency is also investigated using the hypothesis of purchasing power parity theory especially on the nonlinear effect, in which not many studies have been conducted on the SEA countries. Thus, this study could help the authorities and relevant stakeholders in evaluating and valuing the fluctuation of purchasing power competitiveness indicators and in turn, formulate the policy recommendations to control the upcoming impact of these rates. Last but not least, this study could contribute to the body of knowledge, academic literature and future researchers in providing guidance to utilizing selected stability macroeconomic and financial variables to monitor the causality and direction on the purchasing power competitiveness in the SEA context especially for the case Malaysia and Thailand.

## **1.8 Scope of the Study**

The study covers two SEA countries, namely Malaysia and Thailand. The two countries are selected due to the special characteristics mentioned by O'Neil et al. (2005) and, Burkett and Hart-Landsberg (1998) which stated that these two countries are not been listed as N-11, but among the fastest countries to recover from the 1997 AFC. Other than that, Malaysia and Thailand are listed as among the leading SEA emerging countries by the International Monetary Fund's (IMF) estimate in 2019. Furthermore, Malaysia and Thailand are also known as the major exporters of energy and agricultural products among the SEA countries. This study utilizes the monthly time series data from 1994 to 2020 which contained a few series of economic shocks such as the AFC in 1997, the GFC in 2008 and the oil shock in 2015. The monthly time series data have been used to analyze trends as to forecast long term strategic planning toward a stable purchasing power competitiveness value in the context of Malaysia and Thailand.

REER has been the proxy for the purchasing power competitiveness indicator and selected as the dependent variable in this study. This variable represents the intrinsic value of comparing the exchange rate fluctuation on the quantity of goods and services offered internationally between the local currency and other currencies as revealed by Bartolli, (1995). In addition, REER also represents the multilateral RER by comparing the local exchange rate to all country trading partners, rather than bilateral RER. Trade openness becomes one of the independent variables in this study because globalization and trade liberalization can impact the fluctuations of REER value. Other independent variable is interest rate (proxy by OPR), which are also major indicators for the movement of REER. While that, petroleum and crude palm oil were the major commodities which quite contributed to the GDP increments for Malaysia and Thailand, and at the same time could have certain impact on changes of REER.

Stock market index is also selected as an independent variable to proxy for the ease of flow and transfer of investment fund between countries. This index functions as an indicator of business sentiment and confidence level of the investors on the economic development and can affect REER value. In general, the independent variables selected for the study (trade openness, OPR, oil prices, stock market indexes and crude palm oil) are the well-known major macroeconomic and financial indicators for a country economic development.

## **1.9 Organization of the Study**

This thesis is divided into six chapters. The first chapter provides the background of the study, the problem statement, research questions, research objectives, significance of the study and the scope of the study.

The second chapter discusses the economic performance of ASEAN countries, especially Malaysia and Thailand, especially on how their economies are aligned toward AEC 2025 objectives. Then, it briefly reviews the fluctuation of purchasing power competitiveness in these countries.

The third chapter reviews the underpinning theories applied in this study and the previous work pertaining to this topic in order to develop a model for this study. It also pinpoints the gap in the literature and justifies the motivation and significance of this study.

The fourth chapter explains the methodology and data sources used in this study. The model is formulated based on literature reviews and the theories in order to align and satisfy the objectives of the study. Type of data, the period of data and sources of data well discusses and, in order to fit with the model formulated, unit root, co-integration, regression, stability, credibility and causality been tested in this chapter.

The fifth chapter demonstrates the entire findings analysis result of this study. It discusses the dynamic nexus of selected macroeconomic and financial variables with purchasing power competitiveness in the context of Malaysia and Thailand country.

The sixth chapter provides a conclusion of the study. It recapitulates the main findings and links it to the implication of the study. Limitation of the study as well as provides suggestion and recommendations for future research also been discusses in this chapter.

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## LIST OF PUBLICATIONS

1. Bakar, A. M. J., Loganathan, N., Mursitama, T. N., & Hassan, A. A. G. (2021). The effects of interest rate on real effective exchange rate volatility spillover in Malaysia and Thailand: Empirical evidence. *Journal of ASEAN Studies*, 9(2), 181-198. <https://doi.org/10.21512/jas.v9i2.7517>  
(Scopus, Q1 with impact factor 0.24)
2. Bakar, A. M. J., Loganathan, N., Mursitama, T. N., & Hassan, A. A. G. (2022). How far does the stock market performance influence Malaysia's consumers purchasing power. *Kasetsart Journal of Social Sciences*, 43 (4), 983-990.  
(Scopus, Q2 with impact factor 1.67)