



THE IMPACT OF FDI, PORTFOLIO INVESTMENT, TOURISM, INFLATION, NET EXPORTS, AND EXCHANGE RATE ON ASEAN-6 BALANCE OF PAYMENTS: THE MODERATING ROLE OF CORRUPTION PERCEPTION INDEX FROM AN ISLAMIC PERSPECTIVE

¹ Hasbiah, ² Karfin, ³ Fatima Az-zahra Wairooy*

¹²³ IAIN Sorong, Indonesia

Corresponding Author: fatimaazzahrawairooy02@gmail.com

Received: March 19, 2024	Reviewed: April-June 2024	Published: July 5, 2024
-----------------------------	------------------------------	----------------------------

ABSTRACT

This study employs an Islamic economic perspective to investigate the impact of macroeconomic factors on the Balance of Payments (BOP) in ASEAN-6 countries, incorporating the Corruption Perception Index (CPI) as a moderating variable. Utilizing panel data regression and moderated regression analysis (MRA), panel data regression is carried out in two stages, namely in the first stage determining the estimation model, it must be known first which model is the best between CEM, FEM and REM. The second stage is the selection of the estimation model starting from the Chow test, Hausman test and Lagrange Multiplier (LM) test. the study examines data from Transparency International (TI) and the World Bank. A total of 168 samples from Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam were analyzed. The results indicate that while tourism, inflation, and exchange rates do not significantly affect the BOP, both portfolio investment and net exports have a substantial positive impact. Additionally, the CPI is found to be a significant moderating variable. The study's findings suggest several strategies for managing volatile global economic conditions, highlighting the importance of focusing on variables that positively influence the BOP. These insights can guide the ASEAN-6 governments in maintaining or enhancing factors that contribute to a stable BOP, ensuring economic resilience in the region.

Keywords: Balance of Payments (BoP), Corruption Perception Index (CPI), Macroeconomic Variables.

ABSTRAK

Penelitian ini menggunakan perspektif ekonomi Islam untuk menyelidiki dampak faktor makroekonomi terhadap Neraca Pembayaran (BOP) di negara-negara ASEAN-6, dengan memasukkan Indeks Persepsi Korupsi (CPI) sebagai variabel moderasi. Memanfaatkan regresi data panel dan analisis regresi moderat (MRA), regresi data panel dilakukan dengan dua tahap yaitu pada tahap pertama menentukan model estimasi harus diketahui terlebih dahulu model mana yang terbaik antara CEM, FEM dan REM. Tahap kedua adalah pemilihan model estimasi yang dimulai dari uji Chow, uji Hausman dan uji Lagrange Multiplier (LM). Studi ini mengkaji data dari Transparency International (TI) dan Bank Dunia. Sebanyak 168 sampel dari Indonesia, Malaysia, Filipina, Singapura, Thailand, dan Vietnam dianalisis. Hasilnya menunjukkan bahwa meskipun pariwisata, inflasi, dan nilai tukar tidak berpengaruh signifikan terhadap BOP, investasi portofolio dan ekspor neto mempunyai dampak positif yang besar. Selain itu, CPI ditemukan menjadi variabel moderasi yang signifikan. Temuan penelitian ini menyarankan beberapa strategi untuk mengelola kondisi ekonomi global yang bergejolak, dengan menyoroti pentingnya fokus pada variabel-variabel yang mempengaruhi BOP secara positif. Wawasan ini dapat memandu pemerintah negara-negara ASEAN-6 dalam mempertahankan atau meningkatkan faktor-faktor yang berkontribusi terhadap stabilitas BOP, dan memastikan ketahanan ekonomi di kawasan.

Kata Kunci: Neraca Pembayaran (BoP), Index Persepsi Korupsi (CPI), Variabel Makroekonomi.



INTRODUCTION

The advent of economic globalization has become a defining feature of the modern era, characterized by increased international trade and capital flows. While globalization presents opportunities for economic growth, it also poses uniform threats to all participating nations. Countries engage in exchanges within an open economic environment, facilitating the rise of both bilateral and multilateral trade agreements (Chen, 2022).

Export and import activities, encapsulated in the current account—an essential component of the Balance of Payments (BoP)—drive economic expansion and enhance global regional marketing (Aimon *et al.*, 2020). The balance of payments, representing the total monetary transactions between citizens of different countries over a defined period, offers a comprehensive overview of trade and investment patterns. This information is invaluable for policymakers in making informed decisions (Nguyen Thi, 2022).

In general, the characteristics of an economy based on the Koran are in 2 aspects: the aspect of the source of thought, the source of revelation and the source of science. Ibnu Khaldun emphasized that a surplus balance of payments will increase a country's assets. A surplus balance of payments reflects two things, namely a high level of efficiency and a high level of production.

Ibn Khaldun's theory regarding the division of labor is the embryo of the theory of international trade which increased rapidly in the era of mercantilism in the 17th century.

This was realized by the analysis he carried out regarding exchange or trade between a number of poor countries and rich countries which caused a tendency for a country to import or export from other countries.

Ibnu Khaldun stated that through foreign trade, people's sense of satisfaction, trade surplus and state assets will increase, and commodity products become more valuable when sellers transport them from one country to another. Foreign trade can contribute positively to the country's level of income, level of growth and level of prosperity.

To trigger export activities, an export mechanism from an Islamic perspective is very necessary. From an Islamic perspective, what must be observed are the requirements and harmony in the validity of buying and selling. Buying and selling is generally interpreted as an exchange between something and something else. Explained in the Al-Qur'an surah Fathir: 29.

According to Abu Ubaid's view which can be reviewed in his book. Al-Amwaal was written 100 years before Adam Smith "in presenting his theory in its absolute superiority". Abu Ubaid's views regarding exports can be divided into three parts, namely the absence of zero tariffs in carrying out international trade, cheap staple foodstuffs, and the existence of limits on excise duties (Mahmudah, 2021).

As a result of an imbalance in one of its subcomponents, namely the current account balance, especially those related to imports and exports, the balance of payments often experiences changes. A trade balance surplus occurs when exports exceed imports, a trade

balance deficit occurs when exports are less than imports, and a balanced trade balance occurs when exports equal the value of imports (Cristanto & Bowo, 2021). Variations in the balance of payments are a reflection of exchange rate volatility, and the existence of a crisis element also significantly affects the balance of payments' surplus or deficit. There is no denying that the occurrence of the current account deficit causing an imbalance in the balance of payments has caused administrators and academics to become more focused on comprehending the issues surrounding these transactions (Aprilia & Malia, 2020).

The current account deficit which continues and increasingly burdens the foreign sector is a problem in this research. A continuing current account deficit could endanger the country's macroeconomic conditions. Moreover, the problem is that developing countries naturally need foreign money inflows because they often experience current account deficits and savings-investment imbalances. Although foreign capital inflows are now an important source of funding for developing countries, foreign capital inflows can also have a negative impact on the macro economy if not controlled. Furthermore, a rise in capital inflows that contribute to the appreciation of the national currency can make a country's external balance situation worse by increasing imports and decreasing exports (Ali *et al.*, 2019).

As one of the first Asian areas to be hit by the Asian Financial Crisis (AFC) in 1996, ASEAN also experienced the global financial crisis in 2007 and, most recently, the COVID-19 pandemic in 2020. Implementation control

measures taken against COVID-19 may result in government spending exceeding revenues, possibly leading to financial shocks worldwide and a recession in the ASEAN region (Marimuthu *et al.*, 2021).

As is known, only one ASEAN member is a developed country, while the majority of its members are developing countries. Of course, Southeast Asia, namely the ASEAN Region, is one of the leaders in adapting to the contemporary era of globalization. ASEAN's goal is still to expand its economic boundaries. Apart from that, the ASEAN region is one of the places where industrialization is booming, so it can encourage other countries to carry out international trade or make financial investments in ASEAN countries (Andini, 2018).

Many ASEAN-6 developing countries often experience transaction process deficits, so each country always maintains a surplus in its capital balance to cover this shortfall. If capital inflow is the only way to finance the current account deficit, then tensions will always occur, especially if internal shocks occur (Mahmudah, 2021).

Apart from frequently experiencing deficits in the balance of payments, ASEAN-6 countries are also not truly free from corruption. Corruption is one of the main diseases that can threaten a country's economic prosperity. Southeast Asian governments need to focus especially on fighting corruption if they are to draw in international investment. It is well known that the ASEAN-6 nations consistently receive low CPI rankings, figure 1 offers further details.

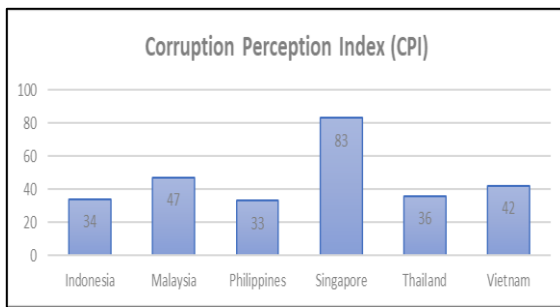


Figure 1.
CPI ASEAN-6 (in score units)

According to one interpretation of the CPI, the nation is more corrupt the closer it is to 0, the worse off it is, and the closer it is to 100, the less corrupt it is. Figure 1 demonstrates that Malaysia is in second place with a score of 47, showing that it is largely free of corruption, while Singapore is rated first in 2022 with a total score of 83, suggesting that Singapore is free from corrupt activities. However, the scores of other ASEAN-6 nations, including Thailand, Vietnam, Indonesia, and the Philippines, are quite near to zero. This demonstrates that these nations actively engage in corruption.

According to Mauro (1995), corruption can result in a decline in investment, especially Foreign Direct Investment (FDI). Excessive bureaucracy, a high degree of discretion when formulating and implementing regulations, and delays in the legal system are just some of the variables that can contribute to corruption and have the ability to negatively influence economic factors including foreign investment and economic growth. Apart from that, several international organizations are now concerned about corruption, namely the World Bank, Transparency International, the International Monetary Fund (IMF) and

the Organization for Economic Co-operation and Development (OECD) (Andini, 2018).

Corruption can increase costs on a business to the point of making it unprofitable and of course can reduce FDI. Corruption can have wider negative effects because it can increase transaction costs in the economy, such costs are used to gather information about partners and market conditions. Corruption can lead to the distribution of large amounts of wealth from a country to corrupt officials in the form of inflated contract prices, besides that corruption can also have an influence on capital inflows towards bank loans and portfolio investments at the expense of FDI (Moustafa, 2021).

Citing research (Das, 2016) It was found that when rich countries such as the United States and other countries experienced a current account deficit, the current account value increased globally. In contrast, emerging market countries such as China and other Asian countries found that ASEAN-6 countries had larger surpluses. This is a problem that needs to be reviewed, of course, because in theory, the category of developed countries or countries with high capital loans that experience deficits will also experience the same thing in countries that collaborate with developed countries. However, it turns out that developing countries actually experience a surplus.

According to studies, the exchange rate variable significantly affects the Balance of Payments (BoP), as demonstrated by Sujianto's 2020 findings (Sujianto, 2020). On the other hand, Sultani and Faisal's research will be in 2022 (Sultani & Faisal, 2022) did not

find any significant influence of exchange rate variables on the Balance of Payments (BoP). Furthermore, the research carried out (Affiza, 2022) revealed that between 2010 and 2019, the currency exchange rate had a negative and significant impact on the ASEAN-6 current account balance; on the contrary, the impact on GDP is positive and significant. Exchange rate, GDP, and foreign direct investment-related variables are all trending positively and have so far had a major influence on the ASEAN-6 current account balance. In addition, earlier study by (Mahmudah, 2021) demonstrates that imports and foreign exchange reserves have a significant long and short term influence on the current account deficit. However, foreign investment and currency exchange rates have no long-term or short-term impact. Long-term effects are only seen with portfolio investments and export considerations.

The method of research, which involves employing quantitative research to examine the relationship between multiple factors, may account for some of the parallels between this study and earlier studies. Other than that, they are similar in that they talk about exchange rates, Balance of Payments (BoP), portfolio investments, Foreign Direct Investment (FDI), and exchange rates.

The research target and other issues covered in this study differ from those in earlier studies, however. Specifically, this study's researcher selected ASEAN-6 countries (Indonesia, Malaysia, the Philippines, Singapore, Vietnam, and Thailand) as its object. The researcher selected these nations for this study because they are essentially classified as developing

nations, meaning that transaction deficits frequently arise in these nations. In addition, these nations have low CPI scores, which is why scholars are drawn to studying the ASEAN-6 nations.

In addition to the previously mentioned variations, this study differs in that it makes use of other variables. Specifically, the Corruption Perception Index (CPI) variable was included as a moderating variable, while the variables Tourism, Inflation, and Net Exports were introduced as independent variables. The GONE Theory, which explains that there are several factors that cause corruption, such as Greed, Opportunities, Needs, and Exposure, provides theoretical support for the use of CPI as a variable moderation in this study (Bologne, 1999).

In addition to this theory, there exists an explanation from (Mauro, 1995) stating that the perception of corruption can impact a nation's economic activity concerning investment and other aspects. This explanation, which uses CPI as a moderating variable, is naturally based on several prior studies that also employed CPI as a moderating variable, these studies were carried out by researchers (Khairi, 2019), (Ajeng Tenri Lala, 2021) and (Moustafa, 2021). To determine if the Corruption Perception Index (CPI) may enhance the independent variable or vice versa, researchers employed CPI as a moderating variable in this study. Aside from that, the Corruption Perception Index (CPI) can be used as a moderating variable to help create new models for tourism, foreign direct investment (FDI), portfolio investment, inflation, net exports, and exchange rates. In

this instance, the BoP can be strengthened or weakened to support the advancement of science.

In order to develop more effective policy, it is crucial to first address the factors that affect a country's balance of payments. This is why researchers are interested in delving deeper into the topics of foreign direct investment, portfolio investment, tourism, inflation, net exports, and exchange rates on the Balance of Payments (BoP) with the Corruption Perception Index (CPI) as a moderating variable. Maintaining a surplus in the BoP is important, and one of the most hotly debated economic topics is when there is a deficit in the balance of payments.

The governments of the ASEAN-6 nations can benefit from this study's assistance in adopting suitable economic policies to enhance the balance of payments, particularly developing nations that typically have deficits and must be mindful of the unstable global economy. The governments of the ASEAN-6 nations currently have several options to deal with the unpredictability of the global economy. One of them is by keeping the value of the national currency stable against the US dollar and keeping the balance of payments in order. Second, the governments of ASEAN-6 countries must be more economical with their foreign exchange reserves. Third, it is important to evaluate imported goods and services and adopt monetary policies to limit the flow of imports, and the fourth phase, which includes implementing import restrictions and tariffs and raising the standards of domestic products, can help

keep a country's foreign exchange reserves stable.

This study's objective is to examine and elucidate the effects of macroeconomic factors on the Balance of Payments (BoP) in ASEAN-6, using the Corruption Perception Index (CPI) as a moderating variable from an Islamic economic standpoint.

RESEARCH METHODS

This study employs a correlational research design within a quantitative methodological framework, utilizing descriptive statistics as its analytical approach. The primary objective is to apply statistical methods to analyze the data and test the specified variables. The research population consists of balance of payments reports from the ASEAN-6 countries: Singapore, Malaysia, Indonesia, Vietnam, Thailand, and the Philippines.

A saturated sampling approach was employed in this study. The sample includes balance of payments and corruption index reports from the ASEAN-6 countries, specifically focusing on the Corruption Perception Index (CPI) with annual data spanning from 1995 to 2022. Additional data points include Balance of Payments (BoP), Foreign Direct Investment (FDI), Portfolio Investment, Tourism, Inflation, and Net Exports, resulting in a total of 168 samples. The selection of this sample is grounded in the fact that ASEAN-6 countries are actively expanding their economic horizons and experiencing significant industrialization, making them attractive destinations for international trade and investment. Furthermore, the CPI is a pertinent variable

given the consistently low scores observed in these nations.

Secondary data sources underpin this research. Data were extracted from annual reports and other documents from the World Bank. Literature reviews and website browsing relevant to the research topic were conducted as part of the data collection process. Documentation techniques, including direct examination of notes, documents, reports, and other relevant materials, were employed to gather data related to the research variables.

To ascertain whether the moderating variable (Z) influences the strength or direction of the relationship between the independent and dependent variables, a Moderated Regression Analysis (MRA) was conducted. This interaction test involves incorporating two or more interaction components within the regression equation (Sakanko, 2020). The analysis explores how the Corruption Perception Index (CPI) impacts the balance of payments (BoP) (Y) in relation to foreign direct investment (FDI) (X1), portfolio investment (X2), tourism (X3), inflation (X4), net exports (X5), and exchange rates (X6). The following MRA equation was used in this study:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 Z + \beta_1 X_1 Z + \beta_2 X_2 Z + \beta_3 X_3 Z + \beta_4 X_4 Z + \beta_5 X_5 Z + \beta_6 X_6 Z + e$$

Explanation:

Y	: Balance of Payments
α	: Constant
X1	: Foreign Direct Investment
X2	: Portfolio Investment
X3	: Tourism

X4	: Inflation
X5	: Net Exports
X6	: Exchange Rate
Z	: Corruption Perception Index
$\beta_1, \beta_2, \beta_3$, etc	: Regression Coefficient
e	: Error

Panel Data Regression Analysis

Panel data encompasses both time series data and cross-sectional data. This study utilizes cross-sectional data from the ASEAN-6 countries along with time series data spanning 28 years (1995–2022), resulting in a total of 168 observations. Consequently, the panel data regression equation derived is as follows:

$$Y_{it} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \epsilon_{it}$$

Explanation:

Y	: Balance of Payments
α	: Constant
X ₁	: Foreign Direct Investment
X ₂	: Portfolio Investment
X ₃	: Tourism
X ₄	: Inflation
X ₅	: Net Exports
X ₆	: Exchange Rate
$\beta_1, \beta_2, \beta_3$, etc	: Regression Coefficients
e	: Error
i	: Cross Section
t	: Time Series

Significance Test

This research also conducted significance testing, which included a simultaneous significance test (F-statistic), an individual parameter significance test (t-statistic), and a simultaneous coefficient of determination (R^2).

RESULTS AND DISCUSSION

Findings

Moderated Regression Analysis (MRA)

Table 1. MRA Test Results

Model	Coefficient	Adj R-Square (before moderation)	Adj R Square (after moderation)	Prob	Explanation
X1Z	-0.004754	0.068701	0.009807	0.0947	Weaken
X2Z	-0.017515	0.005225	0.281615	0.0000	Strengthen
X3Z	-9.962924	0.014069	0.084576	0.3552	Weaken
X4Z	-53975976	0.000256	0.040311	0.0582	Weaken
X5Z	-0.0125681	0.043851	0.361659	0.0000	Strengthen
X6Z	2731.789	0.012615	0.050548	0.8415	Weaken

Source: Processed data, 2024

Recognizing its potential to enhance the relationship with the Balance of Payments (BoP) variable, the moderating variable, the Corruption Perception Index (CPI), as presented in Table 1, has been demonstrated to effectively moderate the two independent variables, namely Portfolio Investment (X2) and Net Exports (X5).

Selection of Estimation Model

The Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test are three critical methodologies employed for evaluating model estimates to ascertain the optimal model. The Chow Test is specifically utilized to determine whether the Constant Effects Model (CEM) or the Fixed Effects Model (FEM) is more appropriate for the investigation.

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.156350	(5,155)	0.0000
Cross-section Chi-square	34.894440	5	0.0000

Source: Processed data, 2024

The Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test are three critical methodologies employed for evaluating model estimates to ascertain the optimal model. The Chow Test is specifically utilized to determine whether the Constant Effects Model (CEM) or the Fixed Effects Model (FEM) is more appropriate for the investigation.

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	7	1.0000

Source: Processed data, 2024

The Random Effects Model (REM) is a superior choice for estimating panel data compared to the Fixed Effects Model (FEM) when the Prob Chi-square value exceeds 0.05, thereby making the null hypothesis (H0) acceptable, as illustrated in Table 3. Based on the results of the Chow and Hausman tests, it can be concluded that the REM is more appropriate than both the Classical Effects Model (CEM) and the FEM, having been selected prior to the Lagrange Multiplier (LM) test.

Table 4. Lagrange Multiplier (LM) Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	6.274439 (0.0122)	0.494496 (0.4818)	6.768935 (0.0093)

Source: Processed data, 2024

Table 4 presents the values. The Random Effects Model (REM) emerges as a superior method for panel data estimation compared to the Constant Effects Model (CEM), as indicated by the p-values (< 0.05), leading to the rejection of the null hypothesis (H0). The

results of the Chow test, Hausman test, and Lagrange Multiplier (LM) test collectively confirm that the REM is more suitable for implementation than both the CEM and the Fixed Effects Model (FEM).

F Test (Simultaneous)

For panel data regression utilizing the Random Effects Model (REM), the probability value of the F-statistic is 0.00, which is less than the 0.05 threshold. These findings indicate that the independent variables—foreign direct investment (FDI), portfolio investment, tourism, inflation, net exports, and exchange rates—exert a significant impact on the dependent variable.

t Test (Partial)

Table 5. t Test Results

Variable	Coefficient	Probability	Results
FDI (X1)	-1.202636	0.0000	H1 Rejected
Portfolio Investment (X2)	0.420342	0.0059	H2 Accepted
Tourism (X3)	103.3827	0.6482	H3 Rejected
Inflation (X4)	-2.87E+08	0.3006	H4 Rejected
Net Exports (X5)	0.740877	0.0000	H5 Accepted
Exchange Rate (X6)	-81493896	0.4491	H6 Rejected

Source: Processed data, 2024

The factors influencing the Balance of Payments (BoP) include Portfolio Investment (X1) and Net Exports (X5). According to the results of the Random Effect Model (REM) panel data regression, these are the only variables that significantly affect the BoP, with other variables showing no significant impact.

Coefficient of Determination (R^2)

Table 6.

Coefficient of Determination Test Results (R^2)

R-squared	0.447832
Adjusted R-squared	0.423675

Source: Processed data, 2024

The Balance of Payments (BoP) variable (Y) can be elucidated by several determinants as revealed by the REM panel data regression analysis: Foreign Direct Investment (FDI), Portfolio Investment, Tourism, Inflation, Net Exports, and Exchange Rates. The remaining 58% of the variance is attributable to factors outside the scope of this study.

Analysis

The Influence of Foreign Direct Investment (FDI) on the Balance of Payments (BoP)

The variable of Foreign Direct Investment (FDI) has a negative and significant impact on the Balance of Payments (BoP), as evidenced by the regression analysis results using the Random Effect Model (REM) conducted previously. Consequently, the first hypothesis (H1) is rejected.

The hypothesis test results align with the Neo-Classical development theory regarding Foreign Direct Investment (FDI). According to this theory, foreign investment can bridge the gap between the required capital for development goals and the domestic savings, government foreign exchange reserves, and skill transfer (Sukirno, 2003). This theory supports the notion that foreign investment can facilitate development in the recipient country.

While theoretically, FDI can stimulate a country's economy, empirical studies often reveal that FDI impacts only specific sectors and can have a negative or insignificant effect. This discrepancy is likely due to the minimal proportion of FDI entering a country (Jufri et al., 2022).

Lindert (1994) elucidates in his book that Foreign Direct Investment (FDI) involves lending or acquiring ownership, where half of the capital of a foreign company belongs to citizens of the investing country. The influx of FDI is sufficient to bolster economic progress and enhance a country's foreign exchange reserves (Mahmudah, 2021).

It can be interpreted that an increase in FDI will lead to an optimal increase in foreign exchange reserves. The value of the current account balance will fluctuate based on whether there is a surplus or deficit, in tandem with increasing foreign exchange reserves. Conversely, a decrease in FDI will result in a reduction of optimal foreign exchange reserves. If the flow of funds to cover the current account deficit diminishes, the current account balance will trend towards a deficit or an increasing deficit. Thus, in reality, BoP and FDI can mutually influence each other.

This study is consistent with King Mantilla's (2022) findings, which revealed that the Balance of Payments (BoP) is significantly and negatively impacted by the FDI variable. It is evident that FDI does not always contribute positively and can have a negative effect, especially in countries with investments in the primary and extractive sectors. The BoP deficit resulting from FDI can be dominated by foreign direct investment obligation payments, consistent with changes in the composition of external liabilities. Furthermore, FDI does not always entail financial or real capital inflows, unlike mergers and acquisitions, which directly contribute to productive capacity. Instead, FDI can discourage domestic investors,

causing significant instability in currencies and financial markets. Therefore, in the long term, FDI often has a negative impact due to high profits from remittances and imported goods.

The Influence of Portfolio Investment on the Balance of Payments (BoP)

The Portfolio Investment (PI) variable exerts a positive and significant impact on the Balance of Payments (BoP), as evidenced by previous research data regression using the Random Effect Model (REM). This finding leads to the rejection of the null hypothesis (H0) and the acceptance of the alternative hypothesis (H2).

The results of the hypothesis test align with the theory developed by Mankiw concerning investment. According to Mankiw (2001), investment represents a net addition to the capital stock that is available, also referred to as capital accumulation or capital creation.

The portfolio investment variable, which quantifies the inflows and outflows of capital within a country, significantly influences the BoP. A substantial volume of transactions can enhance the nation's foreign exchange reserves through increased holdings of foreign currency. Cross-border financial transactions, including portfolio investments, bolster the country's foreign exchange reserves. Investors typically utilize foreign currencies that meet liquidity requirements, thereby introducing foreign investor funds into the country.

This study corroborates the findings of Dakhil et al. (2019) and Az-zahra Wairooy & Endraswati (2023), who determined that the

Portfolio Investment (PI) variable positively and significantly affects the BoP. Portfolio investment involves purchasing equity or debt securities in businesses where investors do not exert control over operations. Given that portfolio investments contribute to the financial balance, they positively impact the BoP. However, it is essential to recognize that the impact of portfolio investments on the BoP can vary based on the specific economic conditions of a country and its trading partners.

The Influence of Tourism on the Balance of Payments (BoP)

From the analysis conducted using the Random Effect Model (REM) in the panel data regression, it is evident that the tourism variable does not significantly impact the balance of payments (BoP). Consequently, the null hypothesis (H0) is accepted, while the alternative hypothesis (H3) is rejected.

These findings appear to contradict the economic demand theory, which posits that an increase in a country's income enhances its citizens' capacity to travel abroad. In essence, tourist arrivals are positively correlated with income (Garín-Muñoz & Amaral, 2000).

In 1887, David Ricardo formulated the classical theory of comparative advantage, illustrating why countries encounter challenges in international trade. Ricardo demonstrated that if two countries can produce two similar commodities and engage in free trade, each country will ultimately increase its consumption (Pressman, 1999). Enhancements in comparative advantage spur exports, thereby boosting the overall economic output. Since tourism is an export-

oriented industry, it serves as a source of export revenue (Agung & Putu, 2023).

Tourism holds substantial potential for achieving significant macroeconomic objectives such as job creation, economic growth, and sustainable social and economic development. Less developed or developing countries often face a shortage of foreign currency reserves and struggle to procure the capital goods and services essential for economic growth. Tourism, by injecting foreign currency into the economy, can augment these reserves and positively affect the balance of payments. It stands as one of the main sources of income from foreign trade, thus benefiting the BoP. International tourism, characterized by the consumption of goods and services by tourists abroad, functions as an export industry that can enhance the balance of payments (Thano, 2015).

This research diverges from several prior studies, as evidenced by the findings of Thano (2015) and Aamir (2021), which concluded that tourism positively influences the BoP. Since tourism is regarded as an invisible export in the balance of payments, it affects the BoP (Celik Kemal et al., 2013).

When international tourists visit a country, they spend on various goods and services, thereby contributing to the export of tourism-related products. The influx of foreign exchange from tourism revenues positively impacts the BoP (Mioćić Krce & Cavlek, 2015). These revenues are recorded as credits to the current account, helping to improve the BoP. Tourism significantly contributes to the BoP by bolstering current transactions and stabilizing the BoP, with

foreign exchange inflows from tourism playing a crucial role in enhancing a country's overall BoP (Radic Matosevic, 2019).

The researcher suggests that the absence of a significant impact of tourism on the BoP in this study could be attributed to the distribution of foreign tourist arrivals among the six ASEAN countries examined. Most foreign tourists concentrate in only five ASEAN countries: Thailand (first place), Malaysia (second), Vietnam (third), Singapore (fourth), and Indonesia (fifth), with the Philippines not featuring among the top destinations (Idialis & Putra, 2021). This uneven distribution may explain the insignificant effect of the tourism variable on the BoP.

Furthermore, researchers emphasize that social and political conditions significantly influence foreign visitors' decisions to travel to popular tourist destinations. A stable social and political environment in a destination country attracts more foreign tourists. Conversely, instability in these areas deters tourism. Overall, ASEAN's social and political conditions remain somewhat unstable, particularly regarding law enforcement, political rights, and civil liberties (Idialis & Putra, 2021).

The influence of social and political factors on foreign tourists visiting ASEAN underscores the importance of these elements in the modern world. Foreign tourists prioritize security, comfort, and quality legal services when selecting travel destinations. Hence, political and legal stability directly impacts their travel choices. Unstable social and political conditions in ASEAN countries could deter foreign tourists, reducing foreign

exchange inflows from tourism receipts and consequently diminishing the tourism sector's impact on the BoP.

The Influence of Inflation on the Balance of Payments (BoP)

According to the results of a panel data regression using the Random Effect Model (REM), the inflation variable does not influence the Balance of Payments (BoP). This outcome indicates that the null hypothesis (H0) is accepted, while the alternative hypothesis (H4) is rejected.

This finding appears to contradict the initial premise of the research, which posits that inflation, defined as a sustained increase in the prices of goods and services, should have a significant impact on the BoP. Inflation can result from various factors, including high demand, increased production costs, expansionary monetary policy, or external influences (Mankiw, 2005). Elevated inflation can deteriorate a country's BoP by increasing production costs, thus reducing export competitiveness. Furthermore, excessively high inflation may deter foreign investors, exacerbating capital flight and BoP deficits.

The alternative hypothesis offers an explanation for the insignificant results observed in this study: although inflation may not directly affect the BoP, it can have indirect effects through mechanisms such as relative prices, import prices, monetary policy, and exchange rates. For example, rising inflation could make a country's export or import prices less competitive, indirectly influencing the BoP. Lopian et al. (2018) found that while inflation did not have a

statistically significant short-term impact on the current account balance, it exerted a negative and statistically significant long-term influence. Consequently, the short-term effects of inflation may obscure its long-term impact on the BoP.

This study corroborates the findings of Lapien et al. (2018), Altayligil and Çetrez (2020), and Sujianto (2020), all of which demonstrate that inflation does not have a significant effect on the BoP.

The Influence of Net Exports on the Balance of Payments (BoP)

The findings derived from the regression analysis using the Random Effect Model (REM) indicate that the Net Export variable exerts a significant and positive influence on the Balance of Payments (BoP). This result substantiates the acceptance of H5 while rejecting H0.

The outcomes of the hypothesis testing align with export theory, particularly the Heckscher-Ohlin (H-O) theory. According to this theory, international trade arises due to comparative advantages, characterized by technological superiority and production surpluses.

The rationale behind the positive and significant impact of the Net Export variable on the Balance of Payments (BoP) lies in the disparity between a country's export and import values. When a country's export value surpasses its import value, an inflow of foreign exchange occurs, leading to a surplus in the BoP. This phenomenon also indicates the elasticity of the country's demand and supply for goods and services, where an

increase in net exports positively affects the BoP.

This study's findings are consistent with those of Dakhil et al. (2019), who found that the Net Export variable had a significant and positive impact on the Balance of Payments (BoP). Similarly, research by Sultani and Faisal (2022) corroborated that the Balance of Payments (BoP) was significantly and positively influenced by the Net Export variable. Furthermore, these results support David Ricardo's theory, which posits that foreign trade maximizes resource benefits and contributes to economic growth by increasing income, thereby accelerating a country's economy and trending the balance of payments towards a surplus.

The Influence of Exchange Rates on the Balance of Payments (BoP)

The results from the panel data regression using the Random Effect Model (REM) suggest that the Exchange Rate variable does not influence the Balance of Payments (BoP). This implies the acceptance of H0 and the rejection of H6.

These findings contradict both theoretical expectations and the researchers' hypotheses, as there should theoretically be a positive correlation between the exchange rate and the balance of payments (BoP). A deficit in the balance of payments typically leads to a depreciation of the currency exchange rate. In a situation of a balance of payments deficit, imports exceed exports. High levels of imports necessitate a substantial demand for foreign currency, and weak exports are likely to affect the exchange rate adversely. Additionally, the exchange rate is a critical factor in an open economy due to

its significant impact on the current account balance and other macroeconomic indicators (Mahmudah, 2021). This study indicates that the exchange rate has a positive and statistically significant impact on the current account balance in both the short and long term, contrary to the findings of Lopian et al. (2018).

However, the researchers propose that other factors might explain why the exchange rate did not affect the balance of payments deficit in this study. These factors include exchange rate uncertainty or fluctuations that lead to domestic economic instability, thereby obstructing a short-term relationship between the two variables. The findings of this study align with those of Kartika and Putri (2019), which also reported no relationship between the exchange rate and the Balance of Payments (BoP).

The Influence of Corruption Perception Index (CPI) as a Moderating Variable on the Balance of Payments (BoP)

The test results indicate that the Corruption Perception Index (CPI), acting as a moderating variable, significantly negatively impacts the relationship between the two independent variables and the dependent variable. In other words, the presence of the CPI in this study weakens the influence of the independent variables on the dependent variable. This suggests that widespread corruption hampers investment and economic progress, thereby affecting a nation's balance of payments. Theoretically, corruption has evolved into a substantial obstacle within the economic sector, severely undermining a nation's competitiveness.

Increasing levels of corruption undeniably pose a significant threat to economic stability and growth.

Moreover, although inbound investment is crucial for economic development, corruption impedes this process by escalating production and distribution costs, ultimately resulting in a high-cost economy. Corruption serves as a barrier that compromises market integrity and complicates the achievement of good governance. Additionally, corruption detrimentally affects the nation by hindering trade, investment, and overall progress (Anhar, 2020).

Previous researchers, including Khairi (2019), Ajeng Tenri Lala (2021), and Moustafa (2021), have discovered that the CPI can moderate the relationship between independent and dependent variables. The findings of this study align with those of earlier research, corroborating the assertion that corruption perception significantly influences economic variables.

CONCLUSION

This study aims to reassess the impact of macroeconomic variables on the Balance of Payments (BoP) in ASEAN-6 countries from an Islamic economic perspective, utilizing the Corruption Perception Index (CPI) as a moderating variable. The research employs a panel data regression analysis model, which integrates cross-time data (time series) from 1995 to 2022 in the form of annual data and cross-sectional data, focusing on the ASEAN-6 as the research object. Given the inclusion of a moderating variable, the study adopts Moderated Regression Analysis

(MRA) alongside panel data regression models.

Data on variables such as Foreign Direct Investment (FDI), Portfolio Investment (IP), Tourism, Inflation, Net Exports, Exchange Rates, CPI, and BoP were sourced from a range of credible sources. Following extensive testing, several key conclusions were drawn from the findings. Notably, Foreign Direct Investment (FDI) has a significant negative impact on the BoP, leading to the rejection of Hypothesis 1 (H1). Conversely, Portfolio Investment (IP) shows a significant and positive effect on the BoP, supporting Hypothesis 2 (H2). The analysis also indicates that Tourism has no significant effect on the BoP, resulting in the rejection of Hypothesis 3 (H3). Similarly, Inflation does not impact the BoP, leading to the rejection of Hypothesis 4 (H4). However, Net Exports have a significant and positive effect on the BoP, supporting Hypothesis 5 (H5). The Exchange Rate does not influence the BoP, thus Hypothesis 6 (H6) is rejected.

Regarding the moderating variable, the CPI, the study finds it significantly and negatively influences the independent variables. In other words, the presence of corruption weakens the impact of the independent variables on the dependent variable. Consequently, widespread corruption impedes investment and economic progress, ultimately affecting a nation's balance of payments.

ACKNOWLEDGMENT

The author extends heartfelt gratitude to various individuals whose invaluable contributions and unwavering openness

during discussions have been instrumental. Their support has significantly fueled the author's enthusiasm and facilitated the seamless execution of this research.

REFERENCES

- Aamir, R. & N. (2021). Asymmetric Impact of Tourism on The Balance of Payments in Pakistan. *Emerald Publishing Limited*. <https://doi.org/https://doi.org/10.1108/JEAS-12-2020-0212>
- Affiza, S. (2022). Analisis Pengaruh Kurs Terhadap Current Account Balance Di ASEAN-6. *Media Bina Ilmiah*, 16(8.5.2017), 2003–2005.
- Agung, A., & Putu, B. (2023). Review On Tourism Competitiveness Strengthening In Order To Strengthen International Balance Of Payment. *Baltic Journal of Law and Politics*, 16(3), 876–888. <https://doi.org/10.2478/bjlp-2023-0000068>
- Aimon, H., Putri Kurniadi, A., & Ulfa Sentosa, S. (2020). Determinants and Causality of Current Account Balance and Foreign Direct Investment: Lower Middle Income Countries in ASEAN. *KnE Social Sciences*, 2020, 10–22. <https://doi.org/10.18502/kss.v4i7.6839>
- Ajeng Tenri Lala, A. (2021). *Determinan Foreign Direct Investment Di ASEAN dengan Korupsi Sebagai Variabel Moderasi*. UIN Sunan Kalijaga Yogyakarta.
- Ali, M. M., Ahmad, T. I., & Sadiq, R. (2019). Empirical investigation of foreign direct investment and current account balance in East Asian economies. *Pakistan Journal of Commerce and Social Science*, 13(3), 779–795.
- Altayligil, Y. B., & Çetrez, M. (2020). Macroeconomic, institutional and financial

determinants of current account balances: a panel data assessment. *Journal of Economic Structures*, 9(1), 1–23.
<https://doi.org/10.1186/s40008-020-00225-1>

Andini, A. P. (2018). Analisis Pengaruh Corruption Perception Index (CPI), Gross Domestic Product (GDP), dan Exchange Rate Terhadap Foreign Direct Investment (FDI) Pada Tahun 2010-2016 di Negara ASEAN. In *Bitkom Research* (Vol. 63, Issue 2). http://forschungsunion.de/pdf/industrie_4_0_umsetzungsempfehlungen.pdf
https://www.dfki.de/fileadmin/user_upload/import/9744_171012-KI-Gipfelpapier-online.pdf
<https://www.bitkom.org/sites/default/files/pdf/Presse/Anhaengen-PIs/2018/180607-Bitkom>

Anhar, A. (2020). Pengaruh Corruption Perception Index (CPI), Gross Domestic Product (GDP), Dan Inflasi Terhadap Foreign Direct Investment (FDI) Pada Tahun 2010-2018 di Indonesia. In *Molecules* (Vol. 2, Issue 1).
<http://clik.dva.gov.au/rehabilitation-library/1-introduction-rehabilitation>
<http://www.scirp.org/journal/doi.aspx?DOI=10.4236/as.2017.81005>
<http://www.scirp.org/journal/PaperDownload.aspx?DOI=10.4236/as.2012.34066>
<http://dx.doi.org/10.1016/j.pbi.201>

Aprilia, R., & Malia, R. (2020). Balance of Payments and Exchange Rates in ASEAN Countries: Granger Causality Test. *OPTIMUM: Jurnal Ekonomi Dan Pembangunan*, 12(1), 1–15.

Az-zahra Wairooy, F., & Endraswati, H. (2023). The Effect of Foreign Direct Investment (FDI), Investment Portfolio, Exchange Rate, and Inflation on Current

Account Balance (CAB) With The Corruption Perception Index (CPI) As A Moderation Variable For The Period 1995-2022 in ASEAN-6. *Business Management Analysis Journal*, 06(02), 148–168.
<https://doi.org/DOI:10.24176/bmaj.v6i2.10846>

Bologne, J. (1999). *The Accountant Handbook of Fraud and Commercial Crime*. Puslitbang BPKP.

Celik Kemal, A., Ozcan, S., Topcuoglu, A., & Yildirim Emrah, K. (2013). Effect of The Tourism Industry on The Balance of Payments Deficit. *Anatolia Taylor & Francis Group*, 24(1), 86–90.
<https://doi.org/10.1080/13032917.2013.772529>

Chen, Z. (2022). The impact of trade and financial expansion on volatility of real exchange rate. *PLoS ONE*, 17(1 January), 1–13.
<https://doi.org/10.1371/journal.pone.0262230>

Cristanto, F. A., & Bowo, P. A. (2021). Determinants of Indonesian Trade Balance: A Vecm Analysis Approach. *Economics Development Analysis Journal*, 10(4), 463–474.
<https://doi.org/10.15294/edaj.v10i4.45909>

Dakhil, A. A., Al-shukri, M. S. S., & Al-Shammari, M. S. (2019). The impact of foreign investment on balance of payments based on the supply chain management: An econometrics study for the period of 2005-2017 in Iraq. *International Journal of Supply Chain Management*, 8(6), 752–757.

Das, D. K. (2016). Determinants of current account imbalance in the global economy: a dynamic panel analysis. *Journal of Economic Structures*, 5(1).
<https://doi.org/10.1186/s40008-016-0039-6>

- Garín-Muñoz, T., & Amaral, T. P. (2000). An econometric model for international tourism flows to Spain. *Applied Economics Letters*, 7(8), 525–529.
<https://doi.org/10.1080/13504850050033319>
- Idialis, A. R., & Putra, T. R. (2021). Keterkaitan Sosial dan Politik terhadap Efisiensi Pariwisata di ASEAN. *Buletin Ekonomika Pembangunan*, 2(2), 285–310.
- Jufri, A., Mulyadi, S., Wibowo, M. G., & Rafiqi, I. (2022). Determinan Penanaman Modal Asing Di Indonesia Periode 1970-2020: Pendekatan Nardl. *Jurnal Dinamika Ekonomi Pembangunan*, 4(3), 232–244.
<https://doi.org/10.14710/jdep.4.3.232-244>
- kartika, Putri, & A. (2019). Analisis Kausalitas Current Account Deficit Dengan Keterbukaan Perdagangan, Nilai Tukar Rill Efektif, Foreign Direct Investment, Dan Pertumbuhan Ekonomi Indonesia. *Kajian Ekonomi Dan Pembangunan*, 1(2).
<http://ejournal.unp.ac.id/students/index.php/epb/article/view/6251/0>
- Khairi, R. A. (2019). *Analisis Faktor-Faktor yang Mempengaruhi Foreign Direct Investment di Negara Kawasan ASEAN dengan Corruption Perception Index Sebagai Variabel Moderating* [Universitas Sumatera Utara].
<http://repositori.usu.ac.id/handle/123456789/24683>
- King Mantilla, K. (2022). Foreign direct investment in Latin America from the perspective of illicit financial flows: “cocacolonisation” of saving? *CEPAL Review*, 2022(136), 25–43.
<https://doi.org/10.18356/16840348-2022-136-2>
- Lapian, M., Rotinsulu, T. O., & Wauran, P. C. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Neraca Transaksi Berjalan Di Indonesia Periode 2010:Q1-2017:Q4. *Jurnal Berkala Ilmiah Efisiensi*, 18(2), 193–203.
- Mahmudah, F. (2021). Pengaruh Foreign Direct Investment (FDI), Investasi Portofolio, Cadangan Devisa, Kurs, Ekspor Dan Impor Terhadap Current Account Deficit (CAD) di Indonesia Periode 1990-2020. In *Tesis* (pp. 1–142).
- Mankiw, N. G. (2005). Macroeconomics. In *Nucl. Phys.* (7th ed., Vol. 13, Issue 1). Worth Publishers.
<https://jollygreengeneral.typepad.com/files/n-gregory-mankiw-macroeconomics-7th-edition-2009.pdf>
- Marimuthu, M., Khan, H., & Bangash, R. (2021). Reverse causality between fiscal and current account deficits in asean: Evidence from panel econometric analysis. *Mathematics*, 9(10), 1–18.
<https://doi.org/10.3390/math9101124>
- Mauro, P. (1995). Corruption and Growth. *The Quarterly Journal of Economics*, 110(3), 681–712.
<https://doi.org/https://doi.org/10.2307/2946696>
- Miocic Krce, B., & Cavlek, N. (2015). Balance of Payment, Tourism. *Springer, Cham*.
https://doi.org/https://doi.org/10.1007/978-3-319-01669-6_333-1
- Moustafa, E. (2021). The relationship between perceived corruption and FDI: A longitudinal study in the context of Egypt. *Transnational Corporations*, 28(2), 97–129.
- Nguyen Thi, V. H. (2022). Surplus in balance of payments and some policy

recommendations for Vietnam. *The Russian Journal of Vietnamese Studies*, 6(1), 28–39.
<https://doi.org/10.54631/vs.2022.61-105384>

Pressman. (1999). *Fifty Major Economist. Terjemahan: Lima Puluh Pemikir Ekonomi Dunia*. PT Raja Grafindo Persada.

Radic Matosevic, M. (2019). The Impact of Tourism on The Balance of Payment Stability. *Journal of Tourism and Hospitality Management*, 10(10), 6–15.
<https://doi.org/10.1007/BF02929308>

Sujianto, A. E. (2020). Macroeconomic factors and balance of payment: Evidence from Indonesia. *Industrial Engineering and Management Systems*, 19(1), 266–272.
<https://doi.org/10.7232/iems.2020.19.1.266>

Sukirno, S. (2003). *Ekonomi Pembangunan*. Kencana.

Sultani, A. H., & Faisal, U. (2022). Determinants of Balance of Payment: A Comparative Review of Developing and Least Developed Countries. *IJRAR-International Journal of Research and Analytical Reviews (IJRAR)*, 9(2), 18–36.

Thano, R. (2015). The Impact of Tourism on the Balance of Payments. *American Journal of Economics, Finance and Management*, 1(5), 529–536. https://doi.org/10.1007/978-1-349-12186-1_6