

THE ROLE OF GOVERNMENT EFFECTIVENESS BOOSTING THE INFLUENCE OF FINANCIAL DEVELOPMENT AND INTERNATIONAL TRADE IN ASEAN-5 COUNTRY

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ABSTRACT

The main focus of this study is the crucial role of an effective government in managing financial development and its impact on international trade. This study aims to analyze the effectiveness of government intervention in moderating the effect of financial development on international trade in the ASEAN-5 region. Annual panel data covering the period 1997-2023 of ASEAN-5 countries will be used in the analysis. The proposed analysis method is Panel Data Regression and Moderated Regression Analysis (MRA) using EViews version 10. The results show that financial development measured using the proxy of bank deposits and liquid liabilities can significantly affect international trade. In contrast, when measured using bank credit, it has a significant negative effect. Government effectiveness can strengthen the influence of bank credit and liquid liabilities on international trade. In contrast, bank deposits can weaken it because the effectiveness of the government in regulating and developing the financial system can interfere with the openness of international trade.

Keywords: Financial Development, International Trade, Government Effectiveness

ARTICLE INFO

Received:
June 3rd, 2024
Revised:
May 26th, 2024
Accepted:
July 23rd, 2024
Online:
December 5th, 2024

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ABSTRAK

Peran krusial pemerintah yang efektif dalam mengelola perkembangan keuangan dan dampaknya terhadap perdagangan internasional menjadi fokus utama penelitian ini. Penelitian ini bertujuan untuk menganalisis efektivitas intervensi pemerintah dalam memoderasi pengaruh perkembangan keuangan terhadap perdagangan internasional di kawasan ASEAN-5. Data panel tahunan yang mencakup periode 1997-2023 dari negara-negara ASEAN-5 akan digunakan dalam analisis. Metode analisis yang diusulkan adalah Analisis Regresi Data Panel dan Analisis Regresi Moderasi (MRA) dengan menggunakan aplikasi EViews versi 10. Hasil penelitian menunjukkan bahwa perkembangan keuangan yang diukur menggunakan proksi bank deposit dan liquid liabilities dapat berpengaruh positif signifikan terhadap perdagangan internasional, sedangkan ketika diukur menggunakan bank credit memiliki pengaruh negatif signifikan. Efektivitas pemerintah dapat memperkuat pengaruh bank credit dan liquid liabilities terhadap perdagangan internasional sedangkan bank deposit dapat memperlemah karena keefektifan pemerintah dalam mengatur dan mengembangkan sistem keuangan dapat mengganggu keterbukaan perdagangan internasional.

Kata Kunci: Pembangunan Keuangan, Perdagangan Internasional, Efektivitas Pemerintah

JEL: F13; F40

To cite this document: Humanita, S. N. A., & Endraswati, H. (2024). The Role of Government Effectiveness Boosting The Influence of Financial Development and International Trade in ASEAN-5 Country. *Jurnal Ilmu Ekonomi Terapan*, 9(2), 221-234. <https://doi.org/10.20473/jiet.v9i2.58389>

Jurnal Ilmu Ekonomi Terapan p-ISSN: 2541-1470; e-ISSN: 2528-1879

DOI: 10.20473/jiet.v9i2.58389



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Introduction

Trade between ASEAN members has been low and trending downward over the past few years. From 26 percent in 2012, the share of trade between members in ASEAN’s international trade will remain 21 percent in 2022 (Mada et al., 2023). International trade is an essential part of measuring global economic growth. Well-developed financial markets can increase international trade and facilitate transactions in world markets. International trade impacts the real sector and positively impacts a country’s financial sector. By opening investment opportunities and establishing cooperation between countries, international trade can strengthen the national financial sector’s stability, efficiency, and competitiveness (Abadiyah & Endraswati, 2023). Financial stability contributes to stable and sustainable export trade; measured, balanced, and efficient financial development is essential to maintain financial stability. International trade benefits from financial stability and access to finance, especially in the manufacturing sector (Caporale et al., 2022; Qiu et al., 2022). Firms in countries with high levels of financial development find it easier to export more goods and a wider variety of goods (Ma & Xie, 2019). A significant and interdependent relationship exists between financial development and international trade. A crucial indicator for measuring a nation’s financial sector advancement is the level of progress achieved by its financial markets and institutions. Economic theory posits that higher financial development is predicted to increase exports’ value, particularly within sectors characterized by high economies of scale.

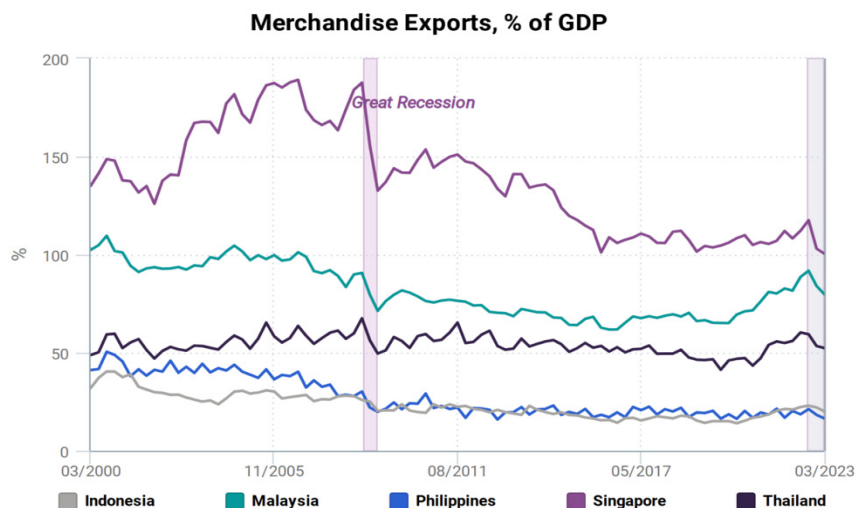


Figure 1: Export ASEAN-5 Country in 2000-2023

Source: CEIC data, 2024

Based on Figure 1. ASEAN-5 countries, consisting of Indonesia, Malaysia, the Philippines, Singapore, and Thailand, experienced a significant decline in exports in late 2022 and early 2023. It is a cause for concern as these countries rely heavily on exports to drive their economic growth. In 2022, exports were the main contributor to the nominal GDP of ASEAN-5 countries, accounting for 59.3%. It is much higher than that of other countries in the region, such as China (19.8%), Japan (17.6%), and India (13.4%). However, for the first time since 2008, exports of ASEAN-5 countries declined for two consecutive quarters.

This decline in ASEAN-5 exports is more severe than the decline in 2008. Exports peaked in the third quarter of 2022 and have fallen ever since. Singapore, which has the highest reliance on exports among ASEAN-5 countries, saw its export-to-GDP ratio fall by 17.1 percentage points to 100.5% in the first quarter of 2023. Similar declines also occurred in Malaysia (down 12 percentage points to 79.9%), Thailand (down 7.1 percentage points),

Indonesia (down 2.9 percentage points), and the Philippines (down 4.8 percentage points). This decline in exports is a worrying signal for the economic outlook of ASEAN-5. Measures are needed to address this decline and get export growth back on track (CEIC, 2024).

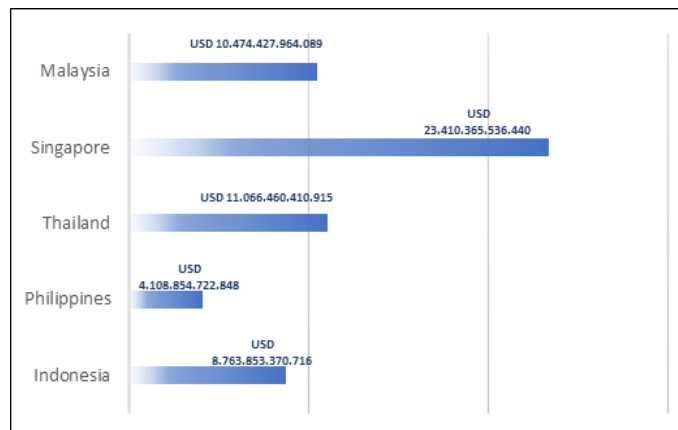


Figure 2: Export-Import of ASEAN Countries in 1960-2022

Source: World Bank, Data processed 2024

International trade transactions in a country are summarized in the trade balance, which consists of export and import components of goods and services (Afriyanti & Putri, 2021). Figure 2 illustrates the export imports of ASEAN-5 countries from 1960 to 2022. The amount of export and import spending cannot determine the success of a country. The success of international trade is not only based on exports and imports. However, other internal factors, such as policies and internal conditions, can be described through government effectiveness variables. Singapore is one of the fastest-growing countries. The development of Singapore as a trading center in Southeast Asia during the time of Governor-General Raffles (1819-1820) reflects Raffles' strategic vision that successfully transformed Tumasik, previously a swampy region with low population density, into a vital port city in the 21st century. Before Raffles' arrival, Singapore was covered in mangroves and lacked infrastructure. After renewing an agreement with the Sultan of Johor in 1785, Raffles developed Singapore into a bustling international trading center, demonstrating the significant impact on local and regional economies in Indonesia and Southeast Asia (Rakhman & Hidayat, 2021).

Empirical studies investigating the nexus between financial development and international trade, such as those conducted by Iqbal et al. (2019) and Sare et al. (2018), consistently report a significant positive association. Sare et al. (2018) posit that the field of international trade delves into the intricate relationship between a nation's export performance and the level of financial development within its borders. They contend that exporting firms grapple with substantial upfront fixed costs encompassing product design, production, marketing, and transportation. These costs, they argue, are demonstrably influenced by the prevailing level of financial development. Consequently, a more developed financial sector, characterized by efficient access to capital and financial instruments, is hypothesized to increase a nation's export volume. Furthermore, the Heckscher-Ohlin-Vanek (HOV) Theory posits that a well-developed financial sector can provide a comparative advantage, enabling a nation to specialize and excel in exporting specific goods and services.

The Heckscher-Ohlin-Vanek (HOV) Theory model states that countries will export products that require relatively abundant production factors. In this context, a good financial sector can be considered an abundant factor of production, so countries with a good financial sector will export products that require much external financing (Caporale et al., 2022). While the studies highlight a generally positive association between financial development

and international trade, [Qiu et al. \(2022\)](#) research introduces a nuanced perspective. Their findings suggest that excessive financial development may hinder international trade volume growth. Additionally, such excessive development may diminish the structure of export trade and potentially reduce the relative importance of trade processes. [Sare \(2021\)](#) supports this notion, demonstrating through their research that highly developed financial markets can conversely impede international trade.

On the other hand, research by [Sare et al. \(2018\)](#) shows that the development of the financial sector does not directly encourage an increase in international trade, either in the short or long term. Although sectoral value added can increase trade, this effect does not depend on the size of the financial sector and international trade. Then, the findings of [Elfaki et al. \(2021\)](#) result in financial development (measured by money supply) and trade openness having a negative impact on economic growth. More research is needed on the effect of financial development on international trade. This research's novelty is adding government effectiveness as a moderating variable. With the performance of government governance, researchers want to test whether governance can strengthen or weaken the effect of financial development on international trade.

This research contributes to understanding how a country's financial system can affect its international trade activities. The findings of this study can assist the government in formulating appropriate policies to encourage export growth, improve competitiveness, and mitigate the impact of the economic crisis.

Literature Review

International Trade

International Trade is a type of trade that impacts the world economy. In this case, demand supply, and prices are affected by global events. Global trade allows countries and consumers to obtain services and goods unavailable in their own countries ([Vijayasri, 2013](#)). International trade arises because of shared interests between countries. This interest is based on differences in resources owned by each country, such as natural resources, people, and technology. This difference encourages countries to exchange goods and services to meet national needs ([Abadiyah & Haris, 2023](#)).

The grand theory used to underpin international trade theory is the Heckscher-Ohlin model. This model predicts trade flows based on an economy's availability of labor, land, and physical capital ([Beck, 2002](#)). This model, known as the factors of production theory, explains that international trade is primarily based on differences in production characteristics, such as labor and capital, between countries ([Abdullah et al., 2023](#)). This theory explains how countries will utilize their comparative advantage to produce goods and services most efficiently and economically ([Assiddiq, 2019](#)).

According to [Keller & Yeaple \(2003\)](#), foreign investment and international trade have long been the main sources of international technology transfer. Basically, a country trades because international trade and foreign investment are seen as sources of knowledge, activity, and technology transfer, especially from developed to developing countries ([Annisa & Ibrahim, 2024](#)).

Financial Development

Financial development is the growth and advancement of a country's financial sector, including financial institutions and markets ([Nguyen & Pham, 2021](#)). It indicates the health of a country's financial system and the ease of public access to financial services. Key dimensions of financial development include market size, liquidity, and efficiency in providing financial services ([Caporale et al., 2022](#)).

Financial development encompasses the multifaceted process of enhancing a nation's financial system across multiple dimensions. This advancement entails not only an increase in the quantity of financial resources but also an improvement in their quality and the efficiency with which they are allocated. The intricate nature of financial development necessitates a comprehensive approach to its measurement, as it is inextricably linked to the underlying financial structure of an economy and the dynamic interplay between various financial activities and institutions. Consequently, a single metric needs to be more robust in capturing the full complexity of this multifaceted phenomenon (Irzam & Setyari, 2020). An essential component of financial development is a society with adequate access to the financial sector. The main objectives of financial development are equal distribution of people's income, reducing poverty, and encouraging increased economic growth (Restulillah & Ariusni, 2020).

According to Abadiyah & Haris (2023) and Ningsih et al. (2023), financial development can increase international trade. Likewise, in Pakistan, according to the research of Gokmenoglu et al. (2015), international trade and financial development spur economic growth. Iqbal et al. (2019) in Asia has found that financial development positively relates to international trade. Developing a strong and efficient financial system is essential for countries that want to increase international trade, primarily through exports.

H1: Bank Credit has a positive effect on International Trade

H2: Bank Deposits have a positive effect on International Trade

H3: Liquid Liabilities have a positive effect on International Trade

Governance Quality

Governance Quality is the quality or level of good and bad of a company in implementing and implementing the principles of good corporate governance (Kepakisan & Budiasih, 2022). In simple terms, governance quality can be interpreted as how effectively the government carries out its duties and promotes the public interest, which is broadly defined as upholding law and order, collecting revenue, allocating resources to meet specific needs, providing infrastructure, and promoting human rights (Aloui et al., 2024). Worldwide governance is an essential factor that must be considered in international trade activities as a decision to export or import (Pertwi et al., 2019). International trade growth can increase with better government effectiveness. The existence of government policies to revitalize the manufacturing industry and provide ease of investment for foreign investors is one of the reasons international trade can grow. These efforts include easing the negative investment list, tax amnesty, investment facilities, and the passing of the omnibus law. The quality of bureaucracy and institutional framework can encourage foreign investment flows (Suryanto & Kurniati, 2022).

An effective government is assessed based on the quality of public services, the professionalism of the state civil apparatus, and its ability to formulate and implement policies credibly and independently of political intervention. To achieve this, it is necessary to improve and standardize public services, professionalize the bureaucracy, focus on the main functions of government, eliminate inefficiencies, implement people-centered governance, and better financial management (Abubakar et al., 2020).

According to Wani et al. (2023), the role of governance in promoting international trade will impact economic growth. According to Bekana (2023), good governance at the institutional level is essential for advancing the financial sector. The impact of governance is more significant in countries with good governance, especially in political, economic, and institutional aspects. The influence of governance on the financial sector is more potent in countries with good economic governance. Research by Abubakar et al. (2020) shows that good governance, including political stability, quality regulation, voice and accountability, trade openness, and stable interest rates, contributes to financial development in West Africa.

H4: Governance Effectiveness can strengthen the effect of Bank Credit on International Trade

H5: Governance Effectiveness can strengthen the effect of Bank Deposits on International Trade

H6: Governance Effectiveness can strengthen the effect of Liquid Liabilities on International Trade

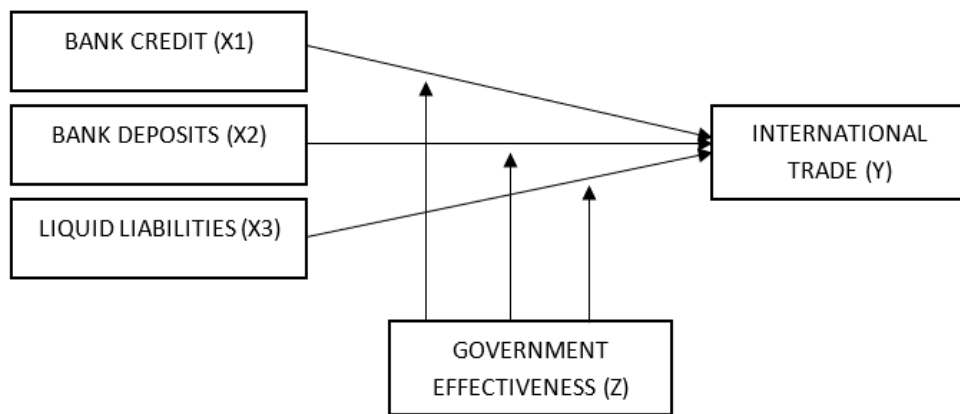


Figure 3: Framework

Source: data processed by researchers, 2024

Data and Research Methods

Data Type and Source

The subjects of this research are 5 ASEAN countries consisting of Indonesia, Malaysia, Thailand, Singapore, and the Philippines. Based on the literature review, the objects studied are financial development, trade openness, international trade, and governance quality using a quantitative positivist approach. This study uses secondary data with annual data (time series) and several companies (cross-section) for 1997-2023. The main source of data collection is the World Bank.

Variable Operational Definition

Table 1: Operational Definition of Variables

| Variables | | Measurement | Source |
|-----------------------------|----|--|------------|
| Dependent Variable | | | |
| International Trade | Y | Exports of goods and services (% of GDP) and Imports of goods and services (% of GDP) of a country | World Bank |
| Independent Variable | | | |
| Bank Credit | X1 | Bank credit to bank deposits (%) | World Bank |
| Bank Deposits | X2 | Bank deposits to GDP (%) | World Bank |

| Variables | | Measurement | Source |
|--------------------------|----|---------------------------------------|------------|
| Liquid Liabilities | X3 | Liquid liabilities to GDP (%) | World Bank |
| Moderating Variable | | | |
| Governance Effectiveness | Z | Worldwide Governance Indicators (WGI) | World Bank |

Data Analysis

The analysis technique used is a multiple linear regression model, including a series of classical assumption tests, normality, heteroscedasticity, multicollinearity, and autocorrelation. After the data passes the classical assumption test, hypothesis testing is carried out, which includes the F test, t-test, and the coefficient of determination. Moderated Regression Analysis (MRA) is used when this study uses moderating variables. This analysis is carried out to assess whether moderating variables can strengthen or weaken the relationship between the independent and dependent variables. This analysis is accommodated from the research of [Kepakisan & Budiasih \(2022\)](#), [Odhiambo & Musakwa \(2024\)](#), and [Wani et al. \(2023\)](#), who used governance as a moderating variable.

Model I:

$$IT_{it} = \beta_0 + \beta_1 CRE_{1it} + \beta_2 DEP_{2it} + \beta_3 LIQ_{3it} + \epsilon_{it} \tag{1}$$

Model II:

$$IT_{it} = \beta_0 + \beta_1 CRE_{1it} + \beta_2 DEP_{2it} + \beta_3 LIQ_{3it} + \beta_4 GOV_{it} + \beta_5 CRE_5 GOV_{it} + \beta_6 DEP_6 GOV_{it} + \beta_7 LIQ_7 GOV_{it} + \epsilon_{it} \tag{2}$$

Description:

- IT : International Trade
- α : constant
- $\beta_1 - \beta_7$: regression coefficient
- CRE : Bank Credit
- DEP : Bank Deposits
- LIQ : Liquid Liabilities
- GOV : Governance Effectiveness
- ϵ : error

Finding and Discussion

Research Data Development

Table 2: Results of Descriptive Statistical Analysis

| | Export | Bank credit to bank deposits (%) | Bank deposits to GDP (%) | Liquid liabilities to GDP (%) | Government Effectiveness: Percentile Rank |
|---------------|-------------|----------------------------------|--------------------------|-------------------------------|---|
| Mean | 81.11161894 | 88.65554134 | 86.56706695 | 90.84647849 | 65.472754 |
| Std Error | 5.258092151 | 1.853432583 | 2.971765014 | 3.11441551 | 1.899843153 |
| Median | 64.84025074 | 93.07825 | 99.40904 | 106.4521 | 59.04761887 |
| Std Deviation | 61.09351 | 21.53494058 | 34.52878922 | 36.18623821 | 22.07418267 |
| Sample Var | 3732.416964 | 463.7536657 | 1192.237285 | 1309.443836 | 487.2695407 |

| | Export | Bank credit to bank deposits (%) | Bank deposits to GDP (%) | Liquid liabilities to GDP (%) | Government Effectiveness: Percentile Rank |
|----------|--------------|----------------------------------|--------------------------|-------------------------------|---|
| Kurtosis | -0.230172924 | 2.043341415 | -1.499101079 | -1.433428527 | -1.221320632 |
| Skewness | 1.046775644 | 0.265842793 | -0.332607422 | -0.298365846 | 0.320184171 |
| Range | 212.869661 | 140.68132 | 110.5245985 | 124.5582371 | 74.98847304 |
| Minimum | 16.12410993 | 38.64238 | 30.61920148 | 28.07166287 | 25.68305969 |
| Maximum | 228.9937709 | 179.3237 | 141.1438 | 152.6299 | 100.6715327 |
| Sum | 10950.06856 | 11968.49808 | 11686.55404 | 12264.2746 | 8838.82179 |
| Count | 135 | 135 | 135 | 135 | 135 |

Based on table 2. The dependent variable, international trade proxied by the export indicator, has a maximum value of 228.9937709 and a minimum of 16.12410993. This occurred in Indonesia in 2023. With an average value of 81.11161894, a median value of 64.84025074, and a standard deviation of 61.09351, there is a deviation from the average value of 61.09351. The independent variable of this study is financial development proxied by indicators of bank credit to bank deposits, bank deposits to GDP, and liquid liabilities to GDP. The average indicator of bank credit to bank deposits is 88.65554134 with a standard deviation of 21.53494058. The maximum value of the bank credit to bank deposits indicator of 179.3237 was obtained from Thailand in 1997. The minimum value was 38.64238 in 1999 in Indonesia. Then, the indicator of bank deposits to GDP has an average value of 86.56706695. With a minimum value of 30.61920148 and a maximum of 141.1438.

Furthermore, the indicator of liquid liabilities to GDP has an average value of 90.84647849, a maximum value of 152.6299, and a minimum value of 28.07166287. The government effectiveness variable as moderation in this study has an average value of 65.472754. The minimum value described in the study period was 25.68305969, this occurred in 1998 in Indonesia. Meanwhile, the maximum value is 100.6715327, which occurred in Singapore in 2023.

Classic Assumption Test

Normality Test

Table 3: Jarque-Bera Test. Normality Test Results

| | Residual |
|------------------|----------|
| N | 135 |
| Jarque-Bera Test | 2.764426 |
| Probability | 0.251022 |

An assessment of normality for the ASEAN-5 country data spanning 1997-2023 was conducted using the Jarque-Bera Test. The resulting p-value of 0.251022 exceeds the significance level of 0.05, indicating that the data exhibits normal distribution.

Multi Collinearity Test

Table 4: Multicollinearity Test Results

| | Export | Bank Deposits | Bank Credits | Liquid Liabilities |
|--------------------|---------|---------------|--------------|--------------------|
| Export | 1 | 0.84290 | 0.22495 | 0.86832 |
| Bank Deposits | 0.84290 | 1 | 0.21463 | 0.98786 |
| Bank Credits | 0.22495 | 0.21463 | 1 | 0.16546 |
| Liquid Liabilities | 0.86832 | 0.98786 | 0.16546 | 1 |

Drawing upon the data presented in Table 4, the multicollinearity test results for the sample of ASEAN-5 Country reveal concerningly high correlation coefficient values among the independent variables. These values exceed 0.80, suggesting a potential problem of multicollinearity.

Heteroscedasticity Test

Table 5: Heteroscedasticity Test Results–Metode Glejser

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|------------|-------------|--------|
| C | 0.021248 | 0.022474 | 0.945423 | 0.3462 |
| Bank Deposit | 0.424844 | 0.345868 | 1.228340 | 0.2215 |
| Bank Credit | -0.010215 | 0.224906 | -0.045418 | 0.9638 |
| Liquid Liabilities | -0.259937 | 0.342574 | -0.758775 | 0.4493 |

An assessment of heteroscedasticity was conducted employing the Glejser method. The regression results between the absolute residuals and all independent variables revealed non-significant p-values for all independent variables. Specifically, the p-values exceeded the significance level of 0.05. Consequently, the absence of a statistically significant relationship between the residuals and independent variables indicates that heteroscedasticity is absent in the model. Therefore, the model passes the heteroscedasticity test.

Autocorrelation Test

Table 6: Autocorrelation Test Results

| | Residual |
|--------------------|----------|
| N | 135 |
| Durbin-Watson stat | 0.655862 |
| DL | 1.6584 |
| DU | 1.7802 |

Shows the results of the autocorrelation test using Durbin-Watson. After calculating using the DL / DU table, the results are $0 < DW < DL$, namely $0 < 0.655862 < 1.6584$, meaning there is positive autocorrelation in the research model.

Multiple Linear Regression Analysis

Table 7: Multiple Linear Regression Analysis Results with Robustness Check

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|--------------------|-------------|------------|-------------|-----------|
| C | -0.110725 | 0.037772 | -2.931410 | 0.0034*** |
| BANK CREDIT | -2.019732 | 0.535747 | -3.769937 | 0.0002*** |
| BANK DEPOSIT | 0.988204 | 0.359304 | 2.750328 | 0.0060*** |
| LIQUID LIABILITIES | 3.611415 | 0.525754 | 6.869016 | 0.0000*** |

Note: ***, **, * stand for significant at $\alpha = 1\%$, 5% , and 10% , respectively. Probability is shown in parentheses.

The results of the t-statistical test are in Table 7. They are starting with the robustness test as proof of a research model that is robust, valid, and unbiased (Sepriani & Candy, 2022). A robustness test is also conducted to pass the classical assumption test; in other words, this test is a cure for heteroscedasticity and autocorrelation symptoms. The results show that bank deposits (X1) significantly negatively affect international trade in ASEAN-5 countries. This is evidenced by the probability value of $0.0002 < 0.01$ (1% significance level) with a negative coefficient value, which means H1 is rejected. Hypothesis (H2) states that Bank Credit (X2) significantly affects international trade in ASEAN-5 countries. This study’s result shows a probability value of $0.0060 < 0.01$ (1% significance level), which means H2 is accepted.

Furthermore, the t-statistic test results found that Liquid Liabilities (X3) significantly affect international trade in ASEAN-5 countries. This is evidenced by the probability value of $0.0000 < 0.01$ (1% significance level), meaning H3 is accepted. Based on the results of the multiple regression analysis above, it is known that H1 is rejected and H2 and H3 are accepted because the probability value is smaller than 1%.

Table 8: Results of the Coefficient of Determination Analysis

| R-squared | Adjusted R Square |
|-----------|-------------------|
| 0.615548 | 0.606743 |

The data analysis of ASEAN-5 Country yielded an adjusted R-squared coefficient of determination of 0.615548. This value indicates that 61.5548% of the variation observed in international trade can be attributed to the influence of financial development within the scope of this research model. The remaining 38.4452% of the variation is likely attributable to the influence of other factors not explicitly incorporated into this model.

Interaction Test (Moderated Regression Analysis)

Table 9: Moderated Regression Analysis (MRA) Test Results

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|--------------------|-------------|------------|-------------|-----------|
| C | 0.516818 | 0.113626 | 4.548401 | 0.0000*** |
| BANK_CREDIT | -2.841863 | 1.024491 | -2.773926 | 0.0055*** |
| BANK_DEPOSIT | 4.689319 | 2.401720 | 1.952483 | 0.0509** |
| LIQUID_LIABILITIES | -4.983967 | 2.488454 | -2.002837 | 0.0452** |
| GOV | -0.009670 | 0.002044 | -4.730079 | 0.0000*** |
| CRXGOV | 0.061051 | 0.018986 | 3.215543 | 0.0013*** |
| DEPXGOV | -0.109973 | 0.043755 | -2.513372 | 0.0120** |
| LIQXGOV | 0.140574 | 0.044470 | 3.161086 | 0.0016*** |

Note: ***, **, * stand for significant at $\alpha = 1\%$, 5% , and 10% , respectively. Probability is shown in parentheses.

The results of the MRA test conducted with a sample of ASEAN-5 countries show that government effectiveness can moderate the influence of financial development indicators on international trade in ASEAN-5 countries. Statistical results answer the moderation of government effectiveness variables, namely hypothesis (H4) states that government effectiveness can strengthen the effect of bank credit on international trade with a probability of $0.0013 < 0.01$ (1% sig. level), which means H4 is accepted. Hypothesis (H5) found that government effectiveness can weaken the effect of bank deposits on international trade with a probability value of $0.0120 < 0.05$ (5% sig. level), meaning that H5 is rejected. The last test result shows that government effectiveness can strengthen the effect of liquid liabilities on international trade with a probability value of $0.0016 < 0.01$ (1% sig. level), which means H6 is accepted.

Analysis of Estimation Results

The second (H2) and third (H3) hypotheses can explain the significant positive effect of the relationship between financial development (bank deposits and liquid liabilities) and international trade. This result aligns with Heckscher-Ohlin’s theory, which states that countries with developed financial systems benefit from more accessible access to external funding (Sare et al., 2018). It is supported by research by Caporale et al. (2022), implying a statistically significant causal relationship between financial development and exports and imports. Research (Abadiyah & Endraswati, 2023; Bilas et al., 2017; Mensah, 2024)

also explains the positive and significant influence on international trade. An increase in the financial development index scale can contribute to an increase in international trade. The Financial Development Index (FD) developed by the IMF includes aspects of depth, accessibility, and efficiency of financial institutions and markets. Therefore, FD can be considered a representative indicator in describing the financial condition of a country. In addition (Iqbal et al., 2019) explained that financial development is the most suitable tool to increase the overall volume of international trade with other Asian countries.

The first hypothesis (H1) explains that bank credit as a proxy for financial development can have a negative effect on international trade. It aligns with research (Qiu et al., 2022), which states that the scale of financial development must be adjusted to international trade because it can have an uncertain impact. While facilitating access to short-term funding for firms, this growth can also lead to rapid increases in the price of factors of production in the long term, resulting in increased export commodity prices and reduced competitiveness in international markets.

Government effectiveness as a moderating variable is a crucial reason for researchers. Because an effective government can play a significant role in managing financial development. The results in hypotheses (H4 and H6) show that government effectiveness can strengthen the effect of financial development (credit banks and liquid liabilities) on international trade. These results align with research (Pertwi et al., 2019; Prahaski & Ibrahim, 2023; Putra et al., 2023); the better the quality of governance in a country, the more international trade activity will increase. Government effectiveness can strengthen the influence of the context of financial development through liquid liabilities and bank deposits on the impact of remittances (Odhiambo & Musakwa, 2024). According to Abubakar et al. (2020), improving the quality of governance by strengthening the legal framework, enforcing standards, empowering supervisory institutions, and encouraging an efficient regulatory environment for financial inclusion will play an essential role in financial development in West Africa. Furthermore, research (Nzama et al., 2023) said selected countries with above-average government effectiveness, namely those with established state bureaucracies and historically strong state traditions, will further increase their activities towards international integration through financial and trade openness.

There is a hypothesis (H5) that is outside the theory, namely, the existence of government effectiveness weakens the influence of financial development as measured by bank deposits on international trade. Government effectiveness in regulating and developing the financial system can interfere with international trade openness. Trade openness is essential for the globalization of international trade barriers, as tariff and non-tariff barriers are reduced. However, if the government is ineffective in regulating the financial system, trade openness can be disrupted by these barriers (Setiawan et al., 2023).

Conclusion

Results show empirical support for the hypothesis linking financial development to international trade. Research shows that countries with developed financial systems have an advantage in international trade as they can more easily access external funding. Factors such as bank credit and liquid liabilities play a role in promoting international trade, with effects that the level of government effectiveness can influence. Improvements in governance, including efficient enforcement of laws, standards, and regulations, can strengthen the link between financial development and international trade. However, there are exceptions where the level of government effectiveness can also moderate the relationship between financial development and international trade, as seen in the unsupported hypothesis of an adverse

effect of government effectiveness on the effect of financial development on international trade. This conclusion underscores the importance of the interaction between financial development, effective governance, and international trade in understanding the dynamics of the global economy.

The limitation of this study is that it only considers financial development factors and ignores the trade policy factors used, economic conditions, and socio-political factors in the study period. Suggestions for future research need to develop a more complex research model that can better capture the dynamics of the interaction between financial development, governance, and international trade and then add other factors that affect global trade, especially in ASEAN.

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