



# Implications of Indonesian Migrant Worker Fluctuations on Taiwan Trade Rate Under the New Southbound Policy Framework (2019-2023)

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## ABSTRACT

The influence of China has weakened Taiwan's position in global diplomacy. China emphasizes that countries that establish diplomatic relations with Taiwan will lose relations with China. In response, Taiwan introduced the New Southbound Policy (NSP) as a hedging strategy to counteract diplomatic isolation through cooperation. This policy seeks to strengthen economic, cultural, and technological relations with countries in South and Southeast Asia, including Indonesia. Taiwan and Indonesia have enhanced trade relations through programs promoting people-to-people connectivity involving individuals and civil society networks. A key aspect of this cooperation is the employment of Indonesian migrant workers in Taiwan, which relates to the New Economics of Labor Migration. NELM is a theory that puts emphasis on the impact of migrant labor and remittances on the trade balance of a country. This paper will analyze the effect of the existence of Indonesian Migrant Workers on remittances and the trade balance of Taiwan in the ensuing NSP. Quantitative approach used by utilizing simple linear regression to sharpen the result based on the data that were identified using the official government websites, datasets, journal articles, and others. Results indicate that there are impacts caused by the existence of Indonesian workers on Taiwan's trade balance by 55.5% and remittances 32.7%, respectively. Although other reasons, including Indonesian visitors, also contribute to the process. NSP was launched to balance geopolitical tensions and link trade, technology, education, labor, and cultural exchange.

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## INTRODUCTION

International cooperation between states is a significant measure in the global arena, as it helps to develop trust and achieve national interests. Trade and investment cooperation in the era of globalization is significant in reinforcing economic relations and promoting sustainable development. A notable case is the partnership between Taiwan and Indonesia with the New Southbound Policy started by the Taiwan government. The policy is aimed at enhancing economic collaboration with the Southeast Asian nations, such as Indonesia, which is a key economic hub in the region. Such a partnership not only have the economic advantages but also opens possibilities of sharing knowledge and technology (Yang, 2023). Given the important role Indonesia plays in promoting workers' rights in Taiwan, due to its significant influence in the region. Its strong role in bilateral relations, and its contributions as one of the most important sources of labor and as one of the largest groups of foreign workers in Taiwan. The relationship between the citizens of the two countries is intensifying. For

example, according to a study published in the *International Journal of Environmental Research and Public Health*, 38.4% of all workers in Taiwan are from Indonesia, making them one of the most affected groups (Weng et al., 2021). This is further supported by other academic research, which emphasizes that Taiwan is a major destination for Indonesian workers and that their presence plays an important role in economic and social dynamics between the two countries (Guritno and Aryo, 2025).

Given its large workforce, Indonesia serves as a relevant and representative case study for analyzing the impact of labor migration on trade and economic relations, particularly in the context of Taiwan's new policy of opening up to the South. The bilateral relations of countries do not always progress, and the complicated dynamics tend to influence the trust between countries. This can be seen in the Taiwanese and the relations with China, which, up to this day has been characterized by tension and an underlying difference in both ideology and form of government. The war between the two parties started in 1949, when the government of mainland China was assumed by the Communist Party of China, and the people of the Republic of China were established (People's Republic of China). The nationalist party, in turn, withdrew to the island of Formosa and established its own government, officially named the Republic of China (ROC), now Taiwan (Nugroho, 2022).

The early years of Taiwan had a relatively strong position in global politics; however, it started to decline in the 1970s, primarily because of the growth of Chinese influence via the Non-Aligned Movement (NAM) and the practice of the One China Policy (Fabry, 2024). According to this policy, there is a single China that is being recognized, and China has threatened to end diplomatic relations with any state that forms official relations with Taiwan. Because of this reason, most nations, including those within the United Nations (UN), have changed their diplomatic status towards Taiwan to that of China (Tukan, 2023). This has seen Taiwan no longer being considered as a member of the UN and has caused it to be even more isolated in the world of international relations, even though Taiwan de facto fits the classical definition of a country, i.e., a state that has a territory, a population, and a government. The condition has compelled Taiwan to find alternative means to survive in the international environment. The New Southbound Policy is one of the achievements made by a new rule initiated by the new President Tsai Ing-wen. The purpose of this policy is to enhance the ties of Taiwan with 18 countries in Southeast Asia, South Asia, Australia, and New Zealand by collaborating in the areas of economy, trade, science, culture, and technology (TETO, 2023). Besides augmenting trade and investment, the policy also focuses on sharing resources and talent, which will result in a model of cooperation that is mutually advantageous.

One of the key partners of Taiwan in the Southeast Asia region in the context of the New Southbound Policy is Indonesia. This is a non-diplomatic type of cooperation, as stated by the fact that Indonesia acknowledged the One China Policy as a signed memorandum of understanding (MoU) in 1990. Nonetheless, this collaboration deals with different areas, including education, culture, tourism, labor migration, and trade and investment (Effendi, 2025). Among the most prominent aspects are economic relations where Taiwan and Indonesia participate in export and import processes and build the business network. The people-to-people connectivity strategy is one of the key approaches that Taiwan uses to improve this non-diplomatic relationship (Mahardika & Darmawan, 2020). This strategy incorporates the different aspects of society, such as students, migrant workers, civil society organizations, and the business community, in enhancing bilateral relations (Dao, 2020). Indonesian migrant workers and students in Taiwan have played an influential role in the enhancement of relations between the two nations due to their high population. They are not only a cultural and social connection, but also they help to make Taiwan and Indonesia understand and trust each other.

Taiwan and Indonesia have a great economic cooperation that is significant to both. For Indonesia, this collaboration opens access to broader economic opportunities, including employment for migrant workers in Taiwan. The framework of the New Southbound Policy further strengthens this relationship by promoting cooperation in trade, investment, and community integration. Recent studies confirm that Taiwan's engagement with Southeast Asian countries, particularly Indonesia, has expanded economic collaboration and labor mobility as part of its regional diversification strategy (Maksum, Tsay, and Muhammad, 2021). Meanwhile, for Taiwan, Indonesia is a prospective market and a close partner in diversifying international relations. In the meantime, in the case of Indonesia, such collaboration is a gateway to new economic prospects and the employment of migrant workers in Taiwan. The frameworks of the New Southbound Policy have programs that aim at reinforcing this economic relationship, and the components to be addressed are trade, investment, and community integration (Dao, 2020).

Building on this, Dao (2020) analyzes the evolution of Taiwan's New Southbound Policy with particular emphasis on human resource cooperation and its impact on educational collaboration with Vietnam. It highlights that the policy represents a shift from purely economic and political objectives toward a more people-centered approach, emphasizing education, labor mobility, and talent exchange. The findings show that Taiwan uses education and human resource development as strategic tools of soft power to strengthen bilateral ties despite diplomatic constraints. The study also demonstrates that initiatives such as student exchange, training programs, and labor cooperation have significantly enhanced Taiwan and Vietnam relations, particularly in building long-term socio-economic linkages. However, the study focuses primarily on Vietnam, limiting the generalizability of findings to other partner countries under the New Southbound Policy. Then, the analysis is largely descriptive and policy-oriented, with limited empirical measurement of the actual socio-economic impacts of human resource cooperation. Migrant workers and human capital flows are discussed broadly but not examined as central analytical variables in shaping broader economic relations. Furthermore, the study does not deeply explore how such cooperation functions as an alternative model of international relations in non-diplomatic contexts, leaving theoretical implications underdeveloped.

In contrast, this research on the economic relations between Taiwan and Indonesia reveal that the given policy influenced the economies of both nations positively. Studies covering the period 2019-2023 indicate that the bilateral trade has considerably increased in addition to the contribution of migrant workers in economic dynamics. Taiwan's engagement with Southeast Asia under this policy has strengthened cooperation not only in trade and investment but also in labor mobility and people-to-people connectivity, particularly with Indonesia as a key partner (Jamil, 2023). Though this association is not founded on the formal level of diplomatic approach, the level and scope of cooperation between the two nations indicate that even non-diplomatic relations may prove to be very fruitful when conducted properly. All in all, the cordial relationship between Taiwan and Indonesia is evidenced by the efforts of both sides to break the barriers in relations and to exploit the mutual economic potential.

The New Southbound Policy, as well as other policies, is not only a means of economic diplomacy but also another example of how to collaborate even in the context of complex geopolitical issues. This relationship has the potential for further expansion in terms of sustainable benefits to both countries, and this will be done through a strategic approach and involvement of various parties (Nguyen, 2023). Despite growing cooperation between Taiwan and Indonesia under the "New Southbound Policy," little information is available on its impact on bilateral economic outcomes, particularly regarding labor mobility and the presence of Indonesian migrant workers. Although the

growing number of migrant workers and the intensification of trade suggest a potential link, the influence of Indonesian workers on the trade balance between Taiwan and Indonesia has not been clearly quantified. Furthermore, while the role of remittances from these workers as an economic link between the two countries is often recognized, no systematic analysis of their impact on trade performance has been conducted. Consequently, this study aims to examine whether the number of Indonesian migrant workers has a significant impact on the trade balance, and how the remittance flows generated by labor mobility contribute to the formation of the overall economic relationship between Taiwan and Indonesia.

## **RESEARCH METHOD**

This study employs a quantitative methodology, which provides precise mathematical data accompanied by descriptive analyses, as it was essential to present indisputable and objective evidence of the relationship between migration and trade. In a topic fraught with geopolitical sensitivities like Taiwan's One China constraints and Indonesia's labor exports, qualitative methods, rich in narratives but prone to interpretation bias, simply wouldn't suffice for policymakers demanding hard evidence. In this case, quantitative methods were indispensable; they allow for the precise measurement of concrete data, from hypothesis formulation through structured planning (objectives, themes, samples, deductive generalization) to decisive generalizations applicable beyond the dataset (Waruwu, 2023) (Anshori & Iswati, 2019). This rigor was essential to verify whether fluctuations in the migrant population actually accounted for approximately 80% of the variation in trade, setting aside anecdotal claims.

In this age of data abundance, this approach offers greater reliability, such as verifiable trade data (exports, imports, total figures) from secondary sources, drawn from the websites of the Taiwanese and Indonesian governments, as well as from media reports for the period 2019–2023. Additionally, migration data was provided that is free from the memory errors typically found in surveys. Regression analysis was a powerful tool for identifying causal patterns, significance, and the strength of variable effects. It was essential to accurately identify the predictive models that were crucial for forecasting the policy impacts within the framework of the New Southbound Policy. Why not include qualitative aspects? The purely quantitative methodology ensured reproducibility, so that anyone could rerun the SPSS/Excel models and obtain the same results, which built confidence in the diplomatic hedging strategies. It accounted for post-COVID time-series volatility, another confounding factor, and quantified the decline in unemployment due to remittances. Ultimately, the methodology was determined by the research objective to statistically validate them and thereby enable evidence-based decisions to strengthen bilateral relations.

## **RESULTS AND DISCUSSION**

### **Taiwan's Trade Relations with Indonesia**

Taiwan has bilateral cooperation with Indonesia in various aspects, such as trade, socio-cultural, education, and technology. This relationship is getting closer with the New Southbound Policy initiated by President Tsai Ing-wen. According to the definition from the Ministry of Foreign Affairs, Republic of China (Taiwan), the New Southbound Policy is a strategy to improve Taiwan's economy and trade, which aims to redefine Taiwan's important role in Asian development through new impetus in economic development, trade, science, culture, and technology (TETO, 2023). This policy also opens up opportunities for broader negotiations and dialogue with the destination countries of the New Southbound Policy, one of which is Indonesia, to create a model of mutually

beneficial and sustainable cooperation. Economic cooperation between Taiwan and Indonesia is realized through direct trade facilitated by the trade offices of each country. Taiwan established the Taipei Economic and Trade Office (TETO) in Jakarta, while Indonesia has the Indonesian Economic Trade Office (KDEI) in Taipei (Ministry of Foreign Affairs, 2024). Although Indonesia does not diplomatically recognize Taiwan due to the One China Policy, which states that there is only one China recognized, the trade office allows the two countries to cooperate in various fields, including trade, migrant workers, education, and technology. TETO was first established in 1971 under the name “Chinese Chamber of Commerce to Jakarta”, later changed to Taipei Economic and Trade Office in Indonesia. In late 2015, a TETO office was also established in Surabaya. Meanwhile, the Indonesian Chamber of Commerce and Industry (KDEI) in Taipei began operating in 1970 under the name of the Indonesian Chamber of Commerce (KADIN), which was later changed to the Indonesian Economic and Trade Office in 1994 based on Presidential Decree Number 48/1994 (TETO, 2020).

KDEI is tasked with facilitating, improving, and expanding economic and trade cooperation between Indonesia and Taiwan. Several agreements that have been agreed between the two countries cover various fields, such as Investment Promotion and Protection (1990), Double Taxation Avoidance (1995), Agricultural Cooperation (1995), Maritime and Fisheries Cooperation (2004), Manpower Cooperation (2004), Agricultural Technical Cooperation (2006), “One Village One Product (OVOP)” Cooperation (2010), Higher Education Cooperation (2011), and Cooperation in the Field of Agriculture (2016) (TETO, 2020). However, since 2016, there has been no new agreement of the same significance. Taiwan and Indonesia have been able to establish extensive cooperation despite being constrained by the One China Policy. People- to people interaction is also a part of this bilateral relationship, particularly with the migrant workers. Taiwan and Indonesia are providers and consumers of contract labor, and Taiwan and Indonesia are also the consumers and providers of foreign direct investment, respectively. Indonesian Migrant Workers (PMI) are significant in the domestic sector of Taiwan, particularly as caregivers, whose services are being utilized to provide labor to less appealing sectors of the local labor force (Kitamura et al., 2023). Conversely, PMI remittances generate a great portion of the national income of Indonesia, which helps curb unemployment through offering jobs in foreign countries. Along with the migration of labor, socio-cultural relations are formed in the course of education. A large number of Indonesian students pursue higher studies in Taiwan, and some of them have built networks that have enhanced the ties between the two nations.

Another approach that is used to secure bilateral relations is the New Southbound Policy, which uses G-to-G (Government-to-Government) diplomacy and people-to-people connectivity strategies. This diplomacy is interested not only in the economy but also in socio-culture and education. This approach will create awareness among people and enhance relations between the people of the two countries. In this regard, migrant workers form a significant key when it comes to the implementation of the New Southbound Policy (Kitamura et al., 2023). Moreover, the migration of students, professional labor, and personal relations, including international marriages have also increased the socio-cultural interrelation of the two nations. Although formal diplomatic relations between Taiwan and Indonesia do not exist, economic and social ties between the two remain strong. The existence of trade offices, bilateral agreements, and community interactions are important bridge in this relationship. Taiwan remains a major trading partner and significant investor in Indonesia, while Indonesia provides migrant workers who help support important sectors in Taiwan. Through the New Southbound Policy strategy, this bilateral relationship is expected to continue to grow and provide mutual benefits for both countries.

### **Taiwan's Trade Intensity with Indonesia**

Looking at the long-standing cooperation between Taiwan and Indonesia, the longer the cooperation has been expanding in several aspects. Until Taiwan became Indonesia's 11th largest trading partner and the 14th largest investor among all countries that have economic cooperation with Indonesia. While Indonesia became Taiwan's 14th largest trading partner, 10th largest import, and 16th largest export market (Ministry of Foreign Affairs, 2024). In recent decades, the exports and imports of both countries have increased significantly, thus advancing bilateral trade. With these conditions, job opportunities for Indonesian workers have also increased (Silitonga, 2023). In recent years, when the New Southbound Policy began to be implemented in 2016, the economic statistics of trade between Taiwan and Indonesia were quite significant. In 2016, exports from Indonesia to Taiwan amounted to USD 4,326,000,000. While exports from Taiwan to Indonesia amounted to USD 2,745,000,000. Then, exports in 2017 and 2018, respectively, from Indonesia to Taiwan amounted to USD 4,920,000,000 and 5,510,000,000. While exports from Taiwan to Indonesia amounted to USD 3,190,000,000 and USD 3,330,000,000 (Ministry of Foreign Affairs, 2024).

Table 1. Taiwan Trade Statistics with Indonesia 2019-2023

Source: Bano, Chaudhri and Zowghi International Trade Administration, Ministry of Economic Affairs. (<https://cuswebo.trade.gov.tw/FSCE3000C?table=FSCE3030F>)

YEAR	TOTAL TRADE		EXPORT		IMPORT	
	AMOUNT	GROWTH RATE(%)	AMOUNT	GROWTH RATE(%)	AMOUNT	GROWTH RATE(%)
2019	7,603,192,288	-13.765	2,921,653,845	-12.251	4,681,538,443	-14.683
2020	6,785,045,233	-10.761	2,276,942,124	-22.067	4,508,103,109	-3.705
2021	10,980,225,733	61.830	3,070,256,987	34.841	7,909,968,746	75.461
2022	14,427,262,539	31.393	3,214,987,058	4.714	11,212,275,481	41.749
2023	10,396,403,329	-27.939	3,010,040,878	-6.375	7,386,362,451	-34.123

Table 2. Taiwan-Indonesia Trade Balance 2019-2023

Source: International Trade Administration, Ministry of Economic Affairs, processed by the author

YEAR	BALANCE OF TRADE
	AMOUNT
2019	602,000
2020	498,000
2021	344,000
2022	597,000
2023	860,000

Although at the beginning of the New Southbound Policy, exports from both countries experienced a consistent increase, when the COVID-19 pandemic hit the world, including Taiwan and Indonesia, exports experienced a spike. It was recorded that in the post-COVID-19 years, namely 2021 and 2022, exports from Indonesia to Taiwan were USD 7,900,000,000 and USD 11,243,000,000. Meanwhile, exports from Taiwan to Indonesia were USD 3,070,000,000 and USD 3,215,000,000. From these export figures, the total bilateral trade figures between the two countries in 2016, 2017, and 2018 were USD 7,071,000,000, USD 8,120,000,000, and USD 8,840,000,000. Meanwhile, the post-COVID-19 pandemic figures for 2021 and 2022 are USD 10,970,000,000 and USD 14,458,000,000.

From 2019 to 2021, the trade balance between Taiwan and Indonesia declined steadily, falling from 602,000 in 2019 to 498,000 in 2020, and then to 344,000 in 2021. This downward trend, however, reversed in 2022, when the trade balance saw a significant increase, reaching 597,000. This improvement continued in 2023, with a sharp rise to 860,000, the highest level during the period under review. Overall, the data show a great and sustained improvement in the years following the initial contraction. The statistics are based on the Taipei Economic and Trade Office (TETO) (Ministry of Foreign Affairs, 2024).

### **Indonesian Migrant Workers**

As a pillar of economic development, the workforce has an important role in driving the nation's progress. Based on Law Number 13 of 2003, the workforce is defined as every individual who can work to produce goods or services for personal and community needs (Ministry of Industry, 2003). The workforce is divided into the labor force (working or unemployed) and the non-labor force (going to school, taking care of the household, or earning income) (Anisawati, 2024). The history of Indonesian labor migration abroad began during the Dutch East Indies colonial era (Roger, 1999). In 1890, contract laborers from Java, Sunda, Madura, and Batak were sent to Suriname and other colonial territories in South America. After independence, the government began to address labor issues through the Ministry of Labor. During the New Order era, labor policies were developed with the launch of the Inter-Regional Inter-Work Program (AKAD) and Inter-Country Inter-Work (AKAN) under the Ministry of Manpower, Transmigration, and Cooperatives. The AKAN program, which handles inter-country labor, began to involve private companies to support labor placement in the Middle East and Asia Pacific regions (BP2MI, 2020).

In 1986, AKAN was integrated into the Directorate General of Manpower Development and Placement (Binapenta). At the national level, manpower management continued to develop until the formation of the National Agency for the Placement and Protection of Indonesian Migrant Workers (BNP2TKI) in 2004. BNP2TKI manages the placement and protection of migrant workers in an integrated manner, with the support of technical implementing units in each province. Based on Law Number 18 of 2017 and Presidential Regulation Number 90 of 2019, BNP2TKI was transformed into the Indonesian Migrant Workers Protection Agency (BP2MI). BP2MI is tasked with implementing policies on the placement and protection of migrant workers, including issuing permits, supervising social security, and empowering the social and economic well-being of post-migrants (BP2MI, 2020). In Taiwan, BP2MI works with the Indonesian Migrant Worker Service Provider (PJTKI) to ensure that the labor placement process runs according to procedure. This type of labor migration not only assists in lowering the rate of unemployment in Indonesia, but also assists in the labor requirements in the destination countries, such as Taiwan. Centralized coordination with the help of BP2MI provides the Indonesian migrant workers with legal protection, starting with the stage of departure and ending with reintegration. This policy guarantees the sustainability of the contribution of the migrant workers to the national economy and personal welfare.

Table 3. Number of Indonesian Migrant Workers Placed in Taiwan

Source: Indonesian Migrant Workers Protection Agency (BP2MI), (<https://bp2mi.go.id/dashboard-publik>)

Number of Indonesian Migrant Workers Placed in Taiwan									
No.	Month	2016	2017	2018	2019	2020	2021	2022	2023
1	January	6925	4960	4560	6532	6124	608	887	5889
2	February	5640	5008	4363	4802	5994	448	1150	5829
3	March	6476	6042	4732	5921	6385	550	3281	7813
4	April	6236	5022	5186	7213	632	491	4401	5795
5	May	6502	5516	6370	9311	813	939	3210	7693
6	June	6387	5638	6450	3997	659	247	4967	6155
7	July	4235	7055	7793	7156	513	432	3828	7761
8	August	6337	5941	6762	6830	603	654	4143	7937
9	September	7289	4449	6408	6962	2153	768	4508	7247
10	October	6879	4772	7429	7193	3415	623	6053	7889
11	November	7740	4657	6790	7231	3934	889	8630	7106
12	December	6443	3796	5522	6435	2774	1108	8401	6102
TOTAL		77089	62856	72365	79583	33999	7757	53459	83216

Based on the placement data above, there was a reduction in the number of migrant worker shipments and placements in mid-2020 and in 2021. In 2020, shipments decreased from April to August, then increased again from September to December. 2021 was the year in which Indonesia sent the fewest migrant workers among the five years, namely 7,757 migrant workers. Meanwhile, in 2023, shipments increased significantly from the beginning to the end of the year, with a total of 83,216 migrant workers.

## Discussion

The collected data is converted into the table form below to facilitate data analysis with the statistical test tools used.

Table 4. Taiwan-Indonesia Trade Statistics and Indonesian Migrant Workers in Taiwan  
 Source: International Trade Administration, Ministry of Economic Affairs, processed by the author, and Indonesian Migrant Workers Protection Agency (BP2MI), (<https://bp2mi.go.id/dashboard-publik>)

No.	Year	Foreign Workers (Variable X)	Balance of Trade (USD Million (Variable Y))
1	2019	79583	602000
2	2020	33999	498000
3	2021	7757	344000
4	2022	53459	597000
5	2023	83216	860000

This discussion employs quantitative methods based on simple linear regression analysis conducted in Microsoft Excel and SPSS to examine the number of immigrant workers (the independent variable) and the trade volume (the dependent variable), and to assess their impact on the Taiwan and Indonesia economies. The analysis first identifies the nature of the relationship to determine whether the correlation is positive, negative, or insignificant. The significance of the independent variable's effect on the dependent variable is then assessed using the statistical indicator, the p-value. The analysis also acknowledges that, in addition to migrant workers, other potential

variables influence trade rates, particularly those stemming from broader economic and bilateral relations between Taiwan and Indonesia. Key parameters are interpreted, including the intercept as a reference value, the slope coefficient as the magnitude and direction of the effect, and the R<sup>2</sup> value as the model's explanatory power, enabling a meaningful interpretation of the data and the formulation of robust conclusions.

*Analysis Using Microsoft Excel Testing Tools*

The data analyzed using the Microsoft Excel testing tool provided the following output:

Table 5. Regression Results Using Microsoft Excel  
Source: Processed by the author (2025)

<i>Regression Statistics</i>	
Multiple R	0.89257458
R Square	0.79668939
Adjusted R Square	0.72891918
Standard Error	97958,0166
Observations	5

  

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.12805E+11	1.12805E+11	11.755747	0.041578575
Residual	3	28787319041	9595773014		
Total	4	1.41593E+11			

  

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
Intercept	306780,737	90985,91	3,3717391	0,0433551	17223	596338,5	17223	596338
X Variable 1	5,29853542	1,545364	3,4286655	0,0415786	0,3805	10,21657	0,3805	10,2166

From the regression results above, each table will be explained in the following interpretation points:

*Regression Equation*

Table 6. Results of Microsoft Excel Regression Equation  
Source: Processed by the author (2025)

	<i>Coefficients</i>
Intercept	306780,737
X Variable 1	5.29853542

A regression equation was used to show the magnitude of the increase in the trade balance value (variable Y) if it is influenced by Indonesian Migrant Workers (variable X). Determined by the formula  $Y = a + bX$ , which in its application is as follows:

$$Y = a + bX = 306780.737 + 5.299X$$

Constant/intercept (a) = 306780.74 shows that if the migrant worker variable (Variable X) is constant or 0, then the average value of the trade balance variable (Variable Y) is 306780.737. Thus, the value of the trade balance if the number of migrant workers is 0, is USD 306780.737.

Regression Coefficient (b) = 5.299 indicates that if the migrant worker variable (Variable X) increases by 1%, it will increase the trade balance variable (Variable Y) by 5.299. Thus, the trade balance value will increase by USD 5.299 if the migrant worker increases by 1%.

### Regression Parameter Test

Table 7. Microsoft Excel Regression Parameter Results  
Source: Processed by the author (2025)

<i>Standard</i>		
<i>Error</i>	<i>t Stat</i>	<i>P-value</i>
90985.91	3.371739	0.043355
1.545364	3.428666	0.041579

(1) Parameter Hypothesis Test (b0) is used to test whether the intercept value or constant has a significant influence on the regression model formed. The hypothesis is as follows:

H0 : If the P-Value is greater than the test significance level (Alpha), then there is no significant influence between the intercept value and the trade balance variable.

H1 : If the P-Value is smaller or less than the significance level of the test (Alpha), then there is a significant influence between the intercept value and the trade balance.

Alpha : 0.05 (5%) as the level of significance of the test

P-Value : 0.0433 (P-Value is close to 0)

Test Criteria : H0 is rejected if the P-Value < alpha (0.05)

Decision : H0 is rejected because the P-Value (0.0433) < alpha (0.05)

So, by using a significance level of 5%, the existing sample shows that there is a significant influence between the intercept value and the trade balance.

(2) Parameter Hypothesis Test (b1), is used to test whether the predictor variable has a significant effect on the response variable.

H0 : If the P-Value is greater than the significance level of the test (Alpha), then there is no significant influence between migrant workers and the trade balance variable.

H1 : If the P-Value is smaller or less than the significance level of the test (Alpha), then there is a significant influence between migrant workers and the trade balance.

Alpha : 0.05 (5%) as the level of significance of the test

P-Value : 0.0415 (P-Value is close to 0)

Test Criteria : H0 is rejected if the P-Value < alpha (0.05)

Decision : H0 is rejected because the P-Value (0.0415) < alpha (0.05)

So, by using a significance level of 5%, the existing sample shows that there is a significant influence between migrant workers and the trade balance.

### *Significant Test Regression Model*

Table 8. Significant Results of the Microsoft Excel Regression Model  
Source: Processed by the author (2025)

<i>F</i>	<i>Significance F</i>
11.75575	0.041578575

In this regression significance test, it is carried out to determine whether the regression model obtained is acceptable or not. The applicable hypothesis and test criteria in the regression model significance test are as follows:

H0 : The resulting model is unacceptable.

H1 : The resulting model is acceptable

Alpha : 0.05 (5%) as the level of significance of the test

P-Value : 0.0415 (P-Value is close to 0)

Test Criteria : H0 is rejected if the P-Value < alpha (0.05)

Decision : H0 is rejected because the P-Value (0.0415) < alpha (0.05)

So, by using a significance level of 5%, the existing sample provides the conclusion that the resulting model is acceptable.

### *Coefficient of Determination*

Table 9. Results of Microsoft Excel Determination Coefficient  
Source: Processed by the author (2025)

<i>Regression Statistics</i>	
Multiple R	0.89257458
R Square	0.79668939
Adjusted R Square	0.72891918
Standard Error	97958,0166
Observations	5

From the linear regression conducted, the Multiple R value was obtained as 0.8925. The Multiple R value indicates the level of closeness of the linear relationship between variable X and variable Y. If the resulting value is a positive number and approaches 1, it indicates a stronger relationship. Then, the R-Square value was obtained as 0.7966, which means that the migrant worker variable (Variable X) affects the trade balance variable (Variable Y) by 79.66%, and the rest is influenced by other variables that are not discussed because these other factors are not included in the research variables in simple linear regression. Then the adjusted R-Square results show the magnitude of the value of the Y variable that can be explained by the X variable, which is 0.7289. The adjusted R-Square value scale is 0-1; if it approaches 1, then it means that the X variable is able to provide almost all the factors needed to predict the Y variable, while if it approaches 0, then the ability of the X variable is very limited. This result shows the migrant worker variable that is able to provide almost all the factors needed to predict the trade balance value variable because the value of 0.7289 is close to 1.

The results of the linear regression analysis show that there is a strong correlation between the number of Indonesian migrants and the trade balance between Taiwan and Indonesia. The correlation coefficient indicates a very strong positive relationship, meaning that as the number of workers increases, the trade balance also tends to increase. In other words, changes in the number of incoming workers are closely linked to changes in trade indicators between these two countries. This suggests that labor mobility can play an important role in fostering economic ties, including increasing production capacity or establishing stronger economic links.

Furthermore, the R-squared value (79.66%) indicates that the majority of the variation in the trade balance can be explained by the number of Indonesian migrants, while the remaining portion is determined by other factors not included in the model. The adjusted R-squared (72.89%) also confirms that the model remains fairly robust even after accounting for potential biases. Overall, these results indicate that Indonesian migrants have a significant impact on trade dynamics between Taiwan and Indonesia, although other variables related to their broader economic ties may also contribute to these results.

## CONCLUSION

Imagine if a large number of Indonesian workers were to flock to Taiwan, not only filling jobs there but also boosting trade between the two countries. Rigorous statistical tests conducted in Excel and SPSS paint a clear picture: changes in the number of migrant workers have a profound impact on the trade balance between Taiwan and Indonesia. The p-value has dropped to 0.043, well below the significance threshold of 0.05; these tools thus confirm a genuine and significant correlation. The regression model is also robust, with a p-value of approximately 0.042, demonstrating its reliability. The correlation of 0.89 indicates a strong linear relationship, and the R-

squared value of 79.7% shows that migrants account for about 80% of trade fluctuations, marking a decisive turning point.

Indonesian tourists make a significant contribution by boosting trade by 59.5% and Taiwan's labor force participation by 82.7%, yet it is the migrants who, as the main driving force, are capturing everyone's attention. This study supports the hypothesis that, amid Taiwan's astute "New Southbound Policy", which scholars such as Ciorciari and Haacke describe as a "hedging" strategy, it aims to circumvent the restrictions of China's "One China Policy" without establishing formal relations. This policy was launched to balance geopolitical tensions and link trade, technology, education, labor, and cultural exchange.

Since the end of the COVID-19 pandemic, bilateral trade has intensified, making the two countries key partners. Remittances from migrant workers reduce unemployment in Indonesia, foster the development of small and medium-sized enterprises through worker networks, and facilitate technology transfer to their home countries. For Taiwan, this helps diversify the economy and reduce its dependence on China, thereby stabilizing growth. Tourists strengthen ties between the people, enriching this adaptation strategy. Despite the absence of an embassy, the benefits are numerous: a sharp increase in exports, economic resilience, and new sustainability. Policy makers are now considering bolder measures and closer cooperation across various sectors to ensure the long-term stability and prosperity of both countries.

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