

INDONESIA'S MILITARY MODERNIZATION AND REGIONAL DIPLOMATIC INFLUENCE, 2005-2024

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INFO ARTIKEL	ABSTRAK
Diterima: 05 Februari 2026 Direvisi: 25 Februari 2026 Disetujui: 12 Maret 2026 Tersedia Daring: 22 April 2026	Artikel ini menganalisis hubungan antara modernisasi militer Indonesia dan pengaruh diplomatik regionalnya di Asia Tenggara selama periode 2005–2024. Studi ini bertujuan untuk menguji secara empiris apakah peningkatan belanja pertahanan berkontribusi terhadap penguatan pengaruh diplomatik Indonesia dalam kerangka keamanan kooperatif ASEAN. Berlandaskan pendekatan positivis serta teori realisme dan transisi kekuatan, penelitian ini mengasumsikan bahwa kapabilitas material dapat menjadi dasar bagi pengaruh diplomatik, namun efeknya dimediasi oleh faktor institusional dan normatif, seperti kepemimpinan dalam forum regional dan kepatuhan terhadap norma konsensus ASEAN. Penelitian ini menggunakan desain kuantitatif longitudinal dengan data tahunan yang mencakup pengeluaran pertahanan, pengaruh diplomatik, serta indikator makroekonomi. Pengaruh diplomatik dioperasionalkan menggunakan komponen “diplomatic influence” dari Asia Power Index yang mengukur kemampuan negara dalam membentuk hasil regional melalui jaringan diplomatik dan partisipasi institusional. Analisis dilakukan melalui korelasi Pearson, visualisasi scatter plot, dan regresi linear berganda. Hasil menunjukkan bahwa meskipun belanja militer meningkat secara signifikan sepanjang periode penelitian ($r = 0.929$; $p < 0.001$ terhadap waktu), hubungan antara belanja militer dan pengaruh diplomatik tidak signifikan secara statistik ($r = 0.160$; $p = 0.553$; $\beta = -0.004$; $p = 0.541$; $R^2 = 0.209$). Temuan ini menunjukkan bahwa modernisasi militer tidak secara langsung meningkatkan pengaruh diplomatik ketika diuji bersama variabel lain. Sebaliknya, pengaruh Indonesia lebih banyak ditentukan oleh keterlibatan institusional, kepemimpinan dalam ASEAN, serta strategi diplomasi multilateral. Artikel ini memberikan kontribusi empiris dengan menyediakan bukti kuantitatif longitudinal yang masih terbatas dalam studi sebelumnya mengenai diplomasi pertahanan di ASEAN, yang umumnya bersifat kualitatif. Temuan ini menegaskan bahwa modernisasi militer merupakan syarat yang diperlukan tetapi belum cukup, dan harus dikombinasikan dengan strategi institusional dan diplomasi kooperatif untuk memperkuat posisi regional Indonesia.

ABSTRACT
<p>Keywords: Diplomacy Indonesia Military Power Transition Southeast Asia</p> <p><i>This article examines the relationship between Indonesia's military modernization and its regional diplomatic influence in Southeast Asia from 2005 to 2024. The study aims to empirically assess whether sustained increases in defence expenditure contribute to strengthening Indonesia's diplomatic influence within ASEAN's cooperative security framework. Grounded in a positivist approach and informed by realism and power transition theory, the study assumes that material capability can support diplomatic influence, while recognizing that its effects are mediated by institutional and normative factors, including leadership in regional forums and adherence to ASEAN consensus-based norms. The study employs a quantitative longitudinal design using annual data on defence expenditure, diplomatic influence, and macroeconomic</i></p>

indicators. Diplomatic influence is operationalized using the “diplomatic influence” component of the Asia Power Index, which captures a country’s ability to shape regional outcomes through diplomatic networks and institutional engagement. The analysis combines Pearson correlation, scatter plot visualization, and multiple linear regression. The findings show that while Indonesia’s military expenditure increased significantly over time ($r = 0.929$; $p < 0.001$), its relationship with diplomatic influence is weak and statistically insignificant ($r = 0.160$; $p > 0.05$), and remains insignificant in the regression model ($\beta = -0.004$; $R^2 = 0.209$). These results indicate that military modernization does not independently enhance diplomatic influence when tested alongside other variables. Instead, Indonesia’s regional influence is more strongly associated with institutional engagement, multilateral diplomacy, and leadership within ASEAN mechanisms. This study contributes to the literature by providing longitudinal quantitative evidence, which remains limited in existing research on defense diplomacy in ASEAN that is largely qualitative or descriptive. The findings suggest that military modernization is a necessary but insufficient condition for enhancing regional influence, highlighting the importance of integrating material capability with institutional and cooperative diplomatic strategies.

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1. Introduction

Indonesia’s steady increase in military spending over the past two decades reflects its commitment to strengthening both national defence and regional diplomacy. Realist and power transition theories argue that rising material capability can serve as a crucial driver of diplomatic strength, enabling states to assert themselves more effectively in regional and global affairs (Kumar, 2022; Schmidt, 2020). Within Southeast Asia’s cooperative and institution-driven security environment, Indonesia’s growing defence budget has provided a material foundation for broader engagement within the Association of Southeast Asian Nations (ASEAN) and the wider Indo-Pacific order. This trajectory is particularly significant given Indonesia’s position as both the largest Southeast Asian state and ASEAN’s de facto leader.

This development cannot be separated from Indonesia’s post-authoritarian transformation following the fall of the New Order regime in 1998. The post-Suharto democratic transition reshaped civil–military relations, redefined the role of the armed forces, and initiated gradual defence reforms aimed at professionalization and external orientation. During the early 2000s, Indonesia shifted from inward-looking security practices toward a more outward-facing defence posture, emphasizing transparency, regional cooperation, and confidence-building measures. These reforms laid the institutional and normative foundation for subsequent military modernization and defence diplomacy.

Indonesia’s geography further amplifies the strategic relevance of these developments. Straddling critical sea lanes such as the Malacca, Sunda, and Lombok Straits,

Indonesia faces persistent maritime security challenges. In recent years, tensions in the North Natuna Sea, gray-zone coercion from foreign powers, and illegal, unreported, and unregulated (IUU) fishing have tested Jakarta's ability to defend sovereignty while maintaining regional stability (Inkiriwang, 2021b). Against this backdrop, military spending rose from under USD 3 billion in 2005 to over USD 9 billion in 2024 (Stockholm International Peace Research Institute, 2025), positioning Indonesia among the region's top defence investors and underscoring its long-term strategic commitment. The selection of the 2005–2024 period is therefore analytically significant, as it captures the consolidation phase of post-reform defence policy, the acceleration of modernization programs, and the increasing institutionalization of Indonesia's regional diplomatic engagement.

Yet, evidence suggests that this rising expenditure has not corresponded with consistent gains in diplomatic influence. Data from the Lowy Institute's Asia Power Index show Indonesia's diplomatic score fluctuating rather than trending upward, despite steady budgetary growth (Lowy Institute, 2025). This disjuncture highlights a deeper theoretical tension: if material power is necessary but not sufficient for influence, then alternative explanations such as institutional leadership, normative diplomacy, and network-building must be considered (Caballero-Anthony, 2022). Recent scholarship on defense diplomacy and middle power behavior emphasizes that states like Indonesia rely not only on military capability, but also on cooperative mechanisms, credibility, and strategic positioning within multilateral institutions to project influence.

The literature on Indonesia's defense modernization emphasizes a dual logic of strategic autonomy and selective interdependence. State firms such as PT PAL, PT Pindad, and PT Dirgantara Indonesia (PTDI) have co-evolved with foreign partners through offsets, co-production, and targeted research and development (R&D), creating domestic capacity for naval vessels, armored vehicles, and aerospace projects (Berkok, 2025; Maharani & Matthews, 2023). Rather than pursuing autarky, Indonesia imports high-end systems while developing domestic maintenance, repair, and overhaul (MRO) capabilities. This hybrid model reflects broader trends in middle power diplomacy, where technological acquisition is closely linked to international partnerships and strategic alignment.

Digital and spatial intelligence have also become central to Indonesia's defence modernization. Maritime Domain Awareness (MDA) systems integrate satellite imagery, Automatic Identification Systems (AIS), and geo-analytics to enhance monitoring across archipelagic waters. These capabilities not only improve operational effectiveness but also support diplomatic signaling and crisis management by enabling calibrated responses to maritime incidents (Maruf, 2026; S. Rajaratnam School of International Studies., 2021; Talpur et al., 2025). At the same time, human capital development through international cooperation, defence education, and cybersecurity initiatives reflects the growing intersection between technological capability and diplomatic engagement (Himeur et al., 2022; Inkiriwang, 2021a).

Diplomatically, Indonesia has pursued a strategy often described as hedging or partial multi-alignment. This approach involves engaging multiple partners simultaneously while avoiding rigid alliances (Aji & Mu'min, 2025; Gindarsah, 2017). Within ASEAN-centered

mechanisms such as the ADMM and ADMM-Plus, Indonesia acts as a convener, reinforcing norms of cooperative security and regional stability (Caballero-Anthony, 2022; Sarjito et al., 2022). These practices align with broader discussions in ASEAN security cooperation, where institutional frameworks serve as platforms for confidence-building and influence projection rather than coercive power.

Despite this extensive body of literature, a clear gap remains. Existing studies on Indonesia's defense industry and modernization primarily focus on technological development and procurement processes without linking these inputs to foreign policy outcomes (Berkok, 2025; Maharani & Matthews, 2023). Research on hedging and multi-alignment tends to be descriptive and lacks systematic empirical testing of its effectiveness (Kuik, 2021). Comparative studies of Southeast Asian states highlight strategic variation but do not provide longitudinal, country-specific analysis of how military expenditure translates into diplomatic influence (Biba & Strating, 2025; S. Teo & Emmers, 2025). Furthermore, institutional analyses emphasize Indonesia's leadership within ASEAN but rarely connect this role to measurable indicators of influence (Caballero-Anthony, 2022; Inkiriwang, 2021b).

Accordingly, the central research gap lies in the absence of systematic, empirical analysis linking military modernization to diplomatic outcomes over time. Specifically, it remains unclear whether increased defence spending contributes to measurable gains in Indonesia's regional diplomatic influence, or whether non-material factors play a more decisive role.

This study addresses this gap by employing a quantitative longitudinal approach to examine the relationship between Indonesia's defence expenditure and diplomatic influence from 2005 to 2024. By integrating data on defence spending, arms imports, defence cooperation agreements, and joint exercises with diplomatic influence indicators and macroeconomic variables, this research provides an empirical assessment of how material capability interacts with diplomatic power. Accordingly, this article asks: how does Indonesia's military modernization between 2005 and 2024 shape its regional diplomatic influence? By combining statistical analysis with theoretical insights from realism, middle power diplomacy, and institutionalism, this study contributes to a more comprehensive understanding of how states translate military capacity into influence within Southeast Asia.

2. Method

This study employs a positivist, quantitative longitudinal research design to analyze the relationship between Indonesia's defence capability development and its diplomatic influence in ASEAN between 2005 and 2024. The positivist orientation is appropriate because the research aims to test measurable relationships using observable data rather than interpret subjective meanings. By relying on statistical analysis, this approach allows the study to identify patterns, associations, and potential explanatory relationships between military expenditure and diplomatic outcomes. In this context, the research is designed to produce empirically grounded findings that can be systematically evaluated and replicated.

The research adopts a single-country longitudinal strategy, focusing on Indonesia as the primary unit of analysis. A longitudinal design is particularly suitable because it enables the observation of changes over time, capturing both gradual trends and structural shifts across different political administrations. This approach is important given that defence modernization and diplomatic influence are not static phenomena but evolve through sustained policy decisions and regional dynamics. The selection of the 2005–2024 period reflects the consolidation phase of Indonesia’s post-reform defence policy, marked by increasing military expenditure, institutional restructuring, and expanding regional engagement within ASEAN and the Indo-Pacific.

Data Sources and Variable Operationalization

This study relies on secondary quantitative data drawn from internationally recognized databases and official statistics to ensure reliability, transparency, and comparability across time. The use of standardized datasets is essential for maintaining consistency in longitudinal analysis, particularly when examining trends over nearly two decades. Data selection is guided by relevance to the research variables as well as methodological credibility within the field of international relations and security studies.

Military expenditure is measured using annual defence spending data (in constant USD) obtained from the Stockholm International Peace Research Institute and cross-checked with the World Bank. These sources are widely used in empirical defence studies and provide consistent and comparable measures across countries and time periods. The use of constant USD values ensures that the analysis is not distorted by inflation or exchange rate fluctuations. This operationalization aligns with the study’s focus on capturing real changes in defence investment.

Diplomatic influence, as the dependent variable, is operationalized using the Asia Power Index developed by the Lowy Institute. Specifically, this study utilizes the “diplomatic influence” component, which measures a country’s ability to shape regional outcomes through diplomatic networks, foreign policy engagement, and participation in international institutions. This indicator is selected because it provides a composite and longitudinally consistent measure of diplomatic capability, making it suitable for statistical analysis. Its use is also consistent with recent empirical research on regional influence in the Indo-Pacific, where composite indices are commonly employed to capture complex diplomatic dynamics.

To improve model robustness and reduce omitted variable bias, several control variables are included. These consist of GDP growth rate and population growth obtained from the World Bank and Indonesia’s national statistics agency (BPS), as well as defence-related variables such as arms imports, defence cooperation agreements (MoUs), and joint military exercises sourced from official Ministry of Defence releases and credible reporting institutions. These variables are incorporated to account for broader economic, demographic, and institutional factors that may also influence diplomatic outcomes. By including these controls, the study seeks to isolate the effect of military expenditure while acknowledging the multi-dimensional nature of diplomatic influence.

Analytical Techniques and Model Specification

Three complementary quantitative techniques are employed using Jeffreys Amazing Statistics Program (JASP) statistical modules, which provide reproducible outputs and standardized model diagnostics to ensure robustness of findings; The study employs three complementary quantitative techniques using the Jeffreys Amazing Statistics Program (JASP), which provides reproducible outputs and standardized diagnostic tools. The combination of these techniques allows for a comprehensive analysis, moving from simple bivariate relationships to more complex multivariate modeling. This layered approach enhances the robustness and interpretability of the findings.

First, Pearson's correlation coefficient (r) is used to measure the direction and strength of linear relationships between variables. The coefficient ranges from -1 to $+1$, where values closer to ± 1 indicate stronger relationships and values near zero indicate weak or no linear association. Statistical significance is evaluated using p -values, with a threshold of $p < 0.05$ indicating that the observed relationship is unlikely to occur by chance. This method provides an initial overview of how variables are associated before more complex analysis is conducted.

Second, scatter plots are used to visually assess the relationships identified in the correlation analysis. Each observation is plotted to examine patterns such as linearity, clustering, and dispersion. This visual inspection helps validate whether statistical correlations are reflected in observable data patterns and allows for the identification of anomalies or outliers. The use of scatter plots strengthens the analytical process by combining statistical and visual interpretation. Third, multiple linear regression analysis is employed to estimate the effect of military expenditure on diplomatic influence while controlling for other variables. The regression model is specified as follows:
$$\text{Diplomatic Influence}_t = \beta_0 + \beta_1 \text{Military Expenditure}_t + \beta_2 \text{GDP Growth}_t + \beta_3 \text{Population Growth}_t + \beta_4 \text{Arms Imports}_t + \beta_5 \text{Defence Cooperation}_t + \varepsilon_t$$

In this model, diplomatic influence represents the dependent variable, while military expenditure is the primary independent variable. The remaining variables function as controls to account for other factors influencing diplomatic outcomes. The regression coefficients (β) indicate the magnitude and direction of relationships, while p -values determine statistical significance. The coefficient of determination (R^2) is used to assess how much variation in the dependent variable is explained by the model.

The model assumes linearity, independence of observations, and the absence of severe multicollinearity among predictors. Diagnostic checks are conducted within JASP to ensure that these assumptions are not violated. These checks are important to maintain the validity and reliability of the regression results.

Addressing Endogeneity and Causal Limitations

The model assumes linearity, independence of observations, and the absence of severe multicollinearity among predictors. Diagnostic checks are conducted within JASP to ensure that these assumptions are not violated. These checks are important to maintain the validity and reliability of the regression results.

A key methodological concern in this study is the potential presence of endogeneity and reverse causality. While the model is structured to assess the influence of military

expenditure on diplomatic outcomes, it is also possible that countries with higher diplomatic influence have greater capacity or incentives to increase defence spending. This reciprocal relationship may introduce bias into the estimation if not properly acknowledged.

To address this issue, the study adopts a temporal logic inherent in the longitudinal design, treating military expenditure as a preceding factor in shaping diplomatic influence. However, due to data and methodological constraints, the study does not employ advanced econometric techniques such as instrumental variables or causal inference models. As a result, the analysis focuses on identifying statistically observable relationships rather than establishing definitive causal effects. This limitation is explicitly acknowledged to ensure analytical transparency and methodological rigor.

Theoretical Alignment

The model assumes linearity, independence of observations, and the absence of severe multicollinearity among predictors. Diagnostic checks are conducted within JASP to ensure that these assumptions are not violated. These checks are important to maintain the validity and reliability of the regression results.

The methodological framework is grounded in established theories of power and diplomacy in International Relations. Realist and power-transition perspectives suggest that material capabilities, such as military expenditure, form the foundation of state influence. However, contemporary approaches to defense diplomacy and middle power theory emphasize that influence is also shaped by institutional engagement, strategic partnerships, and diplomatic positioning.

By integrating these theoretical perspectives within a quantitative framework, the study provides a more comprehensive understanding of Indonesia's role in regional diplomacy. The methodology is therefore designed not only to test statistical relationships but also to engage with broader theoretical debates. This alignment ensures that the findings contribute both empirically and conceptually to the study of international relations in Southeast Asia.

3. Result and Discussion

The correlation analysis provides the first empirical test of the study's central hypothesis: that Indonesia's growing defence capability contributes to the foundations of its diplomatic influence in Southeast Asia. From a realist and power-transition perspective, one would expect a positive and statistically significant association between military expenditure and diplomatic influence, since hard power is often assumed to underpin diplomatic leverage in international politics.

The results highlight both confirmation and nuance. On the one hand, military expenditure shows a very strong and statistically significant correlation with time ($r = 0.929$, $p < 0.001$), underscoring a sustained increase in Indonesia's defence spending between 2005 and 2024. This provides clear evidence of long-term national commitment to strengthening hard-power resources. On the other hand, the correlation between military expenditure and diplomatic influence is weak and statistically insignificant ($r = 0.160$, $p = 0.553$). Rather than implying irrelevance, this suggests that while rising defence spending builds credibility and readiness, its effect on diplomatic standing is mediated through additional factors such as institutional leadership, coalition-building, and ASEAN-centered

engagement - particularly at the bivariate level of analysis.

Table 1. Pearson's Partial Correlations (Source: Authors analysis using JASP)

		Pearson's r	p
Year	-	Military Expenditure (USD) (Million)	0.929 < .001
Year	-	Diplomatic Influence	0.191 .479
Year	-	GDP Growth Rate (%)	0.318 .229
Military Expenditure (USD) (Million)	-	Diplomatic Influence	0.160 .553
Military Expenditure (USD) (Million)	-	GDP Growth Rate (%)	0.174 .520
Diplomatic Influence	-	GDP Growth Rate (%)	0.100 .713

Note. Conditioned on variables: Arms Imports (TIV)(Million), Joint Exercises, Defence MoU, Population Growth (%).

Other results add nuance to this pattern. The correlation between diplomatic influence and time is weak ($r = 0.191$, $p = 0.479$), suggesting that Indonesia's regional influence score has remained relatively stable across the observed years despite sustained increases in defence spending. Similarly, GDP growth does not show a strong association with either military expenditure ($r = 0.174$, $p = 0.520$) or diplomatic influence ($r = 0.100$, $p = 0.713$). Taken together, these preliminary correlations suggest that while Indonesia has consistently invested in defence capability, the diplomatic impact emerges in interaction with additional mechanisms beyond raw material growth. In particular, institutional leadership, legal diplomacy, and coalition-building, highlighted by liberal and constructivist perspectives likely play a complementary role in shaping Indonesia's regional standing. These findings, while not definitive on their own, establish an important baseline for the subsequent stages of analysis. The scatter plots provide a valuable next step, illustrating whether the observed statistical associations are reflected visually in the trajectories of expenditure and influence over time.

Scatter Plots (figures 1-5) (Source: Authors analysis using JASP)

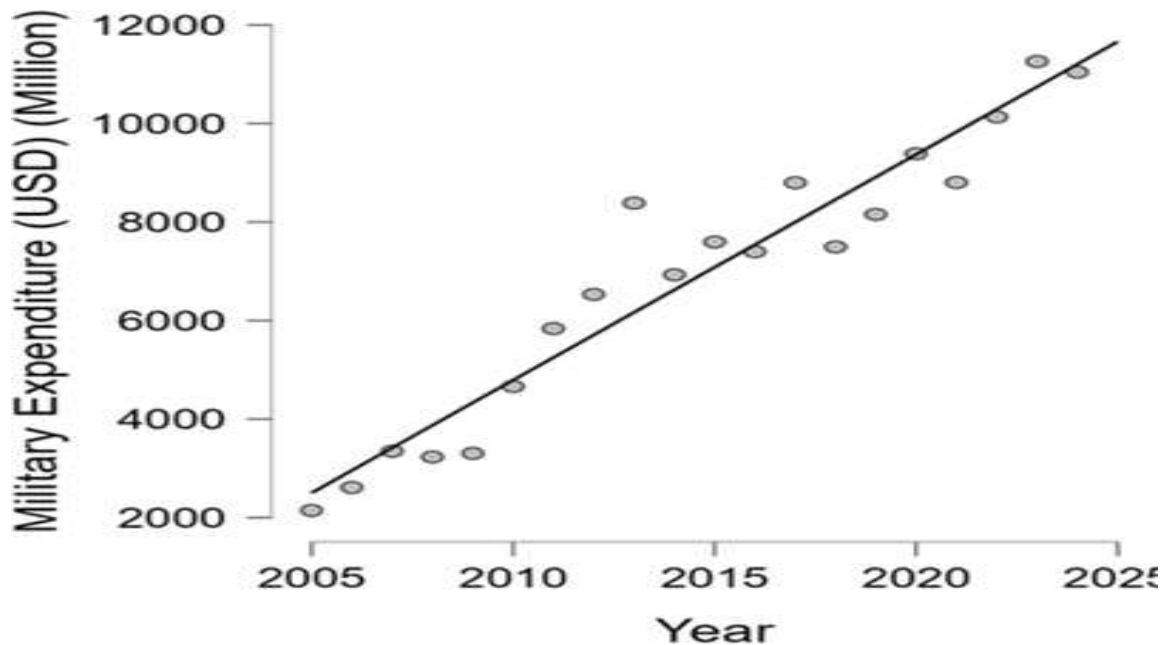
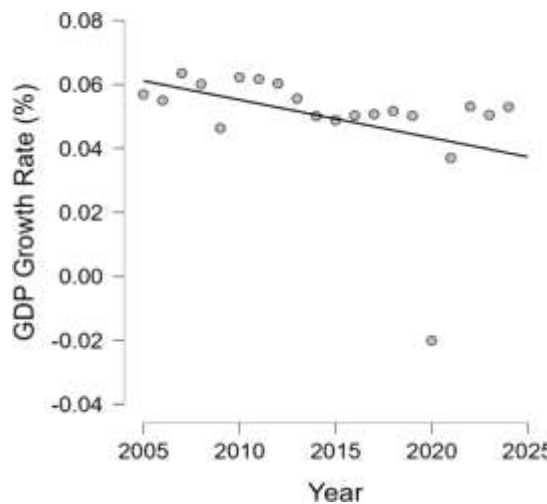


Figure 1. Year vs. Military Expenditure

The scatter plot of year (X-axis, 2005–2024) and military expenditure (Y-axis, USD millions) (**Figure 1**) reveals a strong upward trend, with spending rising from below USD 3,000 million in 2005 to over USD 9,000 million by 2024. The points form



a tight linear cluster sloping upward, confirming the statistical result of a very strong positive correlation ($r = 0.929$, $p < 0.001$). This indicates that Indonesia's defence spending has followed a consistent long-term growth trajectory, reflecting sustainable national commitment to capability development as well as its strategic modernization.

Figure 2. Year vs. Diplomatic Influence

The scatter plot of year (X-axis, 2005–2024) and diplomatic influence (Y-axis) (**Figure 2**) shows dispersed points between about 45 and 65 units, with no clear upward trend. The weak, statistically insignificant correlation ($r = 0.191$, $p = 0.479$) indicates that Indonesia's diplomatic influence has remained relatively stable over time, shaped by external dynamics and institutional engagement beyond temporal progression.

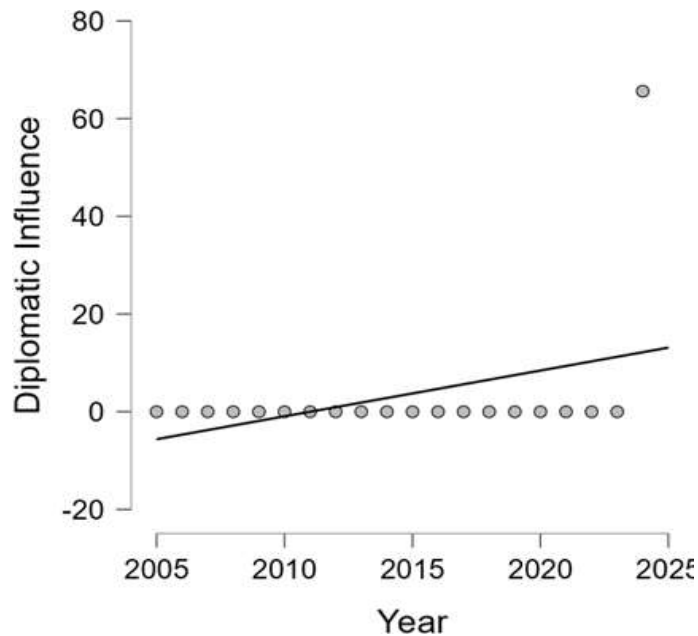


Figure 3. Year vs. GDP Growth Rate

The scatter plot of year (X-axis, 2005–2024) and GDP growth (Y-axis, %) (**Figure 3**) shows wide variation, ranging from -2% to +7%. The absence of a clear pattern aligns with the modest and statistically insignificant correlation ($r = 0.318$, $p = 0.229$). These fluctuations reflect the volatility of Indonesia's economic performance, influenced by global shocks, and help explain why GDP growth has not shown strong associations with defence expenditure or diplomatic influence.

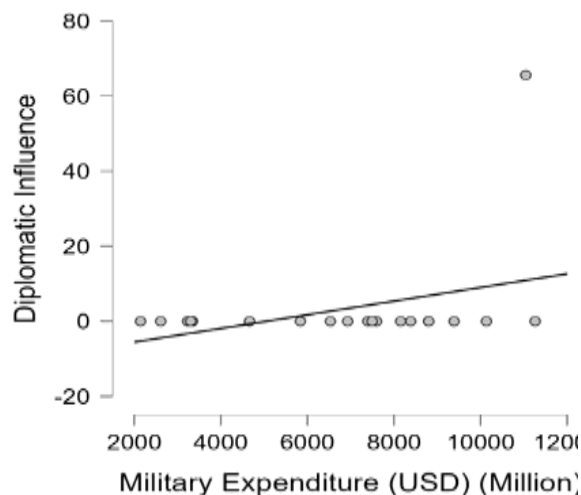


Figure 4. Military Expenditure vs. Diplomatic Influence

The scatter plot comparing military expenditure (X-axis, USD 3,000–9,000 million) and diplomatic influence (Y-axis, 45–65 units) (**Figure 4**) shows dispersed points without a consistent upward or downward trend. This matches the weak and statistically insignificant correlation ($r = 0.160$, $p = 0.553$). The pattern suggests that while defence budgets provide a material foundation, their diplomatic impact is mediated by complementary factors such as institutional leadership and coalition-building.

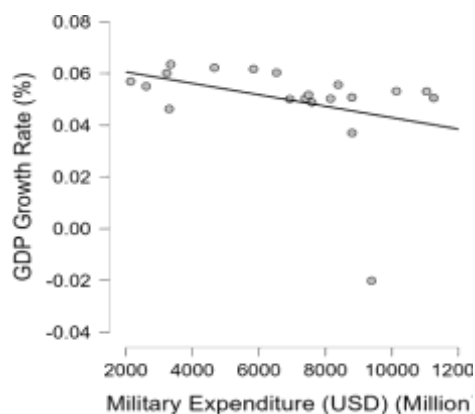


Figure 5. Military Expenditure vs. GDP Growth Rate

The scatter plot of military expenditure (X-axis, USD 3,000–9,000 million) and GDP growth (Y-axis, -2% to +7%) (**Figure 5**) shows a diffuse distribution. Defence expenditure rises steadily, while GDP growth fluctuates widely. The weak correlation ($r = 0.174$, $p = 0.520$) confirms that defence spending increases have been maintained independently of short-term macroeconomic cycles, reflecting its treatment as a strategic priority rather than a variable tied to immediate economic performance.

Taken together, the scatter plots validate the statistical findings by showing that although military expenditure increased steadily and substantially (Figure 1), this expansion did not directly correspond with observable shifts in diplomatic influence (Figures 2 and 4). Instead, Indonesia’s diplomatic standing appears relatively stable and shaped by a combination of factors, while defence spending has been maintained independently of short-term economic cycles (Figure 5). This visual evidence suggests that beyond material capability, institutional leadership, normative diplomacy, and broader strategic mechanisms play an important role a question explored further in the regression analysis.

Regression Analysis

The regression analysis provides a more rigorous test by examining the combined effect of multiple variables.

Table 2. Linear Regression Model. (Source: Authors analysis using JASP)

Model Summary - Diplomatic Influence

Model	R	R ²	Adjusted R ²	RMSE
M ₀	0.000	0.000	0.000	14.67

M ₁	0.457	0.209	-0.002	14.69
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Note. M₁ includes GDP Growth Rate (%), Population Growth (%), Year, Military Expenditure (USD) (Billion)

The scatter plot of military expenditure (X-axis, USD 3,000–9,000 million) and GDP growth (Y-axis, -2% to +7%) (**Figure 5**) shows a diffuse distribution. Defence expenditure rises steadily, while GDP growth fluctuates widely. The model explains 20.9% of the variance in diplomatic influence ($R^2 = 0.209$), but the adjusted R^2 is slightly negative (-0.002), indicating that the explanatory power of the model is limited. The overall model is not statistically significant ($F = 0.989$, $p = 0.443$), suggesting that the included variables do not collectively provide a robust explanation of diplomatic influence.

At the individual level, military expenditure does not show a statistically significant effect ($\beta = -0.004$, $SE = 0.006$, $p = 0.541$). The negative coefficient, although not significant, is noteworthy as it contrasts with theoretical expectations that increased military capability should enhance diplomatic leverage. Similarly, GDP growth ($\beta = 113.585$, $p = 0.669$), population growth ($\beta = 3,100.369$, $p = 0.588$), and time ($\beta = 4.054$, $p = 0.389$) also fail to reach statistical significance.

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	853.3	4	213.3	0.989	.443
	Residual	3,234.9	15	215.7		
	Total	4,088.2	19			

Note. M₁ includes GDP Growth Rate (%), Population Growth (%), Year, Military Expenditure (USD) (Billion)

Note. The intercept model is omitted, as no meaningful information can be shown.

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p
M ₀	(Intercept)	3.280	3.280		1.000	.330
M ₁	(Intercept)	-8,175.040	9,208.114		0.888	.389
	GDP Growth Rate (%)	113.585	260.503	0.136	0.436	.669
	Population Growth (%)	3,100.369	5,602.732	0.508	0.553	.588
	Year	4.054	4.568	1.635	0.887	.389

Military Expenditure (USD) (Billion)	-0.004	0.006	-0.774	-	.541
				0.62	
				5	

The regression analysis evaluates whether Indonesia's military expenditure, alongside macro-level indicators, can predict variations in its diplomatic influence between 2005 and 2024. Unlike correlations or scatter plots, which assess bivariate relationships, regression models incorporate multiple variables simultaneously. This approach allows for testing whether defence spending retains explanatory power when broader factors such as GDP growth and time are controlled, providing a more comprehensive assessment of the drivers behind Indonesia's regional influence.

Model 1 (M1) Baseline Predictors

The multiple regression model (M_1) includes four predictors: GDP growth rate (%), population growth (%), year, and military expenditure (USD million). The model yields an R^2 value of 0.209, indicating that 20.9% of the variance in diplomatic influence is explained by these combined predictors. The adjusted R^2 is slightly negative (-0.002), showing that the model's explanatory power is broadly comparable to the baseline. The ANOVA test indicates that the model is not statistically significant ($F = 0.989$, $p = 0.443$). These results suggest that while the included variables capture part of the variation, Indonesia's diplomatic influence is shaped by additional dynamics beyond macroeconomic trends and expenditure levels, underscoring the importance of institutional and normative factors.

Regression Coefficients for Model 1 (M1)

Examining the individual coefficients provides further detail:

- ✓ **Military expenditure** (USD 3,000–9,000 million, X-axis) has a negative unstandardized coefficient ($\beta = -0.004$, $SE = 0.006$, $p = 0.541$). This indicates that, when controlling for other predictors, higher expenditure is associated with a slight downward effect on diplomatic influence. However, the relationship is not statistically significant, suggesting that defence spending may operate indirectly through complementary mechanisms rather than producing immediate diplomatic gains.
- ✓ **Year** (2005–2024, X-axis) shows a positive coefficient ($\beta = 4.054$, $SE = 4.568$, $p = 0.389$). This points to a modest upward tendency in diplomatic influence over time, though the effect is statistically insignificant. The result is consistent with the notion that Indonesia's standing has been maintained through institutional engagement and long-term presence rather than through linear expenditure effects alone.
- ✓ **GDP growth rate** (-2% to +7%, Y-axis values) has a small positive coefficient ($\beta = 113.585$, $SE = 260.503$, $p = 0.669$). While stronger economic performance is weakly linked with higher diplomatic influence, the large standard error and non-significant p-value indicate that the relationship is not robust. Still, the coefficient aligns with expectations that economic health provides background support for diplomacy.

- ✓ **Population growth** (0.6–1.5% annually) registers a positive coefficient ($\beta = 3,100.369$, $SE = 5,602.732$, $p = 0.588$). Although the magnitude appears sizable, wide error margins limit its reliability. This outcome suggests that demographic factors may play a background role but are not decisive within this model.

The regression confirms the general patterns observed in the scatter plots: none of the tested variables, including military expenditure, exert a statistically significant effect on Indonesia's diplomatic influence. The negative coefficient for military expenditure is notable, as it contrasts with realist and power-transition expectations that greater hard power should automatically strengthen diplomatic leverage. Instead, the results point to the likelihood that variations in diplomatic influence are shaped by additional mechanisms such as coalition-building, institutional leadership, or normative diplomacy that extend beyond material indicators.

Technically, the regression explains only a modest share of the variance in diplomatic influence ($R^2 = 0.209$), and none of the predictors reach conventional levels of statistical significance. While the scatter plots suggested the absence of strong linear relationships, the regression analysis reinforces this by showing that the tested variables, even in combination, have limited explanatory weight. These results do not invalidate realist perspectives, but they suggest that Indonesia's regional influence is more effectively understood through a multi-dimensional lens that integrates material, institutional, and normative factors.

Discussion

Technically, the regression explains only a modest share of the variance in diplomatic influence ($R^2 = 0.209$), and none of the predictors reach conventional levels of statistical significance. While the scatter plots suggested the absence of strong linear relationships, the regression analysis reinforces this by showing that the tested variables, even in combination, have limited explanatory weight. These results do not invalidate realist perspectives, but they suggest that Indonesia's regional influence is more effectively understood through a multi-dimensional lens that integrates material, institutional, and normative factors.

The empirical findings indicate that military expenditure does not have a statistically significant independent effect on Indonesia's diplomatic influence ($\beta = -0.004$, $p = 0.541$), despite its consistent increase over time. This result challenges the expectation that material capability directly enhances diplomatic leverage. However, rather than contradicting theoretical expectations, the findings suggest that the relationship between military modernization and diplomatic influence is conditional and mediated by regional institutional dynamics and strategic engagement.

This pattern is consistent with recent empirical studies on ASEAN middle powers, which emphasize that influence in Southeast Asia is not determined solely by material capability. Caballero-Anthony (2022) demonstrates that ASEAN states derive influence primarily through institutional leadership, agenda-setting, and norm promotion rather than coercive power. Similarly, contemporary research on regional security cooperation highlights that ASEAN's consensus-based framework limits the direct use of military capability as a diplomatic

instrument, reinforcing the importance of cooperative engagement and legitimacy (Sarjito et al., 2022).

Comparative studies further strengthen this interpretation. Research by Biba & Strating (2025) and L. Teo et al. (2023) shows that Southeast Asian states adopt diverse defence strategies, yet these differences do not produce proportional variation in diplomatic influence. For instance, Vietnam tends to pursue a more security-focused and concentrated defence posture, particularly in response to great power competition. In contrast, Indonesia adopts a diversified and multi-aligned approach, engaging multiple partners simultaneously. Despite these differences, both countries rely heavily on institutional mechanisms and regional diplomacy to maintain influence. This aligns with the findings of this study, where increased military expenditure does not significantly enhance Indonesia's measured diplomatic influence.

A similar pattern is observed in Singapore, which is widely regarded as an effective middle power in Southeast Asia. Recent studies indicate that Singapore's diplomatic influence is derived from its strategic positioning within global and regional networks, its economic diplomacy, and its ability to leverage institutional platforms rather than from the scale of its military spending (Alamsyah, 2025; Tran, 2026). Compared to Indonesia, Singapore demonstrates that smaller states can achieve substantial diplomatic influence through non-material capabilities. This comparison reinforces the argument that influence within ASEAN is not linearly correlated with defence expenditure.

At the same time, the findings of this study reveal an important nuance. While military capability is often associated with increased credibility, the regression results show that this effect is not directly observable in statistical terms. The negative but statistically insignificant coefficient for military expenditure suggests that defence spending, when considered in isolation, does not produce immediate or measurable improvements in diplomatic influence. Instead, military modernization appears to function as an enabling condition that supports broader diplomatic strategies rather than acting as a direct driver.

This helps explain the relatively low explanatory power of the model ($R^2 = 0.209$). A substantial portion of variation in diplomatic influence is likely driven by factors not captured in the model, such as leadership diplomacy, crisis management, and informal diplomatic networks. Recent empirical studies highlight that these relational and institutional dimensions play a central role in shaping influence within ASEAN but are difficult to quantify using conventional indicators (Ryan, 2022).

Indonesia's institutional role provides a more concrete explanation for its diplomatic influence. Within the ASEAN Defence Ministers' Meeting and the ASEAN Defence Ministers' Meeting-Plus, Indonesia consistently acts as a convener and facilitator, promoting cooperation in areas such as maritime security, joint exercises, and humanitarian assistance. These activities reflect a form of influence based on coordination and agenda-setting, which is widely recognized in recent studies as a defining feature of ASEAN diplomacy (Caballero-Anthony, 2022).

Indonesia's participation in the ASEAN Regional Forum further strengthens its diplomatic role by enabling engagement with major powers within a multilateral framework. Research on defense diplomacy suggests that such institutional participation is a key

mechanism through which middle powers project influence in cooperative security environments (Hanggarini, 2025; Sunadi & Achyar, 2025).

Taken together, these comparisons demonstrate that the findings of this study are consistent with broader empirical patterns among ASEAN middle powers. Military expenditure contributes to credibility and strategic capacity, but it does not function as a standalone determinant of influence. Instead, diplomatic influence emerges from the interaction between material capability, institutional engagement, and strategic diplomacy.

This study therefore extends recent empirical research by providing longitudinal quantitative evidence that supports and refines these arguments. While previous studies have primarily relied on qualitative or comparative approaches, this research demonstrates empirically that increases in military expenditure do not necessarily translate into higher diplomatic influence. In doing so, it contributes to a more nuanced and evidence-based understanding of middle power behavior in Southeast Asia.

4. Conclusion

This study examined the relationship between Indonesia's defence development and its regional diplomatic influence from 2005 to 2024. Using a positivist, quantitative longitudinal design, the analysis tested realist and power-transition expectations that rising military expenditure would translate into stronger diplomatic leverage. Across correlations, scatter plots, and regression models, the results consistently showed that while Indonesia's defence spending increased sharply and steadily, this growth did not correspond with significant gains in measurable diplomatic influence. These findings reinforce the conclusion that material capability alone does not determine diplomatic standing in Southeast Asia.

The contribution of this research lies in demonstrating that Indonesia's regional influence is shaped by a combination of material and non-material factors. Institutional leadership, coalition-building, and normative diplomacy emerge as critical mechanisms that complement military modernization. This adds nuance to international relations debates by showing that realist expectations must be contextualized within ASEAN's cooperative and institution-driven environment. In such a setting, influence is exercised less through coercion and more through legitimacy, engagement, and strategic positioning.

From a policy perspective, these findings carry several implications for Indonesian defense and foreign policy planners. First, continued investment in military modernization remains important, but it should be more explicitly integrated with diplomatic objectives, particularly through defense diplomacy and multilateral engagement. Second, Indonesia should strengthen its leadership role within regional institutions such as the ASEAN Defence Ministers' Meeting, ASEAN Defence Ministers' Meeting-Plus, and the ASEAN Regional Forum by actively shaping agendas, initiating cooperative programs, and expanding confidence-building measures. Third, greater emphasis should be placed on coalition-building and strategic partnerships, ensuring that defence capabilities are leveraged to enhance diplomatic networks rather than functioning in isolation. These steps would allow Indonesia to more effectively translate material capability into sustained regional influence.

At the same time, this study acknowledges several limitations. The reliance on secondary datasets, particularly the Lowy Institute's Diplomatic Influence Index, may not fully capture

the complexity and multidimensional nature of diplomatic influence. In addition, the single-country focus limits the generalizability of the findings across Southeast Asia. The quantitative approach, while systematic and reproducible, is also limited in capturing qualitative dimensions such as elite decision-making, informal diplomacy, and agenda-setting processes, which play a significant role in shaping regional influence.

Future research should address these limitations by adopting a mixed-methods approach that combines quantitative analysis with qualitative insights. In-depth case studies of Indonesia's engagement within ASEAN mechanisms, including ADMM and ADMM-Plus, could provide a more nuanced understanding of how diplomatic influence is exercised in practice. Comparative studies with other ASEAN middle powers, such as Vietnam or Malaysia, would also help determine whether the Indonesian experience reflects a broader regional pattern or a distinct national trajectory. Additionally, future research could explore alternative indicators of diplomatic influence that better capture informal networks and strategic behavior.

In conclusion, this study highlights a critical insight for both scholars and policymakers: military modernization is a necessary but insufficient condition for diplomatic influence. The ability to translate material resources into regional influence depends on how effectively states combine defence capability with institutional engagement, strategic partnerships, and cooperative diplomacy.

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