



Modeling of Economic And Military Expenditure of South Pacific Countries to Increase the Role of Indonesian Diplomacy through the South Pacific Defense Ministers Meeting (SPDMM) Forum

Muhamad Noor Gibran^{1*}, Jonni Mahroza², Afrizal³, Priyanto⁴, Sri Patmi⁵, Fatwa Budiyan⁶, Ranon Sugiman⁷, Lukman Yudho Prakoso⁸

Universitas Pertahanan Republik Indonesia

Corresponding Author: Muhamad Noor Gibran Gibsabd@gmail.com

ARTICLE INFO

Keywords: Diplomacy, Economy, Military Expenditure, SPDMM

Received : 20, January

Revised : 22, February

Accepted: 24, March

©2024 Gibran, Mahroza, Afrizal, Priyanto, Patmi, Budiyan, Sugiman, Prakoso: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

The South Pacific is a western lake for the West, Asia and China. This is because of its strategic location, abundant natural resources but minimal human resources in managing it, so that this region becomes a contest for superpower state hegemony. The purpose of this study is to analyze the relationship of causality, response in case of shock from a variable through impulse response, long-term and short-term effects of economic growth variables, investment, foreign debt, exports, imports and military expenditure, and forecasting based on actual data up to 2045. The method used in this study is VECM / VAR. Data collection was obtained from reports from the Ministry of Defense, Ministry of Economic Affairs, literature studies and previous research.

INTRODUCTION

History has carved a new ink in geopolitical and geostrategic conditions in the Indo Pacific Region, especially the South Pacific. A Mackinder adage states that "whoever controls Eastern Europe will control The Heartland; whoever controls the heartland, he will be able to control the Eurasian continent; and whoever can rule Eurasia means he will be able to rule the world." The concept of Heartland in question is an area that stretches from the Baltic Sea and Black Sea in the west to the Yenisei river in the east (Wibowo, 2018). After the end of the cold war, the Indo-Pacific region became fulkrum in global geopolitical competition. The U.S. pivot to Asia is trying to counterbalance China's dominance, which continues to develop plans to seize control of the great power aspect planned by Xi Jinping by 2049.

These geostrategic dynamics are now experiencing a change in orientation from Asia-Pacific to the Indo-Pacific, precisely to the South Pacific region. The attraction of the South Pacific not only invites reactions from major countries such as the US and China, but several other countries such as India, Australia, New Zealand and Japan. India began its cooperation with the South Pacific through Modi's visit to Fiji in 2014 at the Forum for India-Pacific Islands Cooperation (FIPIC) in Suva. Within the framework, Modi also met with 14 South Pacific heads of state to carry out cooperation in the economic and maritime defense fields as done by the US, Japan, Australia, New Zealand and China (Chandramohan, 2019). China's diplomatic maneuvers show the intensity of a new hegemony in the South Pacific, which is considered a western lake. The leaders of Fiji, Vanuatu, PNG, Samoa, the Federated States of Micronesia, Tonga and Kiribati welcomed China's presence in the South Pacific region. The reception was far more than that of the US, Australia and New Zealand (Henderson & Reilly 2003, 95). This is because the past relationship about ten thousand years ago which began with Austronesians (the forerunner of the Chinese landing in the South Pacific) migrated to a number of regions in the South Pacific Region (Crocombe, 2007).

The South Pacific is hundreds of kilometers from the vital Sea Lines Of Communication (SLOC) and Sea Lines of Trade (SLOT) routes in the Pacific and Indian Oceans. Referring to the analysis of Nashir, Khomeini, and Rosdiana (2021), the Indo-Pacific is considered home to 10 of the 20 economies with the fastest economic growth rates. By 2050, the Indo-Pacific will be able to contribute 55% of global GDP. The resulting domino effect in this case is the potential market and economic prospects that provide opportunities for increased regional and international cooperation (Davidson, 2019). Some of the South Pacific countries that have the highest GDP levels in the South Pacific in 2022 are Papua New Guinea US\$ 30.6 billion, with a GDP per capita of US\$ 2,471, an economic growth rate of 4.6% and a total population of 10.1 inhabitants. Furthermore, Fiji with a GDP of US \$ 4.9 billion, GDP change of 16.12%, and GDP per capita of US \$ 5,131 and a total population of 929,766 people. Finally, Vanuatu with GDP reached US \$ 983.5 million, GDP change of 1.85% and population reached 326,740 inhabitants. When viewed from the rate of economic growth, Fiji is the country

with the best economic growth rate in the South Pacific Region (Worldmeter, 2023).

In a geographical perspective, the South Pacific Region is an archipelagic country that has abundant natural resources such as forest products, mineral agriculture, marine resources, mining, oil and gas, and geothermal. The economy of South Pacific countries is supported by tourism sectors such as in Fiji, Samoa, Vanuatu and Palau. Commodities such as sugar, coconut, ginger, and copra come from Tuvalu, Tonga, FSM RMI, Kiribati, and Solomon Island.

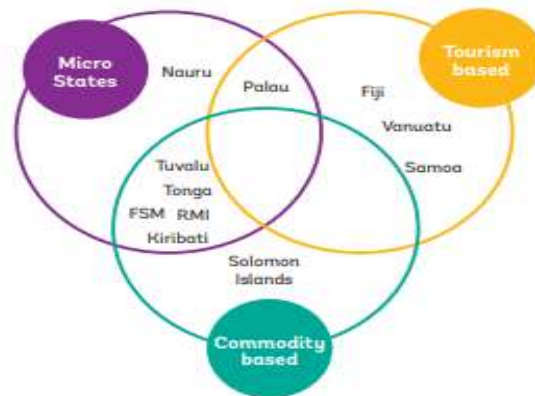


Figure.1 Sectoral Economy of the South Pacific

Source : Worldbank, 2023

This geographical condition and rapid economic growth create non-traditional security problems in the sea area. There are differences in South Pacific island countries in maritime security aspects in the involvement of navigation and military operations (Rahman, 2011). Moreover, the South Pacific is also known as the arc of instability due to unstable political conditions. This is reflected in coups and racial strife in Fiji, the SARA issue in the Solomons, PNG and New Caledonia, as well as high crimes such as weak legal legitimacy, money laundering, Transnational Organized Crime (TNOC) through maritime routes and others. Based on the level of foreign policy, geographical aspects are geopolitical realities that require a response in the formulation of geostrategy (Fathun, 2017). The state exercises control on resources, secure routes and increase defense forces (Grygiel, 2006). A country's territorial boundaries have pushed countries past borders to maintain security and control of the layout of trade routes or geographical conditions such as land or sea in the form of state defense (Haris, LYP, 2019).

Defense is a public good with an intangible nature because the productivity of goods and services from defense activities is obtained output in the form of a sense of security from threats. The outcome obtained is an increase in the national economy which is often referred to as the multiplier effect and backward linkages (Todd in Putri et al., 2018). Based on data compiled from the Stockholm International Peace Research Institute / SIPRI (2023), the defense budget of South Pacific countries such as Papua New Guinea is 0.38% of GDP and Fiji is 1.38% of GDP. Even some other South Pacific countries such as the Solomon Islands, Vanuatu, Samoa, Kiribati, Tonga, Tuvalu, Micronesia, Palau, Nauru, and the Marshall Islands still depend on security, economic and

infrastructure development assistance provided by other countries such as the US, China, Australia, India, and New Zealand as well as their former colonial powers (Dugis, 2015).

Indonesia is one of the largest economic powers in Southeast Asia with an average economic growth over the last 10 years of 4.96%. Some of the factors that encourage Indonesia to be strong in the economic sector are improvements in infrastructure development, political stability, defense and security of the country, as well as a proactive foreign policy in establishing diplomatic relations in the international arena. The role of Indonesia's economic diplomacy has been carried out on July 11, 2019 with the concept of Pacific Elevation through the Pacific Exposition in Auckland, New Zealand. The concept of Pacific Elevation is a step to strengthen diplomacy and partnership with the South Pacific in a sustainable manner. Indonesia and the South Pacific are inseparable parts because of similar identities and geographies. Indonesia has Melanesian clusters which are mostly spread in Maluku, North Maluku, NTT, Papua and West Papua (Bernama, 2020). Previously in March 2019, Indonesia had formed a commitment to cooperation with the South Pacific with the concept of a new era of Pacific engagement starting with partnership cooperation with the Cook Islands and Niue. By analyzing various aspects of economic and defense issues, Indonesia has an important role in long-term diplomacy with countries in the South Pacific through modeling economic influence and military expenditure with forecasting analysis using VECM for the next 23 periods.

LITERATURE REVIEW

Diplomacy

According to Geoffrey McDermott in Alexandra et al., (2019), diplomacy is an aspect that must be considered in state life because it is closely related to international relations. Meanwhile, according to Ellis Briggs in Alexandra et al., (2019) diplomacy is an official state relationship with the sending of ambassadors or representatives in state relations. The objectives of diplomacy include acquisition, namely reciprocal relations in the form of diplomatic affairs with other countries, preservation, which is the process used in maintaining harmonious diplomatic relations, augmentation, which is expansion or expansion carried out by countries with other countries in diplomatic affairs, proper distribution, namely maintaining harmony in peace affairs (Roy, 1995 in Alexandra et al., 2019). It can be interpreted that diplomacy is an autonomous concept that offers perspectives in the understanding of international relations (Morgenthau 1967, Kissinger 1994, Avenhaus et al., 2007 in Constantinou et al., 2016). In the defense aspect of the country is known as defense diplomacy. Defense diplomacy according to Tucydide (2003) is a concept initiated by the United Kingdom through the Strategic Defense Review in 1998, which is aimed at integrating military and diplomatic instruments related to conflict prevention and crisis management. The characteristics of defense diplomacy have three main characteristics, namely (Sinaga, 2017), namely Defense diplomacy for confidence building measures (CBM), Defense diplomacy for defense capabilities and Defense diplomacy for defense industry.

Economic Growth

According to Schumpeter in Putong (2010), economic growth is an increase in national income due to a natural cycle of increasing population and savings. According to Sadono (2000), indicators used to measure economic growth include Gross Domestic Product (GDP) or market prices in the national economic cycle for 1 year and Gross Regional Domestic Product Per Capita or indicators in measuring the welfare of residents in a region. Economic growth is closely related to determining financial inclusion, especially in the South Asian region with the involvement of investor volatility (Sharma, 2020). In addition, this economic growth is also influenced by factors of inequality in national income and per capita income of a region (Mdingi et al., 2021).

Military Expenditure

Military spending or military expenditure or maintenance costs in military agencies is one of the issues in Defense Economics that has become the focus of much research. Military expenditure is an indicator used as output in aggregate payments aimed at defense human resources related to goods and services in the military field in a predetermined period (Bader in Putri et al., 2018).

International Cooperation

According to Lipson (1984) in Gallop, (2016) international cooperation is an institutional process in various fields including economic affairs, security and state defense. International cooperation is a process of forming networks through state institutions that are influenced by geographical proximity and conflict factors (Gallop, 2016). According to Fearon (1998) in Gallop (2016), the understanding of this international cooperation model is a strategic structure with long-term accuracy and usefulness (Gallop, 2016).

METHODOLOGY

The method used in this study is the econometric approach of the Vector Autoregression Model (VAR) or Vector Error Correction Model (VECM) as one approach in economic analysis using time series, cross section and panel data (Widarjono, 2018). The data used relates to the economic growth and military expenditure of South Pacific countries from 2014 to 2022 in accordance with Jak Hanneg 2014-2019 and 2020-2024 to 2045. The data collection techniques used were survey questionnaires, literature studies, documentation and previous research conducted at BPS, Kemhan, the Institute for Economic and Financial Research and Assessment (LPPEK) and the Ministry of Economic Affairs. The data obtained were processed using Eviews 12 software through stationary test data analysis techniques, Johansen Cointegration, determining optimal lag, model stability testing, Impulse Response Function (IRF), Variance Decomposition (VD) and Granger Causality. Where the level of validity of the processed data is determined based on the terms and conditions of statistics in each VECM / VAR test.

RESEARCH RESULT

Pre-Estimation Test Results

To determine the estimation results obtained from the *Vector Error Correction Model* (VECM), researchers conducted a pre-estimation test consisting of a stationary test, determination of *lag* length, model stability test and Johansen cointegration test. At this early stage, researchers will conduct data stationarity tests using ADF (*Augmented Dickey Fuller*) using a significance level of 5%.

Table.1 Stasionecity Test Results

Variabel	Level		First Difference	
	Nilai ADF	Ket	Nilai ADF	Ket
Pertumbuhan Ekonomi (X1)	0.0430	Stationer	0.1532	Tidak Stasioner
Investasi (X2)	0.1390	Tidak Stationer	0.0226	Stationer
Hutang Luar Negeri (X3)	0.0256	Stationer	0.2497	Tidak Stasioner
Ekspor (X4)	0.0186	Stationer	0.0556	Tidak Stationer
Impor (X5)	0.0870	Tidak Stationer	0.0473	Stationer
Pengeluaran Militer (Y)	0.0011	Stationer	0.0489	Tidak Stasioner

Source : Data Processed by Researchers Using Eviews 12, 2023

Based on table 1 it is known that the investment (X2) and import (X5) variables are not stationary at the level level. The analysis process proceeds into stages *First Difference* So that stationary data is obtained. The next pre-estimation test step is to determine the length *optimal lag* against the analyzed variables. In determining this optimal lag length, researchers based on tests *Akaike information criterion* (AIC). Test results *optimal lag* it shows that this research data is in optimal lag 2 with an AIC value of 27.35339.

Table.2 Optimal Lag Test Results

Lag	AIC
0	40.00681
1	31.11185
2	27.35339*

Source : Data Processed by Researchers Using Eviews 12, 2023

The next step is the model stability test as a pre-estimation test that combines the stability of the specified model. If the results are valid in the stability of the model, then IRF (*Impulse Response Function*) and FEVD (*Forecasting Error Variance Decomposition*) will also be valid (Hendayanti, 2017). This test uses a *VAR stability condition check in the form of roots of characteristic polynomials*.

Table.3 VAR Stability Test Results

Root	Modulus
-0.278263	0.278263
-0.278263	0.278263
-0.278263	0.278263
-0.278263	0.278263
0.983316	0.983316
0.869894	0.869894
-0.647612	0.647612
-0.012737 - 0.611928i	0.612060
-0.012737 + 0.611928i	0.612060
0.499250 - 0.019225i	0.499620
0.499250 + 0.019225i	0.499620
-0.278263	0.278263

Source : Data Processed by Researchers Using Eviews 12, 2023

Based on table 3, it is known that the modulus produced in this study is below or less than 1. It can be said that the model produced in this study is stable.

The next stage of testing is the cointegration test *test Johansen's Trace Statistic* Use an optimal lag length of two. The selection of assumptions in this study is *no trend deterministic* and the test used is *Kao (Engle-Granger Based)* Determined prior to the cointegration testing described in the following Table 4:

Table.4 Johans Cointegration Test Results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0,05 Critical Value	Prob. **
None	0.756761	26.54846	33.87687	0.1000
At most 1	0.582894	24.97660	27.58434	0.1047
At most 2	0.448697	3.81880	21.13162	0.1204
At most 3	0.368010	8.35528	14.26460	0.0107
At most 4	0.056164	2.312103	3.841465	0.1284

Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

MacKinnon-Haug-Michelis (1999) p-values

Based on table 4, it is known that the value of *the Trace Statistic* is smaller than *the critical value* so that H1 is rejected H0 is accepted which means there is no equation in the cointegration test. It can be said that there is no cointegration so that the research model based on the equation is VAR or *Vector Autoregression*.

Autoregressive Vector (VAR) Estimation Results

A series of pre-estimation tests carried out are data stationarity, determination of *optimal lag*, model stability test and cointegration test. From the results of the cointegration test, the results of no cointegration were obtained so that the *Vector Autoregressive (VAR)* model estimation equation was obtained as follows:

1. $\Delta X1 = 0.994018142516 * X1(-1) - 0.811741442488 * X1(-2) - 9.9.7326768847 * X2(-1) - 45.1278425463 * X2(-2) + 0.00331460182569 * X3(-1) - 0.00137135538484 * X3(-2) - 3.42486492515 * X4(-1) + 1.37295775501 * X4(-2) + 1.38966649583 * X5(-1) + 5.64828142359 * X5(-2) + 0.176589740494 * Y(-1) - 0.105723239741 * Y(-2) - 10.1035668935$
2. $\Delta X2 = - 0.017525371843 * X1(-1) - 0.00341495733166 * X1(-2) + 0.0.017525371843 * X1(-1) - 0.003457333 233260381877 * X2(-1) - 0.187056250096 * X2(-2) - 0.000143530769053 * X3(-1) + 7.26794421411e-05 * X3(-2) + 0.0851745863557 * X4(-1) - 0.135294701316 * X4(-2) + 0.0616909719583 * X5(-1) + 0.128680241898 * X5(-2) + 0.0018712517097 * Y(-1) - 0.00263983581446 * Y(-2) + 0.358988818549$
3. $\Delta X3 = - 78.3890530467 * X1(-1) - 58.1196020495 * X1(-2) + 565.39002825 * X2(-1) + 2267.81359949 * X2(-2) + 0.716753026253 * X3(-1) - 0.0938331928565 * X3(-2) + 377.70029197 * X4(-1) - 292.711585882 * X4(-2) - 774.486151121 * X5(-1) + 275.440222764 * X5(-2) + 12.7638412681 * Y(-1) - 7.82687766957 * Y(-2) + 2347.85471383$
4. $\Delta X4 = - 0.030431747071 * X1(-1) - 0.0268986803194 * X1(-2) - 6.6.030431747071 * X1(-1) - 0.026898680319.2) - 6.6.030431747071 * X1(-1) - 0.0268986803194 * X1(-2) - 6.6.39780837223 * X2(-1) - 6.14634555581 * X2(-2) - 0.00049872134772 * X3(-1) + 0.000341511853807 * X3(-2) - 0.966247541 * X4(-1) + 1.37737615918 * X4(-2) + 2.97737452475 * X5(-1) - 1.23792225856 * X5(-2) - 0.014739262644 * Y(-1) + 0.0371705290548 * Y(-2) + 0.413478344735$
5. $\Delta X5 = - 0.0520389392204 * X1(-1) - 0.0635517350925 * X1(-2) + 0.0.0520389392204 * X1(-1) - 0.06355517350925 * X1(-2) + 0.0.0555 195584771742 * X2(-1) - 0.93227142822 * X2(-2) - 0.000678028346958 * X3(-1) + 0.000447715570603 * X3(-2) - 0.932718143789 * X4(-1) + 0.963110734338 * X4(-2) + 1.12417497823 * X5(-1) - 0.845118009966 * X5(-2) + 0.00290155548558 * Y(-1) + 0.019212016785 * Y(-2) + 1.88912391989$
6. $\Delta Y = - 0.420608234163 * X1(-1) - 0.375818545454 * X1(-2) + 31.3131257377 * X2(-1) - 14.6466150132 * X2(-2) - 0.00787292840896 * X3(-1) + 0.00383858191633 * X3(-2) - 0.5155306707 * X4(-1) - 0.151066095125 * X4(-2) + 6.64551870053 * X5(-1) - 2.10250679122 * X5(-2) + 0.576394802211 * Y(-1) + 0.260487577726 * Y(-2) + 21.3902472116$

Based on the results of the equation, it is known that the independent variables in the VAR equation are $\Delta X1$ (economic growth), $\Delta X2$ (investment), $\Delta X3$ (Foreign debt Overseas), $\Delta X4$ (Exports), $\Delta X5$ (Imports), ΔY (Military Expenditures) respectively explain diversity (R^2) economic growth of 73.47%, investment of 83.17%, amounted to 93.94%, exports amounted to 99.09%, imports amounted to 94.44% and military expenditure amounted to 98.99%.

The next test is Granger Causality which is carried out as follows:

Table.5 Granger Causality Test Results

Hypothesis:	Obs	F-Hitung	Prob.	Ket.
X2 does not Granger Cause X1	21	2.78802	0.0915	H0 diterima H1 ditolak
X1 does not Granger Cause X2		0.52768	0.5999	H0 diterima H1 ditolak
X3 does not Granger Cause X1	21	0.84507	0.4478	H0 diterima H1 ditolak
X1 does not Granger Cause X3		2.54792	0.1095	H0 diterima H1 ditolak
X4 does not Granger Cause X1	21	0.30229	0.7433	H0 diterima H1 ditolak
X1 does not Granger Cause X4		0.45123	0.6447	H0 diterima H1 ditolak
X5 does not Granger Cause X1	21	0.65138	0.5346	H0 diterima H1 ditolak
X1 does not Granger Cause X5		0.50520	0.6127	H0 diterima H1 ditolak
Y does not Granger Cause X1	21	0.32767	0.7253	H0 diterima H1 ditolak
X1 does not Granger Cause Y		0.67258	0.5242	H0 diterima H1 ditolak
X3 does not Granger Cause X2	21	0.56224	0.5808	H0 diterima H1 ditolak
X2 does not Granger Cause X3		2.02398	0.1646	H0 diterima H1 ditolak
X4 does not Granger Cause X2	21	4.70412	0.0247	H0 ditolak H1 diterima
X2 does not Granger Cause X4		0.51309	0.6082	H0 diterima H1 ditolak
X5 does not Granger Cause X2	21	0.92986	0.4149	H0 diterima H1 ditolak
X2 does not Granger Cause X5		0.61204	0.5545	H0 diterima H1 ditolak
Y does not Granger Cause X2	21	0.28051	0.7590	H0 diterima H1 ditolak
X2 does not Granger Cause Y		3.00079	0.0782	H0 diterima H1 ditolak
X4 does not Granger Cause X3	21	0.00308	0.9969	H0 diterima H1 ditolak
X3 does not Granger Cause X4		0.64468	0.5379	H0 diterima H1 ditolak
X5 does not Granger Cause X3	21	0.71130	0.5059	H0 diterima H1 ditolak
X3 does not Granger Cause X5		0.51328	0.6081	H0 diterima H1 ditolak
Y does not Granger Cause X3	21	0.87555	0.4357	H0 diterima H1 ditolak
X3 does not Granger Cause Y		0.74318	0.4913	H0 diterima H1 ditolak
X5 does not Granger Cause X4	21	0.29563	0.7480	H0 diterima H1 ditolak
X4 does not Granger Cause X5		4.06089	0.0375	H0 ditolak H1 diterima
Y does not Granger Cause X4	21	1.07678	0.3641	H0 diterima H1 ditolak
X4 does not Granger Cause Y		0.97163	0.3997	H0 diterima H1 ditolak
Y does not Granger Cause X5	21	1.34730	0.2879	H0 diterima H1 ditolak
X5 does not Granger Cause Y		2.23229	0.1396	H0 diterima H1 ditolak

Source : Data Processed by Researchers Using Eviews 12, 2023

The results of Granger's causality test with variables are economic growth, investment, foreign debt, exports, imports and military expenditures show that there are 2 one-way relationships that have causality relationships. The first one-way causality relationship is shown exports to investment and the one-way causality relationship of exports to imports with p-values of 0.0247 and 0.0375. The next step is a 10-period *Impulse Response Function* (IRF) for variable responses to economic growth, investment, external debt, exports, imports and military spending.

Economic growth in the first period ranged from the first period responding positively to *shocks* or shocks and continued to decline until the second to sixth period, then in the seventh and eighth periods increased for two consecutive years. However, in the ninth period it experienced a significant decline and soared up again in the tenth period.

IRF results on investment variables are fluctuating with positive trends in the first to second periods. But in the fifth period experienced a shock that had a negative effect. The sixth and seventh periods show a positive trend of investment experiencing a surge. The next two periods the trend reversed to negative. In the tenth period, the trend again gradually responded positively. The results of IRF external debt in the first and second periods showed a positive trend. However, in the fourth to tenth periods foreign debt tends to show a negative trend influenced by internal factors derived from the variables themselves and shows a negative influence on the variables of economic growth, investment, exports and imports but shows a positive trend towards military spending in the ninth period.

The results of IRF exports in the first period showed a positive development trend. In the second and third periods the situation turned into a negative trend and was still fluctuating until the ninth to tenth periods showed a negative trend influenced by internal factors or shocks from itself. This negative trend was responded to by other variables positively such as imports, investment, economic growth and military spending in the last two periods. The results of IRF imports showed a positive trend surge. The development of this negative trend from imports actually only occurred in three periods, namely the third, sixth and seventh periods. The factors that influence this positive trend come from the internal variables. The shocks that occurred in the import variable also affected the development of negative trends in several variables in the third and ninth periods of economic growth and export variables, while military spending tended to fluctuate in line with the rate of economic growth that occurred due to shocks in the import variable.

The results of IRF military expenditure developed a positive trend from the first period to the ninth period. However, in the tenth period the development trend became negative due to internal factors of variable military expenditure. However, in the negative trend due to shocks or shocks from military spending, the variables of economic growth, investment, external debt and imports show a very positive trend development simultaneously. The description of the explanation is contained in the following graph:

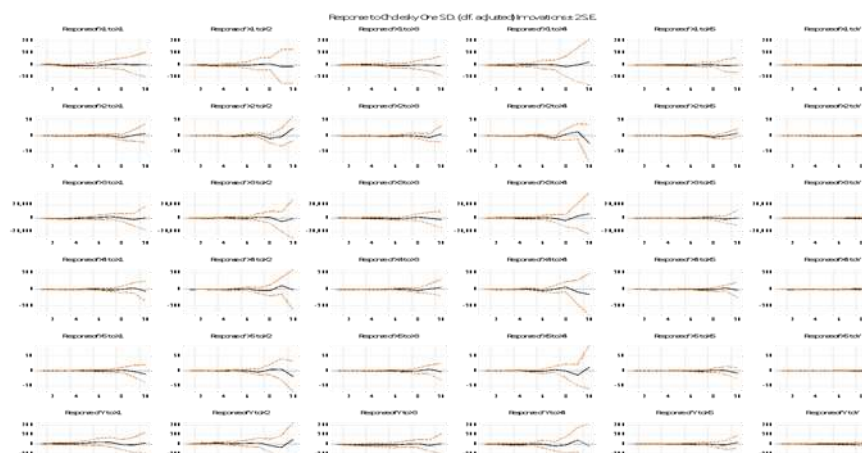


Figure.1 IRF Test Results

Source : Data Processed by Researchers using Eviews, 2023

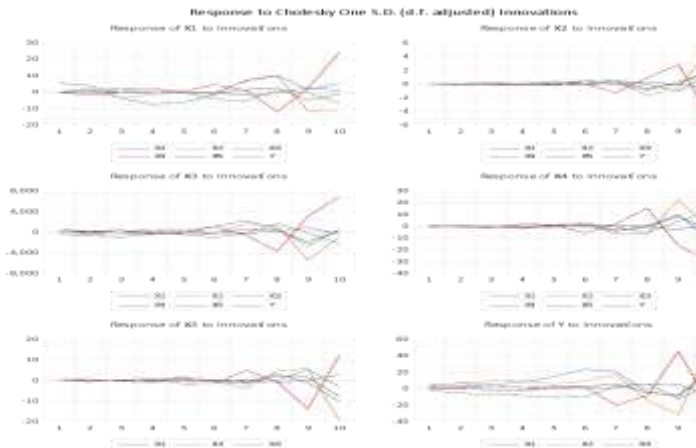


Figure.2 IRF Test Results Innovation Graph
Source : Data Processed by Researchers, 2023

The next step is Variance Decomposition or often referred to as *forecast error decomposition variance* (FEDV) analysis. The results of FEDV analysis for 10 periods of each variable can be seen in Table 6 to Table 11 below:

Table.6 Variance Decomposition Test Results: Variable X1

Variance Decomposition of X1:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	5.478824	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	7.571174	82.06239	0.732135	9.598702	6.142072	0.247099	1.217803
3	9.494055	68.39438	15.06260	10.13936	3.910622	0.164241	2.328800
4	12.26054	76.04936	10.24340	9.721781	2.483390	0.104281	1.397794
5	13.83429	80.81752	8.089916	7.645011	2.066558	0.206402	1.174596
6	15.28667	67.28209	6.626480	13.73543	10.60042	0.647443	1.108138
7	19.06983	58.10684	16.48083	15.84357	7.238295	1.090022	1.238431
8	26.71210	44.04840	22.05797	8.216841	23.63885	1.330142	0.707798
9	29.66423	36.07836	32.50942	6.674290	19.89357	3.630274	1.414091
10	40.68140	20.97893	24.65398	6.207868	45.31184	2.024249	0.823132

Source : Data Processed by Researchers, 2023

Based on table 6, it is known that the trend of economic growth is influenced by investment, foreign debt and exports as well as itself or internal factors of economic growth, namely factors that are directly related to economic growth itself with trends whose value increases every period.

Table 7 Variance Decomposition Test Results: Variable X2

Variance Decomposition of X2:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	0.124128	3.688.852	6.311.148	0.000000	0.000000	0.000000	0.000000
2	0.175935	1.855.263	3.604.011	3.549.106	1.039.191	0.271098	0.263198
3	0.305461	6.690.115	5.072.096	1.259.346	1.756.560	3.127.207	1.302.602
4	0.338336	9.096.841	4.695.995	1.069.314	2.874.873	3.831.889	1.083.748
5	0.639046	6.436.299	2.676.079	1.247.837	4.920.940	3.544.116	0.57.1064
6	0.914278	2.704.439	3.544.446	6.392.454	2.360.416	6.554.105	0.770428
7	1.767.537	7.249.020	1.987.975	1.102.228	5.893.751	2.703.278	0.308167
8	2.872.600	1.367.364	4.292.200	4.306.318	3.183.479	6.369.826	0.994827
9	4.227.177	6.905.560	2.171.364	8.526.627	5.940.064	2.942.547	0.506469
10	8.365.752	5.656.039	3.925.834	4.907.864	4.410.758	5.341.377	0.728800

Source : Data Processed by Researchers, 2023

Based on table 7, it is known that investment trends receive the largest contribution from themselves or internal investment factors, namely factors that are directly related to the investment itself with trends in value that increase each period and other variables except military expenditure which contribute the least compared to economic growth, foreign debt, exports and imports.

Table.8 Variance Decomposition Test Results: Variable X3

Variance Decomposition of X3:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	5.528.509	3.260.393	0.098062	6.729.800	0.000000	0.000000	0.000000
2	1.035.664	6.526.000	7.781.759	2.316.218	3.010.243	0.445862	0.339959
3	1.433.281	7.431.072	4.064.673	1.236.472	8.681.150	0.246416	0.332316
4	1.656.653	6.060.767	1.822.228	1.188.400	7.275.693	0.604247	1.406.109
5	1.802.222	5.334.501	2.056.252	1.652.687	7.153.302	0.921921	1.490.382
6	2.612.955	4.478.572	1.041.603	2.211.650	2.084.691	1.125.833	0.709009
7	3.937.342	5.312.039	2.181.024	9.940.199	1.135.349	3.219.131	0.556554
8	5.787.226	2.581.694	1.408.974	1.279.431	4.511.159	1.883.703	0.303714
9	9.080.546	1.869.893	4.055.871	5.204.509	2.945.133	5.012.328	1.074.199
10	11695.93	1.144.330	2.521.517	6.599.757	5.285.488	3.164.379	0.722518

Source : Data Processed by Researchers, 2023

Based on table 8, it is known that the development of foreign debt trends is mostly influenced by internal factors derived from external debt variables and other variables such as economic growth, investment, export and import activities.

Table.9 Variance Decomposition Test Results: Variable X4

Variance Decomposition of X4:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	0.752463	4.769.368	6.009.308	2.494.509	6.427.624	0.000000	0.000000
2	1.190.579	8.980.517	3.806.754	1.000.179	3.585.969	6.747.432	0.343033
3	1.489.615	1.471.518	2.722.806	7.151.597	4.539.911	4.504.893	1.001.162
4	3.396.968	5.116.053	3.720.959	6.169.278	4.665.974	4.043.792	0.801547
5	4.139.599	1.588.016	3.232.578	6.679.044	3.837.811	5.957.758	0.779153
6	8.513.255	4.514.659	2.524.000	8.251.555	5.819.233	3.584.742	0.216714
7	1.240.418	1.364.761	4.425.137	3.887.954	2.996.260	6.927.471	1.322.997
8	2.165.655	4.552.341	2.232.729	8.697.127	6.142.580	2.554.766	0.442675
9	3.810.799	7.855.196	4.223.435	4.186.221	3.863.833	6.265.358	0.820547
10	5.123.322	8.776.118	2.344.174	8.365.116	5.481.498	3.908.793	0.693260

Source : Data Processed by Researchers, 2023

Based on table 9, it is known that the development of export trends that occur in South Pacific countries is influenced more by variables of economic growth, investment, foreign debt and import activities as well as themselves or internal export factors, namely factors that are directly related to exports themselves with trends whose value increases each period.

Table.10 Variance Decomposition Test Results: Variable X5

Variance Decomposition of X5:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	0.547698	3.858.893	5.434.581	1.354.399	1.667.537	4.043.318	0.000000
2	0.995733	1.501.265	5.767.213	0.529703	2.390.424	2.862.271	0.019005
3	1.267.957	1.867.499	4.194.534	1.338.205	2.161.182	3.793.800	0.592000
4	1.831.139	1.578.803	2.145.280	2.362.482	3.668.287	1.881.129	0.570354
5	3.487.335	2.198.270	3.674.061	6.613.014	3.049.553	3.656.919	0.511224
6	3.893.581	1.763.477	3.225.944	6.975.022	3.778.626	4.188.329	1.156.174
7	7.632.951	4.835.943	3.343.918	6.102.122	5.152.734	3.353.607	0.741810
8	9.775.758	1.245.571	4.335.133	3.723.327	3.174.594	7.587.619	1.136.085
9	1.871.911	3.771.416	2.133.065	9.838.603	6.200.425	2.739.881	0.315204
10	3.222.461	1.104.927	4.228.729	4.147.412	3.515.123	6.465.140	0.899664

Source : Data Processed by Researchers, 2023

Based on table 10, it is known that the development of import trends that occur in South Pacific countries is influenced more by variables of economic growth, investment, foreign debt and export activities as well as themselves or internal import factors, namely factors that are directly related to imports themselves with trends whose value increases each period

Table.11 Variance Decomposition Test Results: Variable Y

Variance Decomposition of Y:							
Period	S.E.	X1	X2	X3	X4	X5	Y
1	6.489.130	2.302.884	9.724.115	9.659.505	0.636856	3.797.632	5.315.306
2	1.290.313	3.130.070	3.102.335	1.723.723	0.286787	2.242.157	1.790.978
3	1.867.783	2.239.641	3.923.878	2.464.319	0.961202	2.587.112	1.017.330
4	2.420.193	2.294.809	3.984.352	2.650.883	2.410.508	1.933.700	6.355.356
5	3.093.941	3.656.094	2.793.288	2.806.913	2.026.438	1.190.812	4.219.796
6	4.141.134	5.293.461	2.101.318	2.104.823	1.414.585	1.103.447	2.485.941
7	5.356.338	4.680.737	2.249.784	1.290.347	1.421.380	1.998.721	1.578.801
8	5.683.320	4.194.219	2.553.394	1.265.031	1.475.190	2.507.679	2.613.983
9	8.115.069	2.179.449	2.744.606	8.519.005	3.841.813	2.138.069	1.684.238
10	1.019.760	1.682.426	4.215.327	5.576.592	2.755.780	6.301.808	1.586.270

Source : Data Processed by Researchers, 2023

Based on table 11, it is known that the development of military expenditure trends that occur in South Pacific countries is influenced more by variables of economic growth, investment, foreign debt and itself or internal factors of military expenditure, namely factors that are directly related to military expenditure itself with trends whose value increases each period.

Statistical Model Forecasting

The results of forecasting with VAR in the next 23 years for the period of Jak Hanneg Indonesia for the period 2014-2029, 2030-2034, 2035-2039, 2040-2044, and 2045-2049 to analyze the projection of Indonesian diplomacy to welcome the golden Indonesia 2045. In the short term, this forecast will be used to formulate Indonesian diplomacy from an economic and defense perspective according to Jak Hanneg in 2024 to 2029.

Economic growth of South Pacific countries in the 2023 period has decreased compared to 2022. Similarly, from 2024 to 2045, it tends to move stagnant and even experience a significant decline in 2045. Meanwhile, investment variables in South Pacific countries fluctuate and tend to fluctuate every year until 2045. In contrast to investment variables, the external debt variable of South Pacific countries tends to experience a significant increase every year even in 2045 is the highest peak of foreign debt which reaches 225%. This figure is exactly the opposite of South Pacific countries' exports which have decreased from 2023 to 2045, as well as imports made by South Pacific countries. From the perspective of military expenditure, the forecast results show a gradual increase in military expenditure. From the forecasting results with reference to the actual data, the *Mean Absolute Percent Error* (MAPE) of each variable shows results below or less than 50. Based on Maricar (2019), MAPE that is less than 10%, the ability of the model is very good, MAPE values of 10 to 20 indicate a good forecasting model, MAPE values of 20-50 indicate a decent forecasting value (good enough) and MAPE values of more than 50 indicate inaccurate forecasting results. As is known, the results of MAPE on each variable show a number below 50 which means the forecasting model is feasible (good enough). While the forecasting model for foreign debt (X3) shows good forecasting results. To provide a description or overview of these results, researchers make processed data graphs that can be seen in graphs 3 to 8 below:

Table.12 MAPE Variables

Variable	MAPE
X1	41.5599
X2	48.3614
X3	18.13964
X4	33.3449
X5	40.97281
Y	41.98212

Source : Data Processed by Researchers, 2023

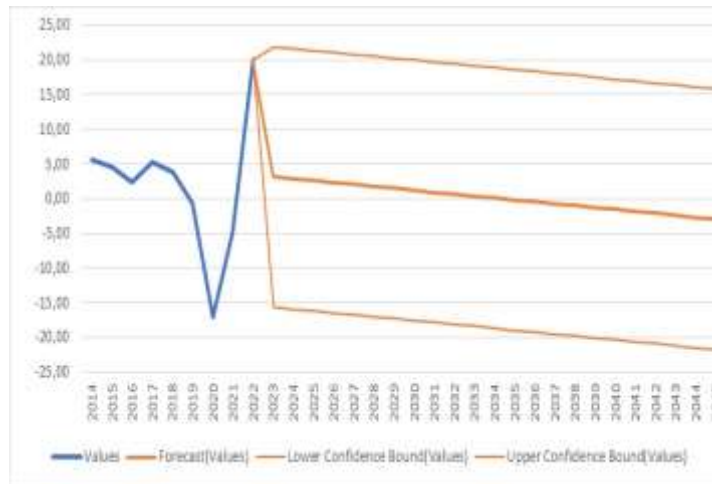


Figure.3 Actual Results and Forecasts of South Pacific Economic Growth 2014-2045

Source : Data Processed by Researchers, 2023

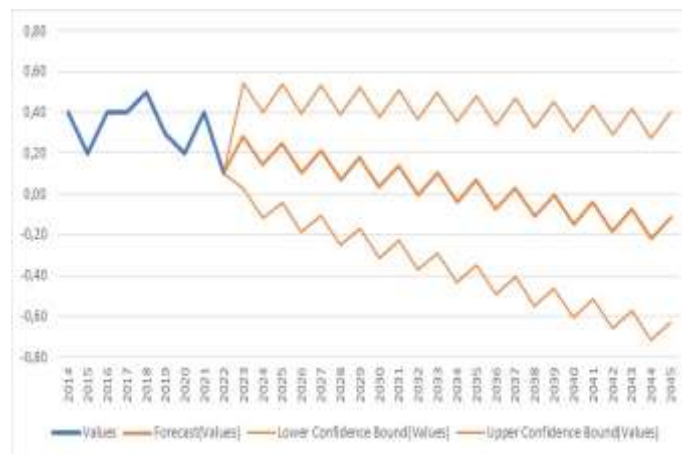


Figure.4 Actual Results and Investment Forecast South Pacific 2014-2045

Source : Data Processed by Researchers, 2023

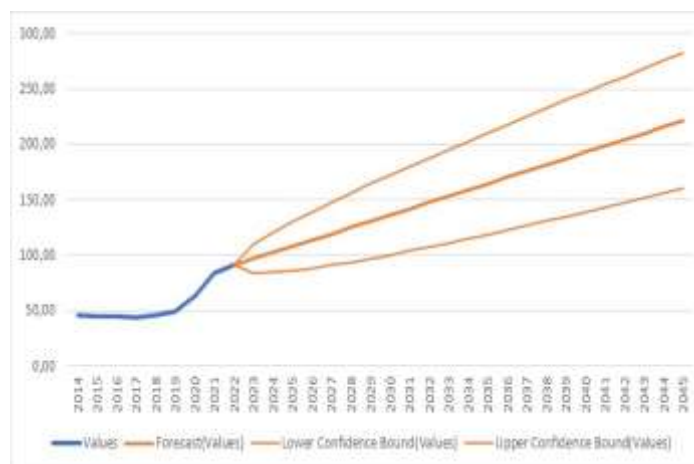


Figure.5 Actual Results and Forecasts of South Pacific External Debt 2014-2045

Source : Data Processed by Researchers, 2023

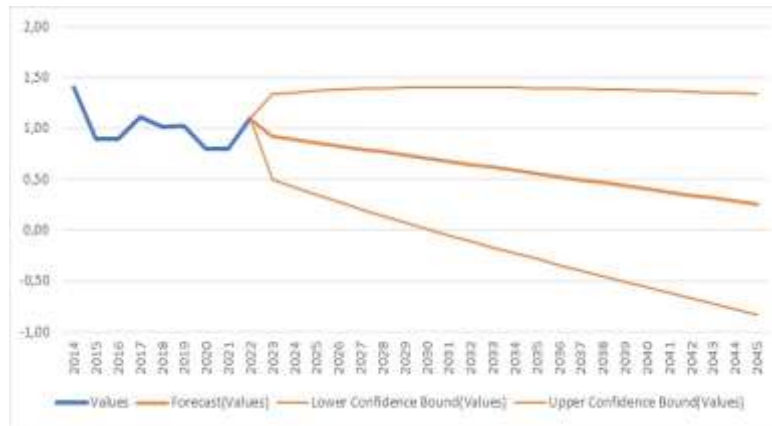


Figure.6 Actual Results and Forecasts of South Pacific Exports 2014-2045

Source : Data Processed by Researchers, 2023

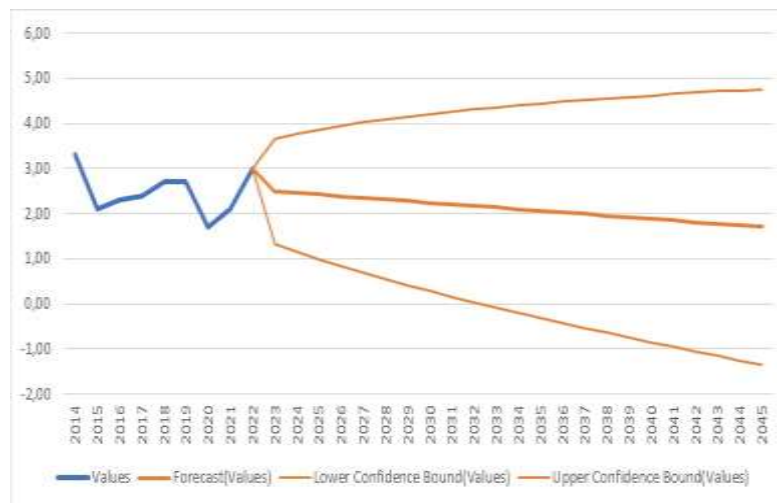


Figure.7 Actual Results and Forecasts of South Pacific Imports 2014-2045

Source : Data Processed by Researchers, 2023

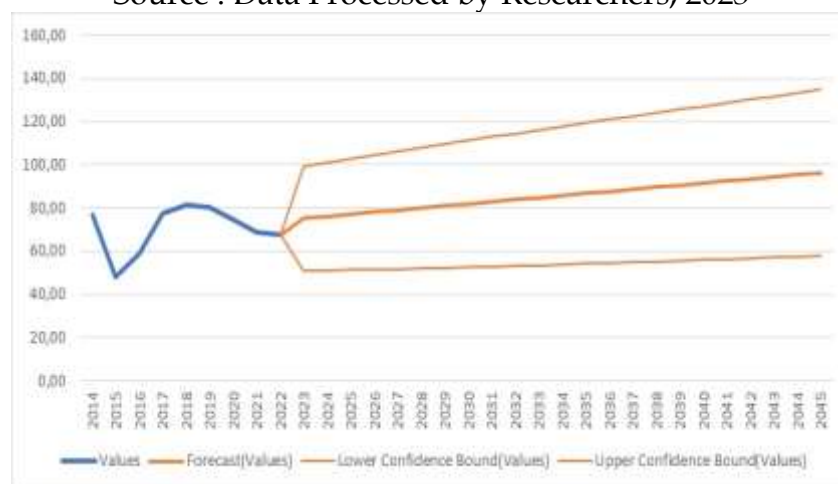


Figure.8 Actual Results and Forecasts of South Pacific Military Expenditure 2014-2045

Source : Data Processed by Researchers, 2023

DISCUSSION

Based on the perspective of the economy and military expenditure of South Pacific countries. Researchers obtained an analysis that export, import and investment activities from abroad to South Pacific countries have a unidirectional causal relationship. The increase in exports that occur shows good economic growth in a country so that it opens up potential market opportunities to invest through investment. In this context, the positive correlation between imports and investment shows that the more import needs that must be met, the greater the opportunity for foreigners to invest in the country and meet these needs. While the economic aspect has a strong contribution in every variable of economic growth, investment, foreign debt, exports and imports. In the perspective of military spending, the largest contribution is influenced by economic growth, investment and external debt. It can be said that global production chain activities related to import and export activities are indirect factors affecting military spending. High economic growth will provide financial benefits for countries, so they can allocate larger funds for military expenditures.

Investment also has an important role because it can improve the country's defense capabilities. Investment in military technology, defense industry development, and modernization of military facilities can make the country stronger and more resilient in the face of TNOC threats and political instability. Based on the forecasting results for the upcoming 2045 period, the South Pacific's external debt will experience a significant increase. Meanwhile, import, export and investment activities as national income will decrease. South Pacific countries that will have large external debts are likely to experience obstacles in increasing military spending. Large external debt can burden the country with debt installments and interest to be paid, leaving few resources for military spending as indicated by *forecasting* that moves gradually and tends to be slow until 2045.

Judging from Jak Hanneg from 2020 to 2024, Indonesia has a very strong diplomatic role. The first relates to the country's defense posture, settlement of territorial border disputes, optimization of bilateral and multilateral relations, development of the main components, the role of ministerial diplomacy, capacity building in the field of international cooperation, guerrilla warfare tactics and protracted warfare, and the deployment of state defense forces projected outside the jurisdiction of the Republic of Indonesia. As is known, Indonesia has carried out four diplomatic objectives developed by Roy, 1995 in Alexandra et al., (2019). The expansion of diplomacy includes aspects of economy, peace and harmony through the development of seaweed carried out in 2015 to the country of Nauru as much as 50 kg (Merdeka, 2015). In addition, Indonesia also conducts business partnerships by supplying commodities in South Pacific countries even though the value of trade to South Pacific countries is considered very small. Indonesia also participated in diplomacy with Fiji starting from 1974 until now through *the Agreement Between the Republic For Development Cooperation* signed in 2011. The sectoral cooperation is agriculture, fisheries and other fields.

Diplomacy is closely related to international cooperation into a process of forming networks through state institutions that are influenced by geographical proximity and conflict factors (Gallop, 2016). The South Pacific and Indonesia have geographical proximity in the form of regional contours that are on the *ring of fire*. Non-military threat factors such as natural disasters, erupting mountains, earthquakes, landslides and others make these countries prone to disasters because they are in 3 tectonic plates. In this countermeasure effort requires a large enough budget, moreover the South Pacific region often experiences deficits in economic growth. In the context of diplomatic relations, Indonesia also provides material assistance such as finance, power plants, food, medicine, other humanitarian and non-material assistance in the form of improving the country's economy. With this assistance, Indonesia has carried out a diplomatic role that serves to maintain the sovereignty of the Republic of Indonesia from the issue of Papuan independence and Melanesian peace and solidarity. Moreover, diplomatic relations between Indonesia and Vanuatu have experienced ups and downs due to human rights violations in Papua.

The high number of TNOC cases in the territorial waters of South Pacific countries makes aspects of Indonesia's maritime diplomacy can be carried out well. When viewed from the indicator of military spending, until 2045, South Pacific countries will experience a fairly slow pace of increase because it is influenced by declining economic growth, investment, exports and imports. Differences in national and capita income between South Pacific clusters cause economic growth to be increasingly unequal (Mdingi et al., 2021). From here Indonesia can carry out bilateral cooperation because South Pacific countries still have very dependence on other countries. For example the Cook Islands, Tokelau and Nieu (under *New Zealand* rule), American Samoa, Guam, Northern Mariana Islands (under US rule), *New Caledonia*, *French Polynesia*, *Wallis and Futuna* (under French rule). Some areas are still US military bases (*Northern Mariana Islands*, *FAS*, *Republic of Marshall Islands*, *FSM*, *Palau* American Samoa and Guam). Maritime diplomacy that can be carried out by Indonesia in this case is the placement of Indonesian National Army (TNI) personnel, maritime cooperation in the field of intelligence operations, information exchange, and development of defense human resources of South Pacific countries with a fairly minimal population.

In addition to internal threats, the South Pacific also faces threats from the development of the strategic environment in the form of competition between China and Taiwan through dollar diplomacy. China and Taiwan tied the South Pacific with soft economic aid aimed at gaining diplomatic recognition or often referred to as *chequebook diplomacy*. Another objective of China's expansion is also contained in China's *Ocean Development Report* (2012) to realize the *Second Island Chain strategy*. Thus, the South Pacific is in China's strategic importance with a military dimension. Even China secures *sea lanes of communication* (SLOC) with the construction of alternative sea lanes when facing a crisis and the construction of military ports, supported by sea security equipped with Yuanwang 6 reconnaissance satellites in Suva and Papeete (Brady 2015). Similarly, in Kiribati the construction of satellites was carried out in 1997. Even fishing boats sailing in

Fiji's maritime sovereignty are equipped with surveillance signals against the US military in Micronesia (Wallis 2012).

Indonesia has a very strategic role in the *South Pacific Defense Ministers Meeting* (SPDMM) Forum which will be held since December 1, 2023. This SPDMM forum will be a routine agenda every year in Indonesia's diplomatic efforts towards South Pacific countries. The agenda of the discussion was defense cooperation, security threat countermeasures, peacekeeping missions, maritime security. The urgency of diplomacy is based on considerations of the national interests of Indonesia and the South Pacific. First, the South Pacific has abundant natural resources in the form of oil and natural gas as well as marine resources, so it is important for Indonesia to protect the country's economic and defense aspects by managing these resources well. Second, from the perspective of international trade, the South Pacific has a strategic location that has accessibility between the Pacific Ocean and the Indian Ocean. Indonesia itself has an interest in the shipping lanes of commercial ships and military ships and is obliged to maintain the security and smooth running of shipping lanes.

Third, several large Indonesian islands are directly adjacent to South Pacific countries, by establishing good diplomatic relations, Indonesia maintains maritime territorial sovereignty. Fourth, establish strategic partnerships with Australia, New Zealand, and Pacific Island countries. Currently, the South Pacific is in a global geopolitical contestation, Indonesia's existence in the South Pacific maintains political stability and balances the hegemony of these forces. In welcoming Indonesia gold 2045 through diplomacy in the South Pacific Region, Indonesia can conduct diplomacy in the SPDMM forum through the following defense diplomacy strategies:

Defense Diplomacy for Confidence Building Measures (CBM)

In defense diplomacy activities, one of the main characteristics is the effort to build trust through various measures that prioritize common security interests. Through defense diplomacy, South Pacific countries and Indonesia work together to reduce tensions and promote cooperation in the face of common threats. This can be done with joint patrol efforts as a preventive measure against TNOC in the border areas of the two countries. In the perspective of Military Operations Other than War (OMSP) carried out by the TNI, assistance in the form of economy, infrastructure development, provision of national resource management owned. The outline of building trust is the merging of economic and defense aspects through indicators of *assistance, trade, finance, force, threats, and force capabilities*.

Defense Diplomacy for Defense Capabilities

The second characteristic of defense diplomacy activities is the effort to build and enhance a country's defense capabilities through international cooperation. In this context, countries share information, technology, and military training to enhance defense capabilities. Indonesia can conduct joint exercises with South Pacific countries to improve operational and managerial capabilities in the defense sector. Broadly speaking, this includes informational aspects in the form of monitoring and information exchange.

Defense Diplomacy for Defense Industry

The third characteristic of defense diplomacy is the promotion and cooperation in the development of the defense industry. Countries cooperate in the production, technology transfer, and sale of weapons to meet their defense needs. Indonesia's defense diplomacy in the South Pacific country is a patrol boat delivery program given to countries such as Timor Leste, Fiji, and Vanuatu as well as other Pacific Islands as a form of world peacekeeping process.

This is described as follows:

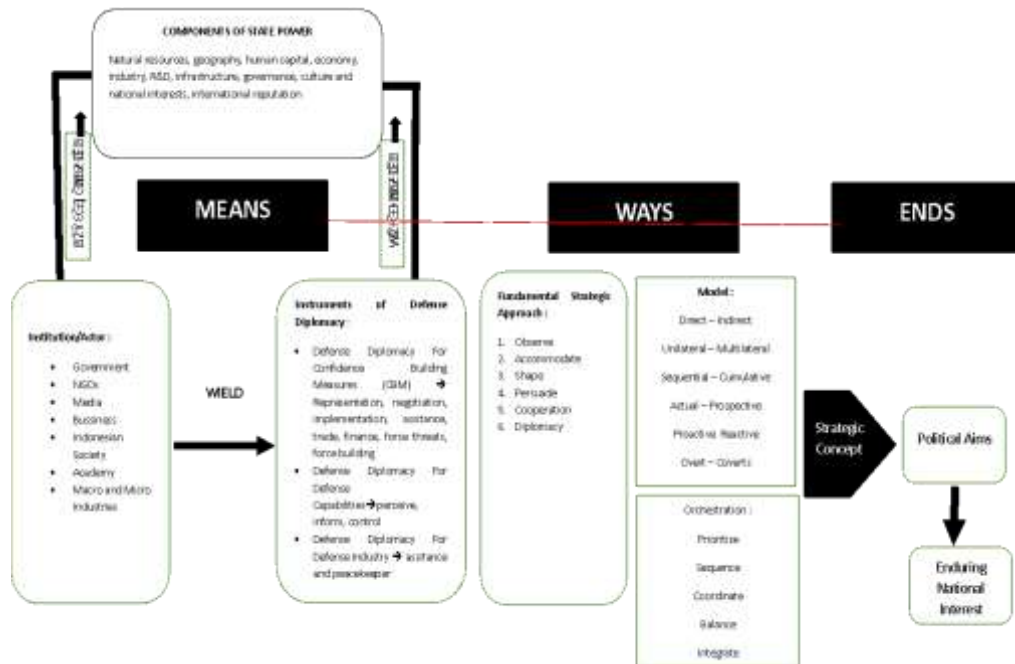


Figure.9 Strategy Based on Economic Modelling and Military Expenditure of the South Pacific

Source : Data Processed by Researchers Modified from FGD Athan RI Canberra, 2023

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the discussion above, the following conclusions were obtained:

From the results of the analysis and discussion, the following conclusions were obtained:

1. The first one-way causality relationship is shown exports to investment and the one-way causality relationship of exports to imports with p-values of 0.0247 and 0.0375.
2. The variables of economic growth, investment, external debt, exports, imports and military expenditure have fluctuating *impulse responses* with positive and negative development trends over the past 10 periods.
3. The result of variance decomposition of economic aspects such as economic growth, investment, foreign debt, exports and imports mutually contributes significantly in each variable. While the aspect of military expenditure receives the largest contribution from internal factors of military expenditure, economic growth, investment and external debt.

4. Forecasting analysis conducted shows that until 2045 the rate of economic growth, investment, exports and imports of South Pacific Countries has decreased both fluctuating and gradually. Meanwhile, Foreign Debt tends to increase significantly. Meanwhile, military spending only moves gradually and tends to be slow until 2045.
5. The role of Indonesian diplomacy listed in Jak Hanneg 2020-2024 includes the country's defense posture, settlement of territorial border disputes, optimization of bilateral and multilateral relations, development of key components, the role of ministerial diplomacy, capacity building in the field of international cooperation, guerrilla warfare tactics and protracted warfare, and the deployment of state defense forces projected outside the jurisdictional area HOMELAND. In the SPDMM forum which is regularly scheduled every year discusses defense cooperation, countering security threats, peacekeeping missions, maritime security. The concept of defense diplomacy applied to welcome Indonesia gold 2045 in the South Pacific Region is reflected in the first perspective of *Defense Diplomacy For Confidence Building Measures (CBM)* including assistance in the form of economy, infrastructure development, provision of management of national resources owned. The outline of building trust is the merging of economic and defense aspects through indicators of *assistance, trade, finance, force, threats, and force capabilities*. Second, *defense diplomacy for defense capabilities* includes *informational aspects* in the form of monitoring and information exchange. Third, *defense diplomacy for defense industry* includes representation, implementation, negotiation, assistance and maintaining world peace.

ADVANCED RESEARCH

Still conducting further research to find out more about Modeling of Economic And Military Expenditure of South Pacific Countries to Increase the Role of Indonesian Diplomacy through the South Pacific Defense Ministers Meeting (SPDMM) Forum

REFERENCES

- Alexandra, Frisca, Dadang Ilham K. Mujiono. (2019). Introduction to Historical Diplomacy, Theory and Case Studies. Kalimantan : Mulawarman University Press.
- Athan, Canberra, RI. (2023). Matera FGD. Indonesia's Interest in SPDMM and Strategy to Make It Happen.
- Chandramohan, Balaji. (2019). Amid the ever-changing geopolitical situation, the country is turning its attention to the South Pacific Retrieved by <https://ipdefenseforum.com/id/2019/04/ekspansi-strategis-india-di-kepulauan-pasifik/> December 15, 2023 by Sri Patmi

- Constantinou, Costas M., Paul Sharp. (2016). Theoretical Perspectives in Diplomacy. BK-SAGE-CONSTANTINOUCON-160137-Chp01.indd. doi: 10.4135/9781473957930.n2
- Crocombe, R. (2007). Asia in the Pacific Islands: Replacing the West. Institute of Pacific Studies, University of the South Pacific.
- Davidson, P. (2019). Introduction to the Indo-Pacific Security Challenges. Journal of Indo-Pacific Affairs, Spring.
- Dugis. (2015). The Strategic Dilemma of Pacific Island States. Retrieved from http://www.eurasia.org/publications/downloads/eurasia/Strategic_Dilemma_Pacific_Island_States.pdf
- Fathun, L. M. (2017). Geopolitical Policy of the Maritime Axis in the Jokowi Era. Journal of Power in International Relations, 1(2), 1-29.
- Gallop, Max B. (2016). Endogenous networks and international cooperation. Journal of Peace Research 2016, Vol. 53(3) 310-324 SAGE Pub DOI: 10.1177/0022343316631033
- Grygiel, J. J. (2006). Great Powers and Geopolitical Change. Baltimore: The John Hopkins University Press.
- Harris, A., Prakoso, L. Y., & Sianturi, D. (2019). Sea Defense Strategy in the Framework of Security Threats in the Sea Lanes of the Indonesian Archipelago II. Sea Defense Strategy, 5(1), 15-30.
- Hendayanti. (2017). Model stability in pre-estimation testing and its impact on Impulse Response Function and Forecasting Error Variance Decomposition. Journal of Economics and Business, 15(2), 123-136.
- Henderson, J. L., & Reilly, B. B. (2003). The Pacific War: From Pearl Harbor to Hiroshima. Westview Press.
- Independent. (2019). Indonesia intensifies cooperation efforts with South Pacific countries, what is it? Retrieved via <https://www.merdeka.com/uang/indonesia-intensifkan-upaya-kerjasama-dengan-negara-pasifik-selatan-ada-apa.html> December 15, 2023 by Sri Patmi

- Kemhan. (2023). FGD Pokja DP Kemhan: Indonesia's Urgency in the South Pacific through the SPDMM Forum Retrieved via <https://www.kemhan.go.id/strahan/2023/12/04/fgd-pokja-dp-kemhan-urgensi-indonesia-di-pasifik-selatan-melalui-forum-spdmm.html> 15 December 2023 by Sri Patmi
- Mdingi, Kholeka, Sin-Yu Ho. (2021). Literature review on income, inequality, and economic growth. *MethodsX* 8. y Elsevier B.V. <https://doi.org/10.1016/j.mex.2021.101402>
- Minister of Defense No.12 of 2021 concerning State Defense Policy for 2020-2024. Named, Allesandro. (2020). Pacific Elevation, Indonesian-style Friendship to the South Pacific. Quoted from <https://kumparan.com/allessandro-bernama/pacific-elevation-silaturahmi-ala-indonesia-ke-pasifik-selatan-1t3TUOIJIEA/full> on December 16, 2023 by Sri Patmi
- Nashir, A. K., Khomeini, Y., & Rosdiana, H. (2021). Strategic Environment, Strategist, and Strategy. *Global & Strategic Journal*, 15(1), 103. <https://doi.org/10.20473/jgs.15.1.2021.103-126>
- Putong, R. (2010). Economic growth and its supporting factors. *Journal of Economics and Development*, 15(2), 113-128.
- Putri, I., Hidayat, R., & Pramono, R. (2018). Analysis of the Effect of Military Spending on Economic Growth: A Case Study in Indonesia (2006-2015). *Journal of Development Economics*, 17(2), 133-146.
- Putri, W. S., Arfinanto, A., & Astuti, R. W. (2018). The effect of the defense budget on Indonesia's national economy. *Journal of Economics and Management*, 32(2), 128-141.
- Rahman, C. (2011). The Geopolitical Context," in Mahnken, Thomas G. (ed) " Indo-Pacific Maritime Security in the 21st Century. Proceedings of an International Conference US Naval War College and Lowly Institute for International Policy.
- Sadono, S. (2000). Measures of economic growth: The use of GDP and GDP in regional development. *Journal of Urban and Regional Planning*, 11(3), 179-192.

Sharma, Radha R. (2020). Financial Inclusion and Economic Growth: Evidence-Based Research. *Vision* 24(2) 139 Journal of SAGE. doi: 10.1177/0972262920933503.

Sinaga, A. M. (2017). *Defense Diplomacy: Its Concept and Implementation in Indonesia*. Jakarta: Center for Defense and Security Studies.

Stockholm International Peace Research Institute SIPRI. (2023). *Military Expenditure Database*. Retrieved from <https://www.sipri.org/databases/milex>

Tucydide. (2003). *Strategic Defence Review*. London: UK Government.

Wibowo, F. (2018). Geopolitical and Geostrategic Competition in the Indopacific Region. *Journal of International Studies*, 2(1), 23-34.

Worldmeter. (2023). Retrieved via <https://www.worldometers.info/gdp/gdp-by-country/> 15 December 2023 by Sri Patmi