

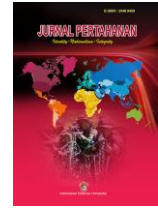


Jurnal Pertahanan

Media Informasi tentang Kajian dan Strategi Pertahanan yang Mengedepankan *Identity*, *Nationalism* dan *Integrity*

e-ISSN: 2549-9459

<http://jurnal.idu.ac.id/index.php/DefenseJournal>



COSTLY-DEFENSE SYSTEMS VERSUS PRODUCTIVE INVESTMENTS: THE CASE OF SINGAPORE'S 1st GENERATION MILITARY BUILD-UP (THE 1960s-1980s)

Wirawan H. Wicaksono

Naval Staff and Command College

Ciledug Raya Street No. 2, South Jakarta, DKI Jakarta, Indonesia 12230

wirawan_hw@tnial.mil.id

Ruslan Arief

Naval Staff and Command College

Ciledug Raya Street No. 2, South Jakarta, DKI Jakarta, Indonesia 12230

ruslanarief01@gmail.com

Article Info

Article history:

Received : June 14, 2022

Revised : September 8, 2022

Accepted : December 29, 2022

Keywords:

Defense Systems,
Investment,
Military Build-up,
SAF,
Singapore

Abstract

Choosing a costly defense over an economically productive investment is always a nightmare for national policymakers. Despite the dilemma, Singapore came up as an anomaly with its decision in investing a remarkable amount of defense budget, reaching 4.5% of its GDP (Gross Domestic Product) and ranging around 15-30% of its annual government spending and still succeeding in developing its economy, while some do not. Therefore, drawing from what happened in the early period of Singapore's independence, this study aims to figure out how the country justified its decision to choose a costly defense investment over a productive investment during this period and how the Singapore government decided to spend almost 40% of its annual budget on defense. Through historical analysis and literature studies, this study finds that the decision to choose a costly defense investment over an economically productive investment is justifiable under specific circumstances: first, when a nation deals with threats that would cost the nation future and survivability; second, the ability to implement the policy effectively and efficiently; third, is the ability to set how much is enough, the top limit of defense investment; and fourth, the existence of potential economic benefits.

DOI:

<http://dx.doi.org/10.33172/jp.v8i3.1726>

© 2022 Published by Indonesia Defense University

INTRODUCTION

It has always been an endless debate about deciding what is more critical to a nation in

their peacetime, amidst pursuing defense capabilities or saving budget for investment and building up its economy.

Most defense strategists will support the development of advanced defense capabilities, while pacifist economists will prefer productive government spending to improve the nation's growth prospects and ensure robust economic infrastructure. The defense strategists always mention the infamous Roman phrase of *si vis Pacem para Bellum*, which means “if you want peace, you have to prepare for war”. History has proven the importance of protecting national interests from the mercantile era until the recent Syrian conflict. Moreover, defense strategists will emphasize that defense capability is crucial for providing a peaceful and stable situation for fast-economic development. On the other hand, economists will always come up with examples taken from the success of the western powers, the Soviets' collapse (Young, 2017), and North Korea's recent situation, to remind us about the consequences of developing military capability over the national economy.

Amongst this ongoing ideological conflict, Singapore's high defense investment, despite its early unfavorable circumstances as a new-born state in 1965, is an anomaly to the rest of the world. Singapore has uniquely been able to invest enormously in its defense while not being broken, economically, as shown in Tables 1 and 2, while also ensuring exponential economic growth. In 1968, Singapore's defense budget reached around 10% of its Gross National Product (GNP) and approximately 40% of its annual government spending, as stated by its first finance minister, Goh Keng Swee (The New York Times, 1968). This proportion of the defense budget is only comparable to the Communist Bloc countries. Modern-day Singapore is the top defense spender in Southeast Asia, what Singapore spends on its defense exceeds Indonesia's, the region's biggest economy. On average, Singapore's allocated defense budget is around 4.5% of its Gross Domestic Product (GDP) and ranges from around 15-30% of its annual government spending

(The World Bank, n.d.). Nevertheless, Singapore's economy steadily grew its GDP per capita, from \$540 in 1965 to \$58,770 in 2018 (The World Bank, n.d.). Why did Singapore's 1st generation leaders confidently bet its future on this path?

Table 1. Singapore's Defence Budget 1966-1996

Singapore's Defence Budgets, 1966-1996 Year	Defense Spending (\$millions)	Defense Spending as % of Govt Spending	Defense Spending as % of GDP
1966	36	6.8	1.1
1971	461	23.7	6.8
1976	670	23.2	4.6
1981	1498	21.9	5.1
1986	2152	18.8	5.5
1991	3440	21.5	4.6
1996	5878	21.4	4.5

Source: Huxley, 2001

Thus, this situation raises the question of how Singapore justified its decision to choose a costly defense investment over a productive investment during the early period of its independence, when it was economically, politically, and strategically unviable on its own (Huxley, 2001), and how the government of Singapore decided to spend a big chunk of its annual budget on defense. Understanding the answer to this question will provide us with what considerations justified Singapore's decision to pick a high-defense investment. Drawing from the broader Singapore Military studies literature, this study argues that Singapore's ability to complete its first-generation military buildup successfully was due to its acknowledgment of significant military investment would lead to big economic returns. Singapore had three main phases in developing its armed forces: 1G or 1st Generation (the 1960s-1980s), 2G or 2nd Generation (1980s-1990s), and 3G or 3rd Generation (1990s-2000s) (Wicaksono, 2020). The 1G phase was the most significant phase, where Singapore was dealing with unexpected independence,

along with several factors that put pressure on its security.

METHODS

This study utilized historical analysis, comparative studies, and case studies (Young, 2017) as primary methods through journals, government publications, books, news articles, and academic researches studies in examining the relationship between Singapore's military modernization conceptualization and implementation in the 1G or 1st Generation transformation phase with contemporary military modernization efforts in the neighboring countries. Overall, this study discusses what approaches Singapore took and how it differs from others, and what made Singapore's approaches justified yet so successful.

Data and information will be taken from Singapore's various defense-related publications from the 1950s to the present. The official speeches, defense data, and other related documents from other credible parties are also part of the comparative studies in this research. Additionally, analytical studies on collected data, related to regional issues, from credible regional and international media sources provide additional information. Literature on management, defense planning, strategic planning, innovation institutionalization, policy history, military strategic thinking, military innovation, and other related publications support the primary resources of study. Historical analysis is also part of the research process, to provide a better understanding of the relationships between variables.

RESULT AND DISCUSSION

This study will be divided into three sections, which will highlight the significance of Phase 1G development and its subsequent success. The first section examines Singapore's traumatic history and provides background on its perspective on defense capability development, which

was shaped by its natural constraints and traumatic history. The second section then explains why and how Singapore translated these circumstances into the decision to a high-defense investment approach in its military buildup effort. While the last part demonstrates why Singapore's approach is justifiable and, remarkably, has worked. This decision was made based on two distinctive considerations in its 1G phase: first, there was national urgency to build an armed force against internal and external threats, almost from scratch, as a result of the British Forces' withdrawal; and second, also the myriad benefits to its marketplace arising from the Singapore high-defense investment, which stimulates its well-performing economy.

Singapore's Traumatic History

Singapore's traumatic experience was caused by regional political dynamics, persecuted by the bigger Malay ethnic (Huxley, 2001) combined with the British Forces' withdrawal which led to the national urgency to build an armed force. Singapore has a long history as a British Colony with its predominantly Chinese immigrant population. Singapore is an island city-state at the tip of the Malayan peninsula, surrounded by two bigger Malay Muslim-dominated states as its immediate neighbors, Malaysia and Indonesia. Singapore has about 3.5 times the territory of Washington, D.C., and is populated by around 6 million people (CIA, 2022).

Singapore previously was only a war-torn port city with a small domestic market, without hinterland and natural resources. This island city-state was powerless, vulnerable, and defenseless, yet struggling with its social, political, and economic problems, as a newborn country in the mid-1960s. Also, social issues such as public housing, sanitation, and unemployment became part of the newborn country's early struggle. As mentioned by Lee Kuan Yew, Singapore

was economically, politically, and strategically unviable on its own (Huxley, 2001). It lacked military-strategic depth, manpower, experience, assets, and capability. At its independence, the British left two battalions, parts of the Singapore Infantry Regiment (SIR), as the only element of the island city-state's armed forces, which comprised around 700 troops who were not citizens of Singapore (Huxley, 2001). Singapore had almost nothing to provide stability, as it had no Air Force, Navy, or proper Army (Tan, 1999). Singapore also experienced a traumatic political and ethnic sentiment (anti-Chinese sentiment from the majority, the Malaysian Malay) while still joining the Malaysian Federation and aggression from Indonesia, with its *Konfrontasi Dwikora* (Indonesian aggression toward the establishment of Malaysia) campaign in the early 1960s. Therefore, on August 9, 1965, the parliament of Malaysia voted for a constitutional amendment expelling Singapore from the federation. However, the expulsion did not change Singapore's security perspective of seeking survivability, as S. Rajaratnam, Singapore's first foreign minister, stated that an independent Singapore had a "near-zero chance of survival—politically, economically, or militarily" (Raska, 2020). This perception was based on the fact that Singapore is located in a volatile region vulnerable to anti-Chinese sentiment from its immediate neighbors (Malaysia and Indonesia), which had been proven to easily spill over to and disrupt the stability of Singapore's internal security. On the other hand, the British forces' premature withdrawal, in the early 1970s, made Singapore even more defenseless and vulnerable against internal and external threats.

Singapore, thus, experienced a humble start as a nation, and traumatic ethnic violence occurred between 1950 - 1969. Singapore experienced its first major outbreak of ethnic violence between Malay and Chinese in 1950, known as the Maria

Herthog riot. It was caused by a custody rights dispute between the foster mother and biological parents over a 13-year-old Dutch girl. The second one was the Maulid riot, anti-Chinese violence on a Muslim holiday, and again a spillover of violence in 1969 from another anti-Chinese riot in Kuala Lumpur (Huxley, 2001).

These riots have heavily influenced the Singaporean political and defense perspective ever since. Thus, Singapore's initial assessment found that this predominantly Chinese island city-state had ethnic violence as its internal primary concern, and two other big Muslim-Malay dominated countries, Malaysia and Indonesia, as their external concerns (Big Think, 2012). Nevertheless, any disruption in the Malacca Strait would cost Singapore its main living source, the sea lanes of communication (SLOC) from the Indian Ocean to the South China Sea, which also should be addressed as a concern. Singapore's behavior seems to reflect most of the international politics realists' characteristics:

1. Self-interest. Singapore's "secret affair" with Israel despite the regional sensitivities.
2. Survival-seeking and Competition which are based on the Singapore Government's (People Action Party) political ideology of survival and the concept of achievement.
3. Fear which is based on the assumption of living between the sea of Malays, Malaysia, and Indonesia.
4. Power and Anarchy. Singapore's forward defense and its efforts to achieve massive retaliation capabilities.
5. Conflict.
6. Mistrust (including allies). Singapore's defense policy which tends to be more self-reliant due to the existence of Malaysia in the FPDA (Huxley, 2001)
7. Indifference to justice/morality.
8. Pragmatism. Lee Kuan Yew's opinion of people will easily choose bread on their table over freedom of speech (Meierding, 2019)

The Singapore circumstances were worsened by the early withdrawal of British forces in the early 1970s, a withdrawal that left Singapore with no option but to rely on itself. Around the 1960s, the United Kingdom also provided financial, technical, and direct defense assistance through its Far East Command. Due to its status as a British ex-colony, Singapore's defense heavily depended on the British Force, until March 1976, when the last British soldier stationed left Singapore (Murfett, 2001). The United Kingdom (U.K.) came up with the concept of the Five Power Defense Agreement (FPDA: U.K., Australia, New Zealand, Malaysia, and Singapore) to compensate for its forces' withdrawal. However, due to the existence of Singapore's most likely adversary, Malaysia, in the FPDA it considered even more seriously a 'self-reliant' force posture (Wicaksono, 2020). This is a posture specifically designed to address any regional threats independently, disregarding Singapore's constraints and unfavorable circumstances.

That said, Singapore's experience and history of Southeast Asia's political dynamics, particularly from its immediate neighbors, Malaysia, and Indonesia, led Singapore to a national urgency of building up a big-armed force. As Andrew Tan mentioned, this armed force is required to be used either as a deterrent or as an active national defense (Tan, 1999), defending its national interests, such as the protection of Singapore's SLOC, the Malacca Strait (Strait Times, 1995), the main source of Singapore's economy.

Singapore's Approach

Despite its clear sense of national urgency, it still, Singapore had to deal with some constraints, starting from the lack of strategic depth (buffer zone between a country's point of interest and its adversaries), human resources, and experience, as well as defense assets. However, Singapore took the matter of its national urgency very seriously, due to the

pursuit of its future and survivability. Therefore, despite its constraints, Singapore's leaders decided to build up its armed forces at all costs, in a smart way.

Apart from pursuing its national urgency, Singapore did approach India, Egypt, and Israel to seek military assistance. Still, only Israel responded to their request and become Singapore's defense adviser. Having a lot of things in common, such as being a small minority country surrounded by hostile and more prominent countries as their primary source of threats, Singapore and Israel quickly got along with each other. This idea was even emphasized by Lee Kuan Yew himself, as he stated that, "Singapore, with its predominantly Chinese population, would if independent on its own, become Southeast Asia's Israel with every hand turned against it (Leifer, 1988)". The Israelis' military advisors assisted Singapore in the development of training methods, doctrine, combat tactics, operational, procedures, logistic management, intelligence, and so on. Singapore quietly imported Israeli military advisors, who began arriving toward the end of 1965-1974, and at its peak, was around 45 personnel strong (Huxley, 2001).

The result of this 'secret affair' was the establishment of a well-designed military, the Singapore Armed Forces (SAF). Through its military advisers' national defense strategy, Singapore systematically adopted the Deterrence and Diplomacy Strategy. This strategy was an effort to maintain and develop a deterrent capability aimed at preventing threats from arising in the first place (Huxley, 2001). Singapore has attempted to employ this strategy through the forward defense and massive retaliation capabilities, which include a pre-emptive defense approach while encouraging diplomacy in the first place. Singapore's end state has been to ensure its survivability and security through deterrence and diplomacy. The Singapore leaders also believed that they should

compensate for their constraints through technology and knowledge to achieve an effective deterrence. Achieving a significant superiority over their adversaries is a must or so-called quality over quantity.

The first phase of SAF capability development, from the 1960s-1980s, also known as 1st generation (1G SAF), was symbolized as a ‘poisonous shrimp’, which means that SAF design was to be ‘easy to swallow but impossible to digest’ (Raska, 2020). SAF sought to achieve internal stability and to defend Singapore from behind its coastal line and then the adversaries would be welcomed by a close quarter-combat in Singapore's urban areas. This strategy showed the SAF's limited capability, excluding the offensive option—its lack of manpower, firepower, and mobility. In this period, the British, Australian, and New Zealand forces (under the Five Power Defence Arrangement or FPDA framework) would provide military assistance (Raska, 2020).

In the first phase, 1G SAF (the 1960s-1980s), Singapore's perception of insecurity was the major driver of its capability development, as shown in Table 2.

Table 2. 1st Generation of Singapore Armed Forces—Summary of Characteristics.

Strategy	1G SAF ‘Poisonous Shrimp’ late 1960s – early 1980s
Threat Designed to Addressed	Conventional military threats
Concept of Operation	Basic defense and survival: <ul style="list-style-type: none"> • Prevent successful invasion • Maintain internal stability
Type of Capability	Passive Deterrence: <ul style="list-style-type: none"> • Strong defensive capability (Infantry-centric) • Fight in your territory Cause substantial damage to enemy
Primary Executing Service	ARMY

Source: Yong, 2017

Singapore, under Israeli assistance, defined that its main concern was to realize its concepts of operation, prevent a successful invasion, and maintain internal stability. These concepts of operation were based on Singapore's attempt to improve its deterrence by raising, as stated by Pak Shun Ng, "an aggressor's cost of attacking Singapore to such an undesirable level that no country would consider invading it (Ng, 2005)". To perform the concept of preventing a successful invasion, firstly Singapore came up with the decision of possessing a strong defensive capability, which relied on infantry force. This stage started with the implementation of the Israeli model of national service, followed by the active reservist duties, and some selected personnel sent to Israel for training. This policy has given Singapore a very large and well-trained number of military personnel, mostly the Army. Second, this armed force had to be able to fight properly in its territory while causing substantial damage to the invader. To equip its newly-formed military forces, Singapore acquired around 75 ex-Israeli AMX-13 light tanks, more than 200 units of U.S.-made V-200 Commando armored personnel carriers (APC), and a bit later on, about 80 ex-U.S. A4 Skyhawk and ex-British Hunter fighter aircraft for its air force (Hanna, 1973). Consequently, Singapore had to focus its early military development on building up its army, while developing the embryo of other services and bearing the huge cost of its military buildup. Singapore's defense spending reached Approximately 11 percent of its GNP which reached around 40 percent of government expenditure in the late 1960s (Hanna, 1973).

Singapore's Justification

One way Singapore justified its costly military buildup was Singapore's insecurity in the 1960s, which led to the decision to employ the Forward Defense and Massive Retaliation strategy, which require a significant amount of investment. Due to

Singapore's limitations (population, natural resources, territory, etc), this decision was achievable only through the technological and knowledge approach. To achieve an effective deterrence, this decision cost a big chunk of Singapore's fortune, approximately 40% of its annual government spending in the 1960s (Hanna, 1973). This decision has taken upon one main reason that the cost of a high-defense investment is a more acceptable way compared to the cost of the fall of the Republic of Singapore. This consideration was based on the assumption of the imminent threat from two bigger Malay-dominated nations in the 1960s, added to the early British Force withdrawal. To prevent another Fall of Singapore the country requires first, a proper strategy addressing Singapore's lack of strategic depth, and second, a battle-proven strategy. Singapore's lack of strategic depth means that it is unviable to fight inside Singapore's territory due to two main reasons (Huxley, 2001):

1. The lack of buffer-zone space between the enemy's forces and Singapore's point of interest (POI), where all is concentrated in a very small space. The enemy could reach it the very first time they land on Singapore's shore.
2. The size of Singapore's territory means that even the smallest destruction would cost too much for its survivability, and a total wipeout is almost imminent right after the arrival of the enemy force in Singapore's territory, as happened during the Japanese occupation in World War II.

The acknowledgment of Forward Defense & Massive Retaliation employment come from the Israelis' success against its Arab neighbors. Moreover, a passive defense strategy is an unviable strategy since it will only delay another Fall of Singapore. This strategy will not significantly reduce the power of aggressors. Therefore, the cost of a high-defense investment has definitive advantages compared to the cost of the fall of the Republic of Singapore. Moreover,

Singapore's decision to prioritize its army during the 1st generation development is proof of a well-calculated policy since the army is the least expensive service to equip compared to the navy and air force.

The second justification is the assurance of accountability which comes from the implementation that is done effectively and efficiently, spending where the money should go. First, a huge amount of the budget should be spent on essential sectors of building an armed force, such as overseas education and training, high-advanced defense system procurement, and building up the embryo for the Singapore defense industries. Moreover, the building up of Singapore's defense industries will lead to not only foreign exchange savings from self-sufficiency but also foreign exchange generation, due to the potential exports in the future. Second, the ability to perform efficiently in military operations. For example, the finance minister, Goh Keng Swee, decision ordering all military officers to use the ordinary car over the Land Rover utility vehicle for their daily operation, since the Land Rover has a higher per kilometer operational cost. The employment of a Citizen Army, where Singapore's armed forces rely on 80% conscripts while maintaining a considerable reserve force (Chu, San, & D'silva, 2022). This option provides Singapore with a massive amount of military manpower resources without spending a lot of budgets. Another example has shown that Singapore does not waste money on something that has more economical alternatives, the application of a system that could quickly produce combat-ready soldiers, which again saves a lot of time and money. This system is quite essential since it could rapidly mobilize extensive reserve forces in times of crisis (Mosier, 1993).

The third justification is the ability to set how much is enough in defense spending (Enthoven & Smith, 2005). As mentioned by Lee Kuan Yew, unless you are a Great Power when you talk about

international politics, it means that you are talking about your neighbors (INSEAD, 2012). Therefore, a self-reliant Singapore Armed Forces (SAF) will only be designed to overcome Singapore's regional threats. Beyond that level, Singapore has a diplomatic solution of Great Power patronage, allowing a foreign military force to be based at Singapore's military facilities. Moreover, this approach will not only save the amount of money while assuring no one will possess any threat to Singapore, but it also will make money from the hosting fees. The high-defense investment approach can be justified as long as a country has specific circumstances and follows specific steps in implementing the policy such as a well-performing economy and likely the myriad benefits created by the Singapore high-defense investment in its marketplace. Singapore did have a considerable economic circumstance, for instance, it had remarkable economic growth around its independence period, as shown in Table 3. Singapore scored a prospective GDP growth ranging from 7.5-11.6% around its independence time, 1962-1967.

Table 3. Singapore's GNP 1962-1967

No	Year	GNP (\$)	GNP per Capita	Growth Rate
1	1967	1,300,000,000	\$660	11.59%
2	1966	1,150,000,000	\$590	10.02%
3	1965	1,020,000,000	\$540	7.86%
4	1963	950,000,000	\$530	10.68%
5	1962	850,000,000	\$490	7.49%

Source: MacroTrends, n.d.

The last justification is the existence of potential economic benefits. It is believed by Singapore's leaders that possession of a self-reliant military force is not only an assurance of its survivability but also an assurance of providing a favorable circumstance for conducting economic activities as well as foreign investment in a stable Singapore (Benoit, 1973). Moreover, there is another example that shows the huge impact of military

activities and spending on the national economy, such as when in 1960 the British military task force in Singapore (find the right nomenclature) spending generated around 25% of Singapore's GDP (Murfett, 2001).

The point of departure for this debate is typically Benoit's studies on the effect of defense spending on economic growth in developing countries from 1950-1965, roughly the period corresponding to the wave of decolonization in the Third World (Benoit, 1973). Benoit's studies found that developing countries with heavy defense spending generally had the highest growth rates, while those that spent the least on defense had the lowest growth rates.

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

Despite the clear example shown from the case of the Soviet collapse and the failure of the North Korean economy, Singapore's decision to choose a costly defense investment over an economically productive investment is still justifiable under specific circumstances:

1. When a nation deals with threats that would cost the nation future and survivability.
2. The ability to implement the policy effectively and efficiently.
3. The ability to set how much is enough, the top limit of defense investment; and fourth, the existence of potential economic benefits.

However, this research has not answered an interesting question. Would Singapore's justifications apply to other countries? Such as its immediate neighbors? Therefore, this question emanates a possibility for potential further research.

REFERENCES

- Benoit, E. (1973). *Defense and Economic Growth in Developing Countries*. Lanham, MD: Lexington Books.
- Big Think. (2012, April 24). *Kishore*

- Mahbubani: Freedom of the Press in Singapore.* Retrieved from <https://www.youtube.com/watch?v=u8sykihdoi>
- Chu, W., San, C. S., & D'silva, J. (2022). *Winston Choo, a Soldier at Heart, a Memoir.* Singapura: Landmark Books Pte Ltd.
- Enthoven, A. C., & Smith, K. W. (2005). *How Much is Enough? Shaping the Defense Program 1961-1969.* Santa Monica: RAND Corporation.
- Hanna, W. A. (1973). *The New Singapore Armed Forces (Fieldstaff Reports: Asia: Southeast Asia Series).* New York: American Universities Field Staff.
- Huxley, T. (2001). *Defending the Lion City: the Armed Forces of Singapore.* Crows Nest: Allen & Unwin.
- INSEAD. (2012, August 23). *Lee Kuan Yew Speaking at INSEAD in 2007 on Leadership and Global Politics.* Retrieved from <https://www.youtube.com/watch?v=1vblzdz9ttm>
- Leifer, M. (1988). Israel's President in Singapore: Political Catalysis and Transnational Politics. *The Pacific Review*, 1(4), 341–352. <https://doi.org/10.1080/09512748808718784>
- MacroTrends. (n.d.). Singapore GNP 1962-2022. Retrieved September 8, 2022, from <https://www.macrotrends.net/countries/SGP/singapore/gnp-gross-national-product>
- Meierding, E. (2019). *International Relation-Clasical Realism.* Monterey: Naval Postgraduate School Lecture.
- Mosier, J. D. (1993). *The National Interests of Singapore: A Background Study for United States Policy.* California: Naval Postgraduate School.
- Murfett, M. H. (2001). *Between Two Oceans: A Military History of Singapore from the First Settlement to Final British Withdrawal.* Singapore: Times Academic Press.
- Ng, P. S. (2005). *From "Poisonous Shrimp" to "Porcupine": an Analysis of Singapore's Defence Posture Change in the Early 1980s.* Canberra: National Library of Australia.
- Raska, M. (2020). *Military Innovation in Small States: Creating a Reverse Asymmetry.* London: Routledge.
- Tan, A. T. H. (1999). Singapore's Defence: Capabilities, Trends, and Implications. *Contemporary Southeast Asia*, 21(3), 451–474.
- The New York Times. (1968, December 4). Singapore Plans a Big Build-Up Of Military Force Over 10 Years. Retrieved September 8, 2022, from <https://www.nytimes.com/1968/12/04/archives/singapore-plans-a-big-buildup-of-military-force-over-10-years.html>
- The World Bank. (n.d.). Military Expenditure (% of GDP) - East Asia & Pacific, Singapore. Retrieved September 8, 2022, from https://data.worldbank.org/indicator/ms.mil.xpnd.gd.zs?locations=z4-sg&name_desc=true
- Wicaksono, W. H. (2020). *Strategic Planning or Innovation Institutionalization? The Case of Singapore Armed Forces' Modernization.* Naval Postgraduate School, California.
- Yong, J. R. L. (2017). *Why Keep Changing? Explaining the Evolution of Singapore's Military Strategy Since Independence.* Naval Postgraduate School, California.
- Young, T.-D. (2017). The Failure of Defense Planning in European Post-Communist Defense Institutions: Ascertaining Causation and Determining Solutions. *Journal of Strategic Studies*, 41(7), 1031–1057. <https://doi.org/10.1080/01402390.2017.1307743>