

## The Comparison of Indonesian and Singaporean Defence in Regional Security from Critical Analysis Perspective

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### ABSTRACT

Singapore and Indonesia's defence strategies are shaped by significant differences in terms of area and length of coastline. This research uses a case study approach by analysing Global Firepower (GFP) data to compare the military strength of the two countries in 2024. The main objective of this research is to identify and present relevant information regarding the military strength of Singapore and Indonesia based on GFP data.

## INTRODUCTION

On 8 August 1967, the Association of Southeast Asian Nations (ASEAN) was formed in Bangkok, Thailand. The founding members, represented by the Foreign Ministers of Indonesia, the Philippines, Singapore, and Thailand, along with the Deputy Prime Minister of Malaysia, were determined to create a regional partnership. Although economic growth, social progress, and cultural development were identified as key objectives, a priority not mentioned by these leaders was ensuring regional security. The organisation aims to control conflict, ease the management of fragile political systems, and reduce the vulnerability of Southeast Asian countries. Although promoting economic and social relations is presented as an ostensible goal, ASEAN's foundation is built on the desire for regional stability. In cooperation, countries should strive to reach solutions that benefit all sides. This requires open and transparent communication as well as a commitment to resolve disputes peacefully. Although each country has its own goals and interests, it is natural for competition to occur in various fields, such as economics, politics, and the military. On the other hand, globalisation and global challenges such as climate change and pandemics require countries to work together. Collaboration can lead to more effective and efficient solutions than unilateral action (Leifer, 2013).

ASEAN countries are unique and have their own ways of solving problems. On the issue of defence, there is something interesting and very inspiring that Singapore has done about how Singapore can grow rapidly after Britain's colonisation, even though Singapore only has fewer human resources than Indonesia (Leifer, 2013). We, as Indonesian citizens, have a lot to learn from Singapore. Singapore's history is complex, despite the undeniable positive impacts of British colonialism, the island nation faced significant challenges upon gaining independence in 1968. Britain's military withdrawal left Singapore vulnerable with no established air force or navy and a fledgling army made up primarily of Malay personnel, Singapore lacked a robust defence system. The economic impact was also substantial, the closure of Britain's massive military base resulted in the loss of 40,000 jobs and a significant chunk of Singapore's national income. Furthermore, the young nation found itself exposed to regional tensions, including maritime disputes with neighbours and even armed conflict with Indonesia during their "Konfrontasi" era. Until to the late 1960s, Singapore lacked the capacity to manufacture defense-related goods. The election of Lee Kwan Yew and his resolve to protect independence to the greatest extent possible through indigenous capabilities marked a turning point. When political reasons take priority over strategic alliances, the arbitrary imposition of arms embargoes by foreign countries would not threaten sovereignty. These immediate challenges forced Singapore to prioritise self-reliance and rapid development, ultimately shaping the nation's path to becoming the prosperous and secure country it is today (Yaacob, 2022).

Indonesia have a long history since the days of the Nusantara kingdoms to achieve independence and maintain the independence of the Unitary State of the Republic of Indonesia until today. Indonesia has a larger population than Singapore. Indonesia has an advantage in terms of the number of armed forces

personnel; according to the Global Fire Power website, Indonesia ranks 15th while Singapore ranks 68th in the world in terms of military strength, but Singapore has an advantage in other fields, namely technology. The search for technological security was facilitated by a parallel policy emphasis on promoting synergistic civil-military industrial and technological absorptive capacity, especially high-level R&D capability, which has powered the defence and aerospace sectors into scaling higher technology stages (Laksmana, 2017).

## LITERATURE REVIEW

Singapore recognized the need for a strong defense industry early on. This process began in 1967 with the establishment of Chartered Industries, which later became part of the state-owned Singapore Technologies (ST) Corporation. With the founding of Chartered Industries in 1967, the first of three divisions that would eventually merge to form the state-owned Singapore Technology (ST) Corporation in 1989, the process of developing the military industry got underway. Sheng-Li Holding was established by the Singaporean government in 1974 to handle and strategically oversee the fast-growing defense-industrial base of the island nation. In addition to ground systems, the distinct and quickly changing naval and aeronautical entities were also the focus of policy. Launched in 1968, Singapore Shipbuilding and Engineering rapidly grew warship manufacturing through agreements for technology transfer to other countries (Matthews, 2023).

Singapore Technologies (ST) Holdings was the new name of Sheng-Li Holdings after it underwent a restructuring in 1990 with the goal of fostering organisational synergies. The main goal of this reorganisation was to make operations more commercial, and as a result, Temasek, the State Investment Company, took ownership of ST in 1994. ST quickly built a commercial portfolio encompassing financial services, travel, telecommunications, and tourism through mergers and acquisitions. The military sector in Singapore was organised into a group known as ST Engineering (ST Engg) in an intentional effort to broaden its scope and integrate its operations with relevant commercial ventures within the growing ST conglomerate. ST Engg became a publicly listed company, with Temasek Holdings owning a 51 per cent controlling share. ST Engg is presently structured into four major companies, namely – ST Aerospace, ST Marine, ST Electronics and ST Kinetics. Aerospace has been the primary source of revenue and net profits for the holding company, with ground systems, electronics, and marine coming in second and third. It's important to note that ST Engg has changed from being a domestic corporation to an international military company with activities all over the world. With 22,000 employees across 22 countries, ST Engineering brought in S\$6.62 billion in revenue and S\$511.9 million in profit in 2017. The business is a success story; it is rated 40th out of the top 100 defence businesses in the world (Matthews, 2020).

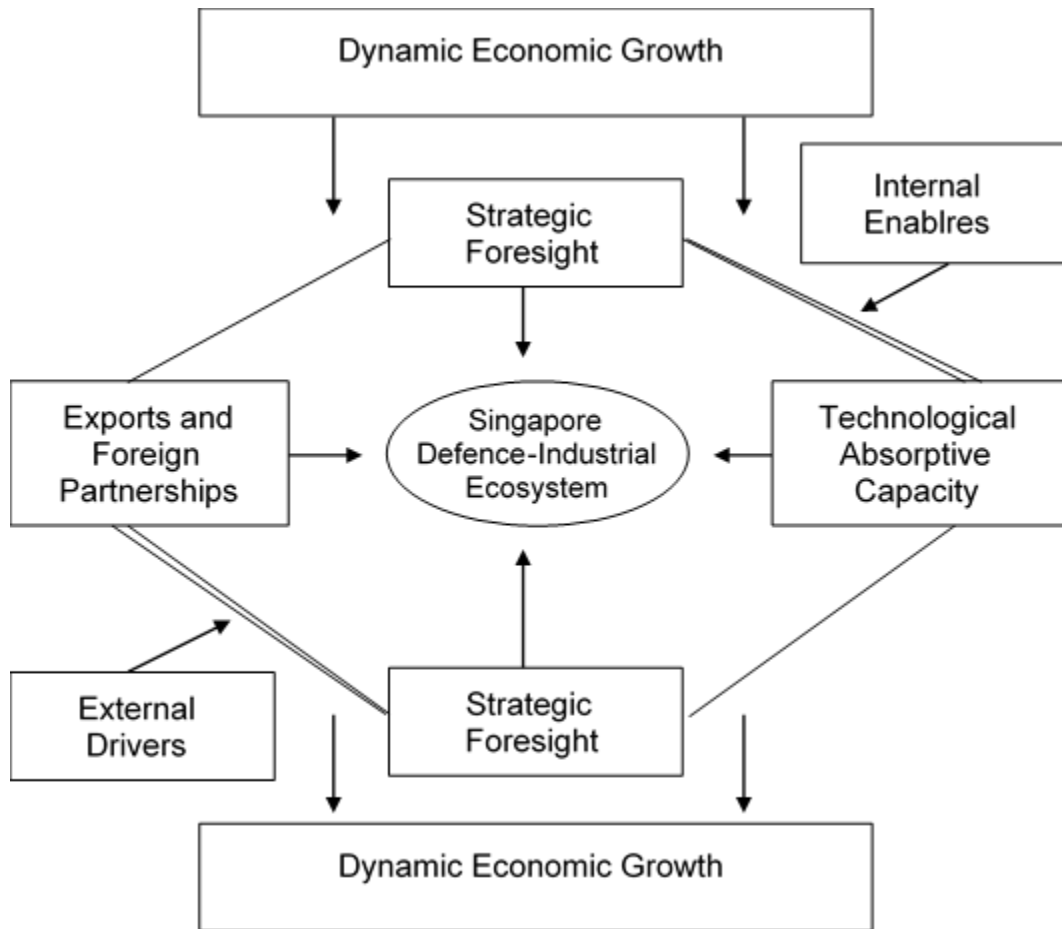


Figure 1. Constituent Components of Singapore’s Defence-Industrial Ecosystem (Matthews, 2020)

## METHODOLOGY

A study was conducted to report a literature analysis that focused on analysis of Global Firepower, Global Firepower is a website that tracks military power information from 145 countries in the world. We identified and analyse the comparison of Singapore and Indonesia Military Strengths in 2024. The main purpose of this research is to identify and present relevant information without conducting experiments or direct observation.

## RESEARCH RESULT

Singapore and Indonesia's defence strategies are shaped by significant differences in terms of area and length of coastline. While Singapore's compact size makes it vulnerable to invasion, it also allows for the concentration of military resources within a smaller perimeter. Despite its shorter coastline, Singapore maintains the need for a strong navy to protect important shipping lanes and surrounding waters. Moreover, its limited airspace allows for efficient utilisation of its air force in defence operations. In contrast, Indonesia's vast landmass of 1,904,569 km<sup>2</sup> demands a substantial military presence to secure its vast borders. With 54,716 km of coastline, Indonesia relies heavily on a robust

navy to effectively patrol its territorial waters. These geographical differences give rise to different defence priorities; Indonesia prioritises the defence of its vast territory, while Singapore focuses on maintaining a technologically advanced and well-equipped military force to guard its smaller territory.

## 1. Geography

Table 1. Comparison of Singapore and Indonesia Geography  
 (Global Firepower, 2024)

No.	Aspect	Singapore	Indonesia
1	Square Land Area	719 km	1.904.569 km
2	Shared Border	None Island	2.958 km
3	Coastline	193 km	54.716 km
4	Waterways	0 km	21.579 km

Singapore and Indonesia have significant differences in land area and coastline length, which can influence their defense strategies. Singapore's small size makes it vulnerable to invasion. However, it also allows them to focus their military resources on a smaller area. Singapore has a shorter coastline, but it still necessitates a well-equipped navy to defend its vital shipping lanes and surrounding waters. They can also leverage their air force more effectively due to the smaller airspace they need to defend. Indonesia has a much larger land area (1,904,569 km<sup>2</sup>) compared to Singapore (719 km<sup>2</sup>). This necessitates a larger military force to defend its land borders. Indonesia also has a much longer coastline (54,716 km) than Singapore (193 km). This necessitates a strong navy to patrol its territorial waters. Overall, the geographical differences between the two countries lead to different strategic defense priorities. Indonesia needs a large military to defend its vast territory, while Singapore can focus on a more technologically advanced and well-equipped force to defend its smaller size.

## 2. Man Power

Table 2. Comparison of Singapore and Indonesia Man Power  
 (Global Firepower, 2024)

No.	Aspect	Singapore	Indonesia
1	Total Population	5.975.383	279.476.346
2	Available Manpower	3.883.999	136.943.410
3	Fit-for-Service	2.605.267	113.746.873
4	Reaching Mil. Age Annually	65.729	4.751.098
5	Active Personnel	51.000	400.000
6	Reserve Personnel	252.500	400.000
7	Paramilitary Forces	12.000	250.000

Indonesia has a significantly larger total population and available manpower pool compared to Singapore. This translates to a much larger potential military force for Indonesia. Indonesia's population is 47 times larger than Singapore's, and Indonesia has 35 times more manpower available for military service, with roughly 44 times more people fit. However, military strength isn't just about total manpower. Singapore employs a well-equipped and technologically advanced professional military, While Indonesia has a much larger potential military force due to its manpower advantage, Singapore's smaller, professional force may be able to leverage advanced technology and training to partially offset the manpower gap.

### 3. Air Power

Table 3. Comparison of Singapore and Indonesia Air Power  
(Global Firepower, 2024)

No	Aspect	Singapore	Indonesia
1	Total Aircraft	247	474
2	Fighter Aircraft	100	41
3	Dedicated Attack	0	37
4	Transports	9	68
5	Trainers	36	130
6	Special-Mission	9	17
7	Aerial Tankers	11	1
8	Helicopters	87	210
9	Attack Helicopters	18	15

Singapore appears to prioritise air defence and potentially achieving air superiority in a regional conflict. Fighter aircraft are crucial for these missions. Singapore may have invested more heavily in advanced fighter jets than Indonesia. Given Singapore's small size, airpower is likely a critical part of their overall defence strategy. However, Indonesia has more total aircraft than Singapore. This may indicate a larger and more well-rounded Indonesian airforce, including transport aircraft, trainers, and helicopters, which are not shown in the detail provided about fighter aircraft. Indonesia has more helicopters than Singapore. Helicopters can be vital for troop transport, search and rescue, and close air support. Overall, while Singapore has a significant advantage in fighter jets, Indonesia has a larger and more well-rounded air force overall. This suggests different strategic priorities. Singapore may be prioritising air defence and achieving air superiority, while Indonesia may have a more general-purpose air force.

Indonesia's defensive hardware is of inadequate quality; some of it cannot be used because it is second-hand, requires labor-intensive and costly maintenance, and has non-replicated spare parts. Singapore can purchase defensive equipment from foreign nations to support its national defence because

it has a larger defence budget than Indonesia. The Stockholm International Peace Research Institute (SIPRI) reports that Singapore has maintained a commitment to devote roughly 3% of its GDP to military endeavours in recent years. And the richest country in Southeast Asia is planning to spend 10% more on defence, or around \$11.7 billion, between 2018 and 2022. Singapore has traditionally prioritised strategic modernization of its military, supported by steady funding.

#### 4. Land Power

Table 4. Comparison of Singapore and Indonesia Land Power  
 (Global Firepower, 2024)

No	Aspect	Singapore	Indonesia
1	Tank Strength	170	313
2	Armored Vehicles	8.318	11.604
3	Self-Propelled Artillery	48	153
4	Tower Artillery	89	414
5	Mobile Rocket Projectors	24	63

Singapore has a larger number of main battle tanks (MBTs) than Indonesia. However, Indonesia has more armoured vehicles. Singapore focuses on armoured fighting for defence purposes. MBTs are well-suited for conventional warfare and offer strong firepower. Indonesia prioritises mobility for its larger land force. Armoured vehicles can be more versatile than MBTs for patrolling and counterinsurgency operations. The number of military vehicles is just one factor in landpower, other consideration are military training and experience, terrain and geography, logistics and support capabilities.

#### 5. Naval Power

Table 5. Comparison of Singapore and Indonesia Naval Power  
 (Global Firepower, 2024)

No	Aspect	Singapore	Indonesia
1	Fleet Strength	43	333
2	Submarines	7	4
3	Figates	6	8
4	Corvettes	6	25
5	Patrol Vessels	15	205
6	Mine Walfare	4	13

Indonesia has a significantly larger fleet than Singapore, but Singapore has a larger number of submarines relative to the overall fleet size. Submarines are valuable for defence, covert operations, and potentially achieving sea denial. This suggests a few things about their naval power: Singapore appears to prioritise a technologically advanced navy capable of anti-submarine warfare, potentially countering a larger regional navy. Indonesia's larger number of ships suggests a

navy capable of patrolling its extensive territorial waters and guarding against threats like piracy. Overall, Singapore has a smaller but more modern fleet focused on specific capabilities, while Indonesia has a larger fleet for broader missions.

## **DISCUSSION**

The Singapore's defence ecosystem occurs inside the total defensive space. In 2006, Quek Tong Boon, the Deputy Defence Secretary for Technology and Transformation, initially proposed the idea. He described it as the nation's military equipment consumers, developers, and manufacturers collaborating and evolving together. Users, or SAF, are involved in decisions on system design, logistics, and other related matters. Quadrilateral stakeholder relationships including the government's policymakers and financiers, the defence industry's manufacturers, the network of trade partners and collaborators, developers, and the maze of defense-related R&D groups (Matthews, 2020).

ASEAN countries have their own way of dealing with problems, especially on defence issues. Singapore has a unique defence-industrial ecosystem, which is an outgrowth of national security. The model was probably impacted by Japan's all-encompassing security strategy, which has been in effect since the start of the Meiji period (1868–1912) in the 19th century. Singapore implemented the model with many developments as it also faces national security challenges, the Singapore's Total Defence concept includes social and psychological defence components representing the country's many ethnic minority groups in addition to the traditional elements of economic, civil and military defence. Indonesia also has a unique way of addressing defence issues (Matthews, 2023).

Singapore's approach to national security takes a holistic view, emphasizing economic strength, technological advancement, and military preparedness. This allows them to fund the high costs of defense and aerospace development through a robust economy. A key policy has been fostering collaboration between civilian and military industries, specifically by building strong R&D capabilities. This synergy has propelled both sectors to higher technological levels. At the heart of this ecosystem sits ST Engineering, a major player driving market expansion through innovation and competition. Their success is further bolstered by technology transfer programs that infuse advanced knowledge into Singapore's industrial base. While defense exports haven't yet reached their full potential, ST Engineering is building its international brand and focusing on specialized markets. This includes not only high-value upgrades and conversion programs but also broader security solutions in space, aerospace, and artificial intelligence. The overall success of Singapore's defense industry is attributed to its well-defined policy framework and its commitment to continuous improvement through strategic partnerships. There's every reason to believe this model will continue to thrive.

The Singapore Armed Forces (SAF)'s overall mobilised manpower strength surpasses that of other larger Asia-Pacific nations, such as Australia, Malaysia, and Japan, notwithstanding Singapore's tiny population (Faiz Muhammad, 2023). The military of Singapore is incredibly professional and well-

trained, enabling the SAF to "punch above its weight" in terms of combat. This is a factor that will become more significant in the coming years because Singapore's national service intake will decrease due to dropping birth rates. Singapore has a robust reserve force of operationally trained professionals who can be quickly mobilised in times of national emergency. In regular times, however, they can carry on working in the civil economy and contribute positively to the development of the country (Matthews, 2023).

The SAF is organised into preparedness tiers, individuals at the top level can respond quickly and efficiently to terrorist attacks or humanitarian crises. The mobilisation response rate is consistently at least 95%, and units are typically operationally deployable within a few hours, suggesting that the system is functioning properly. Operation "Flying Eagle," Singapore's humanitarian effort following the 2004 Boxing Day tsunami, exemplifies this capacity for quick decision-making. The SAF had standby teams prepared for action within 24 hours, a C-130 transport jet carrying relief and medical supplies was sent to Medan, Sumatra, within 48 hours, and within 72 hours, two Chinook heavy-lift helicopters and an advance medical team were sent to Medan. Two Super Puma helicopters were then sent to Phuket Island, Thailand. Three helicopter landing ships and the Republic of Singapore Ship Endurance were also sent, along with 470 specialised personnel, including medical, engineering, naval, and communications experts (Matthews, 2023).

## **CONCLUSIONS AND RECOMMENDATIONS**

Singapore's unique defence-industrial ecosystem, influenced by Japan's historical strategy and adapted to the country's social makeup within the Total Defence concept, fosters collaboration between military and civilian sectors for technological advancement. This holistic approach, driven by ST Engineering's market focus and strategic partnerships, positions Singapore's defense industry for continued success. While both Indonesia and Singapore prioritize regional security, their approaches differ significantly. Singapore's model, influenced by historical examples and emphasizing technological innovation through a collaborative ecosystem, stands in contrast to Indonesia's yet-to-be-specified approach. This comparison highlights the diverse security strategies within ASEAN, and further analysis is needed to determine the effectiveness of each in the face of evolving regional challenges.

## **ADVANCED RESEARCH**

Our research only analyses and compares the military power of Indonesia and Singapore based on Global Firepower, therefore further research should be able to analyse using SWOT Analysis or be able to make forecasts about threat and military power in Indonesia.

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