Trends and Effects of Arms Race or Arms Dynamics amongst ASEAN countries in the next decade

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Certificate of Research Paper

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Abstract

Title : Trends and Effects of Arms Race or Arms Dynamic amongst ASEAN countries in the next decade

Field : Strategy

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There are perceptions of increasing military expenditure by all ASEAN countries, a "tic for tac" sequence of arms procurements by these countries, and military acquisition by Southeast Asian countries caused by China's rise and assertion over territorial claims in the South China Sea. These perceptions suggest an arms race is occurring in Southeast Asia.

Despite these perceptions suggesting signs of an arms race amongst Southeast Asia countries, this research will conclude that that it was not an arms race in the last decade. It will also suggest that; due to the peaceful and stable geo-political environment existing in Southeast Asia, coupled with the move towards tighter economic and security cooperation, and the fact that defence spendings were consistent with slow-paced military modernization programs, the activities that took place in the last decade is of an arms dynamics. And ASEAN countries will continue to engage in an arms dynamic instead of an arms race in the next decade.

Preface

"World War I broke out largely because of an arms race, and World War II because of the lack of an arms race." - Herman Kahn (founder of the Hudson Institute and one of the preeminent futurists of the latter part of the twentieth century)

In August 2019, prior to starting National Defence College Course, I came across an online article "The arms race in Asia. Will force the United States to create a military Alliance with Russia and China?" After reading that article, coupled with many news commentaries that many ASEAN countries were acquiring new military equipment, it piqued my interest on whether an arms race is ongoing amongst ASEAN countries just like in Asia. Another fact about the military expenditure of all ASEAN countries has risen from USD24.6B to 40.7B from 2009 to 2018 also aroused my interest. That interest motivated me to choose this topic as my individual research for my course requirement.

I have been in the Singapore Armed Forces (SAF) for twenty nine years and have personally been involved in shaping and building the Armoured force of the SAF. One of the military acquisitions that I was intimately involved was the operationalisation of the Leopard Main Battle Tanks (L2SG), from the time we received the MBTs from Germany, upgrading of these tanks to the first L2SG company live firing exercise in Germany. My involvement as the Head General Staff, Headquarters Armour over two and a half years allowed me to appreciate SAF's approach to defence spendings and the rationale of military modernisation. But I can't say that convincingly that I understand the rationale for other ASEAN countries military spending and military acquisitions. It is in hope that this research effort will raise my awareness and appreciation of other ASEAN countries defence spendings and military modernisation programs.

The outcome of this research depended on analysis of both quantitative and qualitative data. For qualitative research, there are many materials out there to provide a comprehensive picture. As for quantitative data, there are a few good but expensive analysis of military expenditure and acquisitions, one example is the Stockholm International Peace Research Institute (SIPRI) Yearbook 2019 which costs GBP 100. Due to the inaccessibility to costly research publications, the challenge I faced was a laborious effort of compiling pure data of all ten ASEAN countries from 2009 to 2018 from the publicly available SIPRI Military Expenditure and Arms Transfers Databases to analyse any trends and effects. Additional effort was taken to compile data from USA, China, Japan, India, South Korea and Australia to make comparison between ASEAN countries and these countries.

This research on trends and effects of arms race or arms dynamics amongst ASEAN countries in the next decade was written with an intent to gain a better appreciation on the rationale and considerations of various ASEAN countries military expenditure and acquisitions. I believe that it is useful to understand the conditions of arms race, ascertain if indeed there is an arms race and what are the possible mechanisms to prevent an arms race. These insights help me better comprehend individual national interest and geopolitical realities in the Indo Pacific.

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Acknowledgement

This individual research paper is a 12-month journey from October 19 to September 20 and it is made possible through the support of many Thai National Defence College (NDC) superiors, advisors, college support staff and fellow students.

Firstly, I would like to express my gratitude to NDC Superintendent Lieutenant General Pisan Pathom-Aim, Deputy Superintendent Major General Apisak Sombutcharoennon and Director of the Office of Security Science Major General Chamnan Chansat for their leadership and accommodating international students' needs and concern during NDC 62.

Secondly, I would to express my appreciation to International Student Group's Advisor Lieutenant General Nopadon Mungkalaton. His guidance, patience and dedication to all International students' performance is commendable. His constant feedback and advice allow us to improve our critical thinking and better our research. Besides supporting us, he is also the Lion Scout Group Advisor, so he is really busy and yet we always felt his presence and support throughout the course. Both Colonel Akradej Prateapusanond and Lieutenant Colonel Chalermpol Saributra also play important roles to provide us with their feedback and ideas to improve our research.

Thirdly, I am also grateful to NDC support staff from the Education Development Division Research Department especially to Colonel Nirut Duangpanya, Captain Praphob Punyaniyama and Captain Parinda Pukongduean and the staff from the Research Document and Library Division. They have been very understanding, forthcoming and patient with my queries and challenges throughout my NDC 62 journey

Fourthly, I have been fortunate and privileged to be in NDC 62, interacting with many talented, professional and hardworking officers. Besides exchanging ideas on professional topics and culture, they also ensure NDC 62 is a cohesive and fun class exhibiting the axiom of "Work Hard and Play Hard" attitude. Their friendship and encouragement have motivated me to complete my research successfully.

Lastly, I want to thank the people closest to me. Jasmine, my wife, has been my closest friend and strongest supporter. She tolerated the disproportionate amount of time I had to spend away from my family to complete this research. Joshua, my only child, deserves a father who will allow him from time to time to jump on his lap or disturb him when he is working on his computer. Thank you and I love you both.

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Chapter 1
Introduction

Background and Significance of Problem

There are three common perceptions of increasing military expenditure by all Association of Southeast Asian Nations (ASEAN) countries[1], a "tic for tac" sequence of arms procurements by these countries and military acquisition by Southeast Asian countries caused by fears of China's rise and its assertion over territorial claims in the South China Sea. These perceptions suggest an arms race is occurring in Southeast Asia.

First, military expenditure of all ASEAN countries has risen from USD24.6B to USD40.7B from 2009 to 2018. That is an increase of 65 percent over 10 years as compared to the USA, China, South Korea and India's military expenditure of -2, 136, 65 and 71 percent respectively from 2009 to 2018. Cambodia, Vietnam and Indonesia's military expenditure rose by 315, 129 and 124 percent respectively. Singapore, Thailand and Philippines' military expenditure ranges from 44 to 76 percent while Brunei, Malaysia and Myanmar's military expenditure registered negative 2, 12 and 31 percent respectively. Looking at the figures of these Southeast Asian countries it seems to suggest they were building up their Armed Forces rapidly from 2009 to 2018.

[1] ASEAN countries refer to Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

Second, the acquisition of similar classes of air, land and sea platforms among some Southeast Asian countries is perceived by some as a "tic for tac" arms race. In the last decade, air platform acquisitions included : 2 Su-30MK and 6 Su-27SKs (Indonesia); 18 Su-30MK (Malaysia); 12 FA-50PH (Philippines); 24 F15-SG (Singapore) and 35 Su-30Mk2 (Vietnam). Similarly, for sea platform acquisitions: two Type 209, SSK submarines and four Sigma class corvettes (Indonesia); two Scorpène-class submarines, two improved Lejiu class frigates and four littoral mission ships (Malaysia); two landing platform docks (Philippines); two Archer-class and four Challenger-class submarines (Singapore); and six Kilo-class submarines and four Russian Gepard 3.9-class frigate (Vietnam). Thailand had also ordered one Chinese S26T submarine in 2017. Land platform acquisitions included 42 Leopard Main Battle Tanks (MBTs) (Indonesia), 48 PT-91M MBTs (Malaysia); 96 Leopard 2SG MBTs (Singapore) and 24 VT4 MBTs (Thailand). Without analysing the quantity of all platforms acquisition by each country, it may suggest indeed Southeast Asian countries are outdoing each other to acquire more platforms.

Third, the rise of China and its assertion of its South China Sea claims have triggered several countries to procure more capabilities to counter any potential Chinese threat to their territorial sovereignty in the region. In response to China's dispute with Vietnam over the Spratly Islands, Vietnam purchased Russian submarines, fighter jets and frigates. In the contest over control of the Parcel islands, the Philippines responded by ordering submarines. In anticipating China's claim on Natuna Islands, Indonesia placed additional orders for twelve submarines. Given China's increasing assertiveness over its South China Sea claims, it is fairly understandable that an atmosphere of insecurity prevails, causing other claimant countries to step up their acquisition plans to protect their territorial integrity. The timings of those countries' announcements of arms purchases to respond to China's assertion may be perceived by some as meaning that there is an arms race occurring.

Despite the common perceptions indicating signs of an arms race among ASEAN countries, this research will establish that it was not an arms race and there will be no arms race in the next decade. It will also suggest that; due to the peaceful and stable geo-political environment existing in Southeast Asia, coupled with the move towards tighter economic and security cooperation, and the fact that defence spendings are consistent with slow-paced military modernization programs, the activities that are taking place do not constitute an arms race but that of an arms dynamics. The significance of ASEAN countries engaging in an arms race is the region will face an undesirable state of tension that can ill afford miscalculation or misinterpretation that may escalate to aggressive actions, or worst a conflict. Understanding the factors involved in each country's military expenditure and acquisition in transparent and clear manner will reduce the risk of tension escalation and maintain the peace and order carefully built by ASEAN countries over the years.

Objectives of Research

The objectives of the research are as follows :

1. To decipher common perceptions of arms race amongst ASEAN countries.

2. To study trends and effects of Arms Race or Arms Dynamics amongst ASEAN countries in the last and next decade.

3. To recommend possible policies, mechanisms or approaches to prevent miscalculation and misadventure that could lead to an armed conflict in the next decade.

Scope of Research

The scope of research is as follows :

1. Chapter 1 – This chapter sets the stage for the research by introducing and describing the background of the research and research methodology. It also lists the delimitation and definition of words used in this research.

2. Chapter 2 – This chapter reviews several key literatures related to the research and proposes a conceptual framework to determine if a country is in arms race or arms dynamics.

3. Chapter 3 – This chapter deciphers three common perception of arms race, the analysis will be based on empirical and qualitative data derived from Stockholm International Peace Research Institute database from 2009 to 2018 as well as publication and journal review.

4. Chapter 4 – Using the conceptual framework, Chapter 4 will examine the trends and effects of all ten Southeast Asian nations military expenditure based on empirical and qualitative data derived from Stockholm International Peace Research Institute database from 2009 to 2018. In addition, it will also examine military acquisitions, economic growth and the internal and external considerations of each country’s data. This chapter analyses the factors that affect individual countries military expenditure based on each national requirement, both internal and external factors, traditional security versus non-traditional security

threats and military expenditure as a percentage to her country GDP and its consistency.

5. Chapter 5 – This chapter makes conclusion and summarises the relevant recommendation from the analysis.

Methodology

This research will be adopting the Mixed method research design methodology. The methodology will include publication research, document analysis, collecting both present and historical information and, qualitative and quantitative results in both security and International Relations field. A lot of quantitative data will be derived from Stockholm International Peace Research Institute Databases. In addition, concurrent research design methodology will be employed too, it will explore quantitative data follow by qualitative data, then interpret results.

Limitation and/or Delimitation

The limitations and delimitations for the research are as follows:

1. Countries – Besides the ten Southeast Asian Countries of Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam, selected countries from Indo Pacific are studied to benchmark Southeast Nations' military expenditure using Stockholm International Peace Research Institute (SIPRI) database.

2. Regional Organisation – Association of Southeast Asia Nations and Asia Regional Forum are studied.

3. Data from 2009 to 2018 will be used.

Research Results for Utilization

Militaries from all ASEAN countries will continue to modernise their Armed Forces and their military expenditure will also continue to grow in tandem with their GDP growth. The key utilisation of the research are as follows:

1. Readers will be cognisant of actual military expenditure by all Southeast nations and understand how these military expenditures compare with other selected larger Indo Pacific Armed Forces (like US, China, India, Japan and Australia) using empirical data derived from Stockholm International Peace Research Institute database from 2009 to 2018.

2. Readers will be conscious of the complete picture of Southeast nations' military expenditure in the context of individual national interest and geopolitical realities in Indo Pacific. In addition, readers will appreciate the internal and external considerations of each country's increased military expenditure as well as to understand the increasing emphasis on non-traditional security threats like cyber threats and natural disasters each country has.

3. With a comprehensive analysis, the paper will attempt to postulate the possible trend and effects of Arms Race or Arms Dynamic in the next decade and recommend mechanism, policies or approaches (including possible "traps" and collaboration opportunities) to ensure no miscalculation or arms race.

Chapter 2
Literature Review

Introduction

This chapter reviews several literatures related to the research and is structured under the following themes - Defining Arms Races and Arms Dynamics, Determining Arms Races and Arms Races or Arms Dynamics. It also proposes a conceptual framework to determine if any of the ASEAN country is in arms race or arms dynamics. This conceptual framework is subsequently used to examine the trends and effects of arms races or arms dynamics amongst ASEAN countries in the last and next decade.

Defining Arms Race and Arms Dynamics

Steiner defines arms race as "repeated, competitive, and reciprocal adjustments of their war-making capacities" between "two nations or two sets of nations."[1] Huntington defines it as "a progressive, competitive peacetime increase in armaments by two states or coalitions of states resulting from conflicting purpose or mutual fears."[2] Bull defines it as "intense competition between opposed powers or groups of powers, each

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[1] Steiner, B. Arms Races, Diplomacy and Recurring Behaviour : Lessons From Two Cases. Beverly Hills : Sage Publications, 1973. p.5.

[2] Huntington, S. P. "Arms races: Prerequisites and results", Public Policy. Vol. 8, 1958. p.4.

trying to achieve an advantage in military power by increasing the quantity or improving the quality of its armaments or armed forces."[3]

Amongst all definitions, the most well thought through is perhaps from Gray, he defines it as "two or more parties perceiving themselves to be in an adversary relationship, who are increasing or improving their armaments at a rapid rate and structuring their respective military postures with a general attention to the past, current, and anticipated military and political behaviour of the other parties"[4] All of these definitions suggest that arms racing is an abnormally intense condition in relations between states reflecting either or both of active political rivalry, and mutual fear of the other's military potential. The problem with the concept is how to distinguish this abnormal condition from the norm of self defence behaviour under conditions of anarchy.

Hammond[5] believes the characteristic of arms race include : 1. the existence of two or more parties who are consciously and mutually recognised in an antagonistic relationship; 2. deliberate structuring of armed forces based on likely adversary's behaviour; 3. military planning directly based on calculations of likely adversary's capabilities and intentions; 4. explicit quantitative and qualitative competition in arms acquisitions; and (5) increases in defence spending and a rapid rate of

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[3] Bull, H. The control of the arms race: Disarmament and arms control in the missile age. London : Weidenfeld and Nicolson, 1961. p.5.

[4] Colin, Grey. "The Arms Race Phenomenon", World Politics. 24, No. 1, 1971. p.40.

[5] Grant, Hammond T. Plowshares into swords: Arms Races in International Politics, 1840 – 1991. Columbia : University of South Carolina Press, 1993. p.31.

military acquisitions. It is highlighted earlier that it is very challenging to equate military acquisition to arms race as there are other factors like expanded economies, modernisation, internal considerations. Bitzinger[6] highlighted that there is no good definition that exists about arms race. Existing definitions are all based on pre-Cold War literature and there is a lack of a contemporary version to best describe current phenomena observed. Besides arms race, there is another arms phenomenon known as arms dynamics.

An arms dynamics, defined by Buzan and Herring[7] as the ntire set of pressures that make actors (usually states) both acquire armed forces and change the quantity and quality of the armed forces they possess building around two themes: (1) the revolution in technology that has accompanied the industrial age (and now the information age); and (2) the processes by which the military and political impact of those revolutions have spread, and are still spreading, around the planet.

Understanding different definitions and their rationale, readers will appreciate both the definitions and their challenges of arms race and arms dynamics. These understandings provide some good building blocks in developing the conceptual framework. Further readings of literature on determining arms race provide more insights on arms race

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[6] S. Rajaratnam School of International Studies. ”Arms Racing in Asia: The Naval Dimension”. (Online). Available : https://www.rsis.edu.sg/wp-content/uploads/2017/02/ER170217_Arms-Racing-in-Asia_WEB.pdf, 2016. p.77.

[7] Barry, Buzan and Eric, Herring. <u>The Arms Dynamic in World Politics</u>. Boulder : Lynne Rienner, 1988. p.5.

Determining Arms Race

Hammond (1993)[8] explains that in the twentieth century, arms races have become a constant feature in nations' policy even though the threat of war and the necessity to prepare for it are as old as civilisation itself. Like other races, he states that "arms race has no prearranged beginning or ending, no specified duration, no agreements on the rules of competition, the length of race course, the prize for victory, nor the cost of defeat." Besides stating the characteristics of arms race, he also feels that "the combination of dynamic military technologies and a dynamic international environment are two general preconditions for existence of arms races." In examining the dominant rivalry during post-World War II period between the United States and the Soviet Union and ascertaining if the Cold War was an arms race, he opines "The Soviet-American rivalry was at once a military competition, a normal pattern of adjustment among superpowers, a routine aspect of bipolarity, and an arms race, but whose goal was deterrence for each side." In his final chapter on the roles played by arms races, he suggests that "it is a process by which a state or group of states seeks to change or maintain the political-military balance of the status quo by acquiring increased military capacity to intimidate other states". He adds on that "arms races are as conducive to peace as they are to war" and explains that in the modern world system, arms race may be an imperative need for self-preservation.

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[8] Grant, Hammond T. Plowshares into swords: Arms Races in International Politics, 1840 – 1991. Columbia : University of South Carolina Press, 1993.

Building on both definitions of arms race and arms dynamics, and determining arms race, literature on military spending and arms acquisitions of Asia and ASEAN region provide awareness of factors and considerations of both arms race and arms dynamics.

Arms Races or Arms Dynamics

Siemon (2019)[9] highlights trends in military spending and arms acquisitions of South East Asia countries in the context of regional and national political dynamics. It emphasises on facts about military spending, arms acquisitions and arms imports. The author identifies transparency as one of the basic tenets of military security to prevent tensions and conflicts. He adds that every South East Asia country has to overcome the challenge of balancing between the provision of military security and economic and societal development.

He presents a short overview of the security environment and the drivers of militarisation over the past two decades. In late 1990s, South East Asia region had mainly internal conflicts like in Indonesia (Aceh and East Timor) and Myanmar and the Philippines. There were also some land and maritime borders, and interest zones issues. From 2000 to 2010, after recovering from the 1997-1998 financial crises, most of the South East Asian states' growth rates were high and ASEAN was also becoming more active to further its goal of economic, political, security, military and socio-cultural integration among Asian states. While there were some cross-border contestations (Conflict in East Timor

[9] Siemon, Wezeman T. "Arms Flows to South East Asia". (Online). Available : https://sipri.org/publications/2019/other-publications /arms-flows-south-east-asia, 2019.

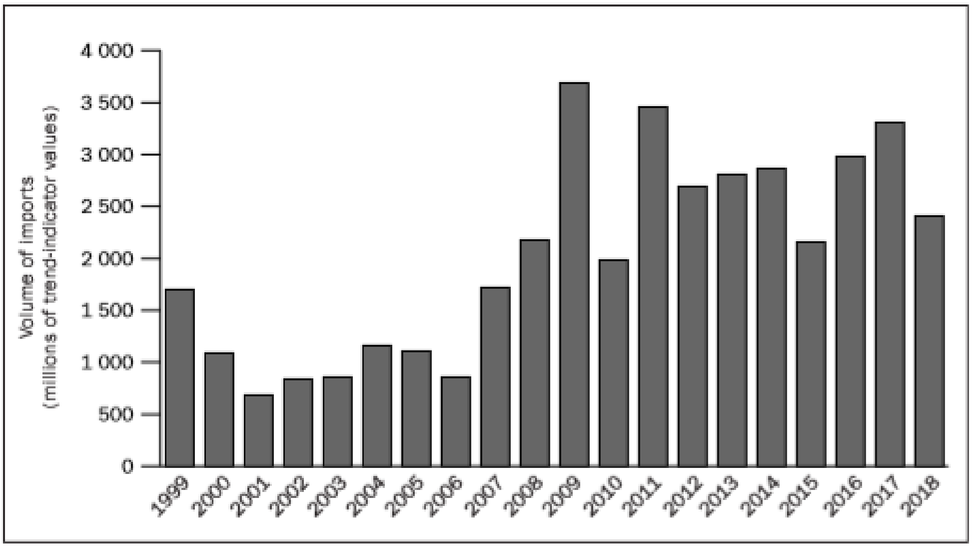
and Dispute between Malaysia and Indonesia over the islands of Ligitan and Sipadan) and internal conflicts/challenges (Philippines internal conflicts with Muslims and communist rebels, and Indonesian and the Free Aceh Movement, and the 2014 Indian Ocean earthquake and tsunami), they were all resolved peacefully and through arbitration and agreements respectively. The South China Sea disputes remained an occasional source of increasing tension but there were realistic prospects for an agreement as China was actively promoting itself as a friend to all South East Asian states. The region's military spending remained stable in absolute terms and was declining as a share of gross domestic product (GDP). The South East Asian states were modernizing their armed forces but arms acquisitions were not huge in either volume or capabilities. Transparency in military and security matters also increased via published defence white papers. The region seemed to be moving towards a peaceful future.

From 2010 onwards, security in the region took a different trajectory, two key security occurrences (2011 confrontation between Cambodia and Thailand and 2013 armed Filipinos invaded Malaysian Borneo) and the most important security development was the rapid growth of China and its assertion of its "nine dash line" claim on South China Sea. These resulted in the increased military spending, arms acquisition and force deployment in the region. The author also highlights that with China's rise and increased activities in South East Asian region, international stakeholders like the United States, Japan, Europe and India have expanded their engagement in the region. There are four key drivers of militarization in South East Asia identified by the author and they are 1. Perceptions of foreign threats, 2. Need to replace outdated and wornout equipment in order to continue carrying out existing tasks, 3. Border and maritime disputes and 4. Illegal cross border activities.

He presents the analysis of the military spending and arms acquisition trends and the suppliers of arms to the South East Asian countries. Military spending in South East Asia between 2009 and 2018 increased by 33 per cent in real terms, from $30.8 billion to $41.0 billion in constant 2017 US dollars. This is significantly higher than the 5 per cent increase globally but lower than the 46 percent increase for the whole of Asia and Oceania over the same period. It is useful to note that the total Asian military spending was dominated by China's increase of 83 per cent, which accounted in 2018 for almost half of total spending in Asia and Oceania. For South East Asian states, the increase was not evenly spread across the nations. 6 increased their military spending between 2009 and 2018. Growth for Singapore and Thailand was limited to 14.3 to 15.6 per cent over the 10-year period, but Vietnam, Philippines and Indonesia increased their spending by between 50.3 per cent and 99.5 per cent, and Cambodia by no less than 190.6 per cent. Regional spending increased in 7 out of the 10 years. With the exception of Brunei Darussalam and Malaysia, the South East Asian states had more years of increased spending than spending reductions.

He shared the arms acquisitions of the South East Asian states over the two decades increased significantly. From 1999 to 2018, South East Asia accounted for 8.1 per cent of the global volume of imports of major arms as compared to from 1999 to 2008 of only 5.9 per cent. Its share of global imports jumped to 9.4 per cent in the next decade. Deliveries increased significantly from 2007, and volumes in every year in the period 2007–18 were greater than in any of the years between 1998 and 2006 (see Figure 2 -1). This increased after 2007 contradicted the earlier stated peaceful region.

Figure 2 - 1 Imports of major arms in South East Asia, 1999-2018



Source : SIPRI Arms Transfer Database, 2019

He added a substantial proportion of the imports were naval and air systems, indicating a strong focus on maritime security. There was a certain focus on ‘underdog’ anti-access/ area denial (A2/AD) weapons (like the submarines, advanced anti-ship missiles and long-range combat aircraft) that would give the weaker South East Asian states an option to deter or survive a military confrontation. Some of the increased spending and arms acquisitions can be explained by more ‘traditional’ South East Asian security developments, following the pattern of past decades. These include the role of the military in internal security (Philippines, Thailand and Myanmar), policing and disaster response.

He looks into the military spending and arms acquisition of each South East Asian countries. The 10 ASEAN countries are improving their military capabilities by increasing their military spending (increased by 33 per cent in real terms between 2009 and 2018 - a rate more than three times the global increase) and acquiring more and better weapons (volume of imports of major weapons in 2009 and 2018 was about two times greater than in 1999–2008). Arms acquisition by South East Asian states were not just replacing or modernizing older weapons but are expanding their military capabilities. While the military spendings and arms acquisition suggest a military build-up in the region, it is useful to note that military spending as a percentage of GDP in South East Asia as a whole remained at around 1.8 per cent throughout the period 2009–2018, which is consistently lower than the global average. Many South East Asian states put economic health before military expansion, as demonstrated during 1997 and 2001 Asian financial crises when economic growth stalled, most military budgets were frozen.

He also presents some conclusions on the potential impact of military spending and arms acquisition. With the increased military capabilities of all South East Asian armed forces, coupled with the South China Sea tensions, it is inevitable that the probability of misunderstandings will take place especially more military forces are operating at closer proximity. It is of utmost importance to establish clear and agreed rules and mechanism when military forces encounter one another. Additionally, greater transparency and clarity in defence and foreign policy will reduce the possibility of miscalculation and misadventure.

The article titled "Arms Racing in Asia : The Naval Dimension"[10] analyses major conventional weapons deliveries to Asia over the decade (2006 to 2015). It is observed that the arms market is growing in Asia despite the fact that China was importing much lesser compared to a decade ago. It is also noted that growth is the fastest for maritime, power projection and anti-access platforms. Jonathan (2017)[11] observed that non-China Asia arms market has grown by 25 percent from 2006-2010 to 2011-2015 despite China arms imports actually shrank by 25 percent (due to massive domestic procurement efforts) while the rest of the world grew at by 5 percent (see Figure 2 - 2). Asia experienced a volume increase of 17.5 percent. The volume of Asia arms imports (Trend Indicator Value TIV of USD72.7B) during 2011 – 2015 was about the same volume as the global arms import (TIV of USD76.8B). It is also noted that during this period the regional GDP in constant 2011 dollars has increased by 33 percent, suggesting that growth of import weapons to Asia was keeping pace with region's GDP growth.

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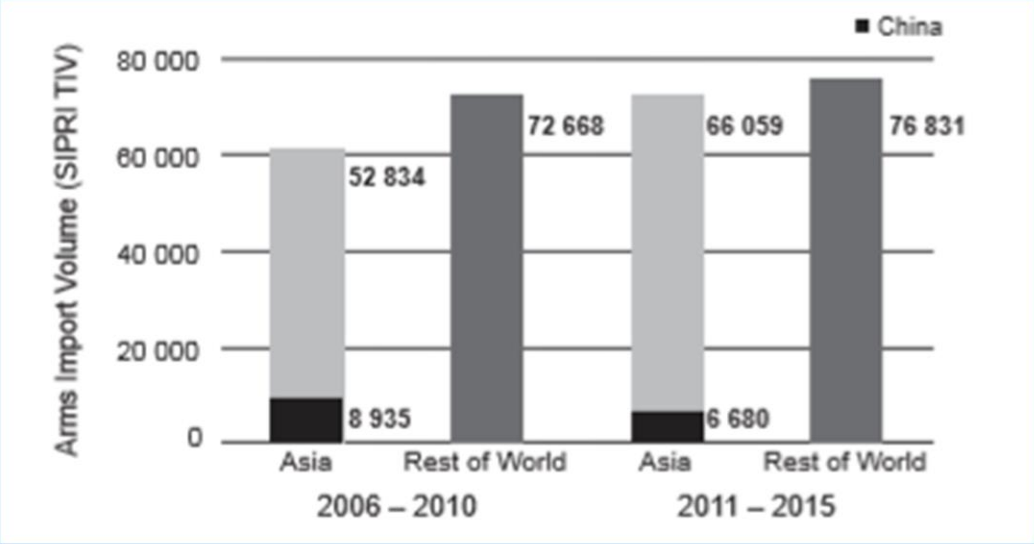
[10] S. Rajaratnam School of International Studies. "Arms Racing in Asia: The Naval Dimension". (Online). Available : https://www.rsis.edu.sg/wp-content/uploads/2017/02/ ER170217_Arms-Racing-in-Asia_WEB.pdf, 2016.

[11] Ibid., p. 5-6.

Figure 2 - 2 Volume of Imports to Asia and Rest of World, 2006-2015



Source : SIPRI Arms Transfer Database, 2016

Table 2 – 1 shows the volume of exports by weapons category. The volume of aircraft, ships and missiles and air defence has increased by 41, 39 and 29 percent respectively. While the overall volume of arms imports to Asia has increased by 17.5% and does not resemble an arms race, the high growth in the platforms related to maritime operations paints a different picture.

Table 2 – 1 Comparing Import Volume by Weapon Category

CATEGORY	2006–2010	2011–2015	CHANGE
Aircraft	21 065	29 623	41%
Ships	7 456	10 400	39%
Missiles/Air defence	5 854	7 531	29%
Armoured vehicles	5 076	6 063	19%
Sensors	2 125	2 580	21%
Engines	1 412	2 284	62%
Other	910	899	-1%

Source : SIPRI Arms Transfer Database, 2016

The article also shares the security dimensions of regional arms acquisitions. Since 2000, there was a sustained and rapid build-up of naval and associated arms acquisition in Asia-Pacific which would also mean a rapid modernisation of naval and air defence capabilities in the region[12]. The article focuses on the People's Republic of China (PRC), Japan, the Republic of Korea (ROK, South Korea) and Vietnam vigorous naval and air modernisation programmes. It suggests Japan, ROK and Vietnam are all reacting to Chinese military modernisation. The article opines that with both the quantity and quality of armaments increasing, the region is becoming more contested.

The article also states the observation that while most of the arms acquisitions were meant to respond to "rivals" qualitative and quantitative levels of armaments, there were also other considerations like enhanced security partnerships and defence technology transfer agreement like Vietnam's closer embrace of US as well as technology transfer agreements between the US and South Korea on Aegis technology. With the increasing armaments in the region, coupled with security partnership and political motivation, the risk of miscalculation and misadventure has definitely been amplified.

There are three different factors essential for arms racing: interstate interaction (in an action-reaction cycle), technological developments, and internal imperatives[13]. Does Asian military acquisition fall into an arms race? It is observed that besides the aforementioned three factors, Asian military acquisition efforts may also be motivated by multiple states (one nation may acquire arms in order to counter arms

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[12] Ibid., p.16.

[13] Ibid., p. 30-35.

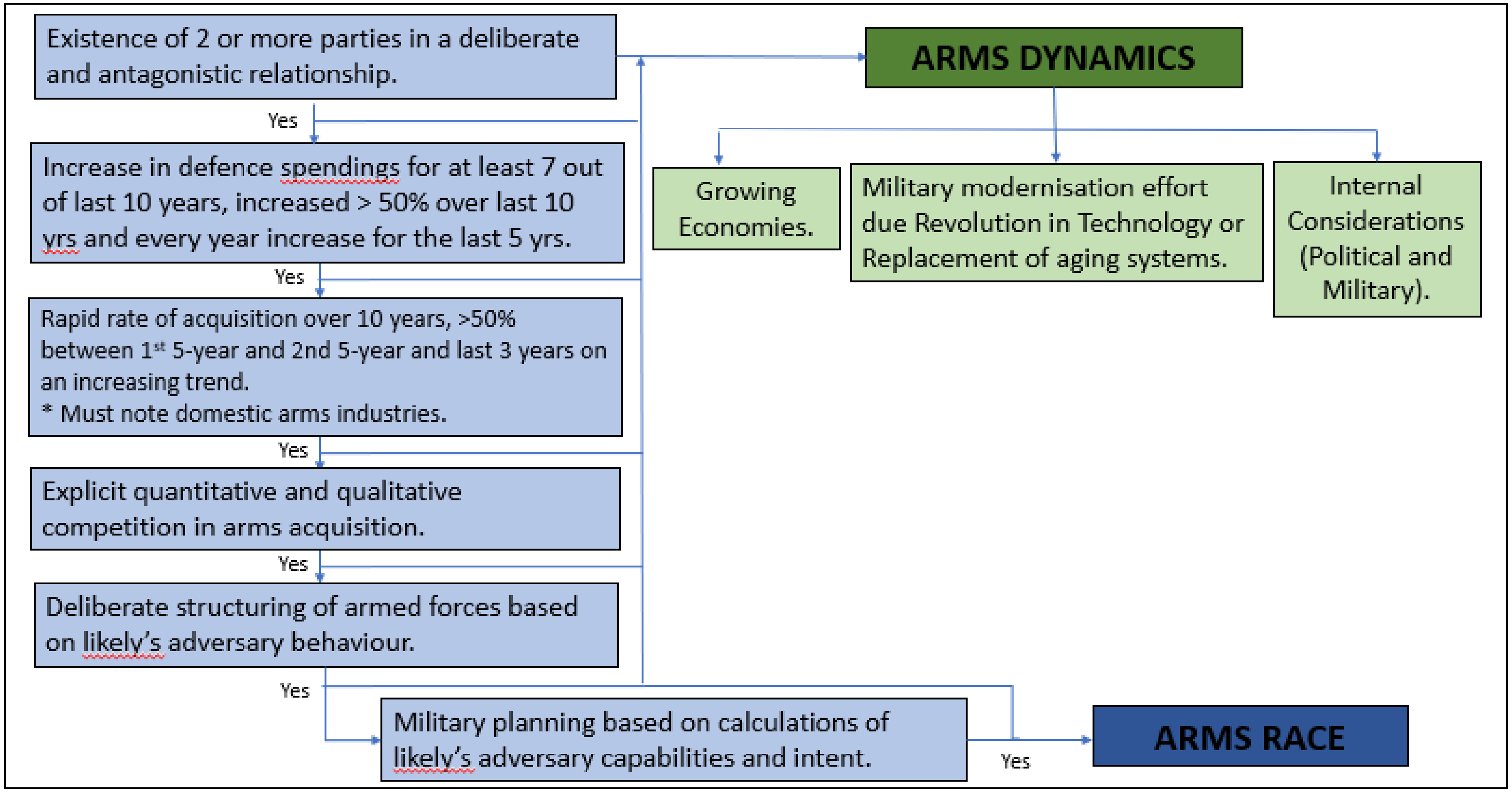
acquisition by one neighbour, but also to achieve technological parity with other states). Additional considerations for Asian nations arms acquisition strategy include: expanded economies, delayed modernisation of the armed forces in many countries and limited capabilities of domestic arms industries.

With a better comprehension of the factors and considerations involving arms race and arms dynamics, the author developed a conceptual framework for factors influencing arms race or arms dynamics.

Conceptual Framework

An arms race suggests that there will only be a winner and a zero- sum mentality which in reality is challenging to determine who is the winner and arms race also connotes something inherently negative. It is difficult to determine in definitive terms that an arms race is taking pace, a conceptual framework for factors influencing arms race or arms dynamics (see Figure 2 -3) is developed (based on Hammond's definition of arms race and Buzan and Herring's definition of arms dynamics stated earlier in the chapter) to help readers to analyse factors (both quantitative and qualitative) in a systematic manner to determine if a country is in an arms race or arms dynamics. The framework addresses factors sequentially in order of priority for determining if a country is in arms race, any factors that do not meet the criteria either quantitatively or qualitatively will result in the country being assessed to be in an arms dynamics. The first key factor in terms of priority is the existence of two or more parties in a deliberate and antagonistic relationship. This is an important factor as it considers the country's national interest and the geopolitics it is involved in. The other two key factors are increase in defence spendings and rate of acquisitions. The factors on deliberate structuring of armed forces and military planning are less emphasised due to the covert nature of these information which are difficult to obtain for analysis. It is also deliberate to look at it quantitatively in a ten-year horizon to ensure consistency. Within arms dynamics analysis, factors will be analysed to determine the driving factor / factors that contribute to its arms dynamics situation. Three key factors are growing economies, military modernisation efforts and internal considerations.

Figure 2 – 3 Conceptual Framework for Factors Influencing Arms Race or Arms Dynamics



Source : Author, 2020

Conclusion

From the literature review, it is indeed challenging to find one good definition of arms race. Even with Grey's good definition, it is difficult to ascertain based on his definition if a country is in an arms race. Going beyond definitions of both arms race and arms dynamics, Hammond's characteristics of arms race, and Buzan and Herring's definition of arms dynamics provide a good basis for factors to be considered in a quantifiable manner and is used as the main driver for the developed conceptual framework. Coupled with the comprehensive insights gleaned on Asian and South East Asian countries' military spendings, arms acquisition and factors for driving countries' justifications and modernisations, the developed conceptual framework is used to ascertain if indeed an arms race or arms dynamics is ongoing amongst ASEAN countries.

Chapter Three will decipher three common perceptions that suggest arms race is in motion in South East Asia region and examine in details to establish if these perceptions are true. Chapter 4 will use the conceptual framework to analyse first if there is an arms race amongst ASEAN countries and if indeed, there is no arms race, efforts will be taken to ascertain which factors are driving each individual ASEAN country's arms dynamics. Chapter 4 will also examine the trends and effects of arms race or arms dynamics amongst ASEAN countries in the last and next decade.

Chapter 3

Deciphering common perceptions of Arms Race

Introduction

There are three common perceptions that suggest an arms race is occurring in Southeast Asia. Chapter 3 will examine these three common perceptions in details and the common perceptions are increasing military expenditure by all ASEAN countries, a "tic for tac" sequence of arms procurements by these countries and military acquisition by ASEAN countries caused by fears of China's rise and its assertion over territorial claims in the South China Sea.

Increasing military expenditure of ASEAN countries

First, the average military expenditure of all ASEAN countries has risen from USD24.6B to USD40.7B from 2009 to 2018. That is an increase of 65 percent over 10 years as compared to the USA, China, India, Japan, South Korea and Australia's military expenditure of -2, 136, 71, -9, 75 and 41 percent (see Table 3-1) respectively. Comparing ASEAN militaries' expenditure with USA and big Asian nations, ASEAN countries' military expenditure increase in percent from 2009 to 2018 is comparable with that of India and South Korea, but is lower than that of China.

Table 3 – 1 : Comparison of ASEAN with USA and some big Asian countries military expenditure, in billions of USD at current prices and exchange rates, 2009-2018

	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**% Chg**
USA	668.5	698.1	711.3	684.7	639.7	609.9	596.1	600.1	605.8	648.7	-2
China	105.6	115.7	137.9	157.3	177.8	200.7	214.0	216.0	227.8	249.9	136
India	38.7	46.0	49.6	47.2	47.4	50.9	51.2	56.6	64.5	66.5	71
Japan	51.4	54.6	60.7	60.0	49.0	46.8	42.1	46.4	45.3	46.6	-9
S Korea	24.5	28.1	30.9	31.9	34.3	37.5	36.5	36.8	39.1	43.0	75
Australia	18.9	23.2	26.5	26.2	24.8	25.7	24.0	26.3	27.6	26.7	41
ASEAN	24.6	27.2	30.9	35.5	38.6	37.7	38.4	39.9	40.0	40.7	65

Source : SIPRI Military Expenditure Database, 2020

While the increase in military expenditure percent of ASEAN countries was similar to that of India and South Korea, analysing individual ASEAN country revealed other findings (see Table 3-2). Cambodia, Vietnam and Indonesia's military expenditure rose by 315, 129 and 124 percent respectively (about that of China (136 percent)). Singapore, Thailand and Philippines' military expenditure ranges from 44 to 76 percent are similar Australia (41 percent), India (71 percent) and South Korea (75 percent), while Brunei, Malaysia and Myanmar's military expenditure registered negative 2, 12 and 31 percent respectively (similar to USA (-2 percent), Japan (-9 percent)). Laos' data is left out for analysis due to only 5 years of available data. Looking at the figures of ASEAN countries, it seems to suggest that some of them were indeed building up their Armed Forces rapidly from 2009 to 2018 and their increased spending percent are comparable to that of China.

Table 3 – 2 Military expenditure by ASEAN countries, in billions of USD at current prices and exchange rates, 2009-2018

2000s	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**% Chg**
Brunei	0.35	0.39	0.41	0.41	0.41	0.52	0.42	0.40	0.34	0.34	-2
Cambodia	0.13	0.16	0.19	0.21	0.24	0.27	0.32	0.38	0.46	0.54	315
Indonesia	3.3	4.6	5.8	6.5	8.3	6.9	7.6	7.3	8.1	7.4	124
Laos	0.01	0.01	0.01	0.02	0.02	-	-	-	-	-	-
Malaysia	3.9	3.8	4.6	4.5	4.9	4.9	4.5	4.1	3.4	3.4	-12
Myanmar	-	-	-	2.9	2.3	2.3	2.5	2.4	2.2	2.0	-31
Philippines	2.1	2.4	2.7	2.8	3.3	3.1	3.3	4.3	3.7	3.7	76
Singapore	7.5	8.1	8.9	9.1	9.3	9.5	9.3	9.8	10.1	10.8	44
Thailand	4.7	4.9	5.5	5.4	5.9	5.7	5.7	5.8	6.3	6.8	44
Vietnam	2.4	2.6	2.6	3.3	3.7	4.2	4.5	5.0	5.0	5.5	129
ASEAN	**24.6**	**27.2**	**30.9**	**35.5**	**38.6**	**37.7**	**38.4**	**39.9**	**40.0**	**40.7**	**65**

Source : SIPRI Military Expenditure Database, 2019

ASEAN countries' economies have been growing from 2009 to 2018 resulting in the region's military expenditure growing too except for 2014, the only decrease out of the 10 years, due to lower energy prices led oil and gas exporters, thus curbing their defence outlays. Table 3-3 shows 6 out of the 10 ASEAN countries registered at least 7 years of increase in military expenditure with both Cambodia and Vietnam registering 10 years of increased military expenditure. Malaysia registered 7 years of decreased military expenditure while both Brunei and Myanmar registered 4 years of decrease. However, while the general trend of ASEAN military expenditure was increasing, the detailed picture showed some countries' defence spending stagnated.

Table 3 – 3 Real term changes in South East Asia military spending, 2009 - 2018

	% change, 2009-2018	**Number of years of increase**	**Number of years of decrease**
ASEAN	+65	9	1
Brunei	-2	6	4
Cambodia	+315	10	0
Indonesia	+124	7	3
Laos	-	4	1
Malaysia	-12	3	7
Myanmar	-31	2	4
Philippines	+76	7	3
Singapore	+44	9	1
Thailand	+44	7	3
Vietnam	+129	10	0

Source : SIPRI Military Expenditure Database, 2019

Breaking the decade into two halves, it is observed that the average military expenditure of all ASEAN nations (see Table 3-4) is about 45 percent from 2009 to 2013 and about 55 percent from 2014 to 2018, a 10-percent increase in the second 5-year period. Countries like Indonesia, Philippines, Singapore and Thailand exhibit the average military expenditure trend of about 45 percent and 55 percent in the first and second 5-year periods respectively. Both Brunei and Malaysia share a consistent military expenditure (50:50) in both periods while Cambodia and Vietnam spend more (35:65) of about 30 percent more in the 2nd period. For Myanmar analysis, it may not be accurate as there was no data on its military expenditure from 2009 to 2011, thus leading to a larger military expenditure of 68.6 percent in the 2nd period. For those 3 countries (Brunei, Malaysia and Myanmar) that have negative military expenditure from 2009 to 2018, they contributed around 18.1 percent of ASEAN nations total military expenditure. The founding members of ASEAN nations (Indonesia, Malaysia, Philippines, Singapore and Thailand) contributed the lion's share of the total military expenditure of 73.8 percent.

Table 3 – 4 Comparison of military expenditure by ASEAN countries in percentage ratio, in millions of USD, between 2009-13 and 2014-18

	2009 - 2013	**% of 2009-2018**	**2014 - 2018**	**% of 2009-2018**	**Total**	**% of ASEAN total**
Brunei	1979.3	49.1	2047.7	50.9	4027	1.1
Cambodia	957.5	32.4	1992.3	67.6	2949.8	0.8
Indonesia	28721.0	43.3	37569.1	56.7	66290.1	18.9
Laos	107.7	na	-	-	107.7	negligible
Malaysia	21924.6	51.5	20585.3	48.4	42509.9	12.2
Myanmar	5336.2	31.4	11633.6	68.6	16969.8	4.8
Philippines	13531.2	46.8	15321.8	53.1	28853	8.3
Singapore	43086.6	46.3	49890.4	53.7	92977	26.4
Thailand	26668.3	46.6	30466	53.4	57134.3	16.3
Vietnam	14848.4	37.8	24409.6	62.2	39258	11.2
ASEAN Total	157160.8	44.7	193915.8	55.3	351076.6	

Source : SIPRI Military Expenditure Database, 2019

Analysing both 5-year periods, only Malaysia has reduced their military expenditure in the 2nd 5-year period (2014-18) while Brunei military expenditure was about the same (see Table 3-5). Philippines, Singapore and Thailand have increased their military expenditure about 15% in their 2nd 5-year period. Indonesia's military expenditure increased by about 30 percent in the 2014-18 period while Cambodia, Myanmar and Vietnam have increased their military expenditure greatly (ranged from 64 to 118 percent) in the 2014 – 2018 period.

Table 3 – 5 Comparison of military expenditure by ASEAN countries in percent, in millions USD, between 2009-13 and 2014-18

Countries	**2009 - 2013**	**2014 - 2018**	**% Change**	**Total**	**% of ASEAN total**
Brunei	1979.3	2047.7	3.4	4027	1.1
Cambodia	957.5	1992.3	108	2949.8	0.8
Indonesia	28721.0	37569.1	30.8	66290.1	18.9
Laos	107.7	-	-	107.7	negligible
Malaysia	21924.6	20585.3	-6.1	42509.9	12.2
Myanmar	5336.2	11633.6	118	16969.8	4.8
Philippines	13531.2	15321.8	13.2	28853	8.3
Singapore	43086.6	49890.4	15.7	92977	26.4
Thailand	26668.3	30466	14.2	57134.3	16.3
Vietnam	14848.4	24409.6	64.3	39258	11.2
ASEAN Total	157160.8	193915.8		351076.6	

Source : SIPRI Military Expenditure Database, 2019

Analysing the region as a whole, besides 2 years of exceptional increase in military expenditure in 2013 and 2015 of 10.1 and 9.8 percent respectively, there were 3 years of decrease in 2014, 2017 and 2018, and 5 years of increase ranging from 1.3 to 4.8 percent (see Table 3-6). Comparing with global military expenditure, ASEAN nations spent 2.3 percent in 2018 from 1.8 percent in 2009. When comparing with Asia's military expenditure, ASEAN countries' military expenditure showed a decline of 9.9 percent in 2009 to 8.7 percent in 2018. The average percent of GDP of ASEAN nations was consistent, ranging from 1.6 to 1.9 percent from 2009 to 2018.

Table 3 – 6 Military expenditure by ASEAN countries, in millions of USD at current prices and exchange rates, 2009-2018

Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Spending ($b)	24.6	27.2	30.9	35.5	38.6	37.7	38.4	39.9	40.0	40.7
% change	+4.8	+1.3	+3.2	+4.0	+10.1	-0.8	+9.8	+3.5	-0.7	-0.7
% of global	1.8	1.8	1.9	2.0	2.2	2.2	2.3	2.4	2.4	2.3
% of Asia	9.9	9.2	9.1	9.0	9.0	9.4	8.9	9.2	9.0	8.7
Average % of GDP	1.7	1.9	1.7	1.6	1.6	1.6	1.7	1.9	1.9	1.8

Source : SIPRI Military Expenditure Database, 2019

While the perception of the military expenditure of all ASEAN countries have risen from USD $24.6B to $40.7B from 2009 to 2018 and an increase of 65 percent over 10 years suggested an arms race amongst ASEAN countries, a deeper analysis suggests some countries may be embarking in an arms race but not all countries or as a region. As a region, the analysis concludes that the military expenditure as an average percent of ASEAN countries' GDP from 2009 to 2018 was consistent (1.6 to 1.9 percent), as a percent of global total military expenditure was small (1.8 to 2.4 percent) and as a percent Asia's total military expenditure was decreasing (from 9.9 to 8.7 percent).

"Tic for Tac" arms procurements by ASEAN countries

The acquisition of similar classes of air, land and sea platforms amongst some ASEAN countries are perceived by some as a "tic for tac" arms race. In the last decade (2009 to 2018), combat aircraft acquisitions included: 2 Su-30MK and 6 Su-27SKs (Indonesia); 18 Su-30MK (Malaysia); 12 FA-50PH (Philippines); 24 F15-SG (Singapore) and 35 Su-30MK2 (Vietnam). Land platform acquisitions included: 42 Leopard Main Battle Tanks (MBTs) (Indonesia), 48 PT-91M MBTs (Malaysia); 96 Leopard 2SG MBTs (Singapore) and 24 VT4 MBTs (Thailand).

Similarly, for sea platform acquisitions: two Type 209, SSK submarines and four Sigma class corvettes (Indonesia); two Scorpène-class submarines, two improved Lejiu class frigates and four littoral mission ships (Malaysia); two landing platform docks (Philippines); two Archer-class and four Challenger-class submarines (Singapore); and six Kilo-class submarines and four Russian Gepard 3.9-class frigate (Vietnam). Thailand had ordered one Chinese S26T submarine in 2017 and Myanmar received delivery of one Kilo class submarine in 2019. Philippines is planning to acquire submarines too.

Strategically, submarines play an important role in enhancing war capability - such as firing torpedoes, launching missiles, laying anti-ship mines, and detecting surface ships and other submarines - and conducting surveillance, reconnaissance and intelligence missions. Besides national security as the key reason why countries acquired submarines, domestic industrial and technological development goals as well as national prestige were also important considerations. Table 3-7 shows the current holdings and orders for submarines of ASEAN countries.

Table 3 – 7 Submarines current holdings / orders of ASEAN countries

Country	**Current**	**Ordered / Firm Plans**
Indonesia	3	-
Malaysia	2	-
Myanmar	1[1]	-
Philippines	0	2[2]
Singapore	4	2[3]
Thailand	0	1[4]
Vietnam	6	-

Source : The Military Balance 2018

[1] The Indian Navy had handed over a Kilo class submarine made by Russia to the Myanmar Navy at the end of 2019, making it the first submarine owned by Myanmar.

[2] Philippine Navy highlighted that the plan to acquire 2 submarines has had been approved in Aug 2019.

[3] Singapore announced in 2013 that the two submarines had been ordered to be delivered in 2020 to replace two older boats

[4] Thailand had ordered one S26T SSK submarine in 2017 and will enter service in 2023. Another 2 submarines have been planned for but not confirmed.

The acquisition of similar classes of air, land and sea platforms amongst ASEAN countries are indeed suggesting a "tic for tac" arms race, however an analysis of the arms export from 2009 to 2018 paints a different picture. Breaking the decade again into 2 five-year windows, it is observed that overall arms export of ASEAN countries saw an insignificant reduction of 4 percent, from USD$14.3B to 13.7B in the 2014-2018 period (see Table 3-8). There are five countries which have lesser arms export (range from 39 to 97 percent) in 2014-2018 period than in 2009-2013 period while Thailand, Laos, Vietnam, Indonesia and Philippines have larger arms export (all larger than 50% and ranged from 50 to 329%) in 2014-2018 period.

Observing both the military expenditure and arms import of each ASEAN country (see Table 3-9), Indonesia, Philippines, Thailand and Vietnam were spending more (13.2 to 64.3 percent) and acquiring more (50 to 329 percent) in the 2014-18 period.

Table 3 – 8 SIPRI Trend Indicator Values (TIVs, expressed in millions USD) of arms export to ASEAN countries from 2009 to 2018

Countries	**2009-2013**	**2014-2018**	**Total**	**Percentage Change**
Brunei	333	159	490	-52
Cambodia	183	4	187	-97
Indonesia	1934	3524	5452	82
Laos	78	119	196	52
Malaysia	2061	732	2787	-64
Myanmar	1432	860	2286	-39
Philippines	161	691	852	329
Singapore	4712	1865	6646	-60

Table 3 – 8 SIPRI Trend Indicator Values (TIVs, expressed in millions USD) of arms export to ASEAN countries from 2009 to 2018

Countries	2009-2013	2014-2018	Total	Percentage Change
Thailand	1024	1536	2550	50
Vietnam	2387	4249	6654	78
	14305	**13739**	**28100**	**-4**

Source : SIPRI Arms Transfers Database, 2019

Table 3 – 9 Comparison between Military Expenditure and Arms Import

	Military Expenditure			Arms Import		
Countries	**2009-13**	**2014-18**	**% Chg**	**2009-13**	**2014-18**	**% Chg**
Brunei	1979	2047	3.4	333	159	-52
Cambodia	957	1992	108	183	4	-97
Indonesia	28721	37569	30.8	1934	3524	82
Laos	107	-	-	78	119	52
Malaysia	21924	20585	-6.1	2061	732	-64
Myanmar	5336	11633	118	1432	860	-39
Philippines	13531	15321	13.2	161	691	329
Singapore	43086	49890	15.7	4712	1865	-60
Thailand	26668	30466	14.2	1024	1536	50
Vietnam	14848	24409	64.3	2387	4249	78
	157160	**193915**		**14305**	**13739**	**-4**

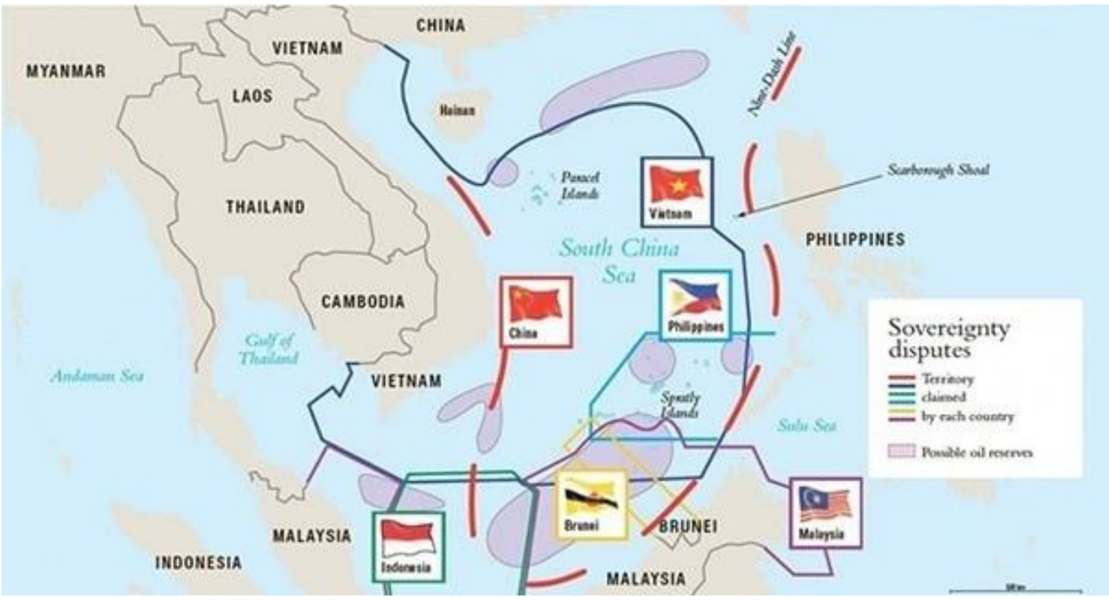
Source : SIPRI Military Expenditure and Arms Transfer Database, 2019

Without analysing the quantity of platforms acquisition, it is understandable why many have the perception that an arms race may be taking place, this is probably due to many ASEAN countries' acquisition of similar classes of air, land and sea platforms presenting the perception that they are outdoing each other to acquire more platforms. Examining the quantity of military acquisition, only Indonesia, Laos, Philippines, Thailand and Vietnam were acquiring more (50 to 329 percent) in the 2014-18 period.

Military acquisitions caused by fear of China's rise and its assertion in South China Sea

The rise of China and its assertion of its South China Sea claims have triggered several countries to procure more capabilities to counter any potential Chinese threat to their territorial sovereignty in the region. Figure 3-1 shows those ASEAN countries that have sovereignty disputes with China over South China Sea and they are Brunei, Indonesia, Malaysia, Philippines and Vietnam.

Figure 3-1 ASEAN countries with sovereignty disputes with China



Source: www.quora.com

South China Sea is dominated by the air and maritime domains, it is natural that countries would want to improve their naval, air and air defence capabilities. Acknowledging that no scale of arsenal up-arming will be able to match up with China's military might, most countries will adopt a deterrence approach to deter China from making aggressive moves. It is useful to note that the only two occasions (1974 and 1988) in which China has used military force in the South China Sea, thus far, has both involved Vietnam and both times involved a significant loss of lives.

In response to China's dispute with Vietnam over the Spratly Islands, Vietnam purchased Russian submarines, fighter jets and frigates. In the contest over control of the Parcel islands, the Philippines responded by ordering submarines. In anticipating China's claim on Natuna Islands, Indonesia placed additional orders for twelve submarines. Chinese naval intrusions into Malaysia's EEZ in 2015-16 revealed capability gaps and Malaysia placed orders for littoral-mission ships.

Examining both the military expenditure and arms import of the five countries which have sovereignty disputes with China over the last decade, it can be seen that these countries, as a whole, increased their military expenditure by 47.7 percent and their arms import remained largely the same (- 4 percent) in the 2014-2018 window. While the quantity of arms export has reduced, the quality of acquired capabilities have increased. A closer examination of these countries revealed that Indonesia, Philippines and Vietnam were spending more and were acquiring more quality capabilities. Both Malaysia and Brunei faced budgetary constraints which limited their desired arms procurement.

Table 3 – 10 Military Expenditure and Arms Import of ASEAN countries that have sovereignty disputes in South China Sea, in millions of USD

	Military Expenditure			**Arms Import**		
Countries	**2009-13**	**2014-18**	**% Chg**	**2009-13**	**2014-18**	**% Chg**
Brunei	1979	2047	3.4	333	159	-52
Indonesia	28721	37569	30.8	1934	3524	82
Malaysia	21924	20585	-6.1	2061	732	-64
Philippines	13531	15321	13.2	161	691	329
Vietnam	14848	24409	64.3	2387	4249	78
	67639	**99931**	**47.7**	**14305**	**13739**	**-4**

Source : SIPRI Military Expenditure and Arms Transfers Databases, 2019

Brunei military expenditure in 2009 – 2013 and 2014 – 2018 were USD$1.97B and $2.04B respectively, a modest increase of 3.4 percent in military expenditure in 2014 – 2018. Brunei acquired 49% less military imports in 2014-2018 period than in 2009-2013 period (See Table 3 – 11). Brunei acquired more aircrafts in 2014 – 2018 period. Since 2015/16 (when defence spending was significantly reduced) funding shortfalls resulting primarily from the impact of declining energy prices on the national budget, this challenged Brunei's equipment procurement (lesser missiles, naval weapons, sensors and ships). Brunei claims only a 200-nautical mile EEZ under the terms of UNCLOS, which include Louisa Reef, Owen Shoal and Rifleman Bank. Brunei acknowledged it would be difficult to enforce its claim against a far more powerful China and adopts a deliberately quiet approach of focusing on both economic and diplomatic means instead of military means. Going forward, Brunei will continue to manage its arms procurement carefully (given its budgetary constraint) as part of modernisation effort and being mindful not to antagonise China.

Table 3 – 11 SIPRI Trend Indicator Values (TIVs, expressed in millions, USD) of arms export to Brunei from 2009 to 2018

	2009	**2010**	**2011**	**2012**	**2013**	**2009 - 13**	**2014**	**2015**	**2016**	**2017**	**2018**	**2014 -18**	**% Chg**
Aircraft	-	-	-	-	15	15	36	36	-	-	-	72	87
Missiles	-	-	-	22	-	22	11	-	-	-	-	11	-33
Naval weapons	-	-	8	-	-	8	3	-	-	-	-	3	-10
Sensors	-	-	29	-	-	29	10	-	-	-	-	10	-38
Ships	33	33	193			259	63	-	-	-	-	63	-322
Total	**33**	**33**	**229**	**22**	**15**	**333**	**122**	**36**	-	-	-	**159**	**-49**

Source : SIPRI Arms Transfers Database, 2019

Indonesia military expenditure in 2009 – 2013 and 2014 – 2018 were USD$28.7B and $37.5B respectively and there was an increase of 30.8 percent more acquisitions in 2014 – 2018, Indonesia acquired 82 percent more military imports in 2014-2018 period than in 2009-2013 period (see Table 3 – 12). The emergence of clearer threats to Jakarta's extensive maritime interests have contributed to Indonesia's goal to strengthen air, naval and maritime paramilitary capabilities. Indonesia acquired more air defence systems, armoured vehicles, artillery, naval weapons, sensors and ships by at least 100 percent in 2014 – 2018 period. Indonesia acquired much more armoured vehicles (618%), naval weapons (900%) and ships (292%) in the same period. In anticipation of China's claim on Natuna Islands (as stated in China's Nine Dash Line), Indonesia procured more naval and maritime capabilities to counter any potential Chinese threat in their extensive maritime territory.

Table 3 – 12 SIPRI Trend Indicator Values (TIVs, expressed in millions, USD) of arms export to Indonesia from 2009 to 2018

	2009	2010	2011	2012	2013	2009 - 13	2014	2015	2016	2017	2018	2014 -18	% Chg
Aircraft	168	155	49	90	639	1101	303	163	155	327	90	1038	-5
Air Def systems	3	-	-	40	40	83	30	90	20	26	-	166	100
Armoured vehicles	4	25	1	6	13	49	129	38	120	61	4	352	618
Artillery	-	-	32	6	-	38	27	52	6	8	8	101	165
Engines	12	3	4	13	35	67	45	12	2	1	3	63	-5
Missiles	12	43	19	37	39	150	22	57	42	65	48	234	56
Naval weapons	3	-	-	-	4	7	12	10	-	18	-	40	900
Other	-	-	-	-	13	13	-	-	-	1	-	1	-92
Sensors	5	-	35	23	17	80	31	15	36	63	26	171	113
Ships	236	-	110	-	-	346	589	-	-	609	160	1358	292
Total	**441**	**225**	**250**	**214**	**800**	**1934**	**1188**	**438**	**381**	**1178**	**338**	**3524**	**82**

Source : SIPRI Arms Transfers Database, 2020

Malaysia military expenditure in 2009 – 2013 and 2014 – 2018 were USD$21.9B and $20.5B respectively, a decrease of 13.2% in military expenditure in 2014 – 2018. Malaysia acquired 64% less military imports in 2014-2018 period than in 2009-2013 period. Malaysia acquired more air defence systems, armoured vehicles and engines in 2014 – 2018 period. Budgetary constraints have slowed Malaysian's equipment procurement (lesser aircrafts, missiles, naval weapons and ships), to address gaps revealed during Chinese naval intrusions into Malaysia's EEZ in 2015-16, Malaysia acquired new air defence systems and ordered 4 littoral-mission ships. Malaysia's focus has seen a shift from counter insurgency towards conventional warfare, with China's assertion of its South China Sea claims and budgetary constraints, Malaysia will be prioritising its procurement strategy to focus on countering any potential Chinese threat in their territorial waters.

Table 3 – 13 SIPRI Trend Indicator Values (TIVs, expressed in millions, USD) of arms export to Malaysia from 2009 to 2018

	2009	**2010**	**2011**	**2012**	**2013**	**2009 - 13**	**2014**	**2015**	**2016**	**2017**	**2018**	**2014 -18**	**% Chg**
Aircraft	375	-	-	15	38	428	38	73	165	73	-	349	-18.4
Air Def systems	-	-	-	-	-	0	-	-	9	-	-	9	100
Armored vehicles	62	51	-	-	-	113	15	15	26	40	29	125	10.6
Artillery	-	18	-	-	-	18	-	-	-	-	-	0	-100
Engines	15	12	-	-	-	27	1	13	30	20	7	71	162
Missiles	136	8	5	32	12	193	-	4	21	1	5	31	-83
Naval weapons	6	6	-	-	-	12	-	-	-	-	-	0	-100
Other	-	-	-	-	-	0	-	-	3	12	12	26	100
Sensors	12	18	-	-	22	52	19	-	12	8	8	47	-9.6
Ships	908	310	-	-	-	1218	-	-	-	37	37	74	-93
Total	**1512**	**423**	**5**	**47**	**71**	**2061**	**71**	**104**	**266**	**191**	**98**	**732**	**-64**

Source: SIPRI Arms Transfers Database, 2019

Philippines military expenditure in 2009 – 2013 and 2014 – 2018 were USD$13.5B and $15.3B respectively and while there was a modest increase of 13.2% more acquisitions in 2014 – 2018, Philippines acquired 329% more military imports in 2014-2018 period than in 2009-2013 period. Philippines acquired more aircrafts, air defence systems, armoured vehicles, engines, artillery, missiles, sensors and ships by at least 100% in 2014 – 2018 period. Philippines acquired much more aircrafts (672%) and sensors (566%) in the same period. Two notable capabilities delivered included Philippines' first FA-50PH fighter / ground attack aircrafts and two additional landing platform docks. With China's assertion of its South China Sea claims, it is clear why Philippines procured more capabilities like aircrafts, missiles, sensors and ships to contest any potential Chinese to control over Parcel Islands in their territorial waters.

Table 3 – 14 SIPRI Trend Indicator Values (TIVs, expressed in millions, USD) of arms export to Philippines from 2009 to 2018

	2009	**2010**	**2011**	**2012**	**2013**	**2009 - 13**	**2014**	**2015**	**2016**	**2017**	**2018**	**2014 -18**	**% Chg**
Aircraft	1	1	9	10	23	44	12	114	67	136	11	340	672
Armored vehicles	-	2	-	-	1	3	-	16	-	-	-	16	433
Artillery	-	-	-	-	-	0	-	-	-	4	-	4	100
Engines	-	-	-	-	-	0	-	10	6	18	-	34	100
Missiles	-	-	-	-	-	0	-	-	-	6	4	10	100
Other	-	-	-	-	-	0	-	2	-	-	-	2	100
Sensors	-	-	-	6	-	6	-	4	4	29	3	40	566
Ships	-	-	54	-	54	108	-	6	153	86	-	245	126
Total	**1**	**3**	**63**	**16**	**78**	**161**	**12**	**153**	**230**	**278**	**18**	**691**	**329%**

Source: SIPRI Arms Transfers Database, 2019

Vietnam's military expenditure in 2009 – 2013 and 2014 – 2018 were USD$14.8B and $24.4B respectively and there was a huge increase of 64.3% more acquisitions in 2014 – 2018. Vietnam acquired 78 % more military imports in 2014-2018 period than in 2009-2013 period. Vietnam acquired more air defence systems, armoured vehicles, engines and ships by 100, 100, 225 and 178 % respectively in 2014 – 2018 period. Both missiles and sensors were also acquired more (77% and 23 % respectively) in the 2014 – 2018 period. Interestingly, there were fewer aircrafts acquired (36%) in the 2014-2018 period but new capabilities like the Su-30MK2, improved Kilo-class submarine, SS-N-26 Yakhont shore-to-ship cruise missiles, advanced anti-ship missiles (P-5 SS-N-3 Shaddock, P-15 Termit and SS-N-25 Switchblade) and air defence systems were added in Vietnam's deterrence arsenal . With China's assertion of its South China Sea claims, it is evident that Vietnam procured more capabilities like air defence systems, missiles, sensors and ships to deter any Chinese pressure to Spratly Islands in their territorial waters.

Table 3 – 15 SIPRI Trend Indicator Values (TIVs, expressed in millions, USD) of arms export to Vietnam from 2009 to 2018

	2009	**2010**	**2011**	**2012**	**2013**	**2009 - 13**	**2014**	**2015**	**2016**	**2017**	**2018**	**2014 -18**	**% Chg**
Aircraft	1	111	455	553	5	1125	246	244	220	-	8	718	-36
Air Def systems	-	-	-	-	-	0	60	60	75	90	90	375	100
Armored vehicles	6	-	-	-	-	6	-	-	1	-	128	129	100
Engines	-	-	20	-	-	20	15	17	13	10	10	65	225
Missiles	40	41	132	63	53	331	143	143	133	84	84	587	77
Sensors	15	-	15	18	44	92	50	12	29	-	23	114	23
Ships	-	-	398	155	260	813	705	386	386	549	235	2261	178
Total	**61**	**152**	**1021**	**788**	**362**	**2387**	**1218**	**862**	**858**	**755**	**577**	**4249**	**78**

Source : SIPRI Arms Transfers Database, 2019

Given China's increasing assertiveness over its South China Sea claims, it is fairly understandable that an atmosphere of insecurity prevails, causing other claimant countries to step up their acquisition plans to protect their territorial integrity. It is clearly evident that Indonesia, Philippines and Vietnam acknowledged the threat and have increased both their military expenditure and arms procurement to counter China's threat to their territorial waters while Brunei and Malaysia were also trying to increase their arms acquisition prioritising on maritime threats but were facing budgetary pressures. The timings of those countries' announcements of arms purchases to respond to China's assertion may be perceived by some as meaning that there is an arms race occurring.

Conclusion

Deciphering these common perceptions and analysing them in details can only provide some indication that countries may or may not be in an arms race. These common perceptions when taken at face value without a systematic approach will give readers a false sense of arms race anxiety. While these considerations on military expenditure, acquisitions and the China factor are important considerations, they are not comprehensive and systematic in concluding ASEAN countries are in an arms race. Acknowledging and understanding these common perceptions are misleading and inconclusive, Chapter 4 will use the developed framework to analyse ASEAN countries based on the influencing factors in a systematic and sequential approach to ascertain if ASEAN countries are in an arms race or arms dynamics and study the trends and effects of either arms race or arms dynamics amongst ASEAN countries in the last and next decade.

Chapter 4
Trends and Effects of Arms Race or Arms Dynamics in the last and next decade

Introduction

The prevalent common perceptions of increasing ASEAN countries' military spendings, the tic for tac ASEAN's military acquisition and the military acquisitions caused by fear of China's rise and its assertion in South China Sea have been deciphered and the analysis of these perceptions indicated that whether an arms race amongst ASEAN countries is ongoing is inconclusive. Chapter 4 will use the developed conceptual framework for factors influencing arms race or arms dynamics to establish if there is any arms race amongst ASEAN countries and if they are not, efforts to ascertain which factors are driving each individual ASEAN country's arms dynamics will be made. The framework addresses factors sequentially (see Figure 2-3) in order of priority for determining if a country is in arms race, any factors that do not meet the criteria either quantitatively or qualitatively will result in the country being assessed to be in an arms dynamics. Within arms dynamics analysis, factors will be analysed to determine the driving factor / factors that contribute to its arms dynamics situation.

Existence of Antagonistic Relationship

The first factor to be examined is the existence of two or more parties in a deliberate and antagonistic relationship. ASEAN has been a relatively peaceful region compared to the rest of the world and she has enjoyed peace, economic growth and political stability in the last two decades. While peace and stability are being experienced in the region, there were occasional disputes over on territorial claims, border disputes, and skirmishes, but they were resolved peacefully.

In the first decade from 1997 to 2008, after recovering from the 1997-1998 financial crisis, South East Asia seemed to be on the path of rapid economic recovery and a peaceful future. ASEAN was also more active to promote better economic, political, security and socio-cultural integration better amongst ASEAN countries. Its engagement with other countries and international organisations also increased including security matters. In 2001, ASEAN became a nuclear weapon-free zone. Border disputes between Thailand and Myanmar since early 2001 were also resolved through a peaceful bilateral solution as members of ASEAN and obligatory signatories to the Treaty of Amity and Cooperation by late 2001. Timor-Leste achieved independence in 2002 after it was annexed by Indonesia in 1975.

On South China Sea disputes, there were signs of good prospects when China and ASEAN signed the Declaration on the Conduct of Parties in the South China Sea in 2002 and China acceded to the Treaty of Amity and Cooperation in Southeast Asia and signed the Joint Declaration on ASEAN-China Strategic Partnership for Peace and Prosperity in 2003. The long and bloody conflict between the Indonesian Government and the Free Aceh Movement finally reached a peaceful resolution in 2004 after much international brokering and pressure. Between 2005 to 2008, South East Asia seemed so secured that one expert lamented that studying South East Asian security during that period too boring. The sweetener in that 1999 to 2008 period was the witnessing of territorial claims between Singapore and Malaysia over Pedra Branca and between Malaysia and Indonesia over the islands of Ligitan and Sipadan being resolved through the International Court of Justice (ICJ).

In the subsequent decade from 2009 – 2018, there were several disputes between ASEAN countries and the below examples demonstrated the willingness of ASEAN countries to comply by its code of conduct and to resolve issues amicably through appropriate forums / channels rather than the use of force. In 2010, the Malayan Railway Land dispute between Singapore and Malaysia was finally resolved after twenty years of negotiation. In 2011, the Thailand-Cambodia skirmishes resulted in a small scale and violent confrontation. The confrontation was over the issue of Preah Vihear Temple and was finally resolved bilaterally through ASEAN intervention. These two dispute settlements reflected both the States' maturity in using bilateral, regional and international mechanisms to resolve disputes amicably while accepting the verdicts gracefully.

In 2013, a group of armed Filipinos invaded Malaysian Borneo to enforce a long-dormant claim to Sabah in northern Borneo. The bloody incursion by some 200 Islamic militants from the southern Philippines was inspired by a self-proclaimed Filipino sultanate's claims of historical dominion over the Malaysian state of Sabah on Borneo island. The assault, Malaysia's most serious security crisis in years, led to a siege between the militants and the country's armed forces who were sent to root them out. Both countries collaborated earnestly towards a peaceful settlement with maximum constraint but the inevitable happened and resulted in at least 70 people were killed, mostly militants, over the six-week ordeal. While this crisis was not a direct dispute between both countries, it revealed a gap in the porous border which amplified rampant illegal immigration and lawlessness incidents. The aftermath of this crisis also saw both countries collaborated on an initiative on joint security patrol to address the porous border.

In the last decade from 2009 to 2018, it was also observed that security cooperation in terms of bilateral and, multilateral exercises and forums among ASEAN countries has also increased greatly. Trust and better relationships between ASEAN Armed Forces were developed through such initiatives. One successful example of security cooperation was the Malacca Strait Patrols or MSP, which comprises the Malacca Strait Sea Patrol (MSSP), the "Eyes-in-the-Sky" (EiS) air patrols as well as the Intelligence Exchange Group (IEG). The MSP initiative was conceived as a set of practical co-operative measures undertaken by Indonesia, Malaysia and Singapore to ensure the security of the Straits of Malacca and Singapore which carries more than one fourth of the world's commerce and half the world's oil.

Non-traditional security cooperation like counter- terrorism, counter cyber attacks, humanitarian assistance and disaster relief also took place. One recent example was the search operation for MH 370 which saw ASEAN countries (all less Cambodia) working together with Australia, China, US and other 14 other countries. Another example was in 2017, Malaysia began trilateral joint maritime patrols and joint Sulu Sea air patrols with Indonesia and Philippines to counter movements and attacks by ISIS-linked militants in regional waterways.

It is clear that there is no existence of two or more parties in a deliberate and antagonistic relationship. It is observed that the Southeast

Asian region is witnessing a trend towards resolving territorial disputes, albeit that some disagreements were temporary in nature, such as those between Malaysia and Thailand, and Malaysia and Vietnam. A number of the unresolved disputes are subjected to negotiations and in some cases, demarcation processes have been initiated. The preferred approach to conflict management would seem to be a combination of discussion, consultation and formal talks. The frequency of these exchanges depends on a variety of factors including the perceived urgency of the issues at stake, which in turn depends upon political, economic and broader security perspectives. It is also envisaged that the tighter security cooperation amongst ASEAN countries will reduce the possibility of an arms race. The peace and stability enjoyed by Southeast Asian countries over the last decade is likely to continue, in fact, is more likely to strengthen given ASEAN's progressive effectiveness. The likelihood for continued peace and stability, and the tighter security cooperation in the region will ensure an arms race will not take place.

Defence spendings

The second factor to be examined is the increase in defence spendings. The conditions for this factor to determine if a country is in an arms race are its military expenditure had (1) increased for at least 7 out of the last 10 years, (2) increased every year for the last 5 years and (3) increased over 50 percent over the last 10 years (see Table 4-1). Cambodia is the only country that satisfied all the conditions that suggest it is in an arms race. The other three countries that satisfied two out of the three conditions are Indonesia, Philippines and Vietnam, which suggest that they are close to an arms race situation especially in the case of Vietnam.

Table 4-1 Conditions of ASEAN countries' military expenditure

Mil Expenditure	Increased for at least 7 out of last 10 years	Increased every year for the last 5 years	Increased more than 50% over the last 10 years
Brunei	N – 6/10	N – 1/5	N
Cambodia	Y – 10/10	Y – 5/5	Y – 315%
Indonesia	Y – 7/10	N – 2/5	Y – 124%
Laos	N – 4/10	NA	N
Malaysia	N – 3/10	N – 0/5	N
Myanmar	N – 2/10	N – 1/5	N
Philippines	Y – 7/10	N – 2/5	Y – 76%
Singapore	Y – 9/10	N – 4/5	N
Thailand	Y – 7/10	N – 3/5	N
Vietnam	Y – 10/10	N – 4/5	Y – 129%
ASEAN	**Y – 9/10**	**N – 4/5**	**Y – 65%**

Another consideration of defence spendings to dismiss the arms race phenomenon is the consistent defence spendings of all ASEAN countries. Despite the fact that military expenditure in Southeast Asia had increased by 65 percent from USD24.6B in 2009 to USD40.7B in 2018, Table 4-2 shows that the defence spending of these countries was consistent against the percentage of the nations' Gross Domestic Product (GDP). Table 4-2 shows both the military expenditure in terms of percent of GDP and the absolute figures in constant USD. It is noted that only Cambodia and Indonesia registered an increase of military expenditure in terms of percent of GDP from 2009 to 2018, while six countries (Brunei, Malaysia, Myanmar, Philippines, Singapore and Thailand) registered a drop in percent of GDP. As a region, ASEAN's average military expenditure in terms of percent of GDP is 1.8 and the figure is the same in 2009 and 2018 with a range of 1.5 to 2.1 percent.

Table 4-2 ASEAN military expenditure in terms of percentage of GDP from 2009 to 2018 Military Expenditure as percentage of GDP / absolute figures in constant USD billions

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Ave
Brunei	2.9 / 0.35	2.9 / 0.39	2.2 / 0.41	2.2 / 0.41	2.3 / 0.41	3.1 / 0.52	3.3 / 0.42	3.5 / 0.40	2.9 / 0.34	2.4 / 0.34	2.7
Cambodia	1.3 / 0.13	1.5 / 0.16	1.5 / 0.19	1.5 / 0.21	1.6 / 0.24	1.7 / 0.27	1.8 / 0.32	1.9 / 0.38	2.1 / 0.46	2.2 / 0.54	1.7
Indonesia	0.6 / 3.3	0.6 / 4.6	0.7 / 5.8	0.7 / 6.5	0.9 / 8.3	0.8 / 6.9	0.9 / 7.6	0.8 / 7.3	0.8 / 8.1	0.7 / 7.4	0.7
Laos	0.2 / 0.01	0.2 / 0.01	0.2 / 0.01	0.2 / 0.02	0.2 / 0.02	-	-	-	-	-	0.2
Malaysia	2.0 / 3.9	1.5 / 3.8	1.6 / 4.6	1.4 / 4.5	1.5 / 4.9	1.5 / 4.9	1.5 / 4.5	1.4 / 4.1	1.1 / 3.4	1.0 / 3.4	1.4
Myanmar	-	-	-	3.7 / 2.9	3.8 / 2.3	3.6 / 2.3	4.1 / 2.5	3.7 / 2.4	3.2 / 2.2	2.9 / 2.0	3.5
Philippines	1.3 / 2.1	1.2 / 2.4	1.2 / 2.7	1.2 / 2.8	1.2 / 3.3	1.1 / 3.1	1.1 / 3.3	1.4 / 4.3	1.2 / 3.7	1.1 / 3.7	1.2
Singapore	3.9 / 7.5	3.4 / 8.1	3.2 / 8.9	3.2 / 9.1	3.1 / 9.3	3.1 / 9.5	3.1 / 9.3	3.2 / 9.8	3.2 / 10.1	3.1 / 10.8	3.2
Thailand	1.8 / 4.7	1.6 / 4.9	1.6 / 5.5	1.4 / 5.4	1.4 / 5.9	1.4 / 5.7	1.4 / 5.7	1.4 / 5.8	1.4 / 6.3	1.3 / 6.8	1.4
Vietnam	2.3 / 2.4	2.3 / 2.6	2.0 / 2.6	2.2 / 3.3	2.2 / 3.7	2.3 / 4.2	2.4 / 4.5	2.4 / 5.0	2.3 / 5.0	2.3 / 5.5	2.2
ASEAN	**1.8 / 24.6**	**1.6 / 27.2**	**1.5 / 30.9**	**1.7 / 35.5**	**1.8 / 38.6**	**2.0 / 37.7**	**2.1 / 38.4**	**2.1 / 39.9**	**2.0 / 40.0**	**1.8 / 40.7**	**1.8**

Source : SIPRI Military Expenditure Database, 2019

Examining ASEAN countries' military expenditure as a percentage of government spendings (GS), ASEAN countries' average military expenditure stood at 8.4% of GS with a range of 7.5-9.6% and a delta of 2.1% (see Table 4-3). Majority of ASEAN countries' average military expenditure ranged from 4.2% to 7.8 % less Laos of 0.9%, Myanmar of 16.8% and Singapore of 19.7%, the differences reflect the different priorities in each country's GS. The delta of military expenditure of most countries were below 2.7% except that of Myanmar and Singapore which were above 5%. Most countries see a reduction of military expenditure in 2009 as compared to 2018 less Cambodia, Indonesia and Vietnam. In fact, there is a trend of gradual reduction from 2009 to 2018 with four countries (Malaysia, Philippines, Singapore and Thailand) recorded their lowest military expenditure as a percentage to GS in 2018. Overall, it is observed that there is also a consistency of military expenditure in terms of percentage to GS of ASEAN countries in the last decade. As compared to defence spendings as a percent of GDP, defence spending as a percent of GS fluctuates in a wider range from year to year.

Table 4-3 Military expenditure as percentage of government spendings

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Ave	Range	Delta
Brunei	8.4	7.9	7.5	7.0	6.8	9.1	8.5	9.0	7.8	7.8	7.2	6.8-9.1	2.3
Cambodia	6.4	7.1	7.3	7.1	7.5	7.7	8.6	8.6	9.0	9.2	7.8	6.4-9.2	2.7
Indonesia	3.4	3.7	3.7	3.8	4.8	4.2	5.1	4.7	4.9	4.3	4.2	3.4-5.1	1.7
Laos	1.2	0.9	1.0	0.9	0.8	-	-	-	-	-	0.9	0.8-1.2	0.4
Malaysia	6.1	5.6	5.7	5.0	5.4	5.5	6.1	6.1	5.1	4.3	5.4	4.3-6.1	1.8
Myanmar	-	-	-	19.6	16.7	14.4	17.1	17.8	16.9	15.2	16.8	14.4-19.6	5.2
Philippines	6.3	6.4	6.7	6.1	6.7	6.0	6.1	7.3	6.0	5.4	6.3	5.4-7.3	1.9
Singapore	21.6	22.2	22.0	21.7	20.5	19.2	17.3	17.7	17.8	17.1	19.7	17.1-22.2	5.1
Thailand	8.0	6.7	7.0	6.5	6.5	6.4	6.5	6.8	6.4	6.3	6.7	6.3-8	1.7
Vietnam	7.2	7.7	7.3	7.3	7.6	8.0	8.1	8.6	8.0	8.1	7.7	7.2-8.6	1.4
ASEAN	**7.6**	**7.5**	**7.5**	**8.5**	**8.3**	**8.9**	**9.2**	**9.6**	**9.1**	**8.6**	**8.4**	**7.5-9.6**	**2.1**

Source : SIPRI Military Expenditure Database, 2019

Using Jane's projected percentages of GDP figures for ASEAN countries (see Table 4-4), it is noticeable that the military spendings remains consistent in the next decade from 2019 to 2028. The projection sees Brunei, Indonesia, Malaysia, Philippines, Thailand and Vietnam increasing a mere 0.1 percent, Singapore decreasing the most by 0.3 percent and the rest remains unchanged. This observation can fairly conclude that in the next decade, the projected military expenditure as a percentage of GDP is reasonably consistent.

Table 4-4 Jane's projection of ASEAN countries' military expenditure in terms of percentage of GDP from 2019 to 2028

Country	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Brunei	2.4	2.4	2.4	2.5	2.6	2.5	2.6	2.5	2.5	2.5	2.5
Cambodia	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2
Indonesia	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Laos	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Malaysia	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.1
Myanmar	2.9	3.0	2.9	2.9	2.9	3.0	2.9	3.0	3.0	2.9	2.9
Philippines	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Singapore	3.1	3.1	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8
Thailand	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.4
Vietnam	2.3	2.4	2.3	2.3	2.4	2.5	2.6	2.6	2.5	2.4	2.4

Source : IHS Jane's Defence Weekly

PricewaterhouseCoopers' (PwC) has projected 2028 ASEAN countries economies to grow steadily in the next decade. Table 4-5 shows the comparison between PwC's projected average GDP growth and Jane's projected average military expenditure % of GDP. It is observed that all countries GDP rate increases at a rate much faster (an average of 3.9 percent) than their military expenditure as a percentage to their GDPs (an average of 1.7 percent) less Brunei (GDP growth of 0.1 percent versus military expenditure percent of GDP of 2.5 percent).

Table 4-5 Comparison of Projected Average GDP Growth and Projected Average Military Expenditure as percentage of GDP of ASEAN Countries

Country	Projected 2028 Average GDP Growth	Projected 2028 Average Military Expenditure % of GDP
Brunei	0.1	2.5
Cambodia	5.0	2.2
Indonesia	3.7	0.8
Laos	6.0	0.2
Malaysia	3.5	1.1
Myanmar	6.0	3.1
Philippines	4.3	1.2
Singapore	2.9	2.8
Thailand	2.9	1.4
Vietnam	5.0	2.3
Average	**3.9**	**1.7**

Source : PricewaterhouseCoopers' and IHS Jane's Defence Weekly

Using the projected 2028 military expenditure percentage of GDP figures, supported by PricewaterhouseCoopers' projection of 2028 GDPs, both shown in Table 4-6, a comparison between 2018 and 2028 figures is made. It is useful to note that the absolute military expenditure figures of ASEAN countries will rise from USD40B to USD60B, an increase of 50% from 2019 to 2028 as compared to USD24.6B to USD40.7B, an increase of 65 percent from 2009 to 2018. Cambodia, Indonesia, Malaysia, Philippines and Vietnam military expenditure will increase from 60 to 77 percent, with Laos and Myanmar figures increasing substantially by 300% and 200% respectively (This increase is substantial because it is assumed that all 10 years of transparent data can be obtained as compared to the last decade). Both Singapore and Thailand military expenditure will increase by 38 and 33% respectively.

Table 4-6 Comparison of ASEAN countries 2018 and projected 2028 GDP and military expenditure

Country	2018 GDP Billions	Projected 2028 GDP	Projected 2028 Mil Exps %	2018 Mil Exps Billions	Projected 2028 Mil Exps Billions	% Change 2009-18	% Change 2019-28
Brunei	13.5	13.6	2.5	0.34	0.34	-2	0
Cambodia	24.6	40.1	2.2	0.54	0.88	315	62.9
Indonesia	1041	1497	0.8	7.4	11.9	124	60.8
Laos	18	32.4	0.2	0.02	0.06	100	300
Malaysia	358	505	1.1	3.4	5.5	-12	61.7
Myanmar	77	138	3.1	2	4	-31	200
Philippines	342	522	1.2	3.7	6.2	76	67.5
Singapore	364	484	2.8	10.8	13.5	25	38.8
Thailand	505	652	1.4	6.8	9.1	44	33.8
Vietnam	241	392	2.3	5.5	9.4	129	70.9
ASEAN	**2986**	**4280**		**40.5**	**60.88**		

Source : SIPRI Military Expenditure Database, 2019 and Pricewaterhouse Coopers’

Analysing the factor of defence spendings and its conditions, findings reveal that only Cambodia’s military expenditure had (1) increased for at least 7 out of the last 10 years, (2) increased every year for the last 5 years and (3) increased over 50 percent over the last 10 years, and satisfied all the conditions that suggest it is in an arms race. However, based on earlier conclusion that Cambodia does not have a deliberate and antagonistic relationship with any country, it is not in an arms race. Additional findings like the consistent defence spendings in terms of percent of GDP, the consistent military expenditure in terms of percent to government spendings and the consistent projected military expenditure as a percent of GDP in the next decade, reinforce an absence of an arms race amongst ASEAN countries. ASEAN countries' military expenditure were consistent over the past decade and are projected to be also consistent in the next decade. It is also evident that their defence spending will fluctuate with the nations' economic growth and will increase with positive economic growth.

Military Acquisitions

The third factor to be examined is the rapid rate of military acquisition over 10 years. The conditions for this factor to determine if a country is in an arms race are its rate of military acquisitions increased more than 50 percent between the 1st 5-year and 2nd 5-year period over the last ten years and the rate is on an increasing trend for the last 3 years. While ASEAN, as a whole, decreased its rate of military acquisitions by 4 percent between 1st 5-year (2009-2013) and 2nd 5-year (2014-2018) periods, there were five countries (Indonesia, Laos, Philippines, Thailand and Vietnam) that increased their rate of military acquisitions by more than 50 percent, but none of these countries' last 3 years acquisitions were on an increasing trend (see Table 4-7). This pace of military acquisition does not constitute to an arms race in Southeast Asia. In the last decade, different countries have had different priorities over military acquisitions, balancing domestic security with military modernisation which affected their pace of modernization programs.

Table 4-7 Conditions of ASEAN countries' rate of military acquisitions

Rate of Military Acquisitions	**Increased at more than 50 % between 1st 5-year and 2nd 5-year period over last 10 years**	**Is on an increasing trend for the last 3 years**
Brunei	N	N – 0/3
Cambodia	N	N – 1/3
Indonesia	Y – 82%	N – 1/3
Laos	Y – 52%	N – 1/3
Malaysia	N	N – 1/3
Myanmar	N	N – 0/3
Philippines	Y – 329%	N – 2/3
Singapore	N	N – 2/3
Thailand	Y – 50%	N – 2/3
Vietnam	Y – 78%	N – 0/3
ASEAN	**N**	**N – 2/3**

Source : SIPRI Military Expenditure Database, 2019

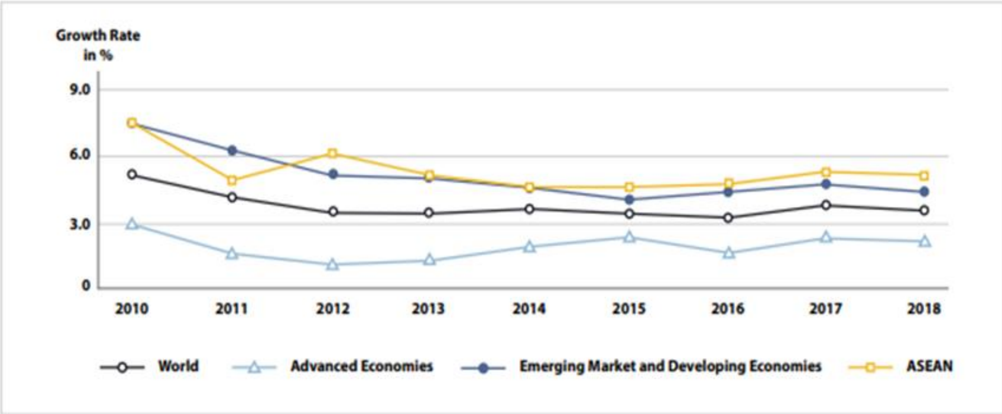
No Arms Race, but Arms Dynamics in the last and next decade

Earlier findings of non existence of deliberate and antagonistic relationship amongst ASEAN countries, no huge increase in defence spendings (except Cambodia) and no rapid rate of military acquisitions concluded that there is no arms race amongst ASEAN countries in the last decade. In fact, extrapolation of last decade data also suggests that there will be no arms race amongst ASEAN countries in the next decade. It is also fairly reasonable to conclude that all ASEAN countries were in an arms dynamics. With the assessment that all ASEAN countries were in an arms dynamics, an analysis on how driving factors like growing economies, military modernisation efforts and internal considerations will affect each ASEAN country.

Growing Economies

Economic growth amongst ASEAN countries discourages an arms race. The rapid economic growth rate and total trade among the ASEAN countries have increased tremendously from 2009 to 2018. After 2008-2009 economic crisis, the global economy embarked on a recovery journey, the global gross domestic product (GDP) expanded by 5.4% in 2010 before moderating within the 3.4%-3.8% range from 2012 to 2018 (see Figure 4-1). The decade saw advanced and emerging economies implementing stimulus measures and adopting quantitative easing, followed by policy tightening and escalating trade tensions, amidst ongoing geopolitical tensions. From 3.8% in 2017, global GDP growth moderated to 3.6% as growth momentum was dampened by the trade tensions. Growth in advanced economies slowed to 2.3% in 2018 following the softening of industrial production, political uncertainties, and natural disasters; while growth in emerging economies eased to 4.5% in 2018 from 4.8% in 2017 given the financial tightening and uncertain economic conditions. (IMF 2019a) The ASEAN economy has consistently outperformed the global economy. The region’s GDP growth has remained close to 5.0% since 2011, while global GDP stayed below 4.0% over the same period.

Figure 4-1 Real GDP Growth Rate, 2010-2018



Source : ASEAN Secretariat, 2019 and IMF (2019b, 2019c)

ASEAN's aggregate average real GDP growth is 5.1% from 2009 to 2018. Amongst ASEAN countries, Myanmar has the highest expansion of 7.6% growth per year. Myanmar, together with Cambodia, Laos and Vietnam, have enjoyed more than 5.1% GDP growth every year since 2010 (see Table 4-8). Countries that grew less than ASEAN's average of 5.1% GDP growth included Brunei, Malaysia, Singapore and Thailand.

Table 4-8 GDP Growth in ASEAN from 2009 to 2018

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Ave
Brunei	-1.8	2.6	3.7	0.9	-2.1	-2.5	-0.4	-2.5	1.3	0.1	-0.1
Cambodia	0.1	6.0	7.1	7.3	7.5	7.1	7.0	6.9	7.2	7.5	6.4
Indonesia	4.6	6.2	6.5	6.3	5.6	5.0	4.9	5.0	5.1	5.2	5.4
Laos	7.5	8.1	8.0	7.9	8.0	7.6	7.3	7.0	6.9	6.3	7.5
Malaysia	-1.5	7.4	5.3	5.5	4.7	6.0	5.0	4.4	5.7	4.7	4.7
Myanmar	10.5	9.6	5.6	7.3	8.4	8.0	7.0	5.9	6.8	6.8	7.6
Philippines	1.1	7.6	3.7	6.7	7.1	6.1	6.1	6.9	6.7	6.2	5.8
Singapore	-0.6	15.2	6.2	4.1	5.1	3.9	2.2	3.0	3.7	3.1	4.6
Thailand	-0.7	7.5	0.8	7.2	2.7	1.0	3.1	3.4	4.0	4.1	3.3
Vietnam	5.4	6.4	6.2	5.2	5.4	6.0	6.7	6.2	6.8	7.1	6.1
ASEAN	**2.5**	**7.5**	**5.0**	**6.2**	**5.2**	**4.7**	**4.8**	**4.9**	**5.3**	**5.2**	**5.1**

Source : ASEAN Secretariat Database, 2019 (GDP growth in percent; based on GDP in national currency at constant market prices)

ASEAN's economy of USD 2.9 trillion in 2018 is the world's 5th largest economy after EU, USA, China and Japan. Amongst ASEAN countries, Indonesia's economy was the largest, with GDP of about USD 1.0 trillion, equivalent to 34.9% of total ASEAN GDP in 2018, followed by Thailand with a GDP of USD 505 billion and 16.9% (see Table 4-9). ASEAN founding members (Indonesia, Malaysia, Philippines, Singapore and Thailand) contributed to the lion's share of 87.4% of ASEAN's economy. The region has witnessed a phenomenon economic growth from 2009 to 2018 with all countries experiencing more than 75% growth less Brunei. In this rapid economic growth years, there were only 16 times that any country has lesser absolute GDP USD than the year before as depicted in red in Table 4 – 9

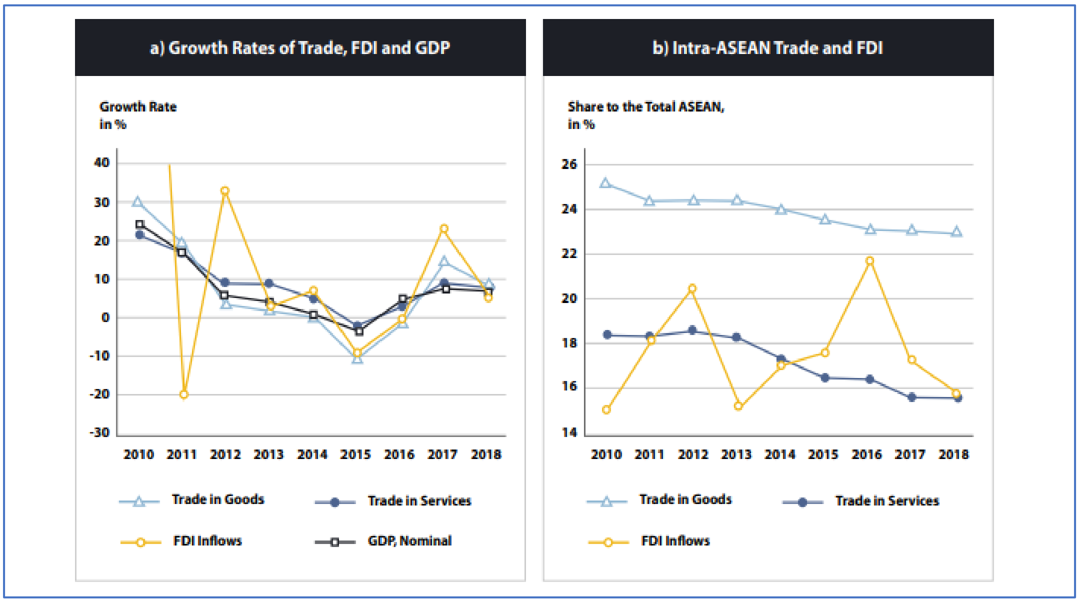
Table 4 - 9 GDP in ASEAN, at current prices (nominal), in USD (billions)

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Brunei	10.8	13.7	18.5	19.0	18.1	17.1	12.9	11.4	12.2	13.5
Cambodia	10.3	11.2	12.8	14.0	15.4	16.7	18.0	19.4	22.0	24.6
Indonesia	545	710	846	874	904	889	855	930	1013	1041
Laos	5.5	6.7	8.0	10.1	11.9	13.2	14.4	15.8	16.9	18.0
Malaysia	202	250	298	314	322	337	299	298	321	358
Myanmar	26.9	41.0	56.5	60.2	61.8	66.3	59.7	64.6	66.6	77.2
Philippines	168	199	224	250	268	284	292	304	313	342
Singapore	192	236	275	295	307	314	308	318	338	364
Thailand	282	341	370	397	420	407	401	412	455	505
Vietnam	106	116	135	155	171	186	193	205	223	241
ASEAN	**1551**	**1927**	**2247**	**2392**	**2502**	**2533**	**2455**	**2581**	**2785**	**2986**

Source : ASEAN Secretariat Database, 2019 (GDP in US $ million; at current market prices)

ASEAN's trade and investments have fluctuated since 2010 (e.g. the post-recession recovery, see Figure 4-2). This was a result of a general cyclical downturn in trade and an overall moderation in the global economy. Growth rates of nominal GDP, trade in goods and trade in services were generally in tandem, with slight variations for FDI. However, in 2018 trade tensions aggravated global uncertainties and stifled the economic expansion, resulting in a dip in major economies, trade in goods and services (as well as investments).

Figure 4-2 ASEAN Trade and Investments, 2010-2018

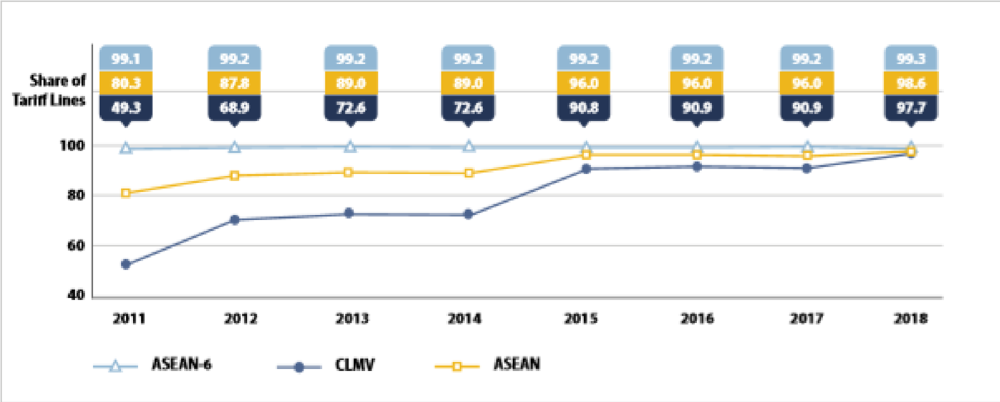


Source : ASEAN Secretariat, 2019

Intra-ASEAN trade in goods and services stayed relatively stable between 2010 and 2018, declining only slightly in the second half of the decade. The intra-regional share of trade in goods fell slightly to 23.0% in 2018 from 25.1% in 2010, while the intra-regional share of trade in services was down from 18.4% in 2010 to 15.7% in 2018. For FDI, the intra-ASEAN share stayed within 15%-22% from 2010 to 2018, with the share in 2018 (15.9%) slightly higher than 2010's 15.1%.

One of ASEAN's strategy to promote and increase trade amongst ASEAN countries is to lower intra-regional tariffs. As of May 2019, 99.3% of all tariffs have been eliminated by the ASEAN-6 (e.g. Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand), while the corresponding figure for Cambodia, Laos, Myanmar, and Vietnam (CLMV) is 97.7%. Collectively, ASEAN has eliminated 98.6% of the total number of tariff lines in 2019 (see Figure 4-3)

Figure 4-3 Share of Tariff Lines at zero percentage in the ATIGA Tariff Schedule

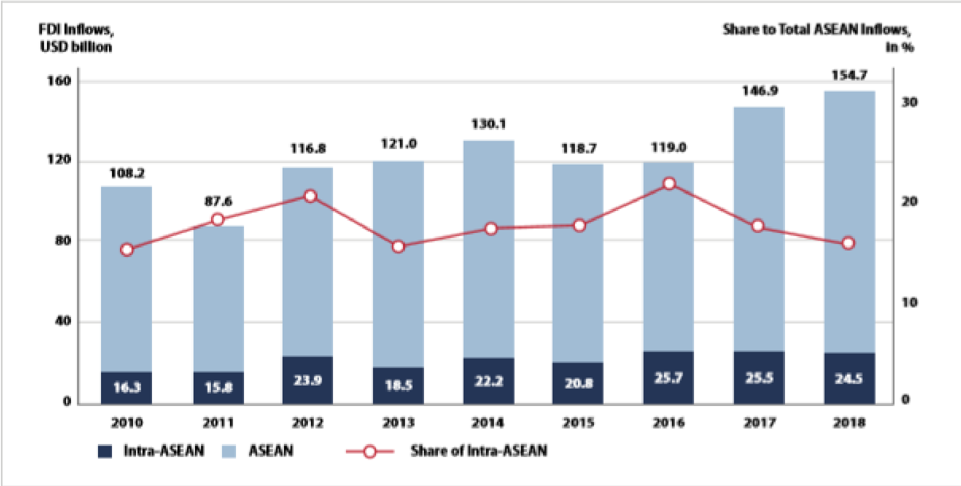


Source : ASEAN Secretariat, 2019

Intra-ASEAN FDI inflows, which amounted to USD 24.5 billion, took up the largest share at 15.9%, of total FDI inflows into the region in 2018[1] (see Figure 4-4). This figure was higher than the EU's USD 22.0 billion (14.2%), Japan's USD 21.2 billion (13.7%), and China's USD 10.2 billion (6.6%). Intra-ASEAN FDI inflows have grown at an annual average of 5.2% from USD 16.3 billion in 2010, slightly higher than the 4.6% average growth of total ASEAN FDI inflows over the same period. The high interdependence of economies amongst ASEAN countries is reflected in the Intra-ASEAN FDI inflows in the last decade.

[1] ASEAN Secretariat. "ASEAN Integration Report 2019". (Online) Available : https://www.asean.org/?static_post=asean-integration-report-2019, October 2019. p. 20.

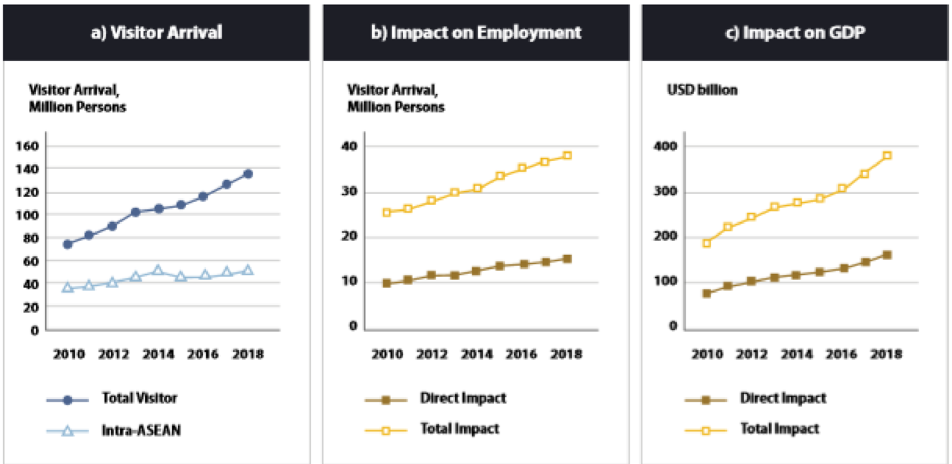
Figure 4-4 Intra-ASEAN FDI inflows, 2010-2018 (USD billions)



Source : ASEAN Secretariat, 2019

ASEAN, a culturally diverse and fascinating tourist destination, continues to attract many visitors. ASEAN saw an increase in visitor arrivals, from 73.8 million persons in 2010 to 135.3 million in 2018. The majority of visitor arrivals were from within the region, with intra-ASEAN tourists representing 36.7% of the total (49.7 million persons) in 2018. The growth in tourism is making a positive economic impact to the region. In 2018, the sector is estimated to have directly contributed USD 161.5 billion to the ASEAN economy (5.4% of GDP) and created 15.5 million jobs, up from USD 79.3 billion and 10.9 million jobs in 2010 (see Figure 4-5). This is another reflection of the high interdependence and connectedness of ASEAN countries' economies.

Figure 4-5 Impact of Tourism on the ASEAN Economies



Note : Direct impact measures total spending on travel and tourism by residents and non residents for business and leisure purposes. Total impact includes government collective expenditure, investments, and other economic activities related to tourism.

Source : WTTC (2019), ASEAN Secretariat

In PriceWaterhouse Coopers' report (Feb 2017), the latest long-term economic growth projections were made. The analysis uses a robust long-term economic growth model from the academic literature that accounts for projected trends in demographics, capital investment, education levels and technological progress to estimate potential long-term growth rates. The projection assumes broadly growth-friendly (but not perfect) policies and no major civilisation-threatening global catastrophes (For example, nuclear war, asteroid collisions)[2]. With the

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[2] Pricewaterhouse Coopers. "The World in 2050". (Online). Available : https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf, 2017.

ASEAN 2018 GDP figures, an attempt is made to project ASEAN GDP in the next decade in 2028 (See Table 4-10). ASEAN is projected to become the fourth-largest economy of USD 4.2 trillion in the world by 2028 after the United States, China, and the European Union. ASEAN will have four countries above USD 500 million namely Indonesia, Thailand, Philippines and Malaysia, with Indonesia being the fifth largest economy in the world. In the next decade, ASEAN will continue with its strong economic growth rate and total trade amongst the ASEAN countries.

Table 4-10 Projected 2028 ASEAN countries GDP in USD billions

Country	**2018**	**PWC projected average Real GDP growth pa 2018 to 2028**	**Projected 2028 GDP**
Brunei	13.5	0.1	13.6
Cambodia	24.6	5.0	40.1
Indonesia	1041	3.7	1497
Laos	18.0	6.0	32.4
Malaysia	358	3.5	505
Myanmar	77.2	6.0	138
Philippines	342	4.3	522
Singapore	364	2.9	484
Thailand	505	2.6	652
Vietnam	241	5.0	392
ASEAN	**2986**		**4280**

Source : PriceWaterhouseCoopers, 2017

With the projected economic growth in Asia in the next decade, and certainly in Southeast Asia too, the trends of tighter economic development and growth are likely to remain. The higher the interdependence and connectedness of the economies amongst ASEAN countries, the greater the higher effect of having a giving stake in the peace and stability of the ASEAN region. With a greater stake in the stability, the likelihood of an arms race is discouraged.

Military modernisation effort and internal considerations

Other driving factors like military modernisation efforts amongst ASEAN countries and individual country's internal considerations will affect individual country's arms dynamics. The slow pace of military modernisation does not contribute to an arms race. In the last decade, different countries have had different priorities over military modernisation. Some have had to balance new domestic security issues with modernisation, hence slowing down their modernization program. Other internal considerations include threats from terrorists, pirates, smugglers, other organised crime, need to perform search and rescue, humanitarian assistance and disaster relief operations. A brief overview on each ASEAN country's priorities, and current and future military modernisation efforts is provided.

1. Brunei

Brunei's military spending depends greatly on its economy which hinges greatly on its oil industry. From 2009 to 2014, Brunei received 4 OPVs, 5 patrol crafts from Germany and 12 transport helicopters from USA. The OPVs gave Brunei a more capable blue water capability to patrol its exclusive economic zone and South China Sea claims. Fall in the oil price in 2014 reduced military spendings and resulted in many acquisition plans being delayed, scaled down or cut. Since 2015, there were no major weapons delivered and no known new orders. From 2015 onwards, the declining energy prices impacted significantly on both GDP and defence spendings, and that affected greatly Royal Brunei Armed Forces' efforts to implement its Defence Capability Enhancement Project and slow its pace of military modernisation.

2. Cambodia

A border issue with Thailand in mid 2008 led to two clashes between Cambodian and Thai forces in 2008 and 2011. The dispute remains unresolved and has become a major driver of increased military spending. Deliveries spiked in 2009-13, they included 160 tanks and 80 armoured personnel carriers and they were mainly acquisition of land systems. Despite the on-going tensions with Thailand and new tensions with Laos, Cambodia did not purchase any major arms or place any major weapon orders after 2013. The lack of acquisition from 2014 to 2018 suggests the limited scope of the border conflict and the threat perceptions of Cambodia. However, in 2016, Cambodia announced plans to acquire combat craft and corvettes or frigates, that indicated a shift of land to maritime systems. These expensive systems will be a challenge for Cambodia's military budgetary constraints.

3. Indonesia

For many years, internal security and counter-insurgency were key drivers for Indonesia's defence budget and the emergence of clearer threats to Jakarta's extensive maritime interests have contributed to a drive to restructure and modernise the TNI in the last decade.

Indonesia's White Paper stated the aspiration of over 1 per cent of GDP expenditure for modernisation but the economic challenges between 2014 to 2018 resulted in only 0.7 to 0.9 percent which affected their modernisation plan of establishing 'Minimum Essential Force' of strengthened air, naval and maritime paramilitary capabilities by 2024. In addition, Indonesia's priority for military acquisition was for new equipment to replace older systems. In 2017, 40% of the budget was allocated for capital investment, a very high allocation compared to many countries. The priority in recent years of expanding its military presence in the Natuna archipelago became clearer with the plans to acquire combat and transport aircrafts, new bases to be built and basing of both AH-64 combat helicopters and VERA-NG passive electronic air surveillance system on Natuna. Increased defence spending in the last decade has enabled military modernisation and restructuring, and commenced expansion of military presence to address maritime concerns but continuing budget pressures slowed its efforts to strengthen capabilities. In the next decade, with the expectation of better economic growth, it is likely that the MEF will be established by 2028.

4. Laos

Laos' military modernisation has been slow and not transparent (no official data from 2014 – 18). There was a small increase in real terms of military spending from 2009 to 2013. Its military expenditure and spendings as a percentage of GDP was the smallest amongst ASEAN countries and possibly in the world as well. In 2017, in response to Cambodia's threat of military action against Laos, Laos placed orders for light combat aircrafts, tanks (from Russia) and air defence systems (from China) to beef up its defence. In the next decade, military modernisation will continue to be slow and is likely to be threat driven and opportunistic.

5. Malaysia

Malaysia's military spending in the last decade had been inconsistent and generally in a downtrend. Economic performance greatly dictated what the military can afford to procure. Two economic events were the fall in oil prices in 2014 and the significant cut in state budget in 2016, both economic downturns reduced the military spending and put many major procurements plan to a halt, a postponement or a scale down. In fact, 2014 to 2018 deliveries of arms were the lowest in the past four five-year periods. These economic challenges, coupled with the 2013 armed intrusion at Lahad Datu, 2014 disappearance of Malaysian Airlines flight MH370 and 2015 Chinese naval intrusions into Malaysia's EEZ, impacted the Malaysian Armed Forces' pace of modernisation plan. In the next decade, Malaysia's future defence budget is likely to focus on closing those operational gaps exposed in the Lahad Datu, MH370 and South China Sea incidents through its navy "15-to-5" programme (reducing the number of vessel classes from 15 to 5 and boost local ship building) and its air force Capability Development 2055 (CAP 55 - procurement, enhancements and upgrading of air assets).

6. Myanmar

Myanmar budget figures were published for only 7 out of 10 years (2012 to 2018) and growth was strongest in 2015 when conflict flared in northern Myanmar. The primary focus of the Myanmar Armed Forces has always been maintaining internal security (one of the world's longest running insurgencies) and this focus essentially means largely a light infantry force centric Armed Forces. Military acquisitions were difficult and slow largely hampered by western arms embargoes. In the last five years, there was added focus on external defence and that spurred higher military spending. The maritime territorial disputes, where oil and gas are at issue, Myanmar has with Bangladesh, provided the impetus for Myanmar to expand its navy from a limited coastal force to a force of several frigates / check submarine that provides some blue-water capabilities.

7. Philippines

Philippines' military arms acquisitions have always been two pronged – regional tensions and internal conflict. Philippines has to constantly prioritise amongst pressure from China in South China Sea, continuing internal conflicts with the Communist Party of the Philippines / New People's Army and the Moro Islamic Liberation Front, and a growing conflict with Abu Sayyaf[3]. Funding restrictions compelled Philippines to acquire small volumes of new or second-hand weapons and modernised some of its older equipment in small batches while managing operational costs of ongoing internal conflict and South China Sea disputes. In fact, Philippines also has one of the most outdated inventories of major weapons in the region. In 2013, the Revised Armed Forces of Philippines Modernisation Act was approved to commence its modernisation programme to acquire new equipment from 2013 to 2028 in three phases or horizons: 2013-17, 2018-22 and 2023-27. Despite continuing internal conflicts in the last decade, the volume of land systems remained the same, while both the volume of ships and aircrafts

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[3] The International Institute for Strategic Studies, The Military Balance 2018. February 2018.

increased by 36 and 25 per cent respectively. The pace of modernisation was indeed slow and picked up some momentum only from 2013-18.

8. Singapore

Singapore had the highest military spending in the region in absolute terms and large arms acquisitions were consistent throughout 2009-18. Singapore Armed Forces (SAF) will see more army mechanisation and larger helicopter-equipped amphibious ships in her SAF 2030 plan. The SAF 2030 plan will see the SAF transforms into a more connected force with two new submarines from Germany, more F-15SG long-range strike aircraft, and possibly F-35 Joint Strike Fighters. Singapore's acquisitions indicate a strong desire to be able to operate over long distance. Notable acquisitions in 2009-18 included 40 F-16 combat aircraft, armed with various advanced ait-to-ground missiles and guided bombs, and support by new A330 MRTT (First two from Spain delivered in 2018). Singapore also acquired a new 'Island Air Defence System' comprising AEW aircraft, radars and SAM systems for its territorial defence. The pace of military modernisation in Singapore was consistent and progressive.

9. Thailand

Thailand's military expenditure has seen a yearly increase from 2012 onwards. The military acquisitions were still impacted by the conflict in southern Thailand, 2006 and 2014 coups and the 2008 state of emergency, which many arms suppliers have restricted their sales to Thailand. Despite the sales restrictions till 2016, there were substantial imports of major weapons (tank, armoured vehicles, combat aircrafts, missiles and warships) after that, the volume of Thai inventory increased only marginally, by 4 percent, as many older weapons were retired. The volume of naval inventory in the last decade actually fell slightly lower due to many major warships are still fairly new and are begin given a mid-life upgrade. Taking alignment with Thailand 20-year national strategy in 2017, the armed forces approved a ten-year modernisation programme called "Vision 2026", which includes plans for restructuring and increased defence spending. After a decade of slow-paced modernisation, 'Vision 2026' will support Royal Thailand Armed Forces' pace of military modernisation to pick up more momentum in the next decade.

10. Vietnam

Vietnam's military spending is increasing every year from 2011 onwards. With the rapid economic growth over the last decade, defence spending has increased and deliberate efforts have been made to re-equip the navy and air force, mainly with a view to deterring Chinese military pressure in the disputed Spratly Islands. Over the last decade, volume of major arms increased by 15 percent. There was a clear emphasis on naval assets as volume of ships increased by 166 percent (submarines, frigates, missile boats and patrol boats), with volume of land systems (a basing of capable coastal defence system) the same and a reduction of 18 per cent for the volume of air assets (received 31 Su-30MKK aircrafts and retired 175 older combat aircrafts). The historical armed confrontations with Chinese armed forces in the South China remain the key driver of Vietnam's military acquisition. With the projected average 5% annual GDP growth, Vietnam will continue build its weapons arsenal to respond to China's South China Sea claims.

It is clear that the pace of arms modernisation was slow and it varied markedly different for each country. Besides, the normal cycle of replacing ageing equipment and platforms, there seemed to be three commons themes for modernisation. For countries closer to developed- country status, it was deterrence towards external threats. For developing countries, providing internal security to resolve internal conflict was of paramount importance. For countries having territorial disputes with China, it was an effort to counter China's growing military power. It is fairly conclusive that the pace of military modernisation of each ASEAN country was aimed towards maintaining a military balance in ASEAN's region rather than trying to gain superiority over one another.

Conclusion

Using the developed conceptual framework, it is fairly conclusive that there is no arms race ongoing amongst ASEAN countries in the last decade, instead ASEAN countries are in an arms dynamics. With the trends and effects of arms dynamics in the last and next decade articulated in Chapter 4, Chapter 5 will conclude with a summary of why ASEAN countries are in an arms dynamics and not an arms race. Chapter 5 will also present recommendations for ASEAN countries to adopt to continue the established peace and stability in ASEAN region in the last decade and continue ASEAN's pursuit of accomplishing its ASEAN Community Vision 2025 in the next decade.

Chapter 5
Conclusion and Recommendations

Introduction

The research aims to study the trends and effects of arms race or arms dynamics amongst ASEAN countries in the last decade. Chapter 1 highlights the background and significance of the problem. If indeed, ASEAN countries are engaged in an arms race, the region faces an undesirable state of tension that can ill afford miscalculation or misinterpretation that may escalate to aggressive actions, or worst a conflict. Chapter 2 reviews several literatures related to the arms race and arms dynamics and highlights several definitions of both arms race and arms dynamics. It also explains the developed conceptual framework anchoring on the characteristic of an arms race by Grey and Hammond and the definition of arms dynamics by Buzan and Herring. Chapter 3 presents facts to decipher the common perception of an arm race occurring amongst ASEAN countries and concludes that these common perception are insufficient to ascertain if ASEAN countries are in an arms race. And a more systematic and sequential methodology, like the developed conceptual framework, is needed to analyse ASEAN countries' situation. Chapter 4 uses the developed conceptual framework and determines that ASEAN countries are not in an arms race but are engaged in an arms dynamics. Analysing and understanding the factors of antagonistic relationship, defence spendings and military acquisition influencing arms race concluded that ASEAN countries are not in an arms race. Subsequent analysis of factors of growing economies, military modernisation effort and internal consideration influencing arms dynamics reveal the trends and effects of ASEAN countries' arms dynamics in the last decade and extrapolate the possible trends and effects of ASEAN countries' arms dynamics in the next decade. This chapter will summarise all the findings and recommend possible policies, mechanism or approaches to prevent miscalculation or misinterpretation that could lead to an armed conflict in the next decade.

Conclusion

1. No arms race in the last decade

Using the developed conceptual framework for factors influencing arms race or arms dynamics, the discussion presented in Chapter 3 and 4 supported the premise that the ASEAN countries were not in an arms race as they did not conform to the characteristics of an arms race identified by Grey and Hammond. Instead, the discussion suggests that ASEAN countries were going through an arms dynamic, as defined by Buzan and Herring.

1.1 Non existence of two or more parties in a deliberate and antagonistic relationship

Amongst ASEAN countries, there was no permanent deliberate and antagonistic behaviour towards each other, albeit some temporal disagreement over territorial disputes. It is observed that the Southeast Asian region is witnessing a trend towards resolving territorial disputes. A number of the unresolved disputes are subjected to negotiations and in some cases demarcation processes have been initiated. The preferred approach to conflict management would seem to be a combination of discussion, consultation and formal talks. The frequency of these exchanges depends on a variety of factors including the perceived urgency of the issues at stake, which in turn depends upon political, economic and broader security perspectives. The peace and stability enjoyed by Southeast Asian countries over the last decade is likely to continue to be valued by all, in fact, is more likely to strengthen given ASEAN's progressive effectiveness. It is also envisaged that the higher likelihood for continued peace and stability and the tighter security cooperation amongst ASEAN countries will reduce the possibility of an arms race in the next decade.

1.2 Military expenditure

While the perception of the average military expenditure of all ASEAN countries has risen from USD24.6B to USD40.7B from 2009 to 2018 and an increase of 65 percent over 10 years may suggest an arms race, a deeper analysis concludes that the military expenditure of ASEAN nations is small and decreasing relative to Asia's total expenditure. Examining ASEAN countries' military expenditure in 2009 and 2018 as a percentage to global military expenditure, ASEAN countries spent 1.8 and 2.3 percent respectively (a figure that is consistently lower than global average), at a relatively slow rate of 0.5 percent per year. When comparing with Asia's military expenditure, ASEAN nations military expenditure show a decline of 9.9 percent in 2009 to 8.7 percent in 2018. The average military expenditure as a percent of GDP of ASEAN nations is consistent, ranging from 1.6 to 1.9 percent from 2009 to 2018.

Scrutinising individual ASEAN country's military expenditure, it is observed that all countries have consistent defence spendings in terms of percent of GDP, consistent military expenditure in terms of percent to government spendings and consistent projected military expenditure as a percent of GDP in the next decade. With the exception of Cambodia which has a military expenditure which (1) increased over 50 percent over the last 10 years, (2) increased for at least 7 out of the last 10 years and (3) increased every year for the last 5 years, and satisfied all the conditions that suggest it is in an arms race. The rationale for Cambodia's increased defence spendings was due to its border issue with Thailand that led to fighting between Cambodian and Thai forces in 2008 and 2011.

ASEAN countries' military expenditure were consistent over the past decade and are projected to be also consistent in the next decade. It is also acknowledged that their economic health is prioritised over defence spendings, as demonstrated in the last decade when military budgets were frozen or reduced when their economy stalled. Defence spendings will fluctuate and increase with positive economic growth but within conservative range.

1.3 Military acquisitions

The perception of acquisition of similar classes of air, land and sea platforms amongst ASEAN countries suggests a "tic for tac" arms race, it gave the impression that ASEAN countries were outdoing each other to acquire more platforms. However, an analysis of the arms export from 2009 to 2018 reveals the rate of ASEAN countries' military acquisitions has decreased by 4 percent between 1st 5-year (2009-2013) and 2nd 5-year (2014-2018) period. While there were five countries

(Indonesia, Laos, Philippines, Thailand and Vietnam) that have increased their rate of military acquisitions by more than 50 percent, none of these countries' last 3 years acquisitions were on an increasing trend. These evidence on the pace of military acquisition concluded that they do not constitute to an arms race in Southeast Asia. In the last decade, different countries have had different priorities over military acquisitions, balancing domestic security with military modernisation which affected their pace of modernization program. In the next decade, arms acquisition programs of ASEAN countries will continue to be aimed at achieving deterrence towards external threats, providing security to resolve internal conflicts, countering China's increased assertion in the South China Sea, or simply replacing old technologies.

2. ASEAN countries in Arms Dynamics in the last and next decade

After examining the three key factors of arms race, it is fairly reasonable to conclude that ASEAN countries are assessed to be in arms dynamics. Most of ASEAN countries' arms dynamics situation are affected by their economy, military modernisation and/or internal factors.

2.1 Growing Economies

ASEAN is projected to become the fourth-largest economy of USD 4.2 trillion in the world by 2028 after the United States, China, and the European Union. ASEAN will have four countries with GDP above USD 500 million namely Indonesia, Thailand, Philippines and Malaysia, with Indonesia being the fifth largest economy in the world. In the next decade, ASEAN will continue with its strong economic growth rate and total trade amongst the ASEAN countries, this will result in a corresponding increase in defence spendings. With the projected economic growth in Asia in the next decade, and certainly in Southeast Asia too, the trends of tighter economic development and growth are likely to remain. The higher the interdependence and connectedness of the economies amongst ASEAN countries, the greater effect of having a strong stake in the peace and stability of the ASEAN region. In the next decade, ASEAN countries will continue to leverage and trade with each other to gain economic prosperity as they strive to move towards developed countries status.

2.2 Military modernisation effort

The slow pace of military modernisation is a common feature in ASEAN countries' arms dynamics situation. In the last decade, different countries have had different priorities over military modernisation. Some have had to balance new domestic security issues with modernisation, hence slowing down their modernization program. Countries experienced the normal cycle of either revolution in technology or replacing ageing equipment and platforms. It is fairly conclusive that in the next decade, the pace of military modernisation of each ASEAN country is aimed towards maintaining a military balance in ASEAN's region while meeting individual revolution in technology or replacement of aging systems requirements rather than trying to gain superiority over one another.

2.3 Internal Considerations

Internal considerations include threats from terrorists, pirates, smugglers, other organised crime and the need to perform search and rescue, humanitarian assistance and disaster relief operations. It is clear that internal considerations impact the pace of arms modernisation too and the pace varies markedly different for each country. In the next decade, there seems to be three commons themes for internal considerations. For countries closer to developed-country status, it is deterrence towards external threats. For developing countries, providing internal security to resolve internal conflict is of paramount importance. For countries having territorial disputes with China, it is an effort to counter China's growing assertiveness and military power.

In the last decade, the peaceful and stable geo-political environment and security cooperation existing in Southeast Asia, coupled with high economic growth and tight economic cooperation, and the consistent defence spendings and slow-paced military modernization programs reinforce the fact that the region is in an arms dynamics situation. The trend of these characteristic is likely to continue and will be manifested through ASEAN's pursuit of accomplishing its ASEAN community Vision 2025 in the next decade.

Recommendations

1. Territorial Claims and Border Disputes to be Resolved Peacefully

Findings suggest that there will be no arms race among Southeast Asian countries in the next decade. The arms acquisitions will be the result of arms dynamics desired by each country for their interest. The existence of an arms dynamic must still be constantly managed to prevent negative consequences. It is important that occasional disputes over territorial claims, border disputes and skirmishes among ASEAN countries be resolved peacefully and not be left for misinterpretation or miscalculation to escalate to an arms race, or worse a conflict, which will undo all the peace and stability of the past decade.

2. Early conclusion of effective Code of Conduct

Tensions of South China Sea disputes have led to more military forces operating in close proximity including that of civilians. Military or security forces will naturally be pressurised to protect the civilians and this is indeed a cause for concern. With regard to China's aggressive assertions in the South China Sea, it is likely to trigger a situation described by Roy: "A state that suddenly becomes more assertive will frighten its neighbours, which will likely respond by forming an alliance to contain the threatening state."[1] It is postulated that ASEAN will act as a collective entity to resolve territorial disputes legitimately – this happened in August 1995 at the ASEAN Regional Forum which saw an unified ASEAN's stand on the Spratly Islands. As witnessed during the 22nd ASEAN-China Summit on 3 November 2019, ASEAN reported the progress of second reading process of the Single Draft Code of Conduct Negotiating Text. To ensure peace, security, stability, safety and freedom of navigation in and overflight above the South China Sea, ASEAN must strive to conclude an effective and substantive Code of Conduct early.

3. Limits on defence spendings

It is also equally important for ASEAN countries to be transparent in their defence capabilities and arms acquisitions to their citizens and among themselves, this will engender greater trust and improve regional ties. For the longer term, as the level of cooperation increases, it is possible to imagine the opportunity to place limits on

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[1] Denny, Roy. "Assessing the Asia- Pacific 'power vacuum", Survival, 37:3, 1995. p.45.

defence spending and therefore reduce the risks that arise from the inevitable tensions in the region[2].

4. Better Water Space Management

For military acquisitions especially for submarines acquisition, Southeast Asian navies acquired them for the primary peacetime missions of covert surveillance and intelligence gathering instead of sinking enemy ships. Given the spate of submarine acquisition, the region is getting congested and that entails high risks of accidents or incidents, thus there is a need for better water space management, a designation of a “no-go” zone will be a pragmatic initiative for all navies operating in South China Sea.

5. Agreed mechanism for unintended confrontation

As the size and capabilities of ASEAN countries armed forces increase, coupled with the limited transparency and clarity in defence and foreign policy, there is a risk of misunderstanding or tension escalation. There is a need to establish some mechanism and agreed rules for unintended confrontation. In addition, it is also important for ASEAN countries to consider clear and explicit communication of why ASEAN countries acquire weapons, what their “red lines” are and what the response to crossing “red lines” would be in their defence policy.

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[2] Wayne Mapp, “Military Modernisation and Buildup in the Asia Pacific – The Case for Restraint”, RSIS Monograph No. 31. (Online). Available : https://www.rsis.edu.sg/wp-content/uploads/2014/11/Monograph31.pdf, 2014.

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Biography

Rank / Name :	- Colonel GOH, Han Thong
Date of Birth :	- 16 December 1972
Education Background :	- Masters of Business Administration, Deakin University, Australia - Masters of Science (Instructional Systems Design) Florida State University, United States - Bachelor of Mechanical and Production Engineering (Honours), Nanyang Technological University, Singapore
Military Courses :	- Defence and Strategic Studies Course, Australia - International Joint Operations Planning Course, UK - Brigade Commander Course - Battalion Commander Course - Singapore Command and Staff Course - Advanced Military Technology Appreciation Course

- Battalion Tactics Course
- Tri Service Staff Course
- Singapore Armed Forces Ranger Course
- Officer Cadet Course

Military Experience
- Deputy Chief Armour Officer, HQ Armour
- Head Exercise Planning Group, HQ TRADOC
- Commander 4th Singapore Armoured Brigade
- Head Operations Planning Branch, General Staff (Operations)
- Head General Staff, HQ Armour
- Commanding Officer, 42nd Singapore Armoured Regiment
- Head Armour Projects Branch, HQ Armour

SUMMARY

Field Strategy

Title Trends and Effects of Arms Race or Arms Dynamic amongst ASEAN countries in the next decade

Name COL GOH, Han Thong **Course :** NDC **Class :** 62

Position NDC 62 Student, Singapore

Background and Significance of Problem

There are three common perceptions of increasing military expenditure by all Association of Southeast Asian Nations (ASEAN) countries, a “tic for tac” sequence of arms procurements by these countries and military acquisition by Southeast Asian countries caused by fears of China’s rise and its assertion over territorial claims in the South China Sea. These perceptions suggest an arms race is occurring in Southeast Asia.

Despite the common perceptions indicating signs of an arms race amongst ASEAN countries, this research will establish that it is not an arms race and there will be no arms race in the next decade. It will also suggest that due to the peaceful and stable geo-political environment existing in Southeast Asia, coupled with the move towards tighter economic and security cooperation, and the fact that defence spendings are consistent with slow-paced military modernization programs, the activities that are taking place do not constitute an arms race but that of an arms dynamics. The significance of ASEAN countries engaging in an arms race is the region will face an undesirable state of tension that can ill afford miscalculation or misinterpretation that may escalate to aggressive actions, or worst a conflict. Understanding the factors involved in each country's military expenditure and acquisition in transparent and clear manner will reduce the risk of tension escalation and maintain the peace and order carefully built by ASEAN countries over the years.

Objectives of Research

The objectives of the research are as follows:

1. To decipher common perceptions of arms race amongst ASEAN countries.

2. To study trends and effects of Arms Race or Arms Dynamics amongst ASEAN countries in the last and next decade.

3. To recommend possible policies, mechanisms or approaches to prevent miscalculation and misadventure that could lead to an armed conflict in the next decade.

Scope of Research

The scope of research is as follows:

1. Chapter 1 – This chapter sets the stage for the research by introducing and describing the background of the research and research methodology. It also lists the delimitation and definition of words used in this research.

2. Chapter 2 – This chapter reviews several key literatures related to the research and proposes a conceptual framework to determine if a country is in arms race or arms dynamics.

3. Chapter 3 – This chapter deciphers three common perception of arms race, the analysis will be based on empirical and qualitative data derived from Stockholm International Peace Research Institute database from 2009 to 2018 as well as publication and journal review.

4. Chapter 4 – Using the conceptual framework, Chapter 4 will examine the trends and effects of all ten Southeast Asian nations military expenditure based on empirical and qualitative data derived from Stockholm International Peace Research Institute database from 2009 to 2018. In addition, it will also examine military acquisitions, economic growth and the internal and external considerations of each country's data. This chapter analyses the factors that affect individual countries military expenditure based on each national requirement, both internal and external factors, traditional security versus non-traditional security threats and military expenditure as a percentage to her country GDP and its consistency.

5. Chapter 5 – This chapter makes conclusion and summarises the relevant recommendation from the analysis.

Methodology

This research will be adopting the Mixed method research design methodology. The methodology will include publication research, document analysis, collecting both present and historical information and, qualitative and quantitative results. In addition, concurrent research design methodology will be employed too, it will explore quantitative data follow by qualitative data, then interpret results.

Results

No Arms Race in the last decade

Using the developed conceptual framework for factors influencing arms race or arms dynamics, the discussion supported the premise that the ASEAN countries were not in an arms race as they did not conform to the characteristics of an arms race identified by Grey and Hammond. Instead, the discussion suggests that ASEAN countries were going through an arms dynamics, as defined by Buzan and Herring.

ASEAN countries in Arms Dynamics in the last and next decade

After examining the three key factors (antagonistic relationship, defence spendings and military acquisitions) of arms race, it is fairly reasonable to conclude that ASEAN countries are assessed to be in arms dynamics. Most of ASEAN countries' arms dynamics situation are affected by their growing economies, military modernisation and internal considerations.

Conclusion

In the last decade, the peaceful and stable geo-political environment and security cooperation existing in Southeast Asia, coupled with high economic growth and tight economic cooperation, and the consistent defence spendings and slow-paced military modernization programs reinforce the fact that the region is in an arms dynamics situation. The trend of these characteristic is likely to continue and will be manifested through ASEAN's pursuit of accomplishing its ASEAN community Vision 2025 in the next decade

Recommendations

The five recommendations are as follows : Territorial claims and border disputes to be resolved peacefully, Early conclusion of effective code of conduct, Limits on defence spendings, Better water space management and Agreed mechanism for unintended confrontation.

Territorial Claims and Border Disputes to be Resolved Peacefully

Findings suggest that there will be no arms race among Southeast Asian countries in the next decade. The arms acquisitions will be the result of arms dynamics desired by each country for their interest. The existence of an arms dynamic must still be constantly managed to prevent negative consequences. It is important that occasional disputes over territorial claims, border disputes and skirmishes among ASEAN countries be resolved peacefully and not be left for misinterpretation or miscalculation to escalate to an arms race, or worse a conflict, which will undo all the peace and stability of the past decade.

Early conclusion of effective Code of Conduct

Tensions of South China Sea disputes have led to more military forces operating in close proximity including that of civilians. Military or security forces will naturally be pressurised to protect the civilians and this is indeed a cause for concern. With regard to China's aggressive assertions in the South China Sea, it is likely to trigger a situation which will frighten its neighbours, resulting in forming an alliance to contain the threatening state. It is postulated that ASEAN will act as a collective entity to resolve territorial disputes legitimately – this happened in August 1995 at the ASEAN Regional Forum which saw an unified ASEAN's stand on the Spratly Islands. As witnessed during the 22nd ASEAN-China Summit on 3 November 2019, ASEAN reported the progress of second reading process of the Single Draft Code of Conduct Negotiating Text. To ensure peace, security, stability, safety and freedom of navigation in and overflight above the South China Sea, ASEAN must strive to conclude an effective and substantive Code of Conduct early.

Limits on defence spendings

It is also equally important for ASEAN countries to be transparent in their defence capabilities and arms acquisitions to their citizens and among themselves, this will engender greater trust and improve regional ties. For the longer term, as the level of cooperation increases, it is possible to imagine the opportunity to place limits on defence spending and therefore reduce the risks that arise from the inevitable tensions in the region.

Better Water Space Management

For military acquisitions especially for submarines acquisition, Southeast Asian navies acquired them for the primary peacetime missions of covert surveillance and intelligence gathering instead of sinking enemy ships. Given the spate of submarine acquisition, the region is getting congested and that entails high risks of accidents or incidents, thus there is a need for better water space management, a designation of a "no-go" zone will be a pragmatic initiative for all navies operating in South China Sea.

Agreed mechanism for unintended confrontation

As the size and capabilities of ASEAN countries armed forces increase, coupled with the limited transparency and clarity in defence and foreign policy, there is a risk of misunderstanding or tension escalation.

There is a need to establish some mechanism and agreed rules for unintended confrontation. In addition, it is also important for ASEAN countries to consider clear and explicit communication of why ASEAN countries acquire weapons, what their “red lines” are and what the response to crossing “red lines” would be in their defence policy.