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ARMS FLOWS TO SOUTH EAST ASIA

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STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

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Notes

Abbreviations

AALS	Amphibious assault landing ship
AEW	Airborne early warning
AFP	Armed Forces of the Philippines
APC	Armoured personnel carrier
ASW	Anti-submarine warfare
ASEAN	Association of Southeast Asian Nations
BICC	Bonn International Center for Conversion
BRI	Belt and Road Initiative
CAATSA	Countering America's Adversaries Through Sanctions Act
EEZ	Exclusive economic zone
EU	European Union
GDP	Gross domestic product
IFV	Infantry fighting vehicle
OPV	Offshore patrol vessel
SAM	Surface-to-air missile
SLOC	Sea lines of communication
TIV	Trend indicator value
UAV	Unmanned aerial vehicle

Conventions

In tables, two dots (. .) indicate data is not available and an en rule (–) indicates nil.

Sources

In this paper, the arms transfers data and military expenditure data are from, respectively, the SIPRI Arms Transfers Database and the SIPRI Military Expenditure Database, and are often the result of comparing and mixing information from multiple sources and specific SIPRI definitions. Sources for data are not included in the footnotes unless the information is not included in the databases.

The SIPRI Arms Transfers Database

The SIPRI Arms Transfers Database contains information on deliveries between 1950 and 2018 of major arms to states, international organizations and non-state armed groups. A new set of data is published annually. SIPRI's definition of 'transfer' includes sales, manufacturing licences, aid, gifts and most loans or leases. The transferred item must have a military purpose, and the recipient must be the armed forces or paramilitary forces or intelligence agency of another country, a non-state armed (rebel) group or an international organization.

The SIPRI Arms Transfers Database only includes 'major arms', which are defined as (*a*) most aircraft (including unmanned); (*b*) most armoured vehicles; (*c*) artillery over 100 millimetres in calibre; (*d*) sensors (radars, sonars and many passive electronic sensors); (*e*) air defence missile systems and larger air defence guns; (*f*) guided missiles, torpedoes, bombs and shells; (*g*) most ships; (*h*) engines for combat-capable aircraft and other larger aircraft, for combat ships and larger support ships, and for armoured vehicles; (*i*) naval weapons: naval guns, missile launch systems and anti-submarine

weapons; (*j*) reconnaissance satellites; (*k*) most gun or missile-armed turrets for armoured vehicles; and (*l*) air refuelling systems (the last two are listed as 'other' in the tables in this paper).

In cases where a sensor, engine, naval weapon, turret or refuelling system (items *d*, *h*, *i*, *k* and *l*) is fitted on a platform (vehicle, aircraft or ship), the transfer only appears as a separate entry in the database if the item comes from a different supplier from that of the platform.

SIPRI has developed a unique system to measure the volume of transfers of major arms using a common unit, the trend indicator value (TIV). The TIV is intended to represent the transfer of military resources. Each weapon has its own specific TIV. Second-hand and second-hand but significantly modernized arms are given a reduced TIV. SIPRI calculates the volume of transfers by multiplying the weapon-specific TIV by the number of arms delivered in a given year. SIPRI TIV figures do not represent sales prices for arms transfers.

Deliveries of equipment that fall within SIPRI's definitions of major arms to non-military security forces such as most coastguard or police forces are generally not included in the database or in the analysis presented in this paper.

The SIPRI Military Expenditure Database

The SIPRI Military Expenditure Database provides military expenditure data by country for the years 1949–2018 in local current prices, constant US dollars, current US dollars, as a share of gross domestic product (GDP), per capita and as a share of total government expenditure. The database and further details on the definitions, sources and methods used are available on the Military Expenditure Database web page of the SIPRI website.

Figures for relative increases or decreases in military spending—often described as changes in 'real terms' or adjusted for inflation—are expressed in constant (2017) US dollars.

Where possible, SIPRI military expenditure data includes all current and capital expenditure on: (*a*) the armed forces, including peacekeeping forces; (*b*) defence ministries and other government agencies engaged in defence projects; (*c*) paramilitary forces, when judged to be trained and equipped for military operations; and (*d*) military space activities. This data should include expenditure on personnel—which encompasses salaries of military and civil personnel, and pensions and social services payments of military personnel—as well as expenditure related to operations and maintenance, procurement, military research and development, and military aid (in the military expenditure of the donor country).

Civil defence and current expenditures on previous military activities, such as veterans' benefits, demobilization, conversion, weapon destruction and military involvement in non-military activities (e.g. policing), are excluded.

Executive summary

Since the 1990s, the security environment of South East Asia has seen both continuity and profound changes. Tensions and sometimes conflict remain an issue in and between the 11 states in South East Asia (Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste and Viet Nam). China's rise as a regional military power and its claims in the South China Sea have become an increasingly pressing security concern for many South East Asian states. These concerns cause states from outside the region to take an active interest in South East Asian security.

Perceptions of growing insecurity have led South East Asian states to increase their military spending and arms acquisitions, the latter largely through imports. The increases were generally facilitated by economic growth. This paper presents these trends over the last two decades. The data show that military spending for the region increased no less than 33 per cent between 2009 and 2018 and that arms acquisitions in the last decade were about twice those of the previous decade. This is significantly more than the global increases military spending or the growth in most other regions and subregions. While arms acquisitions partly replace older weapons withdrawn from service, it is estimated that the total volume of the inventory of armed forces in South East Asia grew by 33 per cent from 2008 to 2017.

However, this picture is not uniform across all 11 South East Asian countries. While 10 of these countries make up the Association of Southeast Asian Nations (ASEAN), they do not necessarily think or act unitarily in security matters and generally, they focus on their own security agenda. Their perception of threats varies as do their spending and acquisition patterns. China has been recognized to play a large role in the decision by these states to increase their military spending. Indeed, the six states with territorial claims in the South China Sea have made the largest commitments to increase their military spending.

At the same time, regional trust in South East Asia remains low and states react to what their neighbours are doing. The primacy of China and other perceived threats from neighbouring states is also apparent when reviewing the types of weapons that states acquire. There is an emphasis on advanced long-range weapons for use against a foreign enemy, often what is called anti-access/area denial weapons that give a weaker country a credible deterrence.

In many cases, increases in military spending have been so dramatic that the term 'arms race' has been used—implying a rapid excessive and destabilizing action-reaction pattern leading to regional military build-up and potential of future large-scale armed conflict. The paper argues that the situation is not so dire. Military spending in the region did not see an increase in relative priority. While spending increased in absolute terms, as a percentage of the total economy it remained at 1.8 per cent below the global average. For the most part, the percentage declined in the last decade as economies grew faster than military spending.

This does not mean there is no problem. On the contrary, the most important conclusion is that the military build-up is a real cause for concern. The increased size and capabilities of most armed forces in South East Asia, coupled with tensions in the region, and territorial disputes have led to more military forces operating close to 'unfriendly' forces. At the same time, there is a lack of mechanisms and agreed rules to deal with regional tension or with unexpected confrontations of opposing military forces. Furthermore, transparency and clarity in defence and foreign policy are limited and for many South East Asian states the intentions behind arms acquisitions are not always clear. This makes it difficult to prevent tensions from escalating

and to limit incidents between the growing armed forces. In sum, there is a risk of misunderstanding between South East Asian states as to why they acquire weapons, what their ‘red lines’ are and what the response to crossing those ‘red lines’ would be.

1. Introduction

Since the 1990s, South East Asia has witnessed both continuity and profound change in its security environment. Tensions between states in South East Asia, intrastate insurgencies, national and transnational crime, including piracy and terrorism, patrolling national borders, maritime claims and disaster relief all remained on the security agenda.[1] At the same time, the rise of China as a regional military power became of increasing importance. China's position in and policies on control of the South China Sea, in particular, have led to tensions in South East Asia and has also led states from outside the region to become more involved, either directly through military deployments or alliances, or indirectly by supplying weapons to South East Asian states. In addition, the geographic position of South East Asia on the main sea lines of communication (SLOC) between East Asia, on the one hand, and Africa, Europe and the Middle East, on the other, makes it of strategic importance, especially for China, Japan and South Korea, but also for other states. This strategic position has long made the South East Asian states a target of influencing efforts by all the major actors in Asia. Such efforts come in the form of economic investment, financial aid, political support, the sale or gift of military equipment, establishment of military relations and access to military bases. China's Belt and Road Initiative (BRI), through which China is investing huge sums to establish a trade and economic corridor—once again from China and East Asia to the Middle East, Africa and Europe—only adds to the importance of South East Asia for non-South East Asian states.

In recent years, the states of South East Asia have tended to increase their levels of military spending and arms acquisitions, the latter largely through imports. These increases have in many cases been so dramatic or substantial that some observers have used the term 'arms race'.[2] This implies an excessive and destabilizing action–reaction pattern leading to regional military build-up and catastrophic scenarios of future armed conflict. Most observers, however, while seeing reasons for concern, do not take such a stark view.[3]

This paper identifies trends in military spending and arms acquisitions in South East Asia and places them in the context of regional and national political dynamics. The emphasis is on facts about military spending, arms acquisitions and arms imports. Transparency in these basic facets of military security is widely accepted as important for efforts in preventing tensions and conflicts, and in finding a balance between the provision of military security and economic and societal development.[4] Making such efforts work requires various types and levels of transparency towards global and regional 'neighbours', as well as in various parts of government and parliament, such as the national decision- and law-making structures, and preferably also with the wider public. However, transparency in military spending, arms acquisitions and defence policy in general has not always been the forte of South East Asian states.

[1] The South East Asian states are Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste and Viet Nam. See Figure 2.1 for a map showing these states.

[2] Bland, B., 'SE Asia said to be losing maritime "arms race" ', *Financial Times*, 1 June 2018.

[3] See for example: Heiduk, F., *An Arms Race in Southeast Asia? Changing Arms Dynamics, Regional Security and the Role of European Arms Exports*, German Institute for International and Security Affairs Research Paper 11/2017 (Stiftung Wissenschaft und Politik: Berlin, Aug. 2017); Hashim, M. H. P., 'An arms race in Southeast Asia: the claims and realities', *Kyoto Review of Southeast Asia*, vol. 19 (July 2016); Arthur, G., 'SE Asia: no naval arms race', *Maritime Security Review*, 2 Feb. 2018; and Wu, S., 'Not an omen of an arms race', *Khmer Times*, 31 Mar. 2018.

[4] While all the South East Asian states have made significant progress with economic growth, reducing poverty, improving health care and education, and other areas of development in the past decade, they remain, with the exception of Singapore, developing countries with often high levels of poverty or near poverty. According to the World Bank, the proportion of the population living below the national poverty line in these states is: Cambodia, 18%; Indonesia, 11%; Laos, 23%; Malaysia, 1%; Myanmar, 32%; Philippines, 22%; Thailand, 11%; Timor-Leste, over 40%; and Viet Nam, 10%. A further substantial percentage live just above the poverty line. World Bank data from <https://data.worldbank.org/indicator/SI.POV.NAHC?locations=CO&view=map&year_high_desc=tru>.

For more than 50 years, SIPRI has tried to fill the transparency gap at the global level, providing data on military spending and arms transfers. This report is based on that work, specifically highlighting developments in military spending and arms acquisitions in South East Asia in the period 2009 to 2018. The report is intended for all stakeholders in the region, to support local mechanisms and organizations that deal with security issues, as well as stakeholders beyond the region, including states supplying arms to South East Asia.

Chapter 2 provides a short overview of the security environment and the drivers of militarization in South East Asia over the past two decades. Chapter 3 analyses military spending and arms acquisition trends and the suppliers of arms to the region. Chapter 4 maps military spending and arms acquisitions in each of the 11 South East Asian states, and the links each has with supplier states. Chapter 5 presents some conclusions on the potential impact of military spending and arms acquisitions in South East Asia.

2. The security environment in South East Asia

The security environment in South East Asia has altered significantly over the past two decades. In the late 1990s South East Asia was a region of mainly internal conflicts, some of which were quite intense, such as those in Indonesia (Aceh and East Timor), Myanmar and the Philippines. There were also several stress points between states in South East Asia, mainly over land and maritime borders, and interest zones. However, processes to resolve these internal conflicts and interstate tensions were ongoing and many showed promise. Significantly, states from outside the region, including the major powers, were only marginally involved in South East Asia. Tensions with China over the South China Sea had already emerged but were nowhere near the level they have reached today.[5]

By the early 2000s the region seemed to be moving towards a peaceful future. South East Asia was rapidly developing economically, having recovered from the 1997–1998 financial crises, and growth rates in most South East Asian states were high. The Association of Southeast Asian Nations (ASEAN) was becoming more active in furthering its goal of economic, political, security, military, educational, and socio-cultural integration among Asian states. It was also engaging more with other states and international organizations, including on security matters, and in 2001 ASEAN became a nuclear weapon-free zone. The conflict in East Timor, which had been ongoing since it was annexed by Indonesia in 1975—an act not recognized by the United Nations—was finally resolved when the territory achieved independence in 2002 as Timor-Leste. The even longer and bloodier conflict between the Indonesian Government and the Free Aceh Movement was also reaching a peaceful resolution—a process propelled as much by the 2004 Indian Ocean earthquake and tsunami, which destroyed much of Aceh, as by international brokering and pressure. In the Philippines internal conflicts with Muslim and communist rebels had seen on–off ceasefires and related peace talks, while several contested border claims were resolved by arbitration and peace agreements.[6] More generally, rules of behaviour were agreed and there seemed to be a culture of willingness to accept arbitration and concentrate on neighbourly relations within ASEAN.

The South China Sea disputes remained unresolved and an occasional source of increasing tension but there were still realistic prospects for an agreement. China was actively promoting itself as a friend to all South East Asian states and of ASEAN.[7] In November 2002 China and ASEAN signed the Declaration on the Conduct of Parties in the South China Sea,[8] as well as economic, agricultural and 'non-traditional security' cooperation agreements.[9] In 2003 China acceded to the Treaty of Amity and Cooperation in Southeast Asia,[10] which promises to promote 'perpetual peace, everlasting amity and cooperation' based on mutual respect, non-interference and the

[5] In 1994–95, e.g., China started to build an installation on Mischief Reef, which is also claimed by the Philippines; see Brookings Institution, 'The U.S. and China's nine-dash line: ending the ambiguity', 6 Feb. 2014.

[6] See, e.g., the International Court of Justice arbitration in the dispute between Malaysia and Indonesia over the islands of Ligitan and Sipadan.

[7] This was officially called China's 'new security concept' or 'harmonized world' but unofficially 'smile diplomacy'. See *The Economist*, 'Smile diplomacy', Special report, 31 Mar. 2007.

[8] ASEAN, Declaration on the Conduct of Parties in the South China Sea, 4 Nov. 2002.

[9] Wu, S. and Ren, H., 'More than a declaration: a commentary on the background and the significance of the Declaration on the Conduct of the Parties in the South China Sea', *Chinese Journal of International Law*, vol. 2, no. 1 (Mar. 2003), pp. 311–19.

[10] ASEAN, Instrument of Accession to the Treaty of Amity and Cooperation in Southeast Asia, 24 Feb. 1976, as amended 15 Dec. 1987 and 25 July 1988, signed by China 8 Oct 2003.

peaceful settlement of disputes.[11] China also signed the Joint Declaration on ASEAN–China Strategic Partnership for Peace and Prosperity.[12]

The region's military spending remained stable in absolute terms and was declining as a share of gross domestic product (GDP). The states of South East Asia were modernizing their armed forces but arms acquisitions were not huge in either volume or capabilities. Transparency in military and security matters increased as states in the region published defence white papers, in line with commitments made in 1995.[13] States also produced other documents on defence policy and the practice of publishing and debating defence policies, military budgets and arms acquisitions, in parliament and in public, became more widespread. All in all, a peaceful future for South East Asia seemed secure—so much so that one expert lamented that studying South East Asian security in 2006 was 'almost boring'.[14]

The situation has since deteriorated significantly. Tensions between South East Asian states never completely disappeared. In 2011 there was a small-scale but violent confrontation between Cambodia and Thailand. In 2013 a group of armed Filipinos invaded Malaysian Borneo to enforce a long-dormant Philippine claim to Sabah in northern Borneo. The attackers were quickly rounded up but the invasion led to a souring of relations as Filipinos were killed and Malaysia hinted at collusion by the Philippines government.[15] Both cases have acted as drivers of increased military spending, arms acquisitions and force deployment.

The most important development, however, has been the rapid growth of China as a military power and renewed Chinese activity in the South China Sea. In 2012 China became much more active in asserting its claims. The 'nine-dash line', which had for many years represented China's official claim to most of the South China Sea, was re-emphasized and, despite agreements with ASEAN that claims would be resolved peacefully in consultation with and according to the United Nations Convention on the Law of the Sea,[16] patrols by the Chinese navy and various other Chinese maritime security agencies became more frequent and more aggressive.

International actors and South East Asian security

Large states outside South East Asia have been stakeholders in South East Asian security for decades but China's rise and its increased activity in the region have prompted states such as the United States of America, Japan, India, and European states such as France and the United Kingdom, to expand their own engagement with the region.

The United States

The USA sees China more and more as its major potential rival. It reacted with a new war-fighting doctrine, Air Sea Battle, in 2010 (renamed as the Joint Concept for Access and Maneuver in the Global Commons (JAM-GC) in 2015) and a general

[11] Embassy of the People's Republic of China in the United States of America, 'China accedes to Treaty of Amity and Cooperation in Southeast Asia', Press release, 8 Oct. 2003.

[12] ASEAN, Plan of Action to Implement the Joint Declaration on ASEAN-China Strategic Partnership for Peace and Prosperity, 2016–2020, [n.d.]; and Embassy of the People's Republic of China in Indonesia, 'ASEAN, China forge strategic partnership', Press release, 8 Oct. 2003.

[13] Gill, B. and Mak, J. N. (eds), *Arms, Transparency and Security in South-East Asia*, SIPRI Research Report no. 13 (Oxford University Press: Oxford, 1997).

[14] Bitzinger, R. A., 'The great Southeast Asia arms supermarket', *Asia Times*, 23 May 2018.

[15] Medina, A. and Cayabyab, M. J., 'Timeline of the Sabah crisis: February to March', *GMA News Online*, 5 Mar. 2013, Updated 1 Apr. 2013. In 2018 a leading Philippine politician suggested including Sabah as part of a restructured federal Philippines, thereby upsetting Malaysia again: Chew, A., 'Malaysia rejects proposal by Philippine government committee to claim Sabah as "13th federal state"', Channel News Asia (international edition), 31 Jan. 2018.

[16] United Nations Convention on the Law of the Sea, opened for signature 10 Dec.1982, entered into force 16 Nov. 1994, *United Nations Treaty Series*, vols 1833, 1834 and 1835.

'pivot to Asia' in 2011.[17] As China formed reefs in the South China Sea into artificial islands and military bases, and claimed the waters around them as its own, the USA responded by moving its navy fleet close to and through the disputed waters in what the USA has called 'freedom of navigation operations' and China calls 'provocations'.[18] The USA is also expanding its links with old allies in the Asia-Pacific (Japan, Australia and Taiwan) and South East Asia (Singapore, the Philippines and Thailand), as well as forging links with new potential allies such as India, Viet Nam and Indonesia. As part of these links, the USA has become more willing to supply weapons to states in South East Asia, including offering them as aid.

Japan

Japan has started to engage more with South East Asia, including by making arms transfers and military deployments to South East Asian states. Japan's previously restrictive policy on exporting arms and military equipment meant that it barely used to export any military equipment at all. The policy was dramatically changed in 2014 when Japan largely abolished these restrictions and actively began to promote arms sales and aid to several South East Asian states. Countering China's growing power is one of the reasons behind Japan's changed arms export policies. Japan's defence policy documents now name China as its major or main military threat.

Europe

European states, either individually or as the European Union (EU), have also started to show greater interest in the South China Sea and Chinese military growth.[19] Several have increased their (mostly temporary) activities in South East Asia.[20] France and the United Kingdom have made naval deployments to South East Asia, and the South China Sea in particular, while several other EU member states are reportedly considering doing so.[21] Perceptions of China as a threat to South East Asia's SLOCs and in the South China Sea have become a factor in the defence policies and arms acquisitions of several European states. However, such deployments in the region are seen by many as promoting European military equipment to South East Asian states.[22]

India

India is increasingly seeking to enlist the ASEAN states as buffers or allies against China's economic and military expansion into the Indian Ocean. India's Look East Policy of 1991 focused on improving economic, diplomatic and military relations with states in South East Asia and East Asia, while at the same time attempting to improve

[17] Southgate, L., 'The Asia pivot as a strategy of foreign policy: a source of peace or a harbinger of conflict?', Paper presented at the International Studies Association (ISA) Hong Kong Conference, University of Hong Kong, 15–17 June 2017; and Gady, FS., 'The Pentagon just dropped the Air Sea battle name', *The Diplomat*, 22 Jan. 2015.

[18] Freedom of naval operations are intended to signal freedom of navigation in international waters and through territorial waters, and do not just target China; they are a long-standing US policy in many parts of the world. See US Department of State, 'Maritime security and navigation', [n.d.]; and Panda, A., 'In 2017, US Freedom of Navigation Operations targeted 10 Asian countries, not just China', *The Diplomat*, 25 Jan. 2018.

[19] See, e.g., Grieger, G., 'China and the South China Sea issue', European Parliamentary Research Service Briefing, 9 Sep. 2016; Tillett., A., 'Top EU diplomat weighs in on South China Sea dispute', *Australian Financial Review*, 2 Apr. 2018; and Casarini, N., 'Beijing's ambitions in the South China Sea: how should Europe respond?', *IAI Commentaries*, vol. 18, no. 23 (6 Apr. 2018).

[20] Of the European countries, only the UK has a permanent military presence in South East Asia: a UK infantry battalion has been stationed in Brunei Darussalam since the 1980s and holds regular military exercises with that state. See Parameswaran, P., 'Military drills put UK–Brunei defense ties in the spotlight', *The Diplomat*, 14 Sep. 2018. A small naval support unit is based in Singapore and in 2019 the British Ministry of Defence announced plans for a larger UK military presence in the Far East. See 'Why the UK must have defence engagement with that region: what sort of defence engagement?', The Future of the British Armed Forces Blog, 13 June 2018; and Lendon, B., 'A British military base on the South China Sea is not a far-fetched idea', CNN, 4 Jan. 2019.

[21] Luc, T. A., 'Are France and the UK here to stay in the South China Sea?', *The Diplomat*, 14 Sep. 2018; AFP, 'France challenges Beijing in South China Sea', *The Straits Times*, 12 June 2018; and Casarini (note 19).

[22] Luc (note 21).

Figure 2.1. Map of South East Asia

relations with China.[23] As part of this policy, India upgraded its status from a 'sectoral partner' of ASEAN in 1992 to a 'strategic partner' in 2012.[24] India has signed defence-related bilateral agreements with various South East Asian states: Indonesia in 2001 and 2005,[25] Viet Nam in 2009, and the Philippines and Thailand in 2012.[26] However, these agreements were often in the nature of a general memorandum of understanding, and have not resulted in much more than military visits and exchanges, limited common exercises and naval patrols.[27]

In 2014 the new government of Prime Minister Narendra Modi upgraded and strengthened the Look East Policy to become the Act East Policy, with an even stronger emphasis on building strategic relations with states in South East Asia and East Asia.[28] Under the Act East Policy, India has become more active in trying to establish military ties with South East Asian states, again signing defence-related bilateral agreements with states such as Viet Nam in 2015 and 2016, and the Philippines in 2017.[29] As before, the new agreements have been general statements of intent that slowly develop into limited action.

In parallel and on the back of these agreements, India is promoting its weapons and cooperation on arms production and development to South East Asian states.[30] However, India has very little to offer in the field of major weapons and very few orders for Indian military equipment have been placed by South East Asian states. The most interesting, albeit still not large, sales have been to Myanmar, where strong

[23] Haokip, T., 'India's Look East policy: its evolution and approach', *South Asian Survey*, vol. 18, no. 2 (Sep. 2011).

[24] Parameswaran, P., 'India warships on Philippines voyage amid ASEAN anniversary', *The Diplomat*, 2 Oct. 2017.

[25] Parameswaran, P., 'The future of India-Indonesia defense ties'. *The Diplomat*, 10 Feb. 2017.

[26] 'Vietnam, India sign joint vision statement on defence relations', VietNamNet, 27 May 2015; Parameswaran, P., 'What's next for India–Philippines defense cooperation?', *The Diplomat*, 20 Nov. 2017; Parameswaran, P., 'India, Thailand launch army exercise', *The Diplomat*, 5 July 2017.

[27] 'Vietnam, India sign joint vision statement on defence relations' (note 26).

[28] Sahasrabuddhe, U. and Mallapur, C., 'Modi's strategic foreign policy vision: a glass half full', *The Diplomat*, 17 May 2017; and Parameswaran (note 24).

[29] Parameswaran, 'What's next for India–Philippines defense cooperation?' (note 26).

[30] Parameswaran, P., 'India, Thailand seek expanded defense ties', *The Diplomat*, 7 Apr. 2015.

Chinese influence and potential Chinese access to bases have been worrying India for many years. Since 2011 India has sold radars and torpedoes to be fitted on frigates and corvettes produced in Myanmar to a Chinese design or with Chinese help. In addition, in around 2006 India supplied various weapons as part of efforts to improve relations and gain Myanmar's support in dealing with rebels in Assam, north-eastern India. In late 2018 India offered to supply six second-hand trainer aircraft free of charge, in a move seen as a reward for Myanmar's support against rebels in India who have been waging a guerrilla war for many years using Myanmar as a base.[31] Some of the weapons supplied by India would be useful for land operations against these rebels and some have been supplied as aid.

China

China has manoeuvred itself into a somewhat delicate position in South East Asia. On the one hand, its high-handed and unilateral actions in the South China Sea and insistence on only negotiating bilaterally with any of the South China Sea claimants have upset many states in the region. On the other hand, these states control China's most important SLOCs and the BRI is highly dependent on South East Asian states. China is therefore trying to improve and expand its links with allies and potential allies in the region, and is offering major investments in most South East Asian states as part of the BRI. China has also offered weapons as aid or for sale to many South East Asian states—including to most of those with which China has clashed over the South China Sea. For example, China was in 2013 highly critical of the Philippines for taking the South China Sea issue to an international court of arbitration and even more critical when in 2016 the court ruled against China. However, less than a year later, China was quick to seize the opportunity to use arms supplies to improve relations with the Philippines and lure it away from its traditional Western allies.[32]

Drivers of military spending and arms acquisitions in South East Asia

In official defence policy documents and statements related to policy, budgets, acquisition plans and specific acquisitions, South East Asian states often provide detailed reasons for their spending and acquisitions. These reasons include threats from terrorists and non-state armed rebel groups (often labelled as terrorists), as well as from pirates, smugglers and other branches of organized crime; and the need to perform search and rescue, humanitarian assistance and disaster relief operations. The importance of the latter is underlined by regular typhoons, earthquakes and volcanic eruptions in the region. These issues need to be seen in the light of the sheer size of South East Asia and many of the states in the region, where sizes and distances are much bigger than they appear on ordinary maps. For example, Indonesia's land area is only about 20 per cent of that of the USA but the distance from east to west is greater than either Europe or the continental USA.[33] Malaysia consists of two halves more than 1000 kilometres apart, while Viet Nam, Myanmar, the Philippines and Thailand are each over 1500 km from north to south (see figure 2.1).

On the most central aspect of military threat perceptions—the potential threat from other countries—official documents and statements are far from clear. Threats are mainly described in general terms, without naming states, although some provide hints as to which states are perceived as threats. Brunei Darussalam, for example, published its first ever Defence White Paper in 2004, and updates in 2007 and 2011,

[31] 'To counter Chinese clout, India to gift 6 HAL Kiran jet trainers to Myanmar', *Times Now*, 1 Dec. 2018.

[32] Zheng, S., 'How China is using military ties to expand its reach in Southeast Asia', *South China Morning Post*, 16 Oct. 2017.

[33] Maps on the Web, 'The real size of Indonesia', 28 Sep. 2015.

but these do not specifically mention its border disagreement with Malaysia nor its issues over the South China Sea with China and other claimants.[34]

Nonetheless, it is clear from the equipment acquired—combat aircraft, anti-submarine warfare (ASW) aircraft, air defence systems, coastal defence systems, submarines and major surface combat ships—that perceptions of foreign threats are an important driver of most military acquisitions by South East Asian states. Such equipment has little or no value in internal conflicts, or for policing functions or disaster relief. The acquisitions of tanker aircraft, large and long-range combat aircraft, long-range air-to-ground missiles, large submarines and surface combat ships, as well as amphibious assault landing ships (AALSs), indicate a strategy of building the capability to engage with any threat from another country, even one far away from the home country, as well as the capability to strike at a foreign country or protect far-off interests such as trade routes or sources of raw materials. In other words, these acquisitions can be seen by other countries as 'aggressive'. However, they can also be seen as meeting a need to protect a large country, such as Indonesia, with only limited forces that must be able to move quickly across huge distances to deal with any threat that might arise. Similarly, large transport aircraft, amphibious ships and large numbers of helicopters could indicate 'aggressive' doctrines as much as a capability to react to the natural disasters that regularly strike several of the South East Asian states. For example, both Indonesia and the Philippines have acquired numerous large amphibious ships. Both countries also have a strong marines force that has received new weapons. Given the South China Sea issues that both face, it is easy to believe that the ships might be linked to more active policies there. In addition, official statements refer to the ships as 'strategic sealift ships' or something similar, indicating a military role.[35] However, the ships are also among the most useful military assets for providing assistance to coastal areas hit by a natural disaster; in both countries the acquisitions have been linked to a disaster relief role, but in the Philippines a counter-insurgency role has also been mentioned.[36]

The lack of transparency about foreign threats is not total. For example, while Malaysia has always been careful not to reference its disagreement with China in any official documents or statements, the Malaysian navy openly defended the acquisition of two submarines in 2002 as needed for the 'country's economic well-being, particularly in the handling of the South China Sea maritime disputes'.[37] However, China was not specifically mentioned in connection with the recent movement of the submarines to a base in Sabah from their original base on the western side of the Malay Peninsula.[38] The reasons for basing the submarines closer to the South China Sea were not stated clearly, but the perceived threat from China seems an obvious factor.

Making deductions about what states perceive as major likely threats based on their weapon acquisitions, actual or planned, is not straightforward. Acquisitions are not always based on threat perceptions or realistic military needs. There is a certain amount of competing just for the sake of it. In both Myanmar and Thailand, where the military plays a leading role in politics, defence ministers have made statements defending plans (in the case of Thailand, now translated into an order) for expensive weapons such as submarines because their neighbours have them.[39] In both countries—

[34] Pryce, P. 'Bolstering Brunei's defences: a small state's strategic guidance and procurement', Offiziere.ch, 5 May 2015.

[35] Romero, A., 'Submarine for Navy? Noy bares AFP shop list', *The Philippine Star*, 24 Aug. 2011.

[36] Grevatt, J., 'PT PAL closes on Philippine Navy opportunities', *Jane's Defence Industry*, 1 Oct. 2018; Rahmat, R., 'Indonesian Navy inducts sixth LPD into Armada I fleet', *Jane's Navy International*, 23 Jan. 2019.

[37] Rahmat, R., 'Malaysia aims to sign for third, fourth submarines by 2040', *Jane's Navy International*, 28 Feb. 2018.

[38] Rahmat (note 37).

[39] Parameswaran, P., 'Is Myanmar really getting submarines now?', *The Diplomat*, 5 May 2017; and Parameswaran, P., 'Did Thailand secretly approve its China submarine buy?', *The Diplomat*, 27 Apr. 2017.

as in other South East Asian states with a strong military influence in politics such as Viet Nam and Indonesia—unreasonable military budgets and arms acquisitions may result from an inability to question the military or a need to placate the military with status symbols and new kit. It is noteworthy that military spending in Myanmar was higher before political reform in 2015, although some see the continued role of the military there as a partial explanation for the continued high military spending and some of its arms acquisitions.[40] Spending in Thailand increased at a faster rate after the military gained control in 2014.

Illegal cross-border activities remain a serious problem for most South East Asian states and the armed forces are often asked to support other law enforcement agencies in countering such activities. For example, in Indonesia between 2015 and 2018 there were over 380 cases of illegal fishing vessels being confiscated.[41] Other illegal activities include smuggling and piracy. The armed forces of many South East Asian states have acquired major weapons for these policing tasks, usually maritime weapons such as patrol vessels and maritime patrol aircraft, but these form only a small part of the volume of major weapons acquired.

Apart from the question of heightened threat perceptions linked to other countries, an important reason for many acquisitions is the need to replace outdated and worn-out equipment in order to continue carrying out existing tasks. Many South East Asian states have weapons in their inventory that, in more developed countries with larger budgets, would have long ago been replaced or at least extensively modernized. In South East Asia only Singapore has managed to build up an inventory of modern major weapons over the past two decades. In the other South East Asian states, a substantial part of the inventory is of a previous generation, heavily used and never modernized, and often acquired second-hand. For example, in 2012 most of the Indonesian major warships were 25–40 years old. The main combat ships were second-hand Dutch frigates from the 1960s, second-hand East German corvettes from the 1980s and submarines from 1981.[42] The navies of the Philippines and Viet Nam used even older ships—many dating from the 1940s and 1950s and more fit for a museum than operations at sea.[43]

Border and maritime disputes that still exist between South East Asian states remain a driver of arms acquisitions. The 2015 Indonesian Defence White Paper, for example, mentions unresolved border and maritime disputes and notes that border issues are 'one of the main causes of war'.[44] There are also unresolved disputes between Myanmar and its neighbours, and Cambodia and its neighbours.[45] That such disputes remain a potential source of conflict was shown in 2011 when tensions between Cambodia and Thailand over a small border disagreement erupted into armed conflict. While of limited scale, it involved heavy weapons on both sides and led to casualties.[46] Fighting quickly ceased but relations are still only slowly improving and the border remains a problem.[47] Cambodia's relations with Laos, which are normally friendly, took a downward turn in mid-2017 over the badly demarcated border. Cambodia threatened military action to deal with alleged Laotian incursions into Cambodia.[48]

[40] Grevatt, J., 'Myanmar proposes a 2017 defence budget of $2.1 billion', *Jane's Defence Industry*, 2 Mar. 2017.

[41] 'Susi insists on continuing her ship-sinking policy', *The Jakarta Post*, 10 Jan. 2018.

[42] Nugent, B., 'The Indonesian Navy', *Naval Forces*, May 2012, pp. 85–86.

[43] Saunders, S. (ed.), *IHS Jane's Fighting Ships 2016–2017* (Jane's Information Group: Coulsdon, 2017).

[44] Indonesian Government, Defence Ministry, *Defence White Paper*, Nov. 2015, pp. 9–10.

[45] Jenne, N., 'Managing territorial disputes in Southeast Asia: is there more than the South China Sea?', *Journal of Current Southeast Asian Affairs*, vol. 36, no. 3 (2017), pp 35–61.

[46] Ngoun, K., 'Thai–Cambodian conflict rooted in history', *East Asia Forum*, 27 Jan. 2012.

[47] Raymond, G., 'Thai–Cambodian relations one year after the ICJ judgement', *East Asia Forum*, 11 Nov. 2014; and Jenne, N., 'Thai–Cambodian fugitive deal won't mend relations', *East Asia Forum*, 11 May 2018.

[48] Phearun, C., 'Prime Minister gives Laos troops 6 days to leave border area', *Cambodia Daily*, 11 Aug. 2017; and 'Rumble in the jungle? Cambodia threatens war over Laos border dispute', *Sputnik News*, 12 Aug. 2017.

3. Regional military spending, arms acquisitions and the role of suppliers

Military spending

Military spending in South East Asia between 2009 and 2018 increased by 33 per cent in real terms (see table 3.1), from $30.8 billion to $41.0 billion in constant 2017 US dollars (see table 3.2). This is significantly higher than the 5 per cent increase globally but lower than the total increase for the whole of Asia and Oceania over the same period, which was 46 per cent. However, the pattern of 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.

The increase was not evenly spread across the region. Of the 11 states in South Asia, 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 Viet Nam, the 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 of the 10 years. With the exceptions of Brunei Darussalam, Malaysia and Timor-Leste, the South East Asian states had more years of increased spending than spending reductions.

Arms acquisitions and imports

Arms imports, which make up almost all the arms acquisitions of the South East Asian states, also increased significantly. In the period 1999–2018, South East Asia accounted for 8.1 per cent of the global volume of imports of major arms (see table 3.3). In the period 1999–2007, however, South East Asia accounted for only 5.8 per cent of the global total. Its share of global imports jumped to 10.0 per cent in the next decade. South East Asian states received more than two times the volume of major arms in the two five-year periods 2008–12 and 2013–17 than they received in the previous five-year periods 1998–2002 and 2003–2007.

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 3.1). Orders had of course been placed some years earlier. The increase in the first few years after 2006 was largely a result of orders placed in 2003–2005, indicating that the peaceful picture from around 2006 was somewhat deceptive. However, some of the orders placed in the early 2000s were for acquisitions originally planned in the late 1990s but put on hold as a result of the 1997–98 financial crises, which hit many South East Asian states hard. These orders were mainly intended to replace outdated weapons and thus were not all a reaction to a worsening security environment in and around South East Asia. On changes in inventories of major arms for the period 2008–17, see figure 3.4.

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 that would give the weaker South East Asian states an option to deter or survive a military confrontation. The interest in submarines, advanced anti-ship missiles and long-range combat aircraft demonstrates this trend. All the larger South East Asian states have acquired these items in recent years or announced plans to do so. Nonetheless, 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

Table 3.1. Real term changes in South East Asia military spending, 2009–18

	% change, 2009–18[a]	Number of years of increase	Number of years of decrease
South East Asia	*+33.1*	7	3
Brunei	*–7.9*	2	8
Cambodia	*+190.6*	10	0
Indonesia	*+99.5*	7	3
Laos	. .[b]	4[c]	1[c]
Malaysia	*–18.5*	4	6
Myanmar	. .[b]	3[d]	3[d]
Philippines	*+50.3*	6	4
Singapore	*+14.3*	6	4
Thailand	*+15.6*	8	2
Timor-Leste	*–63.4*	3	7
Viet Nam	*+75.5*	8	2

. . = data not available.

[a] Percentage change is for military spending in constant 2017 US dollars.
[b] Myanmar (for which there is no data available for 2009–11) and Laos (for which there is no data available for 2014–18) are excluded.
[c] For Laos only the five years, 2009–13 inclusive, are counted.
[d] For Myanmar only the six years, 2013–18 inclusive, are counted.

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 3.2. South East Asia military spending in constant 2017 US dollars, 2009–18[a]

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Spending ($ b.)	30.8	31.2	32.2	33.5	36.9	36.6	40.2	41.6	41.3	41.0
% 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*

[a] For Myanmar no data is available for 2009–11 and for Laos no data is available for 2014–18. For both states, estimates have been made for missing years based on trends in known years.

Source: SIPRI Military Expenditure Database, Apr. 2019.

in internal security, policing and disaster response. Acquisitions by the Philippines, Myanmar and Thailand are at least partly linked to internal conflicts, while many of the naval and air systems acquired by most South East Asian states have a role to play in protecting maritime economic zones or in first response to the natural disasters that often hit the region.

Suppliers

The main suppliers of major arms to South East Asia are the same as the main suppliers globally (see table 3.5). With few exceptions, the top-10 suppliers to South East Asia in the period 1999–2018 feature in the top-10 global suppliers of major arms for the period, albeit not in the same order.[49] The main exceptions are South Korea, which is ranked 7th among suppliers to South East Asia but 14th globally, and Sweden, which is ranked 9th among suppliers to South East Asia but 12th on the list globally. Both are small enough suppliers to have their positions affected by a small number of deliveries of larger major arms. In the case of Sweden, this was 3 submarines to Singapore, and 12 combat and 2 airborne early warning (AEW) aircraft to Thailand. South Korea supplied 2 submarines, 5 AALS and 16 trainer/combat aircraft to Indonesia, 12 combat aircraft to the Philippines, and 1 frigate and 4 trainer/combat aircraft to Thailand.

[49] The 10 largest suppliers of major arms for the period 1999–2018 are, in order from largest to smallest: the USA, Russia, Germany, France, the UK, China, Israel, Italy, Spain and the Netherlands.

Table 3.3. Volume of imports of major arms by South East Asian states, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to the conventions of rounding.

Recipient	1999–2003	2004–08	2009–13	2014–18	Total	% of South East Asia total
Singapore	1 690	2 469	5 013	1 857	11 030	*27.2*
Viet Nam	348	755	2 384	4 240	7 727	*19.1*
Indonesia	766	1 010	1 929	3 590	7 295	*18.0*
Malaysia	1 073	1 566	2 058	728	5 425	*13.4*
Myanmar	558	776	1 465	872	3 672	*9.1*
Thailand	652	255	1 011	1 475	3 393	*8.4*
Philippines	25	96	161	698	981	*2.4*
Brunei	10	3	332	159	503	*1.2*
Cambodia	–	70	183	–	252	*0.6*
Laos	37	10	78	121	246	*0.6*
Timor-Leste	–	–	32	–	32	*0.1*
South East Asia total	**5 159**	**7 010**	**14 645**	**13 741**	**40 556**	
Global total	**100 146**	**118 492**	**135 669**	**146 291**	**500 598**	
South East Asia % of global total	*5.2*	*5.9*	*10.8*	*9.4*	*8.1*	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 3.4. Changes in inventories of major arms, South East Asia 2008–17

Values are SIPRI TIV millions for inventories of major arms; totals may not add up due to the conventions of rounding.

State	2008	2017	% change
Brunei	293	609	*+108*
Cambodia	999	1 027	*+3*
Indonesia	9 012	14 140	*+57*
Laos	658	273	*–59*
Malaysia	6 681	7 958	*+19*
Myanmar	3 106	6 080	*+96*
Philippines	1 601	2 209	*+38*
Singapore	9 628	14 978	*+56*
Thailand	9 506	9 928	*+4*
Timor-Leste	–	18	N/A
Viet Nam	12 409	14 329	*+15*
South East Asia total	**53 893**	**71 549**	***+33***

N/A = not applicable.

Source: *The Military Balance 2009* (International Institute for Strategic Studies (IISS): London, 2009) and *The Military Balance 2018* (IISS: London, 2018); Saunders, S. (ed.), *Jane's Fighting Ships 2008–2009* (Jane's Information Group: Coulsdon, 2009); Saunders, S. (ed.), *IHS Jane's Fighting Ships 2016–2017* (Jane's Information Group: Coulsdon, 2017); SIPRI Arms Transfers Database; official sources; media sources.

For many potential suppliers, the issues of democracy and respect for human rights play a role, and sometimes an important role, in their willingness to supply weapons to South East Asian states. Myanmar has been under an EU arms embargo since 1990 in response to the military coup of 1988; this embargo remains in place as of April 2019.[50] The USA and several other countries have similar restrictions.[51] The military coup in Thailand in 2014 led to restrictions by some EU suppliers, including a refusal by

[50] See the SIPRI Arms Embargo Database, <https://www.sipri.org/databases/embargoes/eu_arms_embargoes/myanmar>.

[51] The USA has had an embargo since the 1990s; see US Government, *Federal Register*, vol. 59, no. 64 (4 Apr. 1994); and *Federal Register*, vol. 81, no. 234 (6 Dec. 2016). Canada has had an embargo since 2007; See Canadian Government, 'Canadian sanctions related to Myanmar', updated 12 Apr. 2019.

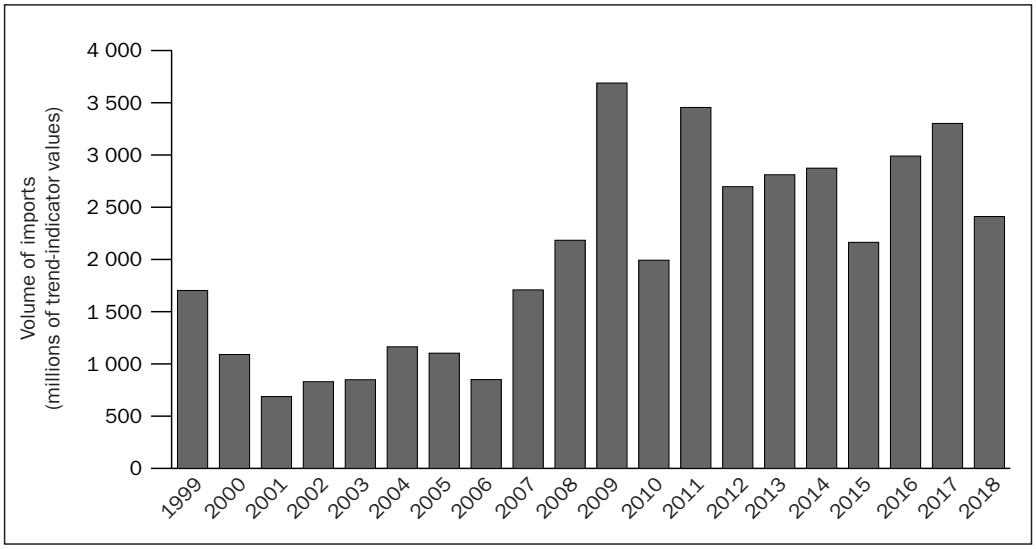

Figure 3.1. Imports of major arms in South East Asia, 1999–2018

Source: SIPRI Arms Transfers Database, Mar. 2019.

Germany to approve the supply of 'military-grade' engines for armoured vehicles that Thailand had ordered from Ukraine. The banning of the political opposition by the Cambodian Government in 2016 and the violent anti-drugs operations of President Rodrigo Duterte of the Philippines have led to severe criticism from Western states and in some cases a refusal to export weapons that can be used for internal operations. Most of these restrictions imposed by individual suppliers or groups of suppliers have been only partially effective and are largely symbolic when replacement suppliers are usually available, sometimes openly so. For example, when Western states criticized the Philippines and withheld export permissions for some equipment, both Russia and China quickly offered to supply, on competitive terms, whatever the Philippines was unable to obtain due to the restrictions (see chapter 4 below). Such generosity was partly for commercial reasons, but also had a political motive, especially in the case of China. This worries other suppliers with political stakes in the region and puts pressure on them to go easier on 'erring' governments in South East Asia.

However, there is also a lack of exporter cohesion among Western suppliers. For example, Indonesia chose to purchase second-hand tanks from the Netherlands, which the Dutch Government was willing to sell, but was forced to look elsewhere when the Dutch Parliament raised objections about the human rights situation in Indonesia. Indonesia found Germany willing to sell the same type of tanks as the German Government did not perceive the human rights situation, or at least the potentially negative impact of the tanks on human rights there, to be as bleak as the Dutch Parliament did.[52] Similarly, in 2018 Canada refused to approve an order for 16 transport helicopters for the Philippines, citing their possible use in internal security operations.[53] However, offers from Italy, South Korea and the USA remained on the table, and the Philippines selected the US option in December 2018.[54]

The list of suppliers to the South East Asian states is quite diverse, with the relative importance of specific suppliers varying over the past 20 years. This diversity was the result of the South East Asian states not only seeking the best solutions for their equipment needs from any supplier, but also attempting to underline their non-aligned

[52] Jansen, P., and Mikkers, R., 'Geheime tankdeal in de knel' [Secret tank deal in trouble], *De Telegraaf*, 26 Apr. 2012; Seegers, J., 'Leopard-tanks toch verkocht, Defensie vindt in Finland alsnog koper' [Leopard tanks sold anyway, Defence still finds Finland as buyer], NRC, 19 Dec. 2013.

[53] Ljunggren, D., 'Canada orders review of deal to sell helicopters to Philippines', Reuters, 7 Feb. 2018.

[54] Viray, P. L., 'Air Force chooses Black Hawk, Turkey attack choppers—Lorenzana', *The Philippine Star*, 7 Dec. 2018.

Table 3.5. Suppliers of major arms to South East Asia, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to the conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	Total	% of South East Asia total	% of supplier's total arms exports
Russia	855	2 084	4 149	3 616	**10 704**	*26.0*	*9.0*
USA	1 509	1 191	3 495	2 030	**8 226**	*20.0*	*5.0*
France	123	1 329	1 254	800	**3 506**	*8.6*	*10.0*
Germany	270	504	1 431	716	**2 920**	*7.2*	*8.1*
China	259	220	1 060	1 035	**2 573**	*6.3*	*13.0*
South Korea	96	196	429	1 129	**1 850**	*4.6*	*37.0*
UK	730	155	66	777	**1 728**	*4.3*	*7.4*
Netherlands	40	479	183	538	**1 240**	*3.1*	*12.0*
Sweden	390	3	647	72	**1 111**	*2.7*	*14.0*
Spain	8	30	371	631	**1 040**	*2.6*	*9.4*
Italy	303	138	336	241	**1 017**	*2.5*	*8.8*
Israel	172	127	325	551	**1 175**	*2.9*	*9.9*
Ukraine	109	73	318	364	**863**	*2.1*	*8.8*
Switzerland	24	103	9	198	**333**	*0.8*	*6.4*
Indonesia	49	16	–	188	**253**	*0.6*	*70.0*
Australia	9	–	99	128	**236**	*0.6*	*21.0*
Poland	4	119	106	1	**231**	*0.6*	*18.0*
Turkey	68	13	33	116	**231**	*0.5*	*9.7*
Belarus	–	–	–	230	**230**	*0.5*	*9.8*
Singapore	4	65	81	–	**149**	*0.4*	*45.0*
Brazil	19	–	35	87	**141**	*0.3*	*16.0*
Czechia	21	28	28	52	**129**	*0.3*	*12.0*
Canada	13	21	43	46	**122**	*0.2*	*3.0*
South Africa	22	13	18	51	**105**	*0.3*	*5.7*
Serbia	10	56	30	–	**95**	*0.2*	*49.0*
India	5	16	6	42	**69**	*0.2*	*17.0*
Denmark	2	11	29	25	**67**	*0.2*	*24.0*
Belgium	–	–	13	36	**50**	*0.1*	*4.3*
Brunei	–	–	24	12	**36**	*0.1*	*100.0*
North Korea	11	–	10	–	**22**	*0.1*	*3.4*
Slovakia	4	–	4	11	**19**	*<0.05*	*4.8*
Thailand	7	7	–	4	**19**	*<0.05*	*17.0*
Pakistan	16	–	–	–	**16**	*<0.05*	*25.0*
Viet Nam	–	14	–	–	**14**	*<0.05*	*100.0*
Bulgaria	7	–	4	–	**11**	*<0.05*	*1.8*
Austria	–	–	5	1	**6**	*<0.05*	*1.0*
Japan	–	–	–	6	**6**	*<0.05*	*13.0*
New Zealand	2	1	–	–	**4**	*<0.05*	*4.2*
Malaysia	. .	. .	<0.5	–	**<0.5**	*<0.05*	*<0.05*
Total South East Asia imports	**5 159**	**7 010**	**14 645**	**13 741**	**40 556**	***8.1***	

– = nil; . . = data not available.

Source: SIPRI Military Expenditure Database, Mar. 2019.

status and to spread the risk of negative relations with supplier states. This pattern has been most pronounced in Malaysia and Indonesia, but is also notable in Singapore, Thailand and Myanmar. Even those South East Asian states that have relied heavily on a single supplier or a small number of suppliers, have shown signs of seeking a more diverse supplier base. Viet Nam, the South East Asian state that relies most heavily on a single supplier—86.9 per cent of its major arms imports in 1998–2017 were from Russia—has more recently been actively seeking other suppliers. At the same time, other suppliers have been very active in seeking Vietnamese orders, by attending arms

fairs in Viet Nam, for example, or otherwise displaying their products and offering incentives such as technology transfers and help in improving the local arms industry. Examples include the Dutch shipbuilder, Damen, which has a shipyard in Viet Nam and has in recent years been negotiating orders for frigates and other ships to be built there;[55] the Israeli company, IWI, which reportedly produces its Galil rifle in Viet Nam in large numbers;[56] and the French company, Nexter, which in 2018 linked its offer of armour and artillery to an industrial partnership.[57]

The efforts of arms companies in South East Asia are often supported by their governments with credits, framework agreements on industrial cooperation, general defence or strategic agreements and trade missions. Most of the larger suppliers have signed framework agreements on industrial cooperation, or general defence or strategic agreements with most of the larger South East Asian states, such as France's industrial partnership agreements with Malaysia, Indonesia and, most recently in September 2018, Viet Nam.[58]

Most of the South East Asian states have the luxury of selecting from a large group of willing suppliers. Only Myanmar have been restricted to some extent as Western states have been unwilling to supply weapons. Myanmar has the distinction of being the only South East Asian state that is subject to a multilateral arms embargo. Despite the EU arms embargo in place since 1990 and the fact that the USA and several other Western states also have decided not to supply weapons, Myanmar has still been able to acquire its major weapons from a diverse group of suppliers. In recent years, for example, it has purchased armoured vehicles from China, Russia, Ukraine and Israel.

The larger South East Asian states have legislation or acquisition guidelines that generally require suppliers to commit to direct offsets, technology transfers and local involvement in production and after sales support.[59]

Russia

Russia is the largest supplier of major arms to South East Asia, accounting for more than a quarter of all deliveries in the past 20 years. Russia's approach to selling arms in South East Asia is mainly economic. Arms exports are an important element of Russia's total export income and essential to maintaining the economic viability of the Russian arms industry. To gain orders, Russia is open to barter trade, as was the case, for example, with Indonesia's order for 11 Su-35 combat aircraft, for which half the payment will comprise Indonesian agricultural and other products.[60] Russia also uses government credits, government-guaranteed bank credits and soft loans to gain orders, as for example in 2018 in its offer of submarines to the Philippines and the remaining half of the Indonesian Su-35 deal.[61]

Russia's leading position is somewhat surprising, as it was globally only the second largest supplier in the period 1999–2018, substantially behind the USA, and, unlike the USA, it has no strong strategic interests in South East Asia. However, 61 per cent of Russia's deliveries to South East Asia went to Viet Nam where Russia had a near monopoly because for most of the period Western states were reluctant to sell arms to Viet Nam and China was not seen by Viet Nam as an acceptable supplier.

[55] Daling, T., and Lalkens, P., 'Superorder van $500 mln voor Damen Shipyards hoogst onzeker' [Super order of $500 million for Damen Shipyards very unsure], *Financieel Dagblad*, 19 Apr. 2015; 'Vietnamese Navy want Sigma 10514 replacing Sigma 9814', Defense Studies Blog, 27 June 2016.

[56] Grevatt, J., 'IWI to begin assault rifle production in Vietnam', *Jane's Defence Weekly*, 12 Feb. 2014, p 22.

[57] Grevatt, J., 'Nexter looks to build profile in Vietnam', *Jane's Defence Industry*, 10 Oct. 2018.

[58] Grevatt (note 57).

[59] Grevatt (note 57).

[60] Munthe, B. C., 'Indonesia to buy $1.14 billion worth of Russian jets', Reuters, 22 Aug. 2017.

[61] Grevatt, J., 'Manila considers Russian loan to support submarine procurement', *Jane's Defence Industry*, 14 Aug. 2018; and Johnson, R., 'Rostec takeover could spell jeopardy for UAC's exports', *Jane's Defence Weekly*, 14 Nov. 2018, p. 21.

The United States

While the USA remains interested in good military relations with the South East Asian states, its position on arms sales to South East Asian allies and other states has been compromised to some extent by the sanctions it imposed on Russia in August 2017. The Countering America's Adversaries Through Sanctions Act (CAATSA)[62] threatens sanctions on any state, including US allies, that buys weapons from Russia.[63] It is unclear what the impact of CAATSA will be on Russian arms sales, or on US relations with, or arms sales to, South East Asia. However, CAATSA is already presenting problems for Indonesia, which ordered 11 Su-35 combat aircraft from Russia in 2018. Indonesia maintains that it is on 'good terms' with both the USA and Russia and buys weapons from both. Indonesian officials have given somewhat conflicting statements on its response to the sanctions threat, varying from looking for alternatives to seeking an exemption from the sanctions; there have been some signals from the USA that an exemption is forthcoming.[64] However, CAATSA has already delayed the deal by a year and by late 2018 Indonesia was still uncertain how CAATSA would affect it.[65] The issue is not only related to the current order, but also affects Indonesia's plans for more combat aircraft, including additional Su-35s. Indonesia has stated that if CAATSA becomes a problem, the Su-35 order will have to be cancelled and another aircraft, probably the US F*NBP*16V, would need to be ordered.[66] Other South East Asian states have reported US pressure not to buy Russian weapons or have noted that they foresee that possibility. A general position of the South East Asian states seems to be either to hope for waivers or to resist US pressure.[67] However, in December 2018 the Philippines cited US sanctions as a reason for bypassing a cheaper Russian offer when selecting new helicopters.[68]

An important and growing aspect of US arms supplies to South East Asia is the US military competition with China in the wider Indo-Pacific region. Improved US relations with Viet Nam are a clear result, but a much stronger US willingness to supply Indonesia with weapons, a willingness to sell F-35s to Singapore, and the muted reaction to the military coup in Thailand, should also be seen in this light. US military aid to South East Asia and other Indo-Pacific states is increasing, the most recent example being the announcement at the ASEAN Regional Forum in August 2018 of an extra almost $291 million in 'Foreign Military Financing' as US aid for states in South Asia and South East Asia, mainly to improve maritime patrol capabilities.[69]

China

South East Asia is a relatively important market for China: 13 per cent of Chinese exports of major arms went to the region in 1999–2018. Myanmar has been an important destination for Chinese arms exports for many years. China's supplies to Myanmar are often linked with its interest in establishing military bases there. China is also an important supplier to Laos, Cambodia and Thailand. Malaysia and Indonesia have bought small volumes of arms from China.

[62] Countering America's Adversaries Through Sanctions Act, US Public Law 115-44, signed into law on 2 Aug. 2017.

[63] Normala, A., 'No risk of US sanctions following Sukhoi deal: Trade Ministry', *Jakarta Globe*, 14 Aug. 2018; and Johnson (note 61).

[64] Wardi, R., 'Defense Ministry wants Sukhoi fighter jets, despite US sanctions risk', *Jakarta Globe*, 10 Aug. 2018; and Normala (note 63).

[65] Johnson (note 61).

[66] Grevatt, J., 'Indo Defence 2018: Indonesia's Su-35 procurement faces CAATSA hurdle', *Jane's Defence Weekly*, 14 Nov. 2018, p. 8.

[67] 'Philippines won't stop buying Russian arms over US pressure—FM', RT, 2 Aug. 2018.

[68] Mogato, M., 'Philippines to buy US helicopters, not Russian, due to U.S. sanctions: official', Reuters, 7 Dec. 2018.

[69] US Government, Department of State, 'US security cooperation in the Indo-Pacific region', Press release, 4 Aug. 2018. Foreign Military Financing is aid funds that are to be used to pay for equipment ordered from the USA.

China's policies on arms exports and the reasons for specific deals are not transparent and cannot be found in official documents and statements. Some observers see China's arms exports more as an economic imperative than a tool of foreign policy. Since its launch in 2013, the BRI has been linked to major Chinese investment and economic aid in many states in Africa and Asia, including most of the South East Asian states. China's arms sales to these countries do not seem to have any major side-effects.[70] Nonetheless, some see China's supply of weapons to the region as part of a long-term strategy to advance its political interests.[71] Chinese arms supplies to the South East Asian states are probably licensed more for political than for economic reasons. For example, Cambodia has long been one of China's staunchest allies in South East Asia—to the point where it is said to make other ASEAN member states uncomfortable. China has rewarded Cambodia with supplies of weapons as aid. Relations between Cambodia and China have become even more important in recent years, with China's supplies expanding to include increased economic and military aid, as well as joint military exercises.[72] This comes at a time when Western states have been highly critical of the Cambodian Government's moves against the opposition, which led (among other things) to a suspension of joint Cambodian–US exercises.[73]

China's arms exports to South East Asia and more generally have benefited from three features. The first is China's competitive pricing—large Malaysian and Thai orders for ships were won at least in part because the Chinese bids were substantially lower than others. Second is China's willingness to involve the buyer in production or in maintenance and upgrades, and to transfer technology. For example, the ships for Malaysia will largely be produced in Malaysia; Thailand acquired multiple rocket launchers (MRLs) with technology transfers to develop a Thai MRL. The third feature is China's policy on non-interference and not setting conditions on its supplies. China has no problems with supplying weapons to countries with human rights, development or other issues and does not, as far as is known, put conditions on the use of the weapons supplied. Unlike the EU, the USA and other states that restrict supply of weapons to Myanmar to prevent their use by the military against civilians, China has supplied weapons that have been so used. In addition, when Western states halted some supplies to the Philippines, China made a show of quickly donating similar weapons (see chapter 4).

European states

Most of the European states that produce major arms supply to states in South East Asia. In the period 1999–2018, 14 EU member states supplied major arms to South East Asian states and EU member states accounted for 32 per cent of all major arms imports by South East Asian states. South East Asia is an important market for some. For example, in that period Czechia, the Netherlands, Sweden and Poland have each exported relatively more to South East Asia than the total South East Asia share of the global market would warrant (see table 3.5).

Many European companies and governments see South East Asia as a promising market and are investing heavily in trying to gain orders there. In many cases, European suppliers offer licensed production, technology transfers and soft loans in order to gain orders.

[70] Béraud-Sufreau, L. and Nouwens, M., 'Are arms exports a tool of Chinese foreign policy?', East Asia Forum, 7 July 2018.

[71] Matthews, R. and Ping, X., 'The end game of China's arms export strategy', East Asia Forum, 27 Sep. 2017.

[72] Grevatt, J., 'China offers military credit to Cambodia', *Jane's 360*, 19 June 2018; and Thul, P. C., 'China pledges over $100 million military aid to Cambodia', Reuters, 19 June 2018.

[73] Thul (note 72).

South Korea

South East Asia has become an important market for South Korean weapons, accounting for 32.8 per cent of South Korea's major arms exports in 1999–2018. Indonesia was South Korea's largest customer in South East Asia (and second largest globally), accounting for 23 per cent of all South Korean major arms exports during that period. South Korea has established itself as an important supplier to Indonesia, accounting for 16 per cent of total Indonesian imports of major weapons in 1999–2018. Deliveries include 2 submarines, 5 AALSs and 16 T-50 trainer/combat aircraft. Four additional submarines and at least one AALS are on order. In all cases the orders were won against competition from more established producers and suppliers, probably, at least to some extent, attributable to competitive pricing and the package of technology transfers and licensed production offered. South Korea and Indonesia have formed a partnership to develop and produce K-FX advanced light combat aircraft in a programme where Indonesia pays 20 per cent of the estimated $7–9 billion development costs and will acquire up to 80 K-FX from 2025 while also producing components for all the K-FX.[74]

Technology transfers and licensed production also played a role in South Korean contracts with Malaysia. In 2011 South Korea won a $95 million contract for two offshore patrol vessels (OPVs)/training ships to be assembled in Malaysia and delivered in 2017–18.[75] In 2014 it won a $1.2 billion deal to supply six MSC frigates to Malaysia, three of which are to be assembled or produced in Malaysia.[76]

South Korea has sold 2 frigates and 12 T-50 trainer/combat aircraft to Thailand, and hopes to win additional Thai orders for T-50s.[77] Sales to the Philippines include 12 FA-50 combat aircraft, delivered in 2015–17, and 2 frigates, agreed for delivery in 2020–21.

South East Asian states

Most South East Asian states remain committed to often long-standing ambitions to develop an arms industry, but still have only a rudimentary capacity. Singapore and Indonesia have developed or produced several types of major arms of their own design. Both cater mainly to their local markets, but they are also the only South East Asian states to have been successful in exporting locally produced major weapons, even if only in small volumes. South East Asia was their most important market in 1999–2018 but together they accounted for only 1 per cent of imports by the South East Asian states.

Indonesia is trying to market itself as a supplier to other South East Asian states. It has had some success in recent years, delivering two AALSs to the Philippines and negotiating the sale of a further two.[78] It is also negotiating a sale of at least two fast-attack craft and has offered submarines—German-designed boats with South Korean modifications produced under South Korean licence in Indonesia—to the Philippines.[79] Indonesia has also used technology transfers and licensed production effectively to sell Indonesian-produced AALSs to Peru.[80] The Indonesian shipbuilder,

[74] 'S. Korea, Indonesia open joint office for consultations on KF-X project', Yonhap News Agency, 8 Feb. 2017; Waldron, G., 'Indonesia presses pause on KF-X involvement', FlightGlobal, 9 May 2018; Grevatt, J., 'Indonesia and Korea Aerospace Industries sign deals to finalise KFX investment and workshare', *Jane's Defence Industry*, 7 Nov. 2015.

[75] 'NGV Tech to build training vessels for Malaysian Navy', Bernama, 14 Dec. 2010.

[76] 'DSME signs contract to deliver 6 Missile Surface Corvettes (MSC) to Royal Malaysian Navy', *Navy Recognition*, 24 Nov. 2014.

[77] Nanuam, W., and Sattaburath, A., 'PM defends B8.8bn jet trainer splurge', *Bangkok Post*, 12 July 2017.

[78] Grevatt (note 36).

[79] Grevatt (note 36).

[80] Grevatt (note 36).

PT PAL, is also trying to gain orders from the other South East Asian states using the same sharing and cooperation incentives as most non-South East Asian suppliers.[81]

Japan

Japan had a long-standing policy of restricting exports of military equipment, to the extent that it barely exported any military equipment at all. However, this export policy was dramatically changed in 2014 when Japan largely abolished the restrictions and actively began to promote arms sales. Part of the reasoning behind this change lies in Japan's efforts to counter China's growing power and support allies or friendly countries in Asia, including through donations and sales of military equipment.

Japan's deliveries to and orders from South East Asia are minimal. It has supplied five second-hand light transport aircraft to the Philippines, for use as maritime patrol aircraft. This was followed in 2018 by an agreement to supply spare parts for UH-1H helicopters.[82] In addition, Japan has supplied as aid or agreed to supply second-hand OPV and patrol craft to non-military coastguards, including 2 OPVs and 10 patrol craft to the Philippines,[83] 2 to Malaysia,[84] and 6 to Viet Nam.[85] Japan's interest in South East Asian security means that the volume of transfers is likely to increase, especially in the form of aid. Japan has offered new-build patrol ships to the Vietnamese coastguard as part aid or funded with a 'soft' loan.[86] The Philippines has also expressed interest in ex-Japanese P-3C ASW aircraft, but no transfers have yet been agreed.[87]

[81] Grevatt (note 36).

[82] Grevatt, J., 'Japan agrees to supply UH-1H parts to Philippines', *Jane's Defence Industry*, 3 June 2018.

[83] Reuters, 'Japan to give ships to Philippines', *The Maritime Executive*, 6 Sep. 2016; Parameswaran, P., 'Japan to give Philippines two large patrol vessels', *The Diplomat*, 6 Sep. 2016; Patil, V., 'Third Japan-made multirole response vessel enters Philippines Coast Guard service', DefenseWorld.net, 7 Mar. 2017.

[84] 'Japan giving two coast guard boats to Malaysia', *The Straits Times*, 15 Nov. 2016.

[85] Reuters, 'Japan to provide patrol ships to Vietnam', *The Maritime Executive*, 7 Sep. 2016; Rahmat, R., 'Vietnam receives refurbished Japanese vessel', *Jane's Defence Weekly*, 18 Feb. 2015, p. 15.

[86] Reuters (note 85); Grevatt, J., 'Japan offers more patrol boats to Vietnam', *Jane's Defence Industry*, 17 Sep. 2015.

[87] Grevatt, J., 'Japan and Philippines sign defence equipment and technology accord', *Jane's Defence Weekly*, 9 Mar. 2016, p. 21.

4. State military spending and arms acquisitions

Brunei Darussalam

Military spending

Brunei Darussalam spends more on its military as a percentage of GDP than most South East Asian states, but has for many years allowed the economy to dictate what it can afford to spend. Economic downturns, largely related to the price of oil, generally lead immediately to reduced spending and the postponement, scaling down or cancellation of major procurement plans. The increase after the 2008 fall in the oil price was likely to pay for ships ordered in 2007. The most recent oil price fall in 2014 has negatively affected the economy and the state budget. Military spending fell by 29 per cent between 2015 and 2018 (see table 4.1), as acquisition plans were delayed or scaled down and all major procurement was cut for 2017.[88]

Arms acquisitions and imports

Brunei's arms acquisitions are all imports as it has no arms industry or any plans for one. Arms imports increased significantly in 2009–13 when Brunei took delivery of three OPVs and five patrol craft from Germany. The OPVs gave Brunei a blue-water capability to patrol its exclusive economic zone (EEZ) and South China Sea claims for the first time. Despite delivery of a fourth OPV from Germany and 12 transport helicopters from the USA, imports fell in 2014–18, but were still much higher than in 1999–2008. However, no major weapons have been delivered since 2015 and none are known to be on order. Brunei has no combat aircraft, maritime patrol aircraft or medium-range air defence systems. Long-standing plans exist for such weapons but have been delayed repeatedly, mainly for reasons of budget and personnel constraints.[89]

Brunei purchases all of its weapons from Western suppliers but has no clear preference for a specific supplier (see table 4.2). Given that Brunei and the United Kingdom have had a defence agreement since 1984 and the UK has around 2000 military personnel in Brunei, it is surprising that the UK has not been among Brunei's suppliers for the past 20 years.[90] This is possibly because of Brunei's negative experience with a 600-million pound order for three frigates from the major British arms company, BAE Systems, in 1998. Brunei refused to accept the completed ships on the ground that they did not meet contract specifications, but an arbitration process forced Brunei to take the ships in 2007.[91] A subsequent order for OPVs in 2007 was awarded to a German company at the same time that it agreed to act as broker for the sale of the frigates.[92]

Brunei's arms imports in the past two decades have largely been linked to the maritime domain: 64 per cent of the volume of orders was for ships and another 17 per cent for sensors and missiles and other weapons for those ships (see table 4.3). Imports of major arms increased the volume of Brunei's inventory of major weapons by 108 per cent between 2008 and 2017, with a clear emphasis on naval assets. A 322 per cent increase in volume means that ships accounted for 62 per cent of the total volume of Brunei's major weapons inventory in 2017, up from 31 per cent in 2008.

[88] Othman, A., 'Defence budget drops 20pc to B$451M', *Borneo Bulletin*, 9 Mar. 2017.

[89] 'The Royal Brunei Armed Forces', *Asian Defence Journal*, May 2005, pp. 10–14; Fong, K. and Ismail, M. H., 'The Royal Brunei Armed Forces', *Asian Defence Journal*, July 2007, pp. 6–8; Pryce (note 34).

[90] Tossini, J. V., 'The UK in the Far East: The relevance of the British forces in Brunei', *UK Defence Journal*, 3 Feb. 2017; and Graham, V. and Larke, K., 'British troops to remain in Brunei for another five years', Forces Network, 17 Feb. 2015.

[91] 'Shipyard deadlock ends', *Ships Monthly*, Sep. 2007.

[92] *Ships Monthly* (note 91). In 2013 they were sold to Indonesia for 120 million pounds. See Dorimulu, P., 'Indonesia bakal miliki frigate Inggris' [Indonesia will have British frigate], *Investor Daily: Indonesia*, 4 Nov. 2012.

Table 4.1. Military spending by Brunei Darussalam, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	365.6	381.5	373.6	367.1	366.9	476.8	417.4	402.0	346.7	336.5
% change	*–1.9*	*+4.3*	*–2.1*	*–1.7*	*–0.1*	*+30.0*	*–12.5*	*–3.7*	*–13.8*	*–2.9*
BND m.[b]	508.8	532.8	522.5	513.9	515.6	668.7	583.0	557.4	479.8	467.5
% change	*–0.8*	*+4.7*	*–1.9*	*–1.7*	*+0.4*	*+29.7*	*–12.8*	*–4.5*	*–13.9*	*–2.5*
% of GDP	*2.9*	*2.9*	*2.2*	*2.2*	*2.3*	*3.1*	*3.3*	*3.5*	*2.9*	*2.3*

[a] Spending per million constant (2017) US dollars.
[b] Spending per million current Brunei dollars (BND).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.2. Suppliers of major arms to Brunei Darussalam, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to the conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
Germany	–	–	259	63	322	*64.0*
USA	<0.5	<0.5	15	73	88	*17.5*
France	5	2	22	11	45	*8.9*
Denmark	–	–	14	5	19	*3.8*
Netherlands	–	–	14	5	19	*3.8*
Sweden	–	–	8	3	10	*2.0*
Total	**10**	**3**	**332**	**159**	**503**	

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

Table 4.3. Share of imports of major arms by category, for Brunei Darussalam, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	–	–	*4.5*	*45.9*	*17.3*
Armoured vehicles	*50.0*	–	–	–	*1.0*
Engines	*<0.05*	*33.0*	–	–	*0.2*
Missiles	*50.0*	*67*	*6.6*	*6.9*	*8.0*
Naval weapons	–	–	*2.4*	*1.9*	*2.0*
Sensors	–	–	*8.7*	*6.3*	*7.6*
Ships	–	–	*78.0*	*39.6*	*64.0*

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

Cambodia

Military spending

Cambodia's military spending increased every year between 2009 and 2018; the total increase for this period was 191 per cent, from $180.7 million to $525.1 million.[93] The increase far outpaced economic growth; thus, military spending as a percentage of GDP also increased, averaging nearly 2.1 per cent in 2015–18 (see table 4.4). Spending immediately before this period, in 2008, was the lowest since 1993, following 15 years of almost continuous declines while the political system became more stable after decades of conflict and foreign intervention. However, a border issue with Thailand rose to prominence in mid-2008, leading to fighting between Cambodian and Thai forces in 2008 and 2011. The dispute remains unresolved[94] and has become a major

[93] SIPRI includes in military spending for Cambodia its spending on the armed forces, the Ministry of Defence and the Royal Gendarmerie.
[94] Sokheng, V., and Cuddy, A., 'Border tensions brewing', *The Phnom Penh Post*, 22 Apr. 2019.

Table 4.4. Military spending by Cambodia, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	180.7	215.9	227.3	248.1	269.7	297.2	346.1	393.8	463.8	525.1
% change	*+70.0*	*+19.5*	*+5.3*	*+9.2*	*+8.7*	*+10.2*	*+16.5*	*+13.8*	*+17.8*	*+13.2*
KHR b.[b]	565	702	780	876	981	1 122	1 551	1 501	1 878	2 198
% change	*+68.7*	*+24.2*	*+11.1*	*+12.3*	*+12.0*	*+14.4*	*+38.2*	*–3.2*	*+25.2*	*+17.0*
% of GDP	*1.3*	*1.5*	*1.5*	*1.5*	*1.6*	*1.7*	*1.8*	*1.9*	*2.1*	*2.2*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Cambodian riel (KHR).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.5. Suppliers of major arms to Cambodia, 1999–2018

Values are SIPRI TIV millions. Totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
China	–	56	58	–	114	*45.2*
Ukraine	–	–	54	–	54	*21.4*
Serbia	–	–	30	–	30	*11.9*
Czechia	–	–	28	–	28	*11.1*
Viet Nam	–	14	–	–	14	*5.6*
Bulgaria	–	–	4	–	4	*1.6*
Canada	–	–	4	–	4	*1.6*
Slovakia	–	–	4	–	4	*1.6*
Total	–	**70**	**183**	–	**252**	

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

Table 4.6. Share of imports of major arms by category, for Cambodia, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	–	–	29.5	–	21.4
Armoured vehicles	–	–	61.7	–	44.8
Engines	–	–	4.4	–	3.2
Missiles	–	–	2.2	–	1.6
Naval weapons	–	–	2.2	–	1.6
Sensors	–	100.0	–	–	27.8
Ships	–	–	78.0	39.6	64.0

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

driver of increased military spending.[95] More recently, the banning of the political opposition in 2017 is likely to strengthen the role of the military.[96]

Arms acquisitions and imports

Cambodia's acquisitions of major weapons are all imported as Cambodia has no arms industry to speak of. Its major supplier for the past 20 years has been China, which accounted for 45.2 per cent of all major arms deliveries (see table 4.5). Most of the Chinese deliveries were either provided as aid or funded by Chinese loans. In 2006–2007 Viet Nam supplied six patrol craft and China provided as aid the first ships delivered to Cambodia for 20 years. These imports give Cambodia some control over its territorial waters and EEZ. Deliveries spiked in 2009–13 following the acquisition of second-hand armoured vehicles from various Central and Eastern European states

[95] Madra, E., 'Cambodia doubles military budget after Thai clash', Reuters, 29 Oct. 2008.

[96] The military leadership supported the Government's actions against the opposition. See Human Rights Watch, World Report 2017, 'Cambodia: Events of 2016'; and Sokhean, B., 'CPP spokesman warns that army will not stay neutral', *The Cambodia Daily*, 18 May 2017.

in 2010–12. These deliveries included about 60 tanks and 40 armoured personnel carriers (APCs) delivered just prior to renewed fighting on the border with Thailand in 2011, and a further 100 tanks and 40 APCs later in the year. Despite the continuing tensions with Thailand and new tensions with Laos, Cambodia did not import any major arms after 2013, nor is known to have placed any orders for major weapons.

Planned acquisitions of major weapons are focused on combat aircraft and two corvettes or frigates. In both cases, only China has been mentioned by the Cambodian military as the potential supplier.[97] In June 2018 China offered to donate military equipment and to expand training in Cambodia. It also made an additional grant of at least $100 million as military aid for Cambodia to use at it sees fit, but this grant is probably conditional on buying Chinese equipment.[98]

The imports of major arms over the past ten years have not had a substantial impact on the size of the Cambodian inventory, as imports were balanced by the decommissioning of older weapons. However, the balance of the inventory has shifted more towards land weapons (see table 4.6). In 2009, before imports had begun to be driven by the border conflict, land weapons made up 47 per cent of the total volume of major arms, alongside 43 per cent air weapons and 10 per cent naval weapons. In 2018 land weapons made up 72 per cent, naval weapons 16 per cent and air weapons only 12 per cent (after the air force decommissioned all combat aircraft). This new emphasis on land weapons, and a near total lack of acquisitions of air defence systems—only a small number of portable SAMs were acquired from China in around 2009—emphasizes the limited scope of the border conflict and the threat perceptions of Cambodia. However, the focus on land systems may have ended following Cambodia's announcement of its plans for combat aircraft and corvettes or frigates in 2016. How such expensive systems can be funded given the budgetary constraints of Cambodia, remains to be seen.

Indonesia

Military spending

Indonesian military spending between 2009 and 2013 increased strongly, by 109 per cent in current prices (see table 4.7). In late 2014 the newly elected government of President Joko Widodo announced plans to triple the military budget, increasing it to 1.5 per cent of GDP by 2019.[99] Indonesia's 2015 Defence White Paper somewhat lowered this aspiration to over 1 per cent of GDP 'and a gradual increase in the next decade'.[100] Between 2014 and 2018, however, economic problems and efforts to reduce the state budget deficit limited growth to 8.9 per cent. In 2016 the the originally approved budget of 108.7 trillion rupiahs was reduced to 98.1 trillion rupiahs, bringing military spending down to 0.8 per cent of GDP.[101] With the budget deficit reduced to acceptable levels by 2017, the Indonesian parliament approved an increase in military spending,[102] but the amount was significantly lower than the government's original request for around 180–200 trillion rupiahs.[103] Indonesia is expected to experience economic

[97] Sokhean, B., 'China to help modernize military, Defense Minister says', *The Cambodia Daily*, 18 Oct. 2016; Sokheng, V., 'Cambodia in talks to buy warships from China', *The Phnom Penh Post*, 25 Feb. 2016, < >.

[98] Grevatt (note 72); and Thul (note 72).

[99] 'Analysts welcome Indonesia's plan to triple defense budget', *Jakarta Globe*, 10 Dec. 2014.

[100] Indonesian Government, Defense Ministry, *Defence White Paper 2015* (Directorate General of Defense Strategy: Jakarta, Nov. 2015), p. 132; Caffrey, C., 'Revised Indonesian budget brings modest increase', *Jane's Defence Weekly*, 19 July 2017, p. 21.

[101] Caffrey (note 100).

[102] Negara, S. D., 'Indonesia's 2017 budget seeks cautious economic expansion', *ISEAS Perspective*, no. 51 (15 Sep. 2016), p. 8.

[103] '2017 defense budget set much lower than proposed by govt', *Jakarta Post*, 14 Oct. 2016.

Table 4.7. Military spending by Indonesia, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	3 840	4 510	5 170	5 936	7 981	7 032	8 225	7 620	8 178	7 661
% change	*+4.9*	*+17.4*	*+14.6*	*+14.8*	*+34.5*	*–11.9*	*+17.0*	*–7.4*	*+7.3*	*–6.3*
IDR tr.[b]	34.3	42.3	51.2	61.3	87.7	82.2	102.3	98.1	109.3	105.9
% change	*+9.6*	*+23.3*	*+21.0*	*+19.7*	*+43.1*	*–6.3*	*+24.5*	*–4.1*	*+11.4*	*–3.1*
% of GDP	*0.6*	*0.6*	*0.7*	*0.7*	*0.9*	*0.8*	*0.9*	*0.8*	*0.8*	*0.7*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Cambodian riel (KHR).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.8. Suppliers of major arms to Indonesia, 1999–2018

Values are SIPRI TIV millions. Totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
Russia	240	68	786	54	1 147	*15.7*
South Korea	96	186	410	443	1 134	*15.5*
Netherlands	22	456	150	452	1 079	*14.8*
UK	194	–	–	691	885	*12.1*
USA	43	50	121	662	875	*12.0*
France	40	134	115	258	547	*7.5*
Germany	91	32	21	324	467	*6.4*
China	. .	16	149	186	350	*4.8*
Spain	8	30	71	59	169	*2.3*
Australia	8	–	18	112	139	*1.9*
Switzerland	–	–	–	134	134	*1.8*
Brazil	–	–	18	87	105	*1.4*
Italy	–	20	4	59	83	*1.1*
Belgium	–	. .	13	32	45	*0.6*
Canada	4	4	17	15	40	*0.5*
Brunei	–	–	24	–	24	*0.3*
Poland	–	8	9	1	19	*0.3*
Sweden	8	3	–	8	18	*0.2*
Denmark	2	3	3	5	13	*0.2*
Czechia	. .	2	–	4	7	*0.1*
Ukraine	3	–	–	4	7	*0.1*
Singapore	4	–	–	–	4	*0.1*
Slovakia	4	–	–	–	4	*0.2*
Austria	–	–	–	1	1	*<0.05*
Israel	–	–	1	–	1	*<0.05*
South Africa	–	<0.5	–	–	<0.5	*<0.05*
Total	**766**	**1 010**	**1 929**	**3 590**	**7 295**	

– = nil; . . = data not available.

Source: SIPRI Military Expenditure Database, Mar. 2019.

growth of over 5 per cent annually in the coming years and military spending was expected to reflect this trend.[104] Despite the projected economic growth, the budget for 2018 was actually slightly lower than in 2017.

Indonesia's priority for military acquisitions is for new equipment to replace older systems. About 40 per cent of the 2017 budget was earmarked for capital investment, a very high share compared to most countries.[105] The focus of Indonesian defence policy—and especially of plans for increased investment in equipment—remains somewhat unclear. Indonesian analysts disagree on the level and types of potential

[104] Caffrey (note 100).
[105] '2017 defense budget set much lower than proposed by govt' (note 103).

Table 4.9. Share of imports of major arms by category, for Indonesia, 1999–2018
Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	62.1	14.1	57.0	29.5	38.1
Air defence systems	–	0.3	4.3	4.6	3.4
Armoured vehicles	4.7	1.2	2.5	9.8	6.1
Artillery	0.1	0.2	2.0	2.8	1.9
Engines	6.8	8.7	3.5	1.8	3.7
Missiles	0.3	4.5	7.7	7.4	6.3
Naval weapons	1.0	1.1	0.4	1.5	1.1
Sensors	5.7	6.6	4.1	4.8	4.9
Ships	19.3	63.5	17.9	37.5	34.1
Other	–	–	0.7	<0.05	0.2

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

external threats facing Indonesia. Some see neighbouring countries as potential threats. Others dismiss this and identify internal threats such as illegal activities as more important, or promote Indonesia's role as a 'peace broker' in the region and a participant in UN peacekeeping operations.[106] However, there appears to be strong agreement among analysts that Indonesia's defence policy should be transparent in order to prevent misinterpretation and negative reactions from neighbouring states.[107] Indonesia has become more concerned about the South China Sea in recent years, where its EEZ around the Natuna islands overlaps with China's nine-dash line.[108]

Arms acquisitions and imports

Indonesia has bought its weapons from a wide variety of suppliers for many years and it continues to be open to deals with most countries (see table 4.8). In almost all larger acquisitions, many countries have tendered or been asked to demonstrate their products. This is at least in part the result of a policy of spreading the risk of potential trouble with suppliers, such as Indonesia encountered in the 1990s and early 2000s when the USA placed an embargo on arms sales to Indonesia.[109]

Expanding indigenous arms production capabilities has long been, and remains, an important goal of Indonesian defence policy.[110] Import deals often include licensed production and a limited level of technology transfer. This also shapes relations with suppliers, based on their willingness to share technology and the interest Indonesia has in such technology. Acquisitions of helicopters are thus mainly from Airbus (France) and Bell (USA), as both companies set up local assembly lines with the Indonesian company PT Dirgantara decades ago.[111] Frigates have been bought from Damen, a Dutch company that has helped to develop an Indonesian production line. More recently, South Korea has become a major supplier, having helped Indonesian companies assemble submarines and get involved in the development of combat aircraft.

Combat aircraft and warships were among the priorities in Indonesia's recent arms acquisitions (see table 4.9). Aircraft made up 38.1 per cent of the volume of arms imports between 1999 and 2018, and ships 34.1 per cent. Most of these aircraft and ships were combat aircraft and warships, such as the 16 Su-27 and Su-30 combat aircraft delivered

[106] 'Analysts welcome Indonesia's plan to triple defense budget', *Jakarta Globe*, 10 Dec. 2014.
[107] 'Analysts welcome Indonesia's plan to triple defense budget' (note 106).
[108] Jennings, G., 'Update: Indonesia formally accepts first Apache helos', *Jane's Defence Weekly*, 21 May 2018.
[109] Grevatt (note 66).
[110] Indonesian Government, Defence Ministry (note 100).
[111] 'Indonesian MOD orders 8 Airbus H225M, 9 Bell 412 helicopters', DefenseWorld.net, 9 Jan. 2019.

Table 4.10. Military spending by Laos, 2009–18[a]

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	19.7	19.8	22.2	22.7	23.3	. .	. .	. .	. .	. .
% change	*–16.5*	*+0.5*	*+12.1*	*+2.3*	*+2.9*	. .	. .	. .	. .	. .
LAK b.[b]	119.0	126.8	152.7	162.8	178.3	. .	. .	. .	. .	. .
% change	*–16.4*	*+6.6*	*+20.4*	*+6.6*	*+9.5*	. .	. .	. .	. .	. .
% of GDP	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	. .	. .	. .	. .	. .

. . = data not available.

[a] Laos has not published data for 2014–2018.
[b] Spending per million constant (2017) US dollars.
[c] Spending per billion current Lao kip (LAK).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.11. Suppliers of major weapons arms to Laos, 1999–2018

Values are SIPRI TIV millions. Totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
China	–	7	30	51	91	*37.0*
Ukraine	11	4	14	61	89	*36.2*
Serbia	26	–	26	–	52	*21.1*
Czechia	–	–	8	–	8	*3.3*
Viet Nam	–	–	–	7	7	*2.8*
Total	37	10	78	121	246	

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

Table 4.12. Share of imports of major arms by category, for Laos, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	90.0	65.0	89.7	40.4	64.2
Air defence systems	–	–	–	24.8	12.2
Armoured vehicles	–	–	–	18.2	8.9
Artillery	–	–	–	11.6	5.7
Engines	–	–	10.3	–	3.3
Missiles	10.0	35.0	–	5.6	5.7

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

by Russia between 2003 and 2011, and the 24 F-16C delivered by the USA between 2014 and 2017. Current acquisitions are also focused on combat aircraft and warships, such as the 11 Su-35 combat aircraft ordered from Russia in 2018, half of which will be paid for with agricultural and other products.[112] The deal was still uncertain as of the end of 2018 because of the threat of US sanctions on buyers of Russian weapons (see discussion under 'United States' in chapter 3, above). Indonesia may have to cancel the order and buy combat aircraft from another country, most likely US F-16Vs, its second choice.[113] Indonesia has also ordered around 80 K-FX combat aircraft (known as the I-FX in Indonesia) from South Korea for delivery after 2025. The K-FX is still being developed; Indonesia will pay up to 20 per cent of the development costs and take a minor stake in the development.[114]

Indonesia has announced plans for substantial increases in military spending and arms acquisitions several times over the past decade. Long-term plans for weapon acquisitions include up to 230 new combat aircraft of several types by 2030, several

[112] Munthe (note 60).
[113] Wardi (note 64); Normala (note 63); and Grevatt (note 66).
[114] Waldron, G., 'KAI upbeat after Jakarta resumes K-FX/I-FX payments', *FlightGobal*, 4 Jan. 2019.

dozen frigates and up to 12 submarines, and a large number of unmanned aerial vehicles (UAVs) of various sizes.[115] Many of these plans, such as for combat aircraft, frigates and submarines, appear unrealistic as they would require a major increase in military spending. However, some of the plans seem to be progressing on a more limited scale. In 2011 Indonesia ordered three Type-209/1400 submarines from South Korea and ordered three more in April 2019.[116] These six submarines would be smaller and less capable but also more affordable than some of the designs suggested previously, and include the much desired Indonesian participation in their production.[117]

Current short-term plans have a special focus on combat and transport aircraft,[118] such as the order for the Russian Su-35 combat aircraft and a planned order for five C-130J transport aircraft from the USA.[119] These plans also include expanding the military presence in the Natuna archipelago, where new bases are to be built for the air force, navy and army by 2020.[120] Natuna controls the south-western part of the South China Sea, an area of specific focus for Indonesia in recent years. In addition to the bases in the Natuna island group, Indonesia has set up other new bases and expanded existing bases in or near the South China Sea. New equipment has been acquired specifically to be stationed in this area, such as the acquisition in 2017 of the VERA-NG passive electronic air surveillance system ('passive radar') for use on Natuna.[121] At least four of the eight AH-64E combat helicopters delivered by the USA in 2017–18 are to be based on Natuna.[122]

Laos

Military spending

Laos is not transparent in its military spending and there is no reliable data available for the period 2014–18. Data for 2010–13 shows a small annual increase in real terms (see table 4.10). However, Laotian military spending is lower than any of the other South East Asian states and spending as a percentage of GDP is lower than almost any country in the world. It is likely military spending has increased significantly in 2017 and 2018 to fund the acquisition of new equipment, including up to 10 Yak-130 light combat aircraft.[123]

Arms acquisitions and imports

Laotian arms acquisitions have been very small in the past 20 years—the lowest of any ASEAN member state and, after Timor-Leste, the lowest in South East Asia. China and Russia have been the largest suppliers to Laos (see table 4.11). China's deliveries coincide with its economic interest in Laos, where it has beenthe largest investor by 2013; China has made Laos a key point in the BRI.[124]. Notably, the Chinese supplies seem to be in the form of commercial deals rather than aid.

[115] Grevatt, J. 'Turkey, Indonesia support UAV collaboration', *Jane's Defence Industry*, 15 Aug. 2018; Grevatt, J., 'Indonesia plans to buy 180 Sukhoi fighter aircraft over 20 years', *Jane's Defence Weekly*, 6 Oct. 2010; Sukoyo, Y. and Wardi, R., 'Indonesia reveals plan to boost defence', *Jakarta Globe*, 27 Sep. 2013.

[116] Shim, E., 'South Korea land $1B submarine contract with Indonesia', United Press International (UPI), 12 Apr. 2019.

[117] Competing designs included a German version of Type-209, and larger designs from France and Russia. See Grevatt, J., 'Indonesia looks to Russia and SK for sub', *Jane's Defence Weekly*, 27 Oct. 2010.

[118] '2017 defense budget set much lower than proposed by govt' (note 103).

[119] Wardi (note 64).

[120] '2017 defense budget set much lower than proposed by govt' (note 103).

[121] Rahmat, R., 'Indonesia selects VERA-NG passive surveillance system for Natuna airbase', *Jane's Defence Weekly*, 28 Feb. 2018.

[122] Jennings (note 108).

[123] The Yak-130s are likely to cost at least $10–15 million each (based on known prices from other sales of Yak-130s and similar aircraft).

[124] Corben, R., 'Laos looks to balance China's growing economic influence', *Voice of America*, 23 Apr. 2015.

Table 4.13. Military spending by Malaysia, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	3 934	3 437	3 853	3 674	4 003	4 035	4 344	4 159	3 495	3 208
% change	*–5.6*	*–12.6*	*+12.1*	*–4.6*	*+9.0*	*+0.8*	*+7.7*	*–4.3*	*–16.0*	*–8.2*
MYR b.[b]	14.0	12.4	14.4	13.9	15.5	16.1	17.7	17.3	15.1	14.0
% change	*+5.0*	*–11.2*	*+15.7*	*–3.0*	*+11.3*	*+3.9*	*+9.9*	*–2.3*	*–12.7*	*–7.3*
% of GDP	*2.0*	*1.5*	*1.6*	*1.4*	*1.5*	*1.5*	*1.5*	*1.4*	*1.1*	*1.0*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Malaysian ringgit (MYR).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.14. Suppliers of major arms to Malaysia, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
Russia	76	815	421	–	1 311	*24.2*
Germany	36	332	627	70	1 065	*19.6*
Spain	–	–	299	292	591	*10.9*
UK	434	122	11	23	590	*10.9*
France	37	54	401	49	541	*10.0*
Italy	202	63	128	–	394	*7.3*
Turkey	68	13	32	116	229	*4.2*
Poland	–	96	77	–	173	*3.2*
USA	51	40	25	27	142	*2.6*
South Korea	–	–	4	74	78	*1.4*
Indonesia	49	16	–	–	66	*1.2*
South Africa	22	–	–	31	53	*1.0*
Switzerland	15	10	9	5	39	*0.7*
Brazil	19	–	17	–	36	*0.7*
Netherlands	18	–	3	6	26	*0.5*
Sweden	23	–	–	–	23	*0.4*
Denmark	–	–	–	16	16	*0.3*
Pakistan	16	–	–	–	16	*0.3*
Canada	5	6	–	3	14	*0.3*
Brunei	–	–	–	12	12	*0.2*
China	–	–	5	–	5	*0.1*
Thailand	–	–	–	4	4	*0.1*
Australia	1	–	–	–	1	*<0.05*
Unidentified supplier(s)	–	–	–	1	1	*<0.05*
Total	**1 073**	**1 566**	**2 058**	**728**	**5 425**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Until 2017, arms acquisitions by Laos were limited in volume and consisted mainly of transport aircraft and helicopters (see table 4.12). However, in 2017 and 2018, after Cambodia threatened military action against it, Laos placed orders for at least 10 light combat aircraft and at least 24 tanks from Russia and several air defence systems from China. Deliveries on these orders started in 2018.

Malaysia

Military spending

Military spending trends in Malaysia have been much less consistent than those in most other South East Asian states in the past 10 years. There have been years of

Table 4.15. Share of imports of major arms by category, for Malaysia, 1999–2018
Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	9.0	46.5	20.7	47.8	29.4
Air defence systems	–	4.8	–	1.2	1.5
Armoured vehicles	6.5	7.0	5.5	16.6	7.6
Artillery	3.6	–	0.9	<0.05	1.1
Engines	5.2	1.6	1.3	10.1	3.4
Missiles	9.4	16.0	9.3	3.8	10.5
Naval weapons	0.5	0.4	0.5	–	0.4
Sensors	11.6	4.0	2.5	6.5	5.3
Ships	50.3	20.0	59.2	10.2	39.5
Other	3.6	–	–	3.7	1.2

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

substantial increases mixed with years of substantial falls, but an overall decline in military spending between 2009 and 2018 (see table 4.13). The economic burden of the military budget has fallen more consistently, and was in 2017 almost half of that in 2008 and 2009.

Malaysia has for many years allowed the economy to dictate what it can afford to acquire. The fall in oil prices since 2014 has negatively affected the Malaysian economy and there was a significant cut to the state budget for 2016. Such economic downturns have affected military spending and generally led immediately to reduced spending and a postponement, scaling down or cancellation of major procurement plans. The defence budget for 2016 was cut by around 2.5 per cent and the 2017 budget by 12 per cent, to 15.1 billion ringgit.[125] The air force and navy budgets were hit particularly hard by the cuts, losing 34 per cent and 25 per cent, respectively, compared to 2015 levels.[126] An increase of 5.3 per cent to 15.9 billion ringgit was planned for 2018 but even this was around 7 per cent below 2015 levels.[127] The military budget in 2018 grew in line with economic growth so spending as a share of GDP was little changed.[128] The 2016, 2017 and proposed 2018 budgets allocated 11.68 billion, 11.7 billion and 12.6 billion ringgits, respectively, to recurrent costs. Funding for procurement therefore fell slightly from 3.4 billion ringgits in 2016 to 3.3 billion ringgits in 2018.[129]

Arms acquisitions and imports

Malaysia obtains its arms from a diverse range of suppliers, predominantly from European states (see table 4.14). Malaysian arms acquisitions in the period 2008–17 were significantly higher than in the period 1998–2007. However, deliveries in the five-year period 2013–17 were the lowest of any of the past four five-year periods. Acquisitions were focused on the maritime domain: ships accounted for 39.5 per cent and many of the aircraft acquired were equipped for a maritime role (see table 4.15). However, Malaysia also acquired 48 tanks in 2007–10—pre-dating and possibly also explaining, at least in part, similar acquisitions by Singapore and Thailand.

Malaysia is likely to remain focused on maritime acquisitions. The navy's '15-to-5' programme aims to replace 15 older ships with just 5 new models. Six frigates are on order from France and four OPVs from China. In 2018 the navy announced plans to order two submarines between 2031 and 2041, as part of the 14th and 15th Malaysia

[125] Grevatt, J., 'Malaysia cuts defence budget by 12%', *Jane's Defence Weekly*, 24 Oct. 2016.
[126] Grevatt (note 125).
[127] Caffrey, C., 'Malaysia announces 5.3% defence budget increase', *Jane's Defence Weekly*, 27 Oct. 2017.
[128] Caffrey (note 127).
[129] Caffrey (note 127); and Grevatt (note 125).

Table 4.16. Military spending by Myanmar, 2009–18[a]

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[b]	. .	. .	. .	2 969	3 270	3 290	3 818	3 651	3 464	3 155
% change	. .	. .	. .	. .	*+10.1*	*+0.6*	*+16.0*	*–4.4*	*–5.1*	*–8.9*
MMK b.[c]	. .	. .	. .	1 902	2 210	2 336	2 967	3 035	3 012	2 907
% change	. .	. .	. .	. .	*+16.2*	*+5.7*	*+27.0*	*+2.3*	*–0.8*	*–3.5*
% of GDP	. .	. .	. .	*3.7*	*3.8*	*3.6*	*4.1*	*3.7*	*3.2*	*2.9*

[a] Reliable budget, GDP and exchange rate data not available in many years. Myanmar has not published data for 2008–11.
[b] Spending per million constant (2017) US dollars.
[b] Spending per billion current Myanmar kyat (MMK).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.17. Suppliers of major arms to Myanmar, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
China	233	119	742	530	1 624	*44.2*
Russia	221	548	637	173	1 579	*43.0*
Ukraine	57	18	27	4	106	*2.9*
Israel	13	20	41	21	94	*2.6*
India	5	16	6	42	69	*1.9*
Serbia	10	56	–	–	65	*1.8*
Belarus	–	–	–	57	57	*1.6*
North Korea	11	–	11	–	22	*0.6*
Netherlands	–	–	–	18	18	*0.5*
France	–	–	–	16	16	*0.4*
Germany	1	–	–	8	9	*0.2*
Bulgaria	7	–	–	–	7	*0.2*
Belgium	–	–	–	<0.5	<0.5	*<0.05*
Unidentified supplier(s)	–	–	1	5	6	*0.2*
Total	**558**	**776**	**1 465**	**872**	**3 672**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.18. Share of imports of major arms by category, for Myanmar, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	57.2	1.0	36.7	42.8	33.7
Air defence systems	–	51.4	2.0	27.6	18.2
Armoured vehicles	4.1	11.9	26.7	7.5	15.6
Artillery	5.4	10.6	1.8	–	3.8
Engines	1.4	–	0.5	3.4	1.3
Missiles	5.2	23.2	11.8	8.7	12.5
Naval weapons	2.5	1.0	0.1	1.0	0.8
Sensors	7.2	1.0	0.8	6.3	3.1
Ships	17.0	–	19.5	2.4	10.9

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

Plans.[130] A long-term (up to 2055) general capabilities plan for the air force, CAP 55, published in 2018, aims to rationalize the inventory of the air force, reducing the number of different types of aircraft. The plan specifies new, large, twin-engined combat aircraft, which Malaysia prefers for operations over sea, combat/advanced

[130] Rahmat, R., 'Malaysia aims to sign for third, fourth submarines by 2040', *Jane's 360*, 28 Feb. 2018.

trainer aircraft, maritime patrol aircraft, AEW aircraft and unmanned combat aerial vehicles.[131] These plans are not new but have been delayed in the past by budget reductions or freezes. In its presentation of the 2017 budget, the Malaysian Government claimed that acquisitions of major weapons would continue as planned, listing some as 'priority' programmes.[132] However, with funding for acquisitions falling, it is clear that procurement will again need to be postponed or scaled down. For example, a decision on the purchase of 18 new combat aircraft planned for at least a decade has been postponed several times. In late 2017 it was announced that the plan had been scaled back from a high-end large aircraft to a low-end smaller design that is cheaper to acquire and to operate. In early 2018, however, the large high-end aircraft remained an option.[133] The new aircraft are quite urgently needed to replace much older aircraft, most of which were reportedly grounded for repairs in mid-2018; a possible interim order for a small number of second-hand aircraft was being considered.[134]

Myanmar

Military spending

Myanmar is not transparent about its military spending. Budget figures have been published for only 6 of the past 10 years and neither GDP data nor exchange rates are reliable. Transparency has been further complicated by a 'special funds law' that allowed the military government in power until the 2015 elections to draw on additional funds beyond normal budget and parliamentary oversight, and probably also on additional off-budget funds for arms procurement.[135] The available data for military spending shows annual growth in 2012–15 and a decline in 2016–17 (see table 4.16). Growth was strongest between 2014 and 2015 when conflict flared in northern Myanmar. The decline followed soon after strongly reduced oil prices in 2014. A regular defence budget of 2910 billion kyat was proposed for 2017, reported as 'a small increase over 2016' and very much below the 3900 billion kyat requested by the defence ministry, and also lower than the 2015 and 2016 budgets.[136] The 2017 budget was the first budget set by the new non-military government and could indicate a change in spending priorities. It is unclear whether additional funding will still be available from the two non-regular funding streams or if the reported 3900 billion kyat request was a way to normalize the two non-regular streams by including them in the regular budget.

Data from various sources indicates that Myanmar uses a substantial part—up to 29 per cent has been reported for 2016—of the normal budget to procure larger items of equipment. The reported irregular funding was probably also used mainly for procurement.

Arms acquisitions and imports

China and Russia have been Myanmar's main suppliers of military equipment for the past 20 years (see table 4.17). Myanmar's supply options have been more limited

[131] Rahmat, R., 'Malaysia reduces aircraft types in air force transformation roadmap', *Jane's Defence Weekly*, 8 Aug. 2018; and Jennings, G., 'Malaysia seeks Light Combat Aircraft as part of wider modernisation plans', *Jane's Defence Weekly*, 7 Nov. 2017.

[132] Grevatt (note 125).

[133] Jennings (note 131); 'Malaysia says EU palm oil curbs may undermine France's fighter jet bid', Reuters, 8 Mar. 2018.

[134] Carvalho, M., 'Mat Sabu: only four out of RMAF's 28 Russian fighter jets can fly', *The Star*, 31 July 2018; and Pocock, C., 'Malaysia grounds MiG-29s and rethinks future fighter', *AINonline*, 9 Nov. 2017.

[135] Grevatt (note 40).

[136] Grevatt (note 40); and Parameswaran, P., 'What does Myanmar's new defense budget mean?', *The Diplomat*, 3 Mar. 2017.

than most of the states in South East Asia because it has been under EU sanctions since 1990, including an arms embargo banning the supply of any type of equipment or services to the Myanmar military. While most of these sanctions were lifted as Myanmar made progress towards democracy, the arms embargo remains. The USA has imposed similar national restrictions. (See discussion in chapter 2 above.) EU member states started to re-establish military contacts with Myanmar after the 2015 elections.[137] Germany has supplied 20 unarmed basic trainer aircraft to Myanmar, while two second-hand transport aircraft were sold by a Dutch airline to Myanmar. However, these deliveries are surprising given that the EU arms embargo is still in force and bans 'arms and related materiel of all types'.

Not all Western states ban arms sales to Myanmar. Israel has long been a supplier of military equipment to Myanmar, although much of this relationship has been shrouded in secrecy and is often only exposed when equipment obviously or probably of Israeli origin is seen in action in Myanmar. Israeli supplies have not generally been the subject of criticism in Israel but the widespread criticism of military operations against the Rohingas have led to questions in Israel about whether further supplies to Myanmar are morally acceptable.[138]

Myanmar's main security problems are several ongoing or latent internal conflicts, some of which are decades old and show little sign of resolution. Myanmar's military spending, arms acquisitions and decisions on arms suppliers are all largely shaped by these internal conflicts. However, issues with neighbouring countries also drive spending and acquisitions.[139] Disputes over maritime boundaries, most notably with Bangladesh where oil and gas are at issue, are likely to have partly driven higher levels of spending.[140] These maritime issues would explain the expansion of the navy over the past decade from a limited coastal force to a force of several frigates that provides some blue-water capabilities, and the interest in submarines (see table 4.18).[141] This expansion has been mirrored by Bangladesh. Myanmar has shown a strong interest in developing its own arms industry and some major contracts and negotiations on equipment include technology transfers to enable assembly, production and provision of life-time support at facilities in Myanmar.[142]

The Philippines

Military spending

Military spending in the Philippines increased 50.3 per cent between 2009 and 2018 (see table 4.19).[143] The economic burden of the military budget remained relatively stable at 1.1 to 1.4 per cent of GDP annually throughout the period. Higher spending in the most recent years can partly be attributed to increased salaries.[144] There have also been arms acquisitions linked to regional tensions and internal conflicts. Following the election of Rodrigo Duterte as president in 2016, internal security aspects again rose to prominence.[145] While open to negotiated solutions to the conflicts with the

[137] Parameswaran, P., 'What's behind Myanmar military chief's Europe voyage?', *The Diplomat*, 28 Apr. 2017.

[138] Levinson, C., 'Israel refuses to stop arms sales to Myanmar, despite its campaign of rape, torture and massacres against the Rohingya', *Haaretz*, 26 Sep. 2017; Dunst, C., 'Israel maintains warm ties with Myanmar by downplaying a human rights controversy', Jewish Telegraphic Agency, 4 Feb. 2019.

[139] 'Myanmar Air Force procurement', *Asian Defence Journal*, Aug. 2015.

[140] *Asian Defence Journal* (note 139).

[141] *Asian Defence Journal* (note 139); and Parameswaran (note 39).

[142] Grevatt (note 40).

[143] SIPRI includes in military spending for the Philippines the ordinary budget for the Armed Forces of the Philippines (AFP), the AFP modernization programme and the budget for military pensions.

[144] Cayabyab, M. J., 'DBM submits P3.35-T "budget for change" for 2017', *Inquirer*, 15 Aug. 2016.

[145] Zheng (note 32); and Cayabyab (note 144).

Communist Party of the Philippines/New People's Army (CPP/NPA) and various Muslim groups, Duterte also emphasized the option of using military force. His first defence budget focused on equipment for internal use, including helicopters and patrol craft.[146] However, an allocation of $1 billion to acquire helicopters and light tanks had not led to any orders by early 2019. In 2018 Duterte approved a major five-year equipment budget that seemed to be focused largely on territorial defence. At the same time, peaceful solutions to the internal conflicts were back on the table.[147]

Arms acquisitions and imports

The Philippines has traditionally acquired its weapons from the USA. In recent years, however, it has diversified (see table 4.20). South Korea has become an important supplier, including of 12 F-50 aircraft ordered in 2014 and 2 HHI-2600 frigates in 2016—the first advanced combat aircraft acquired by the Philippines for decades and its first ever advanced warships. Indonesia delivered two AALSs in 2016–17—the largest ships ever acquired by the Philippines.

Western criticisms of Duterte's anti-drugs war have in some cases led to a refusal to export weapons that could be used for internal suppression. For example, Canada refused to authorize the sale of helicopters in 2018 and the USA blocked delivery of 23 000 rifles for the police.[148] As a result, the Philippines has started to look for other potential suppliers. For example, Russia was confirmed in 2017 as one of the candidates to supply submarines envisaged in the Philippines' modernization plan (see below) and President Duterte has announced the potential for other deals with Russia.[149] Russia had already donated some 5000 rifles in 2017.[150] China and Israel, which have also delivered small volumes of weapons, are seen as alternatives to Western suppliers.[151] At the same time, the Philippines continues to accept military aid from the USA, such as the maritime surveillance system delivered in 2018 for use on a C-130 transport aircraft, and to buy weapons from the USA, such as the Paveway guided bombs ordered in mid-2018, even where alternatives from less critical countries exist.[152] Duterte was less than enthusiastic about a US offer to sell equipment, including F-16 combat aircraft, as he was uncertain about whether the US Congress would approve the arms deliveries and they were not the weapons he wanted for counter-insurgency operations. Nonetheless, the US producer still offered the F-16.[153] The Philippine Ministry of Defence announced in October 2018 that it saw the Swedish Gripen as a better option, and noted that the price was a major advantage.[154]

Despite the tensions with China over the South China Sea, the Philippines accepted a Chinese offer of military aid and possible arms sales after many traditional suppliers to the Philippines were heavily critical of Duterte's anti-drugs campaigns. In May 2017 a letter of intent was signed with China on possible orders worth up to $500 million. This was followed in June by a Chinese aid shipment of 3000 rifles worth PHP

[146] Bartolome, J., 'Duterte's AFP chief says modernization to focus on internal security needs', *GMA News Online*, 23 June 2016.

[147] Grevatt, J., 'Philippines moves ahead with "second horizon" modernisation', *Jane's Defence Weekly*, 21 June 2018; and Mogato, M., 'Philippines' Duterte approves $5.6-billion military upgrade', Reuters, 20 June 2018.

[148] Gomez, J., 'Philippine president says buying F-16 jest "utterly useless"', *Defense News*, 24 Aug. 2018.

[149] Grevatt (note 147); Mellejor, L., 'Duterte junks US offer of support for AFP modernization', Philippine News Agency, 24 Aug. 2018; RT (note 67).

[150] 'Philippines won't stop buying Russian arms over US pressure—FM' (note 67).

[151] 'Philippine leader Duterte eyes arms trade on visit to Israel', *The Telegraph*, 2 Sep. 2018; and Ali, J., 'Israel: Philippines' Duterte seeking military hardware', *Middle East Confidential*, 3 Sep. 2018.

[152] US Embassy in the Philippines, 'US Government provides new SABIR system to enhance Philippine Air Force Capabilities', 14 Aug. 2018; US Department of Defense, 'Contracts for Aug. 9, 2018', 9 Aug. 2018.

[153] Mellejor (note 149); Gomez (note 148); Desiderio, L., 'Lockheed Martin pursuing fighter aircraft deals in Philippines', *The Philippine Star*, 29 Sep. 2018.

[154] Cal, B., 'DND likely to acquire Swedish-made fighter jets', Philippines News Agency, 15 Oct. 2018.

Table 4.19. Military spending by the Philippines, 2009–2018

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	2 497	2 623	2 665	2 706	3 089	2 866	3 136	4 223	3 755	3 753
% change	*–3.8*	*+5.0*	*+1.6*	*+1.5*	*+14.2*	*–7.2*	*+9.4*	*+34.7*	*–11.1*	*–0.1*
PHP b.[b]	100.9	110.0	117.0	122.4	143.3	137.8	151.8	207.0	189.3	198.5
% change	*+0.2*	*+9.0*	*+6.4*	*+4.6*	*+17.1*	*–3.8*	*+10.2*	*+36.4*	*–8.6*	*+4.9*
% of GDP	*1.3*	*1.2*	*1.2*	*1.2*	*1.2*	*1.1*	*1.1*	*1.4*	*1.2*	*1.1*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Philippine pesos (PHP).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.20. Suppliers of major arms to the Philippines, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
USA	18	69	122	171	379	*38.6*
South Korea	–	10	1	200	211	*21.5*
Indonesia	–	–	–	180	180	*18.3*
Israel	<0.5	–	–	52	52	*5.3*
Italy	–	–	13	28	40	*4.1*
Spain	–	–	–	36	36	*3.7*
Poland	–	–	20	–	20	*2.0*
Australia	–	–	–	16	16	*1.6*
Thailand	7	7	–	–	14	*1.4*
Singapore	–	7	–	–	7	*0.7*
Canada	–	–	–	6	6	*0.6*
Japan	–	–	–	6	6	*0.6*
Belgium	–	–	–	4	4	*0.5*
Germany	–	–	4	–	4	*0.4*
UK	–	3	–	–	3	*0.3*
Turkey	–	<0.5	2	–	2	*0.2*
Netherlands	–	–	–	<0.5	<0.5	*<0.05*
Unidentified supplier(s)	–	<0.5	–	–	<0.5	*<0.05*
Total	**25**	**96**	**161**	**698**	**981**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.21. Share of imports of major arms by category, for the Philippines, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	100.0	76.0	27.3	48.9	49.1
Armoured vehicles	–	5.2	1.9	2.3	2.4
Artillery	–	–	–	0.6	0.4
Engines	–	<0.05	<0.05	4.9	3.5
Missiles	–	–	<0.05	2.4	1.8
Sensors	–	–	3.7	5.7	4.7
Ships	–	8.8	67.1	35.1	37.9
Other	–	–	–	0.3	0.2

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

370 million pesos ($7.3 million), as the Philippine armed forces fought rebel forces over Marawi City.[155]

The Philippines has one of the most outdated inventories of major weapons of any South East Asian state. A special modernization budget was agreed in the early 1990s but the money was mainly used for other purposes.[156] Only recently has the Philippines resumed modernization efforts, as the country faces pressure from China in the South China Sea, continuing internal conflicts with the CPP/NPA and the Moro Islamic Liberation Front, and a growing conflict with Abu Sayyaf. Funding restrictions have prevented the Philippines from acquiring large volumes of new equipment. Instead, it has acquired small volumes of new or second-hand weapons and modernized some of its older equipment in small batches. An example of the latter is the upgrade of M-113 APCs, 28 of which were ordered from Israel in 2014, and a further 49 in 2018.[157]

The Revised AFP [Armed Forces of the Philippines] Modernization Act was adopted in 2013 as a framework for a modernization programme for the period 2013–28, mainly focused on new equipment.[158] The programme is divided into three phases or 'horizons': 2013–17, 2018–22 and 2023–27.[159] No budget was attached to the programme but by 2017 annual budgets had allocated 90 billion pesos to the end of 2017,[160] including 25 billion pesos in 2016 and 2017. The funds were used to finance a small number of major orders but were not enough for all the planned acquisitions.

The list of requirements in the period 2018–28 demands higher investment than the first phase. A 77-billion peso ($1.4-billion) budget for modernization of the navy in 2018–22 was announced in May 2018.[161] In June 2018 President Duterte approved around 300 billion pesos ($5.6 billion) for the entire second phase, for submarines, UAVs, OPVs, long-range patrol aircraft and additional combat aircraft. The submarines, at least two, were originally planned for the third phase but brought forward after other states in the region built up their submarine forces.[162] More combat aircraft are also included.[163] Up to 16 transport helicopters from the USA and 8–10 combat helicopters from Turkey were chosen in 2018.[164] The second phase probably also includes an additional two AALSs and a number of fast-attack craft with anti-ship missiles.[165]

In 1999–2018, 87 per cent of arms imports fell into the categories of aircraft or ships, while land systems (armour and artillery) accounted for only 2.9 per cent (see table 4.21). The share of ships increased significantly in the 10-year period 2009–18 as the Philippines embarked on the long-delayed modernization of its navy. Notable also is the very limited share of missiles, which indicates the low level of sophistication of the Philippine inventory. In 2011 the Philippines received 22 JDAM guided bombs for use against Abu Sayyaf.[166] These were the first guided weapons purchased since 1967. Deliveries of more missiles began in 2017: air-to-air and air-to-ground missiles for the new FA-50 combat aircraft and short-range anti-ship missiles for locally produced patrol craft—the first anti-ship missiles ever acquired.

The volume of the Philippine inventory of major arms has increased substantially in the past five years, mainly due to the increased imports of major weapons. These

[155] Zheng (note 32).
[156] Mogato (note 147).
[157] 'Elbit Systems awarded further Philippines M113s upgrade contract', *Defence Blog*, 18 June 2018 <>; 'Improved version of M113 Armored Personnel Carriers spotted in Philippine', *Defence Blog*, 29 Aug. 2016.
[158] Revised AFP Modernization Act, Republic Act 10349, 11 Apr. 2013.
[159] Grevatt, J., 'Philippines commits to naval modernization', *Jane's Defence Weekly*, 23 May 2018 <>.
[160] Grevatt (note 159).
[161] Grevatt (note 159).
[162] Grevatt (note 147); Mogato (note 147).
[163] Desiderio (note 153).
[164] Viray (note 54).
[165] Grevatt (note 36).
[166] Associated Press, 'Philippines using US smart bombs', *SunStar*, 21 Mar. 2012.

Table 4.22. Military spending by Singapore, 2009–2018

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	9 226	9 048	8 726	8 523	8 495	8 743	9 325	9 915	10 196	10 548
% change	*+3.3*	*–1.9*	*–3.6*	*–2.3*	*–0.3*	*+2.9*	*+6.7*	*+6.3*	*+2.8*	*+3.5*
SGD m.[b]	10 964	11 057	11 222	11 462	11 694	12 159	12 901	13 644	14 111	14 623
% change	*+4.0*	*+0.8*	*+1.5*	*+2.1*	*+2.0*	*+4.0*	*+6.1*	*+5.8*	*+3.4*	*+3.6*
% of GDP	*3.9*	*3.4*	*3.2*	*3.2*	*3.1*	*3.1*	*3.1*	*3.2*	*3.2*	*3.1*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Singapore dollars (SGD).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.23. Suppliers of major arms to Singapore, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
USA	1 043	973	3 085	861	5 962	*54.1*
France	30	1 139	659	396	2 223	*20.2*
Germany	–	135	498	150	783	*7.1*
Sweden	354	–	248	–	602	*5.5*
Israel	158	81	251	61	551	*5.0*
Italy	–	29	180	39	247	*2.2*
Spain	–	–	–	196	196	*1.8*
UK	92	–	–	44	136	*1.2*
Switzerland	–	93	–	33	126	*1.1*
Australia	–	–	81	–	81	*0.7*
Netherlands	–	–	9	58	67	*0.6*
South Africa	–	–	–	20	20	*0.2*
Russia	14	–	–	–	14	*0.2*
Denmark	–	8	4	–	12	*0.1*
Canada	–	11	–	–	11	*0.1*
Total	**1 690**	**2 469**	**5 013**	**1 857**	**11 030**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.24. Share of imports of major arms by category, for Singapore, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	50.2	37.0	55.8	46.1	49.1
Air defence systems	3.2	–	0.6	5.9	1.8
Armoured vehicles	0.7	3.2	9.0	11.4	6.8
Artillery	–	–	0.4	–	0.2
Engines	5.7	4.1	2.2	3.4	3.4
Missiles	19.1	4.7	8.1	22.9	11.5
Naval weapons	–	0.4	0.1	2.1	0.5
Sensors	8.2	4.1	7.1	7.2	6.6
Ships	12.9	45.3	15.1	–	19.0
Other	–	1.2	1.6	1.1	1.2

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

increased by 28 per cent between 2008 and 2017, with a clear emphasis on naval assets. Despite continuing internal conflicts, the volume of land systems remained the same, while the volume of ships increased by 36 per cent. The volume of aircraft increased by 25 per cent.

Singapore

Military spending

Despite its relatively small population size, Singapore had the highest military spending in the region in absolute terms throughout the 10-year period 2009–18 and in almost all years as a percentage of GDP. However, Singapore allows economic developments to determine changes in military spending. An economic slowdown in 2016 led to a reduction of the cap on budget growth of 2 per cent.[167] Military spending still grew in 2017 and 2018 but at a lower rate than 2014–16 (see table 4.22).

Singapore does not disaggregate spending on salaries, operations and acquisitions. These are all reported together as 'operating expenditure', which makes up nearly all of the published defence budget.[168]

Arms acquisitions and imports

Singapore is the largest arms importer, with the highest arms acquisitions, in the region, and also has the most developed arms industry from which it sources considerable volumes of additional equipment. It is obvious from these figures that Singapore takes national security very seriously. The Bonn International Center for Conversion (BICC) considered Singapore the second most militarized country in the world in 2015, just after Israel.[169] Since the BICC Global Militarization Index began in 1990, Singapore has consistently scored among the top four most militarized countries, and has occupied second place since 2007. High spending and large arms acquisitions are not openly criticized in Singapore, although some carefully question the need for them.[170] Official statements are clear that Singapore believes it needs to have military capabilities superior to any other country that might threaten it. As Singapore is so small in land area, the policy is to keep any conflict as far away from its borders as possible. This explains the focus on forces, and especially an air force, that have long-distance capabilities.[171]

Singapore is the only country in South East Asia with a well-developed arms industry capable of producing some types of advanced weapons of its own design, albeit often with foreign design support. Among the products produced locally are armoured vehicles, artillery and ships. Some of these have also been exported or are offered for export, including to the UK and the USA. However, Singapore remains dependent for its larger platforms on imports of key components such as engines, sensors and armaments. For example, eight Littoral Mission Vessel corvettes, three of which had entered service by mid-2018, were designed with the help of a Swedish company and have a composite stealthy superstructure imported from Sweden, as well as German engines, Dutch radar, a French surface-to-air missile (SAM) system and electro-optical gun fire control, and Italian and Israeli guns.[172] Technology transfers and the involvement of local industry in production and support are common aspects of Singapore's acquisitions of weapons from abroad. The combat system for the four

[167] 'Budget 2017: Singapore cuts ministries' spending to stay prudent, effective', CNA, 20 Feb. 2017; Au-Yong, R., 'Singapore Budget 2017: budget to grow at a slower pace, future tax raises being considered', *The Straits Times*, 20 Feb. 2017; Grevatt, J., 'Modest increase for Singapore's 2017 defence budget', *Jane's 360*, 21 Feb. 2017.

[168] Singapore Government, Budget 2017, Ministry of Defence chapter, p. 65.

[169] The Bonn International Center for Conversion (BICC) publishes the Global Militarization Index, which gives an indication of the relative importance attributed by around 150 countries to the military compared to other sectors such as health. The most recent data is for 2016; see <http://gmi.bicc.de>.

[170] Voltaire, 'Is Singapore over-spending in its defence?', *The Independent* (Singapore), 27 Jan. 2017.

[171] Lim, A., 'Singapore delaying decision on F35 fighter purchase', *The Straits Times*, 11 Aug. 2016.

[172] Rhamat, R., 'Singapore launches RSN's seventh Littoral Combat Vessel', *Jane's Defence Weekly*, 9 Aug. 2018, p. 6; Wong, K., 'Taking shape: the Republic of Singapore Navy's Littoral Combat Mission Vessel', *Jane's International Defence Review*, Aug. 2014, pp. 36–37; and 'Sagem fournira la conduit de tir des futures corvettes singapouriennes' [Sagem to supply the fire control for future Singaporean corvettes], *Mer et Marine*, 14 May 2013.

new Type-218SG submarines ordered from Germany, for example, will be developed by a German company in cooperation with the Singaporean company ST Engineering, with technology transfers part of the negotiations.[173]

Despite the capabilities of its own industry, Singapore remains dependent on foreign suppliers for most of its major weapons. The major supplier to Singapore is the USA, accounting for 54 per cent of imports (see table 4.23).

Singapore's acquisitions indicate a strong desire to be able to operate over long distances (see table 4.24). Of all the states in the region, Singapore's air force is the most capable of long-range strikes, using 40 F-16 combat aircraft delivered in 2009–17 from the USA, armed with various advanced air-to-ground missiles and guided bombs, and supported by tanker aircraft. The original four KC-135R bought 20 years ago are being replaced by six much larger A330 MRTT from Spain, the first two of which were delivered in 2018. Singapore also operates some of the most capable long-range warships in the region, including six frigates and five submarines. Two large Type-218SG submarines were ordered from Germany in 2013 and two more in 2017, for delivery from 2021.

A new 'Island Air Defence System' led within a relatively short time (2009–18) to all of Singapore's older SAM and radar systems being replaced or supplemented by new, more capable systems.[174] The new systems comprise AEW aircraft from Israel, radars from France and Israel, SAMP/T SAM systems with an anti-ballistic missile capability from France, Spyder SAM systems from Israel, and French and Israeli air search radars.

Singapore has been a 'Security Cooperative Participant' in the US Joint Strike Fighter (F-35) combat aircraft programme since 2003.[175] Singapore plans to acquire—and the USA is willing to sell—the F-35, possibly the F-35B version which can be used on very short runways. In 2013 Singapore twice confirmed its interest in the F-35 replacing its F-16 combat aircraft, but that there was 'no particular hurry' as the F-16 will be able to operate for many years following a modernization.[176] In 2014 the USA announced that it was willing to supply Singapore with requested upgrade kits for 70 F-16s, which would keep the aircraft effective into the 2030s.[177] A partial F-16 upgrade was ordered in 2015 but a final decision on a full upgrade has not yet been made.[178] This led to speculation about an imminent F-35 order.[179] In early 2018, as the F-35B was being shown in Singapore, Singapore reiterated that the F-35 was a possible F-16 replacement, but other aircraft were also a possibility.[180] In early 2019 Singapore announced it would request the sale of four F-35s from the USA with an option on eight more.[181]

[173] 'Singapore Ministry of Defence signs contract with TKMS for two new Type 2018SG submarines', *Navy Recognition*, 3 Dec. 2013.

[174] Singapore Government, Ministry for Defence (MoD), 'Reply by Minister for Defence Dr Ng Eng Hen to parliamentary question on relocation of Paya Lebar Air Base', 8 Apr. 2013, posted on MoD site 16 Sep. 2013.

[175] Wong, K., 'F-35 builds significant Asia-Pacific momentum', *Jane's International Defence Review*, Apr. 2018, p. 6.

[176] Sweetman, B., 'Fast-changing trends in Asia fighter market', *Aviation Week & Space Technology*, 3 Feb. 2014; Lim (note 171).

[177] Sweetman (note 176).

[178] Grevatt, J., 'Singapore awards Lockheed Martin F-16 upgrade contract', *Jane's Defence Industry*, 2 Dec. 2015.

[179] Lim (note 171).

[180] Grevatt (note 178); Zhang, L. M., 'RSAF's long-term plans include evaluating F-35 jets', *The Straits Times*, 6 Feb. 2018; and 'Singapore seriously evaluating future F-35 jet purchase—Lockheed exec', Reuters, 8 Feb. 2018.

[181] Zhang, L. M., 'Singapore to buy four F-35 fighters, with option for eight more', *The Straits Times*, 2 Mar. 2019.

Thailand

Military spending

Between 2009 and 2018, Thai military spending[182] increased by 16 per cent from $5552 million to $6420 million, with an increase in eight of those years (see table 4.25). However, as a percentage of GDP, Thai military spending has decreased since 2009.

Following the military coup of May 2014, military spending has not only increased every year but this increase has been at a faster pace than in the four years before. It is likely to continue to increase for as long as the military remains connected to government in Thailand. The military is due to hand power to a civilian government following the March 2019 election. However, the military will remain a political power in Thailand and military spending is expected to continue to increase in line with a 20-year national strategy adopted by the military government in 2017, which binds future civilian governments.[183] The 20-year strategy was seen by some in Thailand as an attempt by the military to get as much out of the control of government before the planned elections. It has faced criticism in Thailand for damaging economic development.[184]

Arms acquisitions and imports

In the past decade, several suppliers have restricted sales to Thailand on account of the conflict in southern Thailand, the 2006 and 2014 coups and the 2008 state of emergency. Germany, for example, refused to supply the preferred engine for the BTR-3 armoured vehicles ordered from Ukraine. However, a similar engine of German design was authorized, reportedly since it was a more civilian design.[185] After the 2014 coup, several European suppliers again re-evaluated their relations with Thailand. This and Thai unease about the impact of the coup on other arms deals probably helped China to win orders for tanks, armoured vehicles and submarines after 2015.[186]

However, the Thai market remains highly competitive (see table 4.26). Thailand bought small numbers of Chinese tanks and other armoured vehicles in 2017, but Turkey offered infantry fighting vehicles (IFVs) and Ukraine countered with an offer of joint production of armoured vehicles in Thailand, playing on Thailand's policy on developing an arms industry.[187] Countries may have voiced concern over the political situation in Thailand but they have not implemented a general ban on arms sales. For example, Germany has supplied air-to-air missiles and offered submarines.[188] Both the UK and the USA, which originally announced a review of military ties and cooperation, continued to supply weapons, including those possibly suitable for internal use.[189]

In 2017 Thailand ordered the first of three planned S-26T submarines from China, its largest investment in any single type of major weapon since 2010. These will make Thailand the fifth country in South East Asia with a submarine force, at a cost of 22.5 billion baht ($1.1 billion).[190] The acquisition process was criticized in Thailand.

[182] Thai military spending comprises the defence budget as well as funding for several paramilitary forces included in the 'security' budget: the Border Patrol Police, the Tharan Pran/Royal Thai Rangers and the small Internal Security Operations Command.

[183] Nanuam and Sattaburuth (note 77); Agence France-Press, 'Thai junta seeks $10 billion in new security budget', *The Jakarta Post*, 7 June 2018.

[184] Agence France-Press (note 183).

[185] Grevatt, J., 'Thailand buys second batch of Ukrainian APCs', *Jane's Defence Weekly*, 17 Aug. 2011.

[186] Zheng (note 32).

[187] 'Ukraine and Turkey offers its wheeled armored combat vehicles to Thailand Army', *Defence Blog*, 10 Dec. 2017; and 'Ukraine offers joint production of armoured vehicles in Thailand', *Defence Blog*, 18 June 2018.

[188] Grevatt, J., 'TKMS offers Type 209 and Type 210 submarines to Royal Thai Navy', *Jane's Defence Industry*, 30 Jan. 2015.

[189] 'Calls for arms sales to stop as Thai dictator visits Theresa May', *Ekklesia*, 20 June 2018; and 'UK reviews military ties with Thailand', *Bangkok Post*, 27 May 2014.

[190] Nanuam and Sattaburuth (note 77). Thailand earlier operated submarines between 1937 and 1951.

Table 4.25. Military spending by Thailand, 2009–2018

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	5 552	5 138	5 293	5 216	5 422	5 462	5 806	6 131	6 306	6 420
% change	*+11.6*	*–7.5*	*+3.0*	*–1.5*	*+3.9*	*+0.7*	*+6.3*	*+5.6*	*+2.9*	*+1.8*
THB b.[b]	148.8	164.6	157.2	168.1	170.7	181.3	186.1	196.1	207.4	215.7
% change	*+22.4*	*+10.6*	*–4.5*	*+6.9*	*+1.5*	*+6.2*	*+2.6*	*+5.4*	*+5.8*	*+4.0*
% of GDP	*1.8*	*1.6*	*1.6*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.3*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Thai baht (THB).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.26. Suppliers of major arms to Thailand, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
USA	355	59	129	183	727	*21.4*
Sweden	6	<0.5	391	62	459	*13.5*
Ukraine	–	–	155	272	427	*12.6*
China	25	23	58	266	372	*11.0*
South Korea	–	–	–	292	292	*8.6*
Germany	134	5	22	102	262	*7.7*
Italy	100	26	12	115	253	*7.5*
Singapore	–	58	81	–	139	*4.1*
UK	11	30	55	19	114	*3.4*
France	6	–	43	64	113	*3.3*
Russia	–	3	20	27	50	*1.5*
Israel	1	14	<0.5	34	49	*1.4*
Switzerland	8	–	–	26	34	*1.0*
Netherlands	–	24	7	–	31	*0.9*
South Africa	–	13	18	–	31	*0.9*
Canada	4	–	6	2	12	*0.4*
Spain	–	–	–	12	12	*0.4*
Denmark	–	–	7	–	7	*0.2*
Austria	–	–	5	–	5	*0.1*
New Zealand	2	1	–	–	4	*0.1*
Malaysia	–	–	<0.05	–	<0.5	*<0.05*
Total	**652**	**255**	**1 011**	**1 475**	**3 393**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.27. Share of imports of major arms by category, for Thailand, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	68.0	45.5	50.1	24.7	42.1
Air defence systems	–	–	–	4.1	1.8
Armoured vehicles	2.0	5.1	11.8	27.1	16.0
Artillery	0.8	5.1	3.5	2.2	2.5
Engines	2.1	5.1	5.1	1.6	3.0
Missiles	6.4	6.7	15.0	10.3	10.7
Naval weapons	–	2.0	0.6	1.6	1.0
Sensors	6.3	21.6	2.6	13.6	9.5
Ships	15.0	9.0	11.4	15.0	13.4

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

The need for submarines has not been explained and the final decisions on funding and the contract were not transparent.[191]

Substantial investments have also been made in aircraft (see table 4.27) and more are planned for acquisition by 2020. These include 16 T-50TH advanced trainer/light combat aircraft from South Korea, the first 12 of which were ordered in 2015 and 2017. The final four are due to be ordered in 2020. They will replace the less capable L-39 at a total cost for all 16 of around 16.2 billion baht ($480 million).[192]

The army is investing in tanks and other armoured vehicles and in helicopters. In 2011, Thailand ordered 49 Oplot tanks and 123 BTR-3U IFVs and APCs from Ukraine but was not satisfied with their quality There were also problems with delivery because of delays linked to the conflict in Ukraine and the equipment's dependency on engines sourced from European states. Plans for additional armoured vehicles from Ukraine were shelved in 2015 in favour of an order with China for 28 VT-4 tanks, to be followed by 10 more in 2017 as well as 34 VN-1 IFVs. Additional VT-4 and VN-1 purchases are planned.[193]

Despite substantial imports of major weapons, the volume of the Thai inventory increased only marginally, by 4 per cent, as many older weapons were retired. The volume of the naval inventory actually fell slightly. However, most of the major warships in the navy are still fairly new and are being given a mid-life update, and orders have been placed for several new major warships, so the fall will be temporary.

Timor-Leste

Military spending

Military spending in Timor-Leste has seen substantial variations over the 2009–18 decade, involving large increases and large falls (see table 4.28). In 2018 spending was the lowest of the past 10 years, 63 per cent lower than in 2009 and 38 per cent below the annual average for 2009–18. The economic burden of the military budget has remained relatively low, in most years below 1 per cent of GDP. The size of the military budget leaves little room for anything but small purchases, as exemplified by the fact that the $28 million cost of two patrol craft from China was more than the country's entire military spending in 2008.

Arms acquisitions and imports

The only known deliveries of major arms to Timor-Leste are two large patrol craft from China in 2010 and three smaller patrol craft from South Korea in 2011 (see tables 4.29 and 4.30). The South Korean patrol craft were second-hand and supplied as aid.

A possible order for two patrol craft from Indonesia, to be paid for with a loan, was reported on the back of the Indonesia–Timor-Leste defence agreement of August 2011.[194] However, this plan seems to have been delayed or abandoned, possibly due to the high cost ($40 million). It has probably been replaced by Australia's offer in 2014 of two patrol craft and 30 years of support as aid, worth up to 200 million Australian dollars. The offer was accepted in 2017 and the boats are to be delivered in 2023.[195]

In 2006 the government adopted *Força 2020* (*Force 2020*), an ambitious programme for the expansion of its armed forces that includes patrol craft with missiles, armoured vehicles and aircraft.[196] The programme has made little progress, however, probably

[191] Parameswaran, 'Did Thailand secretly approve its China submarine buy?' (note 39).
[192] Nanuam and Sattaburuth (note 77).
[193] Nanuam and Sattaburuth (note 77).
[194] 'East Timor inks Indonesia boat deal', *Jane's Defence Weekly*, 30 Mar. 2011, p. 16.
[195] Dominguez, G., 'Timor-Leste to receive two Pacific patrol boats in 2023', *Jane's Defence Weekly*, 6 Nov. 2017.
[196] *Força 2020*; Timor-Leste government, Government Resolution 28/2011, Journal of the Republic, < >.

Table 4.28. Military spending by Timor-Leste, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	55.2	37.4	25.6	37.3	31.8	29.6	36.7	26.4	25.4	20.2
% change	*+53.2*	*–32.2*	*–31.5*	*+46.5*	*–14.6*	*–6.9*	*+24.1*	*–28.1*	*–3.8*	*–20.5*
US $ m.[b]	36.5	26.4	20.5	33.4	31.7	29.6	37.0	26.2	25.4	20.6
% change	*+54.2*	*–27.7*	*–22.2*	*+62.6*	*–5.1*	*–6.5*	*+24.8*	*–29.1*	*–3.1*	*–19.0*
% of GDP	*1.1*	*0.6*	*0.3*	*0.5*	*0.6*	*0.7*	*1.2*	*1.0*	*0.9*	*0.6*

[a] Spending per million constant (2017) US dollars.
[b] Spending per billion current Philippine pesos (PHP).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.29. Suppliers of major arms to Timor-Leste, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
China	–	–	18	–	18	*56.0*
South Korea	–	–	–	14	14	*44.0*
Total	–	–	**18**	**14**	**32**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.30. Share of imports of major arms by category, for Timor-Leste, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Ships	–	–	100	–	100

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

due to lack of funds but possibly also because there seems to be no rationale for acquiring some of the equipment. Another possible order from Indonesia, this time for transport and maritime patrol aircraft, was also reported in 2011[197] but by 2018 none had been ordered.

Viet Nam

Military spending

Viet Nam's military spending is treated as a state secret and no figures have been published since 2008; however, estimates by various sources show a substantial increase in spending.[198] Between 2009 and 2018 military spending is estimated to have increased by 209 per cent in nominal terms from 41 trillion dong to 126.6 trillion dong, or by 75 per cent in real terms from $3106 million to $5451 million (see table 4.31). It is expected that this growth will continue at over 5 per cent annually in the coming years.[199] However, such growth is not a given as spending largely follows economic growth or predicted economic growth. Substantial off-budget spending on procurement has been reported, including from the income from a nuclear power agreement with Russia. Off-budget spending is believed to have paid for much of the $4 billion in weapon acquisitions from Russia in recent years.[200]

[197] 'Teaming agreement signed to revive PT DI', *The Jakarta Post*, 6 Oct. 2011.
[198] Grevatt, J., 'Inroads into Indochina: Vietnam as an emerging market', *Jane's Defence Weekly*, 12 July 2017, p. 27.
[199] Grevatt (note 198); 'Report: Vietnam's defence spending to cross $7bn mark by 2022', *Naval Technology*, 7 Sep. 2017.
[200] Grevatt (note 198). The off-budget funding is not included in the SIPRI data as its existence and scope remain uncertain.

Arms acquisitions and imports

Viet Nam has remained heavily dependent on Russia for its arms imports but has started to diversify and seek weapons from European states, the USA, India and others (see table 4.32). However, few weapons have yet been acquired from any country apart from Russia.

The new arms negotiations with the USA, India and Japan should be seen in the light of relations with China and Viet Nam's interest in maintaining new alliances. For suppliers, relations with Viet Nam mean becoming more involved in tense Chinese–Vietnamese relations. The USA has discussed potential supplies of military equipment, as sales and as aid, including combat systems such as ASW aircraft. Until now, however, supplies have been limited to a few small patrol craft and one large second-hand OPV as aid for the Vietnamese coastguard.[201]

Viet Nam may look for more non-Russian weapons as future acquisitions. Viet Nam is reportedly looking at almost all available candidates, for example, to replace its MiG-21 combat aircraft and to fill a requirement for maritime patrol aircraft.[202]

Relations with India are developing rapidly towards military cooperation and arms deals. India and Viet Nam signed a strategic partnership in 2016, and the Viet Nam navy's first major visit abroad was to India in 2016.[203] In May 2018 the Indian and Vietnamese navies held their first joint exercise, off Viet Nam.[204] India has sold components for various programmes to modernize existing Vietnamese major weapons of Soviet origin and has offered Indian-produced weapons such as the BrahMos anti-ship missile, the Tejas combat aircraft and torpedoes.[205] In 2016 India offered a $500 million credit line for Viet Nam to buy military equipment from India and a licence to produce Indian-designed patrol vessels in Viet Nam.[206] However, these arrangements have yet to translate into actual orders. Viet Nam has used another $100 million credit line to buy patrol craft for its civilian Border Guard.[207] India also provides training for Viet Nam, such as for submarine crews and combat aircraft pilots.[208] Viet Nam's new submarines and aircraft are of the same types as India's.

Military relations are also improving and expanding with other Asia-Pacific states. For example, Vietnamese military personnel are being trained by Australia and Japan.[209]

The local arms industry is very limited but is being developed with foreign help. Russian and Dutch companies are helping to develop Viet Nam's shipyards, to make them capable of producing larger warships of foreign design.[210] With Russian support, Viet Nam has started to produce anti-ship missiles.[211] Israeli companies have helped to set up production lines for small arms.

China has been Viet Nam's main military headache for many years. Relations with China broke down shortly after the end of the Viet Nam War over territorial issues and China's influence in Laos and Cambodia. The two even fought a short but bloody war in 1979 when China invaded Viet Nam. China's claims in the South China Sea,

[201] Wertheim, E., 'Combat fleets', *Proceedings*, July 2017, p. 92. The Coastguard is a maritime law enforcement and rescue agency but is part of the Vietnamese armed forces under the control of the Ministry of Defence.

[202] Thayer, C. A., 'Vietnam: Defence Policy and Capability and Defence Economics', Thayer Consultancy Background Brief, 2 Mar. 2017, p. 5.

[203] Thayer (note 202), p. 3.

[204] Bedi, R., 'India, Vietnam to conduct first joint naval exercise', *Jane's Defence Weekly*, 21 May 2018.

[205] Thayer (note 202), p. 5.

[206] Parameswaran, P., 'India to train Vietnam fighter pilots', *The Diplomat*, 9 Dec. 2016 <>.

[207] Indian Government, Ministry of External Affairs, Joint statement between India and Vietnam during the visit of Prime Minister to Vietnam, 3 Sep. 2016.

[208] Parameswaran (note 206).

[209] Thayer (note 202), p. 3.

[210] Thayer (note 202), p. 4–5.

[211] Thayer (note 202).

Table 4.31. Military spending by Viet Nam, 2009–18

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
US $ m.[a]	3 106	3 463	3 233	3 765	3 937	4 337	4 729	5 089	5 074	5 451
% change	*+9.8*	*+11.5*	*–6.7*	*+16.5*	*+4.6*	*+10.2*	*+9.0*	*+7.6*	*–0.3*	*+7.4*
VND tr.[b]	41.0	49.7	55.1	70.0	78.0	90.0	99.0	110.0	113.5	126.6
% change	*+17.6*	*+21.4*	*+10.8*	*+27.0*	*+11.5*	*+15.3*	*+10.0*	*+11.1*	*+3.2*	*+11.5*
% of GDP	*2.3*	*2.3*	*2.0*	*2.2*	*2.2*	*2.3*	*2.4*	*2.4*	*2.3*	*2.3*

[a] Spending per million constant (2017) US dollars.
[b] Spending per trillion current Vietnamese dong (VND).

Source: SIPRI Military Expenditure Database, Apr. 2019.

Table 4.32. Suppliers of major arms to Viet Nam, 1999–2018

Values are SIPRI TIV millions; totals may not add up due to conventions of rounding.

Supplier	1999–2003	2004–2008	2009–13	2014–18	1999–2018	% of total
Russia	293	648	2 271	3 302	6 514	*84.3*
Israel	–	12	32	384	428	*5.5*
Ukraine	23	55	56	84	218	*2.8*
Belarus	–	–	–	173	173	*2.2*
South Korea	–	–	–	120	120	*1.6*
Czechia	20	26	–	48	94	*1.2*
USA	–	–	–	54	54	*0.7*
Spain	–	–	–	36	36	*0.5*
Canada	–	–	8	20	27	*0.3*
Poland	4	15	–	–	19	*0.2*
France	–	–	15	–	15	*0.2*
Slovakia	–	–	–	11	11	*0.1*
Germany	8	–	–	–	8	*0.1*
Indonesia	–	–	–	8	8	*0.1*
Romania	–	–	2	–	2	*<0.05*
Unidentified supplier(s)	–	–	–	1	1	*<0.05*
Total	**348**	**755**	**2 384**	**4 240**	**7 727**	

– = nil.

Source: SIPRI Military Expenditure Database, Mar. 2019.

Table 4.33. Share of imports of major arms by category, for Viet Nam, 1999–2018

Values are percentages; totals may not add up due to the conventions of rounding.

Arms category	1999–2003	2004–2008	2009–13	2014–18	1999–2018
Aircraft	6.9	43.7	47.2	16.9	28.4
Air defence systems	–	12.5	–	8.8	6.1
Armoured vehicles	–	1.6	0.3	2.9	1.8
Engines	6.0	1.7	0.8	1.5	1.5
Missiles	17.2	24.0	13.8	13.8	15.0
Sensors	–	–	3.9	2.7	2.7
Ships	69.8	16.7	34.1	53.3	44.6

– = nil

Source: SIPRI Arms Transfers Database, Mar. 2019.

which overlap Vietnamese claims, have led to additional confrontations, including armed incidents. In recent years China and Viet Nam have made several small steps to improve relations, such as high-level 'friendship' meetings between their militaries.[212] In 2016 China and Viet Nam signed an agreement on cooperation in UN peacekeeping

[212] Thayer (note 202), p. 3.

operations.[213] However, the China threat clearly remains the focus of Viet Nam's military efforts.

Viet Nam is modernizing and expanding its navy. Ships account for 43 per cent of the volume of major weapons delivered in the past 20 years (see table 4.33), including six submarines ordered from Russia in 2009 and delivered in 2013–17. These submarines will be supported by a submarine rescue and survey ship produced in Viet Nam to a Dutch design.[214] Viet Nam's acquisitions of frigates, missile boats and patrol boats from Russia—in effect a whole new navy—as well as coastal defence systems from Russia and Israel, and their stationing on the contested Spratly Islands are a clear response to China's South China Sea claims.[215]

Imports of major arms increased the volume of the Vietnamese inventory of major arms by 15 per cent between 2008 and 2017. There was a clear emphasis on naval assets. The volume of land systems remained almost the same, while the volume of ships increased by 166 per cent. The introduction of submarines and modern frigates gave Viet Nam a blue-water capability for the first time. The volume of aircraft fell by 18 per cent as Viet Nam's retirement of around 175 of its older combat aircraft was not balanced by the 31 new Su-30MKK aircraft it received.

[213] 'Vietnam, China boost cooperation in peacekeeping operations', *People's Army Newspaper*, 4 Nov. 2016.

[214] Dominguez, G., 'Vietnam begins work on first submarine rescue vessel', *Jane's Defence Weekly*, 7 June 2018.

[215] Fisher, R. D., and Dominguez, G., 'Vietnamese military deploys Bastion-P to Spratlys', *Jane's Defence Weekly*, 24 Aug. 2016.

5. Conclusions

The South East Asian states are improving their military capabilities by increasing their military spending and acquiring more and better weapons. Military spending increased by 33 per cent in real terms between 2009 and 2018—a rate more than three times the global increase. The volume of imports of major weapons in 2009–18 was about two times greater than in 1999–2008. These imports, as well as a small number of acquisitions from local producers, are not just replacing or modernizing older weapons but are expanding the military capabilities of almost all South East Asian states. In line with the increase in military spending, the total volume of major weapons held by the South East Asian states increased by about 33 per cent in ten years.

Higher spending and larger inventories have cemented the position of some South East Asian states among the most militarized countries globally. As noted above, the BICC considers Singapore to be the second most militarized country in the world, while Brunei has often been ranked around 10th and Viet Nam around 19th.[216] Qualitatively, the picture is changing as the South East Asian states acquire weapons with greater ranges, giving them more options to fight a conflict and to do so further away from their own territory. As far as it is possible to predict from announced plans, these trends look likely to continue for the foreseeable future.

The picture is not as gloomy as some suggest. Military spending has increased and seems likely to increase further, but the increases and planned increases are absolute, not relative. More money is spent on the military but, as a percentage of GDP, military spending 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 was demonstrated most clearly when military budgets were frozen during times when economic growth stalled.

However, the military build-up should still be cause for concern. The increased size and capabilities of most armed forces in South East Asia, coupled with tensions in the region, and especially the strong disagreements over the South China Sea, have already led to more military forces operating in close proximity to 'unfriendly' forces, in an area with uncertain rules on who can or must do what. This is a classic example of a situation in which incidents could easily occur, such as aircraft 'buzzing' each other or ships not giving way, pointing guns at each other or ramming on purpose. It can also be a place where civilians are being pushed around and military or other security forces might feel the need to protect those civilians.

At the same time, as more and more military forces are available for such confrontations, mechanisms and agreed rules to deal with them are lacking. The limited transparency and clarity in defence and foreign policy, and the reasons for arms acquisitions that are common to many South East Asian states, do not make it easy to prevent tensions from escalating. This may assist the 'ASEAN way' of doing international relations—keeping things informal, often unsaid, and non-confrontational, while seeking consensus through consultation—but it also poses the risk of misunderstandings about why South East Asian states acquire weapons, what their 'red lines' are and what the response to crossing those 'red lines' would be.[217]

Judging from recent actions and acquisitions, it is clear that China, and its ambitions in the South China Sea in particular, is probably seen as the most imminent

[216] See the Bonn International Center for Conversion (note 169), <http://gmi.bicc.de>.
[217] Jenne (note 45) pp. 52–53.

threat by at least 6 of the 11 South East Asian states: Brunei, Indonesia, Malaysia, the Philippines, Singapore and Viet Nam. These states' acquisitions also indicate that the South East Asian states have become more capable of using—and possibly more willing to use—military force to further their interests, either alone or as part of alliances or partnerships with major powers. Some type of 'red line' may well therefore be closer than many believe. It is unlikely that any South East Asian or non-South East Asian state would willingly turn political confrontation in the region into military confrontation, but more weapons with greater ranges create a situation in which the chances of an incident increase. An incident may come about by accident but be built up into something much bigger—a shooting war or, more likely, a nasty memory that will haunt international relations for many years, and lead to yet more militarization.

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