

# Naval Modernisation Versus Naval Development: Implications for Strategic Stability in Southeast Asia

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**Abstract** The chapter reviews naval development in Southeast Asia as a whole and finds that it is less than a naval arms race but more than a process of normal naval modernisation. It then identifies some of the possible consequences for international stability in Southeast Asia.

**Keywords** Naval modernisation · Southeast Asia · Problems · Strategic consequences · South China Sea

Since the 1980s, navies in Southeast Asia have been experiencing a significant increase in the allocation of resources. This study focuses on six countries who have significant maritime—Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam. According to data derived from the Stockholm International Peace Research Institute, total spending on naval platforms by the countries in this study increased by approximately \$US one billion each decade between 1970 and 1999 (see “[Appendix](#)”). This increase in spending has resulted in a significant

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increase in naval platforms, allowing these navies to move from primarily brown water-capable platforms to green water-capable platforms, and most recently, platforms capable of performing limited blue water missions. In the second decade of the twenty-first century, most of these countries have either espoused interest in, or have acquired, sub-surface warfighting capabilities as well. Clearly, the trend of dedicating resources to growing naval capabilities has not shown any signs of abating.

How should this increase in naval platforms and capabilities be understood? Is it a case of obsolete capabilities simply being replaced—in other words a straightforward modernisation programme? Or is it a rather more complicated phenomenon? Are these recent acquisitions changing the balance between offensive and defensive capabilities? Are they changing the regional balance of naval power? Stemming from this last question, are these acquisitions suggestive at the very least of a potential naval arms race? If so, what are the follow-on consequences for strategic stability in Southeast Asia, and indeed the larger Indo-Pacific region?

This study rejects two arguments that have attempted to explain these processes: one argument suggests that these processes represent a naval arms race in Southeast Asia<sup>1</sup>; another argument suggests that these processes represent a modernisation programme, anchoring in what Buzan and Herring refer to as maintaining the status quo.<sup>2</sup> Instead, this study argues that recent developments in naval acquisitions in Southeast Asia ought to be understood differently, that these represent a slow-motion development of fully fledged navies, at least in terms of how each state in the region understands a fully fledged navy that corresponds to how each state perceives its respective strategic environment and the security missions that accrue thereafter.

## DECONSTRUCTING THE NAVAL ARMS RACE ARGUMENT

Depicting arms acquisition processes in Southeast Asia as potentially destabilising at the very least, if not as an arms race in the offing, has been something of a cottage industry since the 1990s, when military spending in the region began to garner international attention. The idea that arms acquisitions in Southeast Asia had potentially destabilising consequences is strengthened when comments by particular political leaders painted these processes in a negative light.<sup>3</sup>

Admittedly, there are elements of arms acquisitions by Southeast Asian countries that at least partially fulfill the arms race argument. Outside

the domain of naval acquisitions, for instance, Malaysia's acquisition of F/A-18s and MiG-29s was announced by then-Minister for Defence Najib Abdul Razak, now Malaysia's Prime Minister, to state that the Malaysian air force was back on par with Malaysia's neighbours.<sup>4</sup> Indeed, Malaysia's reconfiguration of its armed forces from counter-insurgency doctrines to a conventional warfighting doctrine was almost certainly driven by the growing conventional warfighting capabilities of the Singapore armed forces.<sup>5</sup> Singapore unveiled its Ah-64D Apache-Longbows shortly after Malaysia's Defence Ministry announced the acquisition of PT-91 main battle tanks. Myanmar's attempt to develop a conventional land warfighting capability in the late 1990s was almost certainly motivated by Thailand's growing military capabilities.<sup>6</sup> At face value, these patterns at least partially resemble the action–reaction element intrinsic to any arms race.

But how accurate are these arguments? As Richard Bitzinger argued recently, the portrayal of these Southeast Asian acquisitions as an arms race is problematic.<sup>7</sup> To begin with, although political relationships within Southeast Asia are not entirely positive, the idea of armed conflict between Southeast Asian states is nevertheless almost certainly almost unthinkable, at least for the foreseeable future. Certainly, it would be a mistake to characterise political relationships within Southeast Asia as openly mutually adversarial and hostile. Second, while there is almost certainly an element of one-upmanship in how specific weapons capabilities are either acquired or announced, this does not qualify as the action–reaction acquisition patterns that arms races demand.<sup>8</sup> Finally, there has been no significant increases in defence expenditures in Southeast Asia throughout and since the 1990s. Indeed, defence expenditures in Southeast Asia have remained remarkably consistent when seen as a percentage of national gross domestic products or national budgets.

It is true that spending on naval platforms experienced a fairly significant increase for at least some Southeast Asian countries in the 1990s (see Table 2.1). Furthermore, individual acquisitions can appear to parallel at least certain aspects of arms race models. For instance, Singapore ordered six missile corvettes in 1983. Ostensibly this was to assist the Singapore Navy in its stated mission of protecting the sea lines of communication upon which Singapore's economy was so dependent. At the time, the strike component of the Singapore Navy comprised smaller brown water-capable missile gunboats, whereas their immediate neighbours had larger (and presumably more prestigious) green water-capable vessels.

**Table 2.1** Defence Expenditure in Southeast Asia

	1960– 1969	1970– 1979	1980– 1989	1990– 1999	2000– 2009	2010– 2013	Total
<i>Indonesia</i>							
Aircraft	1784	485	1178	617	656	921	5641
Armoured vehicles	311	48	141	110	31	42	683
Artillery	40	10	111	23	24	40	248
Ships	1270	361	1596	1075	1021	110	5433
<i>Malaysia</i>							
Aircraft	299	566	485	1369	1117	60	3896
Armoured vehicles	12	109	281	28	241	51	722
Artillery	2	89	38	8	51	23	211
Ships	261	680	877	720	1218	350	4106
<i>The Philippines</i>							
Aircraft	246	558	248	223	100	35	1410
Armoured vehicles	11	67	35	43	5	3	164
Artillery		8	66	6			78
Ships	109	481	14	156	19	108	887
<i>Singapore</i>							
Aircraft	20	887	1348	1720	2288	1562	7822
Armoured vehicles	20	308	154	62	126	400	1070
Artillery		92		71	17	20	200
Ships	20	377		699	2018	198	3311
<i>Thailand</i>							
Aircraft	609	1183	1127	1546	581	468	5514
Armoured vehicles	142	63	522	346	26	146	1245
Artillery	38	61	200	206	31	41	577
Ships	114	460	554	1781	22	115	3046
<i>Vietnam</i>							
Aircraft	1006	2031	2829	606	355	1124	7951
Armoured vehicles	239	2178	240		18		2675
Artillery	519	396	34				949
Ships	250	280	574	300	314	760	2478

Expenditure on major combat systems, calculated at constant 1990 USD, millions; data accessed from <http://www.sipri.org/databases>, accessed 20 November 2014

Granted, the missile corvettes gave Singapore's navy an anti-submarine warfare capability, but only Indonesia possessed submarines—and old, no longer seaworthy vessels at that. Arguably, acquiring a modern mine counter-measures capability might have been a more pressing requirement, given the Singapore Navy's mission of protecting shipping lanes. It is possible to conclude that it was the politics of envy that drove this Singapore decision. More recently, regional navies have been focusing on acquiring submarines—Singapore first, then Malaysia, Indonesia and Vietnam, and even Thailand has now espoused interest in acquiring submarines. Robert Kaplan cited this author as describing these submarines as “bling”.<sup>9</sup> In other words, there is the element of these platforms as flashy and ostentatious statements; but there is potentially also an underlying statement of “having made it”, of now being a more rounded naval force with both surface and sub-surface warfighting capabilities. Intrinsic to the acquisition of “bling” is therefore an element of “keeping up with the Joneses”.<sup>10</sup>

It is possible to argue that “keeping up with the Joneses” implies a pattern of competitive, if not outright adversarial, relationships between the states of the region. Southeast Asia is certainly not a security community; there are some lingering suspicions and points of contention in specific bilateral relationships.<sup>11</sup> Nevertheless, the absence of adversarial relationships and action–reaction acquisition patterns identified earlier still applies in this case, and consequently undermines—if not invalidates—the arms race argument. Furthermore, as the subsequent section will argue, naval spending in the 1990s can be—indeed it ought to be—understood through a longer term historical lens that will begin to suggest a non-arms race explanation for this increase in spending on naval platforms.

## NAVAL MODERNISATION IN SOUTHEAST ASIA: A LONG-TERM PERSPECTIVE

To begin with, looking at the patterns of defence expenditure across the maritime states of Southeast Asia, the general trend is that up till the 1990s, the respective navies of these states were not receiving very much in terms of their shares of their respective states' defence budgets. This trend of relative neglect becomes apparent by examining the number of principal surface combatants that the respective navies had (see Table 2.2).<sup>12</sup> Singapore's navy is the starkest manifestation of this

**Table 2.2** Elements of Southeast Asian Navies

		1969	1979	1989	1999	2009
Indonesia	PSC <sup>a</sup>	21	11	15	33	30
	Heavy lift	7	9	15	28	29
	Submarines	6	3	2	2	2
Malaysia	PSC	2	3	4	10	12
	Heavy lift		3	2	3	
	Submarines					2
The Philippines	PSC		18	3	1	1
	Heavy lift	6	27	24	9	7
	Submarines					
Singapore	PSC				6	12
	Heavy lift		6	5	3	4
	Submarines				3	6
Thailand	PSC	3	7	7	20	20
	Heavy lift	14	5	6	9	6
	Submarines					
Vietnam	PSC		3	7	7	11
	Heavy lift		3	7	6	6
	Submarines				2	2

<sup>a</sup>This refers to principal surface combatants, which in this study includes aircraft carriers, cruisers, destroyers, frigates and corvettes

pattern of relative neglect, growing significantly in terms of principal surface combatants only since the 1990s. Vietnam's navy gained a principal surface combatant fleet only since the late 1970s. Indonesia started out the 1970s with a large naval force, but the numbers of principal surface combatants dropped drastically by 1979. This pattern remained constant for two decades before a significant surge in naval platforms in the late 1990s. The Philippines experienced a significant growth in principal surface combatants and heavy sealift in the 1970s, but those numbers dropped significantly after the 1980s.

There are two obvious exceptions. Malaysia's navy may have been relatively small in the 1969s, but it has thus far not experienced any significant drops in terms of the numbers of principal surface combatants of naval heavy lift throughout the period under study. This constant emphasis on naval platforms is consonant with the strong maritime element in Malaysia's strategic calculus of its geostrategic environment.<sup>13</sup> Thailand's navy similarly started out small, but grew slowly and steadily, and did not experience any significant drops in numbers of platforms.

This pattern of relative neglect becomes more apparent when juxtaposed with the acquisition of air power assets.<sup>14</sup> Between 1989 and 1999: Indonesia's air force had grown from 70 combat aircraft (A-4F/F, F-5E/F) to 91 combat aircraft (A-4E, F-16A/B and Bae Hawk); Malaysia had grown from 58 combat aircraft (A-4, F-5E/F) to 87 combat aircraft (F-5E/F, Bae Hawk, and MiG-29); Singapore had grown from 151 combat aircraft (A-4SU, F-74 Hunter and F-5E/F) to 174 combat aircraft (A-4SU, F-16A/B/C/D, F-5S); Thailand had grown from 143 combat aircraft (F-5A/B/E/F, other COIN platforms) to 162 combat aircraft (F-16A/B, F-5E/F); and Vietnam reduced from 250 combat aircraft (Su-20/22, MiG-21) to 189 combat aircraft (Su-22, Su-27, MiG-21).

What makes this pattern all the more counter-intuitive is the fact that for these states, the maritime environment has always been a significant element of their respective national lives. The respective national historical narratives of these states have always had a strong maritime element, whether by dint of their archipelagic nature or by the maritime trade that has characterised the histories of these states, from pre-colonial to current times.

### FROM RELATIVE NEGLECT TO NAVAL MODERNISATION: EXPLAINING THE PATTERN

The challenge is to be able to explain these patterns of relative neglect in some cases and “feast to famine” patterns in others, moving from relative neglect that the navies of these states had to endure between the 1960s and the 1980s on the one hand, to the relative largesse since the 1990s, where investments in naval platforms across these states have increased quite significantly.

To be sure, there almost certainly is a strategic-security rationale for this surge in investments in naval platforms. Maritime security—security of shipping routes from criminal activities, rival territorial claims, access to fisheries or energy resources—became an increasingly important focal point for these states from the 1990s onwards. Given the rather antiquated or limited nature of naval systems and capabilities at that time, it was therefore imperative that these navies be modernised and expanded in capabilities. Furthermore, as suggested earlier, this phenomenon ought not to be seen as constituting a naval arms race; rather

it constitutes a slow-motion development of more or less full-fledged navies for these states. There is a simple reason for this: naval platforms—especially larger naval platforms capable of at least green water, if not blue water, operations—cost a lot more in absolute terms than combat aircraft. Affordability therefore becomes a potentially significant consideration when it comes to military modernisation writ large. When seen in the context of gross domestic product (see “[Appendix](#)”), it becomes clear that it is really in the 1990s that the respective GDPs for these states begins to grow significantly. There is therefore some correlation between arms acquisitions and economic affluence.<sup>15</sup>

At the same time, there are a number of country-specific explanations for this surge in naval capabilities since the 1990s. For Vietnam, the explanation for the relative neglect of naval investments throughout the 1960s into the 1970s is obvious: the Vietnam War was fought predominantly, indeed almost exclusively, in the air and land domains. The maritime domain was important in terms of the lesser known maritime Ho Chi Minh Trail, but the operation of this maritime channel of supplies to Viet Cong guerrillas in South Vietnam required small private craft that could avoid detection from US naval vessels. For much of the 1980s, Vietnam was embroiled in the Cambodian conflict—otherwise known as the Third Indochina War—which resulted in a significant drain on its already scarce economic resources, crippled by the years of fighting against the USA in the Second Indochina War, and the economic embargoes placed on it as a result of its invasion of Cambodia on 25 December 1978. It is therefore not surprising that Vietnam’s investments in naval platforms only began to surge in the 1990s onwards.

Indonesia ended the 1960s with the largest naval force in Southeast Asia. However, the principal surface combatants that Indonesia’s navy deployed—a Sverdlovsk-class cruiser, seven Skory-class destroyers and 13 frigates—were acquired from the former Soviet Union, during a period of Indonesia’s history that saw the Sukarno government tilt towards the Soviet Union. When Sukarno was subsequently toppled in a military coup, the relationship with the Soviet Union consequently suffered. In any case, these Soviet vessels were patently unsuited for tropical conditions—muddy and high salinity tropical waters resulted in significant erosion for the hulls of these vessels, and they were subsequently returned to the Soviet Union or decommissioned. The human rights abuses of the military-led government that replaced Sukarno resulted in arms embargoes that also affected the quantity and quality of the Indonesian navy throughout the 1970s and



1980s. The surge in principal surface combatants in the Indonesian navy in the 1990s can be attributed to the acquisition of former East German naval vessels by the former President Suharto.<sup>16</sup> The decision was driven principally by the then-Minister for Research and Technology B.J. Habibie, who was leveraging on his close ties with the newly unified Germany in concluding this acquisition programme. However, the vessels were acquired at over-inflated prices.<sup>17</sup> The possibility that corruption was a key element in this acquisition cannot be ruled out therefore.

For Singapore, the relative neglect that the Singapore navy had to endure up to the decade of 2000–2009, in contrast to very significant investments in air force capabilities, can be attributed to the influence of the Israeli military advisors who had helped to build the Singapore Armed Forces.<sup>18</sup> These Israeli advisors, having arrived in Singapore in the aftermath of Israel's stunning victories in the 1967 Arab–Israeli war, were convinced about the absolute necessity of ensuring that Singapore, as a small state surrounded by much larger potential adversaries, had to maintain a significant advantage in air combat systems over these potentially hostile neighbours. This was in obvious detriment to the development of the Singaporean navy. By the 1990s, however, as the Singapore air force began to mature, this was when defence budgets could begin to pay more attention to modernising or upgrading naval capabilities. As the former Singapore Navy Chief Richard Lim noted in his speech on 5 May 1997 at the Singapore Navy's 30th anniversary, "We have now reached adulthood, the product of a generation's effort ... Starting from a small patrol force we have now a balanced navy with capabilities to operate over, upon and under the sea".<sup>19</sup> Richard Lim noted how the Singapore Navy had grown from providing "a basic coastal defence capability" with patrol craft and missile gunboats to "missions of seaward defence and safeguarding our sea lines of communications" with maritime patrol aircraft, mine counter-measures vessels, and new patrol vessels. In the twenty-first century, a submarine capability would be added to that list of capabilities that such a "balanced" force would require.

In the case of Thailand, the surge in numbers of principal surface combatants in the 1990s can be attributed to the acquisition of a helicopter carrier from Spain and a number of Chinese Type 053 Jianghu-class frigates in the 1990s by the Chuan Leekpai government. It was reported that the Thai navy was less than impressed with the quality of the Chinese frigates, which had been sold to Thailand at the so-called friendship prices.

As to why these Chinese frigates were acquired, therefore, explanations have been few and far between. Ostensibly, the Thai navy had been worried about the insufficient numbers of such vessels.<sup>20</sup> The acquisition of the frigates also took place against a backdrop of warm Sino-Thai relations, although at the military to military level, relations have stalled because of the Thai navy's desire to acquire better quality platforms and equipment.<sup>21</sup> It is therefore possible to speculate that the frigates were acquired from China despite the Thai navy's objections and that these acquisitions were part of a larger Sino-Thai political relationship.

### IMPLICATIONS FOR STRATEGIC STABILITY IN SOUTHEAST ASIA

This strategic rationale does not itself constitute a sufficient basis for a naval arms race. For an arms race to exist, there must be, as Colin Gray has argued, an existing mutually acknowledged antagonistic relationship between the relevant strategic actors.<sup>22</sup> Even if national interests in fisheries and energy resources collide with the rival territorial claims, these do not suffice to constitute mutually acknowledged antagonism.

That is not to say that there are no concerns for strategic stability in Southeast Asia today. To begin with, this study takes strategic stability to refer to a situation where the likelihood of miscalculations resulting in armed conflicts that policymakers neither anticipated nor wanted.<sup>23</sup> The worst-case scenario is one where two countries regard each other as likely adversaries in a potential future war, and they are locked in a conflicting geopolitical conflict over either territory or resources. At least one side perceives its geostrategic conditions to be fundamentally unfavourable, thus increasing the attractiveness of preemptive military operations. Finally, both countries possess the military capacities to project power against each other; in other words, both countries possess the military capacity to threaten the interests, possibly even the existence, of the state.

When strategic stability is understood in this light, it becomes clear that this condition does not apply in the case of Southeast Asia. As stated earlier, there are no overtly antagonistic relationships within Southeast Asia; admittedly, there are issues of contention between specific states, but these do not amount to overtly hostile relationships.

That being said, the potential for misunderstandings spiralling out of control into armed conflicts cannot be ruled out entirely. The naval platforms recently acquired or in ongoing acquisition programmes do constitute a potential—but very limited—power projection and war-fighting

capability. To a certain extent, this introduction of power projection capabilities in the naval domain can transform the strategic landscape of Southeast Asia; nevertheless, as an earlier study suggested, this transformation of the strategic landscape of their region has yet to happen.<sup>24</sup> While regional navies are beginning to acquire power projection capabilities, the numbers being acquired can only provide very limited power projection, and this power cannot be projected in any sustained manner.

The positive tone thus far needs to be tempered, however. There is one geopolitical issue that may, if not managed well, spiral out of control into armed conflict, namely the territorial disputes in the South China Sea. Robert Kaplan describes the South China Sea as Asia's Cauldron, the "*throat* of the Western Pacific and Indian oceans".<sup>25</sup> The recent development of particular note in China's construction of an airfield and land reclamation activities in some of the other atolls and islets. While it is tempting to see these activities as evidence of China attempting to create a permanent manned military presence in the South China Sea, it is also possible to argue that these activities are evidence of more than purely military considerations.<sup>26</sup> It is very likely that Vietnam's recent acquisitions of six Kilo-class submarines and four Gepard-class frigates from Russia are meant to strengthen its naval capacity to at least interfere with Chinese naval operations in the South China Sea. Malaysia's acquisition of two Scorpene submarines and the Philippines' espoused interest in acquiring submarines are almost surely connected with these countries' respective interests in the South China Sea disputes as well.

Further, given the absence of adequate incidents-at-sea and other crisis management regimes beyond the scope of this study, the increasingly crowded nature of the South China Sea may eventually create crises that, if not managed properly, can spiral out of control into limited armed conflicts.<sup>27</sup> As it stands, as Geoffrey Till and Jane Chan have noted, "The countries of South-east Asia have their own agendas and their own attitudes and problems and these are reflected in their quite distinctive naval policies".<sup>28</sup>

That being said, it is worth noting that the South China Sea has become a potential flashpoint commanding international attention principally because of China's involvement. It is true that a number of Southeast Asian states are rival claimants to the South China Sea islets and rocky atolls. Given that these Southeast Asian countries possess only rudimentary capacities to project naval power into the South China Sea—but not the capacity to sustain this naval presence for a long time—it is reasonable to argue that the respective interests in submarines and

principal surface combatants are driven more by China's involvement than targeted against other Southeast Asian claimants. This means that the observations made earlier in this study about the absence of intense rivalry between the Southeast Asian countries therefore remains valid.

## CONCLUSIONS

Seen from this long-term perspective, this study concludes that naval acquisitions by these countries since the 1990s ought not to be regarded as evidence of anything even approximating an arms race in the naval domain. Rather, the dominant pattern ought to be regarded as a slow-motion development of more fully rounded naval forces. The explanations for the respective national acquisition patterns range from economic affordability as a result of economic growth, political developments peculiar to individual countries, to the delayed recognition of the increasing importance of the maritime domain for the respective countries national security and economic outlooks. There is no naval arms race in Southeast Asia, simply put.

That is not to say that the increasing numbers of green water-capable naval forces in terms of both principal surface combatants and submarines is a phenomenon that does not warrant some concern. As suggested earlier, this proliferation of relatively advanced and capable naval vessels is occurring in a maritime domain that is not only replete with geopolitical tensions and potential flashpoints, it is also a domain that lacks proper mechanisms for the management of these tensions and potential crises that might emerge as a result of incidents at sea. Southeast Asia has enjoyed a period of relative strategic stability; these naval acquisitions contain the potential for upsetting regional strategic stability. Certainly, without proper management of the respective national acquisitions programmes, and without proper regional crisis management mechanisms, strategic stability in Southeast Asia can deteriorate.

## NOTES

1. See, for instance: Richard Bitzinger, "A New Arms Race: Explaining Recent Southeast Asian Military Acquisitions", *Contemporary Southeast Asia*, Vol. 32, No. 1, April 2010; Felix Chang, "A Salutation to Arms: Asia's Military Buildup, Its Reasons and Its Implications", *Foreign Policy*

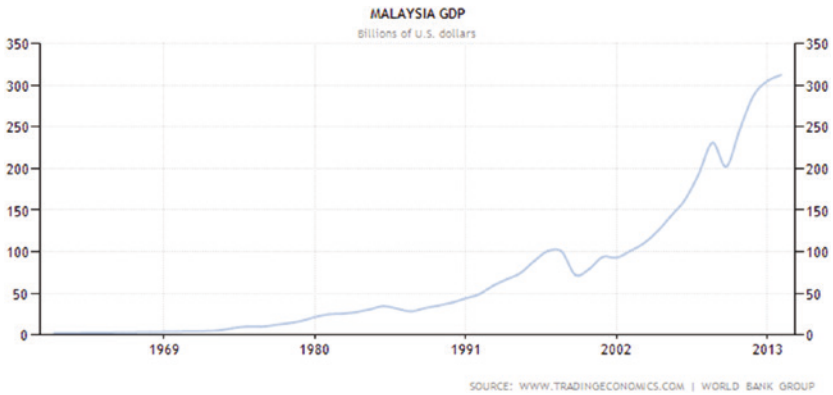
- Research Institute*, September 2013 (available online: <http://www.fpri.org/articles/2013/09/salutation-arms-asias-military-buildup-its-reasons-and-its-implications>, accessed 10 February 2015); Michael E Wallace and Charles A Maconis, New Powers, "Old Patterns: Dangers in the Naval Buildup in the Asia Pacific Region", *University of British Columbia Institute of International Relations Working Paper 9*, March 1995 (available online: <http://www.ligi.ubc.ca/sites/liu/files/9MichaelWallaceandCharlesMeconis.pdf>, accessed 10 February 2015).
2. Barry Buzan and Eric Herring, *The Arms Dynamic in World Politics* (Boulder and London: Lynne Rienner, 1998), p. 80.
  3. In the 1990s, former Indonesian Foreign Minister Ali Alatas noted "rather disturbing reports of increased arms purchases by several countries in the region", and the then Singapore Defence Minister Yeo Ning Hong noted that "No country in Southeast Asia ... has declared a peace dividend." Cited in: Amitav Acharya, "An Arms Race in Post-Cold War Southeast Asia? Prospects for Control", *Pacific Strategic Papers* (Singapore: Institute of Southeast Asian Studies, 1994), p. 1. For the regional arms race argument, see: Michael T Klare, "The Next Great Arms Race", *Foreign Affairs*, Vol. 72, No. 3, Summer 1993, pp. 136–152; Gerald Segal, "Managing new arms races in the Asia/Pacific", *The Washington Quarterly*, Vol. 15, No. 3, 1992, pp. 83–101. For a rather more nuanced reading of this issue, see: Desmond Ball, "Arms and Affluence: Military Acquisitions in the Asia Pacific Region", *International Security*, Vol. 18, No. 3, Winter 1993–1994, pp. 78–112; Panitan Wattanayagorn and Desmond Ball, "A Regional Arms Race?", *Journal of Strategic Studies*, Vol. 18, No. 3, 1995, pp. 147–174.
  4. *Asian Defence Journal*, August 1994, p. 86.
  5. "Malaysia Chases Others in Refuelling Capabilities", *Jane's Defence Weekly*, 22 January 1997, p. 12.
  6. *Jane's Defence Weekly*, 5 August 1998, p. 19.
  7. Richard A Bitzinger, "A New Arms Race? Explaining Recent Southeast Asian Military Acquisitions", *Contemporary Southeast Asia*, Vol. 32, No. 1, April 2010, pp. 50–69.
  8. An example of this one-upmanship is the Malaysian acquisition of F/A-18 and MiG-29 combat aircraft in the 1990s; when the decision was announced, then-Defence Minister Najib commented that this acquisition allowed Malaysia's air force to catch up with its neighbouring counterpart. See Bernard Fook Weng Loo, "Transforming the Strategic Landscape of Southeast Asia", *Contemporary Southeast Asia*, Vol. 27, No. 3, December 2005, p. 396. Singapore unveiled its first AH-64D Apache Longbow attack helicopters shortly after Malaysia announced its own acquisition of PT-91 main battle tanks.

9. Robert Kaplan, *Asia's Cauldron: The South China Sea and the End of a Stable Pacific* (New York: Random House, 2014), p. 34.
10. Desmond Ball, "Arms and Affluence: Military Acquisitions in the Asia-Pacific Region", *International Security*, Vol. 18, No. 3, Winter 1993–1994, pp. 78–112. Ball was the first to posit the prestige argument concerning military acquisitions.
11. The concept of security community may be understood as a group of states whose concepts of national security are "interdependent and that excessively self-referenced security policies, whatever their jingoistic attractions, are ultimately self-defeating." See: Barry Buzan, *People, States and Fear* (London: Harvester Wheatsheaf, 1983), p. 208.
12. Data was obtained from the 1969–1970, 1979–1980, 1989–1990, 1999–2000, and 2009 editions of *The Military Balance*.
13. Patrick Bright, "ASEAN—Naval Forces Overview", in *Naval Forces*, February 2001, p. 48.
14. Data was obtained from the 1989–1990 and 1999–2000 editions of *The Military Balance*.
15. See Ball, "Arms and Affluence".
16. Michael Richardson, "Indonesia to Acquire One-Third of Navy of Former East Germany", *The New York Times*, 5 February 1993.
17. Richard Robison and Vedi Hadiz, *Reorganising Power in Indonesia: The Politics of Oligarchy in an Age of Markets* (London and New York: RoutledgeCurzon, 2004), p. 139.
18. Amnon Barzilai, "A deep, dark, secret love affair", *Tha Haaretz*, 16 July 2004 (accessed online: <http://www.haaretz.com/a-deep-dark-secret-love-affair-1.128671>, 11 February 2015).
19. Speech by Rear Admiral, Richard Lim, Chief of Navy, at the Navy 20th Anniversary Parade, [http://www.mindef.gov.sg/imindef/press\\_room/official\\_releases/sp/1997/05may97\\_speech.html#.VOGDGCiVOfQ](http://www.mindef.gov.sg/imindef/press_room/official_releases/sp/1997/05may97_speech.html#.VOGDGCiVOfQ), accessed on 10 February 2015.
20. See <http://www.globalsecurity.org/military/world/thailand/chaophraya.htm>, accessed 12 February 2015.
21. Bronson Pecival, *The Dragon Looks South: China and Southeast Asia in the New Century* (Westport and London: Praeger Security International, 2007), pp. 50–51.
22. Colin Gray defined an arms race as a situation where "two or more parties perceiving themselves to be in an adversary relationship, who are increasing or improving their armaments at a rapid rate and structuring their respective military postures with a general attention to the past, current and anticipated military and political behaviour of the other parties." Interestingly, later on, Gray would disown the concept, arguing instead

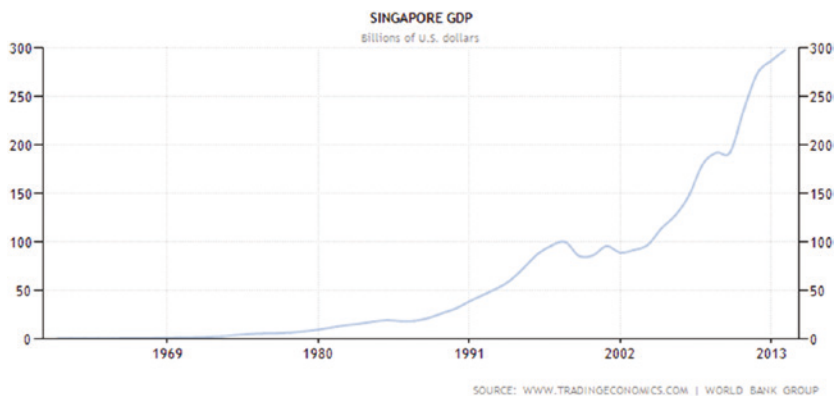
- that the concept really described something that had never happened in the history of international politics; see “Arms Races and Other Pathetic Fallacies: A Case for Deconstruction”, *Review of International Studies*, Vol. 22, No. 3 (July 1996), pp. 323–335.
23. Bernard Fook Weng Loo, *Middle Powers and Accidental Wars: A Study in Conventional Strategic Stability* (Lewiston, NY: Edwin Mellen Press, 2005).
  24. Bernard Fook Weng Loo, “Transforming the Strategic Landscape of Southeast Asia”, *Contemporary Southeast Asia*, December 2005, Vol. 27, No. 3, pp. 389–405.
  25. Kaplan, *Asia’s Cauldron*, p. 9.
  26. See, for instance, Gwynn Guilford, “China’s Island Building Spree Is About More Than Just Military Might”, DefenseOne, 22 February 2015 (accessed online: <http://www.defenseone.com/politics/2015/02/chinas-island-building-spree-about-more-just-military-might/105786/>, 25 February 2015).
  27. Sam Bateman, Joshua Ho and Jane Chan, *Good Order at Sea in Southeast Asia* (Singapore: RSIS, 2009).
  28. Geoffrey Till and Jane Chan, “Naval modernisation in South-east Asia: nature, cause and consequence”, in Geoffrey Till and Jane Chan (eds.), *Naval Modernisation in South-East Asia: Nature, causes and consequences* (London and New York: Routledge, 2014), p. 4.

## APPENDIX











Source <http://www.tradingeconomics.com/>, accessed 20 November 2014

### AUTHOR BIOGRAPHY

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