Rethinking the consequences of naval modernization in Southeast Asia : a heuristic approach

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2016

Koh, C. S. L. (2016). Rethinking the consequences of naval modernization in Southeast Asia : a heuristic approach. Doctoral thesis, Nanyang Technological University, Singapore.

<http://hdl.handle.net/10356/65986>

<https://doi.org/10.32657/10356/65986>

RETHINKING THE CONSEQUENCES OF NAVAL MODERNIZATION IN SOUTHEAST ASIA: A HEURISTIC APPROACH

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Thesis submitted to the Nanyang Technological University in fulfilment of the
requirement for the degree of
Doctor of Philosophy

2015

ACKNOWLEDGEMENTS

It would not have been possible to complete this doctoral thesis without the support from a significant number of individuals.

The author is extremely grateful to Professor Geoffrey Till and Associate Professor Bernard Fook Weng Loo, for their tireless guidance and patience in advising on and supervising the course of research and completion of this research project. The author is much privileged to have been allowed to tap on their vast wealth of knowledge and expertise.

Throughout the sustained span of research and writing, the author is also privileged to have received significant support and encouragement from many current and past faculty members of the S. Rajaratnam School of International Studies (RSIS). The author wishes to specially thank Professors Ron Matthews and Rajesh Manohar Basrur, Associate Professors Alan Chong, Li Mingjiang and Mely Caballero-Anthony, Dr. Sam Bateman, Dr. Euan Graham, Ms. Jane Chan and Mr. Richard Bitzinger.

Rendering various forms of assistance to the author's research are also a number of other RSIS colleagues, in particular the Chief Librarian Ms. Chong Yee Ming who had provided tremendous help with the library resources. There are numerous experts based outside RSIS who have advised the author in various capacities. It is not possible to name all of these individuals here but the author wishes to thank them for their help.

Finally, the author expresses his deepest gratitude to his loved ones, especially his parents, for their unwavering support and forbearance throughout the arduous years of research. Without their support, the author could not have come this far. Special thanks go to the author's wife, Shi Ling, who has not just stayed by his side throughout the course of this research but also provided very useful advice using her expertise in processing vast amounts of statistical data, which forms the centerpiece of this research endeavor.

TABLE OF CONTENTS

	Page
ABSTRACT	i
LIST OF ABBREVIATIONS	ii
LIST OF TABLES	v
 CHAPTER ONE: INTRODUCTION A Limited Cottage Industry of Studies on ASEAN Naval Forces	
1.1. Setting the Stage	1
1.2. Why the Specific Interest in Naval Forces?	3
1.3. Cause for Concern? The Destabilizing Potential of Modern Naval Armaments?	9
1.4. The Bias towards Major Navies?	15
1.5. Existing Studies on ASEAN Naval Forces Tend to be Too Descriptive	22
1.6. Research Statement	30
1.7. Value of This Approach	32
1.8. Thesis Outline	33
 CHAPTER TWO: CONCEPTUAL REVIEW Problems with the “Conventional Argument” about the Consequences of ASEAN Naval Modernization: In Need of an Alternative Perspective?	
2.1. Do Existing Studies Tell the Full Story about the Consequences of ASEAN Naval Modernization?	35
2.2. Is There Naval Arms Racing in Southeast Asia: Addressing a Pertinent Question or Muddying the Waters?	37
2.3. Reason for Pessimism? Questioning the Efficacy of Economic and Political Interdependences in Mitigating the Consequences of ASEAN Naval Modernization	46
2.4. Security Dilemma at Sea: An Inevitable and Unavoidable Pathway to Tragedy?	53

2.5. Naval Armaments: Inherently Offensive and Potentially Destabilizing?	59
2.6. A Way Out of the Conundrum: If Not Negotiated Naval Arms Control, What Else?	67
2.7. The Need for an Alternative Perspective on the Consequences of ASEAN Naval Modernization?	73

CHAPTER THREE: RESEARCH DESIGN

Proposing a Heuristic Analytical Framework to Examine the Influence of Naval Armaments on Strategic Behavior

3.1. A Brief Recap from the Previous Chapter and Intro to an Analytical Framework	76
3.2. Common Security and the Vision of "Peace through Assurance" as Fundamental Motivation behind NPD	77
3.3. Non-Provocative Defense: A Utopian Pipedream or Merely in Need of Conceptual "Tweaks"?	78
3.4. Far from Irrelevant? Promising Hints Pointing to the Feasibility of NPD Demonstrated in Southeast Asia	85
3.5. Towards a Framework for NPD in the Maritime Context	90
3.6. The Heuristic Analytical Framework: Deriving a Modern Rendition of NPD-based Naval Posture That Takes into Account Contemporary Realities	96
3.7. Outline of the General Methodological Approach	98

CHAPTER FOUR: AGGREGATE FORCE STRUCTURE AND DESTABILIZING POTENTIAL

Naval Procurement Choices and Force Structure Development Pathways Can Balance Defense Needs While Demonstrating Restraint

4.1. A Recap of the Earlier Discussion about Naval Armaments	105
4.2. Destabilizing Naval Armaments: The Theoretical Perspective	106
4.3. Destabilizing Naval Armaments: The Professional Perspective	110
4.4. Lessons Learnt and the Need for Perspective in Identifying Destabilizing Naval Armaments	122
4.5. A Broad Snapshot: Is There Any Expansion in Total Size of Naval Forces?	130

4.6. A Deeper Look: Which Force Categories Experience Growth?	132
4.7. Beyond “Bean-counting”: What is the Composition of Each Force Category within the Aggregate Force Structure?	136
4.8. General Trends towards a More Destabilizing Force Structure... A “Smoking Gun”?	139
4.9. More “Stability-Inducing” than Destabilizing: What Posture is the Aggregate Force Structure Oriented Towards?	142
4.10. More than It Meets the Eye: Is there Increasing DPI for Each Force Category?	144
4.11. Summary of Findings	148

CHAPTER FIVE: NATIONAL POLICY DISCOURSES

Words Do Matter: States May Avoid Confrontation and Promote Cooperation through Prudent Tendencies in Diplomatic Communication

5.1. What are “National Policy Discourses”?	152
5.2. Why are Discourses So Important?	153
5.3. Creating a Methodology to Systematically Analyze Discourses	156
5.4. Being Forthright, or in State of Denial: Do States Tend to Openly Identify Their Counterparts as a Source of Security Concern?	163
5.5. Rationale for Legitimate Armament? Perceived Emergence of Unconventional Security Challenges and the Need to Hedge against Uncertainties	169
5.6. The Other Kind of Prudence at Work: Assurances about Defense Postures and Policy Elites’ Consciousness of the Dangers of Arms Racing	172
5.7. “ASEAN Way” in Action? Prudent Tendencies towards Verbal Threats Regarding Use of Force among ASEAN States	177
5.8. Being a Good Citizen of the International Community: Advocacies for Diplomacy and Interstate Cooperation as a Way to Promote Security	180
5.9. Summary of Findings	184

CHAPTER SIX: COOPERATIVE NAVAL DIPLOMACY

States May Gravitate towards Confidence- and Security-Building as well as Cooperative Measures to Demonstrate Benign Strategic Behavior

6.1. Stating the Obvious? Reasons to Examine Proclivities towards Concord	188
6.2. More Than Just Defense Diplomacy	190
6.3. Graduated Forms of CSBMs as a Means of Signaling Strategic Intent?	192
6.4. COMs as an Indicator of Benign Intent and Responsible Stakeholdership in Regional and International Peace and Stability	198
6.5. Distinguishing between CSBMs and COMs: It's All about Primary Designed Purpose	203
6.6. "Pledges" of Security Cooperation: Should They be Considered at All?	205
6.7. Brief Outline of the Methodology	207
6.8. Snapshot on the Total Number of CSBMs and COMs Initiated: A Prevalent "Spirit of Concord" amongst States?	209
6.9. States Become More Ambitious with CSBM Undertakings: Signaling Strategic Intent to Embark on Measures to Ameliorate Potential Misperceptions?	210
6.10. Increased Propensities towards Resolving and Managing Interstate Disputes: An Expression of Benign Intent?	215
6.11. Expanding Commitment to Security Cooperation and Extending Help to Others: A Way of Projecting Positive Image to the International Community?	218
6.12. Summary of Findings	227

CHAPTER SEVEN: COERCIVE NAVAL DIPLOMACY

Enduring Use of Gunboat Diplomacy Can be De-Emphasized and Calibrated for the Purpose of Controlling Risks and Managing Interstate Perceptions

7.1. The Enduring Nature of Gunboat Diplomacy	230
7.2. Reconceptualizing Gunboat Diplomacy: From the Perspective of Self-Restraint?	232

7.3. Towards a Continuum of Gunboat Diplomacy: Revisiting Cable's Four Modes of Limited Threat and Use of Naval Force	236
7.4. What Naval Instrument to Use? Governments are Conscious of the Type of Naval Forces Employed for Gunboat Diplomacy	241
7.5. The Geographical-Legal Context of Gunboat Diplomacy is Important	244
7.6. A Brief Outline of the Methodology: Documenting and Classifying Incidents at Sea	247
7.7. Are States More Inclined Towards the Application of Gunboat Diplomacy?	250
7.8. More Assertive and Aggressive? Mode and Extent of Gunboat Diplomacy as an Indicator of Strategic Restraint?	254
7.9. More White than Grey Hulls? Conscious Preferences over the Type of Naval Forces Employed Indicate Strategic Restraint?	257
7.10. The Best Test Case? Employment of Gunboat Diplomacy in Disputed Zones, Foreign Waters and during Interstate Tensions	261
7.11. Summary of Findings	265

CHAPTER EIGHT: SUMMARY AND CONCLUSIONS

Grounds for Optimism? Naval Armament Does Not Necessarily Result in Destabilizing Strategic Behavior

8.1. What, Why and So What? More Questions Left Unaddressed?	270
8.2. The Fundamental Assumption: Security Dilemmas are Not Inevitable	272
8.3. Conclusion #1: States May Discern the Destabilizing Potential of Naval Armaments and Exercise Unilateral Naval Arms Control	273
8.4. Conclusion #2: States May Moderate their Policy Discourses Especially during Interstate Crises	275
8.5. Conclusion #3: States May Intensify Their Engagements in Confidence- and Security-Building as well as Cooperative Measures	277
8.6. Conclusion #4: States May De-emphasize and Calibrate the Limited Threat and Use of Naval Force	280

8.7. Summing Up: Naval Armament is Not Necessarily Destabilizing and May Even be Stability-Inducing	282
8.8. Prospects for Future Research: Towards a More General "Theory" on the Consequences of Naval Armament in an Expanded, Global Dataset?	285
BIBLIOGRAPHY	287
GLOSSARY OF TECHNICAL TERMS	309
APPENDICES	317

ABSTRACT

The existing scholarship on naval modernization in Southeast Asia focuses mainly on the motivations underpinning those acquisitions as well as characterizing whether they fit the description of naval arms racing. While postulating that the regional naval modernization efforts taking place in the region cannot be characterized as arms-racing, these studies hold that there are still reasons for concern because of the proliferation of offensive, supposedly destabilizing force projection-type naval armaments in the backdrop of unresolved interstate territorial and sovereignty disputes. The absence of any negotiated naval arms control measures and perceived weakness of regional institutions, particularly the one revolving around the Association of Southeast Asian Nations (ASEAN), further feed the pessimistic outlook that naval modernization can be potentially destabilizing. Contrary to this "conventional argument", this thesis instead proposes a heuristic approach to rethink the consequences of naval modernization. Sampling across the wider Indo-Pacific region and Northern European examples over a time-span of 1980-2014, the analytical framework comprises the aggregate naval force structure; national policy discourses; participation in confidence- and security-building (CSBMs) as well as cooperative measures (COMs); and last but not least, the application of limited threat and use of naval force. This thesis finds that states may convey benign strategic intent and seek to avoid being drawn into or entangled in security dilemmas through the following ways. First, states may discern the destabilizing potential of naval armaments and exercise unilateral naval arms control in this regard. Second, they may moderate their policy discourses such as by avoiding threat-labelling and verbal threat of force while advocating diplomacy and interstate cooperation. Third, states may also intensify their participation in CSBMs and COMs. Finally, they may convey benign strategic intent by de-emphasizing the application of limited threat and use of naval force while at the same time, calibrating its mode and extent, as well as the types of naval forces employed for such expediencies. Therefore, using the proposed heuristic analytical framework to examine how naval armaments influence strategic behavior, this thesis argues that naval modernization is not necessarily destabilizing. In fact, it further postulates, such buildups may potentially be stability-inducing.

LIST OF ABBREVIATIONS

A2/AD	Anti-access and area denial
AALS	Amphibious assault landing vessel
AAW	Anti-air warfare
ACSA	Acquisition and Cross-Servicing Agreement
AIP	Air-independent propulsion
ALCM	Air-launched cruise missile
AMTI	Asian maritime Transparency Initiative
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
ASCM	Anti-ship cruise missile
ASM	Air-to-surface missile
ASW	Anti-submarine warfare
ATGW	Anti-tank guided weapon
C4I	Command, control, communications, computers and intelligence
CARAT	Cooperative Afloat Readiness and Training
CCAMLR	Convention for the Conservation of Antarctic Marine Living Resources
CBM	Confidence-building measure
CFE	Conventional Forces of Europe (treaty)
CS	Continental shelf
CSBM	Confidence- and security-building measure
CSCAP	Council of Security Cooperation in the Asia-Pacific
CoC	Code of conduct
COM	Cooperative measure
COW	Correlates of War
DCL	Direct Communications Link
DOC	Declaration of Conduct of Parties in the South China Sea
DPI	Destabilizing Potential Index
DZ	Disputed zone
ECCM	Electronic counter-countermeasures
ECM	Electronic countermeasures
EEZ	Exclusive economic zone

FW	Foreign waters
GKSCSC	Goh Keng Swee Command and Staff College
HA/DR	Humanitarian assistance and disaster relief
HS	High seas
ICG	Indian Coast Guard
ICJ	International Court of Justice
INCSEA	Incident at sea
IS	International straits
IUU	Irregular, unreported and unregulated
JASSM	Joint Air-to-Surface Standoff Missile
JMSDF	Japan Maritime Self-Defense Force
LACM	Land attack cruise missile
LHD	Landing helicopter, dock
LIC	Low-intensity conflict
LSD	Landing ship, dock
MANPADS	Man-portable air defense system
MEF	Minimum Essential Force
MID	Militarized Interstate Disputes
MLSA	Military Logistics Support Agreement
NATO	North Atlantic Treaty Organization
NEO	Non-combat evacuation operation
NPD	Non-provocative defense
NSM	Naval Strike Missile
ODB	Offense-defense balance
ODD	Offense-defense distinction
ODT	Offense-defense theory
OOTW	Operations other than war
pK	Probability of kill
PLAN	People's Liberation Army Navy
PLANAF	People's Liberation Army Navy Air Force
PMSA	Pakistan Maritime Security Agency
R&D	Research and development
RMAF	Royal Malaysian Air Force

ROCAF	Republic of China Air Force
ROKN	Republic of Korea Navy
RTN	Royal Thai Navy
SAF	Singapore Armed Forces
SGPV-LCS	Second-Generation Patrol Vessel-Littoral Combat Ship
SIGINT	Signal intelligence
SIPRI	Stockholm International Peace Research Institute
SLBM	Submarine-launched ballistic missile
SLCM	Submarine-launched cruise missile
SLOC	Sea line of communication
SOFA	Status of Forces Agreement
SOMS	Straits of Malacca and Singapore
TW	Territorial waters
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNIFIL	United Nations Interim Force in Lebanon
USN	United States Navy
WPNS	Western Pacific Naval Symposium

LIST OF TABLES

No.		Page
1	Contextual Differences between Northern European and ASEAN Naval Forces	21
2	Drivers of ASEAN Naval Modernization in the 1990s	24
3	Drivers of ASEAN Naval Modernization in the Early-2000s	25
4	An Alternative Perspective on the Consequences of ASEAN Naval Modernization	75
5	Early Northern European Formulations of an NPD-based Naval Posture	91
6	Post-Cold War Reformulations of NPD-based Naval Postures	94
7	Heuristic Analytical Framework to Study the Consequences of Naval Modernization in Southeast Asia	97
8	Tabulated Results of Questionnaire Section F on Maritime Capabilities	113
9	Tabulated Results of Questionnaire Section G on Naval Force Structures	121
10	Destabilizing Potential Index for Various Categories of Naval Armaments	125
11	Average Compositions of Force Categories Expressed in Percentages across Regions, 1980-2014	137
12	Total Count of Items Collected for Content Analysis	157
13	Theme-based Operational Model for the Content Analysis of Discourses	160
14	Threat-Labeling Frequencies (STATE-Red)	165
15	Threat-Denial Frequencies (STATE-Green)	168
16	Unconventional Security Challenges Frequencies (UNCONVENTIONAL)	169
17	Strategic Uncertainty Frequencies (UNCERTAINTY)	171

18	Defense Posture Assurances Frequencies (POSTURE-Green)	173
19	Arms-Race Warning Frequencies (POSTURE-Red)	175
20	No-Threat of Force Frequencies (FORCE-Green)	178
21	Threat of Force Frequencies (FORCE-Red)	179
22	Advocacy for Diplomacy Frequencies (DIPLOMACY)	181
23	Advocacy for Security Cooperation Frequencies (COOPERATION)	183
24	Typology of Confidence- and Security-Building Measures	195
25	Typology of Cooperative Measures	199
26	Typology of UN Naval Missions and Supporting Tasks	202
27	Total Count of New CSBMs and COMs Initiated in 1980-2014	209
28	Declaratory CSBMs 1980-2014	211
29	Transparency CSBMs 1980-2014	212
30	Constraint CSBMs 1980-2014	212
31	Hybrid (Transparency + Constraint) CSBMs 1980-2014	213
32	Political/Legal Settlements of Territorial and Sovereignty Disputes 1980-2014	215
33	Dispute Management Mechanisms 1980-2014	217
34	COMs Participation in the Immediate Region 1980-2014	219
35	COMs Participation in the Wider Region 1980-2014	220
36	Extra-regional Participation in COMs 1980-2014	220
37	Defense- and Security-Related Assistance 1980-2014	222
38	New Initiatives in Regional and International Security Operations 1980-2014	224
39	New Initiatives in Joint Training and Exercises 1980-2014	225

40	Graduated Levels of the Mode and Extent of Naval Force Applied in Descending Order of Extremity	241
41	Unilateral Zonal Constraints on Limited Threat or Use of Naval Force	245
42	Classifying Reported Incidents at Sea	250
43	Total Count of Reported Incidents at Sea 1980-2014	251
44	Type of Forces Employed in Limited Threat and Use of Naval Force 1980-2014	258

CHAPTER ONE: INTRODUCTION

A Limited Cottage Industry of Studies on ASEAN Naval Forces

1.1. Setting the Stage

The naval scene in the Association of Southeast Asian Nations (ASEAN) region often presents a mixed picture to interested observers. Two mainstream schools of thoughts have dominated what could be deemed a “cottage industry” on this field, comprising perspectives which do not really aid in better understanding the implications of ASEAN naval modernization.¹

One perspective views the ongoing modernization processes as competitive in nature. While acknowledging that the processes do not constitute a naval arms race, the existing scholarship holds that regional naval modernization remains a cause for concern because capabilities acquired now may be utilized for future aggression since strategic intentions can change. Furthermore, these studies warned about the risks of sharpening geopolitical rivalries at sea, including the potential for use of force. There is a prevailing tendency within the scholarship to “predict” such consequences via linear inferences from the purportedly destabilizing characteristics of naval armaments. It also holds that regional institutions, which are supposed to reduce the likelihood of interstate armed conflict through the promotion of economic and political interdependence, possess dubious utility in ameliorating such dangers.

But while tensions do occasionally flare up in the regional flashpoints, primarily the East and South China Seas, these are aberrations than daily occurrences even in the tensest of Asian sub-regions such as the Korean Peninsula. Policy elites in Asia tend to downplay these episodes, portraying them as common phenomena of interstate relations. These aberrations have also rarely resulted in such drastic outcomes as interstate armed conflicts. If one accepts the premise that military power remains an indivisible part of statecraft, perhaps the incidences of coercive

¹ The use of “ASEAN naval modernization” does not imply any collective regional process but merely to signify the collection of processes undertaken by individual member states.

use of naval forces should not be over-amplified. Real instances where lethal naval force was applied constituted a small percentage of the numerous inter-Korean naval incidents for instance. In the case of the South China Sea, the last fatal clash happened in 1988.

The opposite perspective, mainly propounded by policy elites and the existing academic literature to a lesser extent, views the processes as cooperative. ASEAN political and military establishments often defend the regional naval modernization processes, arguing that national resilience promotes regional resilience.² Such ideas were often espoused in the 1990s amidst the rapid military buildup in Southeast Asia. But even in present times it is by no means an outdated conception. For instance, in July 2011 then Indonesian President Susilo Bambang Yudhoyono propounded the view that ASEAN countries' military modernization is designed for regional stability, and that Indonesia could benefit from its neighbours' naval buildup.³ He is certainly not the only ASEAN statesman who thinks this way. The idea that neighbours' naval buildups can benefit someone's security would seem counterintuitive to mainstream realist arguments predicated on the idea of balance-of-power and the security dilemma; that enhancing one's military power would provoke insecurity in and counter-action by others.⁴

² See for instance, "No arms race in Southeast Asia, Suharto says," *Agence France Presse*, July 24, 1993; "Thai-copter carrier plan 'not a threat to Malaysia'," *Straits Times*, April 6, 1994.

³ "President asks Malaysia to expand mily cooperation," *LKBN ANTARA*, July 5, 2011. See also "Arms purchase decision made years ago," *New Straits Times*, April 29, 2002.

⁴ Neo-realism can be examined from the perspectives of Offensive Realism and Defensive Realism; both view material power as the key determinant of interstate relations, and that in the context of international anarchy – regarded as an inescapable reality in international politics – states remain the primary actors in the international system. Offensive Realism envisages states as primarily seeking maximum power, whereby security is essentially seen as an absolute zero-sum equation. Defensive Realism on the other hand envisages states as security-seekers who concede that international anarchy provides incentives for aggressive politics and expansion, albeit under limited conditions. But unlike Offensive Realists, proponents see security in relative terms; states are rational actors capable of cost-benefit analysis; and security can be obtained through means other than the acquisition of maximum military power. Read Hans J. Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, 6th Edition (Revised by Kenneth W. Thompson) (New Delhi: Kalyani

So how can one reconcile these mutually exclusive and conflicting perspectives? The problem fundamentally resides in the ambiguous nature of the seas and the dual characteristics of naval power. To start with, the seas constitute a global commons for mankind. Covering almost 70 percent of Earth's surface, the seas enable and promote trade and communication amongst societies even in the advent of air transportation. The seas provide a rich source of protein, hydrocarbons and minerals for socioeconomic development. At the same time, however, the seas constitute an ambiguous medium in which interstate rivalries play out. Naval power remains an inherently flexible foreign policy instrument for governments to further wide-ranging national interests.⁵ It therefore has both competitive and cooperative utility. Yet one major question still remains: does naval modernization necessarily result in destabilization? This thesis proposes a heuristic approach in examining how naval armaments influence strategic behavior.

1.2. Why the Specific Interest in Naval Forces?

But before addressing the question of how naval armaments influence strategic behavior in Southeast Asia, one may ask: why the specific interest in naval forces?

Publishers, 2007); Kenneth N. Waltz, *Theory of International Politics* (Reading, Massachusetts: Addison-Wesley, 1979); Inis L. Claude, Jr., *Swords into Plowshares: The Problems and Progress of International Organization*, 4th Edition (NY: Random House, 1971); Joseph M. Grieco, "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institution," *International Organization*, Vol. 42, No. 3 (Summer-1988), pp. 485-507; Jeffrey W. Taliaferro, "Security Seeking under Anarchy: Defensive Realism Revisited," *International Security*, Vol. 25, No. 3 (Winter-2000/2001), pp. 128-161; Joseph S. Nye, "Review: Neorealism and Neoliberalism," *World Politics*, Vol. 40, No. 2 (Jan-1998), pp. 235-251; Charles L. Glaser, "Realists as Optimists: Cooperation as Self-Help," in Michael E. Brown, Sean M. Lynn-Jones and Steven E. Miller (eds.), *The Perils of Anarchy: Contemporary Realism and International Security – An International Security Reader* (Cambridge, Massachusetts; London, England: The MIT Press, 1995); James N. Rosenau, "Capabilities and Control in an Interdependent World," *International Security*, Vol. 1, No. 2 (Autumn-1976), pp. 32-49.

⁵ Ken Booth, *Navies and Foreign Policy* (London: Croom Helm; NY: Crane, Russak, 1977), 124-25.

Southeast Asia is predominantly a maritime region consisting of long coastlines, sprawling archipelagos and countless other features such as cays and reefs which could be submerged at high tide. It is a unique sub-region within the broader Indo-Pacific region.⁶ The Southeast Asian littorals are characterized by semi-enclosed waters which offer rich breeding grounds for the marine ecosystem. The region's vast wealth of fishery, hydrocarbon and seabed mineral resources contribute significantly to regional socioeconomic development. Moreover, the vital sea lines of communications (SLOCs) plying through strategic waterways such as the Straits of Malacca and Singapore (SOMS) are especially prized by both local littoral states and foreign users for their economic, military and political values.

These physical attributes of Southeast Asia contribute towards shaping the conceptions of seapower, a holistic notion which encompasses: trade and access; exploitation of marine resources; and military force at sea.⁷ The first two aspects relate directly to those strategic and economic values that constitute sources of interstate rivalries within and around the region. This is where history is important. Not all Southeast Asian nation-states accept those international boundaries and territories which were essentially legacies from their former colonial masters. This results in disputed territorial claims and jurisdictional rights.⁸

⁶ This thesis adopts the definition of Indo-Pacific, described by former Indonesian foreign minister Marty Natalegawa, as "an important triangular spanning two oceans, the Pacific and Indian Oceans, bounded by Japan in the north, Australia in the southeast and India in the southwest, notably with Indonesia at its center". Marty Natalegawa, "An Indonesian perspective on the Indo-Pacific," *The Jakarta Post*, May 20, 2013.

⁷ Harold J. Kearsley, *Maritime Power and the Twenty-First Century* (Aldershot, Dartmouth, 1992), 13; Harlan K. Ullman, "Politics and Maritime Power," *Naval Forces*, Vol. 8, No. 2 (1987), pp. 31-32; and Booth, *Navies and Foreign Policy*, 15.

⁸ This thesis is not the place to treat this topic in depth beyond this mere mention, albeit doing huge injustice to these complex issues. On the post-colonial geopolitical history of Southeast Asia, interested readers may consider the following works: C.M. Turnbull, "Chapter 10: Regionalism and Nationalism," in Nicholas I. Tarling (ed.), *The Cambridge History of Southeast Asia. Volume Two: The Nineteenth and Twentieth Centuries* (Cambridge: Cambridge University Press, 1992), 583-642; Mark Beeson, "Southeast Asia and the Politics of Vulnerability," *Third World Quarterly*, Vol. 23, No. 3 (2002), pp. 549-64; O.W. Wolters, *History, Culture and Region in Southeast Asian Perspectives*, 2nd Edition (Ithaca: Cornell Southeast

To compound matters, the United Nations Convention on the Law of the Sea (UNCLOS) III promulgated in 1982 permits “extended maritime territorialization” by coastal states.⁹ They can lay territorial claims and jurisdictional rights to considerable swathes of sea of up to 200 nautical miles of exclusive economic zones (EEZs) or 350 nautical miles (continental shelf claims included) – a bonanza that could be exploited for strategic and economic ends. This “extended maritime territorialization” further complicates the historical boundary and territorial disputes which pre-dated UNCLOS. The stakes involved are considerable for the abovementioned reasons. Such a situation becomes more acute by the beginning of the 21st Century, when the global balance of economic power is gradually shifting towards Asia.

Sustaining the phenomenal socioeconomic growth experienced in this region requires secure national access to marine resources and SLOCs for the movement of goods and raw materials. The stakes involved correspondingly magnify. Consequently the regional governments perceive more vulnerabilities stemming from a variety of potential traditional and non-traditional security challenges posed to such critical maritime interests. Indeed, maritime issues have already risen to the forefront of security concerns in Southeast Asia and the broader Indo-Pacific, for instance piracy, illegal fishing and smuggling are essentially maritime in nature.¹⁰ The solution, besides diplomacy, requires the naval instrument.

In view of contemporary and future circumstances, where the critical importance of the seas as the global commons for mankind and the security challenges posed therewith, the utility of naval power as a foreign policy instrument is likely to persist.

Asia Program; and Singapore: Institute of Southeast Asian Studies, 2004); M.C. Ricklefs, Bruce Lockhart, Albert Lau, Porita Reyes and Maitrii Aung-Thwin, *A New History of Southeast Asia* (Basingstoke: Palgrave Macmillan, 2010); and Barry Wain, “Latent Danger: Boundary Disputes and Border Issues in Southeast Asia,” *Southeast Asian Affairs*, Vol. 2012, pp. 38-60.

⁹ On maritime territorialization, read Kearsley, *Maritime Power and the Twenty-First Century*, 17.

¹⁰ Mark J. Valencia, “Foreign Military Activities in Asian EEZs: Conflict Ahead?” *NBR Special Report #27* (Seattle, Washington: The National Bureau of Asian Research, May 2011), p. 3.

Because of the operating medium and their adaptability to the flexible exertion of force, navies are likely to be utilized by governments to safeguard their maritime interests.¹¹ Tackling non-traditional security challenges often require naval forces, such as the case of fighting piracy and responding to natural disasters. But another avenue that sees the utility of naval forces is the context of interstate rivalries at sea. It needs pointing out that terrestrial disputes in Asia had largely been resolved by the turn of the century yet the maritime scene does not present such a rosy picture. This means that any future interstate conflict in Southeast Asia or the broader Indo-Pacific is more likely to happen in the maritime domain.¹²

However, the analysis of naval power is often subsumed within the broader literature on military modernization, particularly studies conducted in the 1990s. Only in recent years has there been more specific focus on naval forces, in no small part due to the greater interest taken in the rapid growth of naval forces registered in Asia – a pattern that looks set to continue. To illustrate this case, Bob Nugent has shown that the Asia-Pacific made up roughly 25 percent of the projected global new-construction (newcon) warship market and predicted that regional navies would spend a combined US\$180 billion on almost 800 new vessels including submarines through 2031.¹³ Southeast Asia will likely account for US\$38.3 billion in

¹¹ D. P. O'Connell, *The Influence of Law on Sea Power* (Manchester: Manchester University Press, 1975), 10.

¹² Samuel Huntington pointed out that not all armed services are equally engaged in arms competitions, which mostly feature only a single service. For each of the 13 arms races he studied between 1840 and 1958, Huntington identified the race as naval, land, air or nuclear and none in the list was given more than a single category. He noted that: "Even if both parties to an arms race possess similar land, sea and air forces, normally the race itself is focused on only one of these components or even on only one weapons system within one's component, usually that type of military force with which they are best able to harm each other." Samuel Huntington, "Arms Races: Prerequisites and Results," in Robert Art and Kenneth Waltz (eds.), *The Use of Force* (Lanham, MD: University Press of America, 1983), 447.

¹³ Cited in Wendell Minnick, "Asia's Naval Procurement Sees Major Growth," *Defense News*, May 19, 2013.

new warship projects.¹⁴ In fact, defense planning in the region since the 1990s has already taken on a growing maritime dimension.¹⁵

However, it needs emphasizing here that “naval forces” are not merely warships. Instead, this thesis understands “naval forces” to encompass the whole gamut of aerial, surface, sub-surface and shore-based capabilities optimized for operation in the maritime domain, and which could exert political influence in the context of interstate rivalries at sea. Besides regular military assets belonging to air, navy and naval aviation forces, “naval forces” also include assets belonging to civilian maritime law enforcement agencies such as coastguards. So-called “white hulls” (and “white airframes” for coastguard aircraft) of these paramilitary organizations have emerged more prominently in the regional maritime scene, often observed to be at the forefront of those maritime flashpoints. Hence their strategic impact cannot be discounted. Taken as a whole, naval forces have witnessed increased emphasis since the end of the Cold War as a result of evolving strategic and economic shifts set in the background of Southeast Asia's physical attributes.

Without going into details, ASEAN naval modernization have undergone a general transformation in procurement patterns from small coastal patrol and combat vessels during the Cold War decades towards larger surface combatants such as corvettes and frigates since the 1990s. These assets are characterized by larger physical capacity which translates into bigger payloads, enhanced firepower and precision, better seakeeping qualities, greater range and endurance, enabling sustained, wide-area operations in the open waters.¹⁶ Furthermore, since the

¹⁴ Figure compiled from the summary of *Naval Systems Projections Database (NSPD)*, American Maritime International (dba AMI International), online available: <<http://www.amiinter.com/>>. The author would like to extend his deepest gratitude to AMI International for kindly sponsoring access to the data.

¹⁵ Commodore Sam Bateman, RAN (Retd), “Maritime Strategy for Medium Powers: An Australian Perspective,” in Ann L. Griffiths and Peter D. Haydon (eds.), *Maritime forces in Global Security: Comparative Views of Maritime Strategy as We Approach the 21st Century* (Halifax, NS: Centre for Foreign Policy Studies, Dalhousie University, 1995), 243.

¹⁶ Commodore Sam Bateman, RAN, “The Functions of Navies in the Southwest Pacific and Southeast Asia,” in Hugh Smith and Anthony Bergin (eds.), *Naval Power in the Pacific:*

beginning of the 1990s defense planning has also exhibited general preferences towards submarines, larger amphibious assault landing ships (AALS) as well as rotary- and fixed-wing aerial assets capable of maritime operations, for example maritime patrol aircraft, multi-role fighter jets armed with air-to-surface (ASM) missile armaments including anti-ship cruise missiles (ASCMs), and multi-role helicopters capable of operating from surface ships or shore stations.¹⁷ Other than new “big ticket” platforms, ASEAN navies also acquire discrete combat systems for the incremental upgrades of pre-existing ones. Starting from the late-1990s onwards, some ASEAN governments also began to raise new coastguard-type agencies or reconstitute pre-existing ones. These “white assets” do not work in isolation. Rather, they are often observed to be operating alongside their “grey-hulled” counterparts.

The net result of modernization is an overall enhancement of ASEAN naval forces' ability to project power further into distant waters. These were hitherto not observed back during the Cold War when ASEAN naval forces undertook mainly constabulary roles in support of the land forces. ASEAN navies can no longer be considered “brownwater” but “greenwater” instead largely as a result of enhanced geographical reach enabled by newly-acquired force projection capabilities.¹⁸ They have already seen much recent action, be it asserting

Toward the Year 2000 (Colorado; London: Lynne Reiner, 1993), pp.131-132; Sam Bateman, “Naval Balance in Southeast Asia: Search for stability,” *Jane's Defence Weekly*, May 11, 2005.

¹⁷ Chas. W. Freeman Jr., “Trends in military technology and the Asia-Pacific region,” *Asia-Pacific Review*, Vol. 4, No. 2 (1997), p. 34; Russ Swinnerton, “The strategic environment and arms acquisitions in South-East Asia,” in Bates Gill and J.N. Mak (editors), *Arms, Transparency and Security in South—East Asia*, SIPRI Research Report No. 13, Stockholm International Peace Research Institute, (New York: Oxford University Press, 1997), 34-35; Julian Schofield, “War and punishment the implication of arms purchases in maritime Southeast Asia,” *Journal of Strategic Studies*, Vol. 21, No. 2 (1998), pp. 82-84; Amitav Acharya, *Constructing a Security Community in Southeast Asia: ASEAN and the problem of regional order* (NY: Routledge, 2001), 37; Richard A. Bitzinger, “A New Arms Race? Explaining Recent Southeast Asian Military Acquisition,” *Contemporary Southeast Asia*, Vol. 32, No. 1 (2010), p. 52.

¹⁸ For analytical purposes, I adopt Hirschfeld's classification of navies. “Brownwater” navies (not including riverine forces) are coastal defense forces largely limited to national territorial

sovereignty claims in disputed waters or conducting disaster relief for example, and will continue to do so. In today and foreseeable future contexts, regional naval capacities will increase in significance. While the acquisition of naval forces is understandable from the standpoint of fulfilling diverse national interests, the question remains: are such capabilities destabilizing? What is the big deal about naval modernization?

1.3. Cause for Concern? The Destabilizing Potential of Modern Naval Armaments?

At first glance of the inherently destabilizing characteristics of certain naval armaments, modernization of naval forces can be a matter of concern. David Mussington and John Sislin defined destabilizing weapons to have fulfilled all or some of these qualities: result in decreased warning time; give one country "breakthrough" capabilities; lead to a broadening of target sets; permit no effective countermeasures; give one side better information concerning another's military preparations; and create hostility.¹⁹ Certain naval armaments fit such characteristics, for example long-range ASCMs which are increasingly precise and equipped with sophisticated electronic counter-countermeasures that can outfox the target's "soft" and "hard" kill defensive systems, thus more difficult to counter. Not to mention submarines equipped with such "breakthrough" (insofar Southeast Asia is concerned) capabilities as air-independent propulsion (AIP) and submerge-

waters (up to 12nm). "Greenwater" navies are those effective within their national EEZs (up to 200-350nm) but with limited extra-regional capabilities. "Bluewater" navies are those which possess open-ocean capabilities (beyond the EEZ and continental shelf limits) and with external support, capable of extra-regional deployments. Global navies are those with worldwide availability, characterized by their ability to operate independently and on a continuous basis in more than one regional ocean basin. Thomas J. Hirschfeld, "Multinational Naval Cooperation Options," Centre for Naval Analyses CRM93-44.90, September 1993, p. 12.

¹⁹ David Mussington and John Sislin, "Defining destabilizing arms acquisitions," *Jane's Intelligence Review*, Vol. 17, No. 2 (February 1995), pp. 88-90. See also Charles A. Meconis and Michael D. Wallace, *East Asian Naval Weapons Acquisitions in the 1990s: Causes, Consequences, and Responses* (Westport, Conn.: Praeger, 2000), 35-36.

launched ASCMs. Since the late-1980s, ASEAN naval forces have either acquired or plan to purchase some of these capabilities.

Modern warships, especially major surface vessels and submarines, are increasingly sophisticated, versatile and yet accordingly expensive.²⁰ Such assets are therefore highly strategic capital assets to the less-endowed smaller navies. Therefore, unlike minor warships such as patrol and fast attack craft, major surface warships are typically found in smaller numbers in these navies. But such highly-valuable assets are very vulnerable to attack; their loss in action may mean a huge blow to operational capabilities and national prestige. Therefore, modern large warships are also known as “one hit ships” – either completely put out of action or sunk in just a single attack.²¹

Numerous historical examples bear testimony to such vulnerabilities. Consider total losses under enemy attack: Israeli destroyer *Eilat* sunk by ASCMs fired from Egyptian *Komar*-class fast attack craft (1967); Argentine cruiser *General Belgrano* torpedoed by British submarine *Conqueror* (1982); and British destroyer *Sheffield* sunk by an Argentine air-launched Exocet ASCM (1982). Even if not sunk, modern warships may suffer damages serious enough to put them out of action, for instance: US Navy frigate *Stark* struck by an “accidental” Iraqi Exocet attack (1987) and Aegis guided missile cruiser *Princeton* struck by an Iraqi mine (1991); as well as most recent being Israeli corvette *Hanit* hit by a Hezbollah shore-launched C-802 ASCM off Lebanon (2006) and the South Korean corvette *Cheonan* reportedly sunk by a North Korean mini-submarine (2010).

The vulnerability of modern warships thus potentially creates a “use them and/or lose them” dilemma for on-scene commanders: either respond decisively to any tell-tale signs of an impending attack or risk losing the platform once the attack has been committed. This is especially so for major surface combatants which are

²⁰ The capital costs of naval programs are so high partly because they involve much more than just acquisition of ships. Shore facilities, logistic support and training personnel require a major investment of human and material resources. Ian Anthony, *The Naval Arms Trade*, SIPRI Strategic Issue Papers (New York: Oxford University Press, 1990), 165.

²¹ Kearsley, *Maritime Power and the Twenty-First Century*, 30-31.

considered extremely “time-critical systems” associated with high “first-shot premiums”.²² Therefore, the impulse for reflexive action in response to signs of impending attack, such as electromagnetic emissions from the adversary’s fire control radar, may provoke accidental clashes.²³ Lodgaard for instance argues that major surface warships have become increasingly vulnerable to conventional attacks by new long-range ASCMs backed by more sophisticated target acquisition sensors. He cautioned that shipboard defenses may come at disproportionate costs for already expensive surface warships, thereby disadvantaging their race against cheaper offensive anti-ship weaponry. This disparity exerts pressure upon or incentivizes the naval combatant to shoot first, thus escalating the risk of accidental or inadvertent clash.²⁴

Incidents involving submarines may magnify pressures on the crew to take drastic action in times of tense confrontation since, compared to surface warships, submarines stand a higher chance of being lost with all hands on board.²⁵ It does not help that modern submarines are equipped with advanced signals intelligence (SIGINT) systems which necessitate close-in intelligence-gathering and surveillance,

²² Malcolm Chalmers, Bjorn Moller and David Stevenson, “Alternative Conventional Defense Structures for Europe: British and Danish Perspectives,” *AFES-PRESS (Arbeitsgruppe Friedensforschung und Europäische Sicherheitspolitik and Peace Research and European Security Studies) Report No. 22*, 1989, p. 19; and Robert Neild, “The Implications of the Increased Accuracy of Non-nuclear Weapons,” in Anders Boserup and Robert Neild (eds.); assisted by David Carlton, *The Foundations of Defensive Defence* (Basingstoke: MacMillan, 1990), 61-62.

²³ It was argued that the moment when a potential attacker’s fire control radar is “locked on” to the target, this qualifies a moment of an “armed attack” that use of force in self-defense may be undertaken. O’Connell, *The Influence of Law on Sea Power*, 82.

²⁴ Sverre Lodgaard and John P. Holdren, “Chapter 1: Naval Arms Control,” in Sverre Lodgaard (ed.), *Naval Arms Control* (International Peace Research Institute, Oslo; London: SAGE Publications, 1990), 12.

²⁵ Consider not just submarine losses back during the world wars and peacetime accidents such as the losses of U.S. nuclear submarines *Thresher* (1963) and *Scorpion* (1968). The Russian submarine *Kursk* which sank in 2000 saw most of its crew killed shortly after disaster struck, whereas the few survivors eventually died of asphyxiation before help could reach them.

thereby sharpening the risks of naval incidents.²⁶ In August 1957, U.S. submarine *Gudgeon* was on an intelligence-gathering operation off the Soviet coast of Vladivostok when it was detected by Soviet naval forces. Under constant depth-charge attacks and being repeatedly denied the chance to snorkel, the submarine came perilously close to firing torpedoes at its Soviet pursuers but thankfully, disaster was averted when the boat was finally allowed to leave.²⁷ The notorious incident of Soviet submarine *U137* found grounded on Swedish shores in 1981 while allegedly conducting an intelligence-gathering mission near a major Swedish naval base; and the most recent example of an alleged Russian underwater intrusion into Swedish waters in October 2014 amidst tension in the Baltic Sea region during the ongoing Ukraine crisis were stark reminders of how submarines can also be embroiled in interstate tensions.

Initiatives of over-zealous on-scene commanders and operators, or lax political control over naval forces in times of tensions further compound the risks involved. Confusion caused by the on-scene situation, compounded by the psychological conditions of personnel involved, may become a recipe for disaster. One example was the shoot-down of an Iranian airliner by US Navy cruiser *Vincennes* in July 1988 when in the heat of battle with Iranian gunboats in the Persian Gulf, the crew mistook it for an Iranian fighter-bomber. Miscommunication is also a potential cause of inadvertent or accidental weapons firing, such as the case of anti-aircraft missiles

²⁶ Modern military electromagnetic emitters typically work on higher frequencies hence shorter wavelengths, necessitating SIGINT platforms to move closer to the target platforms or foreign shores in order to 'sniff' at those emissions. Desmond Ball, "Intelligence collection operations and EEZs: the implications of new technology," *Marine Policy* 28 (2004), p. 79; Mark J. Valencia, "Conclusions, regime building and the way forward," *Marine Policy* 28 (2004), p. 89; and Moritaka Hayashi, "Military and intelligence gathering activities in the EEZ: definition of key terms," *Marine Policy* 29 (2005), p. 130.

²⁷ The *Tang*-class submarine is diesel-electric powered. Therefore snorkeling is necessary for the *Gudgeon* to replenish batteries and ventilate the interior environment; otherwise the boat would either have to sink or surface and surrender to the Soviets. This dire situation prompted the submarine commander to open torpedo tube outer doors, signifying the intent to fire anytime and such brinksmanship compelled the Soviets to back off. Time-Life Inc. (ed.) *The New Face of War: Hunters of the Deep* (London: Caxton Publishing Group, 2003), 79-82.

launched by U.S. aircraft carrier *Saratoga* at Turkish destroyer *Muavenet* during an exercise in late 1992.

Are there parallels in Southeast Asia? Armed clashes in Southeast Asian waters did happen in the late 1980s and early 1990s. The Thai-Cambodian border clashes in 2008 was a recent reminder that accidental or inadvertent military action may happen in Southeast Asia. But the region has not seen similar incidents at sea in the more recent decades. Existing studies tend to raise the specter of gunboat diplomacy, defined by Cable to be “the use or threat of limited naval force, otherwise than as an act of war, in order to secure advantage, or to avert loss, either in the furtherance of an international dispute or else against foreign nationals within the territory or the jurisdiction of their own state”.²⁸

Booth wrote that “warships can have deleterious effects on foreign policies. They can shape or undermine a country's efforts in unpredictable and uncertain ways,” also pointing out that the forward deployment of even a single warship can be a concern since provocations may happen without large-scale naval deployments.²⁹ Such potentialities lurked in the 1990s when Southeast Asia was experiencing the unprecedented spate of arms acquisitions. Even till this day, not just scholars but policy elites continue to warn about the potential dangers of military modernization. For example, Singapore's Defense Minister Ng Eng Hen cautioned not long ago:

According to the Stockholm International Peace Research Institute (SIPRI), defence spending in Asia has increased by 72% from 2001 to 2011 over one decade, from US\$177 billion to US\$305 billion. It was six times that of Europe's 12% in the same time period. So Asia faces a different type of challenge – to avoid an arms race and to

²⁸ James Cable, *Gunboat Diplomacy: Political Applications of Limited Naval Force* (London: Chatto & Windus, for the Institute for Strategic Studies, 1971), 21.

²⁹ Booth, *Navies and Foreign Policy*, 103-108.

reduce the potential for strategic miscalculations and misunderstandings even as they modernise.³⁰

In the context of intractable interstate rivalries at sea, the risk of accidental or inadvertent armed clashes can be sharpened by the offensive nature of modern naval armaments combined with a myriad of factors such as psychological stress, over-zealousness, miscommunication and lax political control over militaries.³¹ Seen in this light, it appears that naval modernization can be a source of concern. Based on the history of gunboat diplomacy in practice, Cable observed that there has been continued and frequent use, in one form or another, of limited naval force as a supplement to diplomacy and an alternative to war.³² This observation continues to hold true decades following the publishing of Cable's work; gunboat diplomacy can be rightly deemed as a permanent "fixture" of international politics.

So long as national maritime interests continue to exist, naval forces remain a useful, flexible foreign policy instrument. Moreover, it needs emphasis here that the application of gunboat diplomacy can still be controlled and calibrated. This is evident in the maritime standoff between China and Vietnam over Chinese oil rig HYSY981 in disputed waters off the Paracel Islands. Even though the standoff lasted for a rather sustained period (May-July 2014), involved major deployment of assets, ramming of one another's vessels and use of water cannon, both sides on the whole still exercised restraint and did not repeat the history of naval clash between China and South Vietnam off the same group of islands in early 1974.

³⁰ Keynote Address by Minister for Defence, Dr Ng Eng Hen, at the 14th Asia Pacific Programme for Senior Military Officers, Ministry of Defence, Republic of Singapore, August 8, 2012.

³¹ Lawrence Prabhakar warned that given loose state control over some ASEAN militaries the intensification of any dispute "has always resulted in a spiral of immediate responses and counter-responses generated by the militaries of the belligerent states – particularly the naval and air forces." W. Lawrence S. Prabhakar, "The regional dimension of territorial and maritime disputes in Southeast Asia: Actors, disagreements and dynamics," in Kwa Chong Guan and John K. Skogan (eds.), *Maritime Security in Southeast Asia* (London and New York: Routledge, 2007), 44.

³² Cable, *Gunboat Diplomacy*, 69.

The oil-rig standoff constitutes just one of the many episodes where naval forces involved did demonstrate restraint and avoided drastic escalation to more serious crises. It is noteworthy that such instances happened in the context where regional naval forces already possess offensive, hence supposedly destabilizing, capabilities and are in the midst of acquiring more. As such, while it retains valid grounds for caution for the sake of prudence, the existing scholarship falls short of a holistic assessment of the consequences of ASEAN naval modernization. It does not take into account the way naval armaments influence strategic behavior.

The way ASEAN naval modernization has been studied in the existing scholarship could have constituted the reason why a holistic understanding of its consequences has been lacking, as the following discussion shall demonstrate.

1.4. The Bias towards Major Navies?

Notwithstanding their significant post-Cold War growth, the scope of specialized studies on ASEAN naval forces remains limited. Because of the prevailing Cold War security milieu, research focus tended to be on primarily the American and Soviet naval buildups. However, by the end of the Cold War the anticipated scenario of a major open-ocean confrontation between the North Atlantic Treaty Organization (NATO) and Soviet navies, involving such major assets as nuclear-powered submarines, aircraft carriers, long-range strategic bombers and major surface combatants did not materialize. Instead of envisioning a major naval contest for vital SLOCs in the Atlantic open seas, the emphasis turned towards the Asian littorals. As navies in the West began to downsize as part of the post-Cold War "peace dividend", the focus shifted to Asian navies which experience the opposite fortunes of their Western counterparts.

The focus was not even on all Asian navies. China's navy – the People's Liberation Army Navy (PLAN) – was cast into the limelight because of its noteworthy capability improvements since the early 1990s. The interest on China's burgeoning naval power is closely associated with Beijing's asymmetrical military strategy touted by foreign analysts as "anti-access and area denial" (A2/AD), conceived to deter and if necessary, defeat American military intervention following the Taiwan Strait crisis

in 1995-96.³³ The envisaged scenario is not an open-ocean confrontation between the Chinese and U.S. navies but a more limited form of warfare waged in the littorals.³⁴ This envisaged scenario further captured public imagination following revelations of close-proximity Sino-American maritime encounters, such as the one between aircraft carrier *Kittyhawk* and a PLAN diesel-electric powered attack submarine in November 2006, not to forget the earlier aerial incident involving a U.S. Navy (USN) EP-3 surveillance plane and a PLAN Air Force (PLANAF) J-8 interceptor in April 2001 off Hainan Island. More recent Sino-American naval encounters and lately, the PLAN's forays into the Indian Ocean, continued to fuel intensely keen research interest on the PLAN within the Indo-Pacific littoral context.

Therefore, studies on the PLAN have become a "fashion" just like how studies on the Soviet Navy became popular during the Cold War. A considerable trove of research publications have been created on this subject. Besides the PLAN, there are also works albeit to a lesser extent on other Indo-Pacific major navies such as those of India and Japan. The overwhelming attention on these major navies is understandable in view of their owners' diplomatic, economic and military statures. Minor (or lesser) navies of the Indo-Pacific, such as ASEAN countries', continue to play "second fiddle" to those regional major players in the contemporary literature on Asian navies. The picture becomes rather peculiar: ASEAN naval forces led an obscure existence in the shadows of the major navies. It is as if these lesser navies play negligible or no role at all in shaping the Indo-Pacific maritime dynamics.³⁵ This

³³ Read for instance Andrew S. Erickson, "New US Maritime Strategy: Initial Chinese Responses," *China Security*, Vol. 3, No. 4 (Autumn-2007), pp. 40-61; Paul Dodge, "Circumventing Sea Power: Chinese Strategies to Deter US Intervention in Taiwan," *Comparative Strategy*, Vol. 24, No. 5 (2005), pp. 415-30; James R. Holmes and Toshi Yoshihara, "The Influence of Mahan upon China's Maritime Strategy," *Comparative Strategy*, Vol. 24, No. 1 (2005), pp. 23-51.

³⁴ The importance of littoral naval warfare is highlighted by works such as: Rear Admiral (USN, ret.) George R. Worthington, "An Emerging Coastal Warfare System," *USNI Proceedings*, Vol. 131, Issue 10 (Oct-2005); Robert O. Work, "Small Combat Ships and the Future of the Navy," *Issues in Science and Technology*, Vol. 21, No. 1 (Oct-2004); and Thomas Kempf, "Naval Trends in the 21st Century," *USNI Proceedings*, Vol. 127, Issue 3 (Mar-2001).

³⁵ For example, in a book review published in *Contemporary Southeast Asia* for this edited volume: Mohan Malik (ed.), *Maritime Security in the Indo-Pacific: Perspectives from China*,

overlooks the fact that ASEAN naval modernization carries global significance because of the strategic location of these countries straddling the two oceans of the Indo-Pacific.³⁶

This preoccupation not only ignores recent significant developments small navies underwent but also creates a potential conceptual issue of conflating them with their major counterparts. But first of all it is important to define what a “small navy” is. This is not a straightforward exercise, as Speller and his co-authors noted:

It is surprisingly difficult to define clearly what one means by the term ‘small navy’. The definitional challenge is not helped by the fact that so little has been written about small navies as a group. Perhaps the easiest approach would be to state that a small navy is one that is not large. Unfortunately this simply shifts but does not resolve the problem. What is a large navy or a medium sized navy? The US Navy is clearly large, and when measured against it all others seem small, but this is not entirely helpful. The situation is complicated by the fact that many navies might prefer not to be called ‘small’, whether for reasons of pride, politics, or delusion.³⁷

The conceptual difficulty surrounding “small navies” thus boils down to physical size (whether it ought to be measured as an absolute or relative value) as well as national perceptions and preferences. In one of the small handful of scholarly works dealing with this issue, Till suggested that classification of navies needs to take into account the size and nature of the fleet; geographic reach; function and capability; access to high-grade technology; and reputation.³⁸ He also cautioned that focus on size alone is insufficient given that quantitative measures provide a very unreliable guide to capability and no guide at all to intended roles and

India and the United States (Lanham, Maryland: Rowman and Littlefield, 2014), I highlighted the scant attention paid to ASEAN and its member states, notwithstanding the pivotal geostrategic significance of Southeast Asia within the Indo-Pacific construct.

³⁶ Michael A. Morris, *Expansion of Third-World Navies* (Basingstoke: MacMillan, 1987), 264

³⁷ Ian Speller, Deborah Sanders and Michael Mulqueen, “Introduction,” in Michael Mulqueen, Deborah Sanders and Ian Speller (eds.), *Small Navies: Strategy and Policy for Small Navies in War and Peace*, Corbett Centre for Maritime Policy Studies Series (Farnham: Ashgate Publishing Limited, 2014), 5.

³⁸ Geoffrey Till, “Can small navies stay afloat?” *Jane’s Navy International*, May 1, 2003.

missions. The conceptual differences between great and small navies, Till argues, are more a matter of degree than of kind. He further postulates that there is fundamentally no real difference between large and small navies apart from the relative scale of their ambitions in terms of what they aim to do, where they need to do it, the size of their commitments and the challenges they face in defending them.³⁹

Major and small navies may have similar functions despite different geographical scopes and both seek to attain as balanced a set of capabilities as possible should political will and economic health permit. Nevertheless, their force structures and doctrines still differ as a result of disparities in the scope of national interests and physical capacities. Major navies tend to cater to their governments' broader regional and global interests, whereas small navies cater to a more limited set of national interests tied more closely to their immediate environs. For example, the number of international security missions participated and scale of asset commitment per mission would be smaller for small navies compared to major navies.

A small navy may possess, say, six frigates optimized for bluewater operations but this capacity certainly places constraint on its ability to commit to "out-of-area" missions when compared to a major navy that has 18 such warships. Small navies may possess discrete bluewater capabilities but their force structures on the whole do not render them bluewater navies. In other words, small navies lag behind their major counterparts in terms of flexibility, defined as the navy's ability to perform a variety of missions and operations simultaneously and in different geographical locations. This characteristic is primarily a function of surplus; i.e. the total number of ships and aerial assets of specific types in service such that the larger the force structure, the greater the naval flexibility.⁴⁰ Force structures of small navies, even if

³⁹ Ibid. See also, Geoffrey Till, *Seapower: A Guide for the Twenty-First Century*, Second Edition (NY: Routledge, 2009), 118.

⁴⁰ Michael Lindberg and Daniel Todd, *Brown-, Green- and Blue-water Fleets: The Influence of Geography on Naval Warfare, 1861 to the Present* (Westport, Connecticut: Praeger, 2002), 197.

balanced, constrain strategic policy options. Kearsley nicely summed up these differences:

Small navies are those with the ability to reach only out to the limits of their EEZ and thus have no need or no material capability to conduct naval missions that are above the 'diplomacy' mission. Inherent in this assumption is the belief that small navies are really only acquired for the defensive patrolling of coastlines and the enforcement of regulations in their national waters, rather than the anticipation of global contingencies. Therefore the theories that are centred on the world's major naval powers in large part are not directly pertinent to the planning to smaller navies.⁴¹

Hence, even though small navies are in many respect "big navies in miniature" as Till described,⁴² they are different from major navies where force structure and doctrine are concerned. Therefore, small navies warrant attention and study separate from the major ones. There is a small coterie of naval specialists who have endeavored to derive a seapower theory for those small, littoral states and their navies, drawing from the Northern European experience in particular. Lindberg's work, which attempted to validate the existence of a specific category of such forces known as "coastal defense navies", is particularly notable.⁴³ Kristiansen defined navies of coastal states as those which typically exhibit certain doctrinal differences reflecting their inherent weaknesses while at the same time exploiting asymmetrical means.⁴⁴ Calling them "coastal navies" (used synonymously with "coastal defense navies"), Borresen argued that the equipment and doctrines of

⁴¹ Kearsley, *Maritime Power and the Twenty-First Century*, 108.

⁴² Geoffrey Till, "Chapter 2: Are Small Navies Different?" in Mulqueen et al, *Small Navies*, 31.

⁴³ Michael S. Lindberg, *Geographical Impact on Coastal Defense Navies: The Entwinning of Force Structure, Technology and Operational Environment* (Basingstoke, Hampshire: Macmillan Press Ltd, 1998).

⁴⁴ Asymmetric elements such as the exploitation of international media to deter naval coercion may be injected into the strategic equation, making it difficult for stronger powers to determine the consequences in order to exert their full potential in littoral operations. Tom Kristiansen, "The Interwar Years: Naval Disarmament, Collective Security and Preparations for War," in Rolf Hobson and Tom Kristiansen (eds.), *Navies in Northern Waters 1721-2000* (London, New York: Frank Cass, 2004), 188.

small navies reflect strategically defensive roles within EEZ or continental shelf limits, and wrote:

An efficient and well-run coastal navy makes important contributions to local and regional stability; especially it is inherently defensive in nature of orientation in that it does not represent a threat to anyone who does not venture into its local area of operations, while at the same time being able to maintain maritime law and order, and prevent destabilizing actions by external actors.⁴⁵

Those “external actors” Borresen mentioned plausibly refer to Major Powers and their more powerful navies. To compensate for this asymmetry especially in physical capacity, small navies may resort to other means, for instance exploiting coastal topography, relying on international laws and employing joint action to deter large-scale naval aggression through infliction of punishment to safeguard national maritime interests. In his work on small navies and their operating doctrine in the geographical context of narrow seas, Vego pointed out that small navies may have significant impact against larger oceangoing adversaries within the confines of narrow and enclosed waters.⁴⁶ Other writers who looked at small navies reached similar conclusions.⁴⁷ While it is true that small navies present less of a threat to the major navies in view of the asymmetries in physical sizes especially, small navies may still pose considerable challenges to their contemporaries within the same league.

This survey of existing literature yields the following observations. First, like naval studies focused on the West performed back during the Cold War, contemporary studies on the Indo-Pacific tend to look at major navies and less attention has been

⁴⁵ Jacob Borresen, “The Sea Power of the Coastal State and the Management of Maritime Resources,” in Hobson and Kristiansen (eds.), *Navies in Northern Waters 1721-2000*, 274.

⁴⁶ Milan N. Vego, *Naval Strategy and Operations in Narrow Seas*, second revised edition (London: Frank Cass Publishers, 2003).

⁴⁷ Read for example: Charles W. Koburger, Jr., *Narrow Seas, Small Navies, and Fat Merchantmen: Naval Strategies for the 1990s* (New York, West Port, Connecticut, London: Praeger, 1990); Kearsley, *Maritime Power and the Twenty-First Century*; Morris, *Expansion of Third-World Navies* and Paul T. Mitchell, “Third World Navies Revisited: Re-examining Measures of Proliferation in Small Fleets,” in Griffiths and Haydon (eds.), *Maritime forces in Global Security*.

given to small navies. Second, small navies clearly warrant a separate study from their major counterparts, yet existing studies remain Western-centric drawing mainly from the Northern European context. But it is not enough to just use the Northern Europe-centric lens to analyze all small navies worldwide. While it may be useful to tap on the Northern European example to examine small navies in view of certain commonalities such as resource constraints, there are still contextual differences that need to be taken into account. For one, Southeast Asia represents a different geopolitical context from Northern Europe. This means that ASEAN naval forces may exhibit procurement patterns and force structure development pathways different (or perhaps more nuanced) from their Northern European contemporaries. Table 1 below outlines the contextual similarities and differences of the small navies between these two regions.

Table 1: Contextual Differences between Northern European and ASEAN Naval Forces

	Northern Europe	Southeast Asia
Sample countries	Denmark, Finland, Germany, Norway, Poland and Sweden	Brunei, Indonesia, Malaysia, Myanmar, The Philippines, Singapore, Thailand and Vietnam
Size and nature of fleet	Limited; non-uniform technical competencies and readiness	Limited; non-uniform technical competencies and readiness
Geographic reach	Brown- and Greenwater	Brown- and Greenwater
Function and capability	Coastal defense and limited extra-regional power projection	Coastal defense and limited extra-regional power projection
Access to high-grade technologies	Yes; especially through advanced domestic defense industrial sources and as part of alliance joint procurement and R&D	Yes; but mainly through external sourcing and to a lesser extent, domestic defense industrial sources
Reputation	Yes	Non-uniform
Resource constraints	Yes	Yes
Alliances	Yes, at EU or NATO levels	No; only bilateral arrangements with extra-regional powers but not intra-ASEAN at bilateral and multilateral levels
Burden-sharing	Yes; less so in the post-Cold War and present context	No; throughout the past till present contexts

Quest for balanced capabilities	Yes; insofar small navies are concerned with respect to limited force projection capabilities	Yes; insofar small navies are concerned with respect to limited force projection capabilities
Consequence of external balancing	Yes but still as part of an alliance effort for many; not the case in the 1990s but in recent times, particularly with Russia in mind	Yes; in recent times particularly with China in mind for some ASEAN member states; but without alliance it is more unlikely for external balancing to succeed
Risks of internal balancing	No, or at least very much reduced because interstate disputes were largely resolved and there is institutional capacity to resolve and manage differences	Yes, because interstate disputes in the maritime domain not all resolved, and ASEAN hampered by weak institutional capacity to resolve differences

Source: By author, based on and expanding upon Till's formulation for classifying navies; Till, "Can small navies stay afloat?" 2003.

Bearing in mind the contextual differences, this study seeks to contribute the Southeast Asian angle to the small navies' literature. This is in no small part motivated by the relative dearth of research on small navies in Asia. Existing studies have so far been subsumed within the broader literature on Indo-Pacific naval and military modernization,⁴⁸ which has its own limitations as well.

1.5. Existing Studies on ASEAN Naval Forces Tend to be Too Descriptive

It is misleading to say there are absolutely no specific studies on then-extant ASEAN naval forces. In the 1990s, what amounts to a "cottage industry" of studies on ASEAN naval forces sprouted into being in response to the maritime-oriented ASEAN

⁴⁸ Such literature includes Michael A. McDevitt and Catherine K. Lea (eds.), "CNA Maritime Asia Project Workshop Two: Naval Developments in Asia," Conference Report published in August 2012; Lawrence W. Prabhakar, Joshua H. Ho and Sam Bateman (eds.), *The Evolving Maritime Balance of Power in the Asia-Pacific: Maritime doctrines and nuclear weapons at sea* (Hackensack, NJ: World Scientific; Singapore: Institute of Defence and Strategic Studies, 2006); W. Lawrence S. Prabhakar, "Maritime Doctrines and Transformation in the Asia-Pacific," *Maritime Affairs*, Vol. 2, No. 2 (Winter-2006), pp. 1-28; Richard H. Schultz and Robert L. Pfaltzgraff (eds.), *The Role of Naval Forces in 21st century Operations* (Washington D.C.: Brassey's, 2000); and Sam J. Tangredi (ed.), *Globalization and Maritime Power* (Washington D.C.: National Defence University Press, 2002).

military modernization processes. During the immediate post-Cold War period, while the spotlight shifted to the emerging Asian major navies such as those of China and India, this “cottage industry” began to gain attention. Studies performed back then tended to be primarily descriptive in nature. They were insightful and their authors paid close attention to details about the histories and inventories of capabilities acquired by these naval forces.⁴⁹ A good bulk of these works asked not just the “what” but also “why” questions. One important point to note is that most of these studies did not look at naval forces per se, but couched their inquiries within the broader “military modernization” which was generally acknowledged to be oriented towards the maritime dimension.

The general thrust of existing research had been to identify a range of motivations which underpin the procurement preferences of ASEAN naval forces. Narine in particular neatly divided these drivers into three types: interactive, semi-interactive and non-interactive.⁵⁰ According to this formulation, interactive drivers are generally factors originating from interstate dynamics, for instance unresolved territorial disputes and sovereignty issues; concerns regarding “bargaining power” or “strategic leverage” in the event of low-intensity interstate conflicts as well as technologically-driven imitation (i.e. “catching up with the Joneses”) which are not

⁴⁹ Read for instance G.V.C. Naidu, “ASEAN Navies in a perspective – Part I,” *Strategic Analysis*, Vol. XX, No. 5 (Aug-1997), pp. 687-98; G.V.C. Naidu, “ASEAN Navies in a perspective – Part II,” *Strategic Analysis*, Vol. XX, No. 6 (Sep-1997), pp. 913-26; G.V.C. Naidu, “ASEAN Navies in a perspective – Part III,” *Strategic Analysis*, Vol. XX, No. 7 (Oct-1997), pp.1059-74; International Institute of Strategic Studies, “South-east Asia’s naval build-up,” *Strategic Comments*, Vol. 3, No. 6 (Jul-1997), pp. 1-2; Derek da Cunha, “ASEAN Naval Power in the New Millennium,” in Jack McCaffrie and Alan Hinge (eds.), *Sea Power in the New Century: Maritime Operations in Asia-Pacific beyond 2000* (Australian Defence Studies Centre, 1998); Patrick N. Bright, “Asean – Naval Forces overview,” *Naval Forces*, Vol. XXII, No. 2 (2001); Jürgen Schwarz, Wilfried A. Hermann and Hanns-Frank Seller, *Maritime Strategies in Asia* (Bangkok: White Lotus Press, 2002); International Institute of Strategic Studies, “Southeast Asia’s naval forces,” *Strategic Comments*, Vol. 21, No. 1 (Feb-2006), pp. 1-2; and Joshua Ho, “Naval Force Developments in Southeast Asia,” *Maritime Affairs*, Vol. 2, No. 2 (Winter-2006), pp. 131-59.

⁵⁰ Shaun Narine, *Explaining ASEAN: Regionalism in Southeast Asia* (Boulder, Colorado: Lynne Rienner Publishers, Inc., 2002), 69-70.

necessarily attributed to animosities. Semi-interactive drivers revolve around mainly structural factors such as sensitivity towards the geopolitical environment as well as general doctrinal and technical trends, whereas non-interactive drivers are typically endogenous, such as inter-service rivalries and bureaucratic malpractices.

A review of the literature on ASEAN naval modernization yielded a series of insights, classified under Narine's three categories, presented in Table 2:

Table 2: Drivers of ASEAN Naval Modernization in the 1990s

Category	Types of Drivers Identified
Interactive	<ul style="list-style-type: none"> Unresolved interstate territorial and boundary disputes Historically-based ethnic and political tensions in intra-ASEAN relations Desire for "bargaining power" and "strategic leverage" in times of crisis Technologically-driven imitation ("catching up with the Joneses")
Semi-Interactive	<ul style="list-style-type: none"> Desire for defense self-reliance Perceived reduction of American security umbrella in the region Geopolitical uncertainties due to the rise of local major powers Need to exercise greater maritime responsibilities permitted by UNCLOS Doctrinal shifts from internal security to conventional warfighting Technical and doctrinal lessons from Falklands and Persian Gulf Wars
Non-Interactive	<ul style="list-style-type: none"> Supply-side pressures from a "buyers' arms market" Promises of technological transfers from arms deals Inter-service rivalries within defense and security establishments Military politics and influence over government decision-making Domestic security imperatives Bureaucratic malpractices such as corruption Armaments as symbols of prestige and national virility Life cycle and block obsolescence of in-service equipment

Sources: The studies consulted in order to derive this Table cannot be presented here because of the sheer volume involved, and can be found in the [Appendix A1](#).

For a while there was a hiatus following the Asian Financial Crisis in 1997/98 which seriously beset the naval modernization programmes of many ASEAN governments. However, the "cottage industry" picked up steam again as the ASEAN region recovered gradually from the economic malaise and thereafter revived their programmes placed earlier on the backburner. Moreover, there was interest

evinced by regional navies in more sophisticated capabilities, especially stealth surface combatants, large AALS and submarines. A review of the literature focusing on naval modernization in the early-2000s yielded another list of factors presented in Table 3. The list of drivers during that period also reflects the prevailing geopolitical situation as a result of tumultuous events following the September 11, 2001 terror attacks on the U.S.

Table 3: Drivers of ASEAN Naval Modernization in the Early-2000s

Category	Types of Drivers Identified
Interactive	<ul style="list-style-type: none"> Unresolved interstate territorial and boundary disputes Lingering intra-ASEAN mutual suspicions Military buildup and perceived growing assertiveness of rising China Desire for "bargaining power" and "strategic leverage" in times of crisis Technologically-driven imitation ("catching up with the Joneses")
Semi-Interactive	<ul style="list-style-type: none"> Desire for defense self-reliance Broadened security challenges, especially non-traditional threats Perceived American security shift from Asia to Afghanistan and Iraq Geopolitical uncertainties due to Great Power rivalries Need to exercise greater maritime responsibilities permitted by UNCLOS
Non-Interactive	<ul style="list-style-type: none"> Supply-side pressures from a "buyers' arms market" Promises of technological transfers from arms deals Inter-service rivalries within defense and security establishments Military politics and influence over government decision-making Domestic security imperatives Bureaucratic malpractices such as corruption Armaments as symbols of prestige and national virility Life cycle and block obsolescence of in-service equipment

Sources: Studies consulted can be found in the [Appendix A1](#).

When comparing Tables 2 and 3, it is interesting to note that the later study not only retained many of the drivers identified in the earlier study, it also broadened the list. This created a source of analytical concern. None of the existing studies has been able to identify the primary factor(s) that motivate ASEAN naval modernization. These studies generally converged on the notion that each of these drivers plays a role in some way or another. They also agreed that ASEAN governments tended to predicate naval modernization on contingency planning, which is part of strategic

hedging against geopolitical uncertainties. To be sure, there is nothing fundamentally wrong in this general conclusion when all of these studies were seen together as a whole, albeit risking non-parsimony. But given those drivers exist in various combinations and in various levels of importance according to disparate national contexts in such a diverse region as Southeast Asia, there is in the first place no “one-size-fits-all” model which can be applied to every country’s modernization process. Yet by attempting to broaden this list to explain plausible motivations behind ASEAN naval modernization, as Russ Swinnerton aptly pointed out, this existing pool of studies literally became a “grab bag” of all conceivable drivers – all of which seem relevant to varying extent – thus undermining their explanatory power and policy utility.⁵¹

Lately this “cottage industry” has experienced a renaissance. Instead of subsuming ASEAN naval modernization within the rubric of regional military modernization as earlier works had done, there is new attempt at specifically studying ASEAN naval forces. In this regard, two recent works stood out. One, by Goldrick and McCaffrie, provides a comparative study of ASEAN navies.⁵² This book conducts a systematic, broad survey of the history and force structural development of each navy in the region (even including the long non-existent South Vietnamese Navy) and examined their future roles in the backdrop of contemporary geopolitical shifts.⁵³ The authors concluded that, in view of changes in the regional landscape and acquisition of force projection capabilities, ASEAN navies could exert significant influence on maritime security in the broader Asia-Pacific region in the face of major navies. Notably in this regard, the authors devised a means of classifying

⁵¹ The strategic basis for ASEAN military buildup has neither been entirely clear nor public since the various interactive, semi- and non-interactive driving forces are judged to be relevant to certain extent. Swinnerton, “The strategic environment and arms acquisitions in South-East Asia,” 34.

⁵² James Goldrick and Jack McCaffrie, *Navies of South-East Asia: A comparative study* (Abingdon; New York: Routledge, 2013).

⁵³ As Till pointed out, the detailed study of almost any “small navy” is likely to show considerable variations over time in response to their changing domestic and international context. Accordingly, such a small navy is likely to be different from itself over the years. Geoffrey Till, “Chapter 2: Are Small Navies Different?” in Mulqueen et al, *Small Navies*, 30.

ASEAN navies into four categories.⁵⁴ While classifying navies facilitates better understanding of their evolving capabilities for undertaking expanded roles and missions, the inquiry could have gone further. The book did look at the driving factors behind the individual ASEAN countries' naval buildups. However, this approach is not too dissimilar from the previous existing studies, thereby reducing this book's explanatory power and policy utility.

The second notable major work that focuses specifically on ASEAN naval forces looks at the nature, causes and consequences of ASEAN naval modernization.⁵⁵ Unlike Goldrick and McCaffrie, it pays greater attention to the drivers of ASEAN naval modernization. This volume also represents a further attempt at asking whether ASEAN naval forces follow the same modernization pathway as their major Indo-Pacific counterparts. Most noteworthy was the attempt to look into the consequences of ASEAN naval modernization, with the key question being: do modernization efforts herald the start of a destabilizing naval arms race?⁵⁶ This is a salient question yet one that has been long recurring within the existing literature. So far, resolution to this problematique has been far from conclusive. Existing studies often relied on the arms-racing theory in particular, which is debatable, as an analytical lens for determining the consequences of ASEAN naval modernization.

Most notably, however, existing studies on the consequences of ASEAN naval modernization converged on this "conventional argument" (or rather, prediction): even though there is no arms race but arms competition at best, there is still a need

⁵⁴ According to this formulation, Rank 1 (Adjacent Shipping Protection) includes Malaysia, Singapore and Thailand; Rank 2 (Offshore Territorial Defense) includes Indonesia and Vietnam; Rank 3 (Inshore Territorial Defense) includes Brunei Darussalam and Myanmar; and finally Rank 4 (Constabulary) consists of Cambodia and the Philippines. Laos is a landlocked country and merely has a riverine force at best, and thus not included. Goldrick and McCaffrie, *Navies of South-East Asia*, 11-13.

⁵⁵ Geoffrey Till and Jane Chan (eds.), *Naval Modernisation in South-East Asia: Nature, causes and consequences* (London and New York: Routledge, 2014).

⁵⁶ See in particular, Bernard F.W. Loo, "Naval modernisation in South-east Asia: modernisation versus arms races," in Till and Chan (eds.), *Naval Modernisation in South-East Asia*, 283-97.

for prudence since strategic intent changes faster whereas armaments require gestation time to operationalize. This conclusion is premised on the perceived risks of contingency planning-based defense preparations, set in the context of geopolitical uncertainties, which potentially risks provoking a naval arms race.⁵⁷ To augment this conclusion, the existing scholarship also tends to emphasize the abysmal utility of regional institutions which promote economic and political interdependence among states, identifying this factor as an incentive for regional governments not to adhere to the rules and norms of interstate behavior and thereby increasing the likelihood of states resorting to force to address their disputes. The volatile Indo-Pacific geopolitical milieu simply provides ammunition to reinforce this "conventional argument". This issue shall be dealt with in detail in Chapter Two.

But similar to how the existing literature putting forth a whole list of plausible drivers, this conventional argument on the consequences of naval modernization also carries little policy utility beyond sounding a cautionary (at times alarmist) note. The limitations of existing approaches, which are fully tackled in Chapter Two, are summarized here.

Firstly, the central theme revolving around arms races is the concept of the security dilemma, in which supposedly defensive arms buildups could be (mis)construed as an offensive preparation which provokes a spiral of counter- and counter-countermeasures. The underlying assumption is that the concerned parties view, by choice, one another's defensive buildups as necessarily motivated by strategic ill intent. Nonetheless, this is not always the case; nation-states may view one another's arms buildups as beneficial instead. They may even be cognizant of the risks of a security dilemma and therefore *consciously* seek to avoid being drawn into or entangled by one. Instead of engaging in an action-reaction spiral,

⁵⁷ David Denoon opined that when defense preparations are based on contingency-planning, "there is no obvious boundary between taking prudent steps to prepare for future challenges and taking actions that could be perceived as threatening others and thus stimulate hostile responses." Quoted in J.N. Mak and B.A. Hamzah, "The External Maritime Dimension of ASEAN Security," *Journal of Strategic Studies*, Vol. 18, No. 3 (Sep-1995), pp. 123-46.

governments may actually feel more inclined towards confidence-building and cooperative measures in order to avoid the potential dire consequences of naval modernization. Pronouncements by ASEAN statesmen would attest to that.

Secondly, the conventional argument mentioned earlier is premised on the assumption that offensive armaments acquired for defensive purposes provoke insecurity; and because of their ability to project power they therefore entail the risks of interstate armed confrontation. This assumption revolves around the inherent technical characteristics of armaments; some weapons are designed and optimized more for offensive than defensive purposes, and vice versa. Yet offensive armaments are not necessarily destabilizing, because it depends on the way they are deployed. Moreover, naval armaments should not be seen in their discrete forms but as systems within systems, and as part of a larger force structure. Instead of linearly inferring from the inherent characteristics of armaments to derive a conventional argument about the consequences of naval modernization, it is necessary to examine how such characteristics influence strategic behavior.

It is true that armaments inherently possess the potential to harm the interests of other states. There is also merit to the argument that regional political institutions are weak and therefore creating “windows” for states to exploit by resorting to force to address their grievances with one another. Yet it is important to point out that the counter-arguments are also plausible. While not disagreeing with these positions, this thesis proposes looking at the consequences of ASEAN naval modernization from a more nuanced perspective. It is plausible that states are cognizant of the inherent risks, especially of certain types of naval armaments, which therefore influence procurement preferences, force structure development pathways as well as their deployments. The existing scholarship propounds a conventional argument that is at best a prediction, yet falls short of examining more closely how naval armaments influence strategic behavior of states. This study therefore seeks to revisit and address this major research gap.

1.6. Research Statement

This thesis proposes a heuristic approach for rethinking the consequences of ASEAN naval modernization by examining how naval armaments actually influence strategic behavior. Instead of merely inferring the consequences of naval modernization from the inherent characteristics of armaments and the perceived geopolitical context, in the way the existing scholarship has done, this thesis holistically examines both force structure and strategic behavior – in terms of policy discourses and actions – using Southeast Asia as the case study.

Because of the versatile, multi-functional nature of naval power and its utility within such ambiguous international medium as the seas, there will always be elements of competition and cooperation. For instance, while navies can be employed for gunboat diplomacy, they can also be utilized for the common good. So long as mankind continues to rely on the seas, such dual characteristic of naval power as a foreign policy instrument and the attendant risks of its potential use in pursuit of aggressive national policies remain an inseparable part of international politics.

However, using the proposed heuristic approach, this thesis argues that naval modernization in Southeast Asia is not necessarily destabilizing and such processes may even be stability-inducing as well. Four hypotheses are in order.

Hypothesis #1 States may discern the destabilizing potential of naval armaments and exercise unilateral naval arms control

Hypothesis #2 States may moderate their policy discourses especially during interstate crises

Hypothesis #3 States may intensify their engagements in confidence- and security-building as well as cooperative measures

Hypothesis #4 States may de-emphasize and calibrate the limited threat and use of naval force

The exercise of unilateral naval arms control may vary from one country to another. Nevertheless, this thesis hypothesizes that states may seek to ameliorate potential misperceptions by others in their naval buildups by undertaking deliberate policies regarding procurement choices and how the naval force structures are developed. Unilateral naval arms control may originate from the de-emphasis on highly-destabilizing naval armaments while doing otherwise for the less-destabilizing categories.

Besides unilateral naval arms control, states may choose to convey their benign strategic intent through other forms of policy behavior that is stability-inducing. They may moderate their policy discourses, especially in times of interstate crises, by avoiding such inflammatory rhetoric as threat-labelling and verbal threat of force, while at the same time emphasizing diplomacy and interstate cooperation to promote peace and stability.

Such policy discourses can also be augmented by practical stability-inducing actions. This thesis postulates that despite their naval buildups, states may intensify their participation in confidence- and security-building (CSBMs) as well as cooperative measures (COMs). There are two plausible reasons for this. First, cognizant of the existence of destabilizing naval capabilities in their inventories, states may find it politically expedient to assure others by engaging in CSBMs and COMs. Second, states may elect to employ certain types of naval forces, particularly force projection capabilities, not for hostile activities but to contribute to regional or international security.

Finally, this thesis recognizes that states will continue to utilize the limited threat or use of naval force (i.e. gunboat diplomacy) as a tool of statecraft. However, this is also an area where states may display stability-inducing tendencies. They may de-emphasize gunboat diplomacy and even when such measures are employed, they may elect as a deliberate policy choice to calibrate its use. Stability-inducing methods include calibrating the mode of and extent to which gunboat diplomacy is applied, as well as the type of naval forces employed for such purposes.

1.7. Value of This Approach

This study represents an attempt to build on and contribute to the existing Northern Europe-centric scholarship on small navies that has thus far been Northern European-centric. But it does not seek to replicate existing works that focus on the classification of navies and examining the driving factors behind naval buildup. The thrust of this study centers on the consequences of naval armament in Southeast Asia.

Instead, this study proposes a heuristic approach in reexamining the consequences of ASEAN naval modernization. It more holistically explores how naval armaments influence strategic behavior in areas of force structure developmental preferences as well as national policy discourses and action. In so doing, it hopes to contribute to the literature on how armaments generally influence strategic behavior, with the potential of providing further insights into the stabilizing/destabilizing debate. The proposed analytical framework and extensive database developed in the course of this research may help extend future inquiry beyond Southeast Asia.

This study also seeks to contribute to the wider field of ASEAN security studies. In fact, the “ASEAN Way” (more of this to be addressed in Chapter Two) contains hints which justify the thrust of this approach. Existing scholarship on the “ASEAN Way” has focused principally on institutions and more recently on defense diplomacy.

Stemming from the analytical focus on unilateral naval arms control, the concept of non-provocative defense may potentially shed light on this aspect. This study helps bring into question the way naval modernization is perceived and studied. Indeed, too much attention has been paid to negotiated naval arms control whereas the area of unilateral naval arms control and its significance to real-world policy has been grossly under-examined.

Finally, this study seeks to validate an existing school of thought that the security dilemma is less pronounced at sea despite interstate rivalries in the maritime

context.⁵⁸ While the security dilemma might explain the acquisition of naval armaments, it could not explain the observed greater proclivity towards interstate cooperation over competition, and why ASEAN governments sought to de-escalate tensions whenever interstate crises emerged. In the context of geopolitical uncertainties, it is plausible that regional governments are not only aware of the risks of security dilemma – one of which being the arms race – but also sought to assure other states via force structure development pathways, policy discourses and action in order to avoid being drawn into or become entangled by one.

1.8. Thesis Outline

The discussion in this thesis unfolds in the following manner. Chapter Two examines in detail existing scholarship on the consequences of ASEAN naval modernization. It endeavors to highlight limitations in the mainstream arguments and thereby looks into the literature on naval arms control, highlighting the relevance of unilateral naval arms control as an alternative analytical lens. This leads to an associated concept on non-offensive/provocative defense which is examined in Chapter Three, which leads to a proposed research design for examining how naval armaments influence strategic behavior. It needs pointing out, however, that the inquiry of each hypothesis requires its own unique methodology. Chapter Four deals with the first hypothesis, which is on naval armaments and the inquiry revolves around what is called “aggregate naval force structure”. This sets the stage for examining how naval modernization influence strategic behavior in the next two chapters. In this regard, Chapter Five is a short exposition that looks into the second hypothesis, providing a broad perspective on how naval armaments influence

⁵⁸ At the time of writing, the South China Sea disputes appear to have turned for the worse, following a spate of major land reclamation and infrastructure development work undertaken by the claimants, especially by China. But despite these activities in the backdrop of naval armament, the disputants and external parties clearly do not desire an armed clash. The standoff between a US Navy P-8A Poseidon long-range maritime patrol aircraft and PLAN garrison on one of the reclaimed features during a mission in May 2015 is such an example. The latter reportedly issued warning to the same American plane eight times. Going by rules of engagement, the P-8 would have been shot down at least twice. Jim Sciutto, “Exclusive: China warns U.S. surveillance plane,” *CNN Wire*, May 21, 2015.

national policy discourses. Chapter Six deals with the third hypothesis, focusing on how naval armaments influence policy actions – the proclivity of governments to engage in confidence- and security-building as well as cooperative measures. Chapter Seven examines the utilization of naval forces for the threat and use of force at sea. Finally, Chapter Eight summarizes the findings and puts forth policy ramifications and prospects for further research.

CHAPTER TWO: CONCEPTUAL REVIEW

Problems with the “Conventional Argument” about the Consequences of ASEAN Naval Modernization: In Need of an Alternative Perspective?

2.1. Do Existing Studies Tell the Full Story about the Consequences of ASEAN Naval Modernization?

So far, the question about the consequences of ASEAN naval modernization has not been satisfactorily addressed in the existing scholarship. The widely-propounded “conventional argument” does not truly facilitate a better understanding of the phenomenon.⁵⁹

Yet inferring consequences from naval classifications and drivers, as most existing studies have done, also carries potential pitfalls. First of all, naval classifications do not really matter when even brownwater navies can still threaten or use force in overlapping territorial waters if not the more expansive EEZs. Greenwater navies can conduct hostile operations in overlapping EEZs. Determining the consequences of naval modernization sets a number of problems over and above this exercise of classifying navies.

As was highlighted in Chapter One, the existence of many plausible drivers identified in the existing scholarship means that virtually every one of those drivers can be deemed relevant to varying extent for different navies. This undermines the explanatory power and policy utility of looking at the causes of ASEAN naval modernization. Moreover, such an approach also misses the point that naval power is so inherently flexible as to render it potentially both cooperative and competitive.

This Chapter will survey the existing scholarship that deals with the consequences of naval modernization. Widely utilizing arms-racing and arms-dynamics theories for

⁵⁹ The “worst-case” scenario can be highly subjective for different persons. On the least extreme end of the spectrum, it may involve interstate tensions without threat or use of force, graduating to interstate tensions involving threat or use of force in the middle stage of this spectrum, and finally elevating to outright war at the most extreme.

their analyses, existing studies tend to converge on the following: there is no race, merely naval arms competition within ASEAN. Geopolitical flashpoints, especially those revolving around maritime territorial disputes and jurisdictional issues, provide the ideal political context for the limited threat and use of force. Moreover, existing studies warn about the offensive nature of naval armaments inherently contain the potential for destabilization. This is especially so given non-existent regional arms control measures that limit the type and quantity of naval armaments acquired.

Furthermore, existing studies tend to highlight the questionable efficacy of ASEAN-centric regional security architecture in mitigating the consequences through promoting economic and political interdependence. Because of these conditions, these studies concluded with the conventional argument that naval buildups may not constitute a source of concern now but may become so as suggested earlier in Chapter One. As such, these studies cautioned, there is an increasing potential for security dilemmas to lead to destabilizing tensions over armaments.

From the prudent, policy standpoint, this conventional argument would be most readily accepted by defense establishments since defense-planning has low tolerance for margins of error and a natural inclination towards worst-case analysis. Who would argue against the notion that it pays to be cautious and be prepared for any future contingency when the conditions listed - naval buildups, geopolitical flashpoints, suboptimal regional institutions and absence of naval arms control measures – constitute “ideal” ingredients for a potential future conflict?

Rather, this Chapter argues that existing studies did not tell the full story even if they are correct to suggest caution about the plausible future scenarios. The above-listed conditions leading to the conventional argument contain analytical gaps and thus necessitate a review. Without a more nuanced, holistic analytical perspective, such an argument can potentially produce flawed or even unduly alarmist predictions that have ramifications for policy.

It is therefore important to re-examine those conditions that have constituted the basis of the conventional argument. The Chapter first examines the applicability of using arms-racing and arms-dynamics theories in determining the consequences of

ASEAN naval modernization. Next, it reviews the existing scholarship on the ASEAN-centric regional security architecture that has played such an important complementary role in studies on regional military modernization in general. This leads to the question of whether the security dilemma is an inevitable and unavoidable consequence of naval armament. From that, the discussion turns to explore the fundamental assumptions about the inherently offensive nature of naval armaments and their presumed destabilizing potential. Finally, the concept of naval arms control is examined as a way to mitigate the consequences.

2.2. Is There Naval Arms Racing in Southeast Asia: Addressing a Pertinent Question or Muddying the Waters?

Insofar as determining consequences is concerned, existing studies on ASEAN naval modernization (or broadly, military modernization) tend to gravitate towards the question: are ASEAN countries engaged in an arms race; and if not, how should the modernization process be characterized? Invariably one considers the utility of existing theories and concepts, thereby identifying those which may serve as an analytical lens to make sense of this phenomenon. However, an accurate analysis only goes as far as the theory or concept allows.

The arms-racing theory is one such example where theories and concepts suffer from limitations. Nonetheless, it has often been invoked as an analytical lens to determine consequences of military modernization. The first limitation revolves around definitions (indeed, there is not just one definition, hence the pluralism). Contending definitions were put forth by arms-racing theorists. Gray's definition for instance describes an arms race as being fulfilled by the following criteria:⁶⁰

- 1) There must be two or more parties, conscious of their antagonism;
- 2) They must structure their armed forces with attention to the probable effectiveness of the forces in combat with, or as a deterrent to, the other's arms race participation;

⁶⁰ Colin S. Gray, "The Arms Race Phenomenon," *World Politics*, Vol. 24, No. 1 (October 1971), p. 41.

- 3) They must compete in terms of quantity (men, weapons) and/or quality (men, weapons, organization, doctrine, deployment); and
- 4) There must be a rapid increase in quantity and/or improvements in quality.

In an attempt to address the conceptual flaw of distinguishing the abnormal condition of arms race from normal behavior, Hammond came up with a more extensive set of criteria:⁶¹

- 1) Two or more participants, though the relationship is in essence a bilateral one;
- 2) Specific designation of an adversary or potential adversary;
- 3) Military and diplomatic planning based directly on the capabilities and intent of the other;
- 4) A high degree of public animosity or antagonism between the parties involved;
- 5) Political-military linkage of state actions between or among rival force structures and strategies;
- 6) An extraordinary and consistent increase in the level of defense effort in excess of eight percent per annum;
- 7) The focus on a particular weapons environment or weapons system vis-à-vis the opponent with an explicit ratio goal; and
- 8) The purpose of the effort which is to seek dominance via intimidation over the rival in political-military affairs.

Gray was one of the first to seriously critique Hammond's criteria. He pointed out that Criteria 3, 4 and 5 are difficult to measure and operationalize, whereas Criterion 6 seems arbitrary. Criterion 7 was deemed unnecessary because, as Gray argues, it happens too commonly. Criterion 8 was said to be unnecessarily too narrow because an arms race could also be pursued for deterrence, improving one's

⁶¹ Grant Tedrick Hammond, *Plowshares into Swords: Arms Races in International Politics, 1840-1991* (University of South Carolina Press, 1993), 31.

ability to fight war should one occur, or avoiding the other's attempt to achieve dominance.⁶²

Buzan and Herring concurred with Gray's critique of Hammond's definition. However, they regard arms race as the most extreme manifestation within a continuum they termed as "Arms Dynamics", defined as "the entire set of pressures that make actors (usually states) both acquire armed forces and change the quantity and quality of the armed forces they already possess".⁶³ Arms-racing remains significant because it reflects intensified political rivalry and because it consumes more resources than less-intense manifestations of arms dynamics.⁶⁴

Besides postulating a more holistic measurement of arms acquisition processes, the other noteworthy contribution by Buzan and Herring has been two models for explaining the arms dynamics. The first is the classical Action-Reaction Model that seeks to locate drivers within competitive interstate relations whereas the other was the Domestic Structure Model that seeks to locate drivers within nation-states' internal economic, organizational and political workings of states. However, Buzan and Herring also emphasized that these two models are complementary rather than mutually exclusive.⁶⁵ In any case, what they had done was similar to what earlier studies had attempted in order to uncover rationales behind arms-racing.⁶⁶ Moreover, looking at drivers, especially when numerous plausible ones are identified, does not aid in determining consequences.

⁶² Gray not only criticized Hammond's criteria but considered arms race as a non-existent phenomenon, going so far as to repudiate his *World Politics* article of 1971..

⁶³ Barry Buzan and Eric Herring, *The Arms Dynamics in World Politics* (Boulder, CO: Lynne Rienner, 1998), 78.

⁶⁴ Ibid, 79.

⁶⁵ Ibid, 80.

⁶⁶ See for example, Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, Vol. 26, No. 2 (Jan 1974), pp. 207-33; W. Ladd Hollist, "Alternative Explanations of Competitive Arms Processes: Tests on Four Pairs of Nations," *American Journal of Political Science*, Vol. 21, No. 2 (May 1977), pp. 313-40; and Theresa Clair Smith, "Arms Race Instability and War," *The Journal of Conflict Resolution*, Vol. 24, No. 2 (Jun 1980), pp. 253-84.

An associated problem also arises: total military expenditures are frequently used to measure arms dynamics. But because they appear to provide a single comprehensive measure of capability that obviates the need to make judgments about quality and how to combine disparate elements (personnel, equipment, etc.) together, Bolks and Stolls pointed out, using total military expenditures to measure interstate arms competition can be problematic on the following counts:⁶⁷

1. It does not take into account that some countries rely on conscription, whereas others have a professional military, thus personnel costs can vary widely and a comparison of expenditures between states with different personnel policies can be very misleading;
2. States do not have the same concept of what properly is to be considered military expenditures;
3. States have different economic systems and/or very different economic policies, and associated differences in policies on subsidization of military industries;
4. States may engage in deliberate deception about the level of their expenditures; and
5. Total expenditures imply that all of the armed services are engaged in competition when in fact this may not be the case.

The final limitation of the arms-racing theory is one that delves further into the problematique by examining the consequence of arms-racing itself. A group of theorists attempted to address this question through quantitative methods to derive possible causal linkages between arms-racing and war. This area of research produced two schools of thoughts. The first argues that arms-racing does not necessarily result in war, pointing out that such drastic outcomes were the result of a confluence of domestic and external factors, not solely because of arms buildup.⁶⁸ Amongst these scholars, there are also those who further argue that arms-

⁶⁷ Sean Bolks and Richard J. Stolls, "The Arms Acquisition Process: The Effect of Internal and External Constraints on Arms Race Dynamics," *The Journal of Conflict Resolution*, Vol. 44, No. 5 (Oct 2000), pp. 580-603.

⁶⁸ Colin S. Gray, *Weapons Don't Make War: Policy, Strategy, and Military Technology* (University Press of Kansas, 1993); Smith, "Arms Race Instability and War"; Michael D.

arming is not necessarily a bad thing since it may foster stability and prevent war by instilling a climate of fear, reducing uncertainties and added that arms-racing may provide a measure of security in the face of imminent threats thus serving as a surrogate for war.⁶⁹ The other, opposing school is less sanguine. It postulates that preceding mutual military buildups are strongly and positively related to, and in some cases even increase, the likelihood of dispute escalation that leads to war.⁷⁰

As such, it can be said that the arms-racing theory is fraught with limitations regarding definitions and causal linkages with dispute escalation (and the worst-case, war). While providing a useful analytical lens, the theory's utility in determining

Intriligator and Dagobert L. Brito, "Can Arms Races Lead to the Outbreak of War?" *The Journal of Conflict Resolution*, Vol. 28, No. 1 (Mar 1984), pp. 63-84; Paul F. Diehl, "Armaments without War: An Analysis of Some Underlying Effects," *Journal of Peace Research*, Vol. 22, No. 3 (Sep 1985), pp. 249-59; Paul F. Diehl and Jean Kingston, "Messenger or Message?: Military Buildups and the Initiation of Conflict," *The Journal of Politics*, Vol. 49, No. 3 (Aug 1987), pp. 801-13; James D. Morrow, "A Twist of Truth: A Reexamination of the Effects of Arms Races on the Occurrence of War," *The Journal of Conflict Resolution*, Vol. 33, No. 3 (Sep 1989), pp. 500-29.

⁶⁹ Kenneth M. Waltz, "The Spread of Nuclear Weapons: More May be Better," *The Adelphi Papers*, Vol. 21, Issue 171 (1981); pp. 1-32; Thomas F. Mayer, "Arms Races and War Initiation: Some Alternatives to the Intriligator-Brito Model," *The Journal of Conflict Resolution*, Vol. 30, No. 1 (March 1986), pp. 3-28; Charles L. Glaser, "The Causes and Consequences of Arms Races," *American Review of Political Science* No. 3 (2000), pp. 251-76; Andrew Kydd, "Arms Races and Arms Control: Modeling the Hawk Perspective," *American Journal of Political Science*, Vol. 44, No. 2 (Apr 2000), pp. 228-44; Charles L. Glaser, "When are Arms Races Dangerous? Rational versus Suboptimal Arming," *International Security*, Vol. 28, No. 4 (Spring 2004), pp. 44-84.

⁷⁰ Michael D. Wallace, "Arms Races and Escalation: Some New Evidence," *The Journal of Conflict Resolution*, Vol. 23, No. 1 (Mar 1979), pp. 3-16; Susan G. Sample, "Military Buildups, War and Realpolitik: A Multivariate Model," *The Journal of Conflict Resolution*, Vol. 42, No. 2 (Apr 1998), pp. 156-75; Susan G. Sample, "The Outcomes of Military Buildups: Minor States vs. Major Powers," *Journal of Peace Research*, Vol. 39, No. 6 (Nov 2002), pp. 669-91; Douglas M. Gibler, Toby J. Rider and Marc L. Hutchison, "Taking Arms against a Sea of Troubles: Conventional Arms Racing during Periods of Rivalry," *Journal of Peace Research*, Vol. 42, No. 2 (Mar 2005), pp. 131-47.

the consequences of ASEAN naval modernization is tenuous at best. The label “arms race” also becomes a much abused one, especially in sensationalist media reporting to describe circumstantial developments such as significant hikes in military expenditures or new weapons purchases.

Fortuitously, scholarly works have been more circumspect in describing the observed acquisition processes. For one, they do not view armaments in a political void since non-material factors have to be considered when determining the political implications of armaments.⁷¹ Existing scholarship on ASEAN naval (and more broadly, military) modernization commonly invokes the arms-racing theory to examine the consequences and generally converged on this “conventional argument” in their conclusions:⁷²

- 1) Using the existing definitions in arms-racing theory, ASEAN arms acquisition processes cannot be characterized as “race” but competition at the most;
- 2) Armaments may not be a matter of concern now but may become potentially destabilizing if strategic intentions change in response to evolving domestic and external circumstances;
- 3) Under the conditions in (2), it becomes possible that arms competition can escalate into a race especially in the context of interstate crises;
- 4) The regional architecture that seeks to promote economic and political interdependence possesses dubious utility in ensuring that states play by the norms and rules in their conduct of interstate relations;
- 5) Certain armaments which contribute to “reach”, surprise, opacity, uncertainty and miscalculation can potentially lead to or magnify the risks of accidental or inadvertent clashes, thereby potentially resulting in the worst-case scenario of war.

⁷¹ See for example, Gray, *Weapons Don't Make War*; Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton: Princeton University Press, 2004); and Risa A. Brooks and Elizabeth A. Stanley (eds.), *Creating Military Power: The Sources of Military Effectiveness* (Stanford, California: Stanford University Press, 2007).

⁷² The studies consulted in this literature review cannot be presented here because of the sheer volume involved, and can be found in the [Appendix A2](#).

Some scholars go further by examining consequences from the perspective of internal and external balancing. They conclude that external balancing may be discounted given the difficulties, if not impossibility, encountered by much weaker ASEAN navies in arms-racing with more powerful major navies due to the asymmetries involved. Indeed, given China's material preponderance for example, it would be deemed implausible for the weaker individual ASEAN navies (or even all combined) to "race" against or even sustain rapid capability increases for the purpose of matching the PLAN's buildup, not to say anything of seeking naval dominance. However, these scholars argued that internal balancing remains possible because key ASEAN navies possess comparable capabilities and therefore more likely to race against one another.⁷³ Again, in whichever manner the outcome is examined, this conventional argument serves more as a note of caution, and in fact, just no more than that.

The next step may be to look at historical antecedents as a point of reference. The closest example would be the pre-WW1 Anglo-German naval arms race, during which the British and Germans acquired and counter-acquired battleships in a seemingly relentless action-reaction cycle to gain quantitative and qualitative advantages over the other. Yet ASEAN naval modernization processes witnessed so far did not correspond to this historical example. The acquisitions of submarines – described as "non-cooperative and highly competitive" and therefore arguably the best example – in Southeast Asia bear out this observation.⁷⁴

When Indonesia became the first ASEAN navy to operate submarines,⁷⁵ this did not provoke immediate response from other ASEAN neighbors. Following Singapore's purchase of its first ex-Swedish submarines in the 1990s, Malaysia did not proceed

⁷³ Joon-Num Mak, "The ASEAN Naval Buildup: Implications for Regional Order," *Pacific Review*, Vol. 8, No. 2 (1995), pp. 303-25; Swinnerton, "The strategic environment and arms acquisitions in South-East Asia," 35.

⁷⁴ Bateman, "Naval Balance in Southeast Asia," 2005.

⁷⁵ It needs pointing out that prior to the formation of ASEAN in 1967, Thailand was the only Southeast Asian state to operate submarines in the form of Japanese-built boats supplied in the 1930s and served until the early-1950s. Post-1945 independent Indonesia, then under President Sukarno, operated a fleet of Soviet-supplied *Whiskey*-class submarines.

with similar procurements despite having expressed its desire due to the Asian financial crisis, until 2002 when it was financially stable enough to buy a pair of new French-built boats which are armed with submerge-launched SM-39 Exocet ASCM – the first such weapon introduced into Southeast Asia – which gives the boats a better standoff offensive-strike capability. Singapore purchased a pair of more capable ex-Swedish boats in 2005. These submarines are equipped with air-independent propulsion – the first in the region – but are not armed with anything comparable to the SM-39. Since then, there has been no further Malaysian reaction. The Indonesians purchased a trio of new South Korean-built submarines in 2011, apparently in response to Malaysia and Singapore but arguably more to do with technologically-driven imitative factors than out of interstate animosities.⁷⁶

Vietnam's purchase of six Russian-built submarines in 2009 is more plausibly a reaction towards the PLAN buildup in the South China Sea than against ASEAN neighbours. The Philippines in recent times evinced the interest to acquire an undersea capability but like Vietnam, the primary source of motivation seems to be China instead of ASEAN neighbours.⁷⁷ Thailand's interest in submarines appears to be driven more by the desire not to lag technologically behind its submarine-operating ASEAN neighbours and most likely not attributable to any form of interstate animosity.⁷⁸ Myanmar is reported to be seeking submarines, but the

⁷⁶ Then Indonesian Navy chief Admiral Tedjo Edhy Purdijatno, after Malaysia and Singapore commissioned their submarines, emphasized the procurement of submarines which “should surpass those of neighboring countries by their tactical and technical characteristics”. “Russia, S. Korea to bid for supplying two subs to Indonesia,” *ITAR-TASS World Service*, August 11, 2009.

⁷⁷ This is not to also overlook the potential motivation stemming from fellow ASEAN neighbors' acquisitions back in the 1990s and early-2000s. Back in the 1990s the Vietnamese had long wanted to operate a submarine capability but full-sized ones such as the Kilo was then beyond Hanoi's financial ability. Instead, it bought a pair of North Korean-built mini-submarines, with which the VPN acquired basic submarine operational know-how.

⁷⁸ The closest would be Cambodia, with whom Thailand clashed over disputed borderland around the Preah Vihear temple in 2008. But acquiring submarines with Cambodia in mind would be an overkill that does not make much sense for Bangkok, since Cambodia has nothing more than a brownwater navy that is one of the most poorly-equipped in Southeast

conceivable adversary in mind would not be any ASEAN neighbours but Bangladesh instead, with whom Yangon still has outstanding maritime boundary disputes. At the time of writing, Indonesia is seeking to purchase more submarines whereas Singapore placed an order in 2014 for a pair of boats to be newly developed and built by Germany. In sum, this example demonstrates that naval arms-racing might not be the best label to describe the spate of submarine acquisitions in Southeast Asia observed so far. Intra-ASEAN interactive drivers may exist yet they are but just some of the many plausible drivers.

When the perspective of external- and internal balancing dynamics are brought into the analysis, the picture remains assuring. For example, because of the power asymmetry involved, a submarine race between Vietnam and China (presumably Hanoi's foremost adversary in the South China Sea) is a non-starter. The Philippines, even if it seeks to acquire submarines, is in an even weaker position. Arguments about internal balancing hold more water. However, there are no signs of imminent danger and as the subsequent chapters would point out, in the midst of naval acquisitions there is an observed proclivity of ASEAN governments towards confidence-building and cooperative measures. The situation after 2000 is certainly not as precarious as the post-Cold War 1990s. Moreover, there are no conclusive studies which prove that regional submarine acquisitions constitute a significant determinant in the recent heightened tensions, especially in the South China Sea.

Yet the existing scholarship is inclined to highlight the potential dangers of naval armaments by drawing attention to the abysmal utility of the ASEAN-centric regional architecture in promoting economic and political interdependence as a means to mitigate those risks. It is necessary to examine this aspect.

Asia and largely confined to inshore and riverine operations. The Royal Thai Navy's existing capabilities, sans submarines, remain more than a match for its Cambodian counterpart.

2.3. Reason for Pessimism? Questioning the Efficacy of Economic and Political Interdependences in Mitigating the Consequences of ASEAN Naval Modernization

In the face of naval buildups taking place in Southeast Asia, existing studies have pondered over possible ways of ameliorating the potential consequences. The literature dealing with regional institutions that promote economic and political interdependence has been useful in this regard. Scholars pay attention to the ASEAN-centric regional architecture that has emerged since the early-1990s, and have derived conclusions that have significant ramifications on how the consequences of naval armaments are being examined. Yet this scholarship also remains fraught with debate regarding the efficacies of economic and political interdependence generated by the ASEAN-centric architecture that ameliorates the risk of armaments.

The first point of debate is about economic interdependence. The fundamental assumption is that economically interdependent states have more to lose than to gain if they ever go to war with one another. As Rosecrance and Papayouanou for instance argued, increased economic interdependence fosters peace by making trading more profitable than invading, even though Copeland qualified this by adding that such consequence is only possible if states expect trade levels to be high for the foreseeable future, not just on dependence levels.⁷⁹ Economic interdependence appears to have facilitated not just socioeconomic development but relative peace in Southeast Asia. Over the decades since its inception in 1967, ASEAN member states have not gone to war with one another, plausibly due to the particularly strong economic dimensions in intramural interactions.

⁷⁹ Richard N. Rosecrance, *The Rise of the Trading State: Commerce and Conquest in the Modern World* (NY: Basic Books, 1986); Paul A. Papayouanou, *Power Ties: Economic Interdependence, Balancing, and War* (Ann Arbor: University of Michigan Press, 1999), 159; and Dale C. Copeland, "Economic Interdependence and War: A Theory of Trade Expectations," *International Security*, Vol. 20, No. 4 (Spring-1996), pp. 5-41.

In fact, the Economic Community pillar appears to hold great promise in ASEAN's grand plans to establish a Community by 2015.⁸⁰ Beyond ASEAN, insofar extra-regional powers are concerned, economic interdependence appears to have utility in dousing interstate tensions from time to time. Amidst the ongoing South China Sea tensions involving China and several ASEAN parties, Beijing sought to deepen economic interdependence with Southeast Asia through new initiatives, most notably the "One Belt, One Road" project aimed at promoting regional interconnectivity and economic linkages. At face value, regional states prefer not to risk war over outstanding interstate disputes and thereby derail socioeconomic developments.

Economic interdependence is even more salient in the maritime dimension when one considers seaborne trade and commerce which Indo-Pacific littoral states rely on. Given tight economic linkages it would be far-fetched, for example, to envision a scenario wherein a particular ASEAN littoral state straddling the Malacca Strait seeks to imperil China's SLOC security through armed action (such as mining or interdicting Chinese merchant shipping, especially the crucial energy transports) since retaliation by Beijing would most likely not just affect Southeast Asia but the world at large. The stakes of economic interdependence are just too high to overlook.

Yet at the same time, some scholars argue that economic interdependence also works as a double-edged sword because it may promote interstate resentment and conflict despite enhancements to interstate contacts and mutual

⁸⁰ This is based on the notion of a "security community" defined broadly as one in which there is a real assurance that members will not settle their disputes peacefully and which espouses three characteristics: shared identities, values and meanings among members; multifaceted and direct intra-community relations via some form of face-to-face encounter; and reciprocity among members that expresses some degree of long-term interest. Karl Deutsch et al, *Political Community and the North Atlantic Area: International Organizations in the Light of Historical Experiences* (Princeton: Princeton University Press, 1957); Emmanuel Adler and Michael Barnett (eds.), *Security Communities* (Cambridge: Cambridge University Press, 2000); and Acharya, *Constructing a Security Community in Southeast Asia*.

understanding.⁸¹ Another way of looking at how economic interdependence can indirectly impinge upon regional security is to view it as a vehicle for the growth of economic and subsequently, military power of states.⁸² Economic linkages are no panacea to interstate crises, especially in a geopolitically volatile Indo-Pacific. Lehmann for instance warned about the complacency among regional policy elites who viewed tremendous regional growth as a guarantee against instability.⁸³

It may also be premature to overplay the benefits of tighter economic linkages in the region. Some scholars argued that regional economic cooperation remains too nascent to facilitate genuine integration, thus putting into question the notion of interdependent peace.⁸⁴ Finally, the region's rapid economic growth is said to be achieved at the expense of increasing other security risks, such as uneven socioeconomic development.⁸⁵ Moreover, the increased resource competition among states may potentially magnify the risks of military confrontation.

What about the possibility of ameliorating the consequences of ASEAN naval modernization through multilateral security institutions? In the past two decades,

⁸¹ Kenneth M. Waltz, "Structural Realism after the Cold War," *International Security*, Vol. 25, No. 1 (Summer-2000), pp. 5-41; Stuart Harris, "Economic Security Interactions and China," in David Dickens (ed.), *No Better Alternative: Towards Comprehensive and Cooperative Security in the Asia-Pacific* (New Zealand, Wellington: Centre for Strategic Studies, 1997), 45; and Jean-Marc F. Blanchard, "Economics and Asia-Pacific Region Territorial and Maritime Disputes: Understanding the Political Limits to Economic Solutions," *Asian Politics & Policy*, Vol. 1, No. 4 (2009), 682-708.

⁸² Dwight H. Perkins, "East Asian Economic Growth and its Implications for Regional Security," *Asia-Pacific Review*, Vol. 14, No. 1 (May-2007), pp. 44-53.

⁸³ Jean-Pierre Lehmann, "Economic Interdependence and Security in Asia-Pacific," in Dickens (ed.), *No Better Alternative*, 57.

⁸⁴ Shaun Narine, "Economic Security and Regional Cooperation in the Asia-Pacific: Evaluating the Economics-Security Nexus," in Amitav Acharya and Evelyn Goh (eds.), *Reassessing Security Cooperation in the Asia-Pacific: Competition, Congruence, and Transformation* (Cambridge, Massachusetts; London, England: The MIT Press, 2007), 213.

⁸⁵ Helen E.S. Nesadurai, "The Indo-Chinese Enlargement of ASEAN: Implications for Regional Economic Integration," *Working Paper*, No. 56, Institute of Defence and Strategic Studies, Nanyang Technological University, November 2003.

Asia has witnessed the emergence of an ASEAN-centric regional architecture which some scholars claim has helped promote peace and stability. They referred to the institutional binding of states that constrain or enmesh constituents through agreements or other interdependence in order to weaken their ability to pursue autonomous policies.⁸⁶ Institutions are defined as a "social structure" which comprises a relatively stable set or structure of identities and interests, often codified in formal rules and norms and serve as cognitive entities that do not exist apart from actors' ideas about how the world works.⁸⁷

Underpinning this multi-layered architecture has been the "ASEAN Way" which emphasizes consensual and informal diplomacy, stressing social norms of interstate behavior more so than the European approach of legalized and "formalistic" diplomacy.⁸⁸ Views about the effectiveness of "ASEAN Way" are mixed at best.

⁸⁶ Daniel H. Nexon, "Review Articles: The Balance of Power in the Balance," *World Politics*, Vol. 61, No. 2 (Apr-2009), pp. 330-59.

⁸⁷ Alexander Wendt, "Anarchy is What States Make of It: The Social Construction of Power Politics," *International Organization*, Vol. 46, No. 2 (1992), p. 391-425; Ted Hopf, "The Promise of Constructivism in International Relations Theory," *International Security*, Vol. 23, No. 1 (Summer-1998), pp. 171-200.

⁸⁸ Three clusters of norms lie at heart of the "ASEAN Way": 1) non-interference in domestic affairs; 2) consensus-based style of decision-making; and 3) non-use of force to settle disputes. They fulfill all three normative functions in constraining ASEAN leaders' actions and rhetoric; enabling individual or collective pursuit of common goals and; providing a framework for meaningful communication both within ASEAN itself and with outsiders. ASEAN is therefore unique through its emphasis on "process" rather than "institution", making the group more akin to a "multilateral organization" instead of "institutional multilateralism". David Capie and Paul Evans, *The Asia-Pacific Security Lexicon* (Singapore: Institute of Southeast Asian Studies, 2002), 14; Alex Bellamy, "Security," in Mark Beeson (ed.), *Contemporary Southeast Asia*, 2nd Edition (Basingstoke: Palgrave MacMillan, 2009), 186-88; Alex J. Bellamy, *Security Communities and their Neighbours: Regional Fortresses or Global Integrators?* (Basingstoke, Hampshire and NY: Palgrave-MacMillan, 2004), 94-96; and Mak Joon-Num, "Multilateral Security Processes and Bilateral Defence Ties in the Asia-Pacific," in Abdul Razak Baginda and Anthony Bergin (eds.), *Asia-Pacific's Security Dilemma: Multilateral Relations Amidst Political, Social and Economic Changes* (Australian Defence

Proponents broadly agree that the greatest achievement of "ASEAN Way" so far has been in fostering a "no-war community" in Southeast Asia and promoting regional security through interstate "socialization", including with major extra-regional actors.⁸⁹

However, the ASEAN-centric regional architecture has its own share of detractors. While there has been no major war since ASEAN's inception, the "ASEAN Way" is often criticized for its ineffectiveness in managing, let alone resolving, key regional security issues, including maritime disputes. Scholars have observed that neither ASEAN itself nor the ASEAN-driven architecture have been willing to tackle core regional security issues including those interstate disputes.⁹⁰ This limitation has been attributed to such inhibiting factors as ASEAN's normative attachment to the principle of non-interference and the absence of a "collective inter-subjective

Studies Centre; Malaysian Strategic Research Centre; London: ASEAN Academic Press, 1998), 140.

⁸⁹ "Socialization" refers to the process of community "teaching" or "persuading" the state to adapt to norms, policies or interests that reflect the community's ideological position. This builds on the following works such as Alice D. Ba, "Who's socializing whom? Complex engagement in Sino-ASEAN relations," *The Pacific Review*, Vol. 19, No. 2 (2006), pp. 157-79; Mely Caballero-Anthony, *Regional Security in Southeast Asia: Beyond the ASEAN Way* (Singapore: Institute of Southeast Asian Studies, 2005), 257-58; Ian Hurd, "States and Rules, Norms and Interests," *Working Paper 26*, Research Group in International Security, Montreal/McGill University, November-2008, p.14.

⁹⁰ Michael Leifer, "The Limits to ASEAN's Expanding Role," in Chin Kin Wah and Leo Suryadinata (eds.), *Michael Leifer: Selected Works on Southeast Asia* (Singapore: Institute of Southeast Asian Studies, 2005), 176; Evelyn Goh and Amitav Acharya, "The ASEAN Regional Forum and security regionalism: Comparing Chinese and American positions," in Melissa G. Curley and Nicholas Thomas (eds.), *Advancing East Asian Regionalism* (London: Routledge, 2007), 5-6. The Indonesian foreign minister even urged ASEAN to implement existing resolutions instead of formulating new ones, apparently signaling some form of frustration within the ASEAN internal circles over the grouping's lack of progress. "ASEAN urged to implement existing resolutions instead of creating new ones," *Organisation of Asia-Pacific News Agencies*, September 29, 2011.

identity".⁹¹ The ASEAN Regional Forum (ARF), which was formed in 1993 to promote dialogue among regional governments, is one such example. It is supposed to encompass three incremental stages: I) confidence-building; II) preventive diplomacy; and III) conflict resolution by way of inclusiveness and reassurance as opposed to deterrence.⁹² But the process remains stagnated at the confidence-building level because the need to adhere to ASEAN norms precludes its progress.⁹³

The dismal progress of the ASEAN-driven architecture has been met with skepticism among the disillusioned quarters from within, thereby casting in doubt the continued relevance of ASEAN's centrality. Remedies have been proposed to address the situation, the more ambitious ones threatening to relegate ASEAN's role to a secondary one. The Asia-Pacific Community proposed by former Australian Prime Minister Kevin Rudd in 2007 for instance might have been viewed as so disconcerting, amongst other external and internal pressures that could have prompted the promulgation of an ASEAN Charter and expediting of preparations for realizing the ASEAN Community by 2015. Still, skepticism remains in view of persistent intramural problems such as the lack of unity amongst member states.⁹⁴

⁹¹ Sheldon W. Simon, "Whither Security Regionalism? ASEAN and the ARF in the Face of New Security Challenges," in Acharya and Goh (eds.), *Reassessing Security Cooperation in the Asia-Pacific*, 114; M.C. Abad, Jr., "The Association of Southeast Asian Nations: Challenges and Prospects," in Michael Wesley (ed.), *The Regional Organizations of the Asia-Pacific: Exploring Institutional Change* (Basingstoke, Hampshire and NY: Palgrave-MacMillan, 2003), 57.

⁹² Among problems the ARF continues to face are, for example, the sovereign state nature of its central membership, immense geographic coverage, disparate needs and unresolved inter-member differences. Gary Brown, "The ASEAN Regional Forum: Its Contribution to Asia-Pacific Security," in Baginda and Bergin (eds.), *Asia-Pacific's Security Dilemma*, 130.

⁹³ Akiko Fukushima, "The ASEAN Regional Forum," in Wesley (ed.), *The Regional Organizations of the Asia-Pacific*, 90-92; Goh and Acharya, "The ASEAN Regional Forum and security regionalism".

⁹⁴ Barry Desker, "ASEAN Integration Remains an Illusion," *RSIS Commentaries*, No. 046/2015, S. Rajaratnam School of International Studies, Nanyang Technological University, March 5, 2014.

Most recently, fissures within the regional bloc were starkly exposed after ASEAN failed to issue a joint communique on the South China Sea disputes in July 2012.

The above survey of the existing literature demonstrates that the track record of ASEAN and its associated regional institutions is mixed at best. It would not be surprising, therefore, that under such circumstances regional governments continue to evince interest in modernizing military capabilities, naval especially, as a hedge against geopolitical uncertainties. This is especially so, as scholars argued, given the limitations of relying on diplomacy alone to ensure the long-term peaceful nature of other states, because of difficulties in discerning others' true strategic intentions which may be disguised through deceptive means.⁹⁵

The divided views amongst scholars regarding the effect of economic and political interdependence simply help reinforce the conventional argument about the consequences of ASEAN naval modernization. This view has been echoed by at least some policymakers, as shown by the remarks of a senior naval official during an ARF discussion back in 2007:

The naval build-up is probably the most striking aspect of renewed military spending across the region... Our seas have never seen such activity - we all watch each other and we all know the build-up carries both risks and rewards. There is, of course, the prospect of closer co-operation and enhanced security but the possibilities for tensions and confrontation also multiply. It is quite unprecedented and the big worry is that the diplomacy hasn't caught up with the capabilities that are out there now.⁹⁶

Such a cautionary note certainly reflects genuine security concerns. But one should also not consider it as bowing to the inevitable. This still begs the question: does the questionable utility of economic and political interdependencies necessarily

⁹⁵ Dale C. Copeland, "The Constructivist Challenge to Structural Realism: A Review Essay," *International Security*, Vol. 25, No. 2 (Fall-2000), pp. 201-04 and 210; John J. Mearsheimer, "The False Promise of International Institutions," *International Security*, Vol. 19, No. 3 (Winter-1994/1995), pp. 5-49.

⁹⁶ Cited in "Rough seas ahead as countries around the region beef up their naval capabilities," *South China Morning Post*, August 4, 2007.

destine regional actors to the inevitable tragedy of armed conflict? Would there actually not be greater imperative (or urgency) for unilateral measures to maintain regional stability under prevailing circumstances? The existing scholarship appears to presume that states are totally constrained by structural environmental factors and devoid of the ability to take their own initiatives to ameliorate security concerns. The only "initiative" the studies seem to allude to is for states to engage in military self-help as a hedge against geopolitical uncertainties, which thereby translates into security dilemma amongst other potential destabilizing outcomes. But one ought to ask: are states automatically drawn into and entangled by security dilemmas?

2.4. Security Dilemma at Sea: An Inevitable and Unavoidable Pathway to Tragedy?

Existing studies on ASEAN naval modernization tend to draw attention to the inherent risks posed by the security dilemma. Generally, a security dilemma unfolds when State A for example embarks on defensive preparations which are (mis)construed by another State B as an aggressive move aimed at undermining the latter's security, thereby provoking B's own defensive buildup. B's countermeasures are then (mis)perceived by A to be aimed at undermining its security, which thereby fuels a perpetual cycle of reciprocal defensive buildups. Supposedly security-seeking, status quo states thus become locked in this vicious cycle out of the desire to over-insure their own security in a "better be safe than sorry" conundrum.⁹⁷ Essentially, the security dilemma is underpinned by three general assumptions.

⁹⁷ See for example, Nicholas Wheeler and Ken Booth, "The Security Dilemma," in John Baylis and N.J. Rengger, *Dilemmas of World Politics: International Issues in a Changing World* (New York: Oxford University Press, 1992), 30; John Herz, "Idealist Internationalism and the Security Dilemma," in John Herz, *The Nation-State and the Crisis of World Politics* (NY: David McKay, 1976), 72-73; Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976), 64; and Robert Jervis, "War and Misperception," in Robert Rotberg and Theodore Rabb (eds.), *The Origins and Prevention of Major Wars* (Cambridge: Cambridge University Press, 1989), 114-16.

First, international anarchy represents a geopolitical reality so long as the current state-centric, Westphalian international system persists, where there is no reliable supranational authority to ensure all states adhere to the rule of law. The United Nations is probably the closest such authority but its track record has been mixed at best. Second, modern military technologies have become increasingly sophisticated and offensive in nature, which thereby threaten to undermine a state's security through direct military action or coercive diplomacy. Finally, even though modern new media has enabled a hitherto unprecedented amount of publicly-available knowledge regarding national weapon-holdings, strategic intentions are relatively difficult to obtain and decipher.

Strategic intentions may be based on structural factors such as military technology and geography (structural security dilemma) or perceptual biases towards particular other states, such as relative power balance (perceptual security dilemma).⁹⁸ Yet perfect knowledge of others' strategic intentions may only be possible under ideal, laboratory-like conditions. Partial or total intelligence failure, misperceptions of decision-makers and other intervening factors may still result in a security dilemma.⁹⁹ Capricious human nature and the "black box" of real strategic intentions create uncertainties, hence prudent defense planners judge it better to play safe now than to pay an even larger price for their follies later.¹⁰⁰

An associated problem is that, as suggested in Chapter One, while military capabilities change slowly, strategic intentions change in a shorter time as a result

⁹⁸ Jack L. Snyder, "Perceptions of the Security Dilemma in 1914," in Robert Jervis, Richard Ned Lebow and Janice Gross Stein (with contributions by Patrick M Morgan and Jack L. Snyder), *Psychology & Deterrence* (Baltimore and London: The John Hopkins University Press, 1985), 157-65.

⁹⁹ As Betts noted, given that there are historical cases aplenty that shows that strategic surprise cannot be avoided, the best defense posture remains one predicated on the assumption of surprise and provides a cushion for survival in the face of it. Richard K. Betts, "Surprise Despite Warning: Why Sudden Attacks Succeed," *Political Science Quarterly*, Vol. 95, No. 4 (Winter 1980-81), pp. 551-72.

¹⁰⁰ Ken Booth and Nicholas J. Wheeler, *The Security Dilemma: Fear, Cooperation and Trust in World Politics* (Basingstoke, Hampshire, Palgrave MacMillan, 2008), 4.

of alterations to its domestic and external circumstances.¹⁰¹ The politico-military ramification is that one may have little or no time to react swiftly since defensive capabilities require time to acquire and operationalize. In the preventive war scenario, either State A or B may attempt to exploit the window of vulnerability of either side to wage a preventive war, using its temporary military superiority to forestall any change in the balance of power. Scholars point to the outbreak of WW1 as a premier example in which the security dilemma – attributed to fervent naval arms racing, troop mobilization efforts and prevailing perceptions that offense was favored over defense – resulted in such dire consequences.¹⁰²

In fact, the security dilemma has been a central theme surrounding existing observations that ASEAN defense planning is contingency-based. To a certain extent, this is true given the history and existing interstate problems in the region. The security dilemma is either directly invoked or alluded to in the so-called conventional argument about the consequence of military modernization. But such a conclusion misses the point that the security dilemma is not necessarily inevitable or unavoidable. Some scholars contend that the security dilemma is not an inevitable tragedy of world politics. For instance, Wendt argued that the phenomenon is a social construction, not an automatic product of the international system.¹⁰³ Even if the security dilemma is an inescapable feature of geopolitical life, it can at least be transcended.¹⁰⁴ A state may choose to forgo, or at least limit, a new round of arms buildups given credible assurances and an iterative diplomatic process may result in reciprocal steps to refrain from bolstering military capabilities that would otherwise ignite a new cycle of unwelcome and costly action and reaction.¹⁰⁵

¹⁰¹ Robert E. Harkavy and Stephanie G. Neuman, *Warfare and the Third World* (Basingstoke: Palgrave Macmillan, 2001), 53.

¹⁰² Read more about this in, for example, Stephen van Evera, "The Cult of Offensive and the Origins of the First World War," *International Security*, Vol. 9, No. 1 (Summer 1984), pp. 58-107.

¹⁰³ Alexander Wendt, "Constructing International Politics," *International Security*, Vol. 20, No. 1 (Summer 1995), pp. 71-81.

¹⁰⁴ Booth and Wheeler, *The Security Dilemma*, 296.

¹⁰⁵ Adam P. Liff and G. John Ikenberry, "Racing toward Tragedy? China's Rise, Military Competition in the Asia Pacific and the Security Dilemma," *International Security*, Vol. 39,

General assumptions underpinning the security dilemma are not without problems. First, even in the Westphalian world, states do defend against perceived transgressions upon those broadly accepted rules and norms that govern proper interstate behavior. For example, there was near unanimous world opposition to Iraq's aggression against Kuwait in 1990, and later in 2003 the vast majority of world opinion was opposed to the U.S-led invasion of Iraq under dubious rationales. While there are misgivings towards persistent problems such as representation and decision-making in the Security Council, the UN continues to be widely regarded as indispensable, and the UN Charter remains the fundamental basis governing interstate relations.

Second, it is assumed that states are automatically drawn into and entangled by security dilemmas. Notwithstanding structural factors or perceptual biases, states may not necessarily view, *by choice*, one another's defensive buildups as necessarily manifesting strategic ill intent. Arms buildups may even be viewed as beneficial instead. States may be aware of risks the security dilemma entails and thereby *consciously* seek to avoid being drawn into or entangled by one. Plausible underlying conditions include: 1) destabilizing potential of certain armaments; 2) socioeconomic and sociopolitical reasons; 3) foreign policy that dictates a non-threatening defense-planning approach; 4) existing economic and political associations amongst governments that aid better interstate understanding, predictability of state behavior and cognizance of the economic and political stakes involved; and 5) image and reputation (desire of not be accused of provoking an arms dynamic and thereby destabilizing security).

Instead of engaging in an action-reaction spiral, governments may actually feel more inclined towards confidence-building and cooperative measures to avoid potentially dire consequences of military buildups. They may choose to either stay out of destabilizing arms acquisitions or calibrate their policies through deliberate,

No. 2 (Fall 2014), pp. 52-91; see also Robert Axelrod and Robert O. Keohane, "Achieving Cooperation under Anarchy: Strategies and Institutions," in David A. Baldwin (ed.), *Neorealism and Neoliberalism: The Contemporary Debate* (NY: Columbia University Press, 1993), 85-115.

judicious procurement choices in terms of types and quantities. As Butfoy argued, there is nothing inevitable about the security dilemma since defense planners often have to exercise objectivity over the types and "degrees" of worst-case scenarios.¹⁰⁶ It may not be presumptuous to say that ASEAN states are cognizant of the risks hence undertake steps to avoid being drawn into or entangled by a security dilemma. Policy discourses amongst ASEAN statesmen and tangible policy actions such as naval procurements and force structure development pathways; measures undertaken for confidence-building and practical security cooperation as well as their behavior in the context of interstate crises, may attest to the plausible "alternative pathway" that ASEAN states do recognize and choose to avoid being drawn into or be entangled by the security dilemma.

Perhaps the security dilemma is not uniformly operative in all contexts and this point deserves further attention. Gray for instance argues that the security dilemma is dampened at sea in comparison to land and air.¹⁰⁷ Whereas terrestrial barriers are easier to traverse and overcome, at sea the ability to project power reduces with nautical distance. While discrete categories of modern naval technologies may be inherently destabilizing, especially in catalyzing inadvertent military actions, naval forces on the whole may not as some scholars pointed out. Jordan expounded on the stabilizing role of naval forces, vis-à-vis land forces:

There is a qualitative difference between land-based military forces and power at sea. The difference is a subtle one and one that is often overlooked. Operating on the oceans, navies do not normally intrude directly on national sovereignty as other types of forces do. While the projections of military power normally involves fighting, the projection of maritime power at sea does not necessarily do so. At sea, maritime

¹⁰⁶ Andrew Butfoy, *Common Security and Strategic Reform: A Critical Analysis* (Basingstoke: MacMillan Press Ltd, 1997), Chapter 2: The Security Dilemma, 36.

¹⁰⁷ Read Colin S. Gray, *Modern Strategy* (New York: Oxford University Press, 1999). Richard Hill for instance questioned the notion that limitations on conventional naval armaments would lead to improved mutual security, since compared to land operations instances of gunboat diplomacy often demonstrated greater ease of being terminable and containable, whereas naval forces have stabilizing effects in presence and low-intensity roles. Rear Admiral J.R. Hill, *Arms Control at Sea* (London & NY: Routledge, 1989), 207.

power may contribute to international stability and, as an international force, express unity of purpose in a diplomatic and policing role above and beyond its military function.¹⁰⁸

Wallace and Meconis also argue in favor of the position that naval forces are basically stabilizing:¹⁰⁹

1. The largely international nature of the ocean environment usually allows naval deployment without raising issues of sovereignty;
2. The three-dimensional vastness of the ocean environment allows naval forces to be deployed out of sight and to be easily withdrawn;
3. The difficulty of locating warships (especially submarines) makes them less prone to preemptive attack; and
4. Unless they are armed with nuclear weapons, navies cannot inflict decisive damage on a state by bombardment; amphibious forces are generally only able to take limited objectives on their own.

Unfortunately however, the predominant school of thought in the existing scholarship posits that naval modernization is a potentially destabilizing affair because it can engender security dilemma. A consoling point, luckily, is that it is not the only strand of thinking. The existing scholarship on this theory at least demonstrates that the security dilemma is not necessarily a preordained tragedy in international politics because states – still the key arbiters of a Westphalian international system – can adopt pathways that avoid such a predicament. These studies also demonstrate that the influence of armaments on strategic behavior is not uniform across all types of operating medium. In this regard, the influence of naval armaments on strategic behavior remains under-explored yet at the same time fraught with potential misconceptions.

¹⁰⁸ Robert S. Jordan, *Alliance Strategy and Navies*, Studies in Contemporary Maritime Policy and Strategy Series (London: Pinter Publishers Limited, 1990), p. xi.

¹⁰⁹ Michael D. Wallace and Charles A. Meconis, "New Powers, Old Patterns: Dangers of the Naval Buildup in the Asia-Pacific Region," *Working Paper No. 9*, Institute of International Relations, The University of British Columbia, March 1995, p. 20.

2.5. Naval Armaments: Inherently Offensive and Potentially Destabilizing?

That different armaments may not have the same consequence in different operating mediums, as discussed earlier, means that arms buildup in the terrestrial and maritime contexts may have different influences on strategic behavior. However, as discussed in Chapter One, studies on military modernization in Southeast Asia tend to conflate armaments in all dimensions – air, land, sea, even space-based and cyber – without clear distinction. This also risks conflating their influence on strategic behavior. In relation, there is an often-held assumption that naval armaments are offensive by virtue of their inherent technical characteristics and therefore, destabilizing.

The reason why armaments play a key role is that they cannot simply be dismissed or overlooked. Clearly armaments do shape, constrain or broaden strategic options for policy elites. This view is central to the security dilemma scholarship. The primary concept that needs closer examination in this regard is Offense-Defense Theory (ODT) which comprises two elements: Offense-Defense Differentiation (ODD) and Offense-Defense Balance (ODB).

ODT asserts that when ODB favors the offense, states tend to adopt aggressive strategies including expansionism and confrontational diplomacy. Arms races become more likely since states will have to invest more in military capabilities to match actual or perceived adversaries' offensive capabilities. War also becomes more likely as the result of potential destabilizing arms-tensions spirals. Conversely, when ODB favors the defense, states are more inclined towards peace and cooperation, since defense makes aggression costly. States will not have to spend too much on defenses, which thus allow the forestalling of arms races or tapering off of arms racing.¹¹⁰

¹¹⁰ George Quester, *Offense and Defense in the International System* (John Wiley: New York, 1977); Robert Jervis, "Cooperation under the Security Dilemma," *World Politics*, Vol. 30, No. 2 (January 1978), pp. 187-94, 199-206; Charles H. Anderton, "Toward a Mathematical Theory of the Offensive/Defensive Balance," *International Studies Quarterly*, Vol. 36, No. 1 (Mar 1992), pp. 75-100; Sean Lynn-Jones, "Offense-Defense Theory and Its Critics," *Security Studies*, Vol. 4, No. 4 (Summer 1995), pp. 660-91; Charles L. Glaser and Chaim Kaufmann,

Because of the assumption about how ODB influences states' strategic behavior, ODT carries analytical appeal as a predictive tool, especially for understanding the causes of war. However, the logic of ODT can be turned upside down. For instance, offense-dominance may not provoke war since there are more uncertainties computed into the strategic calculus, compelling belligerents to behave cautiously whereas defense-dominance may tempt aggressors to resort to short-burst offensives since the defense of newly-captured territorial gains against enemy counteroffensives will be favored.¹¹¹ Nonetheless, ODT remains relevant to this study here because existing studies of the consequences of ASEAN naval modernization, even if they do not openly invoke this theory, are in fact influenced by its fundamental assumption about how offensive armaments incentivize states' aggressive policies.

ODB provides a good starting point for discussion here. ODT adopts two methodological approaches with regard to ODB. The traditional approach, the Core Method, utilizes exclusively military technology and geography to measure ODB.¹¹² But the Core Method is problematic because, without first reaching a consensus on ODD it is virtually impossible to adopt the Core Method as a reliable approach.¹¹³ Because the Core Method is too narrow to be universally applicable, critics advocated the more holistic Broad Method which includes other parameters

"What is the Offense-Defense Balance and Can We Measure it?" *International Security*, Vol. 22, No. 4 (Spring 1998), pp. 44-82; Stephen van Evera, "Offense, Defense, and the Causes of War," *International Security*, Vol. 22, No. 4 (Spring 1998), pp. 5-43; Keir A. Lieber, "Grasping the Technological Peace: The Offense-Defense Balance and International Security," *International Security*, Vol. 25, No. 1 (Summer 2000), pp. 71-104; and Karen Ruth Adams, "Attack and Conquer? International Anarchy and the Offense-Defense-Deterrence Balance," *International Security*, Vol. 28, No. 3 (Winter 2003/04), pp. 45-83.

¹¹¹ Richard L. Russell, "Persian Gulf Proving Grounds: Testing Offence-Defence Theory," *Contemporary Security Policy*, Vol. 23, No. 3 (2002), pp. 192-213.

¹¹² Proponents of the Core Method include Lieber, who insisted that the Core Method continues to hold more appeal because technology is the most common determinant in all versions of ODT and also, much more parsimonious than the Broad Method.

¹¹³ For example, see Mearsheimer, "The False Promise of International Institutions," p. 23.

such as sociopolitical order and nationalism to the Core Method.¹¹⁴ These scholars added that ODB cannot be utilized as a universal, system-wide predictive tool since varying geographical contexts can affect ODB measurement. However, Core Method proponents counter-criticized the Broad Method as a non-parsimonious “grab bag” of indicators. They deemed some of those indicators to be so intangible as to preclude rigorous analysis, which thereby undermines ODB's prediction value.

Whichever of the methodological differences, both methods provide two common foci. First, both methods focus on states' incentives to embark on aggressive policies.¹¹⁵ Second, both methods centre on the influence of military technology. This results in ODD remaining a sticky problem because, depending on the conditions under which they are employed, most weapons can serve both defensive and offensive roles. The ODD problem thus places ODB in a tenuous position.

Existing studies on ASEAN naval modernization apparently gravitate towards the Core Method, and the conventional argument reflects the allusion that accumulation of offensive armaments is potentially destabilizing. These studies suggest that because ASEAN naval forces are acquiring offensively-oriented armaments such as bigger warships, submarines and long-range missile capabilities that are suitable for force projection, this increases the likelihood of aggressive policies manifested in arms dynamics, and greater proclivity towards the threat or use of force. Furthermore, the questionable utility of economic and political interdependences makes this ODB slide towards the offense all the more destabilizing.

Because ODB is intricately linked to ODD, the latter deserves closer examination especially with respect to the inferred assumption that naval armaments are dual-functional, inherently offensive and therefore destabilizing. Dual-functionality is best

¹¹⁴ Proponents of the Broad Method include Glaser and Kaufmann, as well as van Evera.

¹¹⁵ For a good exposition on the various methods (a total of four are identified within the Core and Broad Methods), their strengths and limitations, read Sean M. Lynn-Jones, “Does Offense-Defense Theory Have a Future?” Paper based on a talk delivered to the Research Group in International Security at McGill University, October 20, 2000.

manifest in warships, based on the commonly-held perception that naval forces can be used for both warfighting and operations-other-than-war purposes. Warships such as large AALS in particular can be used for amphibious assault to seize a foreign beach-head and for humanitarian assistance and disaster relief (HA/DR). However, to generalize all warships as dual-functional misses the point about optimality in designed performance. Even if dual-functional, some warships are better optimized for certain roles over others. Optimality in designed performance entails trade-offs which circumscribe roles and missions of each weaponry as a result of its inherent technical characteristics. If this factor is disregarded then in theory virtually any warship can be used for any conceivable role in times of war and peace (such as an excessively expensive and armed pleasure yacht for the country's rulers!).¹¹⁶

Yet policy elites, chiefly military planners, are conscious of optimality in designed performance when deciding on the deployment of assets, as demonstrated in the aftermath of Super Typhoon Haiyan which ravaged the Philippines in November 2013. Despite being one of the American spearheads, the aircraft carrier *George Washington* has limited utility in HA/DR in certain respects. While it has a wide range of HA/DR-relevant capabilities such as a huge helicopter capacity and medical amenities, it is physically too large to enter the shallow waters. Furthermore, the supercarrier has no well-dock to embark and disembark shallow-draft landing craft to ferry aid ashore. Partly because of such limitations, the U.S. Pacific Command deployed a pair of landing ship, docks (LSDs) which are optimized for such a purpose.¹¹⁷ Following the LSDs' arrival, aid reached the victims more efficiently because the ships can dispatch both helicopters and shallow-draft landing craft

¹¹⁶ For instance, the Spanish-built RTN light helicopter carrier *Chakri Naruebet* was constructed in the 1990s with a royal suite onboard but it is far from being designed as a royal yacht. Ceremonial function certainly does not precede its primary combat and OOTW roles even if one of the reasons of acquiring this ship is for national prestige.

¹¹⁷ LSDs are equipped with a well-dock, plus their shallower draft makes them more suited for inshore operations. Barbara Starr, "General asks for U.S. warships in typhoon relief," *CNN Wire*, November 12, 2013.

whereas the carrier served as a helicopter-refuelling hub.¹¹⁸ Likewise, the Royal Navy destroyer *Daring* is designed as a warfighting vessel and lacks the physical capacity to deliver HA/DR supplies. Unsurprisingly then, *Daring* was subsequently replaced by light aircraft carrier *Illustrious* which may be less optimized for HA/DR compared to an AALS but at least surpasses the destroyer because it has larger storage space and helicopter complement that can be optimally utilized for HA/DR.

The generalized, offensive character of naval armaments needs examination here. The offensive character of a weapon system is essentially a technical issue which depends on factors such as design and mode of deployment. To generalize all types of naval armaments as "offensive" is therefore misleading. While they may seem offensive because of such qualities as mobility, endurance, range and firepower, not all armed government ships – whether "grey" or "white" hulls – are necessarily offensive. Even the term "warships" is such a generic category that it contains various sub-categories optimized for different roles. It is important to consider a weapon as a system of systems where necessary, because in standalone mode a particular discrete system or sub-system may not deliver its desired effect. For instance, the scantily-armed mine countermeasures vessel is inherently defensive unless it is incorporated within a larger task force and given proper protection, such as friendly air cover, so that it can scout ahead of an invading amphibious assault force.

There also seems to be a tendency within the scholarship to conflate "tactically offensive" and "strategically offensive" capabilities. For example, Lynn-Jones identified bridging equipment to be of "unambiguous offensive character" which is "mainly useful for enabling attacking forces to cross rivers inside enemy territory".¹¹⁹ Bridging equipment enable offensive maneuvers across water obstacles, thus giving it an inherently offensive character. However, the same equipment need not necessarily be used for strategically offensive actions in

¹¹⁸ "Amphibious Ships Replace USS George Washington in Philippines," *Department of Defense Documents*, November 22, 2013.

¹¹⁹ Lynn-Jones, "Does Offense-Defense Theory Have a Future?" p. 16.

foreign land but also for recapturing one's territory previously lost to the enemy (i.e. to restore the earlier territorial status quo). This demonstrates that armaments that have "offensive character" are not necessarily destabilizing, depending on its mode of deployment.

Mode of deployment also concerns looking at armaments from the "system of systems" perspective. For instance, an anti-tank guided weapon (ATGW) in static configuration as part of fixed border defenses is inherently a defensive weapon that is far from destabilizing. When mounted onto a jeep, the ATGW becomes mobile and acquires an offensive character but it is not necessarily destabilizing so long this system remains confined to within the defender's territory (for example as a blocking force against invading armor). However, when the platform upgrades to an even more mobile one that can project force further afield its destabilizing potential increases. For instance, an ATGW-mounted helicopter can project offensive power into enemy territory, as exemplified by U.S. Apache attack helicopters launching anti-armor forays into Iraq and occupied-Kuwait in support of the Coalition ground battle in 1991. The ATGW becomes much more destabilizing when mounted on an even more mobile platform which has better persistence, range and protection that makes it more capable of autonomous operations within foreign territory. An example is the American F-111 Aardvark, a long-range deep-penetration fighter-bomber which can fly at treetop altitudes to evade detection. Armed with small laser-guided bombs employed as an ATGW, it was used during the same campaign to great effect against enemy armor deep inside Iraqi territory.

Therefore, the generally-held assumption that ODD is difficult to attain ought to be looked at in perspective. As the next section later on naval arms control shall point out, the problem lies not so much in ODD than individual governments' distinct national interests – which shape procurement choices – as well as implementation challenges such as compliance and verification. In fact, ODD is observed in real-world policy practice, shaping the way policy elites perceive (and presume) the impact of armaments and their procurement choices.

The first example is U.S. sales of "defensive arms" to Taiwan. Why will Washington not sell Taipei the F-15E Strike Eagle multi-role fighter jet, designed for deep-

penetration attacks, which can pose a more credible deterrent against Beijing? The F-16A/B Fighting Falcon deployed by the Republic of China Air Force (ROCAF) has comparatively inferior survivability, payload and combat radius. It is optimized for only air defense and close air support roles. Even more interestingly, Washington refused to sell the F-16C/D to Taipei because of its superior surface attack capabilities, thereby compelling the latter to bolster its deterrent capability by upgrading its F-CK-1 Indigenous Defense Fighter and F-16A/B fleets as well as induct the Wan Chien long-range standoff weapon system as stop-gap measures.

Another example is the Swiss Air Force's F/A-18C/D Hornet fighter jets. The Hornet is designed as a carrier-borne ground attack fighter. But when sold to the Swiss in the 1990s, the F/A-18s are optimized exclusively as an air defense fighter instead.¹²⁰ If not because of the Swiss policy of neutrality, this additional hassle would not have been incurred in the first place. This example testifies to the plausibility of distinguishing between offensive and defensive weapons, from the policy perspective.

The final example is North Korea. Pyongyang makes regular bellicose statements in response to American-South Korean military exercises, which thereby establishes a routine pattern. However, if one bothers to examine those official statements more closely, there are discernible patterns buried within them which reflect Pyongyang's innate sensitivities towards certain American weapon systems, especially aircraft carriers, long-range strategic bombers and nuclear submarines. While Pyongyang also occasionally lambasts Japan's defense buildups, it specifically highlighted Japan's quest for long-range offensive strike capabilities which can target missile and nuclear threats at their source, in oblique reference to North Korea.¹²¹

¹²⁰ Mike Spick (ed.), *The Great Book of Modern Warplanes* (London: Salamander Books, 2000), 309.

¹²¹ North Korea associates certain armaments as equating to Japan's disavowal of its pacifist Constitution and acquiring the ability to launch "overseas aggression", for instance specifically highlighting such discrete weapons as long-range missiles and aircraft carriers. See for example, "North Korean paper denounces Japanese "aggression", " *BBC Monitoring Asia Pacific – Political*, December 18, 1999; "North Korea says Japan passes "danger line" with plan for two aircraft carriers," *BBC Monitoring Asia Pacific – Political*, December 9, 2000.

The Japanese, South Korean and American plans for missile defenses in Northeast Asia also came under Pyongyang's attack. However, strictly speaking such systems are defensive but they are regarded to be destabilizing by North Korea (and for that matter, China and Russia) because they nullify its strategic missile and nuclear deterrent. Missile defense allows Washington not only to ward off a North Korean missile-nuclear strike but also preserve sufficient second-strike forces for retaliation. As such, even supposedly defensive weapons can be destabilizing.¹²²

Of course, ODD is inherently subjective since different armaments can be perceived differently by different actors. Nonetheless, as the above examples illustrate, ODD is possible in practice. This thesis shall go further, focusing on naval armaments, by identifying those which can be generally categorized as destabilizing or otherwise.

To sum up this discussion on ODT, it needs pointing out that besides the general assumption that ODB influences strategic behavior, the existing methods did not attempt to holistically cover the term "aggressive behavior" other than to test their indices – be it Core or Broad Methods – on the more extreme instances of outbreak of wars (which are quantifiable as a dependent variable since incidences of wars can be operationalized in the analysis).¹²³ This thesis seeks to explore a framework that analyzes how aggregate force structure (instead of discrete capabilities)

¹²² Another good example is the case of mid-air refuelling tanker aircraft, which are actually lumbering slow, unarmed and practically defenseless planes loaded with tons of aviation fuel and therefore sitting ducks. But these defensive platforms can be potentially destabilizing simply because they extend the range of offensive platforms, such as deep-penetration fighter-bombers. The North Koreans for instance claimed that Tokyo's "introduction of airborne refuelling aircraft is a clear indication that overseas aggression of Japanese militarism is becoming a reality". "North Korea says Japan's plan for airborne refuelling aircraft "dangerous", " *BBC Monitoring Asia Pacific – Political*, February 11, 2000.

¹²³ As Lynn-Jones argues in his conclusion, ODT "has had a more persuasive influence than its critics admit," and the steps forward for this theory is not to be bogged down by disputes over the Core and Broad Methods of ODB measurements but to continue testing it empirically. Lynn-Jones, "Does Offense-Defense Theory Have a Future?" p. 38.

influence policy discourses and actions. To do so, it is necessary to examine the concept on naval arms control.

2.6. A Way Out of the Conundrum: If Not Negotiated Naval Arms Control, What Else?

As a concept closely related to ODT, naval arms control constitutes one of the earliest attempts to avoid the security dilemma, with efforts dating back to the Interwar years.¹²⁴ Warships are often upheld as a good case study in the literature about ODD problems, because they are deemed dual-functional platforms that can fulfil a range of roles and missions including warfighting and HA/DR for instance. Naval arms control can be broadly defined, according to Fieldhouse, as:

Comprising those measures and activities that seek to prevent or dissuade war by eliminating or reducing the sources of danger that stem from the naval forces or activities of various nations. This is a more comprehensive construction than the traditional but narrow concept of arms control, and includes everything from negotiated bilateral, multilateral or regional agreements to unilateral or non-negotiated measures, with or without reciprocity, to various forms of joint cooperation ranging from exchanges of information and personnel to structured dialogue.¹²⁵

Structural naval arms control measures seek to identify and limit, quantitatively or qualitatively, naval armaments deemed as destabilizing. It would have been wrong to attribute the failures of the Interwar naval disarmament efforts solely to the ODD problem. That the League of Nations World Disarmament Conference failed to enact measures to abolish offensive weapons, which delegates believed then to be the cause of WW1, was not so much because of wrangling over ODD. The Naval Commission, established as a sub-working group, did manage to tentatively identify

¹²⁴ For historical antecedents of naval arms control up to 1945, refer to the United Nations Department of Disarmament Affairs Report to the Secretary-General, *The Naval Arms Race* (NY: United Nations, 1986), 4-6. See also Annex I in the same report.

¹²⁵ Richard Fieldhouse, "Naval forces and arms control: a look to the future," in Richard W. Fieldhouse and Shunji Taoka, *Superpowers at Sea: An Assessment of the Naval Arms Race*, SIPRI Strategic Issue Papers (New York: Oxford University Press, 1989), 158.

submarines, large battleships and aircraft carriers as offensive naval armaments. Some of the teething problems encountered were because some of the participant states believed some of these naval armaments to be vital to their security interests. The failures of the naval disarmament talks were in no small part due to the inability of the participant states to reconcile conflicting national security interests which circumscribed preferences towards certain types of naval armaments.¹²⁶

The Interwar naval disarmament efforts were thus upheld as a key event that demonstrates structural naval arms control to be the hardest to accomplish. This perception was reinforced by the difficulties encountered in the superpower naval arms control negotiations of the 1980s. It was deemed to be an ill-fated endeavor which should not have been even considered because of stark differences between the two superpowers not just in their security outlooks and national interests, but in areas such as geostrategic and doctrinal considerations as well as force requirements. These differences, some of which were reminiscent of the Inter-War experience, doomed structural naval arms control to failure from the onset.¹²⁷

¹²⁶ For a detailed analysis of the problems encountered during the Disarmament Conference, read Marlies ter Borg, "Reducing Offensive Capabilities: The Attempt of 1932," *Journal of Peace Research*, Vol. 29, No. 2 (May 1992), pp. 145-60. Also read Emily O. Goldman, *Sunken Treaties: Naval Arms Control between the Wars* (The Pennsylvania University Press, 1994), which not only is a thoroughly-research exposition of what transpired during the Conference, but also furnishes archival material related to the provisions of treaties signed back then.

¹²⁷ For the problems that resulted in the dismal outcome of the U.S.-Soviet naval arms control in the 1980s that illuminate the fundamental obstacles relating to those interstate differences that impinge upon naval arms control endeavors, read for instance Richard Fieldhouse, "Superpowers at sea: the need for a new assessment," and Shunji Taoka, "East-West naval force comparison," in Fieldhouse and Taoka, *Superpowers at Sea*; Barry M. Blechman, "Chapter 3: Distinctive Features of the Maritime Forces of the United States and the Soviet Union"; Steven E. Miller, "Chapter 6: Naval Arms Control and Northern Europe: Constraints and Prospects," in Lodgaard (ed.), *Naval Arms Control*; Eric Grove, *Maritime Strategy and European Security*, Common Security Studies: No. 2 (London: Brassey's (UK), 1990); and James L. Lacy, "Naval Arms Control: The Backdrop of History," A RAND Note, N-3120-USDP (Santa Monica, CA: The RAND Corporation, August 1990).

In today's context, structural naval arms control becomes an even more intractable problem. As far as collective security is concerned, certain naval armaments are deemed necessary for international peace. For example, the U.S. Navy's aircraft carriers and their organic strike aviation, RGM-109 Tomahawk LACM, large AALS and U.S. Marine Corps were essential in evicting Iraqi aggressors from Kuwait back in 1991.

Even if the rationale for structural measures is unassailable, obstacles such as problems of compliance, verification, national perceptions and pride make negotiations – those with the goal of achieving mutually acceptable quantitative and qualitative limits on naval armaments – difficult if not impossible.¹²⁸ Modern technology also meant that limitations on tonnage and warship sizes may no longer matter as much as before, since small warships can be equipped with armaments that give it disproportionately greater punch over even larger warships. This may potentially impair the action of oceangoing navies while shifting the advantage to small navies, thus making structural naval arms control, especially between the big and small navies, even harder to achieve.¹²⁹ Also, in the age of new media and increasingly sophisticated intelligence tools, one may secure readier access to knowledge of new naval capabilities introduced into service of potential adversaries, further undermining attempts of structural naval arms control.¹³⁰

¹²⁸ Hill, *Arms Control at Sea*, 139. Read also Peter Jones, "The Future of Naval Arms Control (Including Confidence-Building Measures)," in Griffiths and Haydon (eds.), *Maritime forces in Global Security*.

¹²⁹ Johan Tunberger and Robert Dalsjo, "Strategic developments and the impact of naval arms control in the Baltic region," in Andreas Furst, Volker Heise and Steven E. Miller (eds.), *Europe and Naval Arms Control in the Gorbachev Era* (A SIPRI Publication) (SIPRI; New York: Oxford University Press, 1992), 174.

¹³⁰ Today's new media tools included publicly-accessible databases such as those of IHS *Jane's Fighting Ships* or United States Naval Institute's *Guide to Combat Ships of the World* Series offer unprecedented glimpses into navies' capabilities worldwide. The public may even gather "primary information" using such "intelligence-gathering" tools as Google *Earth* images of a particular country's naval facilities. Naval shipbuilding industries also promote their products and new R&D projects through websites.

An alternative to structural measures is operational naval arms control, which seeks not to limit the quantity and quality of capabilities, but the way navies utilize them (i.e. naval activities), for instance advanced notification of naval exercises and restrictions on naval force size in particularly sensitive maritime zones. Operational measures hold greater promise of success because it does not impose limitations on national naval armament choices. But operational measures are not problem-free either. For example, by nature of their designed purpose submarines would have to be omitted from operational measures and even if they are included in negotiated agreements, there may problems related to verification of submarine movements.¹³¹ Limitations on naval activities may still remain unpalatable to some because of the perceived right to freedom of navigation at sea – an international medium.

If negotiated naval arms control is already hard enough at the bilateral level, as the U.S.-Soviet example demonstrated, multilateral measures are even harder to accomplish. The more parties involved, the broader the differences and thus louder the dissonance as it is correspondingly much more difficult to reconcile the structural and operational naval requirements of so many different participants in the negotiation process.¹³² Southeast Asia (or for the matter the wider Indo-Pacific) is one such example where multilateral measures are more difficult to accomplish because of varying national interests conditioned by varying security perceptions which give rise to different priorities and approaches. Force structure and procurement choices are premised on such interests, which necessarily have to also take into account the resource disparities and needs in the region.

Multilateral, operational naval arms control measures remain largely a pipe dream in this region although the closest would be the 2002 Declaration on the Conduct of Parties in the South China Sea (DOC) and its 2011 Implementation Guidelines. The intractability of multilateral measures is well exemplified in the long-drawn Sino-

¹³¹ Grove, *Maritime Strategy and European Security*, 82; and Miller, "Chapter 6: Naval Arms Control and Northern Europe," 89.

¹³² On the difficulties encountered in regional-level naval arms control, read William J. Durch, "Naval arms control and the Norwegian Sea: a US perspective," in Furst et al (eds.), *Europe and Naval Arms Control in the Gorbachev Era*, 39.

ASEAN consultations over the Code of Conduct (CoC), envisioned to be a legally-binding instrument by some to limit military activities in the South China Sea. Thus far, negotiations over the CoC, notwithstanding the upbeat claims made by some of the parties, remain far from reaching conclusion. The other example is the Direct Communications Link (DCL) proposal adopted by ASEAN defense ministers in May 2013 and the inaugural workshop held in February 2014. If it takes off, the DCL will be a first real multilateral initiative on operational measures.

However, given the international nature of SLOCs plying through Southeast Asian waters such as SOMS, broadening participation in multilateral measures to include extra-regional powers will be necessary since any strictly-regional regimes can potentially be disrupted by external maritime user states.¹³³ This presents yet another problem to Southeast Asia because extra-regional powers will probably refute such agreements that are regarded as constraining their freedom of naval action. Finally, since the longevity of any naval arms control measure depends on prevailing external and internal circumstances that make national interests amendable, the limited scope of existing measures will most likely not go further.

The history of naval arms control thus does not present a rosy picture and contemporary developments in this regard appear to give mixed perceptions at best. In fact, recent tensions in Europe amidst the Ukraine crisis may provoke questions about the utility of arms control measures.¹³⁴ If Europe which possesses

¹³³ Johan Jorgen Holst, "The Arctic, Northern Waters and Arms Control," *Lecture to the True North Strong and Free Inquiry Society*, Edmonton, Canada, 19 March 1989, FD-Information no.3, Oslo: Norwegian Ministry of Defence, 26. Quoted in Ola Tunander, "Chapter 11: Naval Hierarchies: European 'Neutrality' and Regional Restraint at Sea," in Lodgaard (ed.), *Naval Arms Control*, 178. See also James L. Lacy, "Within and Beyond Naval Confidence-Building: The Legacy and the Options," A RAND Note, N-3122-USDP (Santa Monica, CA: The RAND Corporation, 1991), 32-33.

¹³⁴ The post-Cold War arms control, such as those under the Organisation of Security Cooperation in Europe (OSCE, formerly Council of Security Cooperation in Europe), did not appear to have helped forestall the Ukraine crisis. OSCE also encountered difficulties in implementing negotiated operational arms control measures, such as the withdrawal of

arguably the world's most comprehensive set of arms control measures cannot be spared from the dangers of armed conflict, what about other regions where habits and norms of arms control have been far less developed? Does the crisis in Europe therefore lend greater credence to the conventional argument about ASEAN naval modernization and its consequences?

But one potential aspect begs further examination. While existing studies on arms control in general has been largely focused on negotiated measures, much less attention has been given to unilateral measures. As its name implies, unilateral measures constitute a kind of tacit arms control which comprises structural or operational or mixed measures that can be adopted by individual states without having to enter into negotiations and restrictive regimes.¹³⁵ Fieldhouse suggests unilateral naval arms control as comprising:

National (or alliance) decisions or policies to take or not to take certain action in order to improve the military or political situation with respect to naval forces and international security. These decisions could be communicated or publicized in the hope of encouraging a similar or reciprocal action or self-restraint from another nation or to facilitate arms control. There is a wide variety of options in the naval arena, from national decisions on procurement, force structure or choice of armament, to naval strategies, deployment patterns and policies concerning 'gunboat diplomacy'.¹³⁶

Unilateral measures not only enhance mutual security but potentially pave the way for future negotiated regimes.¹³⁷ In any case, the onus still falls on individual states to exercise circumspection in procurement and force structural development pathways, as well as the employment of naval forces. But unilateral naval arms control has its own set of problems, such as verification and ease of reversal (to the

heavy weapons by both Ukrainian government and rebel forces. "OSCE Says Unable to Fully Control Heavy Artillery Withdrawal in Donbas," *Sputnik News International*, March 1, 2015.

¹³⁵ On the potential benefits of unilateral naval arms control, read Richard Fieldhouse, "Naval forces and arms control," in Richard Fieldhouse (ed.), *Security at Sea: Naval Forces and Arms Control* (SIPRI Publications) (SIPRI; New York: Oxford University Press, 1990).

¹³⁶ *Ibid*, 8-9.

¹³⁷ *Ibid*, 26-27.

detriment of other states).¹³⁸ Nevertheless, as the preceding discussion had demonstrated, unilateral measures do hold promise especially if policy elites can still distinguish between offensive and defensive armaments, even though this may be subjective from country to country. Hence, unilateral naval arms control offers an alternative perspective to the conventional argument propounded by the existing scholarship.

2.7. The Need for an Alternative Perspective on the Consequences of ASEAN Naval Modernization?

Even though the conventional argument put forth by the existing scholarship carries merit, the dire consequences it warns of does not have to happen. The survey of existing studies in this Chapter shows that this conventional argument is predicated on theories and concepts which are themselves debatable.

Firstly, the arms-racing theory does not aid in understanding the consequences of naval armament. If any, the theory muddies the water more so than clarifying matters. Even the tentative conclusion reached, that naval modernization in Southeast Asia is competitive without being necessarily adversarial. So long as there is no end to the scholarly questioning about the definitions and underlying assumptions of arms-racing theory, this conclusion will remain a matter of debate. The scholarship on economic and political interdependencies, revolving around the ASEAN-centric regional architecture, is another area that also sees a fair share of debate. But one thing is clear: the efficacies of economic and political interdependencies in mitigating the risks of conflict are perceived differently by different constituents, in both academic and policy circles. Assuming the “play safe” approach, even if existing institutions are undeniably successful, it does not stop countries from taking self-help measures, which include defensive preparations to hedge against uncertainties.

¹³⁸ Durch, “Naval arms control and the Norwegian Sea,” 27; and Vladimir Kulagin, “Naval arms control in the Baltic Sea: a Soviet perspective,” in Furst et al (eds.), *Europe and Naval Arms Control in the Gorbachev Era*, 135.

But does self-help necessarily result in the tragedy of international politics, first and foremost the security dilemma, destabilizing arms-tensions spirals and war? It is plausible, as established in this Chapter, that the security dilemma may not be uniformly operative in all mediums. Assumptions underpinning the security dilemma are no less debatable too. The ODT literature demonstrates an opening to revisit how armaments influence strategic behavior. Even though prospects of negotiated arms control may be slim, it is possible to distinguish offensive from defensive armaments and that offensive armaments are not necessarily destabilizing, even if such perceptions are subjective. Is it therefore not possible to conceive of unilateral measures undertaken by individual states to avoid being drawn into or entangled by a security dilemma? The existing scholarship appears to imply that individual states are necessarily powerless when faced with changing external circumstances and therefore liable to being manipulated by structural influences. Self-help, in this case the building of one's naval capabilities, does not necessarily result in dire outcomes. Hence, there is a need for an alternative perspective to rethink the consequences of ASEAN naval modernization. Table 4 below sums up the preceding discussion in this respect.

Table 4: An Alternative Perspective on the Consequences of ASEAN Naval Modernization

	Conventional Argument	An Alternative Perspective
Drivers of Naval Modernization	Interactive + Semi-Interactive + Non-Interactive	
Assumptions about Mitigation	Absence of negotiated structural naval arms control + Questionable efficacy of ASEAN-centric regional architecture	
Assumptions about Naval Armaments and Offense-Defense Balance	Dual-functionality, inherently offensive character and therefore destabilizing potential of naval armaments Inevitable slide of ODB towards offense	Even if dual-functional, not all types of naval armaments are either inherently offensive or necessarily destabilizing Slide of ODB towards offense not necessarily inevitable
Assumptions about the Context of Geopolitical Uncertainties	Interactive + Semi-Interactive + Non-Interactive Drivers Does not assume policy elites' concern about destabilizing potential of naval armaments	Interactive + Semi-Interactive + Non-Interactive Drivers Assumes policy elites' concern about destabilizing potential of naval armaments
Strategic Behavior #1 (Force Structure and Procurement Pathway)	Pure hedging through self-help via contingency planning-based defensive preparations	Judicious hedging through self-help via contingency planning-based defensive preparations combined with unilateral naval arms control
Strategic Behavior #2 (National Policy Discourse)	Greater propensity towards animus, bellicosity and verbal threats	Greater propensity towards amity, common security and common interests
Strategic Behavior #3 (CSBMs and Cooperative Measures)	May or may not take place	Greater propensity towards confidence- and security building as well as cooperative measures
Strategic Behavior #4 (Use of gunboat diplomacy in the context of interstate disputes)	Greater propensity towards unrestricted application of gunboat diplomacy and escalatory actions for brinksmanship	Greater propensity towards calibrated application of gunboat diplomacy and de-escalatory actions to prevent brinksmanship
Outcome	<u>"Conventional Argument"</u> Security dilemma and arms-tensions spirals, including the risks of accidental or inadvertent armed conflicts are potentially inevitable and unavoidable	<u>An Alternative Perspective</u> Avoidance of being drawn into or entangled by security dilemma; risks of accidental or inadvertent armed conflicts can be ameliorated

Source: Formulated by author

CHAPTER THREE: RESEARCH DESIGN

Proposing a Heuristic Analytical Framework to Examine the Influence of Naval Armaments on Strategic Behavior

3.1. A Brief Recap from the Previous Chapter and Intro to an Analytical Framework

Earlier in Chapter Two the “conventional argument” put forth by existing scholarship on the consequences of ASEAN naval modernization was examined and it proposes a heuristic, alternative approach. It concluded that states could possibly adopt unilateral measures to avoid being drawn into or entangled by security dilemmas as a result of naval armament, in the context of perceived questionable utility of economic and political interdependencies.

However, self-help does not necessarily result in dire consequences if states undertake conscious efforts to avoid being drawn into or entangled by security dilemmas. Therefore, self-help can be undertaken in prudence as noted in the end of Chapter Two. Most importantly, it argues that even though negotiated naval arms control may be difficult, it remains feasible to think about individual states adopting unilateral naval arms control measures. This Chapter shall demonstrate that it is in fact possible to adopt naval postures that can ameliorate the possible negative consequences of naval armament.

This Chapter assumes that naval armaments do not necessarily result in aggressive policies. This requires an alternative way of examining how naval armaments influence strategic behavior – procurement preferences, force structural development pathways, national policy discourses, as well as cooperative and coercive policy actions. To do so, a heuristic analytical framework becomes necessary. The starting point in this Chapter will be the notion of unilateral arms control. An associated concept is non-offensive/provocative defense. It shall form the nucleus of analytical framework for this study.

Throughout this entire study, non-provocative defense (NPD) shall be referred to as the standard terminology to describe defensive military postures.¹³⁹ It will be necessary to examine NPD first as a general concept before deriving an analytical framework that can be applied in the subsequent chapters. The basic research design and general methodological approach shall be outlined in this Chapter. The specific methodological requirements for each hypothesis outlined in Chapter One will be individually outlined in the respective chapters. In other words, while NPD forms the basis of the analytical framework, the various research parameters have different methods of operationalization and analysis.

3.2. Common Security and the Vision of “Peace through Assurance” as Fundamental Motivation behind NPD

But before going into the concept of NPD, it is necessary to trace its origins in order to understand those motives behind its advocacy. The one important notion closely associated with NPD is common security. Essentially, common security envisages that all humankind in the nuclear age share the same future of (in)securities. In what is coined as the “indivisibility of peace”, it also emphasizes that insecurities anywhere can be a danger to peace everywhere.¹⁴⁰

When common security was first conceived in the later stages of the Cold War, the specter of nuclear annihilation loomed large. Therefore, its most important objective was to prevent war under the notion that security is only attainable if it is seen as a common good obtained through interstate cooperation.¹⁴¹ Lasting security is only achievable if defense planning takes into account the security

¹³⁹ Alternative variations for NPD include for example, “Non-offensive Defense”, “Alternative Defense”, “Defensive Defense”, “Non-Threatening Defense”, “Confidence-Building Defense” and “Structural Inability to Attack” though the difference between them lies more in name than substance.

¹⁴⁰ Butfoy, *Common Security and Strategic Reform*, 8-9.

¹⁴¹ Bjorn Möller, *Common Security and Nonoffensive Defense: A Neorealist Perspective* (Boulder, Colo: L. Rienner Publishers, 1992), 30.

needs of actual and perceived adversaries.¹⁴² "Peace through strength" deterrence-based defense planning was not regarded as compatible with common security since it would create and feed into the security dilemma.¹⁴³ Instead, common security is only attainable if "peace through reassurance" non-deterrent solutions such as concerted interstate dialogue, confidence-building measures and gradual alterations to military forces are adopted.¹⁴⁴ Because of the prevailing Cold War context, nuclear armaments were the key concern.

But nuclear armaments could not possibly be de-linked from the context of deploying conventional armaments since the former was factored into opposing sides' defense planning in preparation of a possible Third World War along the European front. To factor nuclear armaments into account, Buzan for instance suggests that NPD can be combined with minimum deterrence in order to become a logically convincing implementation strategy for the concept of common security.¹⁴⁵

3.3. Non-Provocative Defense: A Utopian Pipedream or Merely in Need of Conceptual "Tweaks"?

It could not have been timelier when the concept of NPD emerged in the 1980s. Its birthplace, Europe, was in the centre of ongoing East-West geopolitical rivalries and

¹⁴² Read for example, Margaret Johannsen, "Chapter 5: Beyond Deterrence through Common Security," in Furio Cerutti and Rodolfo Ragonieri (eds.), *Rethinking European Security* (NY: C. Russak; Bristol, PA: Taylor & Francis, 1990), 48; and Bjorn Möller, *Resolving the Security Dilemma in Europe: The German Debate on Non-Offensive Defence* (London, Washington: Brassey's (UK), NY: MacMillan, 1991), 2-3.

¹⁴³ Marie-Louise van Muijen, *Better Safe than Provocative: A policy science perspective on the West European non-provocative defence debate in the 1980s* (Amsterdam: VU University Press, 1993), 13; Butfoy, op cit (note 1), 4.

¹⁴⁴ *Study on Defensive Security Concepts and Policies*, United Nations Department for Disarmament Affairs Report for the Secretary-General, A/47/394 (NY: United Nations, 1993), 22.

¹⁴⁵ Barry Buzan, "Common Security, Non-provocative Defence and the Future of Western Europe," *Review of International Studies*, No. 4 (1987), pp. 265-79.

the prospects of a Third World War loomed large. Though inspired by the notion of common security, NPD was in fact underpinned by the concept of ODT, that trans-armament (shifting away from offensive armaments in favor of defensive ones) via unilateral or multilateral efforts might reduce international tensions, ameliorate the security dilemma and the risks of war. NPD thus represented an unprecedented attempt to institutionalize the whole body of ideas related to defensive security since the earliest disarmament attempts were made during the Interwar Years.

Fundamentally based on the Clausewitzian notion that defense is an intrinsically superior mode of combat,¹⁴⁶ NPD refers to a type of defense posture that is seen in its totality – in terms of force size, weapons, training, doctrine and logistics – capable of credible defense yet incapable of offense.¹⁴⁷ It calls for postures to be (re)structured with the view of maximizing defensive while minimizing offensive capabilities and structural vulnerabilities (through presenting as few lucrative targets to reduce incentives for the aggressor to attack). However, it should be emphasized, adopting NPD does not imply a policy of defeatism or appeasement against military threats.¹⁴⁸

¹⁴⁶ Carl von Clausewitz (translated by Michael Howard and Peter Paret), *On War* (Princeton, N.J.: Princeton University Press, 1976), 359.

¹⁴⁷ This broad definition is based on existing works. See for instance: Bjorn Möller, *Non-Offensive Defence as a Security Political Instrument, Vol. 1. Theoretical Analysis* (PhD Dissertation, Institute of Political Studies, University of Copenhagen, Jan 1990), 1; Möller, *Common Security and Nonoffensive Defense*, 1-2; Alvin M. Saperstein, "Primer on Non-Provocative Defense," *Arms Control*, Vol. 9, No. 1 (1988), pp. 59-75; Egbert Boeker and Lutz Unterseher, "Emphasizing Defence," in Frank Barnaby and Marlies ter Borg (eds.), *Emerging Technologies and Military Doctrine: A Political Assessment* (NY: St Martin's Press, 1986), 89.

¹⁴⁸ Bjorn Möller and Hakan Wiberg, *Non-Offensive Defence for the Twenty-First Century* (Boulder, San Francisco and Oxford: Westview Press Inc., 1994), 1; "Small States, NOD and Collective Security," in Efraim Inbar and Gabriel Sheffer (eds.), *The National Security of Small States in a Changing World* (London: Frank Cass, 1997), 131; Lutz Unterseher, "Chapter 12: The Case for Alternative Defense: A Detailed Proposal and Its Implications," and Margaret Johannsen, "Chapter 5: Beyond Deterrence through Common Security," in Cerutti and Ragionieri (eds.), *Rethinking European Security*; Colin McInnes, "Alternative Defense," in Colin McInnes (ed.), *Security and Strategy in the New Europe* (London: Routledge, 1992),

The assumption is that countries adopting NPD are capable of mounting stout defenses against external aggression yet at the same time, unable to threaten other countries with the same kind, thereby facilitating a retreat from confrontation characterized by offensive weapons and doctrines.¹⁴⁹ Even though NPD stresses a strategic defensive posture, it does not preclude offensive operations at the operational and tactical levels. Neither does it advocate a "pure defense" posture similar to the ill-fated WW2 French "Maginot Line" strategy. Conversely, a strategic offensive posture containing defensive elements only at the tactical and operational levels does not count as NPD. According to its advocates, NPD provides the following strategic benefits:¹⁵⁰

- 1) "Stress management" via removing the urge for military action during crisis;
- 2) Damage limitation should war ever erupts;
- 3) Promoting détente, mutual confidence and interstate rapprochement; and
- 4) Ameliorating likelihood of arms racing, thereby channeling resources to non-military security aspects.

However, NPD has its own criticisms, as summarized below:¹⁵¹

135-36; and Peter Langille, "On the offensive: There are alternatives after the Gulf War, UN should insist nations keep only defensive forces," *The Toronto Star*, January 25, 1991.

¹⁴⁹ "Does NOD Have a Future in Post-Cold War World?" in Möller and Wiberg, *Non-Offensive Defence for the Twenty-First Century*, 11.

¹⁵⁰ Möller, *Common Security and Nonoffensive Defense*, 2; Rodolfo Ragonieri, "Chapter 15: Political and Military Aspects of Security in the Mediterranean Region," in Cerutti and Ragonieri (eds.), *Rethinking European Security*, 149; Butfoy, *Common Security and Strategic Reform*, Chapter 2: The Security Dilemma, 29; and UNIDIR, *Nonoffensive Defense: A Global Perspective* (N.Y.: Taylor & Francis, 1990), vi.

¹⁵¹ Read for instance *Study on Defensive Security Concepts and Policies*; Geoffrey Wiseman, *Common Security and Non-provocative Defence* (Peace Research Centre, Research School of Pacific Studies, Australian National University, 1989), 9-10; Hylke Tromp, "Chapter 19: Nonoffensive Defense and Conventional Stability in Europe: The Wrong Problem, the Wrong Solution," in Cerutti and Ragonieri (eds.), *Rethinking European Security*, 172-74; Steven L. Canby, "Nonprovocative Defense: A Conceptual Critique and an Alternative Approach," in Hans Gunter Brauch and Robert Kennedy (eds.), *Alternative Conventional Defense Postures in the European Theater*, Vol. 3 *Force Postures Alternatives for Europe after*

- 1) NPD fundamentally assumes that offensive and defensive armaments can be distinguished;
- 2) NPD is conceived in Cold War Europe's land-centric context with high force-to-space ratio which was not necessarily so in other countries;
- 3) NPD can hardly be a universal posture for adoption by every country due to unique geostrategic and geopolitical requirements; it would for instance provide restricted defense options for countries which lack strategic depth;
- 4) Doubts about whether an NPD-type posture can appear convincing to potential and actual adversaries since perceptions matter more; and
- 5) By forswearing offensive capabilities, NPD becomes incompatible with collective security which may require the use of offensive armaments for upholding international order

Because of its structure-based prescriptions, critics charged, NPD assumes that mere tweaks to force structures can promote peace and stability in a political vacuum while overlooking other war prevention methods such as CSBMs. Various NPD models proposed were largely tailored for the air- and land-dominated battlefield context which characterized Cold War Europe,¹⁵² not necessarily applicable to other operating environments (e.g. air-sea). Finally, critics pointed out, NPD's focus on territorial defense was relevant during the Cold War but less so in the contemporary era, when major war is judged to be less thinkable. Instead, security threats may emanate from any conceivable source, for instance low-level threat or use of force that does not necessarily require large-scale ground combat formations or other types of high-intensity kinetic weapons.

the Cold War (Washington, Philadelphia, London: Crane Russak, 1993), 131; W. Agrell, "Offensive versus Defensive: Military Strategy and Alternative Defence," *Journal of Peace Research*, Vol. 24, No. 1 (1987), pp. 75-85; and Butfoy, *Common Security and Strategic Reform*, Chapter 3: The Promise and Limits of Non-Offensive Defence.

¹⁵² For an overview of these models, read Hans Gunter Brauch, "Debate on Alternative Conventional Military Force Structure Designs for the Defense of Central Europe in the Federal Republic of Germany," in Brauch and Kennedy (eds.), *Alternative Conventional Defense Postures in the European Theater*; and *Study on Defensive Security Concepts and Policies*, 20.

Are all of the criticisms justified which thus doom NPD as a utopian concept? Certainly some of the criticisms are well-founded. But whether NPD-type postures appear convincing or otherwise to the external audience really does not matter so long as the practicing states believe that serve their national interests anyway. National interest is not merely about the relentless pursuit of military capabilities, but doing so while not necessarily provoking misperceptions and compromising other interests (such as economic well-being). Contrary to the criticisms about NPD, ODD is in fact possible and practiced by individual states. The dismal track record of arms control negotiations, as Chapter Two highlighted, was attributed not so much to problems about ODD than to failures over reconciling diverse and conflicting national interests and implementation.

Certainly, NPD advocates would have liked to see the concept adopted as a *universal* defense-planning model but realistically speaking, this is not possible. The idea of trans-armament, the centerpiece of NPD, has been broadly interpreted by critics to mean "total eradication" of offensive armaments. This is certainly a radical idea, but NPD advocates would not have overlooked the fact that even if such a radical vision could be realized, it will only be possible after a long-drawn, costly trans-armament process.

For instance, the unified German armed forces had to spend significant amounts of money, over a considerable time-span, to decommission and mothball inherited East German military equipment. Warehousing such capacities, superfluous to Germany's post-Cold War needs, not to mention having to reduce a significant portion of the West German arsenal as part of the drawdown, is a long-term, expensive enterprise. External buyers may not be forthcoming, not to mention those willing to purchase large amounts of surplus equipment even at bargain basement prices, especially if the equipment is of dubious quality.¹⁵³ While this is not strictly-

¹⁵³ Indonesia was one of the rare few customers who helped ameliorate Berlin's post-Cold War problem of having to dispose of large amounts of surplus equipment, by purchasing almost the entire former Volksmarine (East German Navy) fleet – numbering 16 corvettes, 14 landing ships and 9 minesweepers – as well as the huge store of associated spares in

speaking trans-armament, the German example shows that large-scale changes to force structure can be a huge pain for taxpayers. Trans-armament would have to take place over a long-term duration, which means that at any point of time while it remains a work-in-progress the force structure would still retain offensive capabilities. NPD advocates are certainly not naïve in believing that trans-armament is easy and quick to implement, as critics seemed to imply, even if they held to the conviction that offensive armaments ought to be substituted with defensive alternatives.

If anything, the one thing critics are correct to point out is the radical vision that offensive armaments ought to be all substituted. Geopolitical and general military-technical trends preclude the possibility of doing so, in any case. The Persian Gulf War in 1991 aptly demonstrated the utility of offensive armaments in evicting Iraqi forces from Kuwait, restoring peace in the Middle East and also stabilizing world oil prices that were so tightly linked to international economic well-being. However, NPD remains a relevant idea to pursue, if not at the universal level, at least by individual states. All that NPD needs are conceptual “tweaks”. Renovations were made to NPD in the 1990s to present a less radical and more realistic concept. Still, NPD contains some of its predecessor’s core elements with respect to force structure.¹⁵⁴ The key renovation is augmentation to the structure-based argument with political and functional elements. At the same time, this renovated NPD concept merely seeks *minimization*, not total eradication, of offensive armaments.

The “renovation” of NPD concept gives less weight to quantitative than qualitative dimensions of military forces, such as force attributes and posture. In the 1990s and following, NPD remains in the academic and policy discourses, in no small part propelled by continued discussion on ODT. Notably, a United Nations Department for Disarmament Report published in 1993 advocated the idea of “defensive

1992. The fact that the unified German Navy decided not to absorb these assets into service ought to be due to their inferior quality.

¹⁵⁴ Bjorn Möller, “Common Security and Non-Offensive Defence as Guidelines for Defence Planning and Arms Control?” *The International Journal of Peace Studies*, Vol. 1, No. 2 (Jul-1996). Online. Available: <http://www2.gmu.edu/programs/icar/ijps/vol1_2/Moeller.htm> (accessed 18 June 2009).

security", defined as a politico-military strategy which encompasses measures such as: the establishment and maintenance of friendly interstate relations; peaceful and equitable resolution of interstate disputes while excluding the use of force; and elimination of capacity for surprise attack and large-scale offensive action via confidence-building measures, defensive restructuring of military forces and constraints on certain military activities.¹⁵⁵ Defensive security is thus a post-1991 rendition of NPD. Alluding to the variations in practice worldwide, Wiseman for instance defines NPD broadly as a range of defensive strategies which envisages not just the structural inability of military forces in totality to threaten other states with large-scale or major counterforce first-strikes, but also emphasizes non-provocative modes of deployment regardless of offensive or defensive capabilities.¹⁵⁶

The post-Cold War conceptualization "tweaks" to NPD thus generated the following criteria which transcend earlier preoccupation with trans-armament, in order to take into account changing geopolitical and technical circumstances so as to remain a durable, policy-relevant concept:¹⁵⁷

- 1) Self-restraint and defensiveness in military affairs must be readily discernible in both policy declarations and the actual military capabilities, meaning that states have to give practical content to NPD by pursuing policies that are consistent with the defensive orientation of this concept and its visible expression of corresponding force postures;
- 2) Primacy is given to the strict adherence to international law, first and foremost the United Nations Charter as a necessary basis regardless of the different variations of NPD;
- 3) Force projection capabilities that may be deemed offensive can come across as useful for internationally-sanctioned collective security missions;

¹⁵⁵ *Study on Defensive Security Concepts and Policies*, 3.

¹⁵⁶ Geoffrey Wiseman, *Concepts of Non-provocative Defence: Ideas and Practices in International Security* (N.Y.; Hampshire: Palgrave in association with St. Antony's College, Oxford, 2002), 79; Buzan, "Common Security, Non-provocative Defence and the Future of Western Europe".

¹⁵⁷ *Study on Defensive Security Concepts and Policies*, 2-3, 27, 60; Wiseman, *Concepts of Non-provocative Defence*, 60-61.

- 4) In order to convince potential and actual adversaries of the defensive orientation of one's armed forces, the missions assigned to them and their actual involvement in conflicts over time have to clearly reflect this. In other words, even if structured along defensive lines, military forces repeatedly assigned offensive missions will therefore not be viewed as defensive.

With the "tweaks", NPD becomes more robust. Taking into account the utility of military power to undertake, where necessary, international security operations for the common good, NPD thus encompasses the need to incorporate offensive capabilities in security situations that require a more effective alternative.¹⁵⁸ In fact, the "tweaks" would have brought NPD closer to the real-world practice where, even though offensive and defensive armaments may be distinguished, the emphasis has been placed on the way those capabilities are utilized. In sum, the contemporary rendition of NPD calls for demonstrating strategic defensiveness by fostering confidence over time through policy discourse and action, with declaratory foreign and defense policies supported by the aggregate force structure which may contain offensive armaments, whereas the mode of deployment for such capabilities matters more than their inherent characteristics.

3.4. Far from Irrelevant? Promising Hints Pointing to the Feasibility of NPD Demonstrated in Southeast Asia

Debates aside, the pertinent question centers on NPD's applicability as policy. In order to apply NPD as the basis of the analytical framework in this study, it is important to first establish its feasibility in real-world practice. To begin with, it needs to be pointed out that back in the 1980s amidst ongoing debate about the concept, some aspects of NPD were already adopted by both sides of the "Iron Curtain" in Europe.¹⁵⁹ But what about Southeast Asia?

¹⁵⁸ Wiseman, *Concepts of Non-provocative Defence*, 67.

¹⁵⁹ For example, the Soviet Union under Mikhail Gorbachev attempted to reduce tensions with the West by proclaiming the adoption of a defensive military doctrine. In the negotiations on the Conventional Forces in Europe (CFE) Treaty, NATO also sought to limit weapons with offensive capabilities. Lynn-Jones, "Does Offense-Defense Theory Have a Future?" p. 16.

Hints that NPD is already practiced in various forms in Southeast Asia could be gleaned from the existing scholarship dealing with the notion of comprehensive security. Comprehensive security, going by the definition put forth by a memorandum published by the Council of Security Cooperation in the Asia-Pacific (CSCAP), a Track-II forum closely linked to the ARF, refers to “the pursuit of sustainable security in all fields (personal, political, economic, social, cultural, military and environmental) in both domestic and external spheres, essentially through cooperative means”.¹⁶⁰ The same document also puts forth seven guiding principles that underpin security policy devices, including official defense white papers, of which the following are of particular interest:¹⁶¹

Mutual interdependence

Envisages mutuality and interdependence among various security dimensions and postulates that sustainable security is only attainable if the state is assured of security in every dimension, and recognizes that “a militarily weak state will find it difficult to protect its territorial, political and economic interests in the face of physical intimidation”.

Self-reliance

Envisages that, in the post-Cold War environment where military threats have declined, non-threatening, mutually-beneficial interstate defense cooperation serves as a relevant facet of comprehensive security

Peaceful engagement

Envisages confidence-building, preventive diplomacy and peaceful resolution of conflicts and

¹⁶⁰ CSCAP Working Group on Comprehensive Security and Cooperative Security, Memorandum No.3 “The Concepts of Comprehensive Security and Cooperative Security,” p. 2. Online. Available: <<http://www.cscap.org/uploads/docs/Memorandums/>> (accessed on June 18, 2009)

¹⁶¹ The seven guiding principles laid out are: comprehensiveness; mutual interdependence; cooperative peace and shared security; self-reliance; inclusiveness; peaceful engagement; and good citizenship. Ibid, pp. 4-5.

differences. Military capabilities should as far as possible be 'defensive' and non-threatening in nature, and arms control and transparency measures are an important element of comprehensive security

The principle of mutual independence does not give primacy to any particular security dimension but notably implies that military security cannot be attained at the expense of other security requirements. Most notably under peaceful engagement, the statement "military capabilities should as far as possible be 'defensive' and non-threatening in nature" underlines caution on the risks of security dilemma. Given the ARF's acknowledgement of CSCAP's concept of comprehensive security, some of these principles underlined in this document may have been adopted by some its member states, including those in Southeast Asia.

In fact, comprehensive security is broadly believed to constitute the predominant basis of how ASEAN states conceive of national security as early as the 1960s though it did not exist as a formalized concept until the 1980s. Regional examples include Indonesia's National Resilience (Ketahanan Nasional), Singapore's Total Defence and Vietnam's National Comprehensive Security. Existing studies on this subject identified the following emphases:¹⁶²

- Many core values
- Potential external and internal threats which may not be military in nature

¹⁶² Rizal Sukma, "Southeast Asian Security: An Overview," in N.S. Sisodia and Sreeradha Datta (eds.), *Changing Security Dynamics in Southeast Asia* (New Delhi: Magnum Books Pte Ltd; Institute for Defence Studies and Analyses, 2008), 16; Jim Rolfe (ed.), *Unresolved Futures: Comprehensive Security in the Asia-Pacific* (Wellington: Centre for Strategic Studies, 1995), 7-20; ASEAN Secretariat, *ASEAN Regional Forum Document Series 1994-2006*, 2007. Online. Available: <<http://www.aseansec.org/5187.htm>> (accessed June 18, 2009); Mohamed Jawhar Hassan, "The Concept of Comprehensive Security," in Mohamed Jawhar Hassan and Thangam Ramnath (eds.), *Conceptualising Asia-Pacific Security*, Papers presented at the 2nd Meeting of the CSCAP Working Group on Comprehensive Security and Co-operative Security, Aug 27-29, 1995, Kuala Lumpur (ISIS, Malaysia, 1996), 11.

- Use of comprehensive capabilities, especially non-violent means and adoption of NPD, to achieve security objectives
- Emphasis on the economic-security nexus
- Emphasis on crisis prevention.

It is not clear whether the concept of comprehensive security, which includes guiding principles that relate to NPD-like defense preparations, has been universally adopted. Nonetheless, it is safe to assume that countries in Southeast Asia would have formulated national variations in accordance to the principles and their own circumstances. The existing scholarship went so far as to suggest that most of the ASEAN states rely on NPD "by default".¹⁶³ Whereas the studies on post-Cold War ASEAN military modernization were dominated by the conventional argument, there was a minority which sounded a discordant positive note about the consequences, hinting that there was perhaps no reason to be alarmed about ASEAN states' military buildup.

For instance, arguing that ASEAN militaries "are not structured, armed or doctrinally prepared to carry out significant offensive operations against neighboring countries but are mostly defensive in character", Gill pointed out that the simple possession of certain weapons does not necessarily lead to offensive action since the political, military and geostrategic contexts within which these capabilities operate affect the offensive character of the weapons in question.¹⁶⁴ Even though he had warned about the potential internal balancing dynamics amongst ASEAN countries, Mak wrote that ASEAN arsenals are weak and short in capacity, such that military modernization would only enhance the feeling of security. He further argued that

¹⁶³ Joe Camilleri, "The Pacific House: Emerging Architecture for Comprehensive Security," in Dickens (ed.), *No Better Alternative*, 79; Yong-Sup Han, "Resolving the Arms Control Dilemma on the Korean Peninsula," in Bjorn Möller (ed.), *Security, Arms Control and Defence Restructuring in East Asia* (Aldershot, Ashgate Publishing Ltd, 1998), 113-14; United Nations Institute for Disarmament Research, *Nonoffensive Defense: A Global Perspective* (N.Y.: Taylor & Francis, 1990), 191; also see J. Soedjati Djwandono, "Nonprovocative Defense Strategy," in the same UNIDIR report, 109-10.

¹⁶⁴ Bates Gill, 'Defining legitimate and unwarranted military acquisitions in South-East Asia,' in Gill and Mak (eds.), *Arms, Transparency and Security in South-East Asia*, 73.

new military capabilities would instead contribute to “regional resilience”, based on the rationale that the combined ASEAN military strength could be a significant counterweight against extra-regional powers, thus resulting in greater self-reliance leading to a greater sense of security in the region.¹⁶⁵

Even right into the first decade of the new century, as ASEAN military acquisitions picked up following recovery from the 1997-98 financial crisis, there were still scholars who detracted from the conventional argument. They suggested that ASEAN states are adopting “responsible stakeholder behavior” in their military procurement choices, and called for scrutinizing those modernization efforts and their underlying rationales in perspective. In this regard, ASEAN military modernization efforts were variously described as “nuanced” and “stability inducing” in that they enhance defenses without becoming a threat to neighbours.¹⁶⁶ McDevitt for instance described ASEAN military modernization as such:

Arguably, what is taking place in Southeast Asia can be considered ‘stability inducing’ modernization in that it improves defenses without becoming a threat to its neighbours. Much of the modernization is oriented toward maritime capabilities – especially systems useful for the surveillance and policing of EEZ’s and for the protection of commercial shipping. Maritime patrol aircraft, air defense enhancements – including fighters, small frigates or patrol craft-sized warships – land-based radar surveillance sites and diesel submarines all fit within this category.¹⁶⁷

These observations are encouraging for the thrust of this thesis, by lending credence to the earlier discussion about the feasibility of NPD as a posture that can be

¹⁶⁵ Joon Num Mak, “International Cooperation in Regional Security: ‘Non-Interference’ and ASEAN Arms Modernisation,” in Möller (ed.), *Security, Arms Control and Defence Restructuring in East Asia*, 85-86.

¹⁶⁶ Nicola Baker, “Phantom menace – Expounding security myths in Southeast Asia,” *Jane’s Intelligence Review*, October 1, 2007; MAJ Ooi Tjin-Kai, “Interpreting Recent Military Modernizations in Southeast Asia: Cause for Alarm or Business as Usual?” *Pointer: Journal of the Singapore Armed Forces*, Vol. 38, No. 1 (2012), p. 13-31.

¹⁶⁷ Michael McDevitt, “Asian Military Modernisation: Key Areas of Concern,” *Adelphi Papers*, Vol. 48, No. 400 (2008), pp. 125-132.

adopted by individual states despite not being necessarily a universal approach. What is left would be to apply NPD as an analytical framework to analyze how naval armaments influence strategic behavior of ASEAN states. But before doing so, it is necessary to derive an analytical framework that suits the maritime context.

3.5. Towards a Framework for NPD in the Maritime Context

There is actually no need to create from scratch an analytical framework for NPD-based naval posture. Back in the 1980s even though the focus was predominantly on NPD formulated with the air and land-based operating scenario in mind there were, drawing from the Northern European context, proposed solutions to (re)structure navies towards defensive postures.

The scant attention paid to this area back then could have been attributed to the predominant focus on the Soviet-U.S. naval confrontation in the Atlantic open-waters.¹⁶⁸ Basic principles suggested back then for an NPD-type naval posture were drawn from the general NPD precepts centering around ambiguities or negative signals about intentions that might be construed by others as provocative; behavior that reduces mutual confidence in co-existence; armaments and postures which promote crisis stability; as well as actions which undermine prospects of arms restraints.¹⁶⁹

Specific to the naval context, detailed proposals largely revolved around structural aspects based on the assumption that offensive naval armaments could be distinguished and therefore ought to be subjected to limitations. Early naval NPD formulations thus sought to phase out bluewater naval operations for purely coastal defense operations. As summarized in Table 5 below, three key proposals on an NPD-based naval posture were advanced with an eye on providing effective defense against Warsaw Pact naval actions along the Baltic and North Sea coastal zones.

¹⁶⁸ Möller and Wiberg, "NOD in the Sea," in *Non-Offensive Defence for the Twenty-First Century*, 98.

¹⁶⁹ Ibid, 101.

Table 5: Early Northern European Formulations of an NPD-based Naval Posture

	Anders Boserup (1990)	Lutz Unterseher (1990)	Bjorn Möller (1991)
Major surface combatants (frigate and above)	None mentioned; though he listed "vessels needed only for peacetime surveillance and perhaps for minelaying"	None mentioned	Conditional: lower priority in modernization vis-à-vis coastal defense forces and no replacements; operations restricted to only southern North Sea for defensive sea control
Minor surface combatants (corvette and below)	None mentioned; though he listed "vessels needed only for peacetime surveillance and perhaps for minelaying"	Yes: missile-armed fast patrol craft operating from dispersed bases	Yes; emphasis on fast attack craft which should be replaced with Danish "Stanflex" type multi-functional vessels
Submarines	Yes	Conditional: not to be deployed against Baltic SLOCs	Existing boats to serve until withdrawal from service without replacement
Mine warfare vessels	Rapid-deployable minefields	Minelayers deploying semi-intelligent minefields in the straits and vital coastal areas	MCM forces to be maintained and modernized Overall minelaying capability to be further expanded with guided mines and torpedo batteries integrated in multi-sensor web
Shore-based coastal defense	Shore-launched torpedo batteries Truck-mounted ASCMs with 8-100km range Coastal artillery	ASCM batteries mounted on light armoured carriers deployed in dispersed, hardened and well-camouflaged launch sites	"Old-fashioned" artillery batteries (employing remotely-activated automatic guns) Shore-launched torpedo batteries Max 50km-range ASCMs deployed up to 40km inland Plans for 200km-range ASCMs

Land-based maritime support aircraft	Attack helicopters armed with ASCMs	Medium helicopters armed with ASCMs, operating from dispersed bases Fighter-bombers barred from operating against foreign coasts	Tornado IDS fighter-bombers armed with ASCMs ("coastal fire brigade") ASW and maritime patrol aircraft Combat helicopters armed with ASCMs
Shipborne naval helicopters	None mentioned	None mentioned	Suggested redeployment of shipborne helicopters to shore bases
Shipboard anti-air	None mentioned	None mentioned	Only short-range systems including navalized MANPADS
Amphibious forces	None mentioned	None mentioned	Small landing craft only for reinforcement of exposed points ashore, and such forces to be reduced considerably

Source: Anders Boserup, "Maritime Defence Without Naval Threat: The Case of the Baltic," in Boserup and Neild (eds.); assisted by Carlton, *The Foundations of Defensive Defence*, 181-82; Lutz Unterseher, "Chapter 12: The Case for Alternative Defense: A Detailed Proposal and Its Implications," in Cerutti and Ragionieri (eds.), *Rethinking European Security*, 112; Möller, *Resolving the Security Dilemma in Europe*, 78 and 107-109. See also Sverre Lodgaard and John P. Holdren, "Chapter 1: Naval Arms Control," in Lodgaard (ed.), *Naval Arms Control*, 32 and Chalmers et al, "Alternative Conventional Defense Structures for Europe: British and Danish Perspectives," 1989.

There was disagreement in the debate regarding the inclusion of certain naval armaments into an NPD-based naval posture. Submarines constituted a particularly thorny issue. While most advocates preferred to have no submarines at all, some felt that submarines could actually promote stability in the Baltic Sea depending on circumstances.¹⁷⁰ However, it needs to be pointed out that these early formulations revolved around the roles of small navies which were either neutral or part of an alliance burden-sharing. Major NATO navies, in particular the U.S. Navy, would bear the brunt of the bluewater missions in the contest for control over the Atlantic SLOCs, leaving their smaller Northern European counterparts free to pursue an NPD-based posture.

Notwithstanding criticisms about the applicability of those proposals, a number of Northern European navies did adopt variations of an NPD-based naval posture. Besides the desire to be non-provocative, maritime topography and limited resources may have also influenced such force structure developmental approaches. The Danes and Norwegians for example structured their Cold War navies in a manner that emphasized shore-based coastal defenses, minor surface combat and patrol forces as well as land-based aviation. They featured only tiny handfuls of frigates and small, coastal patrol submarines. Finland and Sweden took the step even further, such that their navies' force structures become even more aligned closely to NPD. Till this day, these two navies continue to operate just minor surface combat and patrol forces as their mainstay warfighting capabilities, not counting the larger minelayers for the reasons suggested above. Whereas the Finns no longer operate submarines since the end of WW2, their Swedish counterparts retain and even continue to develop new undersea capabilities. Notably, both navies did not seek new replacements following the retirement of frigate-sized warships from service.

¹⁷⁰ For instance, read Elmar Schmähling, "The Vulnerability of Surface Forces to Modern Stand-off Weapons," in Boserup and Neild (eds.); assisted by Carlton, *The Foundations of Defensive Defence*, 177.

However, it also became clear in the post-Cold War years that such formulations clearly required rejigging in order to cope with new mission requirements, as Table 6 below shows.¹⁷¹

Table 6: Post-Cold War Reformulations of NPD-based Naval Postures

Bjorn Möller (1992)	<ul style="list-style-type: none"> 1) Focus on sea denial capabilities for counter-invasion 2) Internal SLOC protection fulfilled by seaward defense capabilities 3) External SLOC protection fulfilled by defensive sea control capabilities and based on the concept of convoy-with-escort system utilizing mostly destroyers, frigates, light ASW-oriented aircraft carriers equipped with helicopters, and submarines 4) Abolition of land-attack and nuclear armaments on major surface combatants 5) Naval deployments in foreign interventions circumscribed under international bodies instead of unilateral, national-level actions
Eric Grove (1992)	<p>Defensive deterrence-oriented navies comprising:</p> <ul style="list-style-type: none"> 1) EEZ-oriented, gun-armed offshore patrol vessels equipped with anti-air defenses and helicopters armed with short-range ASCMs 2) Coastal minelayers and shallow-water sea-mines 3) Shore-based ASCMs limited to no more than 50km-range 4) Land-based helicopters primarily optimized for ASW but can be armed with short-range ASCMs 5) Unarmed maritime surveillance aircraft 6) Land-based fighter jets supported by ground-based air defenses
Lutz Unterseher (1993)	<p>Maritime defense model in the western Baltic more closely integrated with land defenses based on:</p> <ul style="list-style-type: none"> 1) Sizeable component of mine warfare vessels (equipped with good capacity for laying semi-intelligent minefields in straits and vital coastal areas) 2) 20-30 medium helicopters and 40 fast attack craft armed with ASCMs and guns and operating from dispersed bases for surveillance and flexible defense concentration 3) No fighter-bombers for missions against another's coast 4) No submarines for deep interdiction 5) No need for any heavy back-up forces from far behind
Ross Babbage (1996)	<p>Criteria for "legitimate defense development":</p> <ul style="list-style-type: none"> 1) Offensive or defensive nature of weapons

¹⁷¹ For instance, the Swedes had been considering a corvette larger than the existing Visby class, ostensibly for the purpose of facilitating contributions to international security operations. But this plan has so far not been implemented, thus the Royal Swedish Navy remains structured the same way as it was since the Cold War.

	2) Scale and speed of acquisitions 3) Use and deployment of weapons 4) International political conditions 5) Past record of international behavior 6) Openness of political system 7) Involvement in CBMs
Bates Gill (1997)	Three-part model for determining "legitimate" or "unwarranted" acquisitions: 1) Specific maritime defense missions 2) Identification of regional countries which need to perform these missions as part of their defense requirements 3) Identify which acquisitions best correlate with which mission requirements

Source: Möller, *Common Security and Nonoffensive Defense*, 188-93; Eric Grove, "Naval technology and stability," in W.A. Smit, J. Grin and L. Voronkov (eds.), *Military Technological Innovation and Stability in a Changing World* (VU University Press: Amsterdam, 1992), 202-203; Lutz Unterseher, "In Support of Stability in Central Europe: The SAS Proposal and Its Implications," in Brauch and Kennedy (eds.), *Alternative Conventional Defense Postures in the European Theater*, 125; Ross Babbage, "Enhancing national military capabilities in the Asia-Pacific region: legitimate needs versus unwarranted development," Paper presented at the *Tenth Asia-Pacific Roundtable Kuala Lumpur*, June 5-8, 1996; Gill, "Defining legitimate and unwarranted military acquisitions in South-East Asia," in Gill and Mak (eds.), *Arms, Transparency and Security in South—East Asia*, p. 75.

The models proposed by Möller, Grove and Unterseher are oriented towards armament types whereas those proposed by Babbage and Gill relate to policies concerning not just criteria for armaments but also mode of deployment and from the looks of their proposed items, appear to be aimed at formulating an analytical framework for identifying NPD-type naval postures.

Summing up previous attempts to formulate an NPD-based naval posture, two key observations can be made. First, NPD is not restricted only to the air and land contexts. The Northern European example shows that it is possible to conceive of a naval posture that can convey defensive intent, with objectives no less consistent with the original objectives set out by the general NPD scholarship. They comprise primarily tension-reduction, confidence-building and ultimately, prevention of war. Secondly, past attempts show that it is possible to distinguish between offensive and defensive naval armaments. Moreover, this can be accomplished through finding

ways to reconcile the need for certain offensive naval armaments, particularly capabilities required for SLOC protection that remains salient in the post-Cold War context, with the mode of deployment that can still convey defensive intent. In sum, NPD-based naval posture formulations have proven themselves capable of aligning with contemporary realities thus making it more feasible for states to adopt.

3.6. The Heuristic Analytical Framework: Deriving a Modern Rendition of NPD-based Naval Posture That Takes into Account Contemporary Realities

Because of the evolving geopolitical landscape and technological patterns, as well as the enduring characteristics of the seas and the utility of naval power, a modern rendition of NPD-based naval posture necessarily has to align with realities. It is important to emphasize here that the motive of deriving an NPD-based analytical framework is not meant to be policy prescriptive (i.e. for governments to adopt) but rather, as a lens through which one can analyze the influence of naval armaments on strategic behavior to better derive the consequences of naval buildup.

Designed with Southeast Asia in mind, this framework may also be applied in examining other navies. As a recap of Chapter One, four hypotheses were proposed and they form the essential core elements of this analytical framework. Drawing from the earlier discussion on NPD and especially past attempts at deriving a “navalized” NPD framework, this study puts forth the following analytical framework in Table 7 below. The description for each parameter, which corresponds to each hypothesis, is just a brief outline. Chapters Four (on Aggregate Force Structure), Five (on National Policy Discourses), Six (on Cooperative Naval Diplomacy) and Seven (on Coercive Naval Diplomacy) shall address the analytical methods in detail.

Table 7: A Heuristic Analytical Framework to Study the Consequences of Naval Modernization in Southeast Asia

Hypothesis	Parameter	Description of a NPD-type Naval Posture
#1: <i>States may discern the destabilizing potential of naval armaments and exercise unilateral naval arms control</i>	Aggregate Force Structure	Naval forces exhibit an aggregate force structure that is "stability-inducing" through de-emphasis on armaments which are generally considered offensive and destabilizing; and the maximization of stabilizing capabilities
#2: <i>States may moderate their policy discourses especially during interstate crises</i>	National Policy Discourses	Governments issue national policy discourses that emphasize amity, common security, common interests and adherence to rule of law while refraining from belligerent, inflammatory statements that may potentially provoke or escalate interstate crises
#3: <i>States may intensify their engagements in confidence- and security-building as well as cooperative measures</i>	Cooperative Naval Diplomacy	Governments display greater propensity to engage in political and military confidence-building measures, including transparency of their security policies, as well as pursue practical security cooperation at the regional and international levels, within the context of peacetime and that of existing interstate disputes, and naval armaments of offensive and destabilizing characteristics are circumscribed under specific conditions, such as under the auspices of regional and international bodies and for peaceful purposes
#4: <i>States may de-emphasize and calibrate the limited threat and use of naval force</i>	Coercive Naval Diplomacy	Naval forces may continue to be employed for gunboat diplomacy but such instances tend to be controlled and non-violent, emphasizing the use of civilian maritime law enforcement agencies instead of regular militaries, and their governments also display a propensity to avoid or de-escalate tensions at sea, including self-restraint in the deployment of offensive and destabilizing naval armaments to those geopolitically sensitive areas in contention with other states

Source: By author

3.7. Outline of the General Methodological Approach

This study employs a mixed-methods research technique, which refers to the adoption of “a field strategy employing more than one type of research method”.¹⁷² Compared to single-method approaches, this technique has several advantages, such as deriving a complete picture of the phenomenon and to corroborating or confirming the credibility of inferences.¹⁷³ More specifically, this study employs triangulation as a form of mixed-methods technique, which collects and analyzes in parallel different quantitative and qualitative data which are then merged together to develop a more complete understanding or to compare the different results, in order to help validate interpretations of a phenomenon.¹⁷⁴

With this general methodology, it is therefore necessary to point out that there is no uniform analytical framework beyond this general research design and common data sources. What this means is that for each of the four hypotheses, the methodological approach will be different. For example, the way to analyze the aggregate force structures is certainly different from how national policy discourses are being examined. As such, what shall transpire later is that Chapters Four to Seven each constitutes a “self-contained” exposition on how naval armament influences strategic behavior, based on the four hypotheses identified earlier. Each of these chapters shall outline the specific heuristic approach required to enable a more holistic understanding of the consequences of naval modernization, thereby deriving observable patterns and trends. This approach is unlike existing studies that rely on singular indicators to determine the consequences of naval modernization.

¹⁷² Julia Brannen, “The Practice of a Mixed Methods Research Strategy: Personal, Professional and Project Considerations,” in Manfred Max Bergman (ed.), *Advances in Mixed Methods Research: Theories and Applications* (SAGE Publications, 2008), 53.

¹⁷³ Abbas Tashakkori and Charles Teddlie, “Quality of Inferences in Mixed Methods Research: Calling for an Integrative Framework,” in Bergman (ed.), *Advances in Mixed Methods Research*, 103.

¹⁷⁴ John W. Creswell, Vicki L. Plano Clark and Amanda L. Garrett, “Methodological Issues in Conducting Mixed Methods Research Designs,” 68; and Martyn Hammersley, “Troubles with Triangulation,” in Bergman (ed.), *Advances in Mixed Methods Research*.

Sample Countries

ASEAN naval forces, with the exception of Cambodia, are the subject of interest in this study. Cambodia is excluded because of its relatively inactive naval forces that are preoccupied with inshore and riverine operations. The exclusion of Laos, a land-locked country, is self-explanatory. The focus is on major ASEAN naval forces, namely Indonesia, Malaysia, Singapore, Thailand and Vietnam because they possess the most significant capabilities in the region. Brunei, Myanmar and the Philippines are also included because of their respective recent naval growths.

But this study also includes samples from the wider Indo-Pacific: five in Northeast Asia (China, Japan, the two Koreas and Taiwan), two in Australasia (Australia and New Zealand) and three in South Asia (Bangladesh, India and Pakistan). The reason behind their inclusion is two-fold. First, these samples possess significant naval capabilities. Second, because of their geographical proximities to Southeast Asia they also play a role to varying extents in the Indo-Pacific maritime geopolitical dynamics. Finally, samples in Northeast and South Asian sub-regions constitute their own geopolitical flashpoints, which provide interesting comparative cases on how armaments influence strategic behavior.

For the purpose of this study, the non-ASEAN Indo-Pacific samples shall be referred to as simply "Indo-Pacific samples" whereas ASEAN samples are referred to as "ASEAN samples".

Time-span of Analysis

Four time-spans are used in this study to reflect the broader structural context which characterizes each of them:

1980-1991:	This corresponds to the later years of the Cold War characterized by the peak of East-West arms competition, including in the naval arena, and subsequent détente that included arms control negotiations and gradual reduction of tensions leading up to the collapse of the Soviet Union. The
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year 1991 was also particularly important because the Persian Gulf War played a crucial role in shaping perceptions about military-technological trends which had a profound impact on post-Cold War military modernization worldwide, including Southeast Asia.

1992-2000: This corresponds to the immediate post-Cold War years when structural changes to the geopolitical milieu in Asia influenced military modernization processes. This period was also tumultuous as it oversaw the resurgence of interstate disputes and within this time-span, regional governments also embarked on the process of “maritime territorialization” following their accession to UNCLOS. These influenced the shift of military modernization towards air and sea capabilities with an eye on the maritime operating environment, at least up till the outbreak of the Asian Financial Crisis in 1997-98.

2001-2011: This corresponds to the international security milieu following the September 11, 2001 terror attacks on the U.S. and the perceived Washington's shifting of attention to Afghanistan and the Middle East. During this period there was also growing attention on non-traditional security challenges, and the region also experienced significant events, in particular the Indian Ocean Earthquake and Tsunami in December 2004. After 2009, there were resurgent tensions in the East and South China Seas, which helped sustain the military buildups that were revived following recovery from the Asian Financial Crisis and did not abate even following the global economic recession which began in 2008.

2012-present: This corresponds to the contemporary security milieu following the announced “pivot” to Asia (thereafter touted “rebalancing strategy”) as Washington began to devote greater focus on the region. It was also around the same time

that there was intensifying Great Power rivalries in the Indo-Pacific region, not to forget also intensification of tensions in the geopolitical flashpoints such as the East and South China Seas which in no small part continue to sustain ongoing military buildups.

The quantification and operationalization of data would be performed along these designated time-spans. The last set represents more as a work-in-progress because of its ongoing nature. However, the analysis shall still take into consideration developments which took place since 2012 up till the end of 2014, which coincided with the time of this writing.

Data Sources

For the purpose of this study, a multitude of open-source data is utilized and which can be cross-referenced and corroborated. These include databases from the International Institute of Strategic Studies' *Military Balance*, IHS Aerospace, *Defence & Security* (formerly IHS Jane's, including *Jane's Fighting Ships* for example) as well as SIPRI (in particular, the Arms Transfers Database). They also include news reports detailing new developments, such as new equipment being purchased, new CSBM agreements being signed or reported instances of interstate tensions and application of coercive diplomacy at sea. Much use was made also of official government websites where press releases, official documents and speeches can be obtained and surveyed.

News aggregator sites, such as Dow Jones Factiva, are especially useful in the data collection effort. They not only provide English translations of the publications in those countries' native languages, but also enabled a more focused and systematic approach to data collection compared to general search engines such as Google. Besides releases obtainable from official government websites, through such aggregator sites news reports containing policy elites' remarks can be obtained. These are equally important especially for the content analysis on national policy discourses in Chapter Five. Interviews can also be found using those news aggregators, and therefore provided another primary source of information.

One question which may arise is whether “more authoritative” information could be better obtained from personal interviews with the policy elites. Certainly, interviews constitute one of the techniques but the information obtained is not without potential problems. The responses to interview questions may not represent the most accurate depiction of real strategic intent, to put it mildly. Policy elites may have vested organizational interest, especially where data deemed sensitive for national security reasons is concerned, not to provide the full information and in some cases, may even deliberately misinform as a means to conceal real intent or sentiments. As such, while interviews nonetheless are useful they are not emphasized as a primary data collection technique in this study.

Brief Note on the Research Questionnaire

A questionnaire was administered in this study with the objective of facilitating the analysis in Chapter Four. This exercise targeted middle-ranking naval officers who attended the command and staff course at the Goh Keng Swee Command and Staff College based in the Singapore Armed Forces Training Institute. Two batches of students were surveyed over the span of 2010-11. An online version of the questionnaire was also disseminated to foreign middle-ranking naval officers. While derived from a carefully conceived survey and methodological approach, the results certainly contains a certain degree of subjectivity. Nonetheless, there is a degree of confidence that results obtained from this questionnaire can advance understanding of naval armaments which thereby facilitate the analysis of each sample country's aggregate force structure.

Data Collection and Analysis

Inspired by the Correlates of War (COW) project, this database created for the purpose of this research consolidates Microsoft Excel country datasets which comprise worksheets on the following subjects of interest:

- Force structure
- Military acquisitions related to naval forces

- National policy discourses related to defense and foreign policies
- Participation in confidence and security-building and cooperative measures
- Incidents on the threat or use of force at sea

The COW Project could have been an available “off-the-shelf” database but because of the nature of this study, vital information such as those on national policy discourses cannot be found through this project.¹⁷⁵ Arguably the most useful would be the Militarized Interstate Disputes (MID) datasets but the latest version, MID 4, comprises data only up till 2010. Moreover, the MID Narratives contain a very short (sometimes just one-two sentences) “story” of each incident with scant information which can allow a deeper analysis of those events.¹⁷⁶ In short, the MID datasets are very useful as a listing of incidents which can be easily applied to statistical analysis, but less so for a mixed-methods approach that is required in this study because it lacks the resolution of details required.

Other databases were also considered but they were found to be defunct or unsuitable for this study.¹⁷⁷ The most recent example, Asian Maritime Transparency Initiative (AMTI) established by Washington-based Center of Strategic and International Studies is an interactive platform that aggregates information from a variety of sources including news reporting, and furnishes analysis and policy exchanges on maritime security-related issues in Asia.¹⁷⁸ But it lacks the information required for this study, such as details about specific incidents for example. It does

¹⁷⁵ For a listing of the available datasets provided by the COW Project, refer to the webpage: <http://www.correlatesofwar.org/data-sets/folder_listing>

¹⁷⁶ The MID webpage hosted under the COW Project website can be found here: <<http://www.correlatesofwar.org/data-sets/MIDs>>

¹⁷⁷ For example, the Brookings Institution and Center for Naval Analyses (CNA) international incidents projects were long defunct, and in any case they aimed to identify crisis management responses of the U.S. Navy and Marine Corps (their employment by the National Command Authorities in response to international incidents and crises). See Robert B. Mahoney Jr., “A Comparison of the Brookings and CNA International Incidents Project,” Professional Paper No. 174 published by the Center for Naval Analyses, February 1977.

¹⁷⁸ The AMTI website can be found here: <<http://amti.csis.org/>>

not appear to contain information regarding military acquisitions though some useful official documents can be found on its website.

The limitations of these available databases therefore necessitate the creation of a database aggregating those country datasets. Because of the need to sample a collection of countries, it is necessary to implement a standard data collection technique to ensure uniformity and consistency across all samples, as well as to facilitate the replication of research. A set of these standards referred to here as "Research Protocol" can be found in the Appendix A3. Of particular interest is the list of universal search terms or keywords that are generically utilized in the course of research for each sample country. The quantity and diversity of materials used, totaling up to tens of thousands of files collected in the course of this study (and still ongoing), ought to constitute a healthy coverage across time and minimize bias. The country datasets in total amount to a very copious amount of materials that cannot be possibly printed here. Instead, the datasets can be inspected electronically via the CD-ROM attached for the purpose.

CHAPTER FOUR: AGGREGATE FORCE STRUCTURE AND DESTABILIZING POTENTIAL

Naval Procurement Choices and Force Structure Development Pathways Can Balance Defense Needs While Demonstrating Restraint

4.1. A Recap of the Earlier Discussion about Naval Armaments

This Chapter examines the pathway of ASEAN naval forces' development, based on the established hypothesis that ASEAN governments adopt a judicious approach in building their naval forces to cater to their national interests. And where national interests can be defined more holistically, it means not just acquiring the wherewithal to cope with security challenges but doing it in a way that does not unduly provoke misperceptions in others. In other words, states may exercise prudence in their defensive military preparations so as to avoid being drawn into or entangled by a security dilemma that will be counterproductive – by undermining instead of enhancing security. Therefore, the pursuit of national interests can take place under the approach of common security.

However, naval armaments belong to a unique category of military capability that does not easily lend itself to structural arms control efforts, as mentioned earlier. Because the naval instrument is such a flexible tool of statecraft, it is reasonable to suppose that most, if not all, governments seek to attain as balanced a set of naval capabilities as possible. In the process, capabilities that are offensive by dint of their inherent technical characteristics may have to be acquired. Warships belong to such a category simply because it is a platform that embodies mobility and versatility unlike an ATGW mounted in static configuration well within one's defensive fortifications. Warships can bring military action to someone else because of their inherently mobile characteristics.

It was also established earlier that the “offensiveness” or “defensiveness” of a particular armament is a function of its designed technical characteristics and mode of deployment. Not all types of warships are necessarily offensive platforms. Moreover, whether they are destabilizing or otherwise is also another issue. Whether a particular naval force is destabilizing or otherwise, it is critical to look beyond

individual weapon systems, as do some scholars including theorists on NPD suggest, but to consider the aggregate effect of all armaments in a given force structure.¹⁷⁹ Indeed, no armament can work on its own without some interface or synergy with other systems or sub-systems within a given force structure. It needs to be viewed as a system within a larger system. And it is the aggregate potential harnessed from this total system that matters in times of contingencies even if individual systems or platforms within this total force may bestow its user certain tactical advantages.

Unlike existing studies which looked at discrete weapon systems as the basis of their assessments of the consequences of naval buildups, this study looks at the aggregate force structure. This is a much better, more holistic analytical approach to determine armament procurement preferences and forces development pathways. This Chapter will not describe what ASEAN naval forces have acquired. Instead, it will identify which naval armaments are destabilizing, classify them meaningfully using tangible operational codes and thereby provide an overall picture of how those force structures evolve over time as surely national priorities change according to evolving contexts. Naval forces do not remain static since national interests do not. Finally, it needs pointing out that the metrics used for the analysis in this chapter are far from perfect and in fact, lend themselves to debate. However, the study involves a wide array of samples and bases its methodology on a mixture of both theoretical and professional knowledge of the subject matter on hand.

4.2. Destabilizing Naval Armaments: The Theoretical Perspective

What does “destabilizing naval armament” mean? The general definition proposed by Mussington and Sislin is helpful in this regard. They argued that instability and conflict are most likely to happen when arms acquisitions by their nature:¹⁸⁰

¹⁷⁹ Ter Borg, “Reducing Offensive Capabilities,” p. 158; and Jack S. Levy, “The Offensive/Defensive Balance of Military Technology: A Theoretical and Historical Analysis,” *International Studies Quarterly*, Vol. 28, No. 2 (June 1984), pp. 219-38.

¹⁸⁰ Mussington and Sislin, “Defining destabilizing arms acquisitions”. See also Edward J. Laurence, “A Conceptual Framework for Arms Trade Transparency in Southeast Asia,” in Gill and Mak (eds.), *Arms, Transparency and Security in South-East Asia*, 12-29.

- 1) Result in decreased warning time;
- 2) Give one country "breakthrough" capabilities;
- 3) Lead to a broadening of target sets;
- 4) Permit no effective countermeasures;
- 5) Give one side better information concerning another's military preparations;
and
- 6) Create hostility

In their study which specifically looked at naval acquisitions, Meconis and Wallace challenged the above criteria by noting that the term "breakthrough" is ambiguous in phrasing, also pointing out that the broadening of target sets and capabilities offering better information concerning another's military preparations may actually be stabilizing instead, by precluding the likelihood of preemptive military action. Finally, they deemed the criterion "create hostility" too vague to be applied as an operational indicator and at best could only be inferred from the interstate arms-tension dynamics.¹⁸¹ With these in mind, Meconis and Wallace modified the criteria as follows:¹⁸²

- 1) The acquisition is large quantitatively compared either with a state's existing forces or its rival's forces in the weapons category in question;
- 2) The acquired systems represent a substantial qualitative improvement in the performance of that state's forces in this weapons category;
- 3) The acquisition is rapid on the time scale of the existing rivalry;
- 4) The weapon or weapons acquired permit little or no effective countermeasures; and
- 5) They result in decreased strategic and tactical warning time

This revised set of criteria is not without limitations too. For example, some may argue that qualitative characteristics of armaments are more critical since they influence the evolution of strategic and tactical concepts, and that large-scale use of the latest military scientific and technological achievements may can result in a drastic

¹⁸¹ Meconis and Wallace, *East Asian Naval Acquisitions in the 1990s*, 35.

¹⁸² *Ibid*, 35-36.

change of offensive combat potential even in the context of quantitative arms reduction.¹⁸³ While an acquired armament may substantially improve the quality of the state's forces in a particular weapon category, it may not necessarily be perceived as destabilizing in view of general technological patterns. For example, a navy may upgrade its capabilities and replace existing short-range ASCMs with long-range types. Yet this does not mean the capability is destabilizing when long-range ASCMs, beginning from the 1970s and especially in recent times, have become the prevailing primary weapon in its kind. It has become more common and at the same time, more easily accessible in the market. But supersonic ASCMs is another matter altogether because it not only represents the second but also the fourth criteria proposed by Meconis and Wallace.

Suffice to say, the theoretical definitions of what constitutes "destabilizing naval armaments" will always beg the question of perspective, and those criteria do not necessarily remain static so long as geopolitical and technological circumstances change over time. In fact, based on existing theoretical understanding of what constitutes destabilizing naval armaments there have been attempts at identifying those which fit the assumed criteria. The following naval armaments were generally highlighted in the literature as (at least theoretically) provocative and therefore destabilizing, especially by countries that do not have them or lack the means to acquire them. They are deemed to increase the risk of inadvertent escalation and may also in principle contribute to or provoke an arms race at sea:¹⁸⁴

¹⁸³ See for instance, Alexander Yakovenko, "Chapter 11: New Types of Armaments and Confidence-building Measures," in Smit et al (eds.), *Military Technological Innovation and Stability in a Changing World*, 135.

¹⁸⁴ Meconis and Wallace, *East Asian Naval Acquisitions in the 1990s*, 36. See also Schofield, "War and punishment the implication of arms purchases in maritime Southeast Asia"; Ball, "Intelligence collection operations and EEZs"; M.J. Valencia, "Introduction: military and intelligence gathering activities in the exclusive economic zones: consensus and disagreement II," *Marine Policy* 29 (2005), pp. 97-99; Robert Hartfiel and Brian L. Job, "Raising the risks of war: defence spending trends and competitive arms processes in East Asia," *The Pacific Review*, Vol. 20, No. 1 (2007), pp. 1-22; Valencia, "Foreign Military Activities in Asian EEZs," p. 3.

- Naval nuclear weapons
- Ship-based land attack ballistic and cruise missiles with conventional warheads
- Anti-ship missiles of all types
- Mine warfare capabilities (referring to sea mines)
- Means of extending the range of strike aircraft, currently aircraft carriers and inflight refuelling capabilities
- Modern electronic countermeasures (ECM) and electronic counter-countermeasures (ECCM) devices
- Intelligence-gathering capabilities (such as signal intelligence or SIGINT)
- Submarines
- Major surface combat ships
- Long-range anti-air warfare (AAW) ships and their AAW missiles
- Long-range ships (and the missiles they carry) that have anti-ship and land-attack capabilities
- Multi-role fighter aircraft (including land-based types) with maritime attack capabilities
- Missile-armed helicopters (both shipborne and land-based types)
- Modern amphibious power projection capability including not just landing vessels but also the forces that provide them with effective close support

This list of naval armaments highlighted in the existing literature embodies such qualities as force projection capability that appears to render it “destabilizing” by default. It is characterized by the ability to project force far into the target state’s territory, capable of bombardment and blockade. But this list can also easily lend itself to abuse, unrestrained expansion and distortion. Without considering the context of their use such as mode of deployment, and by conflating the effects of individual platforms and systems, to judge this or that particular armament as destabilizing can potentially be misleading. Rather than conceding to this absolutist definition of what naval armaments constitute destabilizing capabilities or otherwise, this chapter proposes looking at the destabilizing potential of naval armaments (and generally all types of armaments for that matter) as a matter of degree, depending on contexts.

4.3. Destabilizing Naval Armaments: The Professional Perspective

To test this proposition that destabilizing potential of naval armaments ought to be assessed as a relative value than as an absolute factor, it is necessary to augment the theoretical understanding. The literature is swamped with theoretical assumptions, as discussed earlier, of those criteria behind “destabilizing naval armaments” and based on that, a whole list of plausible weapons was derived for analytical purpose. But so far, there has not been any observed input from the professional perspective. By “professional perspective”, this study refers to views of those who serve in the naval profession. This is not to undermine the utility of looking at perceptions of civilian policy elites. As a result of their service within respective establishments such as in planning, operational or logistical roles for example, naval professionals are assumed to be more aware of the technical characteristics and mode of deployment of naval equipment and the potential effects they bring about.

Therefore, a questionnaire was created and administered on batches of naval officers who attended the Command and Staff Course at the Singapore Armed Forces Training Institute Goh Keng Swee Command and Staff College (GKSCSC) in 2010, 2011 and 2012 as well as individual respondents via online correspondence.¹⁸⁵ This approach is based on an existing study whose author held individual interviews and group discussions with three batches of senior East Asian naval professionals, totaling about 20, attending the senior international course at the U.S. Naval War College in 1990-93 as well as correspondences with another 18 Asian alumni from the same institution.¹⁸⁶ However, due to the time constraints, this study adopts a

¹⁸⁵ Special thanks go to the then Commandant of GKSCSC for granting the author the opportunity to administer the questionnaire, and to the CSC coordinating officer then, LTC (ret) David Lee, the author's supervisors – Professor Geoffrey Till and Associate Professor Bernard Loo – as well as Dr Euan Graham, then Senior Fellow of the RSIS Maritime Security Programme for their advice and help in facilitating arrangements with the relevant authorities.

¹⁸⁶ Read Esmond D. Smith, Jr., *China Technology and the Spratly Islands: The Geopolitical Impact of New Technologies*, Dissertation submitted to the Faculty of the Humanities

structured questionnaire instead. This exercise did not merely endeavor to gauge the respondents' perspectives about naval armaments but also comprise questions on related issues such as the regional security milieu (the full questionnaire, raw data and structured analyses of the responses as well as a note on modalities related to research ethics can be found in the [Appendix A4](#)). In all, some 45 respondents were surveyed, with 32 of them locals and the remaining 13 international officers.

Country of Origin	Number surveyed
Australia	1
Brunei Darussalam	1
India	3
Indonesia	2
Malaysia	1
New Zealand	1
Singapore	32
Thailand	1
United States of America	2
Vietnam	1

Of interest to this discussion would be Section F that looks at “maritime capabilities” and Section G that examines “force structures”. The list of 58 items in Section F does not represent the entire gamut of plausible capabilities. It was derived based on those capabilities identified in the existing literature to be destabilizing (or at least theoretically so). The sub-sections each deals with a particular theme. F1 for instance looks at systems, whereas F2, F3 and F4 essentially looks at platforms. The idea behind this distinction is related to the assumption that systems confer platforms a particular characteristic, which may be offensive or defensive, and potentially destabilizing or otherwise – i.e. the “system of systems” thinking. It is plausible to say that different types of systems fitted on a given platform will bestow it different characteristics. For example, a patrol craft armed merely with guns would most likely be seen as a defensive platform that is far from destabilizing. However, retrofitting this same patrol craft with a battery of long-range ASCMs changes its characteristic into an offensive one that is potentially destabilizing, too.

Department in Candidacy for the Degree of PhD, Salve Regina University, March 1994 (UMI Number: 9539594).

Moreover, there are other considerations that shaped how the list of 58 items was derived. For instance, one may simplistically deem a frigate to be more offensive than a small patrol craft by virtue of the fact that the former possesses greater physical size that gives it greater capacity, translating into greater range and endurance, seakeeping qualities and combat persistence. However, without looking further beyond the platform, it is misleading to say the least. The patrol craft may be out-displaced by a frigate. However, if the frigate is armed with only guns and torpedoes for anti-submarine warfare (ASW) missions whereas the patrol craft is armed with long-range ASCMs, the latter actually possesses greater offensive striking power, especially in a littoral-states environment, which is potentially destabilizing. Hence, the type of platform is just one aspect to consider. Accurate comparison requires a "system of systems" approach.

For each of the items listed, the response is either "destabilizing" or "non-destabilizing". Given their background and the fact that no time limit was imposed on the exercise, the respondents are assumed to have carefully considered the merits of each of these capabilities included in questionnaire and made informed judgments. There are limitations in such an exercise, to be certain. However, the element of bias would have been minimized by the use of a significant sample size. The sample pool may be deemed diverse though it would have been better and more representative to have a greater proportion of international officers. This questionnaire is far from scientific. It is an assessment of naval professionals' perceptions of naval armaments based on their diverse backgrounds in their respective home services. However, this exercise is never designed to be an absolute basis for this study's analysis. Rather, it serves to enhance understanding of what it means by "destabilizing naval armaments".

The results of the questionnaire on naval armaments are tabulated according to various force categories, in descending order of "destabilizing" responses expressed in percentage of the total. Table 8 summarizes this tabulation as follows.

Table 8: Tabulated Results of Questionnaire Section F on Maritime Capabilities

Code	Type	Category	Destabilizing (%)
Naval Systems			
F1.1	Mach 2 (supersonic) anti-ship missile with 120-200 kilometre range	System	73.3
F1.5	Land attack cruise missile		68.9
F1.9	Naval mine		53.3
F1.2	Mach 0.8 (subsonic) anti-ship missile with 120-200 kilometre range		44.4
F1.7	100-kilometre range anti-aircraft missile launched from surface warships		40.0
F1.4	Anti-submarine warfare torpedo launched by surface warships and aircraft		15.6
F1.10	Remotely-operated underwater mine disposal vehicle		13.3
F1.8	76mm calibre naval artillery gun		6.7
F1.6	5-kilometre range anti-aircraft missile launched from surface warships		4.4
F1.3	Mach 0.8 (subsonic) anti-ship missile with 20-kilometre range		2.2
Submarines			
F3.5	Nuclear-powered submarine armed with nuclear-tipped ballistic missiles	Platform	86.7
F3.1	Nuclear-powered attack submarine		75.6
F3.8	Conventional submarine armed with land-attack cruise missiles		75.6
F3.7	Conventional submarine armed with submerged-launch Mach 2 (supersonic) anti-ship missile		64.4
F3.6	Conventional submarine equipped to lay 28 naval mines		64.4
F3.4	Conventional submarine armed with submerged-launch 120-kilometre range, Mach 0.8 (subsonic) anti-ship missiles		53.3
F3.3	Conventional submarine equipped with air-independent propulsion (AIP) system for 15-days submerged endurance without snorkeling		44.4
F3.9	Midget submarine equipped to disembark combat swimmers/commandos		42.2
F3.2	Conventional submarine equipped with only torpedoes		31.1
F3.10	Conventional submarine fitted with specialised signal intelligence suite		31.1
Major Surface Combatants			
F2.1	Aircraft carriers capable of launching air strikes on enemy land targets	Platform	82.2
F2.5	Destroyer armed with Mach 2 (supersonic) anti-ship missiles		62.2
F2.7	Stealth frigate armed with 120-kilometre range anti-ship missiles		42.2

F2.3	Helicopter carrier equipped with only anti-submarine helicopters		26.7
F2.8	Destroyer armed with Mach 0.8 (subsonic) anti-ship missiles		26.7
F2.4	Cruiser primarily equipped for air defense (e.g. Aegis system)		11.1
F2.6	Frigate equipped for anti-submarine missions only		6.7
Minor Surface Combat and Patrol Forces			
F2.9	Fast attack craft armed with Mach 2 (supersonic) anti-ship missiles	Platform	62.2
F2.14	Stealth fast attack craft armed with 120-kilometre range anti-ship missiles		62.2
F2.13	Fast attack craft armed with 120-kilometre range anti-ship missiles		48.9
F2.30	Unmanned surface vessel armed with remotely-operated gun and/or missile armaments		31.1
F2.11	Fast attack craft armed with 20-kilometre range anti-ship missiles		8.9
F2.12	Patrol craft armed only with guns and torpedoes		4.4
F2.16	Coastguard patrol ship armed with only machine guns		4.4
F2.15	Naval patrol craft armed with only one 76mm calibre main gun armament		2.2
F2.10	Naval patrol craft armed only with 40mm calibre guns		2.2
F2.17	Coastguard patrol ship armed with guns of calibre 40mm or more		2.2
Mine Warfare Forces			
F2.23	Minelayer equipped to deploy up to 30 naval mines	Platform	53.3
F.2.22	Mine countermeasures vessel equipped with remotely-operated underwater mine disposal vehicles		2.2
Amphibious Assault Forces			
F2.2	Helicopter carrier capable of launching amphibious assault landing craft	Platform	57.8
F2.19	Landing platform dock capable of carrying 350 fully-equipped marines/naval infantrymen or 6 main battle tanks		42.2
F2.20	Landing ship tank capable of beaching ashore and disembarking 140 fully-equipped marines/naval infantrymen or 2 main battle tanks		42.2
F2.18	Medium landing craft capable of carrying 1 main battle tank or 30 fully-equipped platoon of marines/naval infantrymen		11.1
Fleet Auxiliaries			
F2.25	Oceangoing surveillance ship equipped with signal intelligence suite	Platform	17.8
F2.21	Oceangoing combat support ship capable of underway replenishment		11.1
F2.24	Oceanographic survey ship equipped for seafloor mapping		8.9

F2.29	Unarmed submarine rescue ship equipped with deep-submergence rescue vehicle		6.7
Aviation Forces			
F4.8	Land-based fighter jet armed with Mach 2 (supersonic) anti-ship missiles	Platform	42.2
F4.6	Land-based maritime patrol and surveillance aircraft armed with two 120-kilometre range anti-ship missiles		28.9
F4.1	Land-based fighter jet armed with Mach 0.8 (subsonic) anti-ship missiles		24.4
F4.7	Land-based fighter jet armed with unguided bombs and rockets		13.3
F4.2	Unarmed, land-based maritime patrol and surveillance aircraft		11.1
F4.4	Air-to-air refuelling tanker aircraft		11.1
F4.3	Anti-submarine helicopter launched from warship		8.9
F4.5	Airborne early warning aircraft (capable of maritime surveillance)		8.9
Shore-based Coastal Defense Forces			
F2.28	Shore-based anti-ship ballistic missile of 400-kilometre range	Platform	62.2
F2.26	Shore-based 120-kilometre coastal defense anti-ship missile		20.0
F2.27	Shore-based 155mm artillery gun in coastal defense role		6.7

Do results of this questionnaire correspond to the theoretical understanding of what constitutes “destabilizing naval armaments”?

Destabilizing Naval Systems

Range, the ability to project offensive power deep into target territory and to permit little or no effective countermeasures as well as decreased strategic and tactical warning times constitute key defining factors of destabilizing naval systems. These attributes have linear relationships with the degree to which these armaments are viewed as destabilizing. Offensive missile armaments deserve attention here. Naval strategic missiles are designed for projecting firepower (in particular, weapons of mass destruction) deep into target territory. Submarine-launched ballistic missile was not covered under sub-section F1 since it is an integral part of a nuclear-powered ballistic missile submarine, under sub-section F2. LACM fits the criterion of strategic missile since it is designed for attacks deep inside target territory.

Amongst ASCM types included in the questionnaire, the destabilizing potential increases with not only missile range but obviously also in its ability to confound and overwhelm the target ship's defenses. Considering equal ranges, a supersonic ASCM is potentially more destabilizing than its subsonic counterpart because of its speed that can undermine its target's reaction ability. The advent of supersonic ASCM means anti-missile defenses have to be updated for modern warships. In other words, supersonic ASCMs are potentially "game-changers" in modern naval warfare now and in the future. To date, only few navies are developing such a weapon, which is only starting to proliferate in the market since not just the Russians – the first user during the Cold War – but also the Chinese (CX-1), Indians (BrahMos, jointly-developed with the Russians), Japanese (ASM-3), South Koreans (Haeseong II) and Taiwanese (Hsiung Fung 3) have developed or are in the process of developing indigenous equivalents.

The naval mine deserves discussion here. Perceptions on this traditional naval weapon appear to reflect prevalent concerns in the Asia-Pacific littorals where the maritime geography and high dependence on seaborne trade make naval mining particularly destabilizing. However, it is necessary to distinguish between defensive and offensive minelaying operations. Defensive minefields are designed to defend vulnerable sea approaches against an enemy amphibious invasion. They do not necessarily threaten shipping if situated safely away from international SLOCs, clearly marked as "no-sail zones" and advanced notification issued to mariners. Offensive minelaying is potentially destabilizing because naval mines are laid in another country's waters, which constitutes nothing short of a naval blockade. Likewise, offensive minelaying along international SLOCs can be deemed destabilizing as well.

Generally, other naval systems which are not designed for offensive striking roles, such as the case of AAW missiles are deemed less destabilizing, and this is also contingent on the range of the particular system. For example, a long-range AAW missile is more destabilizing than a very-short-range counterpart, as seen in the questionnaire results. Short-range strike missiles, generally AAW armaments, gun-type naval weapons and mine disposal equipment are considered some of the

least destabilizing systems. It needs to be pointed out that the design characteristics of a system do determine the characteristics of the platform on which it is mounted.

Destabilizing Platforms

In summary, the following platforms are considered more destabilizing:

- Aircraft carrier equipped with organic strike aviation
- Helicopter carrier equipped for amphibious assault landing operations
- All types of surface and sub-surface platforms equipped with supersonic ASCM
- Nuclear-powered submarines
- Submarines including diesel-powered types, armed with long-range standoff weapons such as ASCM and LACM
- Stealth minor surface combatants armed with long-range ASCM
- Dedicated minelayers

Results of this questionnaire affirm the general understanding that platforms which extend the ranges of strike capabilities, for example aircraft carriers, long-range bombers and nuclear-powered submarines equipped with strategic naval missiles, as well as capabilities for projecting major amphibious assault forces are considered destabilizing.

But this questionnaire also highlights another interesting observation; not all oceangoing platforms, even though they may be offensive because of their inherent technical characteristics, are necessarily destabilizing. In the context of evolving security milieu and technologies as well as fiscal constraints, large oceangoing warships carry practical appeal – they not only allow the fulfilment of a variety of peace- and wartime roles but are more cost-effective compared to having to procure multiple types of vessels designed for specific roles.¹⁸⁷ What truly

¹⁸⁷ Kearsley, *Maritime Power and the Twenty-First Century*, 46; and Rear Admiral N. D. H. Hammond, RAN, "Technological Change and Surface Forces," in Smith and Bergin (eds.), *Naval Power in the Pacific: Toward the Year 2000*, 102; Daniel Todd and Michael Lindberg,

matters therefore is not the size of the platform in question but its inherent capabilities reflected in the systems it carries on board. In other words, if the platforms are fitted with more destabilizing systems, they are deemed as more destabilizing than platforms in the same category yet not similarly equipped. Note the keyword "more" which signifies that the destabilizing potential of a particular armament is a matter of degree. This bifurcation between platforms equipped with more destabilizing systems and those which are equipped with less destabilizing ones can be seen in the area of major surface combatants.

It is argued here that there is a clear distinction between naval platforms optimized for offensive and defensive sea control missions. Strike carrier battle groups, major amphibious assault capabilities, nuclear-powered submarines and strategic missile platforms are offensive sea control instruments. Defensive sea control capabilities – submarines not equipped with destabilizing strike weapons such as supersonic ASCM and LACM, destroyers and especially frigates, as well as land-based patrol aircraft – are ideally suited for barrier defenses, convoying and wide-area ASW operations for instance.¹⁸⁸ They are considered less destabilizing compared to offensive sea control capabilities, so long they are equipped for surveillance and escort duties and with minimal or no offensive strike weapons that are potentially destabilizing in themselves.

Results of this questionnaire also demonstrate that major surface combatants equipped for defensive sea control, such as an ASW-oriented frigate, are considered less destabilizing than those equipped for offensive sea control. The degree to which these platforms are viewed as destabilizing increases as the systems they carry on board become more destabilizing in nature, closer to the realm of offensive sea control capabilities. This is best manifested in the category on amphibious assault landing vessels. The vessel size translates into greater amphibious assault payload that can be projected over a greater geographical

Navies and Shipbuilding Industries: The Strained Symbiosis (Westport, Conn.: Praeger, 1996), 15.

¹⁸⁸ John J. Mearsheimer, "A Strategic Misstep: The Maritime Strategy and Deterrence in Europe," in Steve E. Miller and Stephen Van Evera (eds.), *Naval Strategy and National Security* (Princeton, N.J; Guildford: Princeton University Press, 1988), 56-57.

distance. Hence, landing craft belongs to the lower end of the spectrum of destabilizing amphibious assault landing vessels because it is confined mainly to the immediate waters and incapable of projecting large amphibious forces over great distances.

Minor surface combat and patrol vessels also display equivalent traits in this study, and the influence of the systems they carry is also telling. Typically such small vessels do not possess the range, endurance and capacity as their larger counterparts, which therefore confine them to the immediate coastal waters. When equipped with short-range armaments such as guns and torpedoes, these vessels are clearly less destabilizing compared to those armed with longer-ranged offensive strike systems. Interestingly, a stealth fast attack craft equipped with long-range ASCMs is generally more destabilizing than major surface combatants. This shows that smaller platforms, which are by nature less offensive compared to larger ones, can be more destabilizing because of the systems carried on board. Size does not constitute a key determining factor; it does not mean that larger warships are more destabilizing by default.

Submarines represent an interesting study here. While the theoretical literature generally holds that submarines are destabilizing weapons, results of this questionnaire shows that some types of submarines are more destabilizing than others. A nuclear-powered submarine is most destabilizing since it has virtually infinite underwater endurance whereas conventional boats are less so, because they expose themselves to attack whenever they need to snorkel. Within the conventional submarine family, AIP reduces the need to snorkel and therefore prolongs underwater endurance, thus making it more destabilizing than one that does not possess the same propulsion.¹⁸⁹ Likewise, submarines armed with long-range standoff weapons are also more destabilizing than those equipped only with torpedoes. Even more interesting, this questionnaire shows, a full-sized conventional

¹⁸⁹ This can be seen in relative terms. For a weaker navy using AIP-equipped submarines to deter a stronger adversary, this can be potentially stabilizing for the maintenance of peace and stability through the effect of deterrence by sea denial. However, the same sanguine outlook may not necessarily apply when the two opposing parties belong to the "same league" by possessing equivalent baseline naval capabilities.

submarine designed for warfighting is deemed less destabilizing than a midget submarine. While virtually all types of submarines can infiltrate small commando-type forces to carry out sabotage within target territory, the midget submarine is specially designed for such a purpose and its presence therefore cannot be any more obvious than that.

What about minelayers? This is an area that requires perspective. A dedicated minelayer is considered far more offensive and potentially destabilizing compared to a mine countermeasures vessel. Virtually any platform can be adapted to lay mines. The Iranians for example made use of innocent-looking civilian vessels to conduct minelaying operations during the Iran-Iraq War in 1980-88. But the presence of a dedicated minelayer, and depending on its type, signifies a certain intent. Defensive and offensive minelaying operations require different capabilities though. Defensive minelaying can involve requisitioned civilian vessels as well as smaller dedicated minelayers which can operate well within home waters and given various forms of external support. Offensive minelaying, however, requires larger platforms because of the need to operate autonomously without external support, thus requiring heavier self-defense armaments and larger offensive mining payloads.

Finally, attention needs to be paid to fleet auxiliaries and other forms of support. Essentially, combat support elements that extend the ranges of warfighting platforms have to be considered, for example oceangoing fleet replenishment vessels as well as mid-air refuelling tanker aircraft. Their presence in the force structure signifies a power projection intent, no matter how small or limited such an element is. Of interest here is dedicated intelligence-gathering ships – they are more likely used for intrusive roles such as being deployed near foreign shores to conduct intelligence collection missions which would be often deemed destabilizing by the target state. Even their mere presence close to sensitive areas within international waters, such as loitering close to a military exercise area or a key installation, cannot be taken as a friendly act. The incident between the U.S. Navy surveillance ship *Impeccable* and Chinese forces off Hainan Island in 2009 is one such example.

Destabilizing Force Structures

Section G, on force structures, is included in the questionnaire to validate findings in the previous section. Five force structure models are tabulated below:

Table 9: Tabulated Results of Questionnaire Section G on Nava Force Structures

Model	Constituents	Destabilizing (%)
Type 1	<ul style="list-style-type: none"> - Aircraft carriers with diverse types of aircraft embarked for various missions - Cruisers, destroyers and frigates constituting the fleet's combat power - Long-range amphibious landing capability, including helicopter carriers - Oceangoing combat support forces capable of underway replenishment - Nuclear-powered submarines - No regular naval coastal patrol and combatant forces - Coastguard for maritime constabulary tasks 	82.2
Type 5	<ul style="list-style-type: none"> - Destroyers and frigates, supported by large force of coastal patrol combatants - Nuclear and diesel-electric powered submarines - Oceangoing combat support forces capable of underway replenishment - Long-range amphibious landing force with large landing vessels - Shore-based air support provided by jet fighters and maritime patrol aircraft - Shore-based radar, artillery and anti-ship missile batteries - Coastguard for maritime constabulary tasks 	55.6
Type 4	<ul style="list-style-type: none"> - Destroyers and frigates constituting the fleet's combat power - Only diesel-electric powered patrol submarines - Small squadron of missile-armed fast attack craft - Oceangoing combat support forces capable of underway replenishment - Small numbers of but large-sized amphibious landing vessels - Shore-based air support provided by jet fighters and maritime patrol aircraft - Coastguard for maritime constabulary tasks 	31.1
Type 2	<ul style="list-style-type: none"> - Only patrol and fast attack craft armed with anti-ship missiles and torpedoes - No major surface combatants - Only diesel-electric powered patrol submarines - No oceangoing combat support forces capable of underway replenishment - Minimal amphibious landing forces made up of small landing craft - Shore-based air support provided by jet fighters and maritime patrol aircraft 	4.4

	<ul style="list-style-type: none"> - Shore-based radar, artillery and anti-ship missile batteries - Coastguard for maritime constabulary tasks 	
Type 3	<ul style="list-style-type: none"> - Mostly corvettes, fast attack and patrol craft - Small squadron of frigates, but no cruisers and destroyers - Only diesel-electric powered patrol submarines - Minimal oceangoing combat support forces capable of underway replenishment - Modest amphibious landing forces, led by a pair of large landing ships - Shore-based air support provided by jet fighters and maritime patrol aircraft - Coastguard for maritime constabulary tasks 	2.2

The results seen in Table 9 validates earlier findings. The more destabilizing naval armaments it possesses, the more destabilizing the given force structure. When it is oriented towards offensive sea control missions, such a force structure (Types 1 and 5) tends to be more destabilizing than one that is optimized for defensive sea control (Type 4). Force structures (Types 2 and 3) are essentially oriented towards sea denial missions, which necessitate a more modest yet still balanced set of capabilities, albeit with an emphasis on minor surface combat and patrol vessels and minimal capabilities optimized for long-range, offensive missions.

4.4. Lessons Learnt and the Need for Perspective in Identifying Destabilizing Naval Armaments

By combining the theoretical with professional perspectives, it is possible to derive a more holistic picture of what constitutes destabilizing naval armaments. The questionnaire allows for a better understanding of such weapons by including the views of naval professionals who are deemed to be more aware of the equipment they work with in various capacities. Some salient points can be obtained from the earlier theoretical review and the questionnaire exercise.

- 1) The destabilizing potential of a particular naval armament is not absolute but relative to its counterparts within the same category and with others
- 2) In theory the size of the platform imbues it the capacity for greater range, endurance, persistence and overall flexibility that makes it more offensive in character. Yet it does not necessarily translate into higher destabilizing

- potential. It is the systems carried on board the platform, not the physical size of the platform per se, that confers onto it the qualities that are destabilizing
- 3) The destabilizing potential of any naval armament should be assessed from the "system of systems" approach that embodies considerations about not just the inherent design characteristics but also, its optimality in designed performance and the mode of its deployment
 - 4) The destabilizing potential of a complete naval armament is directly related to the destabilizing potential of the systems or sub-systems it carries on board. This means that the more destabilizing those components are, the more destabilizing the entire armament in question

Hence, while this double-pronged exercise does not invalidate the existing scholarship on destabilizing naval armaments, it highlights the need to classify weapons in perspective. An absolutist approach of identifying naval armaments that is prevalent in the existing literature – calling all ASCMs and all submarines as destabilizing for example – may be appealing from the academic standpoint of parsimony but impracticable from the policy perspective. This is simply because some of the offensive armaments which are by design or coincidence also destabilizing are required. The compounding factor is that naval armaments do not easily lend themselves to structural arms control measures, as history shows. This is not because of the difficulty in distinguishing between offensive and defensive weapons, but more so due to unique national security requirements that foreclose the option of setting limitations on the type and quantity of naval armaments. As such, an absolutist approach of identifying destabilizing naval armaments cannot go far in practice. Some of the most destabilizing weapons become "necessary evils" for a myriad of national, regional and international security considerations.

This study proposes that not only the destabilizing potential of naval armaments may be perceived as a matter of degree, states also elect to exercise restraint in the type and quantity procured. While a force structure development pathway that totally foreswears the most offensive and destabilizing armaments is ideal, it is unrealistic. The most pragmatic approach to achieve a balance between national security needs and avoidance of security dilemmas is to *minimize* the emphasis on more destabilizing naval armaments. In the absence of negotiated structural naval

arms control measures, such an approach is more feasible and practicable for unilateral naval arms control measures. Therefore, this study hypothesizes that states may discern and exercise prudence towards the type of naval armament to be acquired. This tendency can be observed from an aggregate naval force structure that is "stability-inducing" through de-emphasis on naval armaments which are generally considered destabilizing while maximizing stabilizing capabilities. To go about the analysis, it is necessary to derive a set of operationalized codes on destabilizing naval armaments based on the earlier exercise. Instead of clearly listing which weapons are destabilizing (and by default, those that do not appear in the list are not), this study adopts a revised rendition across three categories of what is termed here Destabilizing Potential Index (DPI): Least Destabilizing; Medium Destabilizing; and Highly Destabilizing. This methodology factors into account the observations derived from the earlier exercise. Each of these categories of DPI carries a numerical operational score. The more destabilizing it is, the higher the DPI score:

	<u>Operational Code</u>	<u>DPI Score</u>
Least Destabilizing	L	0
Medium Destabilizing	M	0.5
Highly Destabilizing	H	1

Table 10: Destabilizing Potential Index for Various Categories of Naval Armaments

Force Categories	Least Destabilizing (L-type assets) (Code: L; Score: 0)	Medium Destabilizing (M-type assets) (Code: M; Score: 0.5)	Highly Destabilizing (H-type assets) (Code: H; Score: 1)
Submarines	Conventional submarines armed with only torpedoes and no standoff weapons	Conventional submarines armed with long-range subsonic ASCM and/or equipped with AIP Midget submarines specially equipped for special forces insertion	Nuclear-powered submarines Conventional submarines armed with SLBM, SLCM and/or supersonic ASCM
Major Surface Combatants	All types armed with short-range armaments such as guns, ASW and AAW weapons and/or short-range ASCMs	Helicopter carriers with small fixed-wing aviation detachment All types armed with long-range subsonic ASCM and/or equipped with stealth characteristics All types armed with long-range AAW weapons	Strike aviation carriers All types armed with LACM and/or supersonic ASCM
Minor Surface Combatants and Patrol Forces	All types armed with short-range armaments such as guns, ASW and AAW weapons and/or short-range ASCMs All civilian maritime law enforcement or paramilitary vessels	All types armed with long-range subsonic ASCM Unmanned surface vessels armed with gun and/or missiles	All types armed with LACM and/or supersonic ASCM All types armed with long-range subsonic ASCM and equipped with stealth characteristics
Mine Warfare Forces	All types of mine countermeasures vessels Inshore minelayers	Coastal minelayers	Ocean minelayers
Amphibious Assault Landing Vessels	Landing craft (utility/mechanized/vehicle/personnel)	Landing platform/ship dock Landing ship tank/mechanized	Landing helicopter dock/assault

Amphibious Troops	Commando/underwater demolition units	Commando/underwater demolition units with specialized infiltration devices such as swimmer delivery vehicles Non-mechanized marine/naval infantry	Commando/underwater demolition units with midget submarines Mechanized marine/naval infantry
Fleet Auxiliaries	All other types of fleet auxiliaries	Fleet replenishment or combat support vessel capable of underway replenishment	Specialized surveillance or intelligence-gathering vessels
Aviation Forces	All types armed with only short-range or unguided munitions Unarmed maritime surveillance and airborne early warning aircraft Helicopters (land- and shore-based) All civilian maritime law enforcement or paramilitary aircraft	All types armed with long-range subsonic ASCM Air-to-air refuelling tanker aircraft	All types armed with ALCM (or any long-range standoff precision munitions designed for deep-striking land attack missions) and/or supersonic ASCM
Shore-based Coastal Defense Forces	Shore-based and controlled torpedoes and cable mines Shore-based short-range subsonic ASCM Tube- and short-range rocket artillery	Shore-based long-range subsonic ASCM Shore-based supersonic ASCM	Shore-based anti-ship ballistic missile (ASBM)

With the table of operationalized DPI codes for various categories of naval armaments, it becomes possible to tag every asset in service of each sample country's naval forces. To do so, a dataset for each sample has to be created to detail the inventory of naval forces since 1980. Sources of information include the *IJSS Military Balance*, SIPRI's Arms Transfers Database, and IHS Jane's (especially *Jane's Fighting Ships*, *Jane's Navy International* and *Jane's All-the-World's Navies*) databases, the United States Naval Institute *Combat Fleets of the World*, *Naval Technology*, *Air Force-Technology*, *Defense News* as well as news reports. The data compiled is certainly far from precise. However, likely errors are minimized through the use of such diverse sources in order to corroborate the information, ensuring that the data is as accurate as possible.

For the purpose of this study, assets that serve in the inventory of any one naval force structure are considered. By "asset", this study refers to complete weapon systems – an integration of platform and its systems. It does not make sense to consider individual items of missiles and torpedoes because these weapons need to be launched from a platform. These discrete systems, while not counted as an "asset", are taken into account when classifying along the three categories of DPI. What this means is for example, a supersonic ASCM may not be counted under the Highly Destabilizing (H) category since it is a discrete piece of system. But a ship that is designated to mount the ASCM is counted as such. In other words, the asset is deemed more or less destabilizing when the systems it carries on board are considered. This is the "system of systems" approach highlighted earlier.

The following are not counted as "assets" in active service to warrant analysis:

- Placed into reserve or full-time training role
- Planned for procurement, whether as a stated or officially announced intent
- In various stages of acquisition; i.e. negotiations, signing of contract
- In various stages of construction and pre-induction trials
- Rendered inoperable or taken out of service

The existing scholarship on measuring naval power cautioned against relying solely on "bean-counting" but to consider factors such as the ship's age, state of

maintenance and so on.¹⁹⁰ However, it needs pointing out also that states historically focused on ship counting to weigh the balance of naval forces, such as the case of the 5:5:3 ratio designated for the U.S., Britain and Japan during the 1992 Washington Naval Conference.¹⁹¹ Even till this day, ship counting continues to be relevant. Reminiscent of the goal of a 600-ship navy proclaimed by then President Ronald Reagan's administration in the 1980s, the most recent revision of the U.S. maritime strategy for example envisages "more than 300 ships and a forward presence of about 120 ships by 2020, up from an average of 97 in 2014."¹⁹²

The continued fixation on ship-counting notwithstanding, there are also practical limitations to obtaining the most accurate picture of the state of naval forces, even with modern Internet tools such as Google Earth. Unless official information on its operational status is available, it is not possible to produce a complete, precise picture of the state of the entire force structure. Therefore, even those assets which may appear to be in active service on paper, despite their dubious operational status, have to be duly considered. If policymaking constitutes a "black box", the same can be said about military equipment.

Inoperable assets may be subsequently restored to service even without earlier notice. For example, while the light carrier *Chakri Naruebet* was largely viewed as dormant because of its uncertain operational status following induction into Thai naval service in the 1990s, its activation in response to the southern Thailand floods in 2011 might have come as a surprise to observers. As such, while acknowledging the limitations of not being able to decipher the true state of affairs of any particular

¹⁹⁰ Read for instance, Kearsley, *Maritime Power and the Twenty-First Century*, 176-79; Anthony, *The Naval Arms Trade*, 9; Herve Coutau-Begarie, "Navies of the superpowers: the strategic background," in Fieldhouse (ed.), *Security at Sea*, 92-93; Joseph R. Morgan, "Porpoises among the Whales: Small navies in Asia and the Pacific," *East-West Centre Special Reports No. 2* (March 1994), pp. 12 and 16.

¹⁹¹ The ratio actually refers to the total displacement for each fleet, namely, 500,000: 500,000: 300,000 tons. For historical examples, read for instance, Bolks and Stolls, "The Arms Acquisition Process".

¹⁹² *A Cooperative Strategy for 21st Century Seapower*, United States Navy, March 2015, p. 9. Online. Available: <<http://www.navy.mil/local/maritime/150227-CS21R-Final.pdf>>

naval forces' equipment in the inventory, the "bean-counting" exercise remains essential. Moreover, given that capability attributes of any particular asset is considered in this study, such an exercise is more than mere "bean-counting" on how many of frigates or patrol boats exist in the navy for example.

Counting assets such as ships and aircraft is straightforward but the same cannot be said of other types of fighting units, for example amphibious troops and shore-based coastal defense forces. It is implausible to count an individual marine trooper as an "asset" so whole fighting formations are unitized as a single asset. For instance, a naval infantry battalion starting from the 1980s would be counted as one asset and should it later expand into a brigade, it would equate to three or four assets depending on the information available. The same applies to coastal defense units because the number of launchers and artillery pieces vary. As such, typically one firing battery (totaling around 6 to 8 guns or launchers) is counted as one asset. Assets on the whole fluctuate in quantity over time, for various reasons such as:

- Undergoing maintenance, repairs and/or overhauls which may last for an extended period of time
- Undergoing service-life extension, upgrading and/or modernization programmes
- Removed from active service and placed into reserve, decommissioned or relegated to non-combat, usually full-time training roles or alongside hulk
- Induction of new assets
- Certain assets which are acquired on lease for a finite duration of service

Other than fluctuating number of assets that affect the aggregate force structure, changes to the characteristics of existing assets or new additions can also change the destabilizing potential. In any year, therefore, within a given force structure, the inventory of assets not only may change but its DPI may alter as well. To ensure the most accurate formulation of this value, it is necessary to codify each and every asset in every year by keeping track of their changing quantities and characteristics. Such a process is complex and laborious but necessary. Across the four different timespans of analysis – 1980-1991; 1992-2000; 2001-11 and 2012-14 – the average quantity and DPI for each force category outlined in Table 10 can be

derived for trends analysis. To discern state preferences in procurement and force development pathways the following step-by-step analysis will be undertaken:

Data Analyzed	What Does the Data Mean?
Total number of assets in the aggregate force structure	Is there any expansion in the total size of naval forces?
Total number of assets in each force category	Which force categories experience growth?
Percentage of each force category as a constituent part of the aggregate force structure	What is the composition of each force category within the aggregate force structure?
Total DPI of the aggregate force structure	Is there a general trend towards a more destabilizing force structure?
Percentage of total assets across the L, M and H categories within the aggregate force structure	What posture is the aggregate force structure oriented towards?
DPI of each force category	Is there an increasing destabilizing potential of each force category?

As a comparative study, the analyses prescribed above will be performed in these three sample groups across the four timespans:

- Northern European naval forces
- Indo-Pacific naval forces
- ASEAN naval forces

Bringing in the case of Northern European naval forces is necessary because of certain similarities between them and ASEAN naval forces, which are the primary subject of interest. Comparing ASEAN naval forces with those of the surrounding Indo-Pacific counterparts will also shed light on differences in their preferences in naval armament procurement and force structure development pathways, if any.

4.5. A Broad Snapshot: Is There Any Expansion in Total Size of Naval Forces?

Comparing the three sub-regions using [Table A4.1](#) in Appendix A4, across the four timespans, Northern European naval forces witnessed a downsizing as a result of the post-Cold War easing of tensions in Europe and this conforms to the general pattern of military downsizing efforts in the region since 1991. The decline continues as Northern European naval forces consolidated their capacities and shrunk further till 2014. By contrast, steady growth in naval forces can be observed for the Indo-Pacific and ASEAN samples across all four timespans.

However, comparing all three sub-regions, ASEAN naval forces remained the smallest of all. Growth in overall naval force sizes can be deemed modest. The Philippines and Vietnam experienced post-Cold War decline in naval force sizes as they deactivated the vintage ex-American and Soviet equipment in service. In the 2001-11 period, the Philippines and Vietnam experienced modest force expansion. However, from 2012 till 2014 the Philippines further slashed its naval forces whereas Vietnam forged ahead with the most significant force expansion since the end of the Cold War.

This is merely a macroscopic snapshot of the analysis, which serves to highlight that generally across the wider Indo-Pacific there has generally been expansion in naval forces whereas the opposite is taking place in Northern Europe. However, ASEAN naval forces – the samples of key interest here – consistently muster modest capacities compared to their Northern European and Indo-Pacific counterparts. Such capacities are so modest for some ASEAN countries that they were not deemed sufficient to cope with national security needs, for example the case of Indonesia, Malaysia and the Philippines which command sprawling maritime expanses yet found themselves hard-pressed to police these waters under their jurisdiction.

One then needs to ask: with modest capabilities that generally fall short of essential requirements and in view of the diverse array of maritime security challenges they face, would the aggregate force structures of some of these ASEAN naval forces allow them to undertake aggressive policies, especially in the event of an intra-

ASEAN conflict? Force sizes do not offer any further clues beyond just indicating the existence of any expansion. Yet like the case of military expenditures, the rapid growth in naval forces in Southeast Asia have often been the primary reference point in most media commentaries about an impending arms race, without further inquiry into the nature of modernization and buildup. Merely looking at the number of assets does not furnish the full picture of the nature of the modernization processes.

4.6. A Deeper Look: Which Force Categories Experience Growth?

To simply look at overall force expansion is not sufficient as a way to derive conclusions regarding the possible consequences of naval modernization. Of interest will be to examine which force categories receive the attention of capabilities enhancement over time, which may indicate strategic intent. Surveying Tables A4.2 to A4.10 in Appendix A4, each representing one of the nine force categories, it is possible to identify focus areas of naval modernization.

Northern Europe

Even though Northern European naval forces generally shrunk in overall sizes in the post-Cold War period, there are actually areas of capability enhancements. In all, submarines, mine warfare and shore-based coastal defense forces experienced cutbacks. Minor surface combat and patrol forces, as well as fleet auxiliaries, largely remained in steady state with tiny additions of new assets, though most of these could not out-replace the larger quantities of older assets being taken out of service. Minor surface combat and patrol forces remained more or less in steady state in no small part due to expansion in civilian maritime law enforcement agencies in some of the Northern European countries, in particular Germany, Norway (whose Naval Home Guard has a huge holding of such forces, augmented by the Coast Guard) and Sweden.

But the area which experienced most significant growth in Northern Europe is actually major surface combatants. Finland and Sweden ever since they decommissioned their last such vessels in the 1980s had stuck to minor vessels till

present times. However, the other Northern European naval forces turned to larger warships of frigate and destroyer categories, which reflected their governments' new post-Cold War foreign policies which were no longer Soviet-centric. Though naval forces which were part of NATO (Denmark, Germany and Norway) continued to work within the existing alliance framework on a burden-sharing basis, they also began to enhance their own self-reliance for carrying out independent actions, be it under the umbrella of the European Union or at national levels. To a lesser extent, aviation forces capable of maritime operations constitute another area experiencing significant enhancements. Like major surface combatants, these forces were also representative of the new post-Cold War security policies in Northern Europe where defense self-reliance was emphasized even in the climate of general force reduction.

Indo-Pacific

Unlike Northern Europe, naval forces in the Indo-Pacific are experiencing buildups in since the end of the Cold War. However, amidst the buildups there are areas which witnessed capability enhancement whereas some others do not, at least where quantity is concerned. For the Indo-Pacific samples, most of the force categories remained generally at steady state. Most of these naval forces experienced more significant growth in minor surface combat and patrol forces. Similar to their Northern European counterparts, the expansion in this area is mainly attributed to growth of civilian maritime law enforcement capabilities. The coastguards of India, Japan, South Korea and Taiwan for example steadily acquired new assets.

Of these Indo-Pacific naval forces, China presents the most interesting anomaly. Even though Beijing musters the largest fleet of submarines, minor surface combat and patrol forces as well as amphibious assault landing vessels in the Indo-Pacific, these forces were slashed in size in the post-Cold War period. Yet at the same time, evident capability enhancement is registered in major surface combatants, with China leading in the introduction of new destroyers and frigates. The same applies to fleet auxiliaries, with again China making the most significant increments in new fleet replenishment vessels and oceangoing intelligence-gathering assets. These

force categories were expanded consistent with the PLAN's orientation towards bluewater operations.

Taiwan reduced both its fleet of amphibious assault landing vessels and Marine Corps as the country's post-Cold War defense strategy became geared towards territorial defense instead of preparing for a cross-strait invasion of mainland China. Other Indo-Pacific naval forces maintained their amphibious troops at steady state, though China and India especially expanded these forces. Maritime aviation forces constitute an area where Indo-Pacific naval forces experience significant growth. With the exception of China and India which inducted new aircraft carriers, the rest of these countries expanded their land-based aviation forces, focusing on maritime patrol and multi-role fighter jets equipped with anti-shipping strike capabilities. The other area that experienced smaller but no less significant growth has been shore-based coastal defense forces, with China and Japan taking the lead.

ASEAN

Compared to their Indo-Pacific counterparts, ASEAN naval forces constitute relatively minor players. The patterns of force expansion by ASEAN naval forces follow more closely that of Northern Europe. But unlike the latter group, growth in major surface combatants only became more significant by the turn of the century. Moreover, not all ASEAN naval forces took part in this process. The same applies to the area of submarines. In fact, only a minority of all ASEAN naval forces invested in sub-surface capabilities even though other regional governments also evinced interest. Hence, the growth in this area was weak in the 1990s and only picked up momentum by the turn of the century as Malaysia and Singapore each has in place a viable submarine force.

However, the most significant area of expansion is in minor surface combat and patrol forces. ASEAN naval forces continue to focus on patrol capabilities. Like their Northern European and Indo-Pacific counterparts, they also invested considerably in civilian maritime law enforcement capabilities. Indonesia, Malaysia and Vietnam for example created new agencies for the purpose. Singapore in particular expanded its Police Coast Guard. Thailand's investment in major surface

combatants took place in the 1990s but in the 2000s, gravitated towards more and new minor surface combat and patrol forces instead.

The other area of growth amongst ASEAN naval forces is aviation forces capable of maritime operations. None of these samples, except Thailand, operate any aircraft carriers so all such assets are land-based. Like Northern Europe, the growth in this force category relates to maritime patrol and multi-role fighter jets capable of anti-shipping strike missions. In the post-Cold War period, amphibious troops constitute an area where modest growth was registered for some ASEAN naval forces, with the exception of Vietnam which gradually slashed its naval infantry from 10 to six and now holding it at just two brigades. Indonesia and the Philippines led the region in expanding their marine corps by the turn of the century. Manila's focus on this area appears closely related to the evolving situation in the South China Sea after 2009, when it doubled its marine corps after 2012.

In contrast, mine warfare forces, amphibious assault landing vessels, fleet auxiliaries and shore-based coastal defense forces remained more or less in steady state for ASEAN naval forces with less obvious signs of capacity enhancement. In fact, some of these samples experienced reductions in these force categories as vintage equipment, like in the case of Northern Europe, were phased out of service.

Some Observations

The growth in major surface combatants, aviation forces and submarines in ASEAN naval forces has been commonly invoked as the basis of the "conventional argument". The flexibility and mobility embodied in these platforms confer upon them an offensive character. However, when seen in comparison with the other regions, especially Northern Europe, such areas of expansion should not have been surprising. Neither is it unique only to Southeast Asia. But often overlooked is that ASEAN naval modernization has largely focused on minor surface combat and patrol forces which are mainly geared towards low-intensity security operations. This observation appears to concur with the Positive School which postulates that ASEAN naval forces buildup had been "stability inducing" because they focused on such low-power elements as patrol vessels and land-based aircraft instead of

major investments in offensive force projection capabilities which can be potentially destabilizing.

Nonetheless, looking at force categories which experience growth may provide more insights than merely “bean-counting” the overall numbers of assets mustered by each naval forces. Yet they offer mainly clues to quantitative enhancements. Numbers may remain more or less static because there could have been new replacements with better capabilities that are not reflected in the numbers registered. Qualitative assessment only goes as far as identifying which force categories have undergone expansion. For example, the observed growth in the category of submarine forces highlights a particular government’s interest in acquiring such capability. These indicators at best illuminate particular procurement preferences but not with respect to force structure development pathways.

4.7. Beyond “Bean-counting”: What is the Composition of Each Force Category within the Aggregate Force Structure?

It is possible to look beyond areas of growth in force categories to understand the orientation of a particular naval force structure. To do so, it is necessary to examine the composition of each force category within the aggregate force structure. The composition of each force category, simply referred to as “force composition” here, highlights particular preferences in the force structure development. For example, is the naval forces in question oriented towards more “brownwater”, or “greenwater” or “bluewater”?

Force composition also offers hint to the preferences in capability enhancement over time. This is a more accurate gauge of how a force structure evolves than to simply focus on discrete capabilities being acquired. In other words, it does not mean that just by acquiring a few major surface combatants, the said navy has become a bluewater navy. Force composition is more decisive indicator compared to how many this or that asset was being procured.

Tables A4.11 to A4.19 in Appendix A4 summarize the composition of each of the nine categories in each sample naval forces, expressed in percentages of the total force structure considered. However, it is possible to highlight the overall, average force compositions representative of each region over the entire analytical timespan of 1980-2014. This is not to say that each constituent country in any region sampled has a similar procurement or force structure development pathway. But it is possible to draw inferences about common patterns based on this average force composition over time. Table 11 below displays the average force compositions for each region over the period of 1980-2014.

Table 11: Average Compositions of Force Categories Expressed in Percentages across Regions, 1980-2014

Force Categories	Northern Europe	Indo-Pacific	ASEAN
Submarines	1.45	2.44	0.20
Major Surface Combatants	1.03	4.45	1.53
Minor Surface Combat and Patrol Forces	31.30	26.47	49.91
Mine Warfare Forces	7.11	3.02	1.66
Amphibious Assault Landing Vessels	14.87	11.50	18.58
Amphibious Troops	0.60	0.39	1.51
Fleet Auxiliaries	7.36	4.92	4.01
Aviation Forces	33.46	46.53	22.09
Shore-based Coastal Defense Forces	2.80	0.26	0.26

Throughout 1980-2014, minor surface combat and patrol forces, aviation forces and AALS, in that order, occupy the bulk of ASEAN naval forces' overall compositions. This pattern is analogous to Northern European naval forces. Both ASEAN and Northern European naval forces have about the same force composition where major surface combatants are concerned. This implies similar force development pathway preferences in both regions. Where submarines and mine warfare forces are concerned, ASEAN naval forces lagged by comparison to their Northern European counterparts. This type of force composition is oriented towards "brownwater" and "greenwater" operations.

Indo-Pacific naval forces exhibit different force compositions compared to ASEAN and Northern Europe. On the average throughout 1980-2014, these naval forces muster a larger composition of major surface combatants, in no small part attributed to the fact that a significant number of major naval powers in the Indo-Pacific already possess baseline bluewater capabilities. The same applies to submarines, with Northeast Asian naval forces especially mustering significant sub-surface capabilities. But one area that deserves notice is the composition of aviation forces. Indo-Pacific naval forces muster larger aviation forces compared to their ASEAN and Northern European counterparts. Not only do many of them possess their own separate naval aviation services, but they also possess sizeable air forces that comprise elements capable of maritime support operations. In the main, unlike ASEAN and Northern Europe, Indo-Pacific naval forces (most of those sampled) are oriented towards “greenwater” and at least limited “bluewater” missions.

From the perspective of addressing the consequences of naval modernization, what this means is that ASEAN naval forces do possess low baseline capacities for sustained force projection given that their bulk compositions are oriented towards operations in the immediate waters. Because their forces possess very small components of force projection capabilities, they in effect suffer from what NPD theorists call the “structural inability” to carry out major aggressive missions. It is not wrong to view ASEAN naval force structure development pathways in the same light as that in Northern Europe, even if geopolitical context may be different. “Small navies” share common traits in their quest for balanced capabilities, including their desire for at least some force projection assets that allow limited contributions to “out-of-area” international security missions.

However, while it is possible to glean hints about their orientation from force compositions, it may not be possible to use this indicator to assess the consequences. Minor surface combat and patrol assets may be confined to immediate waters and could not carry out sustained force projection compared to more offensive platforms such as major surface combatants. But as discussed earlier the systems they carry on board may potentially nullify such technical and tactical

disadvantages by conferring upon them the ability to carry out destabilizing activities. For example, while a frigate may be more capable of maintaining continuous presence in open-waters for sustained periods compared to a fast attack craft, the latter may still contest the frigate's control of a maritime zone if it is armed with long-range offensive strike weapons. It does not necessarily mean that the more major surface combatants there are, the more destabilizing is that naval force.

4.8. General Trends towards a More Destabilizing Force Structure... A "Smoking Gun"?

Beyond looking at force composition, it is necessary to examine the characteristics of the naval forces by tagging every asset with a DPI score and then calculating the aggregate force structure DPI for each sample. This takes into account each individual asset's evolving attributes over time. Because the overall force size and force composition may remain static, the only way of better understanding the capabilities of available assets is to treat them as individual "system of systems". But it needs pointing out that the total DPI score of a given force structure is merely an aggregate of all assets considered, which includes those which are least destabilizing (i.e. the L-type assets) whose DPI scores would be zero. In other words, the total DPI score reflects the presence of Medium Destabilizing (M-type) and Highly Destabilizing (H-type) assets, but do not mean that the given force structure only consist these two types of capabilities.

Table A4.20 in Appendix A4 lists the total DPI for each sample naval forces, across the four time-spans analyzed. An interesting trend can be observed. In fact, all naval forces sampled saw increases in their total DPI during the post-Cold War period. Brunei, whose total DPI stayed stagnant at a very low value of 1.50, is an exception. The Philippines' total DPI actually decreased due to the slashing of amphibious assault landing fleet – the U.S. Second World War vintage landing ships – in the 1990s, a pattern which continued into the new century while new acquisitions were too few to make up for the numbers.

That total DPI increases for virtually all other samples should not have come as a surprise. In fact, it signifies commonalities in force development approaches under geopolitical and military-technological influences. From the 1990s onwards, several types of military equipment become more commonplace for acquisition, especially multi-role fighter jets and long-range ASCM armaments. New warships in the global naval market from the 1990s onwards, including minor surface combat and patrol vessels, increasingly come equipped with long-range ASCM armaments as a standard shipboard offensive strike weapon. Not only ASEAN and Indo-Pacific naval forces, but that their Northern European counterparts as well, are acquiring such capabilities.

Northern Europe can best illustrate the influence of military-technological changes on procurement patterns. Prior to the end of the Cold War, the most common ASCM employed by Northern European naval forces were short-ranged such as the 20-kilometre range Penguin Mark-1 manufactured by Norwegian company Kongsberg. Fewer Northern European naval assets were equipped with longer-ranged ASCMs such as the French-built Exocet or the U.S.-origin Harpoon. But in the post-Cold War period, the Penguin ASCM is considered deficient in striking power because of its range, ECCM qualities and warhead size. It might have been able to destroy smaller targets which are not well-equipped with anti-missile defenses. The advent of advanced shipboard "soft" and "hard" kill anti-missile systems in the post-Cold War era means that the Penguin is grossly outclassed. Moreover, given that larger warships have increasingly entered naval services worldwide, the Penguin's puny warhead is deemed insufficient. By contrast, longer-ranged ASCMs with better ECCM qualities and larger warheads to overcome modern AAW defenses have a higher probability of kill (pK). Newer marks of the ubiquitous Penguin is still in use today but it has become more commonly associated with short-range, low-payload aerial platforms such as helicopters. It is no longer a mainstay offensive strike weapon of Northern European naval forces.

This pattern is replicated in virtually all parts of the world where navies seek offensive strike capabilities for their warships. Long-range ASCMs literally become the "norm" instead of the extraordinary. It would have been the case back in those times when the first ASCM entered the global naval arena until these early, short-ranged

weapons became more widely proliferated. ASEAN and Indo-Pacific naval forces follow the same patterns too. There are certainly navies, such as New Zealand's until most recently, which do not acquire long-range ASCMs but the same cannot be said for most of them. There is conceivably not just geopolitical, but also military-technological, pressures to bring shipboard offensive strike capabilities up to par with international standards. To say that this signifies aggressive intent becomes potentially misleading.

Into the new century, Northern European naval forces experienced a dip in total DPI, with exception of Sweden. This was likely the result of continued force cutbacks. Sweden's case is interesting here because the bulk of its total DPI score originated from three areas: AIP-equipped conventional submarines, coastal minelayers and the new fleet of JAS-39 Gripen fighter-bombers armed with RB-15F long-range ASCM. Post-2012, with the exception of Norway, Northern European naval forces experience a decline in total DPI, reflecting the continued patterns of forces reduction and consolidation of existing capabilities. During this period, Finland and Norway introduced new, H-type capabilities – stealth fast attack craft equipped with long-range ASCMs. But most notably, the Royal Norwegian Navy equips its new frigates with not just the Aegis shipboard air defense suite but also the new Kongsberg-developed Naval Strike Missile (NSM) which has a land-attack capability. This accounts for Norway's spiked DPI in 2012-14.

Generally, ASEAN and Indo-Pacific naval forces continue to experience increase in total DPI throughout all post-Cold War time-spans. Even in the case of the Philippines, total DPI rebounded from the 2001-2011 figure of 7.68 to 9.00 in 2012-14, somewhat close to that in 1992-2000 as a result of its Marine Corps expansion. Some may argue that the steady increase in total DPI of ASEAN and Indo-Pacific naval forces does present a cause of concern. However, it suffices to say that the general increase in DPI reflect general worldwide military-technological changes. Total DPI increase may not be unique only to naval forces in these two sample groups. Because total DPI combines all types of capabilities across the L, M and H-types, it is necessary to further examine the procurement preferences along these three categories.

4.9. More “Stability-Inducing” than Destabilizing: What Posture is the Aggregate Force Structure Oriented Towards?

Just by looking at the total DPI one may have the misconceived impression that naval modernization efforts have been very destabilizing. By breaking down the aggregate force structure of each sample into the three categories of destabilizing potential – Least, Medium and Highly Destabilizing – it becomes possible to see the source of total DPI. [Table A4.21](#) in Appendix 4A outlines the breakdown of force composition in terms of L-, M- and H-type assets.

A common pattern emerges. For all naval forces sampled here, L-type assets have been the predominant class of naval armaments within the force structures. L-type assets, as Table 10 highlights, are basically the least destabilizing, more “stability inducing” armaments including unarmed land-based maritime surveillance aircraft, lightly-equipped minor surface combat and patrol forces, as well as coastal submarines unarmed with standoff offensive weapons. This is followed by M-type assets, which are designed for force projection but not the most destabilizing. Instead, M-type assets constitute the main growth areas since the end of the Cold War, as countries acquired long-range ASCMs that equip various aerial, surface and sub-surface platforms while also procuring larger amphibious assault landing ships. As earlier discussed, this is a pattern that transpires from worldwide geopolitical and military-technological changes. The three groups of naval forces sampled here are plausibly not unique in this respect.

However, the general growth of H-type assets in most of the naval forces sampled here deserves closer attention, with Brunei Darussalam and New Zealand being the only exceptions since they registered no H-type assets throughout 1980-2014. Even Northern European naval forces muster certain percentages of H-type assets. ASEAN naval forces muster H-type assets at no more than 10 percent of the total aggregate force structures. The only exceptions are Australia, China, Germany, India, South Korea and Vietnam which registered H-type force composition at over 10 percent of their aggregate force structures across various time-spans.

Some may argue that the uncertain and somewhat volatile geopolitical milieu in the Indo-Pacific region, fraught with interstate disputes that provide the pretext of use of force, drive the increase in M- and H-type assets. Yet the increase in these two categories is also observed in Northern Europe, which is generally considered a geopolitically benign region until the Ukraine crisis. The only probable reason behind shifts in procurement preferences towards M- and H-type assets is technologically driven. M-type assets are most common and constitute the bulk of high-end "big-ticket" acquisitions. There is much less emphasis on H-type assets, which increase in proportion within the aggregate force structure yet still constitute very low percentages. The most likely reason is that states, perhaps not just ASEAN, have commonly practiced varying degrees of unilateral self-restraint in the types and quantities of such highly destabilizing naval armaments they procure and which form an integral part of their aggregate force structures.

A good indication can be seen in the way ASEAN policy elites have regarded highly destabilizing equipment; they have refrained from acquiring them not only due to fiscal reasons but also plausibly because they may have anticipated the potential risks of provoking undue misperceptions and suspicions by other states. Then Chief of Staff of the Indonesian Navy, Admiral Marsetio commented at least twice in 2014 that while Indonesia needs a strong navy for national defense, there is no intention of operating aircraft carriers because "we are no aggressors" and the country is only keen to protect its sovereignty.¹⁹³ In the eyes of Jakarta, it can be said therefore, aircraft carriers – a highly destabilizing asset – are consciously associated with aggressive policies. In fact, this is not the first time Jakarta had voiced against the need for such an asset. In November 2008, Indonesian defense authorities remarked that such vessels as aircraft carriers are primarily used for offensive operations far away from a country's coast whereas Jakarta is "focused on defensive capabilities".¹⁹⁴

¹⁹³ "TNI says no need for aircraft carrier," *The Jakarta Post*, May 21, 2014; and "Navy chief: Indonesia has no intention to procure aircraft carrier," *ANTARA News*, December 29, 2014.

¹⁹⁴ "Indonesia, India taking steps to thwart littoral threats," *The Hindu Online*, November 22, 2008.

Therefore, the procurement and force structure development preferences among the sampled ASEAN naval forces can be summarized as such: a continued predominance of L-type assets, increasing focus on acquiring M-type assets while judicious, very limited procurement of H-type assets. This pattern does not reflect merely fiscal and practical security requirements but does possibly entail prudent considerations regarding the potential of creating misperceptions and risks of arms competition. The contrast is in fact considerable when one compares ASEAN naval forces to a number of Indo-Pacific naval forces which have more significantly increased the proportion of H-type weapons. When one looks beyond the Indo-Pacific, it is possible to observe that the general patterns may be common worldwide, influenced largely by military-technological changes. Still, because H-type assets are especially sensitive from the political standpoint, it is best to implement some form of unilateral arms control measures to balance between national defense requirements and the need to manage external perceptions.

4.10. More Than It Meets the Eye: Is there Increasing DPI for Each Force Category?

To shed light on the nature of those M- and H-type acquisitions, it becomes necessary to identify force categories of concern. Those force categories which register significant growth in DPI deserve closer attention. Moreover, examining this aspect will also bring to light the general force posture of the naval forces and determine whether they are in fact more stabilizing than otherwise. Tables A4.22 to A4.30 in Appendix A4 provide individual sets of force category DPI scores.

Northern Europe

Amongst the nine force categories, those that register significant DPI increases belong first to aviation forces, followed by major surface combatants and then submarines. The growth in DPI scores for aviation forces is especially significant in the case of the German Luftwaffe's combat aviation which is not just equipped for anti-shipping roles but also in recent years, land-attack missions using the 500-kilometre range Taurus KEPD350 air-launched standoff weapon.

Major surface combatants, as exemplified in the case of Norway, register smaller DPI increases. So far, besides Oslo's new frigates armed with land attack-capable NSM, only the Royal Danish Navy's new major surface combatants possess a recessed LACM capability, albeit not acquired as yet. It is likely that in the years to come, more Northern European countries will acquire LACMs, in no small part spurred by the increasingly uncertain European security milieu as a result of the Ukraine crisis and a resurgent and militarily more assertive Russia. Poland inked a contract for the U.S.-made AGM-158 Joint Air-to-Surface Standoff Missile in December 2014 and has expressed interest in procuring SLCMs to equip its new submarines.

Even supposedly neutral Northern European states – Finland and Sweden – made similar moves. Helsinki purchased the JASSM in 2013 to equip its F/A-18 Hornet fighter jets which are originally tasked purely for homeland air defense duties. Stockholm has sought to acquire ALCMs analogous to the JASSM to equip its Gripen jets, even though this has been deemed by some Swedish political quarters as “an aggressive policy” that may potentially bode ill for regional stability.¹⁹⁵

Indo-Pacific

Similar trends are seen in the case of Indo-Pacific naval forces too. The foremost force category that registered the most significant DPI increases has been aviation forces, followed by submarines and major surface combatants. Amongst major players in this group sampled, Australia, China, India, South Korea and Taiwan are especially prolific in acquiring H-type assets. Prime movers have been supersonic ASCM and various classes of LACM.

The Australians achieved initial operational capability with the JASSM in 2014, equipping the older F/A-18A/B Hornets and newer F/A-18E/F Super Hornets – reviving a long-range, deep-strike capability for the first time following the retirement of the F-111 Aardvark long-range theatre bombers. India's DPI registered high returns in 2001-11 onwards because it inducted increasing quantities of

¹⁹⁵ “Sweden: Gripen aircrafts to be equipped with cruise missiles,” *Esmerk Swedish News*, April 24, 2014.

BrahMos supersonic ASCM into naval service. The Chinese incorporated various supersonic ASCM and LACM as well, for both aerial, surface and sub-surface forces.

South Korea and Taiwan are new entrants with their own indigenous supersonic ASCM and LACM about to be incorporated into air and naval services. In other words, there is a broader and deeper proliferation of highly-destabilizing armaments such as supersonic ASCM and LACM amongst these sample countries. Consequently, because they are increasingly fitted with such armaments, the aerial, surface and sub-surface platforms also acquired highly-destabilizing attributes. Compared to Northern Europe and ASEAN regions, such developments truly deserve more attention.

ASEAN

On the whole, ASEAN naval forces present a more sanguine picture in stark contrast to their Northern European and Indo-Pacific counterparts. At the time of writing, the situation has been more positive for M- and H-type assets.

Like Northern Europe and Indo-Pacific samples, ASEAN naval forces register significant DPI growth first in aviation forces, which comes from the acquisition of such M-type assets as air-launched long-range subsonic ASCM. Moreover, the growth is also attributed to countries such as Indonesia, Malaysia and Vietnam that procure such H-type asset as the Russian-built Su-30 Flanker multi-role fighter jet equipped with the Kh-31 (NATO-codenamed AS-17 Krypton) supersonic ASCM, capable of flying at sea-skimming altitude and sink a destroyer-sized target.

Major surface combatants constitute another area of significant DPI growth, albeit to a much smaller extent compared to aviation forces. The primary source of this increase comes from M-type assets, such as frigate-type warships equipped with long-range subsonic ASCMs. So far, only Indonesia operates a shipboard supersonic ASCM even though just one frigate of its *Ahmad Yani*-class is equipped with the Russian-made P-800 Oniks (more commonly known as Yakhont, NATO-codenamed SS-N-26 Strobile). The frigate first tested the missile in 2012.

Recent revelations that the Vietnamese had acquired the land-attack variant of the Klub cruise missile to equip their *Kilo*-class submarines,¹⁹⁶ and the announcement by Malaysia to procure Kongsberg's NSM to equip its Second-Generation Patrol Vessel-Littoral Combat Ship (SGPV-LCS) in late March 2015 may potentially alter the dynamics. Nonetheless, ASEAN countries are considered latecomers in the LACM game compared to their Northern European and Indo-Pacific counterparts. Moreover, at the time of writing no further reported instances of similar purchases by other ASEAN naval forces had been noted.

There are some signs of increase in DPI for amphibious troops, largely driven by Indonesian and Philippine amphibious assault capability buildups. However, even though amphibious troops experienced increases, DPI for amphibious assault landing vessels did not keep in pace, which only meant two things. First, new additions of amphibious assault landing vessels came largely in the form of smaller landing craft suited for inshore and coastal operations, not large AALS. In any case, large AALS are acquired in numbers too small to fully replace or exceed previous inventories of vintage vessels which have since been decommissioned, seen in the case of Indonesia, Malaysia, the Philippines and Thailand.

Second, even though Indonesia and the Philippines expanded and further mechanized their marine corps-type formations, these are more likely designed for localized missions than for large-scale offensive landing operations, as supported by the larger proportions of smaller landing craft. Singapore's planned acquisition of a helicopter carrier equipped with a well-dock – in effect a landing ship dock analogous to the South Koreans' *Dokdo* class – dubbed the Joint Multi-Mission Ship, announced in June 2014 may alter the scene by prompting some other ASEAN governments to follow suit.

But until the scenarios of more ASEAN countries acquiring supersonic ASCM, LACM and LHDs materialize, it suffices to say that the element of unilateral arms control

¹⁹⁶ The Vietnamese did not attempt to hide the acquisition even though they did not state the exact numbers acquired. Instead, the acquisition was duly reported in Hanoi's recent submission to the UN Register of Conventional Arms. Greg Torode, "UPDATE 1-Vietnam buys submarine-launched land attack missiles to deter China," *Reuters News*, April 30, 2015.

restraint is evident in Southeast Asia. Where M-type assets are acquired, they are not considered "breakthrough", revolutionary capabilities and instead conform to broad international military-technological patterns. While surrounding Indo-Pacific extra-regional powers are busy acquiring supersonic ASCMs, LACMs and LHD-type landing ships, ASEAN naval forces have demonstrated a more judicious approach. H-type assets are procured in small numbers in contrast to these two sample groups of naval forces.

The area of supersonic ASCM constitutes a good example. In fact, Singapore had hinted at the possibility of acquiring such a weapon back in May 2001 but this option was not pursued because of concerns over the risk of hitting an innocent ship instead of a legitimate target amidst heavy sea traffic conditions.¹⁹⁷ Even following the Indonesian Navy's Yakhont test-launch in 2012, Singapore has not reciprocated with a similar purchase so far. Meanwhile, Malaysia and Vietnam have also not expanded their supersonic ASCM capabilities from aerial to the other dimensions. Only Hanoi has acquired a supersonic ASCM in the shore-based version, the Bastion-P complex revolving around the Yakhont.

4.11. Summary of Findings

Following the review of the existing theoretical scholarship on the subject and an exercise for acquiring perspectives of naval professionals, this chapter proposed looking at destabilizing naval armaments from a more holistic perspective. Instead of using an absolutist approach, it proposes viewing destabilizing potential as a

¹⁹⁷ The hint about the possibility of acquiring a supersonic ASCM was raised by then Singapore's Chief Defence Scientist, Professor Lui Pao Chuen at the *Naval Platform Technology Seminar 2001*, organized by the Republic of Singapore Navy in May 2001. Quoted by Richard Scott, "Singapore seeks solutions through technology," *Jane's Navy International*, December 1, 2001. Concerns about the potential risks of supersonic ASCM accidentally striking an innocent vessel can be found in Keynote Address by Mr Peter Ho, Permanent Secretary (Defence), at the *Naval Platform Technology Seminar 2003*, held at Singapore Exposition Conference Hall, November 11, 2003, accessible via the website of the Singapore Ministry of Defence:

<http://www.mindef.gov.sg/content/imindef/press_room/official_releases.sp.html>

matter of degree. From the policy point of view this is more feasible because certain armaments, no matter how destabilizing they may be, are acquired for various legitimate rationales. Using the revised criteria that factors into account not just inherent design characteristics but also mode of deployment and by looking at armaments as a "system of systems", this study derives three categories of destabilizing naval armaments – Least, Medium and Highly Destabilizing. They are then utilized to classify various grades of naval armaments to aid in the analysis of the naval forces sampled.

This quantitative approach of coding each asset in the inventory of every sample naval forces is a complex and laborious undertaking. To be sure, a more straightforward way to deal with this area of inquiry would simply be to remain qualitative. However, the qualitative approach does possess limitations. By simply just identifying those discrete types of naval armaments acquired, it does not fully aid in understanding individual states' procurement and force structure development pathway preferences. Conflating any class of naval armament as "likely suspects" of destabilizing potential – such as the case of deeming all ASCMs as destabilizing – is academically appealing because it is parsimonious, yet misleading from the policy perspective.

What is important is not whether this particular armament is acquired, but of what characteristics, and in what quantity. The issue of quantity is not just an absolute value but also how this particular weapon and its quantity feature as part of the aggregate force structure. Only through this holistic undertaking, combining both qualitative and quantitative approaches it is possible to discern the strategic intent behind states' preferences in procurement and naval forces development pathways. With that, this study performed a step-by-step analysis to gradually address the questions regarding the nature of force structure development pathways and procurement preferences. The findings are summarized as follows.

From the broader perspective:

- ASEAN and Indo-Pacific naval forces experience general expansion whereas the converse is true for their Northern European counterparts since the end of the Cold War
- Unlike Northern European and Indo-Pacific samples, ASEAN naval forces experience consistent growth primarily in minor surface combat and patrol forces. Otherwise, the expansion in aviation forces and major surface combatants are consistent with patterns seen in Northern Europe
- ASEAN naval forces exhibit similar force composition patterns as their Northern European counterparts; with the predominant composition being minor surface combat and patrol forces, followed by aviation forces and amphibious assault landing vessels. Offensive force projection assets such as submarines and major surface combatants constitute a very minor force composition throughout 1980-2014, thus reflecting preference towards sea denial and defensive sea control posture

From the narrower perspective:

- Most of the samples exhibited increasing DPI for their overall aggregate force structures. But ASEAN naval forces are not unique; even Northern Europe which remains in the process of general military forces cutbacks until the recent Ukraine crisis is no exception. This can only be attributed to pressures from evolving changes in the general military-technological dimension that affects naval forces worldwide
- The force composition of ASEAN naval forces reflects a predominant focus on L-type (Least Destabilizing) assets, followed by increasing importance of M-type (Medium Destabilizing) assets which is driven by general military-technological changes. Northern European and Indo-Pacific naval forces also tend to prioritize growth in L-type, followed by M- and then H-type assets. But ASEAN naval forces exhibit obvious unilateral arms control restraint in the acquisition of H-type (Highly Destabilizing) assets. Unlike their Northern Europe and Indo-Pacific counterparts, they tend to acquire H-type assets in much smaller quantities, as attested by their very low percentages within their aggregate force structures. ASEAN naval forces generally register lower H-type force composition values compared to the other two sample groups

- Where H-type assets are concerned, all three sample groups exhibit similar approaches in select force categories. The first is aviation forces, followed by major surface combatants and then submarines. Northern European and Indo-Pacific counterparts witnessed stronger proliferation of such H-type capabilities as supersonic ASCM and LACM. ASEAN naval forces lagged way behind by contrast. The low-baseline induction of H-type assets in Southeast Asia most plausibly reflects regional governments' deliberately judicious and cautious "stability inducing" behavior due to concerns about the risks of provoking undue misperceptions, suspicions and potential counter-actions by their neighbours

While it can be said that throughout 1980-2014, individual ASEAN governments exercise varying forms of unilateral arms control restraint, there is no escaping from the observation that this situation may change with evolving geopolitical circumstances. The characterization of procurement and force structure development preferences in this Chapter establishes that certain classes of armaments may be regarded as riskier to acquire and operate. ASEAN governments plausibly demonstrate unilateral arms control restraint in this regard. Therefore, perceptions towards certain grades of naval armaments, by virtue of their design characteristics and mode of deployment, already have a possible influence on policy decisions behind procurement preferences and the way their naval forces are configured. What is left for this study to do next is to proceed to the next levels of analysis: on how naval armaments influence policy discourses, the propensity to engage in confidence- and security-building and cooperative initiatives, as well as limited threat and use of naval force.

CHAPTER FIVE: NATIONAL POLICY DISCOURSES

Words Do Matter: States May Avoid Confrontation and Promote Cooperation through Prudent Tendencies in Diplomatic Communication

5.1. What are “National Policy Discourses”?

The preceding Chapter Four shows that despite the general increase in the destabilizing potential for most of the samples' aggregate force structures, ASEAN samples gravitate towards least-destabilizing assets while exercising unilateral restraint in the induction of highly-destabilizing types compared to their Northern European and Indo-Pacific counterparts. Since the latter type of naval armaments exert influence on the overall aggregate force structure, their influence on strategic behavior becomes a matter of interest too. With that in mind, national policy discourses constitute the key thrust in this Chapter. One may ask: what are national policy discourses? Why is it important to study national policy discourses?

National policy discourses (heretofore simply referred to as “discourses”) examined here are defined as diplomatic communication which is primarily directed to an external audience. Domestic discourses are not included even though diplomatic communication may also encompass a domestic function. For instance, official press releases on maritime disputes are not just intended for the international audience. They are also partly intended for informing domestic constituents that “something has been done” to redress public grievances over such sacrosanct national affairs as sovereignty and territorial integrity. Therefore, discourses are not merely for expressing political sentiment towards a foreign government but also to mollify domestic sentiments for politically-expedient reasons.

5.2. Why are Discourses So Important?

A fundamental assumption here is that armaments do have influence on strategic behavior, in not just actions undertaken but also diplomatic communication. As set out earlier in this study, sensitivity towards the possession of certain naval armaments or the type of force structure configuration may result in a more circumspect, self-restrained form of diplomatic communication aimed at both ameliorating the risks of misperceptions and for building interstate confidence, especially in a geopolitically sensitive context.

Alternatively, the influence can be negative: possession of certain naval armaments is perceived to have given one a strategic advantage, thereby incentivizing aggressive policies including the expression of bellicose diplomatic communication. But one may question: why bother with such discourses when governments can utilize a variety of covert and overt espionage means, to try to collect information that can shed light on others' strategic intent?

To be sure, conducting foreign intelligence activities may constitute the best way to obtain the most precise information regarding other governments' true intent. However, such clandestine approaches do have pitfalls. For example, exposed foreign espionage may result in diplomatic fallout, such as the case of the "Five Eyes" scandal involving alleged espionage activities carried out by Australia, New Zealand and Singapore against their neighbours. The other pitfall is that foreign counter-intelligence agencies may deliberately transmit disinformation that can mislead espionage efforts. In short, even if they constitute the primary approach, such means of collecting strategic information can be limited and need to be backed up by alternative measures.

Therefore, shorn of a complete picture of the strategic intent behind decision-making processes, discourses become key points of references for interested parties. In times of peace, states use discourses to outline foreign policy strategies. In times

of crises, they use discourses to express their sentiments aimed at either de-escalating tensions or inflaming public opinion that may lead to escalation and providing policy elites a suitable pretext to use force. In short, words do matter, the choice of which influences not just routine interstate relations but more significantly, the outcomes of crises – between peace and war.

For instance, in response to then U.S. President George Bush Jr.'s State of the Union address in 2002 in which he identified North Korea as one of the "Axis of Evil" countries, Yu Myung-hwan, Seoul's top counter-terrorism official, remarked that "exchanging rhetoric between the two countries could bring about unexpected unhappy results," adding that he recalled a 1994 standoff with the United States over North Korea's suspected nuclear programme which came close to a military confrontation.¹⁹⁸ Then South Korean Foreign Minister Choi Sung-hong also warned that Bush's likening of North Korea to "evil" would not have any positive influence on inter-Korean and North Korea-US relations, adding that Seoul did ask Washington to tone down such remarks. The Department of State said it would seek to do so. However, the White House did not.¹⁹⁹

It is important to see this speech in the context of armaments and the prevailing political context. Bush's "Axis of Evil" discourse came at a time when his administration was advocating preventive wars against potential adversaries who might show signs of harming American national interests, following the September 11, 2001 terror attacks. This strategy envisaged the deployment of certain sophisticated military capabilities, for example low-yield nuclear weapons. Those sympathizing the North Korean position would argue that Bush's "Axis of Evil" remarks had been untimely because they contributed in no small part to regressing the

¹⁹⁸ Tim Witcher, "North Korea says Bush speech close to war declaration," *Agence France Presse*, February 1, 2002.

¹⁹⁹ "South Korea warned US president against using 'axis of evil' remark," *BBC Monitoring Asia Pacific – Political*, February 8, 2002.

bilateral rapprochement achieved under the preceding Clinton Administration. Indeed, when juxtaposed with the colossal military-technological gap between the U.S. and North Korea, there seemed legitimate reason for Pyongyang to believe that it would be militarily targeted by Washington with the purpose of toppling its regime, thus propelling its nuclear weapon and ballistic missile programme.

Still using the Korean Peninsula example, it is important to understand the dangers of escalation-oriented discourses. Often, parties at the receiving end may ignore tell-tale signs in those discourses at their own peril. For example, North Korea has often used strong, inflammatory discourses directed at its adversaries, chiefly Japan, South Korea and the U.S. Such statements are often laced with the threat of military force. Over time, because these bellicose statements seldom resulted in real action on the part of the North Koreans, the external audiences could have been desensitized and lulled into believing that Pyongyang would not carry out its threat.

A good instance was the run-up to the November 2010 Yeonpyeong Island shelling incident. North Korea's repeated threat to retaliate against South Korea's naval exercises near the disputed Northern Limit Line was overlooked by Seoul. The verbal threat was ignored, and thereafter Pyongyang used military force to demonstrate its political resolve. The attack was reportedly carried out by a North Korean coastal artillery battery earlier deployed in position to cover the South Korean-held frontline island amidst tension in the Yellow Sea.²⁰⁰ Some may argue that the artillery attack was premeditated. But the availability of suitable military means could have given Pyongyang a viable option depending on whether Seoul gives in to its demand.

Therefore, discourses indicate a state's attitude and they should be taken seriously especially if they exhibit ominous signs of subsequent strategic behavior. Even though they may not be the most accurate and could be prone to being

²⁰⁰ "South Korean military 'knew' of North artillery move before attack - paper," *BBC Monitoring Asia Pacific*, November 26, 2010.

misinterpreted, discourses do indicate strategic behavior because states exercise their choice of words in order to demonstrate intent.

5.3. Creating a Methodology to Systematically Analyze Discourses

For the purpose of this chapter, only ASEAN and Indo-Pacific countries are being sampled. The earlier chapter made use of the Northern European samples in order to draw comparisons regarding naval acquisitions and force structure development pathways. However, the geopolitical contexts are different. Until recently, post-Cold War Northern Europe had witnessed a thriving period of peace. Issues of geopolitical contention, especially those revolving around territorial and sovereignty disputes, have been largely resolved. Discourses picked up especially only in the recent years following the eruption of the Ukraine crisis and rising tensions in Europe. But the Indo-Pacific region represents a different case. It is persistently characterized by geopolitical flashpoints such as the East and South China Seas disputes. Not unusually, therefore, discourses have been particularly prevalent in this region. Moreover, being still saddled with contentious interstate issues that provide sources of tension and conflict, the Indo-Pacific provides an ideal test-case to sample discourses and how naval armaments influence strategic behavior in this respect. It is necessary here to outline the methodology concerning the data sources, data compartmentalization, and analysis.

Data Sources

Diplomatic communication can be made in several ways, besides undisclosed forms of secret government-to-government diplomatic dealings that are only made available in declassified archives or, in a more unorthodox form such as WikiLeaks. From time to time, as a form of transparency and confidence-building measure, governments publish official documents such as white papers to expound views on international affairs, defense and foreign policies. In more recent times, governments may organize regular press briefings to address public queries

regarding current developments. In this study, a holistic range of sources – press remarks (impromptu “doorstep interviews” or otherwise), briefings, speeches and official publications – is utilized. Each source material here is referred to as an “item”.

Besides collecting official publications and press releases from the respective sample countries' government websites, this study also utilizes news aggregators such as Factiva to obtain items of interest. To ensure uniformity and minimize the tendency of bias, a common set of universal search terms is utilized for each country (see [Table A5.1](#) in Appendix A5). However, this data-mining process yields a colossal pool of items that does not lend to easy analysis. Table 12 shows the total count of items collected across the timespans for all countries sampled.

Table 12: Total Count of Items Collected for Content Analysis

	1980-91	1992-2000	2001-11	2012-14
Australia	53	186	396	281
Bangladesh	8	57	282	95
Brunei Darussalam	3	6	20	25
DPRK	27	386	968	767
India	54	459	953	598
Indonesia	45	193	594	385
Japan	249	485	762	693
Malaysia	84	315	559	160
Myanmar	2	47	93	22
New Zealand	4	14	64	47
Pakistan	22	447	1045	389
The Philippines	48	203	371	697
PRC	130	778	1167	1398
ROK	78	367	675	584
Singapore	105	246	372	270
Taiwan	35	616	1216	401
Thailand	34	123	181	97
Vietnam	29	160	420	356

Source: By author

Data Compartmentalization

In order to facilitate analysis of such a huge data pool, compartmentalizing the materials and relevant contents becomes necessary. No prior studies exist to provide working examples. Therefore, this study creates its own database for such a purpose. Two Microsoft Excel worksheets – one on Foreign Policies and the other on Defense Policies – are created for each country sample. Where the Foreign Policies segment is concerned, there is no prior methodological example to follow but parameters are based on the fundamental elements of NPD, which called for:²⁰¹

- Friendly relations among states
- Settlement of interstate disputes in a peaceful and equitable manner
- Resort to force is excluded (in this case, through verbal communication)
- Strict adherence to the purposes and principles of the Charter of the United Nations and respect for international law

The Defense Policies segment taps on Greene's proposed basic minimum contents for a typical defense white paper, which comprises the following:²⁰²

- Reasonably full explanation of the country's understanding of the current security situation
- Security and defense concerns
- Defense and military policy
- Outline of the country's existing and projected military forces and an explanation of their roles

²⁰¹ *Study on Defensive Security Concepts and Policies*, p. 3 and 21-23.

²⁰² Owen Greene, "Transparency, Confidence-Building and Security in East Asia," in Moller (ed.), *Security, Arms Control and Defence Restructuring in East Asia*, 45.

- Statement of annual military spending, including some breakdown into sectors (procurement, R&D, pensions, salaries, maintenance, etc.)
- Outline of policies relating to the import, export and domestic production of arms; as well as an outline of military R&D programs

Based on these examples, the parameters for Foreign and Defense Policies can be derived, along with their description, as can be seen in Tables A5.2 and A5.3 in Appendix A5. The date of publication and source of each item is kept for record and ease of reference.

Data Analysis

This study utilizes content analysis, defined as “any technique for making inferences by objectively and systematically identifying specified characteristics of messages,” and is a way of asking a fixed set of questions for a predetermined body of writings, in a way as to produce comparable results.²⁰³ Compared to impressionistic approaches, content analysis is said to be far more objective. It also provides a more systematic way of inferring from the mass of source materials. To perform this content analysis, a thematic approach is undertaken. The reason is because the more conventional way of content analysis that focuses on unitizing and counting discrete keywords may have been useful in discerning patterns in communication studies. However, this is not necessarily so for analyzing policy discourses that involve not just keywords but also other possible terminologies utilized by policy elites to convey certain meanings. Table 13 sets out the operationalization of this approach along seven themes that relate to types of discourses under an NPD context.

²⁰³ T. F. Carney, *Content Analysis: A Technique for Systematic Inference from Communications* (Winnipeg: University of Manitoba Press; London: B. T. Batsford Ltd, 1972), 5-6.

Table 13: Theme-based Operational Model for the Content Analysis of Discourses

Themes	Keywords	Color Code	Operationalization
STATE	Aggressor Destabilization Enemy Security concern Target Threat	Green	Reactive assurance regarding another state or group of states as a security concern, threat, enemy or source of destabilization (i.e. threat-denial tendency)
		Red	Identification of another state or group of states as a security concern, threat, enemy or source of destabilization (i.e. threat-labelling tendency)
UNCONVENTIONAL	Enemy Security concern Threat Various types: e.g. terrorism, energy, etc.		Identification of unconventional security challenges
UNCERTAINTY	Complex Fluidity Flux Uncertainty		Reflection about strategic uncertainty possibly meant to obfuscate threats for the purpose of justifying strategic hedging (i.e. threat-obfuscation)
POSTURE	Arms race Defensive Non-threatening Self-defense Target Threat	Green	Assurance regarding: <ul style="list-style-type: none"> • Non-threatening or defensive defense preparations • Capability- instead of threat-based defense preparations • Avoidance or prevention of an arms race • Making arms reduction or disarmament efforts
		Red	Warning about the prospect or risk of arms racing
FORCE	Aggression Coercion Pre-emption Use of force War	Green	Assurance regarding: <ul style="list-style-type: none"> • Non-use or threat of unilateral military force • Use of military force circumscribed under international law or as part of UN-mandated operation
		Red	Bellicose or inflammatory statements regarding:

			<ul style="list-style-type: none"> • Use or threat of unilateral military force • Initiation of "war talk" • Pre-emptive military action
DIPLOMACY	Benefits Bilateral Confidence-building Consultation Dialogue Diplomacy Discussion International law Management Multilateral Negotiation Peaceful Resolution Rule of law Settlement Solution United Nations		Expression of intent or advocacy regarding: <ul style="list-style-type: none"> • Resort to diplomatic or peaceful approaches in managing or resolving interstate disputes • Emphasis on the rule of law in governing interstate behaviour • Foreign policy based on amity, friendliness and good neighbourliness • Attachment of importance to UN and international law
COOPERATION	Contribution Collaboration Cooperation Coordination Engagement Interaction Joint		Expression of intent or advocacy regarding: <ul style="list-style-type: none"> • Cooperation with other states in dealing with common security challenges • Provision of public common goods for regional or international security • Making defense diplomacy efforts with other states

Source: By author

It is necessary to explain how this analysis works. As per content analysis approaches, this operational model can be equated to a sieve, with seven different sizes for the sieve holes. Each item analyzed can be equated to a load of different-sized beads. The purpose of this sieve is to categorize the beads in each load according to their various sizes. Different loads may contain varying proportions of those different bead sizes. For example, at times all seven different sizes are available in one load. But in the other, perhaps only one or two sizes are available.

Of course, thematically-based content analysis is not as straightforward as a sieve. A sieve can objectively categorize each load of beads according to their sizes. But there is no way content analysis can be fully objective; some subjectivity is invariably involved.²⁰⁴ To minimize bias as a result of subjectivity, some keywords are identified for each theme. While keywords are useful for quick reference, the context is important. Three typical samples extracted from three different items, revolving around the keyword "threat", are shown below.

Sample	Extract from Item	Item Source
A	According to a Malaysian spokesman, Mon Jamaluddin, who is acting secretary general of the Foreign Ministry, Prime Minister Mahathir bin Mohamad rejected Mr. Shultz's argument that an economically strong China would be a stable China that served the interests of world peace, "We reiterated our concern that China continues, in our mind, in the long run to be a <u>threat</u> to the region and we expressed the hope that the United states would take into account the concern of small countries on the periphery of China," Mr. Mon said.	Bernard Gwertzman, "Malaysia, seeing a threat, urges US to stop building up power of China," <i>The New York Times</i> , July 10, 1984.
B	Najib said new security <u>threats</u> have emerged, in the form of "low intensity conflicts" (LIC) - examples of which were the abduction incidents on islands in Sabah waters and the arms heist from two army camps in Gerik, Perak by followers of a deviationist group.	"Defence policy review needed, says Najib," <i>Bernama Daily Malaysian News</i> , October 9, 2000.
C	Royal Malaysian Air Force (RMAF) deputy chief Mej Jen [sic] Datuk Ahmad Saruji Che	"Changing world poses challenges for armed

²⁰⁴ Ibid, 14-15.

Rose said the RMAF, in its airpower development phase, had adopted the principle of deterrence. "We are not a threat-driven force, but rather a capability-driven force," he said.

forces," *New Straits Times*, April 29, 1996.

If the content analysis is done simply based on keywords akin to how a sieve categorizes beads in various size compartments, a major problem arises. The keyword "threat" has different contextual meaning for each of these samples. In sample A, "threat" refers to a state, in this case China back during the Cold War. This automatically categorizes the sample to the Theme STATE. In sample B, the "threat" identified here is non-state, and therefore categorized under the Theme UNCONVENTIONAL. Sample C is different; it does not specify any perceived threat, be it state or non-state, but a defense posture. In this case, it would be categorized under Theme POSTURE, with the color code green.

Therefore, content analysis utilized in this study cannot be conducted by any automatic software. Each item has to be manually analyzed. The first round of analysis makes use of Excel software tools by identifying items with those keywords. Each item had to be subjected to a second round of manual inspection, analysis and categorization according to the themes. Each item is "sieved" through this standard theme-based operational model for content analysis. Then various samples are extracted from each, duly analyzed and categorized. At the end of this exercise, the frequency is counted for each theme and tabulated. It is a laborious and time-consuming but necessary approach in order to identify discernible patterns in the discourses.

Appendix A5 contains Tables A5.4 to A5.7 which consolidate the frequencies of the themes over the four time-spans analyzed. The following sections discusses the findings from this content analysis exercise.

5.4. Being Forthright, or in State of Denial: Do States Tend to Openly Identify Their Counterparts as a Source of Security Concern?

Under the Theme STATE, it is possible to identify patterns in the sample countries' discourses where threat-labelling and threat-obfuscation has been practiced.

There are various ways states do “finger-pointing” at their counterparts. The mildest will be to infer other states as a concern without labels, or use the label “security concern”. Other milder labels include “destabilizing factor”. A stronger alternative will be to use “threat” instead. However, there are also instances where the strongest form of identification is used, by calling another state “enemy”. In the case of North Korea especially, more “colorful” labels are used.

Threat-Labeling Tendencies

In all items sampled, the only instance where such exceptionally strong label “enemy” was used is the case of the two Koreas. This is perhaps unique because both Koreas remain technically in a state of war given that an armistice, not peace treaty, was signed in 1953. South Korea had routinely described its northern neighbour as an “enemy” in its defense documents until the early 2000s. Under persistent pressure from Pyongyang (which certainly disdained at being labeled as “enemy”) at the time Seoul adopted the Sunshine Policy of inter-Korean rapprochement, this label was dropped. It was only after the alleged North Korean sinking of the Republic of Korea Navy (ROKN) corvette *Cheonan* and the Yeonpyeong Island shelling in 2010 that the “enemy” label on North Korea was reinstated.

Threat-labelling in any form on another state certainly does not help in confidence-building because it already compels the other to believe that all defense preparations done by the former have been targeted at itself. Even the mildest “security concern” can potentially be taken seriously by the subject state itself. In summary, open identification of other states as a source of security concern, threat or enemy does not lend to confidence-building.²⁰⁵ Put it another way, one starts to have enemies to worry about when it starts to create them.

²⁰⁵ For example, following a remark made by US Marine Corps General Joseph Dunford characterizing Russia and China as the Numbers 1 and 2 threats respectively to the U.S. national security, Under Secretary of Defense for Policy Christine Wormuth said during the Military Strategy Forum that “in this kind of complex security environment, the benefit of doing a one-to-end list of threats as priorities, I’m not sure how necessary that is.” *Military Strategy Forum: The Honorable Christine E. Wormuth on Defense Policy Priorities in an Age*

Table 14 tabulates the frequencies at which the sampled countries openly identify others as such across time.

Table 14: Threat-Labeling Frequencies (STATE-Red)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	5	3	17	8
Bangladesh	0	0	0	0
DPRK	5	301	807	703
India	20	132	180	108
Japan	44	57	133	132
New Zealand	0	0	2	0
Pakistan	4	177	186	51
PRC	11	91	87	228
ROK	8	108	185	276
Taiwan	22	334	621	55
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	0	4	13	6
Malaysia	8	8	6	0
Myanmar	0	0	4	0
The Philippines	2	22	6	47
Singapore	10	3	0	0
Thailand	0	3	1	0
Vietnam	6	4	5	18

Table 14 shows that generally, the practice of identifying some other states as a source of security concern, threat or enemy is much more prevalent in the Indo-Pacific sample group. Just by visual inspection of the figures in Table 14 one can easily observe that the frequency of threat-labelling is much lower in Southeast Asia compared to Northeast and South Asian samples especially. This pattern coincides with the generally tenser Northeast and South Asian security milieu that involves

of *Rapid Change*, Center for Strategic & International Studies, July 13, 2015. Video recording of the discussion available: <<http://csis.org/event/military-strategy-forum-honorable-christine-e-wormuth-defense-policy-priorities-age-rapid-chan>> (accessed on July 23, 2015)

dire, existential security issues. For example, in the case of the Taiwan Strait, Taipei has regularly made known that China is a security threat to the extent of openly expressing that its defense preparations serve to deter Beijing's intended military invasion.²⁰⁶ The Korean Peninsula also falls into the same category, in which mutual, open identification by both Koreas as a threat is essentially accompanied by reciprocal defense preparations. India and Pakistan routinely traded accusations of cross-border, state-sponsored terrorism, which itself constitutes a form of threat-labelling. Even if such labels are only used in mere rhetoric whereas actual defense preparations do not reflect such considerations, it may still prompt the other party to become wary and even take this into consideration. The case of post-1945 Japan is another interesting example. Tokyo ever since adopting a pacifist Constitution has been one of the most prolific in military transparency, publishing official documents such as the annual Diplomatic Bluebook and Defense White Paper to detail its national security concerns, diplomatic and defense plans.

But this is also where being "too forthright" brings about problems. Recent Japanese defense white papers tend to highlight North Korean ballistic missiles and nuclear weapons as a security threat. Invariably, Pyongyang tends to also regard Japanese defense developments as a serious concern. In effect, Tokyo's open identification of North Korea as a threat could have potentially engendered a sort of security dilemma. Yet ironically, Japan does not have the actual wherewithal to launch any punitive military strike against North Korea.²⁰⁷

By contrast, the ASEAN sample group generally yields much fewer threat-labelling instances. ASEAN governments tended to openly identify the communist threat posed by China and Vietnam back in 1980-91, which relates to the Cold War security climate back then. Manila's threat-labelling tendencies experienced a sharp spike in 1992-2000 (22 recorded instances compared to just two in the previous period 1980-91) during which it described Beijing as a security concern

²⁰⁶ Taiwan is included here in the sample as a "state" purely for methodological simplicity, despite the fact that it is not a UN member and is far from being accepted as a "state" by Beijing and many other governments worldwide adhering to the "One China" policy.

²⁰⁷ Of course, that being said, Japan would still provide a staging area for the US Forces in Japan (USFJ) to deploy reinforcements to Korea in times of renewed hostilities.

especially following incidents over the disputed Mischief Reef in the South China Sea in 1995 and 1998. This tendency declined sharply in 2001-11 largely because the focus turned to threat posed by domestic insurgencies, particularly in the restive southern Mindanao. But Manila's threat-labelling tendencies spiked sharply again in 2012-14 because of Chinese moves in the South China Sea. The same can be said of Vietnam, which also has its own set of problems with China in the disputed waters.

Indonesia's object of threat-labelling in 2001-11 was primarily Australia, because of the latter's intervention in East Timor and a more hawkish counter-terror strategy adopted by then Howard Government which called for pre-emptive strikes against the source of terrorism following the deadly Bali terror bombings. Myanmar's object of threat-labelling in 2001-11 was Thailand, with whom it fought a brief border skirmish in 2002. But in general, threat-labelling is less prevalent in Southeast Asia compared to the surrounding Northeast and South Asian sub-regions. Some may attribute the contrast to the fact that these latter sub-regions are on the whole geopolitically tenser than Southeast Asia. Yet Southeast Asia is not without its own intra-regional problems, including a complex of bilateral territorial disputes and sovereignty issues, not to forget residual historical animosities following the end of colonial rule in the early decades of the Cold War. There is evidently a deliberate attempt by ASEAN governments aimed at avoiding or minimizing threat-labelling that may potentially result in self-fulfilling prophecies which undermine security just simply by creating enemies through rhetoric. As such, the acquisitions of more destabilizing naval armaments do not necessarily translate into more aggressive strategic behavior, at least insofar threat-labelling is concerned.

Threat-Denial Tendencies

There are also instances where states seek to deny the existence of threat posed by others even if they are in reality perceived otherwise. Table 15 tabulates the frequencies at which sampled countries tend towards threat-denial across time.

Table 15: Threat-Denial Frequencies (STATE-Green)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	4	19	22	24
Bangladesh	0	2	2	3
DPRK	0	0	2	0
India	0	9	40	24
Japan	1	8	28	6
New Zealand	0	3	8	0
Pakistan	1	2	15	3
PRC	1	8	17	15
ROK	2	3	12	1
Taiwan	0	2	2	3
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	9	10	23	20
Malaysia	4	24	26	4
Myanmar	0	0	2	2
The Philippines	0	6	7	28
Singapore	4	12	4	4
Thailand	0	7	1	2
Vietnam	0	2	7	4

Threat-denial typically comes into play, as it was observed in the course of content analysis, when the policy elites are subjected to questions posed by the media.²⁰⁸ Content analysis of interview transcripts and extracts from news reports yields much insights into such propensities. The findings in Table 15 exhibit an interesting pattern. While threat-labelling is prevalent in Indo-Pacific, threat-denial is evidently also practiced and increasingly so across the time-span.

²⁰⁸ This is nothing surprising, since on a regular basis no sane policy elite would simply make an impromptu official announcement out of the blue: "I hereby state that country XXX does not pose a threat to our national security." There must be a context to threat-denial, in this case most commonly observed whenever policy elites had to respond to such politically-sensitive media questions as "what do you think of the recent defense purchases by country XXX?"

But on the whole, threat-denial is more prevalent in the ASEAN sample group alongside generally lower threat-labelling tendencies. Not only these ASEAN samples on the whole appear to avoid “rocking the boat” by creating enemies, if there is none in the first place, out of nowhere; when confronted with media questions the ASEAN policy elites tried to avoid “finger-pointing”. These two tendencies observed in the ASEAN sample group can be taken as a general manifestation of conscious attempts to avoid misperceptions and inadvertently provoking insecurity in other states. Suffice to say up to this point, ASEAN samples’ purchases of destabilizing naval armaments do not necessarily lead to threat-labelling and instead may have had the moderating effect of encouraging threat-denial.

5.5. Rationale for Legitimate Armament? Perceived Emergence of Unconventional Security Challenges and the Need to Hedge against Uncertainties

Content analysis moves away from state-based threat-labelling and denial tendencies. Defense preparations need not necessarily be based on state-centric threats but also unconventional (or non-traditional) security challenges such as natural disasters, pandemics and international terrorism. This is especially the case after the tumultuous events of September 11, 2001. Table 16 shows the discourses in which policy elites gave mention to unconventional security challenges.

Table 16: Unconventional Security Challenges Frequencies (UNCONVENTIONAL)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	0	3	25	12
Bangladesh	0	5	24	11
DPRK	0	0	4	0
India	1	26	146	73
Japan	1	10	32	9
New Zealand	1	0	12	13
Pakistan	0	4	105	87
PRC	0	7	69	25
ROK	0	2	9	16
Taiwan	0	0	10	2

ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	1	2	5	5
Indonesia	2	4	36	30
Malaysia	1	15	40	23
Myanmar	0	8	11	0
The Philippines	3	7	27	15
Singapore	0	3	58	29
Thailand	0	6	10	9
Vietnam	0	2	16	8

On the whole, unconventional security challenges consistently appear to be the main preoccupation in the discourses of the ASEAN sample group, especially when one compares with threat-labelling and denial tendencies. Unusually high frequencies were registered for India and Pakistan because of their concerns about cross-border terrorism and militant threats, which they at times also linked to one another's government involvement. Even both ASEAN and Indo-Pacific sample groups increasingly tend to highlight unconventional security challenges, on the whole Indo-Pacific samples tend to exhibit lower propensities in this regard compared to their ASEAN counterparts. It must be pointed out also that this tendency is also linked to that of interstate security cooperation and the expressed willingness to contribute to public common goods for regional and international security, as Chapter Six shall demonstrate.

Threat-Obfuscation Tendencies

However, the emergence of unconventional security challenges is not necessarily a standalone phenomenon. Certain types of unconventional security challenges are intricately linked to interstate relations. In effect, some of these issues become threat-multipliers. A good example has been the case of resource security – unconventional when seen in isolation – which is linked to interstate territorial and sovereignty disputes. The maritime disputes in the Indo-Pacific, as highlighted in Chapter One, are closely linked to the exploitation of marine fishery, mineral and hydrocarbon resources so instrumental for socioeconomic development. The same applies to prosecuting transnational terrorists in foreign territory that can entail diplomatic fallout.

Therefore, while the samples exhibit a general proclivity towards highlighting unconventional security challenges, they also do the same for highlighting concerns about “strategic uncertainty” as seen in Table 17. In the course of research and content analysis, it is evident that states especially in the post-2001 tend to emphasize the prevalence of an uncertain security milieu fraught with multiple types of security threats. And such tendency is also linked to that of emphasizing capability- instead of threat-based defense preparations as well as the need for interstate security cooperation and willingness to offer public security goods. But one cannot also avoid observing that the mention of strategic uncertainty may also be a way of obfuscating threats.

Table 17: Strategic Uncertainty Frequencies (UNCERTAINTY)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	4	12	15	4
Bangladesh	0	1	1	0
DPRK	0	1	3	0
India	1	6	11	13
Japan	8	16	15	8
New Zealand	0	1	2	1
Pakistan	0	0	10	8
PRC	3	14	60	36
ROK	0	2	4	3
Taiwan	0	3	3	1
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	1	4
Indonesia	0	1	5	7
Malaysia	2	4	7	1
Myanmar	0	0	2	0
The Philippines	0	5	0	7
Singapore	12	28	22	17
Thailand	0	1	0	0
Vietnam	0	1	10	14

Highlighting unconventional security challenges is arguably less politically-sensitive compared to openly identifying other states as national security threats. It may

even help garner support for defense preparations. But highlighting “strategic uncertainty” may offer greater strategic flexibility. When threats are obfuscated, there is greater justification for capability-based armament. This is because where unconventional security challenges are concerned; there may not be an operational requirement for conventional warfighting capabilities compared to an envisaged scenario where one state is poised to fight a potential war with another. The case is most straightforward in the case of Taiwan, simply because it has traditionally faced a well-known, direct threat from China which has always retained the option of recovering what it deems as a renegade province by force. The same applies to the Koreas as well as India and Pakistan.

However, not many other countries face the same “war-prone” strategic predicaments that legitimize enemy-imaging and threat-labelling. Unconventional security challenges alone may not provide the strongest justification for acquiring armaments, especially those designed to deal with conventional threats. So the “strategic uncertainty” factor has become an oft-cited condition under which threats can be obfuscated, emphasizing unconventional challenges yet at the same time conferring a degree of strategic flexibility in terms of hedging.

This tendency appears to be stronger in those ASEAN and Indo-Pacific sample groups not being subjected to a typical envisaged scenario of potential war as in the case of Taiwan and the Koreas. Threat-obfuscation tendencies, expressed in the discourse emphasis on “strategic uncertainty”, may also be attributed to a desire to avoid threat-labelling on other states, which may result in themselves being drawn into or entangled by a security dilemma. This apparent caution manifested through threat-obfuscation stands in contrast to the acquisition of destabilizing naval armaments over time by ASEAN samples especially.

5.6. The Other Kind of Prudence at Work: Assurances about Defense Postures and Policy Elites’ Consciousness of the Dangers of Arms Racing

This study assumes that states are consciously aware of the potential risks of being drawn into or entangled by security dilemmas and all the attendant negative consequences, as earlier discussed. Besides putting out regular official documents

outlining their defense policies states may alternatively do so via other means of diplomatic communications as a form of assurance to the others. During the course of this research, states that put out official documents detailing their security outlook and defense policies constitute almost half of the sample population, and even within this pool the frequency of publication is considered low for most of them.

Defense Posture Assuring Tendencies

Verbal assurances about their defense policies largely originate from official speeches (especially those presented at the UN sessions) and responses to media questions. Notably, China frequently addressed media questions regarding its rising military expenditures. Other forms of assurances can be inferred from policy elites' opinion regarding defense procurements, doctrine and their views on arms-racing. Table 18 shows states' tendencies towards assurance about defense postures and abhorrence towards arms-racing.

Table 18: Defense Posture Assurances Frequencies (POSTURE-Green)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	0	9	19	3
Bangladesh	0	3	3	1
DPRK	0	3	55	23
India	6	74	75	45
Japan	43	83	96	62
New Zealand	1	1	4	2
Pakistan	9	76	196	31
PRC	15	100	231	108
ROK	6	16	24	13
Taiwan	1	80	211	50
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	0	16	26	22
Malaysia	12	59	50	1
Myanmar	0	0	3	1
The Philippines	2	6	4	25

Singapore	7	12	9	5
Thailand	0	21	4	1
Vietnam	1	3	20	13

Generally, Indo-Pacific samples exhibit a rising pattern in such “assuring” diplomatic communications regarding national defense postures. Interestingly this pattern was not replicated in the ASEAN sample group. There are plausible reasons behind this.

First, the Northeast and South Asian sub-regions witness acute conditions of arms competition and they are geopolitically more volatile compared to Southeast Asia on the whole. The unpredictable circumstances have a salutary effect on countries in the Indo-Pacific sample group concerning assurances of strategic intent behind national armament processes. Having long subscribed to a pacifist Constitution since 1945, Japan’s higher baseline in this regard compared to other samples should not have been surprising. But generally in Northeast Asia, the key military powers involved are conscious about how their defense preparations are being perceived and therefore seek to ameliorate potential misperceptions of their intent. Interestingly, for all the verbal threats it routinely issued, North Korea also sought to assure others that it has no offensive intent and that its defense buildup, chiefly its nuclear armament, is designed for regime survival against American aggression.

Second, ASEAN samples register lower frequencies because they do not believe there is a need to assure, for a good reason. ASEAN governments may believe, as their discourses demonstrate over time, that their national defense preparations contribute to national resilience which translates into regional resilience. In 1992-2000, those ASEAN states that spearheaded intra-regional military modernization processes tended to be the ones that issued diplomatic communications regarding their defense postures. Thailand in the 1990s especially was concerned that misperception might arise from its naval buildup, including the acquisition of a helicopter carrier. Indonesia, Malaysia and Singapore as can be seen in Table 18 were also the primary players back in 1992-2000, amidst ongoing military modernization efforts. In 2001-11, Vietnam offered more assurances about its defense posture following its revived armament program, including its major submarine purchase. The same applies to Indonesia which also stepped up its military modernization at around the same time, especially ever since promulgating

in 2008 the three-phased Minimum Essential Force (MEF) blueprint that runs from 2010 to 2024.

But the fact that ASEAN states tend to put out less of such assuring diplomatic communications needs not be simply construed as an attempt to escape from military transparency. Instead, it may reflect a genuine, intra-regional sense of comfort with member states' armament processes set in the context of a geopolitically less volatile, much less war-prone Southeast Asia especially in the 2000s vis-à-vis the immediate post-Cold War 1990s.

Arms-Race Warning Tendencies

By assigning it a “red” operational color code it does not mean that arms-race warning tendencies is a negative thing. Instead, it is meant to distinguish “warning” from “assurance”. Warning about arms-racing is one thing, whereas assuring others that one does not take part in arms-racing is quite another. The reason behind highlighting the tendency to warn about arms-racing is because such a parameter reflects states' awareness or consciousness about the dangers of armament.

Table 19 tabulates the frequencies of such warning in the two sample groups. The pattern coincides with that in Table 18. Indo-Pacific samples, especially China and Pakistan, generally have a greater tendency to warn about arms-racing compared to their ASEAN counterparts. In the case of Pakistan and to a lesser extent China, the repeated warning about arms-racing is observed in 1992-2000 because of heightened sense of danger following the late-1990s Indian nuclear tests. Beijing's warnings in the 1990s were also prompted by the armament processes taking place in its Northeast Asian neighbourhood.

Table 19: Arms-Race Warning Frequencies (POSTURE-Red)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	2	2	8	0
Bangladesh	0	4	2	0
DPRK	0	6	21	4

India	1	12	2	0
Japan	0	7	6	3
New Zealand	0	0	0	0
Pakistan	0	32	16	4
PRC	4	46	18	2
ROK	0	5	13	3
Taiwan	0	3	1	0
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	1	3	15	2
Malaysia	1	4	2	2
Myanmar	0	0	0	0
The Philippines	0	11	1	2
Singapore	0	5	2	3
Thailand	0	2	1	0
Vietnam	0	1	4	0

But generally, ASEAN samples register lower frequencies that plausibly reflect their perception of the surrounding neighbourhood. The Philippines was particularly vocal about the dangers of arms-racing because ironically, it was not one of the key players in the post-Cold War military modernization processes compared to the “Big Five” – Indonesia, Malaysia, Singapore, Thailand and Vietnam. Indonesia’s warnings in 2001-11 came particularly in response to events in the South China Sea, especially in the nearby resource-rich Natuna Islands. It also coincides with Jakarta’s own revived military buildup following economic recovery in the early-2000s. As such, Indonesia’s warnings can be construed as a reflection of its own awareness about the potential dangers of armament.

Otherwise, the other ASEAN states generally do not caution much about arms-racing. Other than the plausible sense of genuine intra-regional comfort with member states’ armament processes, these samples may also regard it prudent not to create undue alarm about what ought to be perceived as legitimate arms buildup to enhance resilience in Southeast Asia. ASEAN policy elites, especially those of the “Big Fives”, are quick to quash speculations that an arms race is brewing in Southeast Asia and instead, support the notion that military modernization contributes to national resilience, which in turn translates into

regional resilience. This trend was consistently observed throughout the 1990s till recent years.²⁰⁹ For example, when he was defense minister Najib Tun Razak said: "I have to keep reiterating that our added capability means we are contributing to regional security. A stronger Malaysia in military terms means a stronger ASEAN".²¹⁰

In the more recent years, a former Chief of the Republic of Singapore Navy for instance alluded to the security dilemma when he remarked that the Singapore Armed Forces (SAF) "will continue to build up capabilities as required to ensure strong and robust defence to make sure we send a deterrence message to would-be aggressors and ensure peace and prosperity for Singapore within the region. We do what is required; we do it with great care. Put simply, I don't think our capabilities are going to lead to an arms race. We build what's required for our own defence and our deterrence message is clear."²¹¹

5.7. "ASEAN Way" in Action? Prudent Tendencies towards Verbal Threats Regarding Use of Force among ASEAN States

A more definitive indicator of a state's strategic intent, besides looking at verbal assurances about defense posture, is to examine its tendencies towards or against the threat and use of unilateral military force. The persistent and intractable geopolitical flashpoints in various Indo-Pacific sub-regions provide ideal avenues for the likely resort to force. Juxtaposed with the tendency to verbally threaten use of force, the possession of high-tech naval armaments may therefore heighten the risk of armed conflict. Therefore, under the potential influence of armaments, the verbal threat to use force constitutes a key strategic behavior.

²⁰⁹ See for example: Nirmal Ghosh, "M'sian deterrent capability a positive contribution – Najib," *Business Times Singapore*, July 13, 1993; "No arms race in Southeast Asia, Suharto says," 1993; Bill Tarrant, "More defence spending not arms race, Malaysia says," *Reuters News*, June 6, 1994; "Foreign minister denies increased arms sales reflect ASEAN arms race," *BBC Monitoring Service: Asia-Pacific*, December 8, 1997; "Najib downplays S'pore's purchase of frigates," *Straits Times*, April 21, 2000; "Vietnam not entering any military alliances, arms races - defence minister," *BBC Monitoring Asia-Pacific*, June 2, 2009.

²¹⁰ Ismail Kassim, "Malaysia beefs up armed forces for a new role," *Straits Times*, July 24, 1994.

²¹¹ "The essence of 3G in the navy: Total awareness," *Straits Times*, February 20, 2009.

Total refrain from verbal threats of force would have been ideal. But the stark reality is that at times, a verbal threat is necessary in order to deter the other party from taking undesirable action or to compel it to desist from an ongoing, undesirable action. Verbal threat of force can be seen as a surrogate to real action. Even if one realistically cannot expect verbal threats to use force to be non-existent in international politics, it is still possible to expect states to minimize its use.

No-Threat of Force Assuring Tendencies

Table 20 shows that Indo-Pacific and ASEAN samples generally exhibit growing tendencies towards assurances against force in addressing interstate disputes. In the case of Indo-Pacific, the frequencies are higher which again reflect the comparatively less stable state of affairs where there is a higher risk of armed conflict. Even if that is the case, ASEAN samples also exhibit strong tendencies towards such verbal assurances.

Table 20: No-Threat of Force Frequencies (FORCE-Green)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	1	10	26	16
Bangladesh	1	0	12	5
DPRK	1	9	23	12
India	9	53	82	34
Japan	14	41	44	79
New Zealand	0	0	2	1
Pakistan	2	35	97	28
PRC	8	108	142	87
ROK	4	26	41	9
Taiwan	3	76	95	49
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	1	0	0
Indonesia	3	11	51	41
Malaysia	10	33	77	14
Myanmar	0	3	10	0
The Philippines	2	33	45	81

Singapore	3	6	6	11
Thailand	2	5	23	6
Vietnam	4	34	51	48

One may ask: what makes these two sample groups different from each other if these states exhibit strong tendencies in assuring no use of force in interstate relations?

Threat of Force Tendencies

The key difference lies in the propensities towards verbal threat of force. Table 21 shows the stark contrast between Indo-Pacific and ASEAN sample groups. Northeast Asian countries especially exhibit such tendencies, again reflecting generally less stable geopolitical circumstances.

Strongest of such tendencies comes from North Korea throughout 1980-2014. Seoul's verbal threat of force is most plausibly aimed at deterring Pyongyang's provocations especially following the deadly attacks in the Yellow Sea back in 2010. China exhibited exceptionally strong tendencies in verbally threatening force in 1992-2000 because of the Taiwan Strait crisis. Even defensively-oriented Japan issues such verbal threats especially against perceived threats posed by North Korea.

Table 21: Threat of Force Frequencies (FORCE-Red)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	0	1	12	0
Bangladesh	0	0	1	0
DPRK	2	66	135	188
India	2	5	17	10
Japan	0	4	10	14
New Zealand	0	0	1	1
Pakistan	0	11	20	8
PRC	12	105	47	53
ROK	6	19	35	54
Taiwan	2	8	4	4

ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	0	3	13	2
Malaysia	0	0	1	0
Myanmar	0	0	2	0
The Philippines	2	1	0	0
Singapore	0	0	0	0
Thailand	0	1	5	0
Vietnam	1	0	0	0

By contrast, ASEAN samples generally exhibit much lower tendencies towards the verbal threat of force. Indonesia registered higher tendencies in 2001-11 largely because of the perceived Australian military threat from Howard's Administration as mentioned earlier. Thailand registered a slight increase in 2001-11 because of border issues with both Cambodia and Myanmar. Otherwise, compared to their Indo-Pacific counterparts, the much lower tendencies observed among ASEAN samples reflect a deliberate form of self-restraint and exercise of political sensitivities in governing intra-regional relations. The "ASEAN Way" that promotes non-use of force appears to be practiced assiduously by member states, at least as far as verbal tendencies are concerned. As such, it can be seen from this set of findings, the acquisitions of destabilizing naval armaments do not necessarily lead to aggressive strategic behavior, such as in this case the verbal threat of force.

5.8. Being a Good Citizen of the International Community: Advocacies for Diplomacy and Interstate Cooperation as the Way to Promote Security

Finally, this study examines states' tendencies towards advocating diplomacy and interstate cooperation. These constitute another verbal indicator of strategic behavior by showing that naval modernization needs not be necessarily destabilizing through bellicose discourse, but can promote stability through such advocacies. Based on the hypotheses outlined in Chapter One, the assumptions are as follows:

- Possession of destabilizing naval armaments could have conferred strategic advantages that incentivize aggression, yet governments may prefer diplomatic channels to address contentious interstate issues

- The acquisition of force projection capabilities is at least partly intended for contributing "common public goods" for the purpose of promoting practical security cooperation amongst states

Advocacy for Diplomacy Tendencies

Complementing verbal assurances regarding the threat of force is advocacy for diplomacy. In general, what it means is that in times of peace and crises, adherence to the rule of law should be the guiding principle in governing interstate relations. From this perspective therefore, if all states conduct their businesses in accordance to international law, there will be greater predictability where the strategic behavior of states is concerned. There are numerous occasions for states to outline such advocacies. This study is no exception; in the course of research, items subjected to the content analysis frequently encounter such advocacies.

As Table 22 shows, besides advocating that the rule of law and multilateralism ought to constitute the norm for interstate relations in times of peace, the samples also emphasize the utility of peaceful solutions to interstate disputes.

Table 22: Advocacy for Diplomacy Frequencies (DIPLOMACY)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	6	23	58	70
Bangladesh	4	30	136	28
DPRK	13	81	204	80
India	19	159	378	210
Japan	69	131	219	286
New Zealand	0	0	7	8
Pakistan	6	189	499	174
PRC	74	380	556	692
ROK	66	170	238	174
Taiwan	9	231	386	211
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	3	4	4
Indonesia	6	56	170	95

Malaysia	20	96	200	63
Myanmar	1	26	51	9
The Philippines	8	77	141	304
Singapore	21	66	109	108
Thailand	10	39	87	42
Vietnam	18	115	236	225

While exhibiting strong tendencies towards verbal threats of force, Indo-Pacific samples are also keen advocates of diplomacy to govern interstate relations in times of peace and in times of crises. It should come as no surprise in the case of ASEAN samples given that recourse to diplomatic channels to address interstate disputes has been one of the cardinal norms alongside non-use/threat of force enshrined in the “ASEAN Way”. However, some may argue that open advocacy by states for diplomacy is a common thing after all, since logically no state will want to be seen in a bad light internationally. The portrayal of oneself as a law-abiding member of the international community is unsurprising.

One potential danger is that such advocacy can deliberately be used as a cover for malign intentions. States may potentially be desensitized into believing that the others harbor no ill intent just because the latter repeatedly harp on the virtues of diplomacy. Nonetheless, when seen in a positive, non-skeptical perspective, regular advocacy for diplomacy may be taken as a form of assurance. Despite its limitations, such open expression goes some way in ameliorating tense interstate relations, provide some predictability and contribute towards crisis non-escalation or de-escalation.

Advocacy for Interstate Security Cooperation Tendencies

Table 23 shows states' advocacies towards interstate security cooperation, whether it is meant for jointly tackling common security challenges or as a verbal expression of national aspirations towards enhanced regional and global security roles. The spike in the frequencies of such advocacies is especially noticeable for both Indo-Pacific and ASEAN samples in 2001-11, coinciding with an evolving international security milieu following the September-2001 terrorist attacks and recurring natural calamities such as the December-2004 Indian Ocean Earthquake and Tsunami. This pattern also corresponds with tendencies towards discourses about

unconventional security challenges, many of which being trans-boundary in nature and therefore necessitating interstate cooperation in order to address them effectively.

Table 23: Advocacy for Security Cooperation Frequencies (COOPERATION)

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	5	34	51	38
Bangladesh	0	4	39	82
DPRK	0	0	3	4
India	1	25	115	85
Japan	17	66	100	95
New Zealand	3	6	22	17
Pakistan	0	3	100	38
PRC	3	92	375	189
ROK	0	13	32	28
Taiwan	0	18	32	10
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	1	1	4	16
Indonesia	6	28	75	63
Malaysia	2	62	81	34
Myanmar	0	10	11	1
The Philippines	3	12	25	28
Singapore	28	77	106	72
Thailand	2	12	35	18
Vietnam	1	7	113	98

Advocacy for interstate cooperation towards addressing common security challenges serves two purposes that indicate strategic behavior. First, the assumption is that by advocating interstate cooperation, states demonstrate intent to build security with one another. This serves as a form of confidence-building measure. Second, armaments can be purchased not just for national defense and security but also, to manifest national aspirations towards enhanced regional or global security roles, as a provider of public security goods. These two purposes are interlinked.

To contribute to common security solutions, it is to be expected that states have to offer their capacities. While it may be true that some states may choose to remain “free-riders” on the contributions made by others, this is not the case also for an increasing numbers of states, especially in the Indo-Pacific. Even in post-Cold War Europe, there is an observed proclivity of regional states towards defense self-reliance. Besides contributing to the alliance burden-sharing framework for the NATO member states in particular, the acquired force projection capabilities provide freedom of action by allowing the owner to enhance its own stature through the provision of public security goods. Countries in the Indo-Pacific are considered relatively latecomers in this, but the pattern would have appeared almost similar to that in Europe that reflects such aspirations.

5.9. Summary of Findings

This Chapter seeks to identify patterns in the discourses by assuming that one can discern strategic behavior from them. To recall, the thesis sets out with an alternative, heuristic approach which postulates that naval armament does not necessarily translate into aggressive strategic behavior. In this regard, words matter. Diplomatic communications express sentiments and offer hints of strategic intent. They can either be assuring to others, or become unnerving to some. Therefore, discourses need to be factored into consideration since they may influence or shape interstate relations.

While discourses do not constitute the only way of deciphering strategic behavior, they are at least significant in shaping other states' policies. Armaments may incentivize aggression because they may offer certain strategic advantages translated from the gaining of operational advantage over potential adversaries. But armaments may actually have an effect in ameliorating arms buildup especially in the context of interstate disputes, where armaments can easily lend themselves to potential misperceptions.

With this in mind, this study analyzes the discourses of the considered samples using a standard methodology in order to obtain a less-biased, uniform assessment. This is based on seven themes of strategic behavior concerning threat perception and

verbal expression of policy actions in times of peace and crises. The findings on the samples' discourse tendencies can be summarized as such:

Discourse Tendencies	Indo-Pacific	ASEAN
Threat-labelling	More prevalent	Less prevalent
Threat-denial	Less prevalent	More prevalent
Emphasis on unconventional security challenges	Less prevalent	More prevalent
Threat-obfuscation	No noticeable prevalence in one sample group compared to the other	
Assurance about defense postures	More prevalent	Less prevalent
Arms-race warning	More prevalent	Less prevalent
Non-threat to use force	No noticeable prevalence in one sample group compared to the other	
Threat to use force	More prevalent	Less prevalent
Advocacy for diplomacy as a preferred way of interstate relations	No noticeable prevalence in one sample group compared to the other	
Advocacy for interstate security cooperation	No noticeable prevalence in one sample group compared to the other	

Compared to their Indo-Pacific counterparts, generally ASEAN samples exhibit greater restraint in the use of discourses especially when it comes to the open expression of their political sentiments. This is notably the case for threat-labelling against other states and the greater propensity towards threat-denial. When seen in the context that Southeast Asia does have its own fair share of contentious intra-regional issues, this restraint stands out vis-à-vis Northeast and South Asia. Evidently also, Southeast Asia is generally regarded by its resident governments as relatively

stable compared to the two other “more war-prone” Indo-Pacific sub-regions. Therefore, there is less urge and less justification for threat-labelling.

Less vocal ASEAN member states are keen to avoid misperceptions by not just avoiding threat-labelling but also sought to deny the existence of threats posed by other countries as much as possible. Threat-obfuscation, by raising the specter of “strategic uncertainty”, is another alternative avenue to express their sentiments towards a complex security milieu fraught with multiple external and internal challenges. It offers an opportune justification to hedge, especially in the post-2001.

Equally noteworthy is the less prevalent tendencies among ASEAN samples towards assuring other states about their defense policies and to warn about the risks of arms-racing. Nonetheless, it does plausibly reflect a genuine sense of comfort among member states with regard to each other's defense preparations. When seen in the backdrop of a relatively stable Southeast Asia, they perceive no need to hype up such processes. Where necessary, they even downplay the hype (especially from the media) about the existence of arms-racing.

In this regard, two plausible reasons are worth consideration. First, ASEAN states do not wish to raise the specter of arms-racing because that will be unduly perceived by others as alarmist, which may thereby create misunderstanding. Second, ASEAN states genuinely view one another's defense preparations as legitimate and even to the extent of regarding these processes as beneficial to regional security.

But the most definitive indicator that makes ASEAN samples stand out compared to their Indo-Pacific counterparts is the stark contrast when it comes to the issuance of verbal threats of force. Not only do ASEAN states tend to emphasize the non-use of force and diplomatic solutions to address interstate problems, but they altogether avoided inflammatory rhetoric. There appears to be a conscious effort in this regard; issuing verbal threats to use force are not only unconstructive where it comes to addressing problems but doing so will unnecessarily create long-term strategic implications to a generally stable Southeast Asia. To expect zero issuance of verbal threats would be unrealistic. Unless necessary for the purpose of deterring

the other party from taking action detrimental to their security, ASEAN states tend to avoid such discourses as best as they can.

Finally, both ASEAN and Indo-Pacific samples appear to actively advocate not just diplomacy as a preferred means to govern interstate relations in times of peace and crises, but also interstate security cooperation. Their advocacies for interstate security cooperation coincide with a generally evolved international security milieu fraught with increased unconventional security challenges. They advocate not only interstate security cooperation, but some even express their willingness to play enhanced regional and global security roles.

Seen altogether: the restraint in threat-labelling, tendency towards threat-denial and obfuscation, emphasis on unconventional security challenges, refrain from verbal threat of force as well advocacies for diplomacy and interstate security cooperation do not reflect any aggressive behavior amongst the ASEAN samples despite their naval armament. Instead, the findings in this Chapter demonstrates a general propensity of ASEAN states towards the avoidance of misperceptions, misunderstanding and conflict – all helpful towards confidence-building. The general inclination has been de-escalatory discourses that contribute to peaceful management of interstate disputes but also, maintenance of regional security. This pattern is established consistently throughout 1980-2014 while coinciding with patterns of unilateral restraint in naval armament addressed in the previous chapter.

But discourses only represent the diplomatic language of strategic behavior. It is still necessary to see whether such discourses translate into real action: propensities towards confidence- and security-building as well as cooperative measures, and propensities towards the limited threat and use of naval force. These shall be dealt with respectively in the following two chapters as test cases on how naval armament influences strategic behavior.

CHAPTER SIX: COOPERATIVE NAVAL DIPLOMACY

States May Gravitate towards Confidence- and Security Building as well as Cooperative Measures to Demonstrate Benign Strategic Behavior

6.1. Stating the Obvious? Reasons to Examine Proclivities towards Concord

This Chapter examines the extent to which states exhibit proclivities towards concord, through participation in confidence- and security-building as well as cooperative measures (heretofore referred to as CSBMs and COMs respectively), based on the central thesis that the accumulation of apparently destabilizing naval armaments do not necessarily translate into aggressive strategic behavior. To be sure, one may argue that states cooperate as a means of strategic deception or diversion; by using the façade of concord to disguise its true aggressive intent. A recent example is the case of China which advocates diplomatic means of handling disputes in the East and South China Seas while at the same time engaging in perceptibly destabilizing naval buildup.

But a more optimistic counter-argument holds that states may engage in cooperative behavior because they genuinely feel the need to. In this respect, this Chapter argues that states engage in CSBMs and COMs for the following reasons:

- They wish to ameliorate any potential misinterpretation of their defense preparations, including the acquisition of certain capabilities that may be perceived by others as destabilizing.
- They have the intent to utilize their naval capabilities to contribute to regional or international security, such as through practical interstate cooperation or in the capacity as a provider of public security goods.

From the above hypotheses, two aspects stand out. First, engaging in CSBMs and COMs signal intent. This relates to the concept of cooperative security which envisages "security with, not against, adversaries" under a presupposed scenario of interstate rivalries that carries the potential of use of force, based on the assumption that states share fundamentally compatible security objectives and

recognize one another's security concerns thus seeking collaboration, reassurance and peaceful coexistence.²¹²

Cooperative security is well covered in the existing literature, especially with the emergence of multiple institutions in the Indo-Pacific region. But this Chapter will also consider reasons behind states engaging in cooperation and how that relates to naval armament. It argues that defense preparations are not solely designed for national self-defense but also, to allow one to contribute meaningfully to regional or international security so as to enhance its own security (though some would prefer to remain as "free-riders" on other parties). The possession of physical capacities thus becomes a requisite condition. Without the necessary wherewithal to offer to the table, it is difficult to think about making meaningful contributions at all. Other less altruistic reasons behind engaging in CSBMs and COMs include:

- Enhancing one's regional and international stature
- Allowing one to learn from and gain best practices to emulate for defense and security capacity-building purposes
- Building interoperability in case of future contingencies requiring both naval forces to operate side-by-side
- Demonstrating deterrence by showcasing one's operational capabilities and competence as well as to gain insights or intelligence about potential rival's real capabilities especially if the exercise partner is a likely future adversary

Cooperation can be underpinned by diverse national interests that are liable to change over time as circumstances evolve. However, it needs emphasis that

²¹² See for example, Amitav Acharya, "Chapter 1 Regional Institutions and Security in the Asia-Pacific: Evolution, Adaptation, and Prospects for Transformation", in Acharya and Goh (eds.), *Reassessing Security Cooperation in the Asia-Pacific*, 23; Janne E. Nolan, *Global Engagement: Cooperation and Security in the 21st Century* (Washington DC: The Brookings Institution, 1994), 5; Gareth Evans, *Cooperating for Peace: The Global Agenda for the 1990s and Beyond* (Sydney: Allen and Unwin, 1993), 16; and David Dewitt, "Common, Comprehensive, and Cooperative Security," *The Pacific Review*, Vol. 7, No. 1 (1994), pp. 1-15.

participating in long-term cooperation, not those “one-off” ad-hoc initiatives, does signify a long-term commitment. Some may insist that it is pointless to determine strategic intent from the number and scope of CSBMs and COMs states engage in. However, some of these initiatives entail not insignificant investments of time and resources, such that the willingness to bear such costs does signal benign intent.

Unless it is really a last-ditch resort, to derail the mutual confidence and trust built up with other states painstakingly through these initiatives over sustained periods would seem unwise. While it is normal for one to view states engaging in such activities with a degree of skepticism, it is important not to overlook the other angle; that it can be a deliberately well-intentioned policy, even if meant as a signal to others.

6.2. More Than Just Defense Diplomacy

Before delving into them, one may ask: why not simply examine those activities under the blanket term “defense diplomacy”, which has gained salience in recent times? It is necessary to address this issue. Defense diplomacy, according to Cottey and Forster, refers to the peacetime cooperative use of armed forces and related infrastructure (primarily defense ministries) as a tool of foreign and security policy.²¹³ They defined defense diplomacy as encompassing a wide range of activities that might in the past been described as military cooperation or military assistance:²¹⁴

- Bilateral and multilateral contacts between senior military and civilian defense officials
- Appointment of defense attaches to foreign countries
- Bilateral defense cooperation agreements

²¹³ Andrew Cottey and Anthony Forster, “Reshaping Defence Diplomacy: New Roles for Military Cooperation and Assistance,” *Aldephi Paper* 365, London: Oxford University Press for the International Institute for Strategic Studies, 2004, pp. 5-6. For a study that specifically examines defense diplomacy in Southeast Asia, which is in part based also on the work of Cottey and Forster, see Bhuhindar Singh and See Seng Tan (eds.), *From ‘Boots’ to ‘Brogues’: The Rise of Defence Diplomacy in Southeast Asia*, RSIS Monograph No. 21 (Singapore: S. Rajaratnam School of International Studies, 2011).

²¹⁴ Cottey and Forster, “Reshaping Defence Diplomacy,” p. 7.

- Training of foreign military and civilian defense personnel
- Provision of expertise and advice on the democratic control of armed forces, defense management and military technical areas
- Contacts and exchanges between military personnel and units, and ship visits
- Placement of military or civilian personnel in partner countries' defense ministries or armed forces
- Deployment of training teams
- Provision of military equipment and other material aid
- Bilateral or multilateral military exercises for training purposes

The above list of activities categorized under defense diplomacy is certainly useful in helping to form the basis of this inquiry but the sole utilization of this blanket term defense diplomacy will not be sufficient in this case. It is necessary to point out that besides defense establishments, CSBMs and COMs also involve civilian agencies. While some maritime law enforcement agencies, such as the case of the Indian and Vietnamese coastguards, fall under the respective countries' defense ministries, many others exist as purely civilian agencies under non-defense establishments. It is therefore misleading to use "defense diplomacy" if naval forces include not just military but also civilian agencies.

Moreover, the involvement of civilian agencies working in conjunction with defense establishments has become an increasingly common sight. Such multi-agency cooperation allows more effective and holistic measures against contemporary security challenges that may not require just a military solution. Furthermore, the involvement of civilian agencies also signifies the plausible desire of states to project a more benign, less-militarized image to the wider community and this certainly relates to how naval armaments influence strategic behavior.

6.3. Graduated Forms of CSBMs as a Means of Signaling Strategic Intent?

CSBMs generally refer to arrangements designed to enhance assurance of mind and belief in the trustworthiness of states and the facts they create.²¹⁵ They constitute a form of operational arms control, in that they do not seek to impose limits on the type and quantity of armaments acquired but are only targeted at restraining freedom of military action and entail certain limitations on the use of military force.²¹⁶ Such measures therefore appear to be the most likely and most useful arms control measures for particularly naval forces and activities.²¹⁷ The general principles and aims of CSBMs can be briefly summarized here:²¹⁸

- Constitute a distinctly psychological process that attempts to reduce or eliminate misperceptions of and concerns about potentially threatening military activities
- Fundamentally based on the concept of openness or transparency; in other words, on the exchange of information though the concept of constraining military activities are also considered to be of value
- Undertaken by states with a reasonable expectation that fellow participants do not have hostile intentions, through the communication of credible evidence of the absence of feared threats
- Can be promulgated at the bilateral or multilateral level

²¹⁵ Hill, *Arms Control at Sea*, 185.

²¹⁶ *Comprehensive Study on Confidence-building Measures*, United Nations Department for Disarmament Affairs Report for the Secretary-General, A/36/474 (NY: United Nations, 1982), p. 27.

²¹⁷ Richard Fieldhouse, "Naval forces and arms control," in Fieldhouse (ed.), *Security at Sea*, 35.

²¹⁸ See for example, United Nations Department for Disarmament Affairs, *Disarmament: Confidence and Security-building Measures in Asia*; based on materials from a regional meeting held at Kathmandu, Nepal, 29-31 January 1990 (New York: United Nations, 1990); Johan Jorgen Holst and Karen Alette Melander, "European Security and Confidence-Building Measures," *Survival*, Vol. 19, No. 4 (July/August 1977), pp. 146-54; and John Borawski, "The World of CBMs," in John Borawski (ed.), *Avoiding War in the Nuclear Age: Confidence-building Measures for Crisis Stability*, Westview Special Studies in National Security and Defense Policy (Boulder and London: Westview Press, Inc.: 1986), 9-39.

Existing definitions of CSBMs appear, like the case of defense diplomacy, to revolve around defense establishments. With respect to the first point raised above, potentially threatening activities are not just military but paramilitary as well. With this in mind, this Chapter includes civilian maritime law enforcement agencies and the roles they play in CSBMs. This is nothing new, for such agencies have for some time played a pivotal role in enhancing trust and confidence between states. One example is the case of CSBMs between the Indian Coast Guard (ICG) and the Pakistan Maritime Security Agency (PMSA), particularly with respect to fishermen crossing the International Maritime Boundary Line into disputed waters at Sir Creek.²¹⁹

But there are also criticisms against CSBMs, especially with respect to their actual utility of restraint should the political decision be made to proceed with use of force as incentivized by other factors; and whether they could even materialize in a climate of non-détente and lack of political will among the parties involved. This is not to mention transgressions against agreed CSBMs, for instance selective compliance and deception.²²⁰ Moreover, CSBMs are time-consuming, fraught with uncertainties and yet do not necessarily guarantee results. While some CSBMs are legally binding in nature, many are not. This means that at any point of time, parties to the arrangements may renege on their commitments out of political expediency.

Nonetheless, CSBMs continue to be relevant till this day notwithstanding their limitations. For instance, even in the midst of accusations and counter-accusations hurled by the warring parties regarding transgressions of the ceasefire pact in the

²¹⁹ New Delhi attributed the decline in PMSA's arrest of Indian fishermen to the establishment of a hotline between the former agency and ICG in late December 2006. Anil Pathak, "Hotline brings respite to Indian fishermen," *DNA – Daily News & Analysis*, March 20, 2008.

²²⁰ For a good critique of the usefulness of CSBMs, read for example Jim E. Hinds, "The Limits of Confidence," in Borawski (ed.), *Avoiding War in the Nuclear Age*, 184-98; and Marie-France Desjardins, "Rethinking Confidence-Building Measures," *Aldephi Paper* 307, London: Oxford University Press for the International Institute for Strategic Studies, 1996.

ongoing Ukraine crisis, all those involved continue to place emphasis on CSBMs as the sole recourse pending any viable long-term solution acceptable to all.²²¹

Unlike the land-based scenario seen in the Ukraine crisis, the maritime domain appears more conducive for CSBMs. In view of the daunting challenges commonly faced in structural arms control measures, CSBMs appear to be the most likely and useful arms control measures for naval forces and activities, and they at least may help create the proper climate for other arms control measures.²²² Naval forces may be utilized to influence events taking place on land, such as the case observed in the use of gunboat diplomacy by both India and Pakistan back in 2002 during the tense, prolonged border standoff. They may also help build trust and lessen the risk of conflict even in the context of a terrestrial-based contingency. For example, in June 2015 the U.S. and Russian navies met, for the first time since the Ukraine crisis began, to discuss ways to avoid an accidental aerial or maritime clash following a series of incidents.²²³

Three main categories of CSBMs are adopted in this study: declaratory; transparency and constraint (also known as “stabilization” or “security-building”,²²⁴ hence the broader term CSBM as opposed to just CBMs) measures. These CSBMs along with their sub-categories are presented in Table 24. However, port visits by naval forces and irregular visitations by officials are excluded because of difficulties in tracing such activities.

²²¹ Despite doubts about its actual effectiveness following a series of alleged violations, the Organization for Security and Co-operation in Europe (OSCE) monitoring mission continues to maintain the tenuous ceasefire accord between Kyiv and pro-Russian separatist forces in eastern Ukraine. Edith M. Lederer, “OSCE says cease-fire violations in Ukraine more frequent,” *Associated Press Newswires*, June 6, 2015.

²²² Fieldhouse, “Naval forces and arms control,” 35.

²²³ Adrian Croft, “U.S. and Russian navies hold talks on avoiding accidental clash,” *Reuters News*, June 12, 2015.

²²⁴ Borawski, “The World of CBMs,” 13.

Table 24: Typology of Confidence and Security-Building Measures

Categories	Sub-Categories and Types
Declaratory Measures	General principles that promotes interstate amity and concord National politico-legal acceptance of international laws, e.g. UNCLOS III Non-aggression pacts Nuclear weapons-free pacts
Transparency Measures	<p><u>Information Measures</u> Dialogues Participation in arms registry Navy-to-navy contacts Seminars and workshops Personnel exchanges Exchanges of calendar on naval activities</p> <p><u>Communication Measures</u> Common inter-navy communication procedures Crisis management communication links Conflict prevention centers Mandatory consultation on unusual or dangerous naval activities</p> <p><u>Notification Measures</u> Naval force maneuvers or movements Military alerts Mobilization of reserves Weapon test-launches Naval accidents at sea Scientific activities in disputed zones</p> <p><u>Observation/Inspection Measures</u> Invitation of observers to naval exercises Surveillance and control zones Open skies treaties Naval force separation and monitoring Sensors/early-warning stations</p>
Constraint Measures	<p><u>Risk Reduction Measures</u> INCSEA-type pacts Special communication procedures Emergency communication procedures for ships and aircraft crossing or entering disputed maritime boundaries Submarine underwater communications for close-contact contingencies</p> <p><u>Exclusion/Separation Measures</u> Demilitarized zones Disengagement zones Keep-out zones (air/sea) Nuclear weapon-free zones</p> <p><u>Constraints on Personnel, Equipment and Activities</u> <u>Personnel</u>: national limits; category limits and zone limits</p>

	<p><u>Equipment</u>: deployment limits (by geographical area or numbers); category/type limits; storage/monitoring limits; and nuclear weapons types/deployment</p> <p><u>Activities</u>: maneuver/movement limits (by geographical area or force size); advance notification for movements, exercises and alerts; limits on force readiness; bans on simultaneous exercises/alerts and/or certain force/unit types; nuclear weapons</p>
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Source: Based on and compiled from: *Comprehensive Study on Confidence-building Measures*; John Borawski, "The World of CBMs," in Borawski (ed.), *Avoiding War in the Nuclear Age: Confidence-building Measures for Crisis Stability*, 11-13; Richard Fieldhouse, "Naval forces and arms control: a look to the future," in Fieldhouse and Taoka, *Superpowers at Sea*, 164; Lacy, "Within and Beyond Naval Confidence-Building," 28-29; Andrew Mack, "Arms Control at Sea," in Smith and Bergin (eds.), *Naval Power in the Pacific*, 93; Stanley B. Weeks, "Chapter 4: Incidents at Sea Agreements and Maritime Confidence-Building Measures," in Sam Bateman and Stephen Bates (eds.), *The Seas Unite: Maritime Cooperation in the Asia-Pacific Region* (Canberra: Strategic and Defence Studies Centre, Research School of Pacific and Asian Studies, The Australian National University, 1996), 88-89; Rory Medcalf and Raoul Heinrichs with Justin Jones, "Crisis and Confidence: Major Powers and Maritime Security in Indo-Pacific Asia," Lowy Institute for International Policy, June 2011, pp. 26-30.

This list of CSBMs is certainly non-exhaustive. It is also important to note that this study does not adopt an exclusively maritime-oriented set of CSBMs even though they are fundamentally different from "terrestrial CSBMs" given the different nature of armaments and criteria governing naval operations. Besides CSBMs related to the deployment and use of naval forces. CSBMs that are more political in nature fall under the category of declaratory measures. Finally, it needs pointing out that these three categories of CSBMs may be ranked in an ascending order of difficulty and comprehensiveness in the process of negotiations and implementation.²²⁵

²²⁵ Lodgaard and Holdren for example classified naval CSBM approaches in more or less ascending order of difficulty and comprehensiveness. Of the seven key approaches proposed by them, clarifying rules of behavior is ranked at the bottom whereas limiting nuclear weapons at sea being at the top. Sverre Lodgaard and John P. Holdren, "Chapter 1: Naval Arms Control," in Lodgaard (ed.), *Naval Arms Control*, 16-17.

Declaratory measures are comparatively easiest because they are essentially political and do not entail technical-operational restrictions on naval forces. Not all of such instruments are legally binding in nature. The onus lies on the signatories to keep to these declarations as an article of faith, or to risk otherwise especially in the absence of legal provisions that enforce compliance. At the next level of difficulty, transparency measures require greater commitment towards actual implementation and in many cases, involve defense ministries right down to operational units. Information measures are perhaps the most commonly practiced. Communication, notification and observation/inspection measures are by nature more difficult to accomplish. In fact, it remains true that CSBMs of the information kind are the only ones with much hope of being agreed, albeit at best of limited value.²²⁶

Constraint measures should be the most difficult of all. They are the most intrusive of all CSBMs due to certain restrictions placed on personnel, equipment and activities that may clash with countries' own preferences and priorities. This creates potential hurdles during negotiations, especially when it concerns verification instruments to ensure compliance. Therefore, constraint measures are more challenging to be agreed upon and be adopted (partially or in full) because they would entail the prospects of having to give up some sovereignty and freedom of action.

Generally to say, the level of difficulty rises when CSBMs require greater commitments; if they impose restrictions on the political and operational freedom of action; and perhaps most daunting to some countries especially those in the Indo-Pacific which abhor external interferences – the unthinkable prospects of having to relinquish some sovereignty as part of the commitment to accept intrusive verification mechanisms. Based on this rationale, it may be argued that as states embark on potentially more challenging CSBMs, it also demonstrates a certain political resolve on their part to signal intent to their potential rivals or to the international community as a whole.

²²⁶ Vice Admiral (ret) Carsten A. Lutken, "Chapter 9: Confidence and Security Building – a Naval Perspective," in Lodgaard (ed.), *Naval Arms Control*, 145.

6.4. COMs as an Indicator of Benign Intent and Responsible Stakeholdership in Regional and International Peace and Stability

The other prong of inquiry in this Chapter relates to COMs, which are defined here as accords or political instruments designed for practical security cooperation and for managing and resolving interstate disputes.

COMs offer opportunities for cost reduction or burden-sharing, as well as demonstrate the ability of regional governments, including rivals and potential adversaries, to collaborate against security issues of common concern. Moreover, the contemporary appreciation of the need for optimum management of marine resources and environment also brings about the essential need for interstate cooperation, underpinned by normative foundations of the international law.²²⁷ In other words, not only is cooperation a pragmatic way of managing maritime interests in a collective way, it also encompasses a politico-legal dimension that concerns one's image and reputation as a responsible stakeholder in the international community.

At the functional level, COMs cover a wide range of activities of different scale and scope, including, inter alia: search and rescue operations, actions to counter marine pollution and transnational crimes such as drug and human trafficking; joint resource development and scientific research in disputed sea zones; SLOC protection against piracy and terrorism; joint humanitarian and disaster relief assistance; and fishery management.²²⁸ These activities are outlined below in Table 25.

²²⁷ Ian Townsend-Gault, "Maritime Cooperation in a Functional Perspective," pp. 7-22; and Seokwoo Lee, "UNCLOS and the Obligation to Cooperate," pp. 23-34 in Clive Schofield (ed.), "Maritime Energy Resources in Asia: Legal Regimes and Cooperation," *NBR Special Report #37* (Seattle, Washington: The National Bureau of Asian Research, February 2012).

²²⁸ Duk-Ki Kim, *Naval Strategy in Northeast Asia: Geo-strategic goals, Policies and Prospects* (London: Frank Cass Publishers, 2000), 198; see also Chris Rahman, "Naval Cooperation and Coalition Building in Southeast Asia and the Southwest Pacific: Status and Prospects," *Working Paper No. 7*, Royal Australian Navy Sea Power Centre and Centre for Maritime Policy, October 2001, pp. 17-23.

Table 25: Typology of Cooperative Measures

Categories	Code	Activities/Initiatives
Defense and Security-related Assistance	A	<p>Capacity-building assistance in times of peace:</p> <ul style="list-style-type: none"> • Training aid • Materiel support • Other ancillary types of support <p>Assistance to other countries in times of peace and contingencies:</p> <ul style="list-style-type: none"> • HA/DR • NEO • Provisions of security forces for ad-hoc missions • Peace enforcement operations upon request by host country or under UN mandate
Conventions/Treaties	C/T	International conventions or treaties related to safety and security such as maritime safety and measures against IUU fishing; including follow-on supplementary protocols and amendments
Dispute Mechanisms	DM	<p>Dispute management mechanisms:</p> <ul style="list-style-type: none"> • Fishery accords • Joint resource development accords • Joint environmental protection accords • Negotiations and joint technical/general boundary committees • Coordinated/joint security operations along disputed boundary • Other forms of cooperation amongst parties in the disputed zone
Exchanges	E	<p>Discussions and exchanges:</p> <ul style="list-style-type: none"> • Defense and security-related policy consultations/exchanges e.g. military/naval staff talks • Defense and security-related policy seminars/workshops • Joint committees/working groups/meetings for discussing functional cooperation • High-level meetings/summits/fora • Personnel exchanges
Functional collaborations	F	<p>Collaboration on functional defense and security areas:</p> <ul style="list-style-type: none"> • Functional accords/joint statements/declarations/action-plans • Information-exchanges and intelligence-sharing

		<ul style="list-style-type: none"> • Acquisition and Cross-Servicing Agreement (ACSA) • Military Logistics Support Agreement (MLSA) • Status of Forces Agreement (SOFA) • Military basing and facilities access • Participation in UN Standby Arrangement System
Military-technological	MT	Defense and security-related science and technological collaborations
Operations	O	Coordinated or joint security operations: <ul style="list-style-type: none"> • Coordinated/joint security operations tackling common security issues • Participation in UN peace operations Joint operational formations <ul style="list-style-type: none"> • Ready groups • Standing forces • Combined commands
Political/Legal Settlements	P/L	Political/legal instruments on the settlement of interstate disputes related to territorial and sovereignty issues; including follow-on supplementary protocols and amendments
Training and Exercises	TX	Joint defense and security-related training and exercises

Source: By author

COMs involve defense as well as civilian and paramilitary organizations especially when one considers contemporary patterns of inter-agency cooperation in dealing with a range of security challenges that are transnational and non-state in nature. COMs can be carried out at both bilateral and multilateral levels. They comprise not just practical security cooperation but also political or legal instruments governing the management and resolution of interstate disputes, as well as international conventions and treaties that encompass security dimensions.

International conventions and treaties merit elaboration. Such agreements may not specify practical security cooperation as part of their mandate. But states accede to or sign onto these treaties to demonstrate support for international norms governing specific areas of interest and may still undertake unilateral measures at the national level to enforce such commitments. An example is the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR). Under this

convention, New Zealand carries out patrols in the Southern Ocean in the Antarctic region against poachers who illegally harvest the valuable Patagonian Toothfish for example. In a recent case, a group of foreign-flagged fishing vessels managed to flee the New Zealand naval patrol but one of them was later apprehended by Thai authorities when it entered Thai waters since Bangkok is a signatory to CCAMLR.

Of particular importance to this study are COMs carried out under the auspices of international bodies such as the United Nations. The list of UN-mandated naval missions is outlined in Table 26. It can be argued that one of the main bricks for building a foundation of confidence between states is the degree of a nation's involvement in international peacekeeping arrangements and institutions devoted to securing peace.²²⁹ In fact, one may examine the way navies utilize offensively-oriented, force projection capabilities through their participation in especially UN-sanctioned international or regional security operations, such as counter-piracy under Combined Task Force 151 in the Gulf of Aden. While participation entails various benefits, such as creating access to friendly external support to overcome deficiencies in military logistical capacities,²³⁰ from the strategic-political angle it is possible to ameliorate ill-perceptions regional neighbours may have towards the contributor state and its naval acquisitions. Therefore, participation in such multinational security missions contains a confidence-building element by demonstrating a state's propensity to employ force projection naval capabilities for benign, legitimized causes over time in addition to the positive image-building aspect of allowing the contributor state to demonstrate the fulfilment of its obligations as member of the international community.

As such, COMS carried out at various levels and not only have a certain functional aspect but also some confidence-building effect. Engaging in such activities, such as collective enforcement efforts in overlapping waters, embarking on working-level negotiations on managing disputed maritime boundaries, and sending naval forces to participate in UN missions constitute examples of strategic intent to project a positive and friendly image even when a state acquires naval armaments.

²²⁹ Henry Trofimenko, "The Security-Enhancing Role of Confidence- and Security-Building Measures," in *Disarmament: Confidence and Security-building Measures in Asia*, p. 143.

²³⁰ Grove, *Maritime Strategy and European Security*, 13.

Table 26: Typology of UN Naval Missions and Supporting Tasks

<u>Humanitarian assistance</u> Deliver aid Provide transportation assets Provide medical, C3, and other support Conduct evacuation of non-combatants and refugees Conduct search and rescue Monitor refugee flows	<u>Maritime peacekeeping</u> Provide logistic and C4I support to and integration with land-based peacekeeping ops Monitor and observe cease-fire Establish maritime exclusion or disengagement zones	<u>Maritime enforcement</u> Enforce fisheries regulation and EEZ arrangements Suppress piracy Interdict narcotics trade Protect marine environment Conduct counter-terrorism ops
<u>Humanitarian intervention</u> Provide humanitarian assistance and support Seize and hold ports of entry Conduct security ops Conduct non-permissive evacuations Secure lines of communication and enclaves	<u>Protect sea and air traffic</u> Conduct convoy and escort ops in areas of armed conflict Protect fissile material transport and offshore assets Perform surveillance Conduct minesweeping	<u>Interdict sea and air traffic</u> Perform surveillance and monitoring Stop, search, seize, divert selected ships and aircraft Establish barriers/blockades Enforce maritime exclusion zones
<u>Make a show of force</u> Conduct presence patrols and deterrent deployments Conduct preventive deployments and patrols	<u>Control armaments/demilitarization</u> Establish demilitarization zones Disarm previously warring parties and take custody of weapons Conduct minesweeping Interdict arms smuggling Perform surveillance Conduct coercive anti-proliferation	<u>Respond to aggression</u> Provide prompt combat power Interpose naval forces Achieve local sea and air control Conduct strike ops Land and support troops Seize and hold territory

Source: Jeffrey I. Sands, "W(h)ither the Maritime Agenda for Peace? Quo desiderat pacem, praeparet pacem," in Griffiths and Haydon (eds.), *Maritime forces in Global Security*, 39; and Jeffrey I. Sands, "Blue Hulls: Multinational Naval Cooperation and the United Nations," Center for Naval Analyses, CRM 93-40, July 1993, p. 9.

6.5. Distinguishing between CSBMs and COMs: It's All about Primary Designed Purpose

A likely question may arise: how could one distinguish between CSBMs and COMs? At initial glance, there appears to be no difference since various activities overlap. But first, it needs highlighting that both CSBMs and COMs can be designed for all types of participants. CSBMs may be most relevant for actual and potential rivals, such as the case of the two Koreas and between China and Taiwan. However, the key motivations underpinning CSBMs and COMs are different. CSBMs often originate from pre-existing geopolitical rivalries, such as interstate differences over contentious political issues. On the other hand, COMs are initiated largely because there are security challenges of common concern between countries that require collective solutions in order to effectively address them.

	CSBMs	COMs
Participants	All types	All types
Key motivation	Geopolitical rivalries	Security challenges of common concern
Primary Purpose	Signal benign intent	Promote practical security cooperation
Secondary Purpose	May potentially evolve into practical security cooperation	Signal benign intent

That COMs may have a secondary role of confidence-building is established earlier. But it is also important to point out that CSBMs do have a secondary purpose of potentially evolving into avenues for practical security cooperation. For example, the Western Pacific Naval Symposium (WPNS) first started as a CSBM of the information-type but gradually evolved in scope of activities to include functional collaboration as well as training and exercise components amongst the member states. These later new initiatives spawned from WPNS are counted as COMs. Participants in WPNS activities – both CSBMs and COMs – include countries which

have outstanding interstate disputes and even said to be embroiled in geopolitical rivalries.²³¹

Another example is the Sino-Vietnamese expert-level working group established with respect to overlapping maritime claims in the Beibu/Tonkin Gulf in 2006. It first began as a CSBM focusing on dialogue but gradually evolved to include practical security cooperation such as coordinated fishery patrols. In 2012-13 especially, the working group expanded into such activities as joint resource development. Hence, the initial working group constitutes a CSBM. When subsequent arrangements on joint resource development in the disputed zone was formed, it is a COM-type activity in the context of an interstate dispute. The recent initiatives to promote practical security cooperation in the contested South China Sea waters, such as in search-and-rescue, between China and ASEAN are also examples of COMs derived from such CSBM processes, namely the Sino-ASEAN senior officials-level consultations on the South China Sea.

Therefore, practical security cooperation that takes place in the context of an interstate dispute is categorized as COM. Political or legal instruments established to resolve such disputes should also not be confused with CSBMs. CSBMs such as declaratory measures are designed to signal intent, especially for the purpose of managing external perceptions, but are not the same as declarations on practical security cooperation. Likewise, international conventions related to transparency and operational arms control are CSBMs whereas international conventions related to functional security issues such as fishery enforcement cooperation are COMs. Policy dialogues, designed to promote mutual confidence and understanding about strategic intent, are CSBMs which should be distinguished from policy exchanges that promote practical security cooperation such as submarine rescue.

²³¹ Such is the case for China, Japan and the U.S., which despite aerial and naval incidents in the East and South China Seas involving their forces, continue to engage each other in WPNS.

6.6. “Pledges” of Security Cooperation: Should They be Considered at All?

This Chapter looks at both ASEAN and Indo-Pacific samples. The reason why Northern European samples are not utilized is because CSBMs and COMs are relatively better developed in Europe, which thereby poses an unequal point of comparison.

One main difference is that most security cooperative mechanisms in Europe are legally-binding instruments whereas this is not the case for the Indo-Pacific where CSBMs are commonly seen as building blocks instead of institutions, and that such measures are carried out in a gradual and incremental manner via informal structures.²³² Many CSBMs and COMs in this region are essentially informal, non-binding pacts or accords which can be regarded more as political declarations or statements of intent than functional instruments of a technical nature. The onus is on the individual signatories to implement national-level measures in the “spirit” of those documents.²³³ As such, implementation is non-uniform at best, depending on individual governments’ political will and resource capacity.

These “pledges” on CSBMs and COMs may seem pretentious and hypocritical to some, especially when viewed from the Euro-centric lenses. It harks back to the longstanding debate about the ASEAN-centric regional security architecture which critics dismissed as “talk shops” with little concrete progress to boast about.²³⁴

²³² Ralph A. Cossa, “Chapter 2: Asia-Pacific Confidence-Building Measures for Regional Security,” in Michael Krepon, Michael Newbill, Khurshid Khoja and Jenny S. Drezin (eds.), *Global Confidence Building: New Tools for Troubled Regions* (New York: St Martin’s Press, 1999), 29.

²³³ Acharya noted that, in the case of the Asia-Pacific, the practice of cooperative security is less legalistic in approach. Acharya, “Chapter 1 Regional Institutions and Security in the Asia-Pacific,” 23.

²³⁴ This pattern is what some may call the “Asian Way” or where ASEAN’s security architecture is concerned, the “ASEAN Way”. It bears some similarities to what Bruce Allyn observed from the Soviet approach, in which statements of intent were not meant to accurately describe the present but rather to change the factual into the desirable. This originated from Soviet domestic politics wherein exhortive declarations were used constantly in an attempt to mobilize people toward fulfilment, say, of a particular national

However, these “pledges” along with informal or verbal agreements on security cooperation still have to be taken into account for various reasons.

First, the diverse security perceptions and national priorities of individual states involved, not to mention disparities in resource capacity that hinder institutionalized forms of practical security cooperation, have to be factored into consideration. Since existing interstate rivalries also impose political roadblocks to concrete, institutionalized measures, such “hollow” pledges can constitute a pragmatic approach to promote practical security cooperation. In such a context, parties involved have to make do with the lowest denominator in terms of the modalities, scope and extent of cooperation and commitment.

Second, these “pledges” may seem hollow but results may still materialize over time especially as parties overcome such hurdles as legislative roadblocks and capacity constraints. This means that unlike institutionalized accords that may likely entail “quick returns” in practical security cooperation, CSBMs and COMs in the Indo-Pacific are simply just more time-consuming. National-level capacity-building, with or without external assistance, may precede active implementation and participation in those security arrangements. Seen in this light, the acquisition of naval armaments can be regarded as part of the broader scheme of materializing practical security cooperation.

Third, as a way of critical comparison, institutionalized CSBMs and COMs are not necessarily always better. Institutionalized and binding mechanisms are assumed to provide for greater predictability and obligate signatories to adhere to their commitments. This point is often utilized to compare between the ASEAN-centric and European models. However, geopolitical and cultural contexts are different. Moreover, institutionalized CSBMs and COMs may not work as effectively if there is

goal. Hence, such statements tended to function as an ethical framework intended to serve as a standard to evaluate proper behavior. They could be accompanied by a deep realism that they might not in fact be borne out in reality but such mutual affirmation of basic principles could, at times, assist in creating an atmosphere conducive to concrete problem-solving. Bruce Allyn, “Soviet Views of CBMs,” in Borawski (ed.), *Avoiding War in the Nuclear Age*, 123.

no or little political will to adhere to them anyway, taking for instance the reported violations of Minsk II Agreement by warring parties in eastern Ukraine.

Finally, the problems of practical security cooperation, such as slow reaction or lackluster information-sharing, are not unique to just the ASEAN-centric model. Even supposedly better-developed Western institutions with longstanding habits of security cooperation are plagued with such issues. Amid the Ukraine crisis, U.S. General Philip Breedlove, Supreme Allied Commander Europe of NATO Allied Command Operations told a conference that allies must be willing to share their intelligence faster if its newly-formed rapid reaction force is to be effective in countering threats adding that "now we only share intelligence well when we are scared."²³⁵

Therefore, while institutionalized and formal security arrangements are most certainly welcome, to rank them as better than those which are not can be misleading. This study regards it necessary to count informal arrangements, including verbal pacts, as CSBMs and COMs for the ASEAN and Indo-Pacific samples.

6.7. Brief Outline of the Methodology

The thrust of this Chapter is to document trends in sample states' participation in CSBMs and COMs. It does not delve into whether or not bilateral or multilateral approaches are preferred, not to mention entering the theoretical debate about "defense regionalism" in this region. These issues are already well addressed in the existing scholarship.²³⁶ Rather, this Chapter seeks to demonstrate that participation

²³⁵ Mike Corder, "Top NATO general in Europe says alliance must improve intelligence-sharing," *Global News*, March 25, 2015.

²³⁶ Read for example, David Capie, "Structures, Shocks and Norm Change: Explaining the Late Rise of Asia's Defence Diplomacy," *Contemporary Southeast Asia*, Vol. 35, No. 1 (April 2013), pp. 1-26; See Seng Tan, "'Talking Their Walk'? The Evolution of Defense Regionalism in Southeast Asia," *Asian Security*, Vol. 8, No. 3 (2012), pp. 232-50; and Evan A. Laksmana, "Regional Order by Other Means? Examining the Rise of Defense Diplomacy in Southeast Asia," *Asian Security*, Vol. 8, No. 3 (2012), pp. 251-70.

in these activities constitutes part of the overall attempt by individual states to demonstrate benign strategic intent and commitment towards regional and international peace and stability. The earlier established parameters listed in Tables 24-26 and the various types of activities are utilized to plot these patterns. The indicators that are of interest, from the mass of statistical figures obtained in the process of categorization and tabulation, are as follows:

Indicators	Inferences of Strategic Behavior/Intent
#1 Total count in CSBMs and COMs	Are the states more inclined towards engaging in CSBMs and COMs in general?
#2 Trends in the categories of CSBMs	Are the states more inclined towards more challenging or demanding forms of CSBMs as they embark on more ambitious naval armament over time?
#3 Total count in the number of political/legal instruments (P/L-type COMs) promulgated	Are states more inclined towards resolving interstate disputes?
#4 Total count in the number of dispute mechanisms (DM-type COMs)	Are states more inclined towards mechanisms that seek to manage and instill cooperation in the context of interstate disputes that have yet to be resolved?
#5 Total count in engagement in defense and security assistance (A-type COMs) as well as participation in coordinated or joint security operations (O-type COMs) at the regional and international levels	Are states more inclined towards regional and international security operations as well as being a provider of public security goods through leveraging on their naval force projection capabilities?
#6 Trends in participation in training and exercises (TX-type COMs) observed alongside general geographical trends of cooperation	Are states more inclined towards training and exercises across a broader geographical scope through leveraging on their naval force projection capabilities?

This Chapter only documents newly-promulgated CSBMs and COMs over the four analytical time-spans. It does not count activities carried out annually because not all of them are executed regularly, could be intermittent and at times suspended for an indefinite period for various reasons. Data were obtained and corroborated from various sources, chiefly government official reports, existing databases such as

the *Military Balance*, as well as news reports. Doing so helps maximize the accuracy of the details, such as exact date, of each activity but there may still be imperfections. Moreover, the list of activities tabulated may not be wholly complete especially if one counts low-profile collaborations that are not made publicly known. At best, this list provides a snapshot of known new CSBMs and COMs undertaken to date.

The tabulated findings of CSBMs and COMs can be found in [Appendix A6](#).

6.8. Snapshot on the Total Number of CSBMs and COMs Initiated: A Prevalent “Spirit of Concord” amongst States?

Table 27 shows the total count of CSBMs and COMs initiated throughout 1980-2014. Generally for both ASEAN and Indo-Pacific samples, there is a consistent upward trend in the number of new activities initiated. The spike is relatively obvious in 2001-11. Recall that in Chapter Five, there are increasing propensities for states to advocate diplomacy and interstate security cooperation over time. Seen in this light, it is clear that the states do not merely call for diplomacy and interstate security cooperation as a way of broadcasting their benign strategic intent. In actual policy action, they do embark on real initiatives. In other words, discourses translate into action where cooperation is concerned. There is a prevalent trend in concord exhibited in the states' strategic behavior at least from this snapshot.

Table 27: Total Count of New CSBMs and COMs Initiated in 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	114	156	317	145
Bangladesh	15	35	105	32
DPRK	36	35	69	10
India	46	113	426	177
Japan	92	232	429	210
New Zealand	46	75	154	79
Pakistan	31	71	228	75
PRC	57	230	479	287
ROK	71	200	344	112
Taiwan	17	33	62	38

ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	36	108	271	83
Indonesia	71	175	502	168
Malaysia	75	207	405	130
Myanmar	9	78	257	76
The Philippines	59	151	376	147
Singapore	68	192	365	104
Thailand	58	158	370	107
Vietnam	25	159	408	235

The increase from 1980-91 to 1992-2000 can be deemed significant, and this is most plausibly because of the post-Cold War uncertainties that prompted states in the region to embark on more CSBMs and COMs to address a myriad of emerging and resurgent security problems, chiefly interstate disputes that had been largely left on the backburner and suppressed during the Cold War era. The spike in 2001-11 is related to the post-September 11, 2001 terror attacks and emergence of unconventional security challenges that necessitate practical security cooperation amongst states. This coincides with the rise in perceptibly destabilizing naval armaments being acquired during the same period. This implies that states acquire such capabilities at least partly for the purpose of facilitating their naval forces' participation in COMs. Another way to look at it is that the perceived destabilizing nature of the naval armaments acquired result in states exercising sensitivity towards the potential risks, thereby intensifying their participation in CSBMs.

Obviously there is a rising pattern of cooperation common for all the samples just by judging from the findings tabulated in Table 27. But this offers merely a macroscopic perspective of what had transpired so far over time. It is important to look deeper at the patterns in the scope of cooperation across the two categories.

6.9. States Become More Ambitious with CSBM Undertakings: Signaling Strategic Intent to Embark on Measures to Ameliorate Potential Misperceptions?

Earlier it was argued that there is an ascending order of difficulty across the three main categories of CSBMs, in terms of the requirement for greater commitments from the parties involved, the restrictions imposed upon individual states' political

and operational freedom of action, and the prospects of having to relinquish some sovereignty as part of the commitment to intrusive verification mechanisms. [Table A6.2](#) in Appendix A6 shows the format of cooperation throughout 1980-2014. It shows a trend towards bilateral and most notably of all, multilateral initiatives. Unilateral CSBMs were also commonly initiated in 1992-2000.

Tables 28-31 below tabulates the number of CSBMs along the various categories. The last, Table 31, tabulates what can be termed hybrid CSBMs because they combine both transparency and constraint measures, which thereby make them more comprehensive and in fact, more ambitious undertakings.

Table 28: Declaratory CSBMs 1980-14

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	3	1	6	0
Bangladesh	2	0	4	0
DPRK	10	9	7	5
India	9	4	20	8
Japan	4	8	20	5
New Zealand	1	1	5	0
Pakistan	6	9	10	1
PRC	9	26	33	19
ROK	2	5	12	2
Taiwan	4	6	4	2
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	4	13	20	8
Indonesia	5	16	24	11
Malaysia	3	14	23	9
Myanmar	1	12	21	8
The Philippines	3	17	22	12
Singapore	3	13	22	8
Thailand	3	14	22	10
Vietnam	2	22	23	13

Table 29: Transparency CSBMs 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	6	21	39	18
Bangladesh	4	6	22	4
DPRK	8	23	33	0
India	14	31	85	39
Japan	19	63	85	37
New Zealand	4	9	17	5
Pakistan	10	17	63	22
PRC	20	60	118	74
ROK	16	62	62	25
Taiwan	4	4	15	7
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	10	31	23	16
Indonesia	15	35	42	25
Malaysia	14	39	42	21
Myanmar	1	21	26	16
The Philippines	14	33	35	24
Singapore	13	38	43	18
Thailand	13	36	39	16
Vietnam	7	36	62	56

Table 30: Constraint CSBMs 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	5	3	3	1
Bangladesh	2	3	0	0
DPRK	8	2	6	0
India	3	4	2	3
Japan	6	9	3	4
New Zealand	4	2	2	1
Pakistan	4	8	4	2
PRC	6	7	8	6
ROK	8	8	11	1
Taiwan	0	1	1	2
ASEAN				
	1980-91	1992-2000	2001-11	2012-14

Brunei Darussalam	3	1	0	3
Indonesia	0	4	9	3
Malaysia	3	3	8	2
Myanmar	1	1	0	2
The Philippines	1	3	3	4
Singapore	0	1	1	2
Thailand	0	2	2	3
Vietnam	5	1	1	2

Table 31: Hybrid (Transparency + Constraint) CSBMs 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	0	1	1	0
Bangladesh	0	0	1	0
DPRK	0	1	0	1
India	0	2	4	3
Japan	0	0	2	1
New Zealand	0	0	0	0
Pakistan	0	0	1	2
PRC	1	4	3	4
ROK	0	2	0	0
Taiwan	0	1	3	0
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	1	0
Indonesia	0	0	0	0
Malaysia	0	0	0	0
Myanmar	0	0	0	0
The Philippines	0	0	0	2
Singapore	0	0	0	0
Thailand	0	0	0	1
Vietnam	0	0	0	0

Some interesting patterns may be observed here. Generally, most of the CSBMs are not declaratory types which appeared more prevalent in 1980-91. However, transparency measures become more dominant across 1992-2000 and 2001-11. The post-Cold War security milieu and the rapid arms buildup taking place in the region could have spurred the initiation of numerous transparency measures to promote confidence and mutual trust. They are also relatively easier to promulgate and

sustain over time since they do not entail intrusive measures or technical instruments that restrict the deployment and use of naval forces.

Constraint measures constitute the least initiated types of CSBMs. However, there is a generally slight increase in such measures between 1992-2000 and 2001-11, which may be attributed to a few reasons. First, as arms buildup continued despite a brief hiatus following the Asian financial crisis in 1997-98, states recognized an imperative to embark on more powerful CSBMs even while mainly still putting more efforts on the less-demanding ones to ameliorate misperceptions. At least, even if these constraint measures may not necessarily be working or implemented, even pledges or proposals made in this regard can potentially help demonstrate benign intent. Second, the ascension from transparency to constraint measures may be a natural progression from growing comfort and ease established with pre-existing CSBMs in general.

Nonetheless, the progression from transparency to constraint measures can be said to be slow and perhaps cautious. It is also evident that constraint measures, together with hybrid measures, are more prevalent amongst Indo-Pacific samples than their ASEAN counterparts. This pattern corresponds with differing geopolitical circumstances. Northeast and South Asian sub-regions are more “war-prone” and where likelihood to use force can be deemed higher. This propels Northeast and South Asian states to conceive of more ambitious CSBMs to mitigate war risks.

By comparison, Southeast Asia is plausibly more stable which means reduced need on the part of ASEAN states to embark on those measures that apply more to the circumstances in their surrounding Northeast and South Asian neighborhoods. Coincidentally, this pattern also corresponds to the extent and destabilizing potential of naval armament as well as threat-labelling and threat-of-force discourse tendencies. It is hard to ignore this possible linkage: the greater the destabilizing potential of naval armament processes taking place and the higher the risks of force being applied, the greater the push to embark on more ambitious CSBMs. It is essentially stability-inducing by helping ameliorate potential misperceptions by others regarding strategic intent behind the naval buildup.

6.10. Increased Propensities towards Resolving and Managing Interstate Disputes: An Expression of Benign Intent?

Territorial and sovereignty disputes are often touted as one of the key sources of interstate conflict which amplifies the potentially dire consequences of naval armament. However, from a contending standpoint it is also possible to view strategic behavior from concerned states' willingness to resolve or at least peacefully managing outstanding disputes. Table 32 shows the number of political or legal settlements reached by regional states on issues related to territorial and sovereignty disputes in 1980-2014.

What was not recorded here are those settlements reached before 1980. In fact, a number of settlements related to territory and maritime boundaries were reached during the 1970s. The advent of UNCLOS in 1982 invariably brought about new complications over maritime claims, especially in the 1990s. But as Table 32 shows, while states during this period embarked on post-Cold War arms buildups, they were also predisposed towards settlement of those disputes as part of more reassuring postures. This pattern continued right into 2001-11, especially in the case of Southeast Asia. Compared to nine such instances in 1980-91, there were actually more new legal/political dispute settlements (12 in all) reached in 1992-2000, and more new ones (13 in all) in the following period of 2001-11.

Table 32: Political/Legal Settlements of Territorial and Sovereignty Disputes 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	8	1	6	1
Bangladesh	0	2	3	0
DPRK	3	0	1	0
India	1	3	1	0
Japan	0	0	0	0
New Zealand	1	0	1	0
Pakistan	0	1	0	0
PRC	0	5	2	0
ROK	0	0	0	0

Taiwan	0	0	0	0
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	1	0
Indonesia	3	1	1	2
Malaysia	0	1	3	0
Myanmar	2	2	1	0
The Philippines	0	0	0	0
Singapore	0	1	3	1
Thailand	2	3	1	0
Vietnam	2	4	3	0

However, not all disputes could be satisfactorily resolved. Some were so complex and remain intractable problems that could at best be managed peacefully until a suitable solution can be found, such as the case of the East and South China Sea disputes. Pending suitable political or legal solutions and without the prospect of structural arms control measures to reduce the risks of conflict, dispute management mechanisms become the only best alternative states can turn to. Table 33 shows the number of dispute management mechanisms being initiated throughout 1980-2014 as a way of peacefully managing outstanding, unresolved disputes. Again, it must be emphasized, these are COMs separate from CSBMs. Whereas CSBMs such as crisis management tools (e.g. hotlines) are designed to signal benign intent and ameliorate the risk of accidental or inadvertent conflict, COMs are designed for cooperation amongst disputants to tackle common problems.

For example, while China and South Korea maintained as part of bilateral CSBMs direct air and naval forces hotlines to prevent clashes in the context of overlapping EEZs in the Yellow Sea since 2008, they also maintain such COMs as a Fisheries Cooperation Committee established in 2012 and joint fishery inspection in the bilateral Provisional Measure Zone since 2014 to deal with IUU fishing activities.²³⁷

²³⁷ Despite the continued intractability of the overlapping EEZ claims and persistent complaints Seoul made about illegal Chinese fishing vessels, including recent incidents of violence involved in the confrontation between Chinese fishermen and South Korean patrols, the two countries continue to hold joint fishery inspection. This COMs serves as not

Such COMs did not come about overnight; in fact they are the product of an enduring process of CSBMs that began in earnest since the 1990s following normalization of bilateral ties. This pattern of gradualist approach in dispute management, from CSBMs to COMs, is widely replicated in the region. They are such activities as joint environmental and hydrographic surveys (e.g. those initiated under the South China Sea Workshops in the 1990s) and negotiations over fishing rights in disputed maritime zones.

Table 33: Dispute Management Mechanisms 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	0	0	0	0
Bangladesh	0	1	3	0
DPRK	1	0	4	0
India	2	3	19	5
Japan	2	10	15	3
New Zealand	0	0	0	0
Pakistan	1	1	8	2
PRC	5	33	43	20
ROK	0	10	15	7
Taiwan	1	11	3	9
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	8	8	3
Indonesia	4	14	28	4
Malaysia	6	25	24	7
Myanmar	1	3	4	2
The Philippines	3	15	9	8
Singapore	3	11	14	5
Thailand	2	22	11	2
Vietnam	1	29	22	13

just a means to deal with a common security challenge within the disputed zone – in this case rampant illegal fishing and consequences dealt to apprehended Chinese fishermen by South Korean authorities – but also for signaling benign intent. “S. Korea, China to Jointly Monitor Illegal Chinese Fishing Boats,” *KBS World News – English Edition*, June 18, 2015.

Some of the prior-promulgated dispute mechanisms continue to be in force or are in the process of implementation while new ones are added over time. There is an evident, general spike in the number of newly-initiated dispute mechanisms in 1992-2000 compared to the previous, followed by another general increase in 2001-11. These are separate from CSBMs established across the same periods and plausibly signify the intent of the concerned states to demonstrate their willingness to use peaceful means of managing those problems with an aim of eventual settlement. While some may call them “band aid” measures, from the political standpoint they remain significant. Pragmatically speaking, in view of realistic circumstances and pending settlement, such dispute management mechanisms are the only next possible recourse.

Be it dispute resolution or management, one clear observation can be made here. The acquisitions of destabilizing naval armaments, as highlighted in Chapter Four, do not necessarily translate into malign behavior. Instead, states sampled here are not only engaging in their respective naval buildups, but also sought new initiatives to resolve or manage their outstanding disputes. Such stability-inducing policy actions correspond to their tendencies to advocate diplomacy and interstate security cooperation as established earlier in Chapter Five.

6.11. Expanding Commitment to Security Cooperation and Extending Help to Others: A Way of Projecting Positive Image to the International Community?

This section examines three strands of COMs the sampled states embarked on throughout 1980-2014, namely: defense and security-related assistance; joint or coordinated security operations at the regional and international levels; and lastly, training and exercise initiatives. These relate to the hypothesis that states embark on practical security cooperation with others and contribute public security goods for the purpose of helping maintain regional and international security by leveraging on their expanded military capacities, especially force projection capabilities. Moreover, the acquisition of such capabilities allow the navies to not just expand the scope of their cooperative activities abroad but also further extend the geographical scope.

On the latter point, Tables 34-36 show the breakdown in the geographical scope of samples' involvement and participation in various COMs, as a means of reference. The scope is broken down into: immediate region; wider region; and extra-regional. The immediate region refers to the Oceania which covers the South Pacific for Australia and New Zealand; Southeast Asia for the eight ASEAN countries; Northeast Asia for China, Japan, the Koreas and Taiwan; and the Indian Ocean region for the three South Asian countries – Bangladesh, India and Pakistan. The wider region is commonly across the entire span of the Indian and Pacific Oceans. Extra-regional refers to the distant regions beyond.

Table 34: COMs Participation in the Immediate Region 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2011-14
Australia	29	16	25	19
Bangladesh	2	15	26	7
DPRK	7	0	17	3
India	9	25	126	46
Japan	9	56	66	21
New Zealand	22	13	25	15
Pakistan	6	13	51	9
PRC	7	44	69	32
ROK	4	43	59	16
Taiwan	0	5	4	18
ASEAN				
	1980-91	1992-2000	2001-11	2011-14
Brunei Darussalam	9	16	59	15
Indonesia	26	45	136	43
Malaysia	32	69	118	44
Myanmar	3	15	50	14
The Philippines	14	33	85	38
Singapore	26	40	76	27
Thailand	23	45	88	30
Vietnam	5	41	91	57

Table 35: COMs Participation in the Wider Region 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2011-14
Australia	57	83	186	90
Bangladesh	2	7	35	14
DPRK	0	0	4	0
Japan	43	72	219	116
New Zealand	8	27	76	46
Pakistan	1	8	58	21
PRC	9	74	219	129
ROK	33	60	160	54
Taiwan	9	13	30	8
ASEAN				
	1980-91	1992-2000	2001-11	2011-14
Brunei Darussalam	6	38	153	37
India	6	35	152	66
Indonesia	21	67	255	74
Malaysia	15	61	186	49
Myanmar	1	27	143	35
The Philippines	23	55	205	63
Singapore	15	78	190	40
Thailand	17	53	197	42
Vietnam	3	53	205	88

Table 36: Extra-regional Participation in COMs 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2011-14
Australia	14	31	57	17
Bangladesh	3	4	17	7
DPRK	3	0	2	1
India	5	12	37	12
Japan	11	24	34	26
New Zealand	7	23	29	12
Pakistan	4	16	41	18
PRC	5	15	29	23
ROK	8	20	40	14
Taiwan	0	3	5	1
ASEAN				
	1980-91	1992-2000	2001-11	2011-14

Brunei Darussalam	4	9	15	4
Indonesia	4	8	36	12
Malaysia	8	21	28	5
Myanmar	2	2	17	1
The Philippines	4	10	26	4
Singapore	11	22	33	9
Thailand	2	8	22	5
Vietnam	3	6	26	19

COMs initiated in 1980-91 were mainly confined to the immediate regions, followed by the wider region and only a minority of such activities involved extra-regional participation. This was especially the case for ASEAN samples whose COMs were by and large confined within Southeast Asia, mainly conducted as bilateral activities during the period. It was only from 1992-2000 onwards that there was an outward orientation.

The pattern of initiating new COMs within the immediate region was kept up till this day, but there has also been an evident gravitation towards more wide-ranging geographical involvement, for example reaching out to more partners within the Indo-Pacific and not just confined to the immediate neighbourhood. This level of wider-regional involvement was most evident in 2001-11 especially as newly-emergent unconventional threats propelled countries in the region to initiate new forms of security cooperation to collectively address those challenges. Equally noteworthy has also been the gravitation towards extra-regional COMs, such as participation in distant security missions especially in 2001-11 onwards. Nonetheless, the bulk of COMs continue to be initiated within immediate and Indo-Pacific regions.

Of course, COMs encompass various activities including assistance, functional collaborations, training and exercises as well as joint or coordinated operations at regional and international levels. But projecting trends in the geographical scope of involvement and participation is meant to highlight the plausibility that parallel growth in naval armament, especially those capable of force projection, has a certain influence. Without the requisite capabilities to project force further afield geographically, there is no way many of these COMs can be implemented effectively and for appreciable durations sufficient to demonstrate commitments

to those activities. In fact, the patterns exhibited in states' provision of defense and security-related assistance overseas; participation in regional and international security operations; as well as in joint training and exercises do reflect this plausible linkage.

Table 37 shows the tabulation of newly-initiated defense and security-related assistance (A-type COMs) over 1980-2014.

Table 37: Defense- and Security-Related Assistance 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	5	10	16	4
Bangladesh	0	1	1	3
DPRK	0	0	0	0
India	1	0	14	4
Japan	1	1	7	6
New Zealand	0	1	3	1
Pakistan	1	0	1	0
PRC	0	0	1	5
ROK	0	0	1	2
Taiwan	0	0	1	2
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	1	1
Indonesia	0	0	3	3
Malaysia	0	0	3	0
Myanmar	0	0	0	0
The Philippines	0	1	1	1
Singapore	0	0	3	1
Thailand	0	1	2	2
Vietnam	0	0	1	1

Amongst the Indo-Pacific samples, Australia leads in the way of providing such assistance, a longstanding practice with respect to the immediate South Pacific neighbourhood, such as providing maritime aerial surveillance in support of the island states' counter-IUU fishing operations and offering HA/DR in response to the numerous disasters that afflicted the region. India's assistance are mostly targeted

at its immediate Indian Ocean neighbourhood, for example deploying military forces to help quell the coup d'etat in Maldives in 1988 at the request of its president. New Zealand is another example.

Amongst countries in East Asia, Japan has a longer history of providing assistance abroad, the most significant being the dispatch of JMSDF mine countermeasures forces to the Persian Gulf in 1991. Otherwise, the other Indo-Pacific counterparts are either small players in this field or newcomers. China is particularly notable in this regard, with its overseas security assistance raised in 2011-14, corresponding with its expressed intent to play a greater global security role and willingness to provide more public security goods. One recent example had been the Beijing's contribution of a frigate to escort Syrian chemical weapons out of the country for eventual disposal under UN auspices in 2014.

Compared to Indo-Pacific counterparts on the whole, ASEAN countries do not have a longstanding history of providing defense and security-related assistance abroad. The primary reason had to do with the lack of capacity. ASEAN naval forces back during the Cold War-era were by and large "brownwater" coastal-oriented services which were confined to national tasks and did not possess surplus capacities to offer such help abroad. This situation only improved in the post-Cold War era onwards, when larger and more capable platforms allow a number of ASEAN naval forces to project further afield, which thereby translates into the ability to offer help to neighbours in times of contingencies.

The spike in such assistance came about in 2001-11, especially when the region was plagued with a number of natural disasters. Some of the better-endowed ASEAN naval forces took part in the aftermath of the Indian Ocean Earthquake and Tsunami in December 2004, as well as the smaller-scale disasters which afflicted Southeast Asia thereafter. In these events, major force projection capabilities were brought into action, chiefly of all large AALS acquired by the regional navies and deployed for HA/DR missions. Also, this period also witnessed greater participation by ASEAN naval forces in "out-of-area" international security operations by projecting force into distant regions. For example, Malaysia, Singapore and

Thailand deployed naval forces to counter-piracy operations as part of the multinational Combined Task Force 151 off Somalia.

The latest episode that witnessed various ASEAN member states contributing aerial and surface forces to assist in a regional contingency, at the time of writing, was the MH370 incident.²³⁸ The important linkage between naval capacity and the propensity to provide assistance can also be seen in the case of Brunei, whose newly-acquired offshore patrol vessels are much more optimized to carry out overseas security assistance. In the aftermath of Super Typhoon Haiyan in November 2013, the Royal Brunei Navy managed to deploy one of these German-built vessels to deliver HA/DR supplies to the Philippines, a feat that was hitherto not possible earlier when the fleet was equipped with only small patrol and fast attack as well as landing craft that were confined to inshore and coastal operations.

Next on, Table 38 shows new initiatives or participation in regional and international security operations (O-type COMs) throughout 1980-2014.

Table 38: New Initiatives in Regional and International Security Operations 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	4	13	18	5
Bangladesh	0	0	3	1
DPRK	0	0	1	0
India	0	1	12	2
Japan	2	5	7	2
New Zealand	2	7	11	5
Pakistan	0	0	4	0
PRC	0	2	10	2
ROK	0	5	6	7
Taiwan	0	0	1	0

²³⁸ In fact, the most recent was the case of the Indonesia AirAsia flight QZ8501 which crashed into the Java Sea in late December 2014, though multinational search-and-rescue effort only followed the initial Indonesian response starting in January 2015.

ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	1
Indonesia	2	9	26	0
Malaysia	2	17	15	5
Myanmar	0	0	3	0
The Philippines	0	4	6	2
Singapore	0	10	8	2
Thailand	0	5	11	2
Vietnam	0	3	8	1

For all samples, the increase began in 1992-2000, with further increases evident in 2001-11. These patterns generally tallied with the pro-advocacy discourses established in Chapter Five on interstate security cooperation especially in 2001-11 when there was greater emphasis on unconventional security challenges. But within this mix of figures, there was also a rising trend of contributing to not just regional security operations but participation in international missions further afield.

The 2001-11 period can be deemed the “golden era” especially for ASEAN naval forces. Not only there was a blossoming of regional security operations, such as the Malacca Strait Patrol framework promulgated by the littoral states in 2004, individual ASEAN naval forces which possess the wherewithal also contributed to international security operations, notably counter-piracy efforts in the Gulf of Aden (notably Malaysia, Singapore and Thailand), and also the UN Interim Force in Lebanon (to which the Indonesian Navy regularly contributes a warship).

Finally, Table 39 shows new joint training and exercise initiatives (TX-type COMs) promulgated throughout 1980-2014.

Table 39: New Initiatives in Joint Training and Exercises 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	21	23	45	33
Bangladesh	0	4	20	4
DPRK	1	0	1	1
India	1	13	57	23

Japan	11	22	56	30
New Zealand	7	9	28	23
Pakistan	1	9	19	6
PRC	1	9	49	40
ROK	11	16	42	18
Taiwan	0	0	1	1
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	2	6	16	13
Indonesia	12	20	37	22
Malaysia	17	20	34	18
Myanmar	0	2	8	9
The Philippines	8	13	32	18
Singapore	17	45	39	19
Thailand	14	7	32	12
Vietnam	0	3	24	12

The upward trend observed for these new training and exercise initiatives coincides with the procurement and force structure development patterns of regional navies discussed in Chapter Four. The more able the services are in projecting force beyond immediate waters, the more active is the participation. This pattern is similar to that for provision of defense and security assistance as well as participation in regional and international security operations, especially when juxtaposed with the generally outward-oriented geographical scope of involvement and participation in COMs. From the qualitative perspective of analysis, this statistical data also tallies with observed realities.

A good example is the case of the navies of Brunei and the Philippines; they were hitherto unable to participate in "out-of-the-area" joint training and exercises with foreign partners until the recent years when they acquired ocean-capable platforms. With the new German-built offshore patrol vessels Brunei was able to contribute a ship as a full exercise member at the U.S.-led, multinational Rim of the Pacific exercise in 2014. The Philippine Navy, with its antiquated vintage fleet, was earlier only capable of exercising within home waters with the U.S. Navy or at most with close ASEAN neighbours. With the acquisition of newer, oceangoing platforms chiefly the former U.S. Coast Guard high-endurance cutters in 2012-13, the Philippine Navy was able to reinstate its participation in Australia-hosted

multinational Exercise Kakadu in 2014, the second time after having last done so in the early-1990s.

It is clear from the above discussion that naval buildups do not necessarily destabilize. Instead, naval buildups can be stability-inducing when one considers that the states sampled here broadened their engagements within and beyond their immediate regions, and even expanded the scope of their roles as security providers to contribute to regional and international peace and stability. These propensities correspond to the increase in supposedly destabilizing force projection naval capabilities brought into service. Using the proposed heuristic approach, findings here show, naval buildups may not be destabilizing after all.

6.12. Summary of Findings

Unlike existing scholarship that qualitatively dealt with CSBMs, defense diplomacy, ASEAN defense regionalism, and so on, this Chapter undertakes a primarily quantitative approach similar to previous chapters. The key thrust is not to critique the merits of this or that type of cooperation but to simply advance the idea that despite having acquired potentially destabilizing naval armaments, states do not necessarily stop engaging in cooperation with others. In fact, naval modernization is not necessarily destabilizing. When utilized for positive endeavors – engaging in practical security cooperation or to contribute public security goods for international and regional peace and stability – naval modernization can be stabilizing in fact. What this Chapter has done is to quantify the patterns of engagement in CSBMs and COMs over time with the objective of drawing inferences about the linkage between naval armament and strategic behavior. Findings of this Chapter do not correspond with the prevailing mood of “conventional argument” made by existing studies. Those findings can be summarized as such.

From the narrower perspective:

- While there were general proclivities towards CSBMs, the samples attempt to keep up such efforts in parallel with the pace of their naval armament. From

declaratory measures, they graduated towards transparency measures from 1991-2000 amidst their post-Cold War naval armament processes. The more unstable the security milieu is, the greater the propensities towards more ambitious CSBM undertakings as seen in Northeast and South Asian sub-regions where constraint and hybrid measures are more prevalent than in the comparatively more stable, "less war-prone" Southeast Asia

- In the midst of naval armament, the samples endeavor to reach political or legal settlements for outstanding territorial disputes and sovereignty issues. In cases pending suitable solutions, they paid more attention to dispute management mechanisms to ameliorate the attendant risks
- Generally increasing trend towards providing defense and security-related assistance overseas; participation in regional and international security operations; as well as joint training and exercises can be juxtaposed with the geographically outward-oriented pattern exhibited by the samples. These can only be possible with the necessary wherewithal, namely, the requisite naval capabilities that can facilitate and sustain commitments to regional and international security undertakings

From the broader perspective:

- There is in fact a positive, upward trend in CSBMs and COMs being initiated over time as seen in the generally increasing total numbers of new activities being proposed, agreed upon and implemented. This runs in opposition to the increasing destabilizing potential of naval armament over the same period as established earlier in Chapter Four
- The increased propensities towards CSBMs and COMs correspond with discourse tendencies established in Chapter Five, with respect to advocacies for diplomacy as the preferred means of governing interstate relations and for practical security cooperation, including open expression by some of the states of their desire to play regional and international security roles
- While the samples continue to establish new cooperative arrangements within their immediate neighborhoods, they also exhibit an outward orientation through intensified participation in CSBMs and COMs in the wider

Indo-Pacific region and extra-regionally. Because some of the COMs involve practical security cooperation, only the possession of requisite wherewithal – in this case potentially destabilizing, force-projection naval armaments – can facilitate participation

It becomes evident that the seas are marked by greater cooperation even when destabilizing potentials expand within the sampled naval forces. While it can certainly be argued that the type of naval armaments acquired may have no bearing on whether states cooperate or otherwise, one should not dismiss or even downplay the possibility that their mere existence may very well influence strategic behavior to a certain extent. That states were shown in this Chapter to have gravitated towards cooperation can be attributed to the following reasons.

First, states are cognisant of the potential negative consequences of naval armament, chiefly of all misperceptions about strategic intent which create the risks of security dilemmas. Short of structural arms control measures, the only recourse to ameliorate such dangers would be to embark on CSBMs and COMs. Secondly, through engagements in CSBMs and COMs states can also demonstrate that their acquisitions of potentially destabilizing naval capabilities do have legitimate justifications, such as promoting practical security cooperation amongst themselves for the furtherance of regional or international security.

To sum up, this Chapter establishes that states gravitate more towards cooperation with one another despite their naval armament efforts. Naval modernization needs not necessarily be destabilizing. States may ameliorate external misperceptions of their strategic intent behind the acquisitions through engaging in CSBMs and COMs. Where the latter category of initiatives is concerned, even the possession of potentially destabilizing naval armaments can be stabilizing. To further validate the central thesis in this study that the acquisition of destabilizing naval armaments do not necessarily result in aggressive strategic behavior, it is necessary to turn to the following chapter to examine the antithesis of cooperation; namely how states apply the limited threat or use of naval force.

CHAPTER SEVEN: COERCIVE NAVAL DIPLOMACY

Enduring Use of Gunboat Diplomacy Can be De-Emphasized and Calibrated for the Purpose of Controlling Risks and Managing Interstate Perceptions

7.1. The Enduring Nature of Gunboat Diplomacy

It would certainly have been ideal if states in the Westphalian world did not resort to military force for the attainment of foreign policy objectives. Yet despite the advent of liberal institutions that sought to govern interstate behavior, the total elimination of the military instrument from a whole range of strategic options, such as the limited threat or use of force, is far from being realized at all. The military instrument has repeatedly demonstrated its utility in insuring national survival and self-preservation, as well as for the maintenance of international peace and security.²³⁹

The use of naval power exemplifies this reality. Unlike land and aerial forces, naval forces continue to be an attractive strategic tool for furthering diverse national interests. Therefore, it should not have been surprising that gunboat diplomacy, defined by Cable as “the use or threat of limited naval force, otherwise than as an act of war, in order to secure advantage, or to avert loss, either in the furtherance of an international dispute or else against foreign nationals within the territory or the jurisdiction of their own state,”²⁴⁰ remains in practice today and most plausibly into the foreseeable future. As he observed:

²³⁹ If one considers the role of naval power in collective security and upholding of international order, Article 42 of the UN Charter stated that “should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate; it may take such action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations”. *Charter of the United Nations*, San Francisco, 1945, Chapter VII.

²⁴⁰ James Cable, *Gunboat Diplomacy 1919-1991*; Third Edition, Studies in International Security: 16, An International Institute for Strategic Studies Book (Basingstoke: The Macmillan Press Ltd, 1994), 14.

It scarcely needs arguing that, in the future as in the past, coercive diplomacy will be less costly and less of a risk than war, or that navies will usually find it easier than armies or air forces to await (still uncommitted) the critical moment for intervention and, even then, if more resistance is encountered than was expected, to withdraw, relatively unscathed and with less loss of face... The political application of limited naval force is likely to remain an economical expedient (for those naval powers willing to sustain their navies) and, by comparison with other forms of coercion, to seem an even better bargain in the years ahead.²⁴¹

Cable could not be any more correct. Recent events bore out gunboat diplomacy as an enduring feature of international politics. The instances of such coercive use of naval power in the Indo-Pacific region, particularly in the geopolitical flashpoints of the East and South China Seas, has been much reported in recent years. But the Indo-Pacific countries are not alone in this regard. Even though the frequency of its use is comparatively less, gunboat diplomacy has also been applied by Western countries as an instrument to assert their sovereignty claims, even in supposedly peaceful post-Cold War Europe that enjoys longstanding habits of institutionalized cooperation.

Even close allies apply gunboat diplomacy against each other from time to time, for instance the case of Denmark and Canada over the disputed Hans Island during and after the Cold War. At the time of writing, navies of both NATO and Russia continue to sustain their "show of force" in the Baltic and Black Sea regions for instance amid simmering tensions in Europe over events taking place in Ukraine.

History and contemporary developments have shown that short of an act of war, the limited threat and use of force at sea as a tool of statecraft will remain a salient feature of international politics.²⁴² This holds for as long as political and economic

²⁴¹ Ibid, 146.

²⁴² An act of war, according to Cable, is the use of armed force against or in a foreign state for the primary purpose of injuring that state, whether as part of an existing policy of injuring the other state as and when opportunity serves, or to initiate such a policy or without regard to the risk that the reaction of the victim state will go beyond mere self-defense to a reciprocal adoption of injury rather than profit as the prime motive of policy. However, an

interactions among states continue to take place at sea; for as long as national interests continue to reside in the world's oceans; and for as long as states continue to acquire and operate naval forces. It would be naïve to wish away naval power and its use for political expediency.

Therefore, to say that the use of naval power for coercion at sea is something irrelevant in the contemporary and future contexts would be tantamount to utopia. Instead of viewing the existence of gunboat diplomacy as an absolute phenomenon (i.e. it should be completely outlawed) which may carry academic appeal but lack serious policy utility at all, this study proposes that it would be more realistic to view the enduring use of gunboat diplomacy from the perspective of how force is being applied; which naval instrument has been employed; and under what geopolitical context.

7.2. Reconceptualizing Gunboat Diplomacy: From the Perspective of Self-Restraint?

The fundamental assumption of this Chapter is that regardless of whether destabilizing capabilities are acquired, self-restraint from the employment of gunboat diplomacy is important since a defensive posture needs to be demonstrated over time to be convincing. But refraining *totally* from the use of gunboat diplomacy is unrealistic, especially when it can be useful for the greater good of international security and is also sanctioned by international law. One example was the naval buildup by the UN-sanctioned multinational coalition force in the Persian Gulf during Operation Desert Shield in 1990-91 amidst diplomatic attempts to persuade Baghdad to withdraw its troops from Kuwait.

As discussed in Chapter Six, states modernizing their naval forces could have legitimate causes for the application of gunboat diplomacy. This ranges from general peacetime deterrence to contributing "common public goods" for

act of coercion – in this case the limited threat or use of naval force – is intended to secure some specific advantage from another state and forfeits its diplomatic character if it either contemplates the infliction of injury unrelated to obtaining the advantage or results in the victim attempting the infliction of injury after the original objective has been either achieved or abandoned. Ibid, 12-13.

international security reasons. The pursuit of such strategic options means that naval forces can actually be a stabilizing influence. As such, even though a strategically defensive posture should ideally forswear its use, the idea is to *de-emphasize* and *calibrate* the employment of gunboat diplomacy as a policy choice. It is therefore necessary here to conceptualize an analytical framework in this regard. The trickiest aspect to conceptually tackle is the use of gunboat diplomacy in the context of interstate disputes, in this case within the maritime domain.

But first, UNCLOS in particular does not specify norms that govern the threat or use of force, except that Article 279 of Part XV and Article 301 of Part XVI echo those already enshrined in the UN Charter and numerous UN Resolutions. UNCLOS primarily outlined the rights and duties of states in the conduct of maritime activities. Nonetheless, provisions in this Convention contribute to the framework for examining naval behavior in various sea zones, including politically sensitive areas. General instruments of international law ought to offer more direction in this regard.

Article 2 of the UN Charter stated that “all Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered” (paragraph 3) and that “all Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations” (paragraph 4).²⁴³ Indeed, the emphasis on peaceful resolution of maritime disputes has been one of the fundamentals of a strategically defensive posture. Use of force is perhaps straightforward. The UN Resolution No. 3314 (XXIX) adopted in December 1974 defined “aggression” as “the use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations” (Article 1).²⁴⁴

²⁴³ *Charter of the United Nations*, Chapter I.

²⁴⁴ UN Resolution No. 3314 (XXIX): *Definition of Aggression*, adopted on the Reports of the Sixth Committee, United Nations General Assembly, Forty-second Session, 2319th Plenary meeting, 14 December 1974.

However, "threat of force" needs further qualification where more often, force is being threatened for the purpose of political coercion. Part I of UN Resolution No. 42/22 adopted in November 1987 stated that "no State may use or encourage the use of economic, political or any other types of measures to coerce another State in order to obtain from it the subordination of the exercise of its sovereign rights and to secure from it advantages of any kind" (paragraph 8) and that "neither acquisition of territory resulting from the threat or use of force nor any occupation of territory resulting from the threat or use of force in contravention of international law shall be recognized as legal acquisition or occupation" (paragraph 10).²⁴⁵

These provisions allude to abhorrence of coercive measures, short of war, to impose one's political will against other states. However, another conceptual problem arises, this time revolving around the issue of self-defense. Article 51 of the Charter states that "nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security."²⁴⁶ Yet the "inherent right of individual or collective self-defense" can be abused or misused for the purpose of justifying aggression.

The notion of self-defense becomes problematic when determining "if an armed attack occurs". In naval warfare, it is not as simple as reacting to the opening shots of the enemy warship. Due to the inherent vulnerability of modern warships, as discussed in Chapter One, signs of impending attack – such as illumination by the adversary's fire control radar or the imminent ramming by the other vessel – may justify immediate self-defense measures in split-second "life-and-death" decisions

²⁴⁵ UN Resolution No. 42/22: *Declaration on the Enhancement of the Effectiveness of the Principle of Refraining from the Threat or Use of Force in International Relations*, adopted on the Reports of the Sixth Committee, United Nations General Assembly, Forty-second Session, 73rd Plenary meeting, 18 November 1987.

²⁴⁶ *Charter of the United Nations*, Chapter VII.

made by the on-scene commander.²⁴⁷ The margins of error can be slim considering that technical failures and false alarms in modern sensors may have the unintended consequences of precipitating war.

Legitimate self-defense, some scholars contended, revolves around necessity and proportionality of the force used. For instance, O'Connell argued that inherent in the concept of self-defense are restrictions on the character of operations, the use of operations and the weapons to be used in operations.²⁴⁸ The doctrine of proportionality can be defined by the use of same mode of weaponry and tactics in response to an aggressive act; and the confining of responses within the geographical area where the attack took place.²⁴⁹

The first point is important. For example, the initial response to deliberate ship ramming by the opponent should not be the immediate use of weapons. Only when counter-harassment using evasive maneuvers and verbal warnings fail to deter the opponent from further moves can one escalate to the next phase of countermeasures. In response to an initial attack by a gun-armed patrol vessel for example, one should not respond with a submarine or air strike especially if the opponent is defenseless against such countermeasures.

The second point is crucial too. International law does not specify whether self-defense is restricted to the immediate area where attack takes place or also includes the area, possibly within the opponent's territory, where force was committed. Nonetheless, in a low-intensity naval confrontation, the exercise of legitimate self-defense ought to be restricted to the immediate area, for example the disputed zone, where the attack took place. The victim should not attempt to launch an all-out retaliation against the opponent's naval base, located within its national territory where the attacking warship is stationed in, as the initial response.

²⁴⁷ Read for instance, Oscar Schachter, "The Scope of Legitimate Self-Defence," in Paul B. Stephan III and Boris M. Klimenko (eds.), *International Law and International Security: Military and Political Dimensions* (Armonk, NY; London, UK: M.E. Sharpe, Inc., 1991), 21-27.

²⁴⁸ O'Connell, *The Influence of Law on Sea Power*, 69.

²⁴⁹ Ibid, 64-65.

Legitimate self-defense ought to also include reprisals against the opponent in its territory from where the attack first originated.

Short of an act of war, the issue of contention here is whether gunboat diplomacy can be practiced in a calibrated manner by states so that it does not unduly escalate. For the purpose of this study it is necessary therefore to derive a continuum of gunboat diplomacy as a proposed analytical model, along three aspects: 1) mode and extent of force applied; 2) type of naval forces employed; and 3) geographical-legal context. Cable's work provides a useful starting point.

7.3. Towards a Continuum of Gunboat Diplomacy: Revisiting Cable's Four Modes of Limited Threat and Use of Naval Force

To begin, some definitions are in order here with respect to the actors engaged in gunboat diplomacy. According to Cable, the assailant is he who first uses limited naval force, the victim is he who suffers it. Nations are not typecast for either role. Any country with a coastline – and occasionally some without – can be a victim. Any country with a sea-going navy – even one not called by that name – can be an assailant.²⁵⁰ An important caveat is also that the assailant may not necessarily be an aggressor whereas the victim may not necessarily be innocent.²⁵¹ This terminology shall be adopted in this study. It is necessary to revisit the four modes of limited naval force put forth by Cable, namely, Definitive, Purposeful, Catalytic and Expressive.²⁵²

Definitive Naval Force envisages the intent of the assailant to create a *fait accompli* that compels the victim to either acquiesce or escalate (such as employing even more extreme measures to overturn the *fait accompli*). Beijing's repeated coastguard incursions into the territorial waters surrounding the disputed Senkaku/Diaoyu Islands despite repeated warnings by the Japanese patrols is one example in which a *fait accompli* is dealt to the victim, thereby potentially risking drastic countermeasures, such as moves by Japanese coastguard to evict them.

²⁵⁰ Cable, *Gunboat Diplomacy 1919-1991*, 6.

²⁵¹ *Ibid*, 158.

²⁵² *Ibid*, 15-64.

The most notable example here was the Argentine attempt to deal a *fait accompli* to London by invading the Falklands Islands in 1982.²⁵³ Not only does Definitive Naval Force contain huge escalatory risks, but it also appears to breed long-term instability.

Purposeful Naval Force does not aim to present a *fait accompli* but to induce the victim to adopt certain measures. Or it aims at preventing him from taking certain action. In short, purposeful naval force has a deterrent or coercive objective. Unlike Definitive Naval Force, it is a less reliable expedient since its success hinges on the victim's choice and allows more time for tensions to build up thus posing considerable escalatory risks. However, it also provides a window of opportunity for de-escalatory measures to kick in. One example is the deployment of coastguard and fishery patrol forces in May 2014 by Hanoi to compel Beijing to withdraw the oil-rig HYSY981 from disputed waters. Through coercion or deterrence, Purposeful Naval Force is potentially more stability-inducing than Definitive Naval Force is.

Catalytic Naval Force is a form of speculative activity in which the assailant's intention is not always precise and the outcome often uncertain since it is usually exploratory and tentative in character. It constitutes more of a readiness to do something than an explicit response toward a perceived or foreseen threat. The assailant may employ such force to broaden its range of options. For instance, Washington's decision to deploy Littoral Combat Ships to Singapore was apparently undertaken in response to the rising tensions in the South China Sea. Such a move reflects not just Washington's but also Singapore's "just-in-case" mentality. While Catalytic Naval Force may create anxiety and resentment, it contains less escalatory risks since the victim may be uncertain of the assailant's motives and thus create grounds for caution.

Expressive Naval Force is arguably the least extreme yet underemphasized form of gunboat diplomacy. In this case, naval forces are deployed to emphasize the

²⁵³ Unlike the Japanese whose coastguard did not undertake further action following the intrusion into the disputed waters by their Chinese coastguard, in the 1982 case London chose to overturn the *fait accompli* by deploying a sizeable military force to recapture the isles, thus igniting a war with Buenos Aires.

assailant's attitude or sentiments. It is ambiguous and contains uncertain outcomes (probably no dire consequences are expected by the assailant). One example is the conduct of live-firing exercises by North Korea in its waters as an expression of displeasure towards the annual South-Korean-U.S. wargames.²⁵⁴ The Russian Navy passage through the English Channel in early 2015 possibly served as a way of expressing Moscow's sentiment towards NATO's buildup in Eastern Europe. Expressive Naval Force arguably contains the least amount of escalatory risks and it constitutes the most common mode of gunboat diplomacy.

Based on the degree of escalatory risks involved, Definitive Naval Force is ranked as the most extreme, followed by Purposeful, Catalytic and finally, Expressive Naval Force as the least extreme. But this only completes part of the proposed continuum of gunboat diplomacy. Cable's categorization of gunboat diplomacy is useful insofar it highlights various motives behind the application of naval force. However, a survey of his chronology of from 1919 to 1991 illuminates a list of examples that involved varying degrees of force being applied. Therefore, not only is it necessary to distinguish between the modes of force applied, it is important to also distinguish the extent of force – lethal or non-lethal.

This study presumes also that use of lethal force is a more aggressive manifestation of gunboat diplomacy compared to instances when lethal force is not used. This is based on the assumption that the resort to lethal force – unless justified necessarily in the absence of other viable alternatives – not only causes a greater extent of physical or political injury to the victim but also creates the foundation for long-term animosity and instability. Various incidents are shown below as examples to highlight the varying modes and extent of force being applied.

²⁵⁴ Force demonstration as exemplified in the Korean Peninsula example is of particular interest since it "can form a sort of bridge between pristine peace and actual war". It allows the gradual fulfilment of a threat by allowing a sequence of preparatory moves obviously leading in the direction of violence and yet inherently not violent. Despite their ambiguity, force demonstrations could imply that the country exercising this means might be considering moving from the realm of diplomatic negotiations to the realm of military actions. Glenn H. Snyder, *Deterrence and Defence: Towards a Theory of National Security* (Princeton University Press, 1961), 256.

Mode of Force	Extent of Force	Examples
Definitive	Lethal	In March 1988, Chinese forces seized some reefs in the Spratly Archipelago following a naval clash with Vietnamese forces off Johnson South Reef. ²⁵⁵
	Non-lethal	Following Tokyo's nationalization of the Senkaku/Diaoyu Islands in late 2012, China's coastguard forces have routinely entered and stayed for hours within the territorial waters around the disputed isles, ignoring warnings from the Japanese coastguard patrols. ²⁵⁶
Purposeful	Lethal	In June 2002, North Korean warships escorting fishing boats across the Northern Limit Line into South Korean waters engaged in a firefight with the ROK Navy patrols. ²⁵⁷
	Non-lethal	In September 1972, an Icelandic gunboat cut the trawl wires of the British fishing boat <i>Peter Scott</i> during one of the Cod War encounters. ²⁵⁸
Catalytic	Lethal	In May 1920, Bolshevik Russian warships seized White Russian ships in the harbor of Enzeli (now Bandar-e Anzali) in Persia, bombarded and occupied the town

²⁵⁵ "Chinese, Vietnamese ships exchange fire near disputed islands," *The Associated Press*, March 14, 1988; Joseph De Rienzo, "Vietnam, China accuse each other of starting naval clash," *Reuters News*, March 15, 1988; John Ngai, "Vietnam tries to stop China buildup in Spratlys," *Reuters News*, March 15, 1988; "Secrets of the Sino-Vietnamese skirmish in the South China Sea, March 14, 1988", Chinese account of the clash on the *Wen Wei Po* news website. Online. Available: <<http://news.wenweipo.com/2009/04/22/HO0904220048.htm>> (in Mandarin); "Vietnam accuses China of blocking rescue of freighters," *The Associated Press*, March 16, 1988; "Vietnam says China sank three ships in Spratlys," *Reuters News*, March 17, 1988; "Soviet gives Vietnam information about Chinese ship," *Japan Economic Newswire*, March 17, 1988.

²⁵⁶ There were numerous such instances since the Sino-Japanese spat began following Tokyo's nationalization of the isles. But for illustration purpose here, see for example: "Chinese ships enter disputed waters: Japan," *Agence France Presse*, November 4, 2012; "4 Chinese vessels enter Japanese 'territorial waters' near Senkakus," *Kyodo News*, November 4, 2012.

²⁵⁷ "Warships of North and South Korea exchange fire," *Associated Press Newswires*, June 28, 2002.

²⁵⁸ Cable, *Gunboat Diplomacy*, 199.

		and then expelled the small British military contingent to allow Moscow to improve its political position in Persia at London's expense. ²⁵⁹
	Non-lethal	In April-May 1977, 18 French warships positioned themselves off the coast of Djibouti to provide reassurance in the run up to the former French colony's independence and, if the need arose, to evacuate French nationals. ²⁶⁰
Expressive	Lethal	In August 1992, North Korean patrol craft reportedly fired upon a fleet of Chinese fishing vessels in "an apparent show of displeasure" over the normalization of diplomatic relations between Beijing and Seoul. ²⁶¹
	Non-lethal	In July 1976, the Soviet aircraft carrier <i>Kiev</i> transits the Bosphorus and Dardanelles Straits to assert Moscow's interpretation of the 1936 Montreux Convention regarding the Regime of the Straits that allows Turkey to regulate the transit of naval vessels through these waterways. ²⁶²

The seriousness of a particular instance where gunboat diplomacy is applied, based on the mode and extent of force applied, may have significant bearing on interstate relations and stability. Most crucially, it can be taken to signify strategic intent, which thereby shapes perceptions and countermeasures. For example, it is logical to see that mere expressive show of naval force, such as cruising near disputed waters might likely result in formal diplomatic protests or at the most reciprocal show of force. However, the impact on interstate relations ought to be greater if states come to blows resulting in the loss of lives and properties, and thereafter creating grounds for reciprocal arming and forces buildups ostensibly targeted at one another.

Table 40 summarizes this continuum of the application of naval force. Act of war is not an example of gunboat diplomacy but included here for the purpose of classification of reported instances. Otherwise, a total of eight graduated levels of

²⁵⁹ Ibid, 159.

²⁶⁰ Ibid, 203.

²⁶¹ "DPRK navy attacked Chinese fishing boats last year," *BBC Monitoring Service: Asia-Pacific*, January 28, 1993.

²⁶² Cable, *Gunboat Diplomacy*, 203.

gunboat diplomacy is outlined based on a combination of the mode and extent of force applied. The most extreme of all is the use of Lethal Definitive Naval Force (DL-type), and so on in descending order of extremity, right down to Non-Lethal Expressive Naval Force (EN-type) being the least extreme of all.

Table 40: Graduated Levels of the Mode and Extent of Naval Force Applied in Descending Order of Extremity

Category	Mode of Force	Extent of Force	Code
Act of war	War of aggression for territorial annexation or political subjugation	Lethal/Non-Lethal	AW
Gunboat diplomacy	Definitive Most Extreme	Lethal	DL
	Purposeful		PL
	Catalytic		CL
	Expressive		EL
	Definitive	Non-Lethal	DN
	Purposeful		PN
	Catalytic		CN
	Expressive Least Extreme		EN

Source: by author

7.4. What Naval Instrument to Use? Governments are Conscious of the Type of Naval Forces Employed for Gunboat Diplomacy

The next aspect in deriving a continuum of gunboat diplomacy is to examine the type of naval forces employed. Linked to the idea of proportionality in the use of force as enshrined in international law, the type of military instrument employed has an effect on escalating or de-escalating a crisis. States may exercise prudence in selecting the type of naval forces for the exercise of gunboat diplomacy. In other words, the force applied can be graduated in phases, ascending the escalatory ladder where circumstances allow. The discretion resides in both the assailant and victim even if the initial commitment of force is accidental or inadvertent. The Korean Peninsula best exemplifies this example. Even though the North Koreans lethally shelled Yeonpyeong Island in November 2010, the South Koreans retaliated with counter-battery artillery fire but did not commit high-capability assets for the

purpose.²⁶³ Four graduated phases of using force to achieve or defeat a political objective at sea had been proposed, as seen below:²⁶⁴

Phases	Types of Naval Forces Employed
#1	Initial response involving single units or small numbers of low-capability and general-purpose types
#2	Reinforcement involving high-capability units suited for area defense including ASW, submarine and at-sea logistics support
#3	High-level operations involving area-control forces of all capabilities with the function of controlling a given maritime area
#4	Strategic nuclear response forces

Low-capability naval forces such as lightly-armed patrol vessels should constitute the first line of instruments employed, especially in politically-sensitive zones such as overlapping waters. In times of tension, such forces may have reasonably adequate deterrent or coercive effects. However, the deployment of heavily-armed warships can portray an overly militaristic impression and provoke reciprocal moves by other claimants, which is not conducive for the amicable management of disputes.²⁶⁵

Contemporary instances show that states are cognisant of the potential escalatory risks that stem from the type of naval forces they commit in the exercise of gunboat diplomacy and thereby elected to calibrate their options accordingly. Should heavily-armed warships be deployed for reasons of austerity (especially given that not all countries operate separate civilian maritime law enforcement agencies),

²⁶³ Following the incident, Seoul threatened more resolute response to any such North Korean provocations. During the exchange of artillery "show of force" in the Yellow Sea in late March 2014, the South Koreans placed ROKAF F-15K Slam Eagle fighter-bombers, a high-capability strike asset, armed with AGM-84H SLAM-ER air-to-surface missiles on standby as a precautionary, deterrent measure while warning Pyongyang against escalating tensions. "Hi-tech missiles were deployed," *Joins.com*, April 2, 2014.

²⁶⁴ O'Connell, *The Influence of Law on Sea Power*, 57.

²⁶⁵ Kearsley, *Maritime Power and the Twenty-First Century*, 46; Duk-Ki Kim, "A Republic of Korea perspective," *Marine Policy* 28 (2004), pp. 13-18.

their heavy offensive armaments should either be removed or at least visibly covered.²⁶⁶ Warfighting-optimized naval forces which can potentially contribute higher escalatory risks ought to remain kept as a form of “recessed deterrent” confined to rear zones such as one’s territorial waters. Such sensitivities can be seen in the example following the death of a Taiwanese fisherman shot by the Philippine patrol in disputed waters in May 2013. When asked whether the navy would regularly deploy warships to protect fishermen in the Spratlys, Taiwanese defense authorities said that “the Coast Guard will be on the frontline, while the Navy will provide backup,” adding that this is a normal practice in democratic countries and that deploying warships on frontline would invite criticism in the international community.²⁶⁷

Nor should this apply only to mobile forces. In the case of maintaining one’s territorial claims in a disputed zone, the initial response ought to also be confined to low-capability static forces, for example refrain from militarizing occupied territories unless such measures are undertaken in response to escalations by other claimants. Again, the Taiwanese example is instructive. Having withdrawn its Marine Corps garrisons from the Pratas (Tungsha) Islands and Itu Aba (Taiping) Island in the Spratlys in 2000, Taipei has since maintained only Coast Guard detachments in the area. Despite rising tensions in the South China Sea, Taipei remained adamantly against the idea of permanently deploying military forces, including the return of marines and stationing of naval ships, in the Spratlys. The decision was motivated by Taipei’s preference of maintaining a “peacemaker” image in the South China Sea.²⁶⁸

²⁶⁶ Modern warships can be “fitted for” but not with certain types of weapons especially the heavier, long-range offensive types, unless situation requires. Even aircraft can be shorn of certain armaments when carrying out routine patrols or even intercepts. The armament configuration for platforms deployed to the frontline ought to be regarded as a conscious policy choice that signals intent and portrays the type of military posture.

²⁶⁷ Rogge Chen and Lilian Wu, “Navy will support Coast Guard in protection of fishermen: MND,” *Central News Agency English News*, May 14, 2013.

²⁶⁸ The decision to sustain a civilian law enforcement presence was upheld by the Taiwanese defense authorities despite pressure from various vocal political quarters within the Legislative Yuan. Jason Pan and Lo Tien-pin, “Threat to Spratlys outposts growing,” *Taipei*

Further north, in the case of the South Korean-held Dokdo Islands (or Takeshima Islands, also claimed by Japan), there is also caution on the type of forces stationed. The South Korean Ministry of Defense was reportedly against the idea of dispatching military forces to Dokdo, mindful of further straining souring diplomatic relations with Tokyo back in early 2005, while it also ruled out the possibility of stationing a Marine Corps landing force on Ulleungdo, an island close to the disputed islets.²⁶⁹ The last reported discussion about the prospect of stationing military troops on Dokdo "depending on the situation" was made in 2011 and it appears still under consideration and not implemented.²⁷⁰

Therefore, it is possible to calibrate the employment of gunboat diplomacy by not just choosing which graduated level and extent of force to be applied, but also the type of naval forces deployed for such purpose. This is not to say that coastguard-type forces cannot be deployed for aggressive actions. It is only to emphasize that at the very least, civilian, low-capability forces should contribute less escalatory risks and tend to promote greater stability compared to regular, warfighting-optimized forces. Pertaining to this study, it would be important to observe the role played by medium- (M-type) and highly-destabilizing (H-type) naval armaments.

7.5. The Geographical-Legal Context of Gunboat Diplomacy is Important

Because the application of naval force has to have a foreign policy motive in order to qualify as "gunboat diplomacy", military or paramilitary actions carried out

Times, December 26, 2014 and Jason Pan, "New Tuo Jiang corvette beefs up naval firepower," *Taipei Times*, December 27, 2014.

²⁶⁹ "South Korean Defence Ministry against sending troops to disputed islets – daily," *BBC Monitoring Asia Pacific*, March 28, 2005.

²⁷⁰ "S. Korea considers stationing troops on disputed isles," *Agence France Presse*, April 8, 2011. Despite support for such a move from various quarters, Seoul deemed it not in its national interests to make such a move when there have been no signs of the Japanese conducting any military maneuvers in the islets' vicinity. "Seoul cautious about stationing Marines on Dokdo," *Korea Times*, August 15, 2011; "Defence minister Kim supports military presence on Dokdo," *Yonhap English News*, September 19, 2011.

against non-state actors in one's territorial waters shall be excluded conceptually. Gunboat diplomacy would be considered legitimate under the following geopolitical conditions. First, force is sanctioned by an international governmental body, in this case the UN, under a multinational setting that confers legitimacy in the name of collective security. The deployment of a multinational naval task force in the Adriatic Sea off former Yugoslavia constitutes one such example. Secondly, force applied – the mode, extent and type of instruments employed – has to be proportionate for the purpose of achieving the intended objective, as discussed earlier.

The final factor to consider is the geographical-legal context in which limited threat or use of naval force is applied. The most straightforward is force being applied within maritime domain which indisputably and unambiguously falls under the sovereignty or national jurisdictional rights of the assailant unless it is an unprovoked attack against another country's ships sailing in the area under the legitimate auspices of innocent or transit passage. Table 41 below outlines the various maritime geographical zones stipulated by UNCLOS and the accompanying zonal constraints on the application of gunboat diplomacy.

Table 41: Unilateral Zonal Constraints on Limited Threat or Use of Naval Force

Maritime Geographical Zones	Limited Threat and Use of Naval Force	
	Coastal States	User States
Territorial Waters	<ul style="list-style-type: none"> - Use of all naval means for peacetime jurisdiction over foreign ships transiting on innocent passage in line with its enacted laws and regulations - Use of all naval means to apprehend breaches of coastal state's laws and regulations governing foreign ships' behavior - Defend against act of foreign aggression, but following standard ROEs in line with law of armed conflict 	<ul style="list-style-type: none"> - All types of naval forces in transit should adhere to rules underlined by UNCLOS on innocent passage - Refrain from military activities that undermine coastal state's security, including intelligence-gathering, research and survey; conduct of exercises and loitering in apparent attempt to threaten force (i.e. gunboat diplomacy)
Straits Used for International Passage	<ul style="list-style-type: none"> - All types of naval forces can be deployed 	<ul style="list-style-type: none"> - All types of naval forces - Refrain from military activities that undermine coastal state's

(including those located within coastal States' territorial waters and archipelagic sea lanes)	- Refrain from actions that hamper or threaten freedom of navigation of foreign shipping such as mining and unannounced straits closures	security, including intelligence-gathering, conduct of exercises and loitering in apparent attempt to threaten force
EEZ/Continental Shelf	- Preferably low-capability general-purpose naval forces or coastguard forces for enforcement of coastal state's sovereign rights in EEZ	<ul style="list-style-type: none"> - All types of naval forces - Refrain from the threat or use of force, or provocative acts, such as stimulating or exciting the coastal State's defensive systems; collecting information to support the use of force against the coastal State; or establishing a "sea base" within another State's EEZ without its consent - Military activities should not involve deployment of systems that prejudice coastal state's defense or security and sovereign rights to enforce environment and resource management and protection in the EEZ, including coastal state's rights to maritime surveillance
High Seas	<ul style="list-style-type: none"> - All types of naval forces - All warships and ships on government non-commercial service enjoy complete diplomatic immunity from actions of ships of other nationalities - Refrain from boarding of other foreign ships unless on legal grounds circumscribed under UNCLOS III, Part VII, Article 110, Paragraph 1 - Refrain from arrest and detention of other foreign ships 	
Foreign Waters	<ul style="list-style-type: none"> - Naval forces operate in accordance to guidelines specified under UNCLOS III - Naval forces operate beyond that permitted under UNCLOS III subject to sanction by coastal state government 	
Disputed Zones	<ul style="list-style-type: none"> - Low-capability general-purpose naval forces and preferably coastguard units - Where high-capability naval forces have to be deployed for peacetime enforcement of claims or patrol along disputed boundaries, heavy armaments onboard should be covered or removed (in the case of modular fittings) - Refrain from actions that complicate disputes and escalate tensions, including: <ul style="list-style-type: none"> Mining operations except in occupied zones where minefields are clearly marked out well within occupied waters, and other claimants informed of their presence Use of force on civilian shipping (including fishing vessels) Threat of force against other claimants within and near disputed sea zones 	

	<p>Military exercise, especially large-scale live-firing and maneuvers and amphibious assault landing) near or within disputed sea zones</p> <p>Use of force for alteration of territorial status quo (e.g. seizure or unclaimed and occupied territories within disputed sea zones)</p> <p>Deployment of heavy weaponry on occupied but contested maritime territories, such as missiles (probable exception for short-range self-defense types) except in response to such moves or escalatory acts (threat and/or use of force) by other claimants thus justifying anticipatory self-defense measures</p>
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Source: Conceptualized using the following materials: *United Nations Convention on the Law of the Sea III*, 10 December 1982; *Guidelines for Navigation and Overflight in the Exclusive Economic Zone*, EEZ Group 21, Ocean Policy Research Foundation, 16 September 2005, Tokyo, Japan; *Declaration on the Conduct of Parties in the South China Sea*, November 2002; Patrick Howard, "Naval confidence-building measures: a CSCE perspective," in Fieldhouse (ed.), *Security at Sea*, 233-35; J.R.V. Prescott, *The Maritime Political Boundaries of the World* (London, NY: Methuen, 1985), 40-41; O'Connell, *The Influence of Law on Sea Power*; James Cable, "Conflict at sea," *Marine Policy* 9 (Oct 1985); pp. 261-68; Hasjim Djalal, Alexander Yankov and Anthony Bergin, "Draft guidelines for military and intelligence gathering activities in the EEZ and their means and manner of implementation and enforcement," *Marine Policy* 29 (2005), pp. 175-83; Sam Bateman, "Hydrographic surveying in the EEZ: differences and overlaps with marine scientific research," *Marine Policy* 29 (2005), pp. 163-74; Benedicte Sage, "Precautionary Coastal States' Jurisdiction," *Ocean Development & International Law*, Vol. 37, No. 3 (2006), pp. 359-87; Chris H. Bennett, "International Law Still Applies in Mine Warfare," *US Naval Institute Proceedings*, Vol. 125, Issue 3 (March 1999), [online edition].

This set of "guidelines" also serves as a way to ensure that classification of the recorded instances of gunboat diplomacy is done as impartially and with minimum bias as possible.

7.6. A Brief Outline of the Methodology: Documenting and Classifying Incidents at Sea

The earlier discussion proposed an analytical model to analyze how states apply the limited threat or use of naval force for the attainment of foreign policy objectives, based on the argument that even though gunboat diplomacy cannot be eliminated as an enduring feature of international politics, its use can be de-emphasized and calibrated. The geographical, legal, operational, political, and

technical conditions under which gunboat diplomacy can be analyzed as a continuum are established: 1) mode and extent of force applied; 2) type of naval forces employed; and 3) the geographical-legal context.

Similar to Chapters Five and Six, only the ASEAN and Indo-Pacific countries are sampled across the time-span 1980-2014.

Documenting Instances of Gunboat Diplomacy

For the purpose of this study, it is necessary to cover as comprehensively as possible all recorded instances of incidents at sea in order to identify instances of coercive naval diplomacy. An "incident at sea" refers to "action on the high seas by a ship or plane that endangers, or is alleged to endanger, another vessel or aircraft"²⁷¹ that can result from various motives. Incidents comprise dangerous maneuvers that compel naval forces operating in close proximity to take evasive actions; close air surveillance ("buzzing"); simulated attacks, which in times of acute political tensions may provoke armed countermeasures; other forms of naval harassments such as illuminating other vessels' bridges with powerful searchlights; and accidental firing during naval exercises especially in the absence of prior notification and where contending navies observe the other's maneuvers as closely as possible.²⁷²

In this study, incidents at sea are not geographically limited only to the high seas but as wide expanse as possible which includes all maritime zones defined by UNCLOS from territorial waters outwards. All incidents at sea are recorded for each country in chronological order. However, these are restricted only to interactions among diplomatically-recognized member states of the global system and exclude non-recognized states or non-state actors.²⁷³ Adapting the MID methodology, each recorded incident is categorized using the parameters

²⁷¹ Sean M. Lynn-Jones, "A Quiet Success for Arms Control: Preventing Incidents at Sea," in Miller and Van Evera (eds.), *Naval Strategy and National Security*, 361.

²⁷² Ibid, 361-63.

²⁷³ Daniel M. Jones, Stuart A. Bremer and J. David Singer, " Militarized Interstate Disputes, 1816-1992: Rationale, Coding Rules, and Empirical Patterns," *Conflict Management and Peace Science*, Vol. 15, No. 2 (1996), pp. 163-213.

outlined in Table A7.1 in Appendix A7. In conjunction, Table A7.2 in the same appendix outlines the various types of gunboat diplomacy for the purpose of classifying each incident.

Data Sources and Compilation

This study looks at naval incidents by covering a wide pool of open-sources, such as government press releases and news reports. It must be duly acknowledged that the list compiled may not be exhaustive, especially when some of the incidents could have been unreported and classified by government authorities. Some valuable data may probably reside in governmental archives but these are closed to public for reasons of political sensitivity. By amassing a huge quantity of such open-source data over the appreciable time-span 1980-2014, using a standardized methodological protocol for consistency, it is possible to minimize bias in the analyses.

With the exception of the COW Project and MID database on militarized interstate disputes mentioned in Chapter Three, no other dedicated databases that specialize in recording such instances exist. The closest academic example is Cable's seminal work *Gunboat Diplomacy* which detailed a chronology – albeit incomplete – of recorded instances. The last-known third edition of his work was published in 1994, which chronicled instances only up to 1991. This study therefore adapts the research methodological approach of the MID databases and builds on Cable's work to create a database for documenting incidents at sea for each of the sampled country.

Analyzing and Classifying Reported Incidents

Incidents will be analyzed and classified using the following indices: a) mode and extent of force applied; b) type of forces employed; c) legitimacy of force applied; d) geographical scope; and e) zonal categorization as shown in Table 42.

Table 42: Classifying Reported Incidents at Sea

Mode and Extent of Force	Type of Forces Employed	Geographical Scope	Zonal Categorization
Act of War (AW) <u>Lethal Force</u> Definitive (DL) Purposeful (PL) Catalytic (CL) Expressive (EL) <u>Non-lethal Force</u> Definitive (DN) Purposeful (PN) Catalytic (CN) Expressive (EN)	L-type naval (LN) L-type civilian (LC) M-type (M) H-type (H) Unknown (NK)	Immediate Region (IR) Wider Region (WR) Extra-regional (ER)	Disputed Zones (DZ) Exclusive Economic Zone (EEZ) or Continental Shelf (CS) Foreign Waters (FW) High Seas (HS) International Straits (IS) Territorial Waters (TW)

Source: by author

Particularly for the case of type of forces employed, if governmental forces employed are not specified, the coding will be taken as an L-type naval unit. This is separate from the coding "unknown" which applies to reported incidents for which no details are available regarding the exact type of forces involved, for they can be government or even non-state. "Foreign waters" refers to waters under unambiguous national jurisdiction, which includes not just territorial waters (in which states exercise sovereignty under UNCLOS auspices) but also the EEZ or CS waters (where sovereign rights of jurisdiction are exercised).

7.7. Are States More Inclined Towards the Application of Gunboat Diplomacy?

To begin with the analysis, an overall view of the reported instances for all samples is in order. The first question is: are states more inclined towards the application of gunboat diplomacy? The answer lies in the total count of reported incidents, as shown in Table 43 below.

Table 43: Total Count of Reported Incidents at Sea 1980-2014

Indo-Pacific				
	1980-91	1992-2000	2001-11	2012-14
Australia	23	52	151	25
Bangladesh	12	20	7	13
DPRK	18	41	102	55
India	6	33	186	89
Japan	26	90	144	180
New Zealand	2	6	2	0
Pakistan	3	14	149	37
PRC	31	136	194	311
ROK	21	50	207	85
Taiwan	7	45	80	53
ASEAN				
	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	1	7	5
Indonesia	7	44	132	39
Malaysia	16	44	149	36
Myanmar	1	7	19	6
The Philippines	3	85	74	38
Singapore	4	6	3	1
Thailand	3	18	9	12
Vietnam	8	23	24	13

Generally, Indo-Pacific samples trump their ASEAN counterparts in absolute numbers of reported incidents. This difference aside, what can be determined from this tabulation is that the generally upward trend of reported incidents at sea especially over the period 1980-2000 is indicative of the systemic factors that were at play. It has to be pointed out that part of the statistics includes enforcement action taken by states against foreign nationals in waters under their jurisdiction (see [Table A7.3](#) in Appendix 7 for the zonal categorization).

The geopolitical context especially in the immediate post-Cold War 1992-2000 period underpinned the sharp spike in reported incidents compared to the previous 1980-91 period. Increased instances of seizures of foreign fishing vessels in maritime zones (especially EEZs) under national jurisdiction as stipulated by UNCLOS constitute a symptom of the “maritime territorialization” discussed earlier in Chapter

One. This trend continues to rise, especially as the seas become ever so important and given that some of the maritime territorial and boundary disputes have remained unresolved. Fishermen who had operated in “traditional fishing grounds” found themselves apprehended by foreign naval forces on the reason of fishery law enforcement.

However, fishery infringements – actual or perceived – aside, Indo-Pacific generally registered larger numbers of reported incidents also from outstanding disputes that became increasingly militant. This has been the case particularly for the disputes in Northeast Asian waters – the East China Sea (the Senkaku/Diaoyu Islands), Sea of Japan (the Dokdo/Takeshima Islands), Taiwan Strait and the Yellow Sea (the Northern Limit Line). Especially in the 2012-14 period, the situation in the East China Sea worsened following the nationalization of the disputed isles by Japan, resulting in a recurring series of coastguard actions thus contributing to the sharp spike in reported incidents for China and Japan compared to the 2001-11 period.

Comparatively, the reported incidents for ASEAN samples do not register the same patterns of increase especially by the turn of the century. The sharp spike registered in the 1992-2000 period for ASEAN samples is largely attributable to the systemic post-Cold War conditions where outstanding territorial disputes emerged to the fore. But the increase was non-uniform and arguably muted into the 2001-11 period. The only exceptions were Indonesia and Malaysia, which registered the main increases in reported incidents in no small part because of their dispute in the oil-rich western Sulawesi Sea where both countries' naval forces had numerous reported encounters. But for most of the ASEAN samples, the increases were much smaller and for some, even declined.

The case of the Philippines is interesting, which experienced the sharpest post-Cold War increase in the reported incidents because of several key events (especially Mischief Reef in 1995 and 1998) which took place in the South China Sea. The situation for Manila eased somewhat in the 2001-2011 period, in part because of the preoccupation with the internal security issues in the southern Mindanao which thus grabbed the bulk of the military's focus. Into the 2012-14 period, all except the Philippines experienced a sharp decline in the reported incidents.

Besides the seizures of transgressing fishing vessels in waters under their jurisdiction, the reported incidents involving show of military force drastically declined for all except the Philippines. Rising tensions over the South China Sea disputes and generally improved internal security circumstances led to a more externally-oriented Philippine Navy which, together with civilian counterparts such as the Coast Guard, focused more on territorial defense. This was partly motivated by major incidents, chiefly of all the standoff with Chinese forces in the Scarborough Shoal in April 2012. This resulted in an increase in not just sovereignty enforcement by Manila but also "show of force" demonstrations near the disputed areas in conjunction with its American ally.

Therefore, the patterns exhibited in the reported incidents at sea appear generally similar for both sample groups. But from a more nuanced perspective, the application of limited threat and use of naval force ought to be looked at from a different context. Indo-Pacific examples are more militarized compared to those in Southeast Asia. In the latter group, propensities towards gunboat diplomacy can be said to exhibit a trend of *de-emphasis*, especially as some of the disputes are gradually resolved in the recent years thereby resulting in a general reduction of reported incidents, and where there was a corresponding increase in emphasis on diplomacy and other peaceful means of managing and resolving outstanding disputes.

With the exception of the South China Sea, the situation for intra-ASEAN disputes that provide the ideal context of gunboat diplomacy has eased considerably in the more recent years compared to the immediate post-Cold War period. Most importantly, this ought to be also seen in the light of general increase in DPI for the naval armament processes as well as increasing engagements in CSBMs and COMs for ASEAN samples.

7.8. More Assertive and Aggressive? Mode and Extent of Gunboat Diplomacy as an Indicator of Strategic Restraint?

Next, this Chapter takes a broader view of the propensity towards limited threat and use of naval force by examining its modes and extents during application. Because of the sheer volume of numbers (eight categories of mode and extent in all), the figures could not be presented here but in [Table A7.4](#) in Appendix A7.

The majority of the mode and extent of force applied belong to the Purposeful-Nonlethal (PN) category, which relates mainly to enforcement actions without resort to lethal force. PN-type force is necessary for several types of common enforcement actions undertaken by naval forces, especially warning (verbal and visual, escalating up to the use of warning shots not aimed at the target but across the bow or away from it) and successful expulsion of or detention of the transgressing vessels. In most cases, PN relates to seizures of transgressing foreign fishing vessels.

But in the case of Indo-Pacific samples, Northeast Asian countries especially, PN also includes a significant proportion where force is applied not against foreign fishing vessels but also rival naval forces. Japan Coast Guard undertook PN-type actions against marine surveys in Japanese EEZ waters carried out without prior notification by foreign governments (especially Chinese) and particularly in the 2012-14 period, against Chinese coastguard forays in waters surrounding the disputed Senkaku/Diaoyu Islands.²⁷⁴ South Korean naval forces executed recurring PN-type actions against North Korean patrols crossing the contested NLL.²⁷⁵

²⁷⁴ There were numerous instances of such PN-type force being applied by JCG against foreign marine research vessels carrying out unauthorized surveys in Japanese EEZ waters, including those near to the disputed Senkaku/Diaoyu Islands. For example, see: "UPDATE1: Chinese vessels seen sailing near Senkakus for 5th day," *Kyodo News*, October 24, 2012. One of the more recent reported instance can be seen here: "Japanese officials say China vessels conducting research near disputed islands," *BBC Monitoring Asia Pacific*, November 28, 2014.

²⁷⁵ Numerous instances of such PN-type force applied by South Korean patrols against transgressing North Korean vessels have been logged. One of the latest examples can be

As far as nonlethal forms of force is concerned, PN is primarily the furthest mode and extent applied in Southeast Asia. Compared to Indo-Pacific samples, ASEAN samples exhibit less proclivity towards a more assertive, nonlethal type of gunboat diplomacy. Definitive-Nonlethal (DN) force is seldom applied by ASEAN samples compared to their Northeast Asian counterparts especially. DN-type force is designed to present *fait accompli* to the victim, for example ignoring warnings from the rival patrols to desist from certain activities in waters under the latter's jurisdiction thus compelling them to either accept the transgressions or to escalate. As such, DN-type force is potentially more escalatory in nature.

By drawing upon the reported instances where DN-type force is applied one can decipher the propensity towards escalation for individual states. To be certain, ASEAN governments resort to expressive (EN) and purposeful (PN) shows of force to assert their claims in disputed waters but the tendency towards escalation is low. Whenever challenged, the transgressing patrols would most often withdraw without further incident thus contributing to de-escalation or at the very least, prevent the tensions from escalating.

Such examples could be seen in the case of the Malaysian-Singapore standoff in waters surrounding the disputed Pedra Branca prior to the ICJ verdict in May 2008. Even though Malaysian patrols sometimes maneuvered too closely to their Singapore counterparts, they would usually withdraw without further incident.²⁷⁶ The Indonesian-Malaysian naval and aerial encounters near the disputed Ambalat offshore hydrocarbon block represent another interesting example. In February 2007 during one of such incidents, an Indonesian warship drove away a trespassing Malaysian patrol craft backed by an air force plane without further incident. Later in May 2009, a transgressing Malaysian warship withdrew after its Indonesian

seen here: "N. Korean Patrol Ship Approaches NLL," *KBS World News - English News*, November 6, 2014.

²⁷⁶ "Malaysia still intruding into Pedra Branca waters," *Straits Times*, March 1, 2003.

counterpart maneuvered against it. Following which, both sides undertook swift measures to soothe the tension.²⁷⁷

The same comparison also applies to the escalation to lethal force being applied. For all four sub-categories of lethal force – EL, CL, PL and DL – ASEAN samples exhibit lower propensities than those of their Indo-Pacific counterparts. One primary reason has to do with geopolitics. In the case of the Korean Peninsula especially, there has been a more recurring trend of lethal force being applied at sea. Recent years had witnessed such incidents along the contested NLL in the Yellow Sea, where North Korea allegedly sank the ROKN corvette *Cheonan* and shelled Yeonpyeong. But point to note is that even in this intractable flashpoint, instances of lethal force being applied at sea in the more recent decade are lesser than those during the later Cold War years and the 1990s. Even in the case of fishery disputes and in undertaking such enforcement actions, ASEAN samples also exhibited general refrain from use of lethal force (PL-type) in apprehending or repelling transgressing foreign fishermen, even those who violently resisted arrest.

In sum, from the tabulated patterns in [Table A7.3](#), ASEAN samples not only exhibited tendencies towards de-emphasizing the limited threat and use of force at sea but also tend to exercise greater restraint in the mode and extent of force being applied. This can only indicate the intention of controlling and managing the risks which occasional threat and use of naval force may potentially entail. This evidently corresponds to the general propensities established in the findings of Chapter Five towards de-emphasizing the verbal threat of force and advocacy on diplomacy in governing interstate relations, including over disputes. When seen in the context of the naval buildups in Southeast Asia, the de-emphasis on gunboat diplomacy and restraint in the mode and extent of such force being applied should be regarded as a form of stability-inducing measure undertaken by ASEAN samples.

²⁷⁷ The incident was touted the worst of its kind, since the Indonesian warship reportedly had to illuminate its fire control radar on the Malaysian warship so as to force it to withdraw following repeated warnings which were ignored by the latter. Nonetheless, both sides had demonstrated utmost restraint. "RI not to increase naval fleet in Ambalat," *LKBN ANTARA*, May 26, 2009; "KL-Jakarta tensions rekindled at Ambalat," *Straits Times*, May 30, 2009; and "DPM: Navy acts with caution, restraint," *New Straits Times*, June 5, 2009.

7.9. More White than Grey Hulls? Conscious Preferences over the Type of Naval Forces Employed Indicate Strategic Restraint?

The type of forces employed speaks volumes about a state's particular tendency towards enforcing its jurisdictional rights and asserting contested claims at sea. In fact, this bears a direct analytical relationship between the nature of naval armament – the choices of capabilities acquired and force structure development pathways – and strategic behavior. Chapter Four dealt with naval armaments characterized according to their destabilizing potential: least (L), medium (M) and highly (H) destabilizing types. L-type naval forces need to be distinguished along the lines of civilian (LC) and military (LN) types. The assumption here is that in a calibrated exercise of gunboat diplomacy that aims to demonstrate unilateral restraint especially with the purpose of avoiding escalation in times of interstate tensions or crises, more destabilizing armaments ought to be deemphasized.

There is also a caveat to note here, however. The existing literature generally converges upon the point that “white hulls” – vessels of civilian maritime law enforcement agencies – are more stability-inducing compared to “grey hulls” because the former gives a less militaristic impression during the sovereignty enforcement operations. However, not every country can well afford a separate civilian agency for such a purpose. For many, their navies not only have a wartime conventional role but primarily a peacetime constabulary role. Hence, this caveat is important so as to avoid the assumption that just because a particular government uses more of or only “grey hulls” for enforcement roles it necessarily implies an aggressive behavior. Hence, while useful to highlight the role played by civilian maritime law enforcement agencies in the limited threat and use of naval force it is important to also point out that in the absence of such separate agencies, LN-type forces will be the next best alternative.

Table 44 shows the types of forces employed in the reported incidents. In many instances, more than one type of naval forces was employed. The mixture of forces employed is dependent on both operational and political expediencies. For instance, in cases of sovereignty patrols, coastguard or low-capability naval forces

may be backed by a more powerful naval deterrent – in the form of much heavier-armed, larger warships. In most cases, especially those conducted in waters under national jurisdiction, usually only a single type is utilized. But in today's context and the future, inter-agency cooperation will become more common and therefore, various forces from diverse agencies will be utilized in a mix-and-match configuration.

Table 44: Type of Forces Employed in Limited Threat and Use of Naval Force 1980-2014

Indo-Pacific																
	1980-91				1992-2000				2001-11				2012-14			
	LC	LN	M	H	LC	LN	M	H	LC	LN	M	H	LC	LN	M	H
Australia	3	14	8	0	11	29	16	1	81	94	15	0	21	9	4	0
Bangladesh	1	11	0	0	0	19	1	0	1	6	3	0	2	11	0	0
DPRK	0	15	2	5	1	28	12	4	6	90	11	5	7	41	8	11
India	0	2	1	4	20	15	4	1	154	31	11	1	81	9	3	2
Japan	15	10	3	0	75	11	10	0	92	30	29	1	116	49	25	0
New Zealand	0	2	0	0	2	5	0	0	0	2	0	0	0	0	0	0
Pakistan	2	1	0	0	11	2	1	0	138	6	10	1	38	0	0	0
PRC	8	16	11	2	41	75	36	33	79	79	51	45	227	56	51	26
ROK	1	20	1	0	22	27	11	1	120	85	23	16	19	58	39	30
Taiwan	1	6	0	0	22	24	6	2	64	23	5	4	41	19	7	2
ASEAN																
	1980-91				1992-2000				2001-11				2012-14			
	LC	LN	M	H	LC	LN	M	H	LC	LN	M	H	LC	LN	M	H
Brunei Darussalam	0	0	0	0	0	1	0	0	3	3	1	0	0	6	0	0
Indonesia	2	5	0	0	2	52	9	3	31	89	24	2	16	22	8	2
Malaysia	4	10	3	0	18	24	4	0	99	49	7	0	27	8	1	0
Myanmar	0	1	0	0	1	6	0	0	0	17	4	0	1	5	0	0
The Philippines	0	3	0	0	11	73	5	0	34	41	4	1	20	20	7	7
Singapore	3	1	0	0	4	2	0	0	2	1	1	0	0	1	0	0
Thailand	0	3	1	0	1	17	3	0	2	7	2	0	4	11	0	0
Vietnam	4	1	3	0	5	13	6	0	10	13	1	0	9	3	2	0

From the tabulated figures it is evident that the emphasis for all samples has revolved around low-capability forces, both LC- and LN-types. In fact, generally to say, there is an increasing trend exhibited in the use of LC-type forces. For some of

the samples, especially China, LN-type forces appear to be giving way to LC-type equivalents, which means a growing role of civilian maritime law enforcement agencies in the employment of gunboat diplomacy. Smaller, less obvious “white substitute grey” patterns can be spotted in the other samples, such as the case of Vietnam.

It would appear that the emergence of civilian agencies, particularly for the purpose of enforcing sovereignty in disputed waters, may not necessarily be a positive affair. Some may argue that the availability of such forces can actually incentivize the exercise of coercion at sea, since LC-type forces literally raises the threshold of escalation. In other words, with “white hulls” the governments may choose to employ them for gunboat diplomacy with reasonably similar levels of success as deploying the low-capability “grey hulls” yet without appearing militaristic. At the same time, this gives wider berth of risk control and management. The latter point is particularly useful in view of the enduring nature of limited threat and use of naval force.

Such general patterns common to both Indo-Pacific and ASEAN samples aside, there are also obvious differences in the propensities to use more destabilizing forces. M-type forces were also increasingly used by ASEAN samples, but that propensity is relatively more muted compared to their Indo-Pacific counterparts. The disparity is even more pronounced in the case of H-type forces.

The Philippines appears to stand out amongst the ASEAN samples where H-type forces being utilized in past reported incidents are concerned. The Philippine Navy does not possess any kinetic long-range offensive capabilities in the form of ASCMs (M-type) unlike the case of all other ASEAN samples. The only offensive capability that is considered highly destabilizing is the Philippine Marine Corps, which is one of the few mechanized amphibious assault formations in Southeast Asia.²⁷⁸ The spike

²⁷⁸ In fact, the Philippine case is an interesting anomaly. The Philippine Navy force structure is divided into two extremes: almost exclusively L-type forces in the form of low-capability, gun-armed patrol vessels on one end of the spectrum, separated by a void of M-type capabilities because of the lack of kinetic long-range offensive armaments such as missile-equipped platforms, from the other highest extreme end that is the Philippine Marine Corps.

in H-type forces being utilized in the 2012-14 period is in no small part attributed to events in the South China Sea. Filipino marines and their American counterparts have in recent years ramped up "show of force" assault landing exercises involving highly-mobile mechanized elements in areas close to the disputed areas ever since the Scarborough Shoal standoff in April 2012. The annual Cooperation Afloat Readiness and Training (CARAT) exercise held jointly between the Philippine and US navies in June 2013 for example was staged in waters off the coast of Zambales, some 20nm from the Scarborough Shoal. Despite attempts by Philippine authorities to deny that the exercise was linked to the shoal dispute with China, it is hard to overlook the coincidence between the exercise and the April 2012 standoff, especially since Beijing called for actions "beneficial for maintaining peace and stability in the region," in oblique reference to the exercise.²⁷⁹

The findings here suggest that the acquisition of destabilizing capabilities do not necessarily translate into more aggressive strategic behavior as exhibited in the propensity towards employing gunboat diplomacy. They also raise the question of whether such capabilities are destabilizing in the first place. Low-capability LC- and LN-type assets continue to be the primary forces employed in such instances. ASEAN samples which have their fair share of inducting increasingly offensive and more destabilizing naval armaments register lower propensities towards the use of M- and H-type forces compared to their Indo-Pacific counterparts.

But the latter branch, despite being mechanized, had until recent years been largely a counter-insurgency force active in the southern Mindanao. Nonetheless, the availability of such a rapid deployment force, backed by AALS capacities, have implications for the South China Sea disputes.

²⁷⁹ Jaime Laude, "Phl, US troops to hold drills near Panatag," *The Philippine Star*, June 19, 2013; Jaime Laude, "Phl, US naval exercises to include live fire drills," *The Philippine Star*, June 21, 2013; "BRP Del Pilar to join US-PH war games near Panatag," *Inquirer.net*, June 26, 2013; Jaime Laude, "Amid Phl-US war games, China calls for peace," *The Philippine Star*, June 26, 2013; Jason Gutierrez, "Philippines, US hold war games near China flashpoint reef," *Agence France Presse*, June 27, 2013; Hu Qingyun, "Philippine-US drill intensifies tensions," *Global Times*, June 28, 2013.

The only plausible explanation is the desire to minimize the use of such capabilities that may unnecessarily engender hostility, escalate tensions and in the long run, making the environment uncondusive for interstate relations. This self-restraint exhibited in Southeast Asia may even be motivated by the very existence of such destabilizing armaments; i.e. that with the acquisition of such capabilities that may potentially provoke misperception, it will be imprudent to resort to gunboat diplomacy and if such recourse has to be exercised, the employment of such destabilizing assets may potentially create grounds for instability.

7.10. The Best Test Case? Employment of Gunboat Diplomacy in Disputed Zones, Foreign Waters and during Interstate Tensions

The earlier discussion constitutes a broad analysis of the employment of limited threat and use of naval force, which takes place in all contexts including enforcement actions against foreign nationals in one's own jurisdictional waters. In such latter case especially, the diplomatic fallout is less significant. Fishery enforcement is one such example. Jakarta has in the recent times scuttled foreign fishing vessels as part of the broader scheme to deter IUU fishing in Indonesian waters. Such measures provoked consternation amongst the foreign governments involved. However, within Indonesia's territorial waters the political effects became much more muted.

But the consequences ought to be starkly different if foreign fishermen are apprehended in waters that are not unambiguously under one's national jurisdiction but are instead contested by others. In such cases, the diplomatic consequences do not simply relate to the treatment meted out to one's fishermen by the foreign government in question but also, the tricky problem regarding justification of arrest and detention over the dispute of sovereignty and jurisdictional rights. They may have a negative effect in raising already simmering interstate tensions. Besides such cases of gunboat diplomacy being exercised in disputed maritime zones, other geopolitical circumstances where the exercise of limited threat and use of naval force will more likely than not entail a diplomatic fallout concern extra-territorial and jurisdictional actions taking place in foreign waters as

well as during times of interstate tensions in the terrestrial, not necessarily maritime, context.

As such, it can be argued that the propensity to use gunboat diplomacy, the mode and extent of force applied as well as the type of forces employed in such contexts together constitute the best test case of strategic behavior. It goes beyond any self-proclaimed peaceful façade government statements often like to portray. Instances of gunboat diplomacy taking place in the context of geopolitical tensions ought to be more indicative of the concerned parties' attitude towards how conflicts should be managed if unresolved, and consequently shapes perceptions that translates into tangible policies including those of enemy-imaging, threat-labelling and associated armament choices. Tables A7.5 to A7.8 in Appendix A7 characterize the reported incidents of gunboat diplomacy being employed in the three abovementioned contexts: disputed zones; foreign waters and interstate tensions in each of the four time-spans analyzed.

Total Count of Reported Incidents

Generally conforming to the overall trends earlier established, sharp increases in the use of gunboat diplomacy were registered in the 1992-2000 period for all samples. But in the 2001-11 period onwards, ASEAN samples on the whole registered relatively stable patterns with only few exceptions (the case of Indonesia and Malaysia especially) whereas Indo-Pacific samples, particularly those Northeast Asia and to a lesser extent South Asia, experiencing general growth in the reported incidents.

The last three years have been most instructive of all. During the 2012-14 period there has been a general state of decline in the use of gunboat diplomacy in Southeast Asia whereas the situation has been the reverse for Northeast Asia, most noticeably in the East China Sea concerning China and Japan. Again, differences in the geopolitical context play no small role. While the situation has become more stable in the Taiwan Strait and the Sea of Japan, the conditions worsened in the Korean Peninsula and the East China Sea – which can be rightly deemed as the hotbed for rampant use of gunboat diplomacy for the attainment of political objectives.

By comparison, the situation is more stable in Southeast Asia. The number of reported incidents declined sharply for both Indonesia and Malaysia between the periods of 2001-11 and 2012-14 as tensions eased in the Sulawesi Sea. But intra-ASEAN disputes aside, several ASEAN samples remain claimants in the South China Sea disputes but they display less proclivities towards gunboat diplomacy compared to their Northeast Asian counterparts.

Mode and Extent of Force Applied

The mode and extent of force applied is also different between ASEAN and Indo-Pacific samples. The predominant furthest mode and extent where force is applied in Southeast Asia has been PN-type, relating to enforcement actions against transgressions. Escalation towards DN-type force registers generally-consistent low figures for ASEAN samples across the 1980-2014 period.

Resort to lethal use of force is even more muted in the case of ASEAN vis-à-vis their Indo-Pacific counterparts. In fact, the 2012-14 period witnesses less PN-type or higher modes and extent of force compared to the previous. Instead, there appears to be a higher propensity towards the least destabilizing form of gunboat diplomacy – EN-type force – largely concerned with “show of force” through presence in the disputed zones or conduct of military exercises (especially the case of the Philippines) in connection with interstate disputes.

By contrast, Northeast Asia has seen growing propensities towards more destabilizing, even if not lethal, force being applied. More assertive forms of gunboat diplomacy in this respect – such as Chinese coastguard entry into the territorial waters surrounding the Senkaku/Diaoyu Islands despite warnings by the standing Japanese patrols; as well as incidents involving such provocative naval actions as illuminating the rival warship with fire control radars or close-proximity aerial encounters over or near disputed zones – possess higher escalatory potential that can cross into the use of lethal force if mismanaged. The alleged illumination of a JMSDF destroyer by a PLAN frigate's fire control radar in the East China Sea in January 2013 was one such example. The incident resulted in nearly two months of

back-and-forth war of words between Beijing and Tokyo amidst already tense relationship over the disputed isles.²⁸⁰

Presenting fait accompli at sea to rivals has been a more common occurrence in the case of Northeast Asian samples. In short, they exhibit greater propensities towards aggressive and assertive strategic behavior compared to their ASEAN counterparts. Seen in this context, the presence of destabilizing naval armaments in Northeast Asia does not altogether promote stability.

Type of Naval Forces Employed

Compared to their ASEAN counterparts, Indo-Pacific samples generally exhibit greater tendencies to rely on civilian maritime law enforcement agencies in the contexts of disputed zones, foreign waters and interstate tensions. The workhorse most often employed in such cases in Southeast Asia has been LN-type – low-capability naval – assets. However, notwithstanding this, escalation to the use of more destabilizing naval forces is noticeably more prominent in the Indo-Pacific samples than their ASEAN counterparts. In fact, M-type forces would be deemed as the primary furthest extent ASEAN samples would go for the predominant proportion of reported incidents.

Employment of H-type forces are minimized in Southeast Asia, notwithstanding the recent acquisition of such systems albeit in low quantities in the region, compared to the case in Northeast Asia especially. As earlier mentioned, the case of the Philippines had been one of the employment of such H-type forces as the marine

²⁸⁰ Daisuke Yamamoto, "UPDATE3: Chinese warship directs 'fire control' radar at Japan MSDF destroyer," *Kyodo News*, February 5, 2013; "Refiling: UPDATE3: Abe slams China over radar on Japan ship," *Kyodo News*, February 6, 2013; "Japan sees China radar-use as threat of force under UN rule," *Kyodo News*, February 7, 2013; "Chinese envoy asks Japan to stop 'irresponsible words' on radar incident," *BBC Monitoring Newsfile*, February 19, 2013; "Japanese radar targeting claims false: FM spokeswoman," *Xinhua News Agency*, February 28, 2013; "Chinese officials admit to locking radar on Japanese destroyer," *Kyodo News*, March 18, 2013; "PLA Navy refutes reports of radar lock on Japanese destroyer," *Xinhua News Agency*, March 19, 2013.

corps for “show of force” exercises in national waters of the Palawan province close to the disputed zones, but no direct participation in coercive action against rival forces in the disputed zones per se.

Indonesia minimized the use of H-type forces throughout the 1980-2014 period. In any case, instances of such use had been so tiny even during the 1992-2000 period when the KORMAR (Korps Marinir, Indonesia's Marine Corps) was utilized in “show of force” exercises in the Natuna Islands close to the South China Sea. The purchase of supersonic Yakhont ASCM installed on one of the six *Ahmad Yani*-class frigates did not incentivize its use either. The most recent example has been the brief period of bilateral tensions in January 2014, following revelations of Australian intrusions into Indonesian waters under the auspices of Operation Sovereign Borders in which Canberra sought to repel incoming foreign asylum-seeking boats. To deter similar incursions, Jakarta amassed its naval forces along the Australian-Indonesian maritime boundary but refrained from deploying more powerful assets ostensibly out of concern that it might appear unnecessarily provocative. KRI *Oswald Siahaan*, the sole Yakhont-outfitted frigate in the Indonesian Navy, was not deployed.²⁸¹

7.11. Summary of Findings

This Chapter represents the final strand of analysis of how naval armaments influence strategic behavior. The exercise of limited threat and use of naval force constitutes an ideal test case in this respect compared to looking at the preferences of acquisitions and force development pathways; the nature of national policy discourses; and even the propensities towards CSBMs and COMs.

²⁸¹ Some may attribute this to issues boiling down to the financial expenses involved or that the warships might not have been operational for lack of maintenance or fuel. Nobody will ever know the exact reason. But following the deployment of a frigate to complement the patrol craft in late January, Jakarta did not deploy any more such M- or H-type forces. Richard Shears, “Indonesia sends gunboats and a frigate to patrol its coast after Australian ships illegally enter their waters to turn back asylum seekers,” *Mail Online*, January 17, 2014; Bagus BT Saragih, “Navy strengthens patrols at border with Australia,” *The Jakarta Post*, January 22, 2014.

How naval armaments are being utilized in the context of interstate relations – particularly under the circumstances of outstanding territorial and sovereignty disputes, historical animosities and contemporary disagreement regarding extra-territorial jurisdictional rights in foreign waters – reflects policy elites' attitudes. One may not want to read too much into the policy statements put out from time to time for the purpose of "assurance" but assumptions about the other's strategic behavior can be best ascertained through observations about how it utilizes the wherewithal. And this is the reason why it is so crucial to look at patterns of the use of limited threat and use of naval force. By chronologically cataloguing the reported incidents at sea one can draw discernible patterns in this regard.

Firstly, the findings validated the continued attraction of gunboat diplomacy as a tool for the furtherance of national interests, even at the expense of rivals. Asian countries are not alone in this regard; gunboat diplomacy has become resurgent in Europe where geopolitical tensions are brewing. As long as the current Westphalian arrangement of international politics persists notwithstanding the proliferation and growing salience of liberal international institutions, as long as states under such circumstances continue to have conflictual interests from time to time, and as long as they possess the requisite naval instrument, the use of gunboat diplomacy cannot be erased as an enduring feature of international politics.

However, beyond looking at the recurrences of gunboat diplomacy, this study endeavors to make a more nuanced analysis of such a phenomenon. On the fundamental assumption that limited threat and use of naval force will always realistically remain part of nation-states' foreign policy toolkit, the exercise of gunboat diplomacy, if ever deemed expedient and necessary, can still be de-emphasized and calibrated if the desire is to manage perceptions and control risks.

By looking at the exercise of gunboat diplomacy from a pragmatic instead of utopian standpoint, it serves greater utility for understanding how armaments influence strategic behavior. This study does not undertake a purely qualitative analysis in this regard. The qualitative analysis was conducted in the process of categorizing and coding each reported incident at sea. To properly decipher the

influence of naval armaments on strategic behavior, it would be necessary to present the data in a systemic, as less biased as possible, quantitative manner just like the previous analyses.

In so presenting the findings, one can compare and contrast the broader and narrower characteristics of the application of gunboat diplomacy along three aspects: first, the mode and extent of force applied; the type of naval forces employed; and finally, the geographical-legal dimension. On the broader level:

- The general increase in reported instances of gunboat diplomacy can be attributed to systemic international conditions common to all samples. But differing geopolitical contexts of Indo-Pacific samples – the Northeast and South Asians – set their emphasis on gunboat diplomacy apart from that of ASEAN samples. For the latter, the total count of incidents either stabilized or declined from 2001-11 onwards, indicating a general propensity towards de-emphasizing the limited threat and use of naval force
- It is not merely about the general de-emphasis on gunboat diplomacy in Southeast Asia but most importantly, evident refrain from more assertive and aggressive forms of limited threat and use of naval force. Instances where lethal force was applied were comparatively more muted amongst ASEAN samples than their Indo-Pacific counterparts. In the realm of nonlethal force, the tendency has been to refrain from actions that can be deemed escalatory and destabilizing. PN-type force is the predominant action undertaken in most instances. DN-type force, which is the most destabilizing especially in the context of interstate maritime disputes, is less observed in Southeast Asia than in Northeast and South Asian sub-regions. Such instances, along with the resort to lethal force, were most prevalent in 1992-2000 but decreasingly so in subsequent periods
- Most instances of gunboat diplomacy involved both civilian and military low-capability forces. But unlike the case of their Indo-Pacific counterparts, the use of more destabilizing naval armaments is much less prevalent amongst ASEAN samples. The furthest option ASEAN samples appear to pursue for most cases had been M-type instead of H-type forces which entail higher escalatory risks. There is also an evident trend towards increasingly involving

the use of civilian maritime law enforcement agencies in lieu of regular naval forces. But this trend is more prevalent in Northeast Asia.

The narrower perspective examines reported instances of gunboat diplomacy in the most relevant contexts – disputed maritime zones; extra-territorial and jurisdictional actions undertaken in foreign waters; and also, in times of general interstate tensions over contentious terrestrial issues.

- The spike in reported incidents took place in 1992-2000, again because of mainly systemic factors at play concerning disagreements over territorial and jurisdictional rights over overlapping waters or contested maritime territories. This was a common pattern for both ASEAN and Indo-Pacific samples. But from 2001-11 onwards, ASEAN samples generally registered a decline in the reported instances, implying a de-emphasis on limited threat and use of force in times of crises
- Propensities regarding the mode and extent of force applied in these contexts largely conformed to the broader findings. ASEAN samples exhibit greater propensities towards nonlethal while restraining lethal force. The primary mode and extent had been PN-type, but in 2012-14 even this type of force becomes less emphasized. Instead, greater emphasis has been placed on the least destabilizing forms of gunboat diplomacy, especially those involving just "show of force" yet the risks being more easily managed and controlled. On the whole, ASEAN samples display lower tendencies towards more assertive and aggressive application of force
- Unlike their Indo-Pacific counterparts, ASEAN samples generally rely more on LN-type naval forces (LN) compared to civilian maritime law enforcement agencies (LC). Both sample groups generally display similar patterns in terms of the emphasis on LN- and LC-type forces for the exercise of gunboat diplomacy. However, going up the ladder of force options, the difference between them becomes more evident. ASEAN samples de-emphasize the employment of highly-destabilizing capabilities for the exercise of gunboat diplomacy

What this Chapter shows is that naval buildup in Southeast Asia is not necessarily destabilizing, contrary to what the "conventional argument" tends to posit. It may appear from superficial examination that the total number of incidents bears a direct relationship with the increasing destabilizing potential of the samples' naval buildups. But there is in fact no direct causal relationship between naval modernization and propensity to threaten or use force at sea. Despite their acquisitions of destabilizing naval armaments, ASEAN samples de-emphasize the limited threat and use of naval force, demonstrate restraint in the mode and extent of force being applied as well as the type of naval forces employed. This de-emphasis and calibration of should not be regarded as a mere statistical coincidence but a deliberate policy choice. Findings in this Chapter further validate the observations made in Chapters Five and Six, especially the ASEAN samples' tendency to refrain from verbal threat of force, their advocacies for diplomacy and interstate cooperation, and evident expansion of their engagement in CSBMs and COMs. The stability-inducing behavior exhibited in their application of the limited threat and use of naval force stands in contrast to the general proclivities towards acquiring supposedly destabilizing naval armaments.

CHAPTER EIGHT: SUMMARY AND CONCLUSIONS

Grounds for Optimism? Naval Armament Does Not Necessarily Result in Destabilizing Strategic Behavior

8.1. What, Why and So What? More Questions Left Unaddressed?

Right from the onset, this study sought to break away from the descriptive characteristic of existing scholarship on the development of ASEAN naval forces. While acknowledging that naval forces are by nature versatile instruments of statecraft, it appears that one ought to seek answers to more than just addressing the “what” and “why” questions. One cannot criticize this state of affairs, however. National motivations driving naval armament are diverse and complex. Suffice to say, various interactive, semi-interactive and non-interactive factors play certain roles one way or another, yet never remain static as the contexts and circumstances faced by the governments in question evolve with time.

Simply rehashing the “what” and “why” questions would therefore not add value to the existing scholarship. Rather, the key question to ask is: so what? Would it not be more fruitful – from both academic and policy perspectives – to examine the consequences of naval armament instead? Naval forces are certainly versatile instruments of statecraft, but the real question is about the consequences of investing in them. The existing scholarship did attempt to offer treatment to this problematique, but it is not without problems. Firstly, the question of “so what” always serves as secondary to their “what” and “why” counterparts, perhaps more of an afterthought in the analyses than anything else. The most commonly invoked “conventional argument” can be dissected as such:

- 1) Using the existing definitions in arms-racing theory, ASEAN arms acquisition processes cannot be characterized as “race” but competition at the most;
- 2) Armament may not be a matter of concern now but may become potentially destabilizing if strategic intentions change in response to evolving domestic and external circumstances;
- 3) Under the conditions in (2), arms competition can possibly escalate into a race especially in the context of interstate crises;

- 4) The regional architecture that seeks to promote economic and political interdependence possesses dubious utility in ensuring that states play by the norms and rules in their conduct of interstate relations;
- 5) Certain armaments which contribute to "reach", surprise, opacity, uncertainty and miscalculation can potentially lead to accidental or inadvertent clashes, which may thereby result in the most drastic, unimaginable outcome of war.

These assumptions are essentially derived from offense-defense theory, namely that when the offense-defense balance favors the offense, states tend to adopt aggressive strategies including expansionism and confrontational diplomacy. Arms races become more likely since states will have to invest more in military capabilities to match actual or perceived adversaries' offensive capabilities. War also becomes more likely as the result of potential destabilizing arms-tensions spirals. One of the primary assumptions in this approach is that naval forces, because of their versatility and dual-functionality, are offensive in nature and therefore liable to raise the specter of armed conflict, inadvertent or otherwise. Yet this assumption like many others which underpin the "conventional argument", needs to be looked at in perspective. For example, the generally-held assumption that offense-balance distinction is difficult to attain ought to be looked at in perspective because a weapon system attains an offensive nature from its inherent technical characteristics but is not necessarily destabilizing depending on its mode of deployment.

Therefore, the neither optimistic nor pessimistic "conventional argument" does not truly help in better understanding the consequences of naval modernization in Southeast Asia. At worst, this conclusion seems to imply that naval armament is a process that is akin to, bluntly put, a time bomb waiting to explode anytime. Fortuitously, however, there is the Positive School which counters this "conventional argument" by proposing that naval forces are essentially "stabilizing" instead of destabilizing. This study therefore proposes a heuristic approach to rethink the consequences of naval modernization in the region.

8.2. The Fundamental Assumption: Security Dilemmas are Not Inevitable

To properly address the question about the consequences of naval modernization, it is necessary to target the origins of existing assumptions. The existing scholarship widely assumes that states are automatically drawn into and entangled by a security dilemma. However, the contrary can hold true as well: states may not necessarily view, *by choice*, one another's defensive buildups as necessarily motivated by strategic ill intent. Instead, arms buildups may even be viewed as beneficial. States may be aware of risks the security dilemma entails and thereby *consciously* seeks to avoid being drawn into or entangled by one. Faced with the unabated naval armament processes, virtually zero prospects of negotiated structural arms control measures, and the less-than-perfect record of existing regional architecture in promoting economic and political interdependence, individual states have to undertake measures to secure their own national interests.

Yet it would be overly-simplistic to think of national interests and self-help as merely one of relentless accumulation of defense capabilities. Faced with strategic uncertainties, hedging can still be judicious and prudent to avoid provoking misperceptions by others. States can exercise unilateral restraint even if negotiated arms control is not possible to attain. At the most basic, unilateral arms control restraint is not anything new either. Notwithstanding criticisms of the concept of non-provocative defense – which is essentially a concept revolving around unilateral arms control measures – individual states do practise it in varying forms and extents. ASEAN countries are no exceptions. The existing policy pronouncements and documents within the ASEAN discourses show that member states appear to subscribe to normative elements of unilateral restraint. This is the case even if such norms are not mandatory or uniformly adopted throughout the region. Nevertheless, they provide the impetus and conceptual basis for this study to examine the influence of naval armament on strategic behavior.

It is necessary to revisit the hypotheses earlier put forth in this study:

Hypothesis #1 States may discern the destabilizing potential of naval armaments and exercise unilateral naval arms control

Hypothesis #2 States may moderate their policy discourses especially during interstate crises

Hypothesis #3 States may intensify their engagements in confidence- and security-building as well as cooperative measures

Hypothesis #4 States may de-emphasize and calibrate the limited threat and use of naval force

This study sets out to validate these hypotheses that form the strands of analysis of the influence of naval armament on strategic behavior, drawing a comparison between ASEAN samples and their Indo-Pacific counterparts. Northern European samples were utilized for Hypothesis #1 because of certain similarities they exhibit vis-à-vis their ASEAN counterparts in force structure development. The study looks at a time-span from 1980 to 2014, divided into four distinct periods each with its unique geopolitical context. The findings can be summarized in the following sections.

8.3. Conclusion #1: States May Discern the Destabilizing Potential of Naval Armaments and Exercise Unilateral Naval Arms Control

Chapter Four examines the influence of naval armament on the samples' strategic preference of the types of naval armaments acquired and their force structure development pathways.

It is observed that generally, ASEAN and Indo-Pacific samples demonstrate the expansion of naval forces whereas their Northern European counterparts experience the opposite trends since the end of the Cold War. However, unlike Northern European and Indo-Pacific samples, ASEAN naval forces experience consistent growth primarily in the area of minor surface combat and patrol forces. The expansion in aviation forces and major surface combatants is relatively consistent with patterns seen in Northern Europe. But on the whole, ASEAN naval forces do exhibit similar force composition patterns as their Northern European

counterparts; with the predominant composition being minor surface combat and patrol forces, followed by aviation forces and amphibious assault landing vessels. Offensive force projection assets such as submarines and major surface combatants constitute a very minor force composition over the period of 1980-2014. This reflects a certain preference towards a sea denial and defensive sea control posture.

In this study, most of the samples exhibit increase in the destabilizing potential for their overall aggregate force structures. ASEAN naval forces are not unique in this respect. Even Northern Europe, which remains in the process of general military forces cutbacks until the recent Ukraine crisis, is no exception. This can only be attributed to pressures from evolving changes in the general military-technological dimension that affects naval forces worldwide. One area especially highlighted is ASCM; long-range derivatives have emerged as the mainstay “offensive” armament on board modern warships built in the post-Cold War, compared to the much shorter-ranged predecessors which found widespread service during the Cold War era. Given evolving systemic geopolitical and technological circumstances, the induction of increasingly long-range offensive naval armaments becomes more of a technical-operational imperative than a political one. It would be misleading to say the least if one concludes that the induction of long-range ASCM is a reflection of malign strategic intent. This study went further to examine not just these general patterns but destabilizing potential in the specific areas of force composition and force categories.

ASEAN naval forces exhibit a particular preference in procurement and force structure development pathways. As the research here has shown, ASEAN naval forces demonstrate a preference for L-type (Least Destabilizing) and M-type (Medium Destabilizing) assets, in that order of priority. M-type assets are gaining in importance primarily because of the general military-technological changes earlier discussed, such as the increasingly availability and more widespread proliferation of long-range ASCM. ASEAN naval forces demonstrate a unilateral restraint; unlike their Northern European and Indo-Pacific counterparts, ASEAN naval forces have acquired much smaller quantities of H-type (Highly Destabilizing) assets. This is attested by their very low percentages vis-à-vis L- and M-type assets in their

aggregate force structures. H-type percentages registered for ASEAN naval forces are generally lower than that of the other two sample groups.

Where H-type assets are concerned, all three sample groups exhibit similar approaches in select force categories. The first force category that registers the most significant DPI returns is aviation forces, followed by major surface combatants and submarines. If one compares all sample groups in terms of intensity of growth in H-type assets, ASEAN naval forces lagged behind their Northern European and Indo-Pacific counterparts. These two latter groups witnessed stronger patterns of proliferation of such H-type capabilities as supersonic ASCM and LACM which are the prime movers behind the more destabilizing nature of their assets. In other words, the low-baseline induction of highly-destabilizing naval armaments in Southeast Asia can only reflect a deliberately judicious and cautious “stability inducing” endeavor by ASEAN governments concerned about the risks of provoking undue misperceptions, suspicions and potential counter-actions by their neighbours.

8.4. Conclusion #2: States May Moderate their Policy Discourses Especially during Interstate Crises

Chapter Five examines how naval armament influences policy discourses. Through the content analysis approach, it analyzes policy discourses from seven discourse tendencies that reflect strategic behavior, namely: threat-labelling; threat-denial; threat-obfuscation; defense posture; threat of force; emphasis on diplomacy to govern interstate relations especially in the context of disputes; and finally, emphasis on interstate cooperation to tackle common security challenges.

The findings show that compared to their Indo-Pacific counterparts, generally ASEAN samples exhibit more restraint especially in the case for threat-labelling against other states. At the same time, they also exhibit greater propensity towards threat-denial. When seen in the context that Southeast Asia does have its own fair share of contentious intra-regional issues, this restraint does stand out vis-à-vis discourses from their Northeast and South Asian counterparts. The findings also show that evidently, ASEAN governments regard Southeast Asia as relatively stable

compared to the other two “more war-prone” sub-regions. There is consequently less urge and less justification to openly identify one another as a security concern or threat. Less vocal ASEAN member states are keen to avoid provoking misperceptions by not just avoiding threat-labelling altogether but even sought to deny the existence of threats posed by other countries. Threat-obfuscation, by raising the specter of “strategic uncertainty”, is therefore an alternative avenue to express such sentiments. In the context of a complex security milieu fraught with multiple external and internal challenges especially in the post-2001 era, threat-obfuscation offers an opportune justification to hedge.

What is also noteworthy in the findings is the less prevalent tendencies amongst ASEAN samples to assure one another about their defense policies and to warn about the risks of arms-racing. The generally lower frequency of such discourses registered for ASEAN samples appears to reflect their sense of comfort with one another's defense preparations. When viewed in the backdrop of a relatively stable Southeast Asian security milieu, they perceive no need to hype up such intra-regional armament processes. They even sought to downplay the hype (especially from the media) about the existence of arms-racing. Two plausible reasons may explain this phenomenon. First, ASEAN states do not wish to raise the specter of arms-racing because that will be unduly perceived by others as alarmist, which may thereby create misunderstanding. Second, ASEAN states genuinely view one another's defense preparations as legitimate, even to the extent of regarding them as beneficial to regional security.

However, in validating Hypothesis #2, arguably the most definitive discourse tendency that makes ASEAN samples stand out compared to their Indo-Pacific counterparts is the stark contrast regarding the issuance of verbal threat of force. Not only do ASEAN states tend to emphasize the non-use of force and diplomatic solutions to address interstate problems, they altogether avoided making inflammatory rhetoric that puts forth such threats. Issuing verbal threat of force is not only unconstructive where it comes to addressing problems but will also unnecessarily create long-term strategic implications to a generally stable Southeast Asia. Unless necessary for the purpose of deterring the other party from taking action detrimental to their security, ASEAN states tend to avoid such

communication as best as they can. This constitutes nothing short of a conscious effort.

Finally, the findings show that both ASEAN and Indo-Pacific counterparts appear to actively advocate not just diplomacy as a preferred means to govern interstate relations in times of peace and crises, but also interstate security cooperation, including open expression of their willingness to play enhanced regional and global security roles. These tendencies coincide with a generally evolved security milieu. The persistence of interstate disputes alongside the rising salience of unconventional security challenges give more grounds for concord and cooperation. Not just ASEAN, but Indo-Pacific samples are championing for diplomacy and security cooperation to deal with this complex multitude of security challenges. And as findings in Chapter Six show, these samples truly attempted to translate such advocacies into real actions through the intensified engagement in confidence-building and cooperative measures across the same time-span of analysis.

But seen in its entirety, the general restraint in threat-labelling; tendency towards threat-denial and obfuscation; emphasis on unconventional threats; refrain from verbal threat of force while advocating diplomacy and interstate security cooperation scarcely reflect any aggressive strategic behavior from ASEAN samples which are each engaging in varying extents of naval armament processes. What is observed here is rather a general propensity of ASEAN states towards the avoidance of misperceptions, misunderstanding and conflict. While Northeast and South Asian samples traditionally displayed greater tendencies towards threat-labelling and threat of force, the same cannot be said of their ASEAN counterparts. Such restraint ought to be regarded as not an outcome by chance but a deliberate policy option being exercised.

8.5. Conclusion #3: States May Intensify Their Engagements in Confidence- and Security-Building as well as Cooperative Measures

Chapter Six sought to validate not just Hypothesis #3 but in part, also the findings made in the previous Chapter Five where it comes to advocacies for diplomacy

and security cooperation. The analysis was bifurcated along two distinct strands of diplomacy and cooperation. The first was the analysis on trends of participation in CSBMs, regarded as a form of operational arms control that encompass declaratory, transparency and constraint measures with the main purpose of assurance and minimizing the risk of armed conflict. The other was COMs that encompass practical security cooperation with the main purpose of addressing common security challenges, or to promote military interoperability.

In this respect, CSBMs carry the primary goal of confidence-building, even if certain such initiatives do have secondary aims of practical security cooperation. COMs on the other hand have the primary goal of promoting practical security cooperation, such as through policy exchanges, resource pooling, force coordination and interoperability, as well as embarking on legal or political means to resolve disputes, to cope with common security challenges. COMs may have a secondary confidence-building role. This distinction is necessary because each of these two sets of activities encompasses different nature of activities and policy outcomes. When seen in the context of increasingly salient inter-agency cooperation, CSBMs and COMs provide better analytical appeal over the simpler defense diplomacy.

On the general level, findings in this study show that on the whole, there is a positive, upward trend in CSBMs and COMs being initiated over time as seen in the generally increasing total numbers of new activities being proposed, agreed upon and implemented. This result corresponds with similar patterns seen in the advocacies for diplomacy and security cooperation. At the same time, these increases run parallel with the general increase in the destabilizing potential of naval armament over the same time-span. From the geographical perspective, sampled states not only continue to establish new initiatives within their immediate neighborhoods, but they also exhibit an outward orientation shown in greater levels of involvement in CSBMs and COMs in the wider Indo-Pacific region and extra-regionally.

This study posits that each of the three aforementioned types of CSBMs can be categorized according to the order of ambition and difficulty based on the level of commitment and extent of intrusiveness. The easiest would be declaratory

measures, followed by transparency and then, the most difficult being constraint measures. All samples are shown in this study to exhibit general proclivities towards CSBMs. Not only that, findings show that the samples also attempt to not just keep up, but also step up, CSBM efforts alongside the pace of their naval armament processes. From declaratory measures, they graduated towards transparency measures from the 1991-2000 period. The more unstable the security milieu is, the greater propensities towards "more ambitious" CSBM undertakings. Northeast and South Asian samples appear to gravitate towards constraint and hybrid measures. This is not the case for ASEAN samples, not coincidentally so when seen in the context of a comparatively "less war-prone" Southeast Asia.

Where COMs are concerned, the generally increasing trend towards providing defense and security-related assistance overseas; participation in regional and international security operations; as well as joint training and exercises can be juxtaposed with the geographically outward orientation exhibited by sample states. Because some of the COMs require actual commitment of physical resources such as naval assets, only by possessing the requisite wherewithal can states then participate. It does not appear to be mere coincidence that participation in regional and extra-regional security cooperation may require long-range naval force projection capabilities that may potentially be viewed as destabilizing. This proclivity towards greater force involvement in certain COMs, such as rendering overseas HA/DR in times of natural disasters, does correspond to the general direction undertaken by the samples' naval procurement preferences, especially with respect to such offensively-oriented armaments.

Another strand of COMs – on political or legal settlements and mechanisms to manage disputes – also yields interesting findings. Samples examined in this study endeavored to reach political or legal settlements for outstanding territorial and sovereignty disputes that may provide ideal avenues for the threat and use of force. Even where there are no such settlements forthcoming, there is still an evident propensity towards engaging in dispute management mechanisms, such as continued negotiations, joint action to deal with common security problems in the disputed zones, to ameliorate the risks of conflict.

The findings therefore demonstrate that the procurement of potentially destabilizing naval armaments is not necessarily destabilizing. Instead, such capabilities can be regarded as "stability inducing" when utilized for the benefit of greater regional or international well-being. The existence of destabilizing naval armaments does not stifle cooperation. Instead, it can even be argued that ongoing naval armament, including the induction of destabilizing capabilities, places greater incentives for cooperation as a means of ameliorating potential misperceptions. Not only are they keen to engage in CSBMs, these states are also keen to demonstrate that their naval forces can also constitute a force for good – by contributing to an expansive array of practical security cooperation that benefit regional and international security.

8.6. Conclusion #4: States May De-emphasize and Calibrate the Limited Threat and Use of Naval Force

Finally, Chapter Seven explores the influence of naval armaments on the proclivity towards the limited threat and use of naval force. It posits that the use of gunboat diplomacy will remain an enduring feature of international politics. So long as states continue to traverse the seas for economic and strategic reasons, and so long as they continue to operate and maintain naval forces to secure their diverse national interests found in this medium, they will continue to find opportunities to exercise the option of limited threat and use of naval force. But that being said, this study argues also that the gunboat diplomacy can be de-emphasized and calibrated. The last aspect occupies the bulk of Chapter Seven's attention. This study proposes that calibration is possible if states resort to the limited threat and use of naval force through graduated phases in the mode and extent of force applied, the type of naval forces employed, and within specific geographical-legal contexts.

This chapter showed a general increase in reported incidents at sea where limited threat and use of force had been applied, even though these can be attributed to systemic international conditions common to all samples such as the advent of UNCLOS for example. But differing geopolitical contexts for Indo-Pacific samples – the Northeast and South Asians – set their emphasis on gunboat diplomacy apart from that of ASEAN samples. This harks back to the earlier Chapter Five, where

Southeast Asia is considered generally more stable and “less war prone” compared to Northeast and South Asian sub-regions. Discourse tendencies towards threat-labelling and threat of force are significantly less prevalent for ASEAN samples. At the same time, as this study shows, the total count of incidents for ASEAN samples either stabilized or declined from the 2001-11 period onwards, indicating a general propensity towards de-emphasizing the limited threat and use of naval force for the furtherance of national interests.

It is not merely about the general de-emphasis on gunboat diplomacy in Southeast Asia but most importantly, evident refrain from more assertive and aggressive forms of limited threat and use of naval force. Instances where lethal force was applied were comparatively less prevalent amongst ASEAN samples compared to their Indo-Pacific counterparts. Where nonlethal force is concerned, the tendency amongst ASEAN samples has been to refrain from escalatory and destabilizing modes of force applied. PN-type force is the predominant action undertaken in most instances. DN-type force, which is the most destabilizing since it involves the presentation by assailant of a *fait accompli* to its victim, is less of an occurrence in Southeast Asia than in the surrounding Northeast and South Asian sub-regions. Such instances, along with the resort to lethal force, were most prevalent in Southeast Asia during the 1992-2000 period but decreasingly so in subsequent periods.

This study shows that most of instances of gunboat diplomacy involve the use of low-capability naval forces, both civilian and military, for all samples. There is also an evident upward trend towards the use of civilian maritime law enforcement agencies in lieu of regular naval forces. But this trend has been more prevalent in Northeast Asia compared to Southeast Asia. But it needs highlighting that the use of more destabilizing naval armaments can be deemed much less prevalent amongst ASEAN samples. The furthest force option ASEAN samples pursued for most cases had been M-type forces instead of H-type which entails long-range offensive force projection and thereby carrying higher escalatory risks.

To further validate Hypothesis #4, this study specifically examines the limited threat and use of naval force in the most relevant contexts – disputed maritime zones; extra-territorial and jurisdictional actions undertaken in foreign waters; and also, in

times of general interstate tensions over contentious issues that occur in the terrestrial context. The spike in reported incidents took place in the 1992-2000 period, again because of mainly systemic post-Cold War factors at play. This was a common pattern for both ASEAN and Indo-Pacific samples. But from the 2001-11 period onwards, ASEAN samples generally registered decline in the reported instances, which implies the de-emphasis on limited threat and use of force in times of tensions and within the enduring context of yet-to-be-resolved interstate disputes. Propensities with respect to the mode and extent of force, as well as the types of force applied generally conformed to the preceding findings. ASEAN samples exhibit greater proclivities towards nonlethal force whereas resort to lethal force was restrained. The primary mode and extent being PN-type, which in the 2012-14 period becomes less emphasized. Rather, more emphasis is placed on EN-type force – arguably the least destabilizing form of gunboat diplomacy. Even though both sample groups display similar emphasis on low-capability forces, ASEAN samples generally de-emphasize the employment of highly-destabilizing capabilities for the exercise of gunboat diplomacy compared to their Indo-Pacific counterparts.

As such, the findings demonstrate that the induction of more destabilizing naval armaments and overall force structures do not necessarily create an adverse impact on strategic behavior by incentivizing aggression. ASEAN samples' de-emphasis and calibration of the use of limited threat and use of naval force should not be regarded as a mere statistical coincidence, but rather a deliberate policy choice.

8.7. Summing Up: Naval Modernization is Not Necessarily Destabilizing and May Even be Stability-Inducing

Naval forces will continue to be regarded as versatile instruments of statecraft which can be utilized for the pursuit and furtherance of diverse national interests. Their use has been so attractive to policy elites because they are versatile and provide a wide range of options in times of both peace and crisis. It ought not to be a foregone conclusion to note that naval forces can certainly be utilized for both cooperation and competition. By their very nature, naval forces can be

employed for such a diverse set of missions. They are not simply just restricted to engaging in massive maneuvers at sea, firing high-powered weapons to take out the enemy warships at range. Most of the time, since 1945, naval forces become seen increasingly executing limited combat missions and mainly constabulary missions, what in today's jargon being known more colloquially as operations-other-than-war.

But the history of the Anglo-German Dreadnought battleship race in the run-up to the First World War, large-scale naval engagements witnessed in the Second World War, and the inter-Korean naval clashes in more recent years, appear to form the collage of a "stereotypical" traditional image the public, the media and even some within the academic community have of naval forces. The journalistic community went as far as hyperbole by putting forth sensationalist-sounding titles of "naval arms races" and making dire commentaries about the adverse consequences of naval armament. The underline in such sensationalist reports is clearly just this: states are engaging in naval buildups and this will lead to or has already qualified as a naval arms race which, as a seemingly logical next step, will escalate to war in those geopolitical flashpoints such as the Indo-Pacific. The academic community endeavors to examine the phenomenon of naval armament in perspective. Scholars sought various methodological approaches and made use of various theories and concepts to furnish a better, more rationally-based form of understanding of this facet of international politics.

Much had been accomplished by the existing scholarship, to be sure. Thanks to these existing studies and facilitated by modern information and communication technology the public may get to know more about what capabilities naval forces worldwide have acquired, as well as the underlying strategic motivations driving naval armament. Yet that "stereotypical" image of naval forces appears to form the basis of conclusions about what consequences may transpire from naval armament. The existing scholarship certainly did justice to the importance of the subject by examining the phenomenon in Southeast Asia on the arms-racing theory. Insofar the consequences are concerned, it argues that, while naval armament is not a concern it may be the case in future. This "conventional

argument", repeatedly highlighted in this study, does not do much to offer better understanding of how naval armament may influence strategic behavior.

It is therefore imperative to adopt a heuristic approach in order to understand what exactly naval forces are and how states perceive and utilize them over time. Other than being more nuanced, the analysis ought to be pragmatic as well. Examining the consequences of naval armament should not remain caged within the domain of an academic exercise using unrealistic assumptions. If the studies need to have policy utility, they will have to take into account the realities. The first reality is that states do always have options to make strategic choices. On the one hand, there is the option to engage in naval armament as a form of national self-help. On the other hand, there is the option to exercise circumspection and unilateral restraint in order not to inadvertently undermine one's security just because of armament. The reality is that states may choose strategic options to balance their national interests, and one of which being the avoidance of being drawn into or entangled by a security dilemma. It is not as if naval armament by itself results in the tragedy of arms races and war.

The case of Southeast Asia is instructive in this regard. Boxed in by the geopolitically more unstable regions of South and Northeast Asia; faced with diverse maritime security challenges including interstate disputes that offer ideal avenues for armed conflict; seemingly unabated series of naval buildups with virtually zero prospects for negotiated structural arms control; not to mention a mixed track record of existing regional architecture that seeks to promote economic and political interdependence, would it not be in the best interest of ASEAN governments to exercise unilateral restraint? Individual ASEAN governments not only seek to judiciously enhance their naval capabilities but also seek to ameliorate the potential of misperception of strategic intent. They do that through calibration of discourses that de-emphasize threat and use of force while emphasizing diplomacy and cooperation. They also endeavor to engage in confidence-building and practical security cooperation with one another and with extra-regional partners, at the same time de-emphasizing and calibrating the use of gunboat diplomacy to further their national interests. Such unilateral restraint, borne out in this study, is plausibly the very reason why Southeast Asia continues to remain relatively stable

compared to the neighbouring Indo-Pacific sub-regions of Northeast and South Asia.

8.8. Prospects for Future Research: Towards a More General “Theory” on the Consequences of Naval Armament in an Expanded, Global Dataset?

This study had set out with a predominantly quantitative methodological approach to attain as objective analysis as possible in examining the influence of naval armament on strategic behavior. This is very much unlike the existing scholarship which was couched in qualitative approach. Of course, such a method would likely be deemed as too broad, too general and it would have been more ideal that the study is limited to just a few sample countries which can be examined in greater depth. However, this study does not seek in the first place to delve in depth on each specific sample. To adopt such a method which will be qualitative by design, it is more suitable in the case of examining driving factors behind each sample's naval armament. As this study endeavors to do right from the onset, it does not seek to replicate existing studies. Rather, this study sets out to propose a heuristic approach to rethink the consequences of naval modernization.

Moreover, the analysis of how naval armament influences strategic behavior would necessarily become a predominantly quantitative in nature since it becomes essential to identify patterns or trends of strategic behavior. To be certain, this study sought to operationalize a number of variables into quantitative elements for such an analysis. The most straightforward would be to quantify the destabilizing potential of each sample's naval force structure as it was done in Chapter Four. It would have been rather straightforward where one counts the number of newly-initiated CSBMs and COMs in each time-span of analysis and not to mention counts on the number of incidents at sea in order to tabulate patterns and trends for the use of gunboat diplomacy. But the quantification of discourse, as it was done in Chapter Five, is not without risk. Even though it is underpinned by concepts and is based essentially on the well-known approach of content analysis, surely this strand of analysis can be further refined in order to further minimize the problem of subjectivity.

To add further precision into the analysis for future research, it is not just the analysis of discourse tendencies that can be further refined. Instead of looking at the number of newly-initiated CSBMs and COMs, the study can be enhanced by looking at the number of such activities undertaken in each year for every sample. That way, one can project the patterns and trends of engagement in CSBMs and COMs on a continual year-by-year basis and compare that with that of naval force structure developments. The approach utilized in this study is definitely simpler but lacks the ability of being able to track the continuation in patterns of participation in CSBMs and COMs. An enhanced approach as discussed here may be the better way forward, even though it will mean greater complexity especially when one deals with a wide, diverse array of samples.

Finally, this study is limited to ASEAN naval forces as the primary samples, using Indo-Pacific samples as a comparison. Northern European samples featured in this study only in Chapter Four. This study can therefore be expanded to include Northern European samples in testing all four hypotheses with the objective of drawing more general findings on navies of all types across regions. For that matter, future research may include other sample groups representing regions outside the Indo-Pacific region. Potential regions of interest would be the Mediterranean, Persian Gulf and in South America. Such an expanded scope of study will surely entail a greater amount of time and resources. Such future study conducted may potentially benefit the academic and policy communities by identifying common patterns and trends of strategic behavior, in varying levels, brought about by naval armaments according to different regional contexts.

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<i>ABC News</i>	<i>Channel NewsAsia</i>	<i>Frontier Star</i>
<i>ABC Transcripts</i>	<i>China Daily</i>	<i>Fuseworks Media</i>
<i>Adelaide Advertiser</i>	<i>Chosun Ilbo</i>	<i>Global Times</i>
<i>Agence France Presse</i>	<i>CNN Wire</i>	<i>Herald-Sun</i>
<i>Al Jazeera</i>	<i>Daily Telegraph</i>	<i>Hindustan Times</i>
<i>Antara News</i>	<i>Daily The Pak Banker</i>	<i>India Today</i>
<i>Asahi Shimbun</i>	<i>Daily Yomiuri</i>	<i>Indian Express</i>
<i>Asia Pulse</i>	<i>Dawn</i>	<i>Interfax (Russia)</i>
<i>Asian News International</i>	<i>Deccan Chronicle</i>	<i>International Herald Tribune</i>
<i>Assam Tribune</i>	<i>Deccan Herald</i>	<i>ITAR-TASS World Service</i>
<i>Associated Press Newswires</i>	<i>Defense Daily</i>	<i>Japan Economic Newswire</i>
<i>Australian Associated Press</i>	<i>Dhaka Courier</i>	<i>Jiji Press</i>
<i>Bangkok Post</i>	<i>Domain-B</i>	<i>Joins</i>
<i>BBC Monitoring</i>	<i>Dong-A Ilbo</i>	<i>KBS World News</i>
<i>Bernama Daily Malaysian News</i>	<i>Economist Intelligence Unit</i>	<i>Korea Times</i>
<i>Bloomberg</i>	<i>Esmerk Swedish News</i>	<i>Korean Central News Agency</i>
<i>Borneo Bulletin</i>	<i>Far Eastern Economic Review</i>	<i>Kyodo News</i>
<i>Business Times</i>	<i>The Financial Express (Bangladesh)</i>	<i>Malay Mail</i>
<i>BusinessWorld</i>	<i>Financial Times</i>	<i>Manila Bulletin</i>
<i>Canberra Times</i>	<i>Forbes</i>	<i>Manila Standard</i>

Mizzima News
NDTV
New Indian Express
New Straits Times
New Sunday Times
New York Times
New Zealand Herald
Nikkei
Otago Daily Times
Pakistan Observer
Pakistan Today
People's Daily
Philippine Daily Inquirer
Platts
Plus News Pakistan
Press Trust of India
Pyongyang Times
Radio New Zealand News
Radio Pyongyang
Reuters News
RIA Novosti
Rodong Sinmun
Samay Live
Scoop.co.nz
Shanghai Daily

South China Morning Post
Sputnik News Service
Straits Times
Taipei Times
Tempo
Tempur
Thanh Nien News
The Age
The Asian Age
The Australian
The Baluchistan Times
The China Post
The Christian Science Monitor
The Dominion
The Edge Financial Daily
The Free China Journal
The Guardian
The Globe and Mail
The Hamilton Spectator
The Hindu
The Independent
The Jakarta Globe
The Jakarta Post
The Korea Herald

The Mainichi
The Manila Times
The Nation (Thailand)
The New Paper
The Philippine Star
The Pioneer
The Press (Christchurch)
The Saigon Times
The Statesman
The Sydney Morning Herald
The Telegraph
The Times
TODAY (Singapore)
Townsville Bulletin
Tuoi Tre
United News of Bangladesh
United News of India
Washington Post
Washington Times
Wall Street Journal
The West Australian
Times of India
Xinhua News
Yonhap News Agency

GLOSSARY OF TECHNICAL TERMS

This study adopts standard categorization of platforms and systems based on *Jane's* and *IJSS Military Balance*. It is used specially for the purpose of Chapter Four's country datasets on naval armaments and force structures.

Generic Categorization

General Type	Description
Combat system	Sensors and/or weaponry carried aboard platforms.
Platform	Hull or airframe aboard which combat systems are carried as payload.
Craft	Refers to all vessels with overall length of 16m or more.
Ship	Refers to all vessels with overall length of more than 60m and displacing over 1000 tons at full load.
Aircraft carrier	In general warships with flight deck that extends beyond two-thirds of their overall lengths.
Amphibious assault landing ship	Refers to ships that are specifically procured and employed to disembark troops and their equipment over unprepared beachheads or directly to support amphibious operations. They comprise such vessels capable of ocean passage and able to deliver troops and equipment in a fit state to fight, including LSM and above categories.
Amphibious troops	Refers to ground forces specially trained, equipped and organized for amphibious assault landing operations against beach resistance. They include organic or independent marine or naval infantry units. Army-controlled ground forces trained, equipped and organized for such missions are also included. Naval commando or combat swimmer and underwater demolition team units are considered.
Major surface combatant	Includes all surface ships with both 1000 ton full-load displacement and a weapon system other than for self-protection. They comprise aircraft carriers, cruisers, destroyers and frigates.

Minor surface combatant and patrol forces	Includes all surface ships and craft which have the primary role of protecting a state's sea approaches and coastline. They comprise corvettes, missile craft and torpedo craft which are characterized by weapon systems other than those for self-protection and permanently-fitted missile/torpedo launch and control equipment. Ships and craft that fall outside these definitions are classified as 'Patrol' vessels. Prefix 'F' denotes ability to attain speeds up to 30 knots or more. They are classified into inshore, coastal and offshore types depending on their full-load displacements.
Mine warfare	Refers to surface vessels configured primarily for mine-laying or mine-countermeasures such as minehunters and minesweepers. They are classified into inshore, coastal and offshore types depending on their full-load displacements.
Submarine	Refers to all vessels designed primarily for undersea military operations. They are classified in terms of propulsion (diesel-electric or nuclear); and into midget, coastal and patrol/attack types.
Fleet auxiliary	In this study, this category refers to specially designed military and government-chartered vessels tasked with fleet service and support missions, for example marine surveys, oceanographic research as well as underway replenishment.
Land-based aviation	Refers to all aerial platforms primarily based in shore aerodromes and capable of carrying out and supporting maritime operations. They include dedicated organic fleet aviation and separate air force units capable of undertaking maritime strike, surveillance and reconnaissance operations. Air-to-air refuelling tanker aircraft is also considered as an aerial sustainability means for these units.
Shore coastal defense	Refers to shore-based coastal defense forces that comprise tube- and/or rocket artillery, missile and torpedo units. Radar units are excluded from this categorization.
Maritime paramilitary	Refers to paramilitary forces tasked with constabulary duties within a state's EEZ and/or continental shelf limit. They can be navy-controlled or civilian, such as border guard (coast), coastguard and/or marine police forces.

Specific Technical Abbreviations

Abbreviation	Description
AAR	Fixed-wing aircraft specially designed for air-to-air refuelling duties.
AEW&C	Fixed- and rotary-wing aircraft specially equipped with long-range aerial search and surveillance radar system, capable of controlling missions of other forces.
AG	General fleet auxiliary; AGI refers to intelligence-gathering vessel; AGS refers to survey vessel; AGOR refers to oceanographic research vessel.
AK	General cargo vessel.
AO	General fleet oiler; AOR refers to fleet replenishment oiler which is capable of underway support; AOT refers to fleet tanker which is incapable of underway support.
AP	Ship of 120m length or more designed for transporting troops and their equipment.
ASR	Submarine rescue or general fleet salvage vessel.
BBR	Aircraft specifically designed and tasked for bombing duties.
CC	Cruiser, not equipped with primary guidedmissile armament.
CG	Guidedmissile cruiser; CGH refers to guidedmissile cruiser equipped with helicopter(s).
CVL	Aircraft carrier not fitted with arrester gears and/or catapults for conventional take-off and landing of aircraft, typically equipped with V/STOL fixed-wing aircraft and helicopters.
DD	Destroyer; DDG refers to guidedmissile destroyer; DDH refers to destroyer not equipped with a primary guidedmissile armament but with helicopter(s); DDGH refers to guidedmissile destroyer equipped with helicopter(s).
FS	Corvette; FSG refers to missile corvette; FSH refers to corvette not equipped with a primary missile armament but with helicopter(s); FSGH refers to missile corvette equipped with helicopter(s).

FF	Frigate; FFG refers to guided missile frigate; FFH refers to frigate not equipped with a primary guided missile armament but with helicopter(s); FFGH refers to guided missile frigate equipped with helicopter(s).
FGA	Jet fighter specifically designed and tasked for surface attack duties.
FTR	Jet fighter designed for multi-role functions including surface attack.
LCAC	Hovercraft or air-cushion vehicle.
LCC	Amphibious assault landing ship specially fitted for C3I of amphibious assault operations.
LCM	Landing craft of 15-25m length and equipped with landing ramp, capable of carrying 1 battle tank or 15-200 fully-equipped troops.
LCP	Landing craft of 7.5-30m length suitable for carrying personnel only.
LCU	All-purpose landing craft of 25-55m length and equipped with landing ramp, capable of carrying 2-3 battle tanks or 300-450 troops.
LCVP	Similar to LCP but capable of carrying light vehicles in lieu of personnel.
LHA	Large general-purpose amphibious assault ship equipped with aircraft carrier-type flight deck, internal stowage, ramp and flooded dock well, capable of landing an assault force from helicopters and/or landing craft. Also capable of carrying V/STOL fixed-wing aircraft. May carry up to 1800 troops or more.
LHD	Large general-purpose amphibious assault ship equipped with aircraft carrier-type flight deck, internal stowage, ramp and flooded dock well, capable of landing an assault force from helicopters and/or landing craft. May carry V/STOL fixed-wing aircraft. May carry up to 1000 troops or more.
LPD	Large amphibious assault ship equipped with internal stowage, ramp, flooded well dock and a helicopter platform, capable of carrying 1000 troops and up to 9 LCMs.
LSD	Large amphibious assault ship equipped with internal stowage, ramp and flooded well dock. May be equipped with a helicopter platform. Primarily a tank and vehicle carrier, also capable of carrying 150-400 troops in addition.

LSM	Medium amphibious assault ship of 45-85m length capable of beaching to land troops and/or tanks.
LST	Medium-large amphibious assault ship of 85-160m length capable of transporting troops, vehicles and tanks. Equipped with bow doors and/or ramps.
MH (C/I/O)	Mine countermeasures vessel of 25-60m length equipped with special equipment for locating, identifying and classifying mines. May also be equipped with MDVs and/or diving teams for the destruction of mines. MHC refers to coastal minehunter; MHI refers to inshore minehunter; MHO refers to ocean minehunter.
ML (C/I/O)	Surface vessel specially designed and equipped for minelaying operations. MLC refers to coastal minelayer; MLI refers to inshore minelayer; MLO refers to offshore minelayer.
MPA	Fixed-wing aircraft specially equipped for maritime search and surveillance, including ASW. May be armed for surface attack and ASW duties. LRMPA refers to MPAs designed for long-range, high-endurance missions aloft, and generally are large enough to carry a greater sensor and weapons payload.
MS (C/I/O)	Mine countermeasures vessel of 25-60m length equipped with special equipment for sweeping mines. MSC refers to coastal minesweeper; MSI refers to inshore minesweeper; MSO refers to ocean minesweeper. A special category, MSD, refers to minesweeping drone, which is operated remotely from a mother ship.
PB	Patrol boat; PBF refers to patrol boat with ability to attain speeds up to 30 knots or more.
PC (C/I/O)	Patrol craft; PCC refers to coastal patrol craft; PCI refers to inshore patrol craft; PCO refers to offshore patrol craft; PCFG refers to missile-armed fast attack craft.
PS	Patrol ship; PSO refers to offshore patrol ship; PSOH refers to offshore patrol ship equipped with helicopter(s).
PT	Patrol torpedo craft; PTH refers to hydrofoil-equipped patrol torpedo craft.
SDV	Swimmer-delivery vehicle.
SSB	Diesel-electric powered submarine equipped with ballistic missile as primary armament. SSBN refers to a similarly-equipped submarine which is nuclear-powered.

SSC	Short- or medium-range diesel-electric powered submarines designed mainly for shallow-water military operations that include coastal patrol (armed with torpedoes) and swimmer insertion.
SSG	Long-range diesel-electric powered submarines designed for both littoral and open-sea military operations and equipped with primary armament of long-range land attack cruise missiles. SSGN refers to a similar-equipped submarine which is nuclear-powered.
SSK	Long-range diesel-electric powered submarines designed for both littoral and open-sea military operations, may be equipped with USGW.
SSM	Short-range diesel-electric powered submarines typically of 150 tons full-load displacement or below. Typically has little or no onboard habitability facilities and works alongside a larger mother vessel which launches and recovers the SSM, and provides accommodations for the crew of the boat. In this study, those designed for military combat operations such as reconnaissance, anti-surface and swimmer insertion are considered while those designed for scientific research and rescue purposes (deep-submergence rescue vehicles) are not.
SSN	Nuclear-powered attack submarine.
UAV	Unmanned aerial vehicle; categorized into HALE (high-altitude, long-endurance) and MALE (for medium-altitude, long-endurance).
USV	Unmanned surface vehicle.
UUV	Unmanned underwater vehicle; categorized into AUV (autonomous underwater vehicle that operates without human input) and ROV (remotely-operated underwater vehicle that is remotely manned by a human operator).

Combat Systems

AAM	Air-to-air missile	HWT	Heavyweight torpedo
ALCM	Air-launched cruise missile	ICBM	Intercontinental-range ballistic missile
AR	Air-search radar	IRBM	Intermediate-range ballistic missile
ASCM	Anti-ship cruise missile	LACM	Land attack cruise missile
ASROC	Anti-submarine rocket	LWT	Lightweight torpedo
ARM	Anti-radar missile	MAD	Magnetic anomaly detector
ASM	Air-to-surface missile	MFCS	Missile fire-control system
ASR	Air/surface-search radar	MFR	Multi-function radar
ASWMOR	Anti-submarine warfare mortar	MG	Machine-gun
ASTT	Anti-submarine torpedo tube	MRBM	Medium-range ballistic missile
BMS	Bow-mounted sonar	nav	Navigation radar
BVRAAM	Beyond visual-range air-to-air missile	PAR	Phased array radar
CIWS	Close-in weapon system	PRS	Passive-ranging sonar
COMINT	Communications intelligence	RWS	Remote weapon system
DPG	Dual-purpose gun	SAM	Surface-to-air missile
ECCM	Electronic counter-countermeasure	SIGINT	Signal intelligence
ECM	Electronic countermeasure	SLBM	Submarine-launched ballistic missile
EO	Electro-optic	SLCM	Submarine-launched cruise missile
ELINT	Electronic intelligence	SRBM	Short-range ballistic missile
ESM	Electronic support measure	SSR	Surface-search radar
EW	Electronic warfare	TAS	Towed-array sonar
FAS	Flank-array sonar	TCM	Torpedo countermeasure
GFCS	Gun fire-control system	TT	Torpedo tube
GLCM	Ground-launched cruise missile	TTCM	Towed torpedo countermeasure
HMG	Heavy machine-gun	USGW	Underwater-to-surface guided weapon
HMS	Hull-mounted sonar	VDS	Variable-depth sonar

Warship Classification

This study notes that overtime, warship classification continues to evolve with increase in tonnage. For instance, a warship displacing 8000 tons full load could have been designated a cruiser back in the Cold War, but in contemporary times classified as a destroyer since cruiser displacement is marked presently at above 8000 tons.

Classification	1980-99	1990-99	2000-
Aircraft carriers	Flight deck that extends beyond two-thirds of the vessel's length		
Cruiser	> 8,000 tons	> 8,000 tons	> 8,000 tons
Destroyer	< 8,000 tons	< 8,000 tons	< 8,000 tons
Frigate	> 1,000 tons	> 1,000 tons	> 1,500 tons
Corvette	600-1,000 tons	600-1,000 tons	500-1,500 tons
Patrol Forces (offshore)	> 600 tons	> 600 tons	> 500 tons
Patrol Forces (coastal)	300-600 tons	300-600 tons	75-500 tons
Patrol Forces (Inshore)	< 300 tons	< 300 tons	< 75 tons
Amphibious vessel		> 1,500 tons	

Source: adapted from successive series of IISS, *Military Balance*, and Dick Sherwood, *Operational and Technological Developments in Maritime Warfare: Implications for the Western Pacific* (Canberra Papers on Strategy and Defence, No. 105, 1994).

APPENDICES

	Page
APPENDIX A1	
A1.1. Studies Surveyed on the Drivers of ASEAN Naval Modernization in the 1990s as Presented in Table 2	320
A1.2. Studies Surveyed on the Drivers of ASEAN Naval Modernization in the Early-2000s as Presented in Table 3	321
APPENDIX A2	
A2.1. Studies Surveyed on the Consequences of ASEAN Naval Modernization, in footnote number 72, page 42 in Chapter Two	322
APPENDIX A3	
Table A3.1. Research Protocol	323
APPENDIX A4	
Research Questionnaire (Sample)	324
Tabulated Questionnaire Results	333
Table A4.1: Total Assets in the Aggregate Force Structure by Country	346
Table A4.2: Total Submarine Assets by Country	347
Table A4.3: Total Major Surface Combatant Assets by Country	348
Table A4.4: Total Minor Surface Combat and Patrol Forces Assets by Country	349
Table A4.5: Total Mine Warfare Forces Assets by Country	350
Table A4.6: Total Amphibious Assault Landing Vessel Assets by Country	351
Table A4.7: Total Amphibious Troops Assets by Country	352
Table A4.8: Total Fleet Auxiliaries Assets by Country	353
Table A4.9: Total Aviation Forces Assets by Country	354
Table A4.10: Total Shore-based Coastal Defence Forces Assets by Country	355
Table A4.11: Percentage of Submarine Assets as Part of the Aggregate Force Structure by Country	356
Table A4.12: Percentage of Major Surface Combatant Assets as Part of the Aggregate Force Structure by Country	357
Table A4.13: Percentage of Minor Surface Combat and Patrol Forces Assets as Part of the Aggregate Force Structure by Country	358
Table A4.14: Percentage of Mine Warfare Forces Assets as Part of the Aggregate Force Structure by Country	359
Table A4.15: Percentage of Amphibious Assault Landing Vessel Assets as Part of the Aggregate Force Structure by Country	360
Table A4.16: Percentage of Amphibious Troops Assets as Part of the Aggregate Force Structure by Country	361
Table A4.17: Percentage of Fleet Auxiliaries Assets as Part of the Aggregate Force Structure by Country	362
Table A4.18: Percentage of Aviation Forces Assets as Part of the Aggregate Force Structure by Country	363

Table A4.19: Percentage of Shore-based Coastal Defence Forces Assets as Part of the Aggregate Force Structure by Country	364
Table A4.20: Total DPI of the Aggregate Force Structure by Country	365
Table A4.21: Percentage of L-, M- and H-type Assets as Part of the Aggregate Force Structure by Country	366
Table A4.22: DPI of Submarine Assets by Country	368
Table A4.23: DPI of Major Surface Combatant Assets by Country	369
Table A4.24: DPI of Minor Surface Combat and Patrol Forces Assets by Country	370
Table A4.25: DPI of Mine Warfare Forces Assets by Country	371
Table A4.26: DPI of Amphibious Assault Landing Vessel Assets by Country	372
Table A4.27: DPI of Amphibious Troops Assets by Country	373
Table A4.28: DPI of Fleet Auxiliaries Assets by Country	374
Table A4.29: DPI of Aviation Forces Assets by Country	375
Table A4.30: DPI of Shore-based Coastal Defence Forces Assets by Country	376

APPENDIX A5

Table A5.1: Universal Search Terms	377
Table A5.2: Compartmentalization of Parameters for Foreign Policies	378
Table A5.3: Compartmentalization of Parameters for Defence Policies	379
Table A5.4: Tabulated Frequencies from Theme-based Content Analysis, 1980-91	380
Table A5.5: Tabulated Frequencies from Theme-based Content Analysis, 1992-2000	381
Table A5.6: Tabulated Frequencies from Theme-based Content Analysis, 2001-11	382
Table A5.7: Tabulated Frequencies from Theme-based Content Analysis, 2012-14	383

APPENDIX A6

Table A6.1: Total Count of CSBMs 1980-2014	384
Table A6.2: Format of CSBMs 1980-2014	385
Table A6.3. CSBMs Classified in Categories in the Period 1980-91	386
Table A6.4. CSBMs Classified in Categories in the Period 1991-2000	387
Table A6.5. CSBMs Classified in Categories in the Period 2001-11	388
Table A6.6. CSBMs Classified in Categories in the Period 2012-14	389
Table A6.7: Total Count of COMs 1980-2014	390
Table A6.8. COMs Classified in Categories in the Period 1980-91	391
Table A6.9. COMs Classified in Categories in the Period 1992-2000	392
Table A6.10. COMs Classified in Categories in the Period 2001-11	393
Table A6.11. COMs Classified in Categories in the Period 2012-14	394
Table A6.12: Geographical Scope of COMs 1980-2014	395
Table A6.13. Format of COMs 1980-2014	396

APPENDIX A7

Table A7.1: Types of Limited Threat and Use of Naval Force	397
Table A7.2: Tabulating Incidents at Sea	398
Table A7.3: Zonal Categorization of Reported Incidents at Sea 1980-2014	399
Table A7.4: Mode and Extent of Limited Threat and Use of Naval Force 1980-2014	400
Table A7.5: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 1980-91	401
Table A7.6: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 1992-2000	402
Table A7.7: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 2001-11	403
Table A7.8: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 2012-14	404

APPENDIX A1

A1.1. Studies Surveyed on the Drivers of ASEAN Naval Modernization in the 1990s as Presented in Table 2:

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A1.2. Studies Surveyed on the Drivers of ASEAN Naval Modernization in the Early-2000s as Presented in Table 3:

Shaun Narine, *Explaining ASEAN: Regionalism in Southeast Asia* (Boulder, Colorado: Lynne Rienner Publishers, Inc., 2002), 69-70; "More bucks for the bang," *Straits Times*, April 21, 2002; Eric Heginbotham, "The Fall and Rise of Navies in East Asia: Military Organizations, Domestic Politics, and Grand Strategy," *International Security*, Vol. 27, No. 2 (Fall-2002), pp. 86-125; Sean Yoong, "Experts divided over whether Southeast Asia risks arms race as militaries snap up new fighter jets, submarines," *Associated Press Newswires*, October 9, 2003; Andrew Tan, "Force Modernisation Trends in Southeast Asia," *IDSS Working Paper No. 59*, Institute of Defence and Strategic Studies, Nanyang Technological University, January 2004, pp. 29-35; Sheldon W. Simon, "Southeast Asia's Defense Needs: Change or Continuity?" in Ashley J. Tellis and Michael Wills (eds.), *Military Modernization in an Era of Uncertainty* (Seattle: National Bureau of Asian Research, 2005), 285, 298-99; Bernard Fook Weng Loo, "Transforming the Strategic Landscape of Southeast Asia," *Contemporary Southeast Asia* 27, No. 3 (2005), p. 395; Andrew T.H. Tan, *Southeast Asia: Threats in the Security Environment* (Singapore: Marshall Cavendish Academic, 2006); Robert Hartfiel and Brian L. Job, "Raising the risks of war: defence spending trends and competitive arms processes in East Asia," *The Pacific Review*, Vol. 20, No. 1 (2007), p. 16; Richard A. Bitzinger, "The China Syndrome: Chinese Military Modernization and the Rearming of Southeast Asia," *RSIS Working Paper No. 126*, S. Rajaratnam School of International Studies, Nanyang Technological University, May 2, 2007, p. 2, 24-29; Rizal Sukma and K.S. Nathan, "Globalization's impact on threat perceptions and defence postures in Southeast Asia: Two views," in Geoffrey Till, Emrys Chew and Joshua Ho (eds.), *Globalization and Defence in the Asia-Pacific* (London and New York: Routledge, 2009); "Asia to spend over US\$108b for regional maritime security," *Channel NewsAsia*, May 14, 2007; Bernard F.W. Loo, "Arms Races in Asia?" *RSIS Commentaries*, No. 149/2010, S. Rajaratnam School of International Studies, Nanyang Technological University, 16 November 2010, p. 2; Brijesh Khemlani, "Southeast Asia's Arms Race," *RUSI Analysis*, January 13, 2011; Andrew T.H. Tan, "The Emergence of Naval Power in the Straits of Malacca," *Defence Studies*, Vol. 12, No. 1 (2012), pp. 106-135; Andrew T.H. Tan, *The Arms Race in Asia: Trends, causes and implications* (London and New York: Routledge, 2014), 104-74.

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A2.1. Studies Surveyed on the Consequences of ASEAN Naval Modernization, in footnote number 72, page 42 in Chapter Two:

Andrew Mack, "Arms Control at Sea," in Hugh Smith and Anthony Bergin (eds.), *Naval Power in the Pacific: Toward the Year 2000* (Colorado; London: Lynne Reiner, 1993), 97; Desmond Ball, "Trends in Military Acquisitions in the Asia-Pacific Region: Implications for Security and Prospects for Constraints and Controls," Working Paper no. 273, Australian National University, Strategic and Defence Studies Centre, Canberra, 1993, pp. 20-21; Wolfgang Kasper, "The Implications of Economic Development for Naval Power in the Pacific," in Hugh Smith and Anthony Bergin (eds.), *Naval Power in the Pacific: Toward the Year 2000* (Colorado; London: Lynne Reiner, 1993), 37; "Chapter 11: Is There an Arms Race?" in J.N. Mak, *ASEAN Defence Reorientation 1975-1992: The Dynamics of Modernisation and Structural Change* (Canberra: Australian National University, 1993), 141-48; Michael D. Wallace and Charles A. Meconis, "New Powers, Old Patterns: Dangers of the Naval Buildup in the Asia-Pacific Region," Working Paper No. 9, Institute of International Relations, The University of British Columbia, March 1995, p. 25; Bates Gill, JN Mak and Siemon Wezeman, *ASEAN Arms Acquisitions: Developing Transparency*, A MIMA-SIPRI Report (The Malaysian Institute of Maritime Affairs (MIMA), August 1995), 10; Malcolm Chalmers, *Confidence-Building in Southeast Asia* (Bradford Arms Register Studies No. 6; Boulder: Westview, 1996), 104; Commodore Sam Bateman, RAN (Ret.), "Asia-Pacific Maritime Confidence Building," in Jill R. Junnola (ed.), *Maritime Confidence Building in Regions of Tension*, The Henry L. Stimson Center Report No. 21, May 1996, p. 32; Sam Bateman, "Catching up or building up?" *Jane's Navy International*, April 1, 1997; Bjorn Moller, "Introduction: Defence Restructuring in Asia," in Bjorn Moller (ed.), *Security, Arms Control and Defence Restructuring in East Asia* (Aldershot, Ashgate Publishing Ltd, 1998), 15-17; Joon Num Mak, "International Cooperation in Regional Security: 'Non-Interference' and ASEAN Arms Modernisation," in Bjorn Moller (ed.), *Security, Arms Control and Defence Restructuring in East Asia* (Aldershot, Ashgate Publishing Ltd, 1998), p. 86; Julian Schofield, "War and punishment the implication of arms purchases in maritime Southeast Asia," *Journal of Strategic Studies*, Vol. 21, No. 2 (1998), pp. 75-106; Alan Collins, *Security and Southeast Asia: Domestic, Regional, and Global Issues* (Singapore, Institute of Southeast Asian Studies, 2003), 99 and 119; Amitav Acharya, *Constructing a Security Community in Southeast Asia: ASEAN and the problem of regional order* (NY: Routledge, 2001), 141; Anthony Bergin, "East Asian naval developments – sailing into rough seas," *Marine Policy* 26 (2002), pp. 121-131; Andrew Tan, "Force Modernisation Trends in Southeast Asia," *IDSS Working Paper No. 59*, Institute of Defence and Strategic Studies, Nanyang Technological University, January 2004, pp. 36-37; Bernard Fook Weng Loo, "Transforming the Strategic Landscape of Southeast Asia," *Contemporary Southeast Asia* 27, No. 3 (2005), pp. 388-405; Richard A. Bitzinger, "The China Syndrome: Chinese Military Modernization and the Rearming of Southeast Asia," *RSIS Working Paper No. 126*, S. Rajaratnam School of International Studies, Nanyang Technological University, 2 May 2007, pp. 9-10; John Garofano, "China-Southeast Asia Relations: Problems and Prospects," in Toshi Yoshihara and James R. Holmes (eds.), *Asia Looks Seaward: Power and Maritime Strategy* (Westport: Praeger Security International, 2008), 170; Richard A. Bitzinger, "A New Arms Race? Explaining Recent Southeast Asian Military Acquisition," *Contemporary Southeast Asia*, Vol. 32, No. 1 (2010), pp. 50-69; Bernard F.W. Loo, "Naval modernisation in South-east Asia: Modernisation versus arms races," in Geoffrey Till and Jane Chan (eds.), *Naval Modernisation in South-East Asia: Nature, causes and consequences* (London and New York: Routledge, 2014), 283-97; Andrew T.H. Tan, *The Arms Race in Asia: Trends, causes and implications* (London and New York: Routledge, 2014), 175-99; 181-83; Richard A. Bitzinger, "IMDEX ASIA: Southeast Asian Naval Expansion and Defence Spending," *RSIS Commentaries*, No. 120, S. Rajaratnam School of International Studies, Nanyang Technological University, May 19, 2015.

APPENDIX A3

Table A3.1. Research Protocol

Regions	Northeast Asia, Southeast Asia, South Asia, Baltic, Nordic, Indian Ocean
Countries	Japan, China, Korea, Taiwan, Brunei, Indonesia, Malaysia, Myanmar, The Philippines, Singapore, Thailand, Vietnam, Bangladesh, India, Pakistan, Denmark, Finland, Germany, Norway, Poland, Sweden, Russia/USSR, United States, Australia, New Zealand
Concepts	Security, defence, military, naval, navy, maritime, sea, marine, fishing, fishery, foreign policy, non-aggression, international law, threat of force, use of force, regional peace, regional stability, peaceful coexistence, peaceful resolution, peaceful settlement, hegemony, hegemonic, expansionism, expansionist
Hotspots	Hibernia Reef, Socotra Rock, Katchatheevu, Ligitan, Sipadan, Ambalat, Kuril, Kuriles, Northern Territories, Dokdo, Liancourt Rocks, Takeshima, Ieodo, Macclesfield Bank, Minicoy Island, New Moore island, Naf river, Okinotorishima, Yonaguni, Pedra Branca, Batu Puteh, Batek, Natuna, Sebatik, Sir Creek, Bay of Bengal, International Maritime Boundary Line, Tasman Sea, Arctic, Bering Sea, Bornholm, Baltic Sea, Tuzla Spit, Beaufort Sea, Hans Island, Jan Mayen, Svalbard, Spitsbergen, Barents Sea, Machias Seal Island, Rockall, Tonkin, Gulf of Thailand, Senkaku, Diaoyu; Diaoyutai; East China Sea, Pratas, Penghu, Kinmen, Matsu, Sea of Japan, South China Sea, Spratly, Paracel, Scarborough Shoal, Straits of Malacca, Melaka Strait, Straits of Singapore, Makassar, Lombok, Sunda, Mianggas, Yellow Sea, Northern Limit Line, Taiwan Strait

APPENDIX A4

Research Questionnaire (Sample)

Country of origin: _____

Organisation: _____

Rank/Designation: _____

Section A: Regional Security in the Asia-Pacific

What is your view of regional security in the Asia-Pacific?

Please tick accordingly

SD: Strongly disagree D: Disagree A: Agree SA: Strongly agree

		SD	D	A	SA
A1	A major war between states in the Asia-Pacific is thinkable	☐	☐	☐	☐
A2	Low-intensity armed conflict between states in the Asia-Pacific is thinkable	☐	☐	☐	☐
A3	Naval armed confrontation between states in areas of maritime territorial disputes (e.g. South and East China Seas) remains thinkable	☐	☐	☐	☐
A4	The buildup of armaments in the Asia-Pacific raises the risk of armed confrontation between states	☐	☐	☐	☐

Section B: Military Power

What is your view about military power?

Please tick accordingly

SD: Strongly disagree D: Disagree A: Agree SA: Strongly agree

		SD	D	A	SA
B1	Military power is the basic foundation of national security	☐	☐	☐	☐
B2	Military power serves as an insurance against uncertainties	☐	☐	☐	☐
B3	Investing in military power is essential in times of peace	☐	☐	☐	☐
B4	While military power is important, it should not be attained at the expense of other non-military security goals (e.g. economic, health, social, etc.)	☐	☐	☐	☐

B5 The accumulation of armaments tends to increase tensions among states

--	--	--	--

Section C: Deterrence

What is your view about military deterrence?

Please tick accordingly

SD: Strongly disagree D: Disagree A: Agree SA: Strongly agree

C1 Effective deterrence depends on having the capacity to defeat an adversary

SD	D	A	SA

C2 A militarily-weaker state can still stand a chance to prevent a stronger adversary winning, possibly by non-military means

--	--	--	--

C3 Effective deterrence depends solely on the accumulation of military power

--	--	--	--

Section D: Naval Power

What is your view about naval power?

Please tick accordingly

SD: Strongly disagree D: Disagree A: Agree SA: Strongly agree

D1 Because of their geographical reach, naval forces are especially threatening

SD	D	A	SA

D2 The only legitimate functions of naval forces are those associated with the defence of national coastlines and waters

--	--	--	--

D3 Naval power should be regulated by diplomatic efforts among states

--	--	--	--

D4 Because of their flexibility, naval forces are especially threatening

--	--	--	--

D5 Naval power is about acquiring bluewater capabilities even if national maritime needs are purely local or regional

--	--	--	--

D6	Naval arms control efforts aimed at the way naval armaments are being deployed are more likely to be effective compared to those intended to restrict the types and/or quantity of armaments				
D7	Naval forces with long-range, oceangoing capabilities are especially threatening				
D8	Naval power can be utilized to solely safeguard national interests without necessarily threatening other countries				
D9	Bluewater naval capabilities can increase the risk of armed conflict at sea				
D10	Bluewater naval capabilities are cost-effective ways for offshore territorial defence and constabulary functions, and do not necessarily signify offensive intent				
D11	Deploying coastguard instead of regular naval warfighting forces to areas of maritime territorial disputes can lower the risk of armed confrontation at sea				

Section E: Naval Defence Posture

Please rank the following in relative order of importance in determining a defensive naval defence posture

		1 st	2 nd	3 rd	4 th
a)	Capabilities				
b)	Mode of deployment				
c)	Defence policies				
d)	Foreign policies				

What are the other considerations you might suggest? :

Section F: Maritime Capabilities

How do you perceive the following maritime capabilities?

Please tick accordingly

D: Destabilising ND: Not destabilising

F1: Naval Armaments

		D	ND
F1.1	Mach 2 (supersonic) anti-ship missile with 120-200 kilometre range	☐	☐
F1.2	Mach 0.8 (subsonic) anti-ship missile with 120-200 kilometre range	☐	☐
F1.3	Mach 0.8 (subsonic) anti-ship missile with 20-kilometre range	☐	☐
F1.4	Anti-submarine warfare torpedo launched by surface warships and aircraft	☐	☐
F1.5	Land attack cruise missile	☐	☐
F1.6	5-kilometre range anti-aircraft missile launched from surface warships	☐	☐
F1.7	100-kilometre range anti-aircraft missile launched from surface warships	☐	☐
F1.8	76mm calibre naval artillery gun	☐	☐
F1.9	Naval mine	☐	☐
F1.10	Remotely-operated underwater mine disposal vehicle	☐	☐

F2: Surface Warfare

		D	ND
F2.1	Aircraft carriers capable of launching air strikes on enemy land targets	☐	☐
F2.2	Helicopter carrier capable of launching amphibious assault landing craft	☐	☐
F2.3	Helicopter carrier equipped with only anti-submarine helicopters	☐	☐

F2.4	Cruiser primarily equipped for air defence (e.g. Aegis system)		
F2.5	Destroyer armed with Mach 2 (supersonic) anti-ship missiles		
F2.6	Frigate equipped for anti-submarine missions only		
F2.7	Stealth frigate armed with 120-kilometre range anti-ship missiles		
F2.8	Destroyer armed with Mach 0.8 (subsonic) anti-ship missiles		
F2.9	Fast attack craft armed with Mach 2 (supersonic) anti-ship missiles		
F2.10	Naval patrol craft armed only with 40mm calibre guns		
F2.11	Fast attack craft armed with 20-kilometre range anti-ship missiles		
F2.12	Patrol craft armed only with guns and torpedoes		
F2.13	Fast attack craft armed with 120-kilometre range anti-ship missiles		
F2.14	Stealth fast attack craft armed with 120-kilometre range anti-ship missiles		
F2.15	Naval patrol craft armed with only one 76mm calibre main gun armament		
F2.16	Coastguard patrol ship armed with only machine guns		
F2.17	Coastguard patrol ship armed with guns of calibre 40mm or more		
F2.18	Medium landing craft capable of carrying 1 main battle tank or 30 fully-equipped platoon of marines/naval infantrymen		
F2.19	Landing platform dock capable of carrying 350 fully-equipped marines/naval infantrymen or 6 main battle tanks		
F2.20	Landing ship tank capable of beaching ashore and disembarking 140 fully-equipped marines/naval infantrymen or 2 main battle tanks		
F2.21	Oceangoing combat support ship capable of underway replenishment		

F2.22	Mine countermeasures vessel equipped with remotely-operated underwater mine disposal vehicles		
F2.23	Minelayer equipped to deploy up to 30 naval mines		
F2.24	Oceanographic survey ship equipped for seafloor mapping		
F2.25	Oceangoing surveillance ship equipped with signal intelligence suite		
F2.26	Shore-based 120-kilometre coastal defence anti-ship missile		
F2.27	Shore-based 155mm artillery gun in coastal defence role		
F2.28	Shore-based anti-ship ballistic missile of 400-kilometre range		
F2.29	Unarmed submarine rescue ship equipped with deep-submergence rescue vehicle		
F2.30	Unmanned surface vessel armed with remotely-operated gun and/or missile armaments		
F3: Undersea Warfare		D	ND
F3.1	Nuclear-powered attack submarine		
F3.2	Conventional submarine equipped with only torpedoes		
F3.3	Conventional submarine equipped with air-independent propulsion (AIP) system for 15-days submerged endurance without snorkeling		
F3.4	Conventional submarine armed with submerged-launch 120-kilometre range, Mach 0.8 (subsonic) anti-ship missiles		
F3.5	Nuclear-powered submarine armed with nuclear-tipped ballistic missiles		
F3.6	Conventional submarine equipped to lay 28 naval mines		
F3.7	Conventional submarine armed with submerged-launch Mach 2 (supersonic) anti-ship missile		

F3.8	Conventional submarine armed with land-attack cruise missiles		
F3.9	Midget submarine equipped to disembark combat swimmers/commandos		
F3.10	Conventional submarine fitted with specialised signal intelligence suite		

F4: Maritime Aviation

		D	ND
F4.1	Land-based fighter jet armed with Mach 0.8 (subsonic) anti-ship missiles		
F4.2	Unarmed, land-based maritime patrol and surveillance aircraft		
F4.3	Anti-submarine helicopter launched from warship		
F4.4	Air-to-air refuelling tanker aircraft		
F4.5	Airborne early warning aircraft (capable of maritime surveillance)		
F4.6	Land-based maritime patrol and surveillance aircraft armed with two 120-kilometre range anti-ship missiles		
F4.7	Land-based fighter jet armed with unguided bombs and rockets		
F4.8	Land-based fighter jet armed with Mach 2 (supersonic) anti-ship missiles		

Section G: Naval Force Structures

How do you perceive the following types of naval force structures?

Please tick accordingly

D: Destabilising ND: Not destabilising

		D	ND
G1	<u>Type 1 model</u>		
	- Aircraft carriers with diverse types of aircraft embarked for various missions		
	- Cruisers, destroyers and frigates constituting the fleet's combat power		

-
- Long-range amphibious landing capability, including helicopter carriers
 - Oceangoing combat support forces capable of underway replenishment
 - Nuclear-powered submarines
 - No regular naval coastal patrol and combatant forces
 - Coastguard for maritime constabulary tasks

G2 **Type 2 model**

--	--

- Only patrol and fast attack craft armed with anti-ship missiles and torpedoes
- No major surface combatants
- Only diesel-electric powered patrol submarines
- No oceangoing combat support forces capable of underway replenishment
- Minimal amphibious landing forces made up of small landing craft
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Shore-based radar, artillery and anti-ship missile batteries
- Coastguard for maritime constabulary tasks

G3 **Type 3 model**

--	--

- Mostly corvettes, fast attack and patrol craft
- Small squadron of frigates, but no cruisers and destroyers
- Only diesel-electric powered patrol submarines
- Minimal oceangoing combat support forces capable of underway replenishment
- Modest amphibious landing forces, led by a pair of large landing ships
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Coastguard for maritime constabulary tasks

G4 **Type 4 model**

--	--

- Destroyers and frigates constituting the fleet's combat power
- Only diesel-electric powered patrol submarines
- Small squadron of missile-armed fast attack craft
- Oceangoing combat support forces capable of underway replenishment
- Small numbers of but large-sized amphibious landing vessels
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Coastguard for maritime constabulary tasks

G5 **Type 5 model**

--	--

-
- Destroyers and frigates, supported by large force of coastal patrol combatants
 - Nuclear and diesel-electric powered submarines
 - Oceangoing combat support forces capable of underway replenishment
 - Long-range amphibious landing force with large landing vessels
 - Shore-based air support provided by jet fighters and maritime patrol aircraft
 - Shore-based radar, artillery and anti-ship missile batteries
 - Coastguard for maritime constabulary tasks

Section H: Naval Arms Buildup in the Asia-Pacific

How do you view naval arms buildup in the Asia-Pacific?

Please tick accordingly

SD: Strongly disagree D: Disagree A: Agree SA: Strongly agree

		SD	D	A	SA
H1	Naval arms buildup in the Asia-Pacific increases tensions between states	☐	☐	☐	☐
H2	Naval expansion by individual nations can be beneficial, since it facilitates better national control of sea-space and thus maritime boundaries with respect to neighbouring states (i.e. 'secure fences make good neighbours')	☐	☐	☐	☐
H3	It is the right of every nation to acquire naval power, so long as it does not threaten the security of other countries	☐	☐	☐	☐
H4	Naval arms buildup in the Asia-Pacific can contribute to regional peace and security	☐	☐	☐	☐
H5	Existing maritime confidence-building and security measures (MCSBMs) in Asia-Pacific are effective in promoting peace and stability	☐	☐	☐	☐
H6	The naval arms buildup in the Asia-Pacific requires more effort to improve MCSBMs in the Asia-Pacific in order to maintain peace and stability in the region	☐	☐	☐	☐

Any other opinions about naval arms buildup in the Asia-Pacific? :

-- End of Questionnaire --
Thank you for your participation!

Tabulated Questionnaire Results

For the purpose of this study, a research questionnaire is created since 2010 to elicit opinion on naval buildup in the Asia-Pacific. It exists in both hardcopy and online formats. The target respondents are mid-level naval officers from the Asia-Pacific region. As such, the questionnaire was primarily administered upon three batches of naval officer students attending the Command and Staff Course (CSC) at the Singapore Armed Forces Training Institute Goh Keng Swee Command and Staff College (GKSCSC) in 2010, 2011 and 2012 respectively. In addition to that, online responses were elicited. Special thanks go to the Commandant of GKSCSC for granting the author the opportunity to conduct the questionnaire, and to the CSC coordinating officer LTC (ret) David Lee, Associate Professor Bernard Loo, the author's dissertation supervisor, and Dr Euan Graham, former Senior Fellow of the RSIS Maritime Security Programme for facilitating this arrangement.

This approach is based on the one adopted by Esmond D. Smith, Jr. whose doctoral dissertation with the title *China Technology and the Spratly Islands: The Geopolitical Impact of New Technologies* at the Salve Regina University involved individual interviews and group discussions with three groups of senior East Asian naval professionals, totaling about 20, attending the senior international course at the US Naval War College in 1990-1993 and correspondences with another 18 Asian alumni from the college.²⁸² Since individual interviews and group discussions were deemed infeasible for this study due to the time constraints encountered at GKSCSC, the questionnaire approach is a more viable alternative.

Research Ethical Considerations

This questionnaire does not require respondents to state their names so as to preserve anonymity. Such a move is important due to the sensitivity of the questions involved in this research, in view of the nature of the professions of the respondents. However, the questionnaire does elicit the following basic information from each respondent, namely: the country of origin, organization and rank or vocational designation. More importantly, the research questionnaire is kept at best as possible to be unbiased. The questions are structured in a manner which does not incline responses towards any particular expected results. At the end of the administering of the questionnaire, no tags or markings are made to the scripts which may help identify any particular respondents. However, each script is given a simple batch marking for the purpose of archiving according to the date the questionnaire was administered. The results are presented in consolidated, analyzed form while raw data contained in the scripts is duly safeguarded and unpublicized in this study.

Demographical Distribution of Respondents

By the end of 2012, a total of 45 respondents were being surveyed via hardcopy or online version of the questionnaire. The demographical distribution of these respondents according to their country of origin is presented here:

Country of Origin	Number surveyed
Australia	1
Brunei Darussalam	1
India	3

²⁸² Read Esmond D. Smith, Jr., *China Technology and the Spratly Islands: The Geopolitical Impact of New Technologies*, Dissertation submitted to the Faculty of the Humanities Department in Candidacy for the Degree of PhD, Salve Regina University, March 1994. (UMI Number: 9539594).

Indonesia	2
Malaysia	1
New Zealand	1
Singapore	32
Thailand	1
United States of America	2
Vietnam	1

Tabulated Results and Discussion

Discussion of the consolidated and tabulated results of the questionnaire proceeds here by section. In sections A-D and H, SD denotes strongly disagree, D denotes disagree, A denotes agree and SA denotes strongly agree. In sections F and G, D denotes destabilizing while ND denotes non-destabilizing. The tabulated results are presented in total numbers of responses in each respective option.

Section A: Regional Security in the Asia-Pacific

		SD	D	A	SA
A1	A major war between states in the Asia-Pacific is thinkable	11	27	6	1
A2	Low-intensity armed conflict between states in the Asia-Pacific is thinkable	0	2	31	12
A3	Naval armed confrontation between states in areas of maritime territorial disputes (e.g. South and East China Seas) remains thinkable	0	2	35	8
A4	The buildup of armaments in the Asia-Pacific raises the risk of armed confrontation between states	0	16	25	4

The majority of respondents do not feel that a major interstate war in the Asia-Pacific is thinkable. This is an expected response given the current relatively peaceful state of affairs in the region despite the existence of interstate animosity and rivalries. Underlying causes of a major interstate war in the region are likely mitigated by existing levels of diplomatic and economic cooperation amongst the countries. However, an overwhelming number of the respondents feel that low-intensity interstate armed conflict in the Asia-Pacific remains likely, in particular naval armed confrontation over existing maritime disputes. This risk is perceived to be potentially exacerbated, as observed in the responses so far, by a regional naval arms buildup. This illuminates the geopolitical sources of destabilization in naval modernization in the Asia-Pacific.

Section B: Military Power

		SD	D	A	SA
B1	Military power is the basic foundation of national security	1	2	18	24
B2	Military power serves as an insurance against uncertainties	0	1	16	28
B3	Investing in military power is essential in times of peace	0	3	19	23

B4	While military power is important, it should not be attained at the expense of other non-military security goals (e.g. economic, health, social, etc)	1	6	23	15
B5	The accumulation of armaments tends to increase tensions among states	0	14	29	2

An overwhelming majority of the respondents feel that military power forms the basic foundation of national security and serves as an insurance against uncertainties. This demonstrates the continued relevance and fungibility of military power in buttressing and even facilitating the conduct of foreign policy. Diplomacy cannot exist without the support of military power. Against geopolitical uncertainties, the importance of military power is magnified. However, while an overwhelming majority of the respondents feel that investing in military power is essential in times of peace, they also feel that this should not be accomplished at the expense of other non-military security goals. Hence, while peacetime investment in military power is a necessary move against untoward and unforeseeable contingencies in the future, it has to be done in a prudent manner within the greater scheme of national security policy planning. This is probably the reason why the majority of respondents also feel that the accumulation of armaments tend to sharpen interstate tensions. It demonstrates that given the paucity of perfect information about a perceived and actual adversary's political intent, armaments become the tangible indicator of intent.

Section C: Deterrence

		SD	D	A	SA
C1	Effective deterrence depends on having the capacity to defeat an adversary	1	6	21	17
C2	A militarily-weaker state can still stand a chance to prevent a stronger adversary winning, possibly by non-military means	0	3	32	10
C3	Effective deterrence depends solely on the accumulation of military power	9	29	6	1

The majority of respondents feel that effective deterrence depends on having the capacity to defeat an adversary. This illuminates the following observations. First, effective deterrence coexists with effective defense, meaning that should deterrence fail, there must be an available capacity to defeat the aggressor. Second, deterrence and defense encompass qualitative and quantitative components. For instance, a mere existence of a handful of weapons may serve to deter but should deterrence fail, this mere handful may not suffice in quantity to defeat the adversary, hence defeating the purpose of effective deterrence. Third, this perception reinforces the notion that national defense preparations remain sacrosanct and inviolable as a property of sovereign right. Nonetheless, an effective deterrence may not entail purely accumulation of military power since non-military means can complement the use of military power to deter a potential or actual aggressor. A militarily weaker party does not need to engage in reciprocal acquisition and counter-acquisition of military power in response to a stronger adversary since those non-military tools can fill the gaps of deterrent capacity.

Section D: Naval Power

SD	D	A	SA
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D1	Because of their geographical reach, naval forces are especially threatening	3	11	20	11
D2	The only legitimate functions of naval forces are those associated with the defence of national coastlines and waters	15	20	9	1
D3	Naval power should be regulated by diplomatic efforts among states	2	14	26	3
D4	Because of their flexibility, naval forces are especially threatening	3	11	26	5
D5	Naval power is about acquiring bluewater capabilities even if national maritime needs are purely local or regional	6	21	17	1
D6	Naval arms control efforts aimed at the way naval armaments are being deployed are more likely to be effective compared to those intended to restrict the types and/or quantity of armaments	2	10	32	1
D7	Naval forces with long-range, oceangoing capabilities are especially threatening	1	9	28	7
D8	Naval power can be utilized to solely safeguard national interests without necessarily threatening other countries	2	11	19	13
D9	Bluewater naval capabilities can increase the risk of armed conflict at sea	2	23	17	3
D10	Bluewater naval capabilities are cost-effective ways for offshore territorial defence and constabulary functions, and do not necessarily signify offensive intent	0	23	27	5
D11	Deploying coastguard instead of regular naval warfighting forces to areas of maritime territorial disputes can lower the risk of armed confrontation at sea	1	12	24	8

In this section, results show that the majority of respondents have the following perspectives in general:

- Long-range, bluewater naval forces are particularly threatening due to their geographical reach and inherent flexibility, and they can increase the risk of armed conflict at sea.
- If a country's immediate or primary geostrategic focus is local or regional it should not acquire bluewater naval capabilities.
- Navies' legitimate functions are not confined solely to the defence of national coastlines and waters.
- Bluewater naval capabilities are cost-effective ways of carrying out territorial defence and constabulary functions without necessarily signaling offensive intent.

- Operational, as opposed to structural, naval arms control measures are more likely to be successful.
- Coastguard-type forces have greater de-escalatory potential than regular naval forces in the context of interstate maritime disputes.

This apparent contradiction seems to highlight the following. First, navies recognize their roles as not necessarily confined to local and regional maritime domains. There are times when navies may need to perform duties beyond this domain, for instance participating in multinational naval operations or simply port visits to 'show the flag'. Second, bluewater capabilities despite its inherent flexibility and geographical reach that contribute to their threatening nature remain essential for carrying on traditional tasks such as defence and constabulary duties, and in doing so they can be deployed without signaling offensive intent. The onus is thus placed more on the mode of deployment than the actual capabilities per se. This is related to the realism about naval arms control, the operational type of which is deemed to be more likely to achieve success over structural one. Fourth, a country whose immediate or primary geostrategic focus is local or regional should not acquire bluewater capabilities but this also needs to be viewed with circumspection because most if not all navies naturally tend to aspire towards a balanced set of capabilities, in which bluewater types certainly play a role. The issue here therefore is about the role of bluewater capabilities within the force structure of navies whose primary focus is local or regional. In other words, navies whose primary interests are local or regional should not have a force structure that is disproportionately bluewater-oriented in nature because the 'excess' of such capabilities may signal offensive intent. The onus is placed on not just operational naval arms control, but structural types insofar unilateral measures are feasible for individual countries. Finally, in the area of deployment particularly in zones of interstate maritime contention, regular naval forces should be best kept off while coastguard-type platforms may take the place in order to prevent untoward naval incidents. This reinforces the importance of demilitarizing maritime disputes, one of the ways being to restrict the operation of regular naval forces away from disputed zones that may otherwise portray an overly militaristic impression which creates misperceptions.

Section E: Naval Defense Posture

	1 st	2 nd	3 rd	4 th
a) Capabilities	11	8	13	13
b) Mode of deployment	2	5	16	22
c) Defence policies	12	22	10	1
d) Foreign policies	20	13	5	7

For a defensive naval posture, the respondents ranked Foreign Policies first, followed by Defense Policies second, while the third and fourth positions are somewhat ambiguous. It would seem that mode of deployment of naval forces is attached greater importance than capabilities. Hence, determinants of a defensive naval posture follow in this descending order: Foreign Policies, Defense Policies, Mode of Deployment and then, Capabilities. Declaratory policies on defense and foreign affairs matters may probably be taken more at face value, but what the respondents possibly mean is that the national security policy stances circumscribing the use of naval forces are more indicative of intent. As such, for an NPD naval posture, the capabilities and operations have to reflect the following NPD fundamentals: status quo, peaceful coexistence, non-militarized solutions to disputes and respect for and adherence to international laws. The policies under which naval modernization is proscribed has also to take into consideration other countries' legitimate security concerns and requirements.

Section F: Maritime Capabilities

F1: Naval Armaments

		D	ND
F1.1	Mach 2 (supersonic) anti-ship missile with 120-200 kilometre range	33 (73.3)	12 (26.7)
F1.2	Mach 0.8 (subsonic) anti-ship missile with 120-200 kilometre range	20 (44.4)	25 (55.6)
F1.3	Mach 0.8 (subsonic) anti-ship missile with 20-kilometre range	1 (2.2)	44 (97.8)
F1.4	Anti-submarine warfare torpedo launched by surface warships and aircraft	7 (15.6)	38 (84.4)
F1.5	Land attack cruise missile	31 (68.9)	14 (31.1)
F1.6	5-kilometre range anti-aircraft missile launched from surface warships	2 (4.4)	43 (95.6)
F1.7	100-kilometre range anti-aircraft missile launched from surface warships	18 (40)	27 (60)
F1.8	76mm calibre naval artillery gun	3 (6.7)	42 (93.3)
F1.9	Naval mine	24 (53.3)	21 (46.7)
F1.10	Remotely-operated underwater mine disposal vehicle	6 (13.3)	39 (86.7)

In this section, various naval armaments (or combat systems) are evaluated by the respondents. Supersonic ASCM, LACM and naval mine are identified in this research to be destabilizing. Supersonic ASCM and LACM are perceived as destabilizing due to their ability to reduce tactical and strategic warning time for the opponent, and permit little or no effective countermeasures. This is especially the case for supersonic ASCM that can overwhelm shipboard self-defense capabilities while LACM is particularly destabilizing because it allows one to project precision firepower into the opponent's hinterland, whether or not targeted at military (counterforce) or civilian facilities (counter-value), resulting in huge escalatory risk potential due to its ability of expanding armed confrontation from sea to land. Long-range subsonic ASCM appears to lie in the 'grey area' even though by virtue of absolute statistical score it is not considered destabilizing. When compared to a short-range subsonic ASCM it becomes clear that long-range ASCM provides enhanced standoff force projection capability, without necessarily exposing the shooter to the adversary's line of fire, thus exposing a potential source of destabilization. The long-range SAM appears to highlight the range-sensitivity factor to a lesser extent. The remaining naval armaments are

not regarded destabilizing due to their inherent defensive operational characteristics and/or short ranges.

F2: Surface Warfare

		D	ND
F2.1	Aircraft carriers capable of launching air strikes on enemy land targets	37 (82.2)	8 (17.8)
F2.2	Helicopter carrier capable of launching amphibious assault landing craft	26 (57.8)	19 (42.2)
F2.3	Helicopter carrier equipped with only anti-submarine helicopters	12 (26.7)	33 (73.3)
F2.4	Cruiser primarily equipped for air defence (e.g. Aegis system)	5 (11.1)	40 (88.9)
F2.5	Destroyer armed with Mach 2 (supersonic) anti-ship missiles	28 (62.2)	17 (37.8)
F2.6	Frigate equipped for anti-submarine missions only	3 (6.7)	42 (93.3)
F2.7	Stealth frigate armed with 120-kilometre range anti-ship missiles	19 (42.2)	26 (57.8)
F2.8	Destroyer armed with Mach 0.8 (subsonic) anti-ship missiles	12 (26.7)	33 (73.3)
F2.9	Fast attack craft armed with Mach 2 (supersonic) anti-ship missiles	28 (62.2)	17 (37.8)
F2.10	Naval patrol craft armed only with 40mm calibre guns	1 (2.2)	44 (97.8)
F2.11	Fast attack craft armed with 20-kilometre range anti-ship missiles	4 (8.9)	41 (91.1)
F2.12	Patrol craft armed only with guns and torpedoes	2 (4.4)	43 (95.6)
F2.13	Fast attack craft armed with 120-kilometre range anti-ship missiles	22 (48.9)	23 (51.1)
F2.14	Stealth fast attack craft armed with 120-kilometre range anti-ship missiles	28 (62.2)	17 (37.8)

F2.15	Naval patrol craft armed with only one 76mm calibre main gun armament	1 (2.2)	44 (97.8)
F2.16	Coastguard patrol ship armed with only machine guns	2 (4.4)	43 (95.6)
F2.17	Coastguard patrol ship armed with guns of calibre 40mm or more	1 (2.2)	44 (97.8)
F2.18	Medium landing craft capable of carrying 1 main battle tank or 30 fully-equipped platoon of marines/naval infantrymen	5 (11.1)	40 (88.9)
F2.19	Landing platform dock capable of carrying 350 fully-equipped marines/naval infantrymen or 6 main battle tanks	19 (42.2)	26 (57.8)
F2.20	Landing ship tank capable of beaching ashore and disembarking 140 fully-equipped marines/naval infantrymen or 2 main battle tanks	19 (42.2)	26 (57.8)
F2.21	Oceangoing combat support ship capable of underway replenishment	5 (11.1)	40 (88.9)
2.22	Mine countermeasures vessel equipped with remotely-operated underwater mine disposal vehicles	1 (2.2)	44 (97.8)
F2.23	Minelayer equipped to deploy up to 30 naval mines	24 (53.3)	21 (46.7)
F2.24	Oceanographic survey ship equipped for seafloor mapping	4 (8.9)	41 (91.1)
F2.25	Oceangoing surveillance ship equipped with signal intelligence suite	8 (17.8)	37 (82.2)
F2.26	Shore-based 120-kilometre coastal defence anti-ship missile	9 (20)	36 (80)
F2.27	Shore-based 155mm artillery gun in coastal defence role	3 (6.7)	42 (93.3)
F2.28	Shore-based anti-ship ballistic missile of 400-kilometre range	28 (62.2)	17 (37.8)
F2.29	Unarmed submarine rescue ship equipped with deep-submergence rescue vehicle	3 (6.7)	42 (93.3)

F2.30 Unmanned surface vessel armed with remotely-operated gun and/or missile armaments

14 (31.1)	31 (68.9)
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The following naval platforms are identified to be destabilizing: 1) aircraft carrier equipped with organic strike aviation; 2) helicopter carriers equipped for amphibious assault operations (LHD-type); 3) all surface combatants equipped with supersonic ASCM; 4) stealth minor surface combatants equipped with long-range ASCM; 5) minelayers; and 6) ASBM. Large amphibious assault landing ships of LST and LPD categories; stealth frigates and minor surface combatants equipped with long-range subsonic ASCM fall within the 'grey zone' despite their absolute statistical score. Basically, naval platforms which allow for the projection of power ashore, such as sea-based aerial strikes into the opponent's hinterland or seizure of coastal zones are particularly offensive. The results also showed that major surface combatants (frigate to cruiser) are not perceived as destabilizing unless they are equipped with destabilizing armaments such as supersonic ASCM. Stealth minor surface combatants armed with long-range ASCM are deemed destabilizing while stealth major surface combatants similarly armed are not. This is probably because stealth combined with small physical size of platform increases its offensive power reducing detectability and thus warning time for the target. Minelayers are deemed destabilizing probably because the Asia-Pacific littorals are particularly vulnerable to mining operations which endanger free movement of shipping. Shore-based ASBMs are supposed to be denial or anti-access weapons designed with defense in mind. However, this particular armament is destabilizing because it permits little or no effective countermeasures. Only the most advanced navies equipped with sea-based anti-ballistic missile defenses may stand a chance of resisting an ASBM attack. Responses elicited in this section also demonstrates that minor surface combatants primarily equipped with short- to medium-range armaments; defensive sea control assets such as helicopter carriers equipped for ASW, most major surface combatants not equipped with supersonic ASCM and/or LACMs; anti-mine warfare and shore-based artillery and ASCM coastal defenses are defensive in nature. Coastguard-type vessels lightly equipped at most with medium-calibre gun armaments can be potentially stabilizing, especially when deployed in disputed maritime zones.

F3: Undersea Warfare

		D	ND
F3.1	Nuclear-powered attack submarine	34 (75.6)	11 (24.4)
F3.2	Conventional submarine equipped with only torpedoes	14 (31.1)	31 (68.9)
F3.3	Conventional submarine equipped with air-independent propulsion (AIP) system for 15-days submerged endurance without snorkeling	20 (44.4)	25 (55.6)
F3.4	Conventional submarine armed with submerged-launch 120-kilometre range, Mach 0.8 (subsonic) anti-ship missiles	24 (53.3)	21 (46.7)
F3.5	Nuclear-powered submarine armed with nuclear-tipped ballistic missiles	39 (86.7)	6 (13.3)
F3.6	Conventional submarine equipped to lay 28 naval mines	29 (64.4)	16 (35.6)

F3.7	Conventional submarine armed with submerged-launch Mach 2 (supersonic) anti-ship missile	29 (64.4)	16 (13.3)
F3.8	Conventional submarine armed with land-attack cruise missiles	34 (75.6)	11 (24.4)
F3.9	Midget submarine equipped to disembark combat swimmers/commandos	19 (42.2)	26 (57.8)
F3.10	Conventional submarine fitted with specialised signal intelligence suite	14 (31.1)	31 (68.9)

In this section, nuclear-powered submarines in general are perceived as destabilizing due to their ability to conduct offensive operations for sustained periods of time while submerged, hence increasing the difficulty of ASW operations for the defender. Sea-based nuclear armaments are also deemed destabilizing due to their immense power projection and destructive capabilities. Diesel-electric powered submarines on the other hand are generally not deemed destabilizing unless they are equipped with destabilizing combat systems such as supersonic ASCM, LACM, naval mines and to a lesser extent long-range subsonic ASCM. While mining operations can be defensive or offensive, typically offensive mining operations conducted against an opponent are carried out most effectively by submarines. Diesel-electric powered submarines equipped with AIP and midget submarines designed for swimmer insertion fall within the 'grey zone' despite their statistical scores. Generally all modern diesel-electric submarines are equipped with at least a basic SIGINT capability but interestingly they are not deemed destabilizing.

F4: Maritime Aviation

		D	ND
F4.1	Land-based fighter jet armed with Mach 0.8 (subsonic) anti-ship missiles	11 (24.4)	34 (75.6)
F4.2	Unarmed, land-based maritime patrol and surveillance aircraft	5 (11.1)	40 (88.9)
F4.3	Anti-submarine helicopter launched from warship	4 (8.9)	41 (91.1)
F4.4	Air-to-air refuelling tanker aircraft	5 (11.1)	40 (88.9)
F4.5	Airborne early warning aircraft (capable of maritime surveillance)	4 (8.9)	41 (91.1)
F4.6	Land-based maritime patrol and surveillance aircraft armed with two 120-kilometre range anti-ship missiles	13 (28.9)	32 (71.1)
F4.7	Land-based fighter jet armed with unguided bombs and rockets	6 (13.3)	39 (86.7)

F4.8 Land-based fighter jet armed with Mach 2 (supersonic) anti-ship missiles

19 (42.2)	26 (57.8)
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In general, land-based aviation is not regarded as destabilizing by the respondents. In this case, land-based surveillance aerial platforms can be particularly stabilizing. Land-based fighter jets armed with supersonic ASCM fall within the 'grey zone' despite the statistical score, although it is still clear that they are seen as less stabilizing compared to land-based fighter jets armed with subsonic ASCMs. Even though land-based fighter jets' reliance on land bases limits combat radius, the fact that supersonic ASCM carried as payload may be a potential source of concern. This may be further amplified if air-to-air refuelling platforms are available to extend its combat radius allowing it to project force further out to the sea, threatening shipping with weapons that reduce warning time and offer little or no effective countermeasures.

Section G: Naval Force Structures

G1 **Type 1 model**

D	ND
37 (82.2)	8 (17.8)

- Aircraft carriers with diverse types of aircraft embarked for various missions
- Cruisers, destroyers and frigates constituting the fleet's combat power
- Long-range amphibious landing capability, including helicopter carriers
- Oceangoing combat support forces capable of underway replenishment
- Nuclear-powered submarines
- No regular naval coastal patrol and combatant forces
- Coastguard for maritime constabulary tasks

G2 **Type 2 model**

2 (4.4)	43 (95.6)
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- Only patrol and fast attack craft armed with anti-ship missiles and torpedoes
- No major surface combatants
- Only diesel-electric powered patrol submarines
- No oceangoing combat support forces capable of underway replenishment
- Minimal amphibious landing forces made up of small landing craft
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Shore-based radar, artillery and anti-ship missile batteries
- Coastguard for maritime constabulary tasks

G3 **Type 3 model**

1 (2.2)	44 (97.8)
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- Mostly corvettes, fast attack and patrol craft
- Small squadron of frigates, but no cruisers and destroyers
- Only diesel-electric powered patrol submarines

- Minimal oceangoing combat support forces capable of underway replenishment
- Modest amphibious landing forces, led by a pair of large landing ships
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Coastguard for maritime constabulary tasks

G4 **Type 4 model**

14 (31.1)	31 (68.9)
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- Destroyers and frigates constituting the fleet's combat power
- Only diesel-electric powered patrol submarines
- Small squadron of missile-armed fast attack craft
- Oceangoing combat support forces capable of underway replenishment
- Small numbers of but large-sized amphibious landing vessels
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Coastguard for maritime constabulary tasks

G5 **Type 5 model**

25 (55.6)	20 (44.4)
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- Destroyers and frigates, supported by large force of coastal patrol combatants
- Nuclear and diesel-electric powered submarines
- Oceangoing combat support forces capable of underway replenishment
- Long-range amphibious landing force with large landing vessels
- Shore-based air support provided by jet fighters and maritime patrol aircraft
- Shore-based radar, artillery and anti-ship missile batteries
- Coastguard for maritime constabulary tasks

The results tabulated for this section conforms to the earlier responses. Bluewater capabilities are destabilizing due to their inherent flexibility and geographical reach, thus force structures predominantly constituted by such capabilities are also deemed destabilizing. A natural progression can be seen in ascending order of destabilization according to the proportion of bluewater to coastal oriented capabilities: Types 2 and 3, followed by Types 4 and 5, and finally, Type 1 model. Hence, three different categories of naval force structures can be distinguished here. Types 2 and 3 largely belong to what Michael Lindberg classified as the Coastal Defense Navies category. Type 1 model is clearly a typical bluewater, oceangoing navy. Types 4 and 5 reside in between these two categories. They are certainly much more capable of undertaking bluewater naval operations than Types 2 and 3. However, Type 5 is judged to be destabilizing while Type 4 is not, most likely due to the incorporation of large amphibious assault landing capabilities within its force structure.

Section H: Naval Arms Buildup in the Asia-Pacific

H1 Naval arms buildup in the Asia-Pacific increases tensions between states

SD	D	A	SA
2	13	29	1

H2	Naval expansion by individual nations can be beneficial, since it facilitates better national control of sea-space and thus maritime boundaries with respect to neighbouring states (i.e. 'secure fences make good neighbours')	1	9	30	5
H3	It is the right of every nation to acquire naval power, so long as it does not threaten the security of other countries	1	2	27	15
H4	Naval arms buildup in the Asia-Pacific can contribute to regional peace and security	2	9	28	6
H5	Existing maritime confidence-building and security measures (MCSBMs) in Asia-Pacific are effective in promoting peace and stability	2	8	28	7
H6	The naval arms buildup in the Asia-Pacific requires more effort to improve MCSBMs in the Asia-Pacific in order to maintain peace and stability in the region	2	3	33	7

The majority of the respondents on the one hand viewed naval buildup in the region as destabilizing since that increases interstate tensions but on the other hand, also viewed the phenomenon as beneficial for regional security. This reflects the unresolved debate between the destabilizing and stabilizing schools over the regional naval modernization. Point to note however is that the questions did not specifically target any sub-regions within the Asia-Pacific. Naval arms buildup is primarily seen in terms of capabilities acquired, and therefore the source of existing security dilemma and thus ongoing naval arms dynamics in the region. Nonetheless, most respondents view the effectiveness of existing MCSBMs in at least mitigating the likely negative consequences of naval arms buildup in the Asia-Pacific, yet even more acknowledge the need for greater efforts in this aspect in order to keep pace with the ongoing regional naval arms dynamics. This section also reinforces the need to look beyond capabilities and force structure, and include other aspects such as navies' involvement in MCSBMs for instance to more accurately determine the consequences of naval modernization in Southeast Asia which is the subject of inquiry in this study.

Table A4.1 relates to the discussion in Chapter 4, Section 4.5

Table A4.1: Total Assets in the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	195	194	183	159
Finland	127	229	273	244
Germany	527	616	513	378
Norway	668	611	579	575
Poland	443	302	243	199
Sweden	650	690	700	438
Min = 127; Max = 700; Average = 406				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	196	230	252	263
Bangladesh	64	101	125	182
Democratic People's Republic of Korea	904	1087	1094	1137
India	312	373	465	670
Japan	626	644	658	700
New Zealand	43	48	25	32
Pakistan	197	219	212	255
People's Republic of China	2767	2221	1546	1511
Republic of Korea	503	588	719	839
Taiwan	899	1209	1406	1337
Min = 25; Max = 2767; Average = 666				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	18	23	25	29
Indonesia	338	455	545	619
Malaysia	184	263	425	589
Myanmar	100	153	187	215
The Philippines	274	224	230	205
Singapore	197	392	432	407
Thailand	322	408	466	459
Vietnam	263	231	236	279
Min = 18; Max = 619; Average = 287				

Tables A4.2, A4.3, A4.4, A4.5, A4.6, A4.7, A4.8, A4.9 and A4.10 relate to the discussion in Chapter 4, Section 4.6

Table A4.2: Total Submarine Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	5	5	2	0
Finland	0	0	0	0
Germany	24	17	12	6
Norway	14	12	6	6
Poland	3	3	5	5
Sweden	12	10	6	5
Min = 0; Max = 24; Average = 7				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	6	4	6	6
Bangladesh	0	0	0	0
Democratic People's Republic of Korea	29	59	68	85
India	11	18	16	14
Japan	14	16	17	18
New Zealand	0	0	0	0
Pakistan	11	9	9	8
People's Republic of China	105	79	65	66
Republic of Korea	2	13	21	23
Taiwan	3	4	2	2
Min = 0; Max = 105; Average = 20				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	2	2	2	2
Malaysia	0	0	0	2
Myanmar	0	0	0	0
The Philippines	0	0	0	0
Singapore	0	0	3	6
Thailand	0	0	0	0
Vietnam	0	1	2	3
Min = 0; Max = 6; Average = 1				

Table A4.3: Total Major Surface Combatant Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	2	0	1	4
Finland	1	0	0	0
Germany	16	14	16	18
Norway	5	4	4	5
Poland	1	2	3	3
Sweden	1	0	0	0
Min = 0; Max = 18; Average = 4				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	12	11	12	12
Bangladesh	3	4	4	6
Democratic People's Republic of Korea	3	3	3	3
India	24	20	22	26
Japan	52	60	55	48
New Zealand	4	4	2	2
Pakistan	10	11	8	11
People's Republic of China	44	53	68	70
Republic of Korea	18	16	16	22
Taiwan	33	30	29	26
Min = 2; Max = 70; Average = 21				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	13	17	14	14
Malaysia	3	5	7	11
Myanmar	0	0	0	4
The Philippines	6	1	1	3
Singapore	0	0	2	6
Thailand	6	13	13	13
Vietnam	6	7	6	7
Min = 0; Max = 17; Average = 6				

Table A4.4: Total Minor Surface Combat and Patrol Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	87	79	71	53
Finland	47	61	73	87
Germany	61	63	49	39
Norway	452	434	433	433
Poland	83	63	57	40
Sweden	94	107	82	56
Min = 39; Max = 452; Average = 129				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	25	23	23	26
Bangladesh	29	44	67	120
Democratic People's Republic of Korea	503	461	445	513
India	55	95	124	193
Japan	199	186	204	213
New Zealand	6	4	4	6
Pakistan	48	30	23	32
People's Republic of China	954	753	405	467
Republic of Korea	115	175	190	239
Taiwan	83	136	215	215
Min = 4; Max = 954; Average = 191				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	15	19	20	24
Indonesia	129	171	229	295
Malaysia	91	105	194	347
Myanmar	80	100	110	113
The Philippines	115	133	154	136
Singapore	65	107	162	180
Thailand	141	163	168	171
Vietnam	76	66	70	93
Min = 15; Max = 347; Average = 126				

Table A4.5: Total Mine Warfare Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	13	14	12	6
Finland	13	23	20	20
Germany	73	57	40	36
Norway	12	10	9	7
Poland	43	22	21	20
Sweden	70	56	38	16
Min = 7; Max = 87; Average = 37				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	25	23	23	26
Bangladesh	0	4	5	5
Democratic People's Republic of Korea	23	23	24	24
India	17	21	13	7
Japan	43	35	38	36
New Zealand	0	0	0	0
Pakistan	4	8	8	8
People's Republic of China	177	152	78	66
Republic of Korea	9	15	12	10
Taiwan	22	15	12	14
Min = 0; Max = 177; Average = 32				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	4	12	11	11
Malaysia	4	4	4	4
Myanmar	0	0	0	0
The Philippines	0	0	0	0
Singapore	2	3	4	4
Thailand	12	16	19	18
Vietnam	12	15	13	13
Min = 0; Max = 19; Average = 6				

Table A4.6: Total Amphibious Assault Landing Vessel Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0	0	0	0
Finland	23	86	118	86
Germany	63	22	14	3
Norway	7	10	23	16
Poland	40	14	10	8
Sweden	239	338	346	162
Min = 0; Max = 346; Average = 68				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	23	27	29	32
Bangladesh	4	10	11	14
Democratic People's Republic of Korea	127	253	263	267
India	15	23	30	45
Japan	49	31	32	31
New Zealand	0	0	2	3
Pakistan	2	2	7	8
People's Republic of China	493	308	284	264
Republic of Korea	56	56	53	52
Taiwan	422	377	326	293
Min = 0; Max = 493; Average = 108				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	2	3	4	4
Indonesia	91	111	119	117
Malaysia	32	68	121	117
Myanmar	13	15	17	18
The Philippines	97	54	44	35
Singapore	38	141	138	70
Thailand	57	58	63	71
Vietnam	43	36	29	29
Min = 2; Max = 141; Average = 58				

Table A4.7: Total Amphibious Troops Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	2	2	2	2
Finland	1	1	1	1
Germany	1	1	2	2
Norway	2	2	3	3
Poland	4	4	2	2
Sweden	1	1	2	2
Min = 1; Max = 4; Average = 2				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0	0	0	0
Bangladesh	0	0	0	1
Democratic People's Republic of Korea	6	6	6	6
India	1	1	2	6
Japan	0	0	2	2
New Zealand	0	0	0	0
Pakistan	1	2	2	4
People's Republic of China	4	4	5	5
Republic of Korea	4	4	4	5
Taiwan	11	9	6	6
Min = 0; Max = 11; Average = 3				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	1	1	1	1
Indonesia	8	8	11	11
Malaysia	1	1	2	2
Myanmar	1	1	1	1
The Philippines	3	3	2	4
Singapore	1	3	3	3
Thailand	2	2	2	3
Vietnam	10	6	2	2
Min = 1; Max = 11; Average = 3				

Table A4.8: Total Fleet Auxiliaries Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	16	17	19	23
Finland	23	36	38	27
Germany	38	41	38	39
Norway	18	17	16	17
Poland	11	12	13	11
Sweden	13	22	30	29
Min = 11; Max = 41; Average = 24				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	10	13	15	18
Bangladesh	3	4	4	5
Democratic People's Republic of Korea	20	21	21	21
India	16	25	28	30
Japan	11	20	27	26
New Zealand	5	7	5	3
Pakistan	5	7	7	8
People's Republic of China	164	186	195	179
Republic of Korea	11	9	10	11
Taiwan	13	10	10	4
Min = 3; Max = 195; Average = 30				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	17	21	28	28
Malaysia	14	11	12	12
Myanmar	5	16	19	18
The Philippines	8	10	12	13
Singapore	0	1	1	1
Thailand	12	12	14	13
Vietnam	5	17	19	22
Min = 0; Max = 28; Average = 11				

Table A4.9: Total Aviation Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	70	75	74	70
Finland	9	10	12	14
Germany	251	400	342	234
Norway	117	102	80	83
Poland	249	174	125	103
Sweden	169	116	176	148
Min = 9; Max = 400; Average = 133				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	116	141	156	160
Bangladesh	25	35	33	29
Democratic People's Republic of Korea	191	259	261	217
India	170	166	228	345
Japan	259	293	277	319
New Zealand	28	33	13	18
Pakistan	116	149	147	175
People's Republic of China	826	684	446	389
Republic of Korea	287	298	409	473
Taiwan	309	624	802	774
Min = 13; Max = 826; Average = 267				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	73	113	131	140
Malaysia	40	70	84	94
Myanmar	1	21	40	61
The Philippines	44	23	16	15
Singapore	90	136	118	137
Thailand	93	137	178	161
Vietnam	111	81	93	107
Min = 0; Max = 178; Average = 75				

Table A4.10: Total Shore-based Coastal Defence Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	2	2	2	2
Finland	10	12	11	8
Germany	0	0	0	0
Norway	42	20	6	5
Poland	8	8	6	7
Sweden	50	39	20	20
Min = 0; Max = 50; Average = 12				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0	0	0	0
Bangladesh	0	0	0	1
Democratic People's Republic of Korea	2	2	2	2
India	3	3	3	4
Japan	0	4	7	7
New Zealand	0	0	0	0
Pakistan	0	0	0	1
People's Republic of China	0	0	1	4
Republic of Korea	1	3	3	3
Taiwan	3	3	3	3
Min = 0; Max = 7; Average = 2				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0	0	0	0
Indonesia	0	0	0	0
Malaysia	0	0	0	0
Myanmar	0	0	0	0
The Philippines	0	0	0	0
Singapore	0	0	0	0
Thailand	0	7	10	10
Vietnam	1	1	1	3
Min = 0; Max = 10; Average = 1				

Tables A4.11, A4.12, A4.13, A4.14, A4.15, A4.16, A4.17, A4.18 and A4.19 relate to the discussion in Chapter 4, Section 4.7

Table A4.11: Percentage of Submarine Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	2.48	2.51	0.94	0.00
Finland	0.00	0.00	0.00	0.00
Germany	4.55	2.81	2.34	1.68
Norway	2.06	2.00	1.04	1.04
Poland	0.68	0.92	1.99	2.51
Sweden	1.85	1.48	0.87	1.14
Min = 0.00; Max = 4.55; Average = 1.45				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	3.06	1.69	2.31	2.28
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	3.18	5.41	6.26	7.47
India	3.53	4.92	3.40	2.09
Japan	2.29	2.43	2.54	2.57
New Zealand	0.00	0.00	0.00	0.00
Pakistan	5.36	4.22	4.25	3.14
People's Republic of China	3.79	3.57	4.22	4.37
Republic of Korea	0.40	2.27	2.88	2.78
Taiwan	0.31	0.33	0.17	0.15
Min = 0.00; Max = 7.47; Average = 2.44				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	0.67	0.44	0.37	0.32
Malaysia	0.00	0.00	0.09	0.34
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.76	1.39
Thailand	0.00	0.00	0.00	0.00
Vietnam	0.00	0.38	0.85	0.95
Min = 0.00; Max = 1.39; Average = 0.20				

Table A4.12: Percentage of Major Surface Combatant Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.77	0.00	0.59	2.51
Finland	0.79	0.00	0.00	0.00
Germany	3.04	2.33	3.05	4.68
Norway	0.75	0.69	0.69	0.87
Poland	0.28	0.70	1.39	1.51
Sweden	0.14	0.00	0.00	0.00
Min = 0.00; Max = 4.68; Average = 1.03				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	6.20	4.74	4.73	4.56
Bangladesh	4.84	3.96	3.56	3.12
Democratic People's Republic of Korea	0.36	0.28	0.27	0.26
India	7.70	5.42	4.69	3.88
Japan	8.30	9.25	8.29	6.86
New Zealand	9.94	7.82	9.35	7.38
Pakistan	5.24	4.93	3.78	4.18
People's Republic of China	1.60	2.41	4.38	4.63
Republic of Korea	3.56	2.65	2.28	2.66
Taiwan	3.69	2.45	2.04	1.94
Min = 0.26; Max = 9.94; Average = 4.45				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	3.95	3.74	2.57	2.26
Malaysia	1.72	1.77	1.73	1.87
Myanmar	0.33	0.00	0.24	1.71
The Philippines	2.19	0.50	0.47	1.30
Singapore	0.00	0.00	0.42	1.47
Thailand	1.91	3.19	2.79	2.83
Vietnam	2.34	2.84	2.39	2.51
Min = 0.00; Max = 3.95; Average = 1.53				

Table A4.13: Percentage of Minor Surface Combat and Patrol Forces Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	44.45	40.57	38.57	33.26
Finland	37.24	26.60	26.87	35.57
Germany	11.65	10.27	9.51	10.24
Norway	67.65	70.96	74.77	75.36
Poland	18.74	20.85	23.49	20.10
Sweden	14.50	15.45	11.66	12.85
Min = 9.51; Max = 75.36; Average = 31.30				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	12.65	9.87	9.25	9.87
Bangladesh	45.68	43.94	53.27	66.24
Democratic People's Republic of Korea	55.61	42.45	40.72	45.08
India	17.56	25.59	26.55	28.79
Japan	31.81	28.90	30.97	30.40
New Zealand	14.62	8.28	15.11	18.73
Pakistan	24.32	13.88	10.94	12.68
People's Republic of China	34.48	33.93	26.20	30.88
Republic of Korea	22.91	29.78	26.44	28.51
Taiwan	9.18	11.26	15.32	16.10
Min = 8.28; Max = 66.24; Average = 26.47				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	83.10	82.21	79.78	82.76
Indonesia	38.28	37.58	42.07	47.68
Malaysia	49.16	39.75	45.76	58.90
Myanmar	79.63	65.41	58.58	52.60
The Philippines	42.01	59.07	67.05	66.13
Singapore	33.29	27.36	37.57	44.24
Thailand	43.78	39.96	35.92	37.25
Vietnam	28.69	28.65	29.72	33.29
Min = 27.36; Max = 83.10; Average = 49.91				

Table A4.14: Percentage of Mine Warfare Forces Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	6.49	7.20	6.74	3.77
Finland	10.13	10.03	7.25	8.34
Germany	13.93	9.29	7.87	9.62
Norway	1.74	1.56	1.49	1.22
Poland	9.76	7.39	8.77	10.05
Sweden	10.80	8.11	5.41	3.65
Min = 1.22; Max = 13.93; Average = 7.11				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	2.21	4.60	4.44	3.92
Bangladesh	0.00	3.63	4.00	2.75
Democratic People's Republic of Korea	2.54	2.12	2.15	2.11
India	5.51	5.51	2.89	1.04
Japan	6.79	5.42	5.82	5.15
New Zealand	0.00	0.00	0.00	0.00
Pakistan	2.20	3.76	3.78	3.14
People's Republic of China	6.39	6.86	5.03	4.39
Republic of Korea	1.80	2.55	1.70	1.19
Taiwan	2.45	1.25	0.85	1.05
Min = 0.00; Max = 6.86; Average = 3.02				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	1.04	2.59	2.04	1.78
Malaysia	2.08	1.52	0.94	0.68
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	1.02	0.82	0.93	0.98
Thailand	3.57	4.00	4.07	3.85
Vietnam	4.56	6.44	5.71	4.65
Min = 0.00; Max = 6.44; Average = 1.66				

Table A4.15: Percentage of Amphibious Assault Landing Vessel Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	18.42	37.69	43.27	35.29
Germany	11.86	3.50	2.71	0.88
Norway	1.05	1.64	3.91	2.78
Poland	8.97	4.67	4.08	4.02
Sweden	36.80	48.97	49.46	36.96
Min = 0.00; Max = 49.46; Average = 14.87				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	11.71	11.76	11.34	12.03
Bangladesh	6.41	9.80	8.79	7.71
Democratic People's Republic of Korea	14.04	23.27	24.08	23.48
India	4.94	6.17	6.45	6.76
Japan	7.77	4.77	4.87	4.48
New Zealand	0.00	0.00	6.47	9.37
Pakistan	0.84	0.92	3.43	3.14
People's Republic of China	17.81	13.86	18.39	17.49
Republic of Korea	11.17	9.48	7.34	6.24
Taiwan	46.99	31.21	23.22	21.93
Min = 0.00; Max = 46.99; Average = 11.50				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	11.27	13.46	16.18	13.79
Indonesia	26.94	24.37	21.80	18.91
Malaysia	17.32	25.85	28.43	19.80
Myanmar	12.97	9.66	9.01	8.38
The Philippines	35.47	24.16	19.32	17.06
Singapore	19.25	36.09	31.95	17.21
Thailand	17.67	14.33	13.51	15.47
Vietnam	16.28	15.77	12.26	10.50
Min = 8.38; Max = 36.09; Average = 18.58				

Table A4.16: Percentage of Amphibious Troops Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	1.02	1.03	1.09	1.26
Finland	0.79	0.44	0.37	0.41
Germany	0.19	0.16	0.32	0.53
Norway	0.30	0.33	0.52	0.52
Poland	0.90	1.32	0.82	1.01
Sweden	0.15	0.18	0.32	0.46
Min = 0.15; Max = 1.32; Average = 0.60				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	0.00	0.00	0.00	0.55
Democratic People's Republic of Korea	0.66	0.55	0.55	0.53
India	0.32	0.27	0.47	0.90
Japan	0.00	0.00	0.29	0.29
New Zealand	0.00	0.00	0.00	0.00
Pakistan	0.55	0.92	0.94	1.44
People's Republic of China	0.14	0.19	0.32	0.33
Republic of Korea	0.79	0.68	0.61	0.60
Taiwan	1.17	0.74	0.44	0.45
Min = 0.00; Max = 1.44; Average = 0.39				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	5.63	4.33	4.04	3.45
Indonesia	2.37	1.83	2.02	1.83
Malaysia	0.54	0.38	0.47	0.34
Myanmar	1.00	0.65	0.53	0.47
The Philippines	1.22	1.39	0.95	1.95
Singapore	0.59	0.77	0.69	0.74
Thailand	0.65	0.49	0.43	0.58
Vietnam	3.74	2.79	0.85	0.72
Min = 0.34; Max = 5.63; Average = 1.51				

Table A4.17: Percentage of Fleet Auxiliaries Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	8.03	8.74	10.61	14.23
Finland	18.03	15.55	13.93	11.08
Germany	7.24	6.68	7.49	10.41
Norway	2.71	2.78	2.75	2.96
Poland	2.52	3.86	5.36	5.53
Sweden	2.06	3.23	4.31	6.62
Min = 2.06; Max = 18.03; Average = 7.36				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	5.14	5.81	5.96	6.71
Bangladesh	4.19	3.96	3.34	2.94
Democratic People's Republic of Korea	2.20	1.93	1.92	1.82
India	5.05	6.82	5.92	4.48
Japan	1.70	3.18	4.12	3.72
New Zealand	11.11	15.17	19.42	9.37
Pakistan	2.58	3.36	3.52	3.14
People's Republic of China	5.93	8.39	12.61	11.87
Republic of Korea	2.09	1.49	1.42	1.27
Taiwan	1.47	0.85	0.71	0.30
Min = 0.30; Max = 19.42; Average = 4.92				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	5.03	4.62	5.19	4.58
Malaysia	7.33	4.22	2.89	2.04
Myanmar	5.40	10.45	10.37	8.38
The Philippines	3.04	4.61	5.22	6.34
Singapore	0.04	0.26	0.34	0.25
Thailand	3.57	2.91	3.00	2.76
Vietnam	1.84	7.50	8.13	7.88
Min = 0.00; Max = 10.45; Average = 4.01				

Table A4.18: Percentage of Aviation Forces Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	35.91	38.69	40.21	43.72
Finland	7.11	4.46	4.39	5.88
Germany	47.55	64.96	66.71	61.96
Norway	17.45	16.74	13.85	14.38
Poland	56.25	57.74	51.63	51.76
Sweden	25.98	16.87	25.11	33.76
Min = 4.39; Max = 66.71; Average = 33.46				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	59.04	61.54	61.97	60.63
Bangladesh	38.87	34.69	26.74	16.15
Democratic People's Republic of Korea	21.18	23.82	23.86	19.08
India	54.44	44.50	48.92	51.47
Japan	41.31	45.49	42.05	45.55
New Zealand	64.33	68.74	49.64	55.16
Pakistan	58.91	68.02	69.33	68.76
People's Republic of China	29.85	30.80	28.82	25.77
Republic of Korea	57.08	50.60	56.92	56.39
Taiwan	34.41	51.66	57.03	57.85
Min = 16.15; Max = 69.33; Average = 46.53				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	21.73	24.84	23.95	22.63
Malaysia	21.75	26.44	19.66	16.01
Myanmar	0.50	13.72	21.17	28.39
The Philippines	16.02	10.20	6.91	7.15
Singapore	45.72	34.67	27.30	33.67
Thailand	28.85	33.48	38.14	35.08
Vietnam	42.18	35.19	39.51	38.42
Min = 0.00; Max = 45.72; Average = 22.09				

Table A4.19: Percentage of Shore-based Coastal Defence Forces Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.85	1.26	1.24	1.26
Finland	7.50	5.23	3.92	3.42
Germany	0.00	0.00	0.00	0.00
Norway	6.29	3.31	0.97	0.87
Poland	1.69	2.54	2.47	3.52
Sweden	7.72	5.71	2.86	4.56
Min = 0.00; Max = 7.72; Average = 2.80				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	0.00	0.00	0.29	0.55
Democratic People's Republic of Korea	0.22	0.18	0.18	0.18
India	0.96	0.80	0.72	0.60
Japan	0.03	0.55	1.05	1.00
New Zealand	0.00	0.00	0.00	0.00
Pakistan	0.00	0.00	0.04	0.39
People's Republic of China	0.00	0.00	0.04	0.26
Republic of Korea	0.20	0.51	0.42	0.36
Taiwan	0.33	0.25	0.21	0.22
Min = 0.00 Max = 1.05; Average = 0.26				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	0.00	0.00	0.00	0.00
Malaysia	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.00	0.00
Thailand	0.00	1.63	2.14	2.18
Vietnam	0.38	0.43	0.58	1.07
Min = 0.00; Max = 2.18; Average = 0.26				

Table A4.20 relates to the discussion in Chapter 4, Section 4.8

Table A4.20: Total DPI of the Aggregate Force Structure by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	10.96	14.72	8.45	2.00
Finland	5.13	5.39	12.91	12.67
Germany	133.50	202.28	178.59	163.00
Norway	7.00	7.39	6.59	13.67
Poland	42.17	68.22	54.00	47.83
Sweden	88.96	63.28	87.73	77.50
Min = 2.00; Max = 202.28; Average = 54.75				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	44.54	77.00	81.82	85.83
Bangladesh	2.75	5.89	6.55	8.83
Democratic People's Republic of Korea	44.38	63.17	77.77	100.67
India	43.29	69.78	136.82	257.33
Japan	66.71	123.44	117.23	126.83
New Zealand	0.17	0.50	0.77	1.00
Pakistan	53.29	57.50	54.23	79.17
People's Republic of China	224.08	234.28	240.91	442.83
Republic of Korea	34.42	81.67	142.55	209.83
Taiwan	39.08	120.28	207.91	223.67
Min = 0.17; Max = 442.83; Average = 99.72				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	1.50	1.50	1.50	1.67
Indonesia	21.54	29.67	39.86	59.00
Malaysia	6.50	11.33	22.45	37.17
Myanmar	0.50	2.72	7.09	10.00
The Philippines	15.71	9.22	7.68	9.00
Singapore	4.58	16.94	38.36	48.33
Thailand	9.29	14.06	15.27	19.33
Vietnam	19.58	51.72	62.95	81.83
Min = 0.50; Max = 81.83; Average = 21.18				

Table A4.21 relates to the discussion in Chapter 4, Section 4.9

Table A4.21: Percentage of L-, M- and H-type Assets as Part of the Aggregate Force Structure by Country

NORTHERN EUROPE		1980-91	1992-2000	2001-11	2012-14
Denmark	L	88.77	84.86	90.78	97.49
	M	11.23	15.14	9.22	2.51
	H	0.00	0.00	0.00	0.00
Finland	L	92.76	95.64	93.95	93.98
	M	6.38	4.36	2.66	1.64
	H	0.86	0.00	3.39	4.38
Germany	L	49.78	34.84	34.93	37.86
	M	49.54	64.60	60.85	37.95
	H	0.68	0.56	4.22	24.18
Norway	L	98.35	97.98	98.59	97.51
	M	1.20	1.36	0.36	0.00
	H	0.45	0.65	1.05	2.49
Poland	L	82.04	56.75	57.03	53.43
	M	16.93	41.85	42.04	45.06
	H	1.03	1.40	0.94	1.51
Sweden	L	73.16	82.31	75.44	66.01
	M	26.08	17.34	24.04	32.62
	H	0.76	0.35	0.52	1.37
NON-ASEAN INDO-PACIFIC		1980-91	1992-2000	2001-11	2012-14
Australia	L	64.05	46.30	45.25	45.32
	M	25.93	40.93	45.07	44.18
	H	10.02	12.77	9.68	10.51
Bangladesh	L	91.36	87.78	89.53	91.01
	M	8.64	11.67	10.47	8.26
	H	0.00	0.00	0.00	0.73
Democratic People's Republic of Korea	L	92.28	90.16	87.62	84.55
	M	5.61	7.94	10.53	13.19
	H	2.10	1.90	1.85	2.26
India	L	72.93	63.09	56.59	51.86
	M	26.38	36.04	28.48	19.69
	H	0.69	0.86	14.92	28.44
Japan	L	79.27	62.60	66.30	65.65
	M	20.32	36.60	31.53	32.44
	H	0.41	0.79	2.17	1.91
New Zealand	L	99.22	97.93	93.88	93.76
	M	0.78	2.07	6.12	6.24

	H	0.00	0.00	0.00	0.00
Pakistan	L	46.75	47.59	49.38	39.61
	M	53.00	51.70	49.55	58.69
	H	0.25	0.71	1.07	1.70
People's Republic of China	L	85.17	80.70	75.02	61.57
	M	13.39	17.30	18.86	18.24
	H	1.44	2.00	6.12	20.19
Republic of Korea	L	87.12	72.97	63.78	60.53
	M	12.25	26.22	32.77	28.95
	H	0.63	0.81	3.45	10.52
Taiwan	L	92.14	80.54	70.67	68.22
	M	6.95	18.91	29.08	30.11
	H	0.91	0.55	0.25	1.67
ASEAN		1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	L	83.10	87.02	87.87	90.80
	M	16.90	12.98	12.13	9.20
	H	0.00	0.00	0.00	0.00
Indonesia	L	89.37	88.35	87.72	84.86
	M	9.00	10.26	10.01	11.21
	H	1.63	1.39	2.27	3.93
Malaysia	L	92.94	91.17	90.58	90.44
	M	7.06	8.62	8.00	6.51
	H	0.00	0.21	1.41	3.06
Myanmar	L	99.00	96.44	92.43	91.15
	M	1.00	3.56	7.57	8.70
	H	0.00	0.00	0.00	0.16
The Philippines	L	89.75	93.46	95.14	94.15
	M	9.03	3.87	3.04	2.93
	H	1.22	2.68	1.82	2.93
Singapore	L	95.04	91.61	82.34	76.48
	M	4.58	8.13	17.30	23.27
	H	0.38	0.26	0.36	0.25
Thailand	L	94.57	93.35	93.67	91.79
	M	5.09	6.40	6.12	7.99
	H	0.34	0.25	0.21	0.22
Vietnam	L	89.14	60.58	56.71	58.35
	M	7.41	33.41	33.19	24.70
	H	3.45	6.01	10.10	16.95

Tables A4.22, A4.23, A4.24, A4.25, A4.26, A4.27, A4.28, A4.29 and A4.30 relate to the discussion in Chapter 4, Section 4.10

Table A4.22: DPI of Submarine Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	0.00	0.00	1.23	2.50
Norway	0.00	0.00	0.00	0.00
Poland	0.00	0.00	0.00	0.00
Sweden	0.00	0.67	1.95	2.50
Min = 0.00; Max = 2.50; Average = 0.37				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	3.00	1.94	2.91	3.00
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	4.38	11.06	11.50	7.50
India	0.33	0.00	3.45	10.00
Japan	7.17	7.83	8.36	9.00
New Zealand	0.00	0.00	0.00	0.00
Pakistan	5.29	4.61	4.50	4.00
People's Republic of China	5.04	8.56	16.86	30.33
Republic of Korea	1.00	4.56	6.86	9.33
Taiwan	0.00	0.00	0.00	0.33
Min = 0.00; Max = 30.33; Average = 4.82				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	0.00	0.00	0.00	0.00
Malaysia	0.00	0.00	0.18	1.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.05	0.83
Thailand	0.00	0.00	0.00	0.00
Vietnam	0.00	0.44	1.00	1.33
Min = 0.00; Max = 1.33; Average = 0.15				

Table A4.23: DPI of Major Surface Combatant Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.75	0.00	0.55	2.00
Finland	0.00	0.00	0.00	0.00
Germany	5.83	7.11	7.82	8.83
Norway	0.00	0.00	1.64	5.00
Poland	0.17	0.56	1.18	1.00
Sweden	0.00	0.00	0.00	0.00
Min = 0.00; Max = 8.83; Average = 1.77				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	3.29	4.28	3.36	6.00
Bangladesh	0.13	0.50	0.73	1.33
Democratic People's Republic of Korea	1.63	1.50	1.50	1.50
India	5.00	6.00	9.64	16.67
Japan	9.08	22.00	24.91	23.00
New Zealand	0.00	0.00	0.00	0.00
Pakistan	2.54	3.39	2.86	4.00
People's Republic of China	18.42	26.28	35.32	37.50
Republic of Korea	5.13	7.67	8.18	14.83
Taiwan	12.67	14.56	14.50	15.50
Min = 0.00; Max = 3.50; Average = 9.13				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	2.96	5.00	5.68	7.50
Malaysia	0.58	1.33	2.91	5.00
Myanmar	0.00	0.00	0.23	1.83
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.91	3.00
Thailand	0.08	3.50	4.50	4.50
Vietnam	0.00	0.00	0.00	1.00
Min = 0.00; Max = 7.53; Average = 1.58				

Table A4.24: DPI of Minor Surface Combat and Patrol Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	6.92	11.83	6.91	0.00
Finland	3.54	5.39	7.18	6.67
Germany	18.38	17.00	8.05	4.00
Norway	0.00	0.00	0.45	5.67
Poland	7.17	5.72	2.64	1.00
Sweden	5.96	10.89	5.91	7.00
Min = 0.00; Max = 18.38; Average = 6.18				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	2.17	4.39	4.82	5.83
Democratic People's Republic of Korea	16.38	24.83	24.23	26.00
India	10.13	12.89	19.32	16.00
Japan	0.00	0.67	6.18	6.00
New Zealand	0.00	0.00	0.00	0.00
Pakistan	3.17	3.61	2.95	5.33
People's Republic of China	110.67	87.28	49.32	80.17
Republic of Korea	8.54	16.56	13.91	23.00
Taiwan	0.00	0.00	1.64	16.50
Min = 0.00; Max = 110.67; Average = 15.06				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	1.50	1.50	1.50	1.67
Indonesia	2.46	2.00	2.32	5.50
Malaysia	4.00	4.78	6.00	6.00
Myanmar	0.00	2.22	6.36	7.67
The Philippines	0.00	0.00	0.00	0.00
Singapore	1.38	6.00	5.91	4.00
Thailand	1.96	2.50	2.50	2.50
Vietnam	4.42	4.72	6.95	8.17
Min = 0.00; Max = 8.17; Average = 3.33				

Table A4.25: DPI of Mine Warfare Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	3.29	2.89	1.00	0.00
Finland	1.58	0.00	5.73	6.00
Germany	2.00	0.33	0.00	0.00
Norway	2.50	2.89	1.45	1.00
Poland	0.00	0.00	0.00	0.00
Sweden	8.38	6.50	4.23	0.50
Min = 0.00; Max = 8.38; Average = 2.09				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	0.00	0.00	0.00	0.00
India	0.00	0.00	0.00	0.00
Japan	2.00	2.33	3.00	2.33
New Zealand	0.00	0.00	0.00	0.00
Pakistan	0.00	0.00	0.00	0.00
People's Republic of China	0.00	0.67	1.00	1.00
Republic of Korea	0.00	0.89	1.00	1.00
Taiwan	0.00	0.00	0.00	0.00
Min = 0.00; Max = 3.00; Average = 0.38				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	0.00	0.00	0.00	0.00
Malaysia	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.00	0.00
Thailand	0.33	0.00	0.00	0.00
Vietnam	0.00	0.00	0.00	0.00
Min = 0.00; Max = 0.33; Average = 0.01				

Table A4.26: DPI of Amphibious Assault Landing Vessel Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	0.00	0.00	0.00	0.00
Norway	3.50	2.72	1.05	0.00
Poland	11.67	5.72	3.45	2.50
Sweden	0.00	0.00	0.00	0.00
Min = 0.00; Max = 11.67; Average = 1.28				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.50	1.22	1.45	0.83
Bangladesh	0.08	0.50	0.50	1.00
Democratic People's Republic of Korea	2.00	4.78	5.00	5.00
India	6.88	8.67	8.18	8.00
Japan	3.00	3.11	3.05	3.00
New Zealand	0.00	0.00	0.27	0.50
Pakistan	0.00	0.00	0.00	0.00
People's Republic of China	19.75	26.50	33.50	42.50
Republic of Korea	8.67	7.89	5.45	4.17
Taiwan	14.83	11.28	11.09	7.17
Min = 0.00; Max = 42.50; Average = 6.51				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	7.08	11.56	13.91	12.83
Malaysia	1.13	1.33	0.41	0.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	12.38	4.33	3.50	3.00
Singapore	2.42	2.50	2.14	2.00
Thailand	4.25	4.00	3.50	2.83
Vietnam	3.67	3.33	3.00	3.67
Min = 0.00; Max = 13.91; Average = 3.40				

Table A4.27: DPI of Amphibious Troops Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	0.00	0.00	0.32	0.50
Norway	0.00	0.00	0.00	0.00
Poland	3.00	3.00	1.00	1.00
Sweden	0.50	0.61	1.14	1.00
Min = 0.00; Max = 3.00; Average = 0.50				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	5.00	5.00	5.00	5.00
India	0.42	1.00	1.91	5.00
Japan	0.00	0.00	0.45	0.50
New Zealand	0.00	0.00	0.00	0.00
Pakistan	1.04	1.50	1.50	2.33
People's Republic of China	4.00	4.22	5.00	5.00
Republic of Korea	4.00	4.00	4.00	4.00
Taiwan	7.50	6.00	3.18	3.00
Min = 0.00; Max = 7.50; Average = 2.24				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	6.50	6.83	9.50	9.83
Malaysia	0.00	0.00	0.00	0.00
Myanmar	0.50	0.50	0.50	0.50
The Philippines	3.33	3.11	2.18	4.00
Singapore	0.13	1.50	1.50	1.50
Thailand	1.08	1.00	1.00	1.00
Vietnam	9.83	6.44	2.00	2.00
Min = 0.00; Max = 9.83; Average = 2.38				

Table A4.28: DPI of Fleet Auxiliaries Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	10.88	8.22	7.95	8.50
Norway	1.00	1.78	2.00	2.00
Poland	2.04	2.50	2.50	2.50
Sweden	0.67	1.00	1.00	1.00
Min = 0.00; Max = 10.88; Average = 2.31				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.63	1.00	0.73	1.00
Bangladesh	0.38	0.50	0.50	0.67
Democratic People's Republic of Korea	15.00	16.00	16.00	15.67
India	1.00	1.44	1.55	2.00
Japan	1.88	5.00	5.32	4.50
New Zealand	0.17	0.50	0.50	0.50
Pakistan	0.71	1.39	1.45	1.00
People's Republic of China	16.50	18.94	20.36	21.00
Republic of Korea	0.08	0.78	1.50	1.50
Taiwan	0.08	0.50	0.50	0.50
Min = 0.08; Max = 21.00; Average = 4.48				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	1.21	1.50	1.50	1.50
Malaysia	0.79	1.00	1.00	1.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	1.78	2.00	2.00
Singapore	0.00	0.00	0.00	0.00
Thailand	0.46	0.78	1.00	1.00
Vietnam	0.00	0.00	0.00	0.00
Min = 0.00; Max = 2.00; Average = 0.58				

Table A4.29: DPI of Aviation Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	96.42	169.61	153.23	138.67
Norway	0.00	0.00	0.00	0.00
Poland	18.13	50.72	43.23	39.83
Sweden	73.46	43.61	73.50	65.50
Min = 0.00; Max = 169.61; Average = 40.25				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	37.13	68.56	73.36	75.00
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	0.00	0.00	14.55	40.00
India	19.54	39.78	92.59	199.17
Japan	43.58	82.50	65.95	78.50
New Zealand	0.00	0.00	0.00	0.00
Pakistan	40.54	43.00	40.95	62.50
People's Republic of China	49.71	61.83	79.55	224.33
Republic of Korea	7.00	39.33	101.64	152.00
Taiwan	4.00	87.94	177.00	180.67
Min = 0.00; Max = 224.33; Average = 57.06				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	1.33	2.78	6.95	21.83
Malaysia	0.00	2.89	11.95	24.17
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.67	6.94	27.86	37.00
Thailand	1.13	2.28	2.77	7.50
Vietnam	1.67	36.78	49.82	64.67
Min = 0.00; Max = 64.67; Average = 9.72				

Table A4.30: DPI of Shore-based Coastal Defence Forces Assets by Country

NORTHERN EUROPE	1980-91	1992-2000	2001-11	2012-14
Denmark	0.00	0.00	0.00	0.00
Finland	0.00	0.00	0.00	0.00
Germany	0.00	0.00	0.00	0.00
Norway	0.00	0.00	0.00	0.00
Poland	0.00	0.00	0.00	0.00
Sweden	0.00	0.00	0.00	0.00
Min = 0.00; Max = 0.00; Average = 0.00				
NON-ASEAN INDO-PACIFIC	1980-91	1992-2000	2001-11	2012-14
Australia	0.00	0.00	0.00	0.00
Bangladesh	0.00	0.00	0.00	0.00
Democratic People's Republic of Korea	0.00	0.00	0.00	0.00
India	0.00	0.00	0.18	0.50
Japan	0.00	0.00	0.00	0.00
New Zealand	0.00	0.00	0.00	0.00
Pakistan	0.00	0.00	0.00	0.00
People's Republic of China	0.00	0.00	0.00	1.00
Republic of Korea	0.00	0.00	0.00	0.00
Taiwan	0.00	0.00	0.00	0.00
Min = 0.00; Max = 1.00; Average = 0.04				
ASEAN	1980-91	1992-2000	2001-11	2012-14
Brunei Darussalam	0.00	0.00	0.00	0.00
Indonesia	0.00	0.00	0.00	0.00
Malaysia	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00
The Philippines	0.00	0.00	0.00	0.00
Singapore	0.00	0.00	0.00	0.00
Thailand	0.00	0.00	0.00	0.00
Vietnam	0.00	0.00	0.18	1.00
Min = 0.00; Max = 1.00; Average = 0.04				

APPENDIX A5

Table A5.1: Universal Search Terms

Concepts	Security, defense/defence, military, naval, navy, maritime, sea, marine, fishery (fisheries), fishing, international law, expansionism/expansionist, hegemonic/hegemony, foreign/defence/defense ministers, foreign policy
Flashpoints	Hibernia Reef, Socotra Rock, Katchatheevu, Ligitan, Sipadan, Ambalat, Kuril, Kuriles, Northern Territories, Dokdo, Liancourt Rocks, Takeshima, Ieodo, Macclesfield Bank, Minicoy Island, New Moore island, Naf river, Okinotorishima, Yonaguni, Pedra Branca, Batu Puteh, Batek, Natuna, Sebatik, Sir Creek, Bay of Bengal, International Maritime Boundary Line, Tasman Sea, Tonkin, Gulf of Thailand, Senkaku, Diaoyu; Diaoyutai; East China Sea, Pratas, Penghu, Kinmen, Matsu, Sea of Japan, South China Sea, Spratly, Paracel, Scarborough Shoal, Straits of Malacca, Melaka Strait, Straits of Singapore, Makassar, Lombok, Sunda, Mianggas, Yellow Sea, Northern Limit Line, Taiwan Strait

Table A5.2: Compartmentalization of Parameters for Foreign Policies

Parameters	Description
Foreign affairs outlook	This reflects a country's foreign policy outlook in general or with respect to interstate disputes. The foreign policy outlook should emphasize maintaining the status quo of territorial boundaries while respecting other countries' and peaceful coexistence with other countries especially rivals. It should generally reflect a country's desire for peaceful and cooperative relations with the international community.
Concerns about the international environment	This reflects a country's concerns about the international environment, such as matters related to the likelihood of armed conflict in particular. In general, it may outline the country's views against other countries' policies that undermine its national interests, while at the same time taking into account other countries' security concerns.
Inflammatory statements	These comprise verbal statements that undermine interstate relations, such as issuing an ultimatum with intention to take a certain action against another country if the latter acts, fails to act, or does not refrain from acting in a specific manner. They may also comprise verbal attacks which undermine interstate relations. Refrain from such rhetoric signifies attempts to foster confidence and prevent escalation of interstate tensions.
Threat to use armed force to resolve interstate disputes	Overt verbal threat to use armed force against another country in the context of an interstate dispute does not foster confidence-building and may instead create enemy imaging. Declarations which openly forswear the use of armed force to resolve disputes may reassure other countries and promote cooperation.
Adherence to and respect for international laws	Expression of willingness to adhere to and respect international laws in the conduct of foreign relations may reassure other countries and foster cooperation, especially in the context of interstate disputes. Willingness to cooperate on the basis of international laws is of particular interest.

Table A5.3: Compartmentalization of Parameters for Defence Policies

Parameters	Description
International security outlook	This reflects a country's assessment of the international or regional security outlook, which provides an indication of how its military forces are structured and tasked.
Defence and security concerns	This reflects a country's national security concerns, which provides an indication of how its military forces are structured and tasked.
Open reference to threats	Open reference to another country as a national security threat or security concern does not foster confidence-building since it creates enemy imaging, promote reciprocal arms acquisition and orientation of defence postures targeted at one another.
Outline of existing and projected military forces	Outline of existing and projected military forces reflects a deliberate attempt at transparency over one's defence preparations, such as force structure organization and new procurements.
Policies on roles of the military forces	Outline of policies governing the roles of the military forces reflects not just transparency but also indicates their likely employment which signifies either offensive or defensive intent.
Defence expenditures and sectoral budget breakdowns	Outline of defence expenditures may reflect transparency, but the publication of how defense budgets are categorized according to various sectors may be even more helpful in fostering confidence, especially when it comes to budget allocations for new arms procurements vis-à-vis manpower maintenance.
Arms procurement and domestic R&D policies	Outline of arms procurement and domestic R&D policies reflects transparency but also gives other countries access to information pertaining to defence preparations.

Table A5.4: Tabulated Frequencies from Theme-based Content Analysis, 1980-91

	Count	STATE		UNCONV	UNCERTAINTY	POSTURE		FORCE		DIPLOMACY	COOPERATION
		Green	Red			Green	Red	Green	Red		
Australia	53	4	5	0	4	0	2	1	0	6	5
Bangladesh	8	0	0	0	0	0	0	1	0	4	0
Brunei Darussalam	3	0	0	1	0	0	0	0	0	0	1
DPRK	27	0	5	0	0	0	0	1	2	13	0
India	54	0	20	1	1	6	1	9	2	19	1
Indonesia	45	9	0	2	0	0	1	3	0	6	6
Japan	249	1	44	1	8	43	0	14	0	69	17
Malaysia	84	4	8	1	2	12	1	10	0	20	2
Myanmar	2	0	0	0	0	0	0	0	0	1	0
New Zealand	4	0	0	1	0	1	0	0	0	0	3
Pakistan	22	1	4	0	0	9	0	2	0	6	0
The Philippines	48	0	2	3	0	2	0	2	2	8	3
PRC	130	1	11	0	3	15	4	8	12	74	3
ROK	78	2	8	0	0	6	0	4	6	66	0
Singapore	105	4	10	0	12	7	0	3	0	21	28
Taiwan	35	0	22	0	0	1	0	3	2	9	0
Thailand	34	0	0	0	0	0	0	2	0	10	2
Vietnam	29	0	6	0	0	1	0	4	1	18	1

Table A5.5: Tabulated Frequencies from Theme-based Content Analysis, 1992-2000

	Count	STATE		UNCONV	UNCERTAINTY	POSTURE		FORCE		DIPLOMACY	COOPERATION
		Green	Red			Green	Red	Green	Red		
Australia	186	19	3	3	12	9	2	10	1	23	34
Bangladesh	57	2	0	5	1	3	4	0	0	30	4
Brunei Darussalam	6	0	0	2	0	0	0	1	0	3	1
DPRK	386	0	301	0	1	3	6	9	66	81	0
India	459	9	132	26	6	74	12	53	5	159	25
Indonesia	193	10	4	4	1	16	3	11	3	56	28
Japan	485	8	57	10	16	83	7	41	4	131	66
Malaysia	315	24	8	15	4	59	4	33	0	96	62
Myanmar	47	0	0	8	0	0	0	3	0	26	10
New Zealand	14	3	0	0	1	1	0	0	0	0	6
Pakistan	447	2	177	4	0	76	32	35	11	189	3
The Philippines	203	6	22	7	5	6	11	33	1	77	12
PRC	778	8	91	7	14	100	46	108	105	380	92
ROK	367	3	108	2	2	16	5	26	19	170	13
Singapore	246	12	3	3	28	12	5	6	0	66	77
Taiwan	616	2	334	0	3	80	3	76	8	231	18
Thailand	123	7	3	6	1	21	2	5	1	39	12
Vietnam	160	2	4	2	1	3	1	34	0	115	7

Table A5.6: Tabulated Frequencies from Theme-based Content Analysis, 2001-11

		STATE		UNCONV	UNCERTAINTY	POSTURE		FORCE		DIPLOMACY	COOPERATION
	Count	Green	Red			Green	Red	Green	Red		
Australia	396	22	17	25	15	19	8	26	12	58	51
Bangladesh	282	2	0	24	1	3	2	12	1	136	39
Brunei Darussalam	20	0	0	5	1	0	0	0	0	4	4
DPRK	968	2	807	4	3	55	21	23	135	204	3
India	953	40	180	146	11	75	2	82	17	378	115
Indonesia	594	23	13	36	5	26	15	51	13	170	75
Japan	762	28	133	32	15	96	6	44	10	219	100
Malaysia	559	26	6	40	7	50	2	77	1	200	81
Myanmar	93	2	4	11	2	3	0	10	2	51	11
New Zealand	64	8	2	12	2	4	0	2	1	7	22
Pakistan	1045	15	186	105	10	196	16	97	20	499	100
The Philippines	371	7	6	27	0	4	1	45	0	141	25
PRC	1167	17	87	69	60	231	18	142	47	556	375
ROK	675	12	185	9	4	24	13	41	35	238	32
Singapore	372	4	0	58	22	9	2	6	0	109	106
Taiwan	1216	2	621	10	3	211	1	95	4	386	32
Thailand	181	1	1	10	0	4	1	23	5	87	35
Vietnam	420	7	5	16	10	20	4	51	0	236	113

Table A5.7: Tabulated Frequencies from Theme-based Content Analysis, 2012-14

		STATE		UNCONV	UNCERTAINTY	POSTURE		FORCE		DIPLOMACY	COOPERATION
	Count	Green	Red			Green	Red	Green	Red		
Australia	281	24	8	12	4	3	0	16	0	70	38
Bangladesh	95	3	0	11	0	1	0	5	0	28	82
Brunei Darussalam	25	0	0	5	4	0	0	0	0	4	16
DPRK	767	0	703	0	0	23	4	12	188	80	4
India	598	24	108	73	13	45	0	34	10	210	85
Indonesia	385	20	6	30	7	22	2	41	2	95	63
Japan	693	6	132	9	8	62	3	79	14	286	95
Malaysia	160	4	0	23	1	1	2	14	0	63	34
Myanmar	22	2	0	0	0	1	0	0	0	9	1
New Zealand	47	0	0	13	1	2	0	1	1	8	17
Pakistan	389	3	51	87	8	31	4	28	8	174	38
The Philippines	697	28	47	15	7	25	2	81	0	304	28
PRC	1398	15	228	25	36	108	2	87	53	692	189
ROK	584	1	276	16	3	13	3	9	54	174	28
Singapore	270	4	0	29	17	5	3	11	0	108	72
Taiwan	401	3	55	2	1	50	0	49	4	211	10
Thailand	97	2	0	9	0	1	0	6	0	42	18
Vietnam	356	4	18	8	14	13	0	48	0	225	98

APPENDIX A6

Table A6.1: Total Count of CSBMs 1980-2014

	1980-91	1992-2000	2001-11	2012-14
Australia	14	26	49	19
Bangladesh	8	9	27	4
Brunei Darussalam	17	45	44	27
DPRK	26	35	46	6
India	26	41	111	53
Indonesia	20	55	75	39
Japan	29	80	110	47
Malaysia	20	56	73	32
Myanmar	3	34	47	26
New Zealand	9	12	24	6
Pakistan	20	34	78	27
The Philippines	18	53	60	42
PRC	36	97	162	103
ROK	26	77	85	28
Singapore	16	52	66	28
Taiwan	8	12	23	11
Thailand	16	52	63	30
Vietnam	14	59	86	71

Table A6.2: Format of CSBMs 1980-2014

	1980-91			1992-2000			2001-11			2012-14		
	Unilateral	Bilateral	Multilateral	Unilateral	Bilateral	Multilateral	Unilateral	Bilateral	Multilateral	Unilateral	Bilateral	Multilateral
Australia	0	4	10	3	9	14	0	21	28	0	13	6
Bangladesh	0	2	6	1	1	7	3	10	14	0	3	1
Brunei Darussalam	0	1	16	2	2	41	0	1	43	0	2	25
DPRK	3	11	12	1	22	12	2	28	16	0	6	0
India	0	17	9	3	24	14	1	81	29	0	43	10
Indonesia	1	3	16	2	10	43	2	30	43	0	9	30
Japan	2	14	13	2	59	19	1	71	38	1	36	10
Malaysia	1	2	17	3	7	46	1	28	44	0	7	25
Myanmar	0	0	3	1	5	28	0	7	40	0	5	21
New Zealand	2	1	6	2	0	10	1	4	19	0	2	4
Pakistan	0	13	7	4	16	14	1	53	24	0	20	7
The Philippines	1	2	15	2	10	41	1	15	44	0	15	27
PRC	0	20	16	3	66	28	4	18	50	1	79	23
ROK	1	11	14	2	50	25	5	50	30	1	20	7
Singapore	0	2	14	2	11	39	0	15	51	0	4	24
Taiwan	3	4	1	6	6	0	2	16	5	0	8	3
Thailand	1	1	14	2	9	41	1	16	46	0	6	24
Vietnam	1	3	10	2	19	38	0	42	44	1	45	25

Table A6.3. CSBMs Classified in Categories in the Period 1980-91

CATEGORY	DECLARATORY	TRANSPARENCY					CONSTRAINT				HYBRID
		Info	Comms	Notification	Obs/Insp	TOTAL	Risk Reduction	Excl/Sep	Personnel/Eqpt/Activities	TOTAL	
Australia	3	6	0	0	0	6	1	1	3	5	0
Bangladesh	2	4	0	0	0	4	0	0	2	2	0
Brunei Darussalam	4	10	0	0	0	10	1	0	2	3	0
DPRK	10	8	0	0	0	8	1	0	7	8	0
India	9	11	3	0	0	14	1	0	2	3	0
Indonesia	5	15	0	0	0	15	0	0	0	0	0
Japan	4	18	0	0	1	19	0	0	6	6	0
Malaysia	3	13	1	0	0	14	1	0	2	3	0
Myanmar	1	1	0	0	0	1	1	0	0	1	0
New Zealand	1	4	0	0	0	4	0	2	2	4	0
Pakistan	6	7	3	0	0	10	1	0	3	4	0
The Philippines	3	14	0	0	0	14	0	1	0	1	0
PRC	9	20	0	0	0	20	1	0	5	6	1
ROK	2	16	0	0	0	16	0	0	8	8	0
Singapore	3	13	0	0	0	13	0	0	0	0	0
Taiwan	4	4	0	0	0	4	0	0	0	0	0
Thailand	3	12	1	0	0	13	0	0	0	0	0
Vietnam	2	7	0	0	0	7	1	0	4	5	0

Table A6.4. CSBMs Classified in Categories in the Period 1991-2000

CATEGORY	DECLARATORY	TRANSPARENCY					CONSTRAINT				HYBRID
Sub-Category		Info	Comms	Notification	Obs/Insp	TOTAL	Risk Reduction	Excl/Sep	Personnel/Eqpt/Activities	TOTAL	
Australia	1	20	1	0	0	21	0	0	3	3	1
Bangladesh	0	6	0	0	0	6	0	0	3	3	0
Brunei Darussalam	13	30	1	0	0	31	0	0	1	1	0
DPRK	9	21	1	0	1	23	0	0	2	2	1
India	4	29	2	0	0	31	2	0	2	4	2
Indonesia	16	31	3	0	1	35	0	0	4	4	0
Japan	8	56	6	1	0	63	2	0	7	9	0
Malaysia	14	36	2	0	1	39	1	0	2	3	0
Myanmar	12	19	2	0	0	21	0	0	1	1	0
New Zealand	1	8	1	0	0	9	0	0	2	2	0
Pakistan	9	16	1	0	0	17	4	0	4	8	0
The Philippines	17	32	1	0	0	33	0	1	2	3	0
PRC	26	56	3	0	1	60	1	1	5	7	4
ROK	5	51	7	1	3	62	2	0	6	8	2
Singapore	13	36	2	0	0	38	0	0	1	1	0
Taiwan	6	2	1	1	0	4	0	1	0	1	1
Thailand	14	30	6	0	0	36	0	0	2	2	0
Vietnam	22	32	4	0	0	36	0	0	1	1	0

Table A6.5. CSBMs Classified in Categories in the Period 2001-11

CATEGORY	DECLARATORY	TRANSPARENCY					CONSTRAINT				HYBRID
Sub-Category		Info	Comms	Notification	Obs/Insp	TOTAL	Risk Reduction	Excl/Sep	Personnel/Eqpt/Activities	TOTAL	
Australia	6	39	0	0	0	39	0	0	3	3	1
Bangladesh	4	22	0	0	0	22	0	0	0	0	1
Brunei Darussalam	20	21	1	0	1	23	0	0	0	0	1
DPRK	7	23	8	2	0	33	2	2	2	6	0
India	20	72	11	1	1	85	1	0	1	2	4
Indonesia	24	37	4	0	1	42	4	0	5	9	0
Japan	20	69	10	3	3	85	0	0	3	3	2
Malaysia	23	34	8	0	0	42	3	1	4	8	0
Myanmar	21	24	2	0	0	26	0	0	0	0	0
New Zealand	5	17	0	0	0	17	0	0	2	2	0
Pakistan	10	57	6	0	0	63	1	1	2	4	1
The Philippines	22	30	5	0	0	35	0	0	3	3	0
PRC	33	90	21	2	5	118	4	0	4	8	3
ROK	12	44	16	1	1	62	3	2	6	11	0
Singapore	22	41	2	0	0	43	0	0	1	1	0
Taiwan	4	12	3	0	0	15	0	1	0	1	3
Thailand	22	36	3	0	0	39	0	1	1	2	0
Vietnam	23	52	10	0	0	62	0	0	1	1	0

Table A6.6. CSBMs Classified in Categories in the Period 2012-14

CATEGORY	DECLARATORY	TRANSPARENCY					CONSTRAINT				HYBRID
Sub-Category		Info	Comms	Notification	Obs/Insp	TOTAL	Risk Reduction	Excl/Sep	Personnel/Eqpt/Activities	TOTAL	
Australia	0	18	0	0	0	18	1	0	0	1	0
Bangladesh	0	4	0	0	0	4	0	0	0	0	0
Brunei Darussalam	8	13	3	0	0	16	2	0	1	3	0
DPRK	5	0	0	0	0	0	0	0	0	0	1
India	8	34	5	0	0	39	1	0	2	3	3
Indonesia	11	24	1	0	0	25	2	0	1	3	0
Japan	5	33	3	1	0	37	3	1	0	4	1
Malaysia	9	16	5	0	0	21	2	0	0	2	0
Myanmar	8	15	1	0	0	16	1	1	0	2	0
New Zealand	0	5	0	0	0	5	1	0	0	1	0
Pakistan	1	21	1	0	0	22	0	0	2	2	2
The Philippines	12	20	4	0	0	24	3	1	0	4	2
PRC	19	56	16	1	1	74	4	1	1	6	4
ROK	2	19	5	1	0	25	1	0	0	1	0
Singapore	8	17	1	0	0	18	2	0	0	2	0
Taiwan	2	6	1	0	0	7	1	1	0	2	0
Thailand	10	15	1	0	0	16	2	1	0	3	1
Vietnam	13	43	13	0	0	56	2	0	0	2	0

Table A6.7: Total Count of COMs 1980-2014

	1980-91	1992-2000	2001-11	2012-14
Australia	100	130	268	126
Bangladesh	7	26	78	28
Brunei Darussalam	19	63	227	56
DPRK	10	0	23	4
India	20	72	315	124
Indonesia	51	120	427	129
Japan	63	152	319	163
Malaysia	55	151	332	98
Myanmar	6	44	210	50
New Zealand	37	63	130	73
Pakistan	11	37	150	48
The Philippines	41	98	316	105
PRC	21	133	317	184
ROK	45	123	259	84
Singapore	52	140	299	76
Taiwan	9	21	39	27
Thailand	42	106	307	77
Vietnam	11	100	322	164

Table A6.8. COMs Classified in Categories in the Period 1980-91

	A	C/T	DM	E	F	MT	O	P/L	TX
Australia	5	9	0	8	43	2	4	8	21
Bangladesh	0	3	0	0	4	0	0	0	0
Brunei Darussalam	0	3	0	7	7	0	0	0	2
DPRK	0	3	1	0	2	0	0	3	1
India	1	5	2	7	3	0	0	1	1
Indonesia	0	3	4	14	12	1	2	3	12
Japan	1	7	2	15	25	0	2	0	11
Malaysia	0	2	6	13	15	0	2	0	17
Myanmar	0	2	1	0	1	0	0	2	0
New Zealand	0	5	0	8	13	1	2	1	7
Pakistan	1	2	1	3	3	0	0	0	1
The Philippines	0	3	3	11	16	0	0	0	8
PRC	0	5	5	6	3	1	0	0	1
ROK	0	7	0	13	14	0	0	0	11
Singapore	0	3	3	12	17	0	0	0	17
Taiwan	0	0	1	4	4	0	0	0	0
Thailand	0	1	2	10	13	0	0	2	14
Vietnam	0	3	1	3	2	0	0	2	0

Table A6.9. COMs Classified in Categories in the Period 1992-2000

	A	C/T	DM	E	F	MT	O	P/L
Australia	10	6	0	24	51	2	13	1
Bangladesh	1	2	1	2	13	1	0	2
Brunei Darussalam	0	1	8	33	15	0	0	0
DPRK	0	0	0	0	0	0	0	0
India	0	6	3	21	25	0	1	3
Indonesia	0	3	14	42	31	0	9	1
Japan	1	12	10	47	55	0	5	0
Malaysia	0	6	25	46	36	0	17	1
Myanmar	0	2	3	23	12	0	0	2
New Zealand	1	8	0	22	16	0	7	0
Pakistan	0	8	1	9	7	2	0	1
The Philippines	1	4	15	33	28	0	4	0
PRC	0	13	33	30	40	1	2	5
ROK	0	11	10	42	37	2	5	0
Singapore	0	3	11	38	29	3	10	1
Taiwan	0	0	11	5	5	0	0	0
Thailand	1	5	22	36	26	1	5	3
Vietnam	0	5	29	33	23	0	3	4

Table A6.10. COMs Classified in Categories in the Period 2001-11

	A	C/T	DM	E	F	MT	O	P/L	TX
Australia	16	8	0	50	123	2	18	6	45
Bangladesh	1	4	3	19	24	1	3	3	20
Brunei Darussalam	1	1	8	80	120	0	0	1	16
DPRK	0	0	4	4	12	0	1	1	1
India	14	3	19	73	131	5	12	1	57
Indonesia	3	6	28	109	213	4	26	1	37
Japan	7	10	15	111	113	0	7	0	56
Malaysia	3	3	24	98	151	1	15	3	34
Myanmar	0	4	4	78	112	0	3	1	8
New Zealand	3	6	0	36	45	0	11	1	28
Pakistan	1	0	8	49	65	4	4	0	19
The Philippines	1	5	9	98	165	0	6	0	32
PRC	1	6	43	90	115	1	10	2	49
ROK	1	10	15	80	100	5	6	0	42
Singapore	3	0	14	89	143	0	8	3	39
Taiwan	1	2	3	13	18	0	1	0	1
Thailand	2	1	11	104	145	0	11	1	32
Vietnam	1	0	22	97	165	2	8	3	24

Table A6.11. COMs Classified in Categories in the Period 2012-14

	A	C/T	DM	E	F	MT	O	P/L	TX
Australia	4	1	0	22	55	5	5	1	33
Bangladesh	3	1	0	5	14	0	1	0	4
Brunei Darussalam	1	0	3	15	23	0	1	0	13
DPRK	0	1	0	0	2	0	0	0	1
India	4	0	5	22	65	3	2	0	23
Indonesia	3	0	4	21	77	0	0	2	22
Japan	6	0	3	39	80	3	2	0	30
Malaysia	0	0	7	16	51	1	5	0	18
Myanmar	0	0	2	13	26	0	0	0	9
New Zealand	1	0	0	9	35	0	5	0	23
Pakistan	0	3	2	6	31	0	0	0	6
The Philippines	1	1	8	26	49	0	2	0	18
PRC	6	0	20	21	95	0	2	0	40
ROK	2	1	7	13	35	1	7	0	18
Singapore	1	0	5	17	31	0	2	1	19
Taiwan	2	1	9	5	9	0	0	0	1
Thailand	2	0	2	20	39	0	2	0	12
Vietnam	1	0	13	28	107	2	1	0	12

Table A6.12: Geographical Scope of COMs 1980-2014

	1980-91			1992-2000			2001-11			2012-14		
	Immediate Region	Wider Region	Extra-regional	Immediate Region	Wider Region	Extra-regional	Immediate Region	Wider Region	Extra-regional	Immediate Region	Wider Region	Extra-regional
Australia	29	57	14	16	83	31	25	186	57	19	90	17
Bangladesh	2	2	3	15	7	4	26	35	17	7	14	7
Brunei Darussalam	9	6	4	16	38	9	59	153	15	15	37	4
DPRK	7	0	3	0	0	0	17	4	2	3	0	1
India	9	6	5	25	35	12	126	152	37	46	66	12
Indonesia	26	21	4	45	67	8	136	255	36	43	74	12
Japan	9	43	11	56	72	24	66	219	34	21	116	26
Malaysia	32	15	8	69	61	21	118	186	28	44	49	5
Myanmar	3	1	2	15	27	2	50	143	17	14	35	1
New Zealand	22	8	7	13	27	23	25	76	29	15	46	12
Pakistan	6	1	4	13	8	16	51	58	41	9	21	18
The Philippines	14	23	4	33	55	10	85	205	26	38	63	4
PRC	7	9	5	44	74	15	69	219	29	32	129	23
ROK	4	33	8	43	60	20	59	160	40	16	54	14
Singapore	26	15	11	40	78	22	76	190	33	27	40	9
Taiwan	0	9	0	5	13	3	4	30	5	18	8	1
Thailand	23	17	2	45	53	8	88	197	22	30	42	5
Vietnam	5	3	3	41	53	6	91	205	26	57	88	19

Table A6.13. Format of COMs 1980-2014

	1980-91		1992-2000		2001-11		2012-14	
	Bilateral	Multilateral	Bilateral	Multilateral	Bilateral	Multilateral	Bilateral	Multilateral
Australia	63	37	66	64	121	147	67	59
Bangladesh	2	5	16	10	36	42	14	14
Brunei Darussalam	5	14	17	46	26	201	10	46
DPRK	7	3	0	0	19	4	3	1
India	11	9	42	30	220	95	92	32
Indonesia	29	22	51	69	176	251	72	57
Japan	43	20	89	63	142	177	110	53
Malaysia	28	27	76	75	83	249	42	56
Myanmar	4	2	13	31	26	184	14	36
New Zealand	14	23	14	49	24	106	24	49
Pakistan	7	4	20	17	100	50	36	12
The Philippines	18	23	41	57	88	228	53	52
PRC	11	10	76	57	158	159	132	52
ROK	24	21	73	50	122	137	51	33
Singapore	23	29	64	76	60	239	27	49
Taiwan	4	5	7	14	9	30	19	8
Thailand	23	19	42	64	71	236	31	46
Vietnam	8	3	42	58	112	210	118	46

APPENDIX A7

Table A7.1: Types of Limited Threat and Use of Naval Force

Types	Definition
Alert	Reported non-routine increase in military readiness of a state's existing regular naval forces near or within a disputed zone without prior notification of other parties. It also includes response to foreign transgressions.
Blockade	Use of naval forces to seal off the territory of another so as to prevent entry or exit of goods or personnel; this also includes boarding, stopping or inspection of ships or confiscation of goods. This includes the blockade of a disputed zone.
Clash	Outbreak of hostilities at sea between military forces of two or more interstate members involving the use of violent force, during which the assailant may or may not be clearly identified. It may involve the use of naval force carried out as a full-scale act of war.
Border violation	Crossing of a recognized sea boundary for a period of less than 24 hours by official naval forces of one state, without any force being used in the territory of the targeted state or any significant public demonstration of military force capability.
Force demonstration	Public demonstration of naval and aerial forces, such as purposeful display of naval forces outside the territorial waters of a victim and/or naval movements in the direction of the victim's shores or naval forces; repeated airspace incursions. No combat interaction is involved. It may take place near or within a disputed zone.
Fortification	Explicit attempt to publicly demonstrate control over a disputed zone through construction or reinforcement of military outposts to defend or claim territory. This includes creeping militarization within a disputed zone.
Harassment	Explicit attempt to publicly demonstrate control over a border or disputed area, or in the high seas, through the threat or use of limited naval force in close-proximity against or physical encounters (e.g. collision) with the other state's naval forces or private citizens. No combat interaction is involved.
Mobilization	Activation by a state of all or part of its previously inactive naval forces near or within a disputed zone. This includes unilateral naval force buildup in said area.
Occupation of territory	Use of naval force by one state to occupy the whole or part of another state's territory for a period of more than 24 hours. The immediate occupation after a war by the victorious side is not coded as an incident unless provisions of the treaty are violated by the occupying forces or further militarized incidents are undertaken by the state being occupied.
Raid	Use of regular naval forces to fire upon the naval forces or private citizens of another state, and the initiator may be clearly identified and its action is not sanctioned by the victim. Unlike clash, the victim does not retaliate in response.
Seizure	Capture of material or personnel of official naval forces from another state, or the detention of private citizens operating especially within contested territory.

Source: Based on Daniel M. Jones, Stuart A. Bremer, J. David Singer, "Militarized Interstate Disputes, 1816-1992: Rationale, Coding Rules, and Empirical Patterns," *Conflict Management and Peace Science*, Vol. 15, No. 2 (1996), pp. 172-173; Glenn H. Snyder, *Deterrence and Defense: Towards a Theory of National Security* (Princeton University Press, 1961).

Table A7.2: Tabulating Incidents at Sea

Categorizing Parameters	Description
Incident date	Date when incident takes place
Incident type	Sub-categories of threat or use of force employed
Forces involved	Forces – including the platforms – included on both sides
Provocateur	The party which initiates the incident (i.e. perpetrator)
Source of information	Source of information, including the news agency and date of publication
Incident narrative	Summary of the incident as reported in the information source

Source: adapted from Jones, et al (1996).

Table A7.3: Zonal Categorization of Reported Incidents at Sea 1980-2014

Non-ASEAN Indo-Pacific																								
	1980-91						1992-2000						2001-11						2012-14					
	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW
Australia	1	11	7	0	0	4	1	37	9	0	0	5	4	131	4	0	0	12	0	18	6	0	0	1
Bangladesh	11	1	0	0	0	0	17	3	0	0	0	0	3	2	0	0	3	0	4	9	0	0	0	0
DPRK	1	2	6	0	2	7	2	5	5	0	17	12	7	18	5	0	72	4	2	20	8	0	24	1
India	0	0	1	0	1	4	6	19	1	0	3	4	34	118	6	0	17	11	17	50	1	0	16	5
Japan	8	10	6	0	2	0	19	34	13	0	24	0	16	42	19	0	63	4	5	45	30	2	96	2
New Zealand	0	1	0	0	0	1	0	1	3	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
Pakistan	0	3	0	0	0	0	1	8	1	0	1	3	17	116	7	0	5	4	4	22	3	0	5	3
PRC	2	1	1	0	21	6	17	15	14	0	54	36	7	28	22	9	93	36	4	8	18	15	250	17
ROK	3	4	4	0	2	8	9	18	1	0	18	4	13	101	2	0	88	3	6	31	3	0	44	1
Taiwan	6	1	0	0	0	0	28	7	1	0	7	2	34	19	1	0	25	1	9	9	2	0	33	1
ASEAN																								
	1980-91						1992-2000						2001-11						2012-14					
	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW	TW	EEZ/CS	HS	IS	DZ	FW
Brunei Darussalam	0	0	0	0	0	0	0	1	0	0	0	0	2	3	0	0	2	0	0	5	0	0	0	0
Indonesia	0	4	0	0	2	1	7	26	5	0	5	0	12	86	2	0	28	4	8	23	0	0	7	1
Malaysia	0	6	0	0	6	4	6	23	0	0	11	4	12	89	1	0	43	4	8	22	0	0	4	0
Myanmar	0	0	0	0	0	1	1	0	0	0	4	2	5	4	0	0	5	5	1	4	0	0	1	0
The Philippines	2	1	0	0	0	0	10	36	0	0	39	0	16	39	0	0	19	0	11	12	0	0	15	0
Singapore	1	0	0	0	3	0	2	0	0	0	2	2	0	0	1	0	2	0	0	0	0	0	0	1
Thailand	1	0	1	0	1	0	2	5	0	0	5	6	2	2	0	0	3	2	4	7	0	0	2	0
Vietnam	1	2	0	0	5	0	3	0	0	0	20	0	7	3	1	0	13	0	0	0	0	0	13	0

Table A7.4: Mode and Extent of Limited Threat and Use of Naval Force 1980-2014

Non-ASEAN Indo-Pacific																																
	1980-91								1992-2000								2001-11								2012-14							
	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL
AUS	0	2	20	0	0	0	0	0	0	7	44	1	0	0	0	0	2	3	139	3	0	0	1	0	4	2	19	0	0	0	0	0
BGD	0	0	11	0	0	0	1	0	0	0	17	0	0	0	3	0	0	0	6	1	0	0	0	0	1	0	12	0	0	0	0	0
DPRK	0	0	5	5	0	0	0	8	5	9	13	8	2	0	2	3	38	13	41	6	0	1	2	4	32	14	5	1	0	1	0	2
IND	0	4	1	0	0	0	0	1	0	3	23	1	0	0	3	3	4	7	150	18	0	0	3	4	0	4	74	8	0	0	1	2
JPN	4	5	17	0	0	0	0	0	6	10	72	2	0	0	0	0	27	26	90	0	0	0	1	0	20	40	120	0	0	0	0	0
NZ	0	1	1	0	0	0	0	0	2	0	4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PAK	0	0	3	0	0	0	0	0	0	1	12	1	0	0	0	0	6	4	134	2	0	1	2	0	0	0	33	2	0	0	2	0
PRC	7	8	8	5	1	0	0	2	43	16	47	20	0	1	5	4	84	9	74	21	0	0	2	4	112	29	51	119	0	0	1	0
ROK	8	0	5	1	0	0	2	5	8	1	35	2	0	0	3	1	43	10	146	3	0	0	5	0	43	8	29	2	0	0	3	0
TWN	0	0	2	2	0	0	3	0	10	6	21	2	0	0	5	1	12	7	60	1	0	0	0	0	19	8	25	2	0	0	0	0
ASEAN																																
	1980-91								1992-2000								2001-11								2012-14							
	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL	EN	CN	PN	DN	EL	CL	PL	DL
BRN	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	5	0	0	0	0	0
IDN	1	0	5	0	0	0	1	0	7	7	29	0	0	0	1	0	13	5	103	2	0	0	9	0	2	3	34	0	0	0	0	0
MY	2	0	8	4	0	0	0	2	12	1	26	1	0	0	3	1	27	1	117	2	0	0	2	0	3	3	25	1	0	0	2	0
MM	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	4	1	2	9	1	0	0	5	1	0	2	2	0	0	0	2	0
PHL	0	0	1	0	0	0	2	0	8	1	64	5	0	0	6	1	10	0	61	1	0	0	2	0	13	7	17	0	0	0	1	0
SGP	2	0	2	0	0	0	0	0	0	0	6	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0
THL	0	0	1	0	0	0	2	0	1	0	7	2	0	0	6	2	2	2	3	0	0	0	1	1	0	0	11	0	0	0	1	0
VN	0	0	1	2	0	1	1	3	7	0	10	3	0	0	3	0	7	1	14	0	0	0	2	0	2	2	6	3	0	0	0	0

Table A7.5: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 1980-91

Non-ASEAN Indo-Pacific																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Australia	3	2	1	0	0	2	1	0	0	0	0	0	0	2	1	0
Bangladesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DPRK	14	14	0	0	0	0	1	5	0	0	0	7	0	11	2	5
India	5	5	0	0	0	3	1	0	0	0	0	1	0	2	4	0
Japan	2	2	0	0	0	0	2	0	0	0	0	0	2	0	0	0
New Zealand	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Pakistan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRC	26	26	0	0	5	7	7	4	1	0	0	2	5	15	9	2
ROK	18	18	0	0	7	0	3	1	0	0	2	5	1	17	1	0
Taiwan	1	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0
ASEAN																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Brunei Darussalam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	3	3	0	0	1	0	2	0	0	0	0	0	1	2	0	0
Malaysia	11	11	0	0	2	0	2	4	0	0	1	2	2	8	2	0
Myanmar	1	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0
The Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Singapore	3	3	0	0	2	0	1	0	0	0	0	0	2	1	0	0
Thailand	3	3	0	0	0	0	1	0	0	0	2	0	0	3	1	0
Vietnam	6	6	0	0	0	0	1	1	0	1	1	2	3	0	3	0

Table A7.6: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 1992-2000

Non-ASEAN Indo-Pacific																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Australia	5	5	0	0	0	4	0	1	0	0	0	0	0	0	5	1
Bangladesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DPRK	35	35	0	0	4	8	10	8	1	0	1	3	1	23	12	3
India	4	4	0	0	0	0	2	0	0	0	0	2	1	3	2	0
Japan	37	35	2	0	5	8	23	1	0	0	0	0	28	6	8	0
New Zealand	2	2	0	0	1	1	0	0	0	0	0	0	0	2	0	0
Pakistan	5	4	1	0	0	1	4	0	0	0	0	0	2	1	2	0
PRC	119	118	1	0	35	17	41	19	0	1	3	3	39	62	30	28
ROK	27	27	0	0	7	1	13	2	0	0	3	1	2	24	9	1
Taiwan	23	22	1	0	10	7	3	0	0	0	1	1	5	17	7	2
ASEAN																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Brunei Darussalam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	8	8	0	0	4	3	1	0	0	0	0	0	0	8	4	2
Malaysia	14	14	0	0	10	0	2	1	0	0	1	0	6	8	1	0
Myanmar	6	6	0	0	1	0	0	0	0	0	1	4	1	5	0	0
The Philippines	39	39	0	0	6	0	27	5	0	0	0	1	0	37	5	0
Singapore	4	4	0	0	0	0	4	0	0	0	0	0	0	4	0	0
Thailand	12	12	0	0	1	0	3	1	0	0	5	2	0	12	1	0
Vietnam	20	20	0	0	7	0	7	3	0	0	3	0	3	12	6	0

Table A7.7: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 2001-11

Non-ASEAN Indo-Pacific																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Australia	12	6	3	0	1	3	3	2	0	0	0	0	2	5	5	0
Bangladesh	3	3	0	0	0	0	3	0	0	0	0	0	0	3	3	0
DPRK	94	94	0	0	36	11	37	2	0	1	2	4	2	86	7	5
India	34	34	0	0	0	4	10	11	0	0	4	5	14	19	5	1
Japan	71	71	0	0	18	8	44	0	0	0	1	0	53	7	16	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	11	11	0	0	1	3	3	2	0	0	2	0	8	2	3	1
PRC	167	164	2	1	69	6	67	19	0	0	2	4	70	66	40	34
ROK	101	101	0	0	41	8	45	3	0	0	4	0	18	78	23	15
Taiwan	43	43	0	0	9	7	26	1	0	0	0	0	32	19	3	1
ASEAN																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Brunei Darussalam	2	2	0	0	0	0	2	0	0	0	0	0	0	2	0	0
Indonesia	35	35	0	0	11	4	18	0	0	0	2	0	5	26	13	1
Malaysia	47	47	0	0	26	0	17	2	0	0	2	0	10	38	3	1
Myanmar	10	10	0	0	1	1	3	1	0	0	3	1	0	8	4	0
The Philippines	19	19	0	0	9	0	8	1	0	0	1	0	2	15	2	0
Singapore	3	3	0	0	1	0	2	0	0	0	0	0	2	1	1	0
Thailand	7	7	0	0	2	2	1	0	0	0	1	1	1	6	2	0
Vietnam	15	15	0	0	7	1	5	0	0	0	2	0	2	12	1	0

Table A7.8: Gunboat Diplomacy in Disputed Zones, Foreign Waters and in Times of Interstate Tensions 2012-14

Non-ASEAN Indo-Pacific																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Australia	1	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0
Bangladesh	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
DPRK	52	52	0	0	32	14	3	1	0	1	0	1	5	40	8	11
India	16	16	0	0	0	0	12	4	0	0	0	0	15	1	0	0
Japan	104	104	0	0	11	9	84	0	0	0	0	0	82	16	10	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pakistan	8	8	0	0	0	0	6	1	0	0	1	0	8	0	0	0
PRC	305	299	6	0	107	28	50	119	0	0	1	0	228	53	48	24
ROK	88	87	0	1	47	10	28	1	0	0	2	0	10	66	39	37
Taiwan	39	39	0	0	19	7	11	2	0	0	0	0	28	19	6	2
ASEAN																
	Total Count	Geo Category			Mode and Extent of Force Applied								Type of Forces Employed			
		IR	WR	ER	EN	CN	PN	DN	EL	CL	PL	DL	LC	LN	M	H
Brunei Darussalam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	8	8	0	0	2	1	5	0	0	0	0	0	0	8	3	0
Malaysia	3	3	0	0	2	0	0	1	0	0	0	0	1	3	0	0
Myanmar	2	2	0	0	0	1	0	0	0	0	1	0	0	2	0	0
The Philippines	15	15	0	0	9	3	2	0	0	0	1	0	6	11	4	3
Singapore	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
Thailand	2	2	0	0	0	0	1	0	0	0	1	0	0	1	0	0
Vietnam	13	13	0	0	2	2	6	3	0	0	0	0	9	3	2	0