RSiS | S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES

Nanyang Technological University, Singapore

Maritime Security Challenges 2018

Panel III – The Future Fleet

Building Balanced Fleets: Nexus Between Capability, Capacity and Readiness

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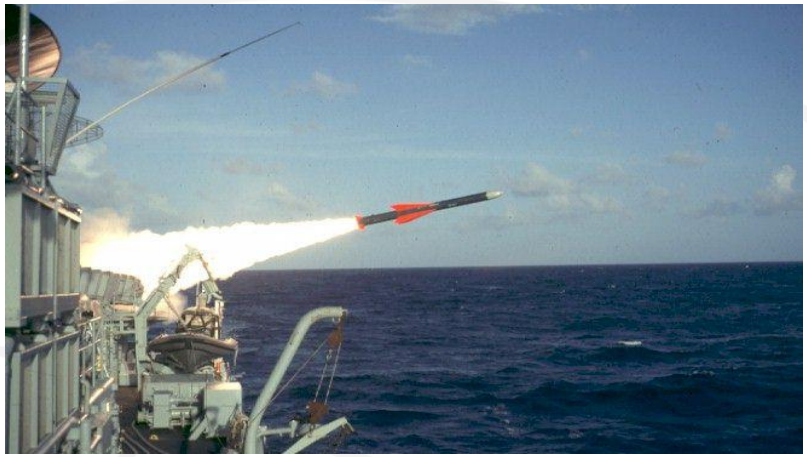
Skyrocketing Warship Costs

Destroyer Class	Year	Unit Cost (US$)
Charles F. Adams	1958	200 million
Kidd	1978	325 million
Arleigh Burke Flight IIA	2015	1.84 billion
Zumwalt	2016	3.96 billion

Asymmetric Countermeasures



MM-38 Exocet
1973
US$200,000

MM-40 Exocet
1993
US$3.4 million

Capability

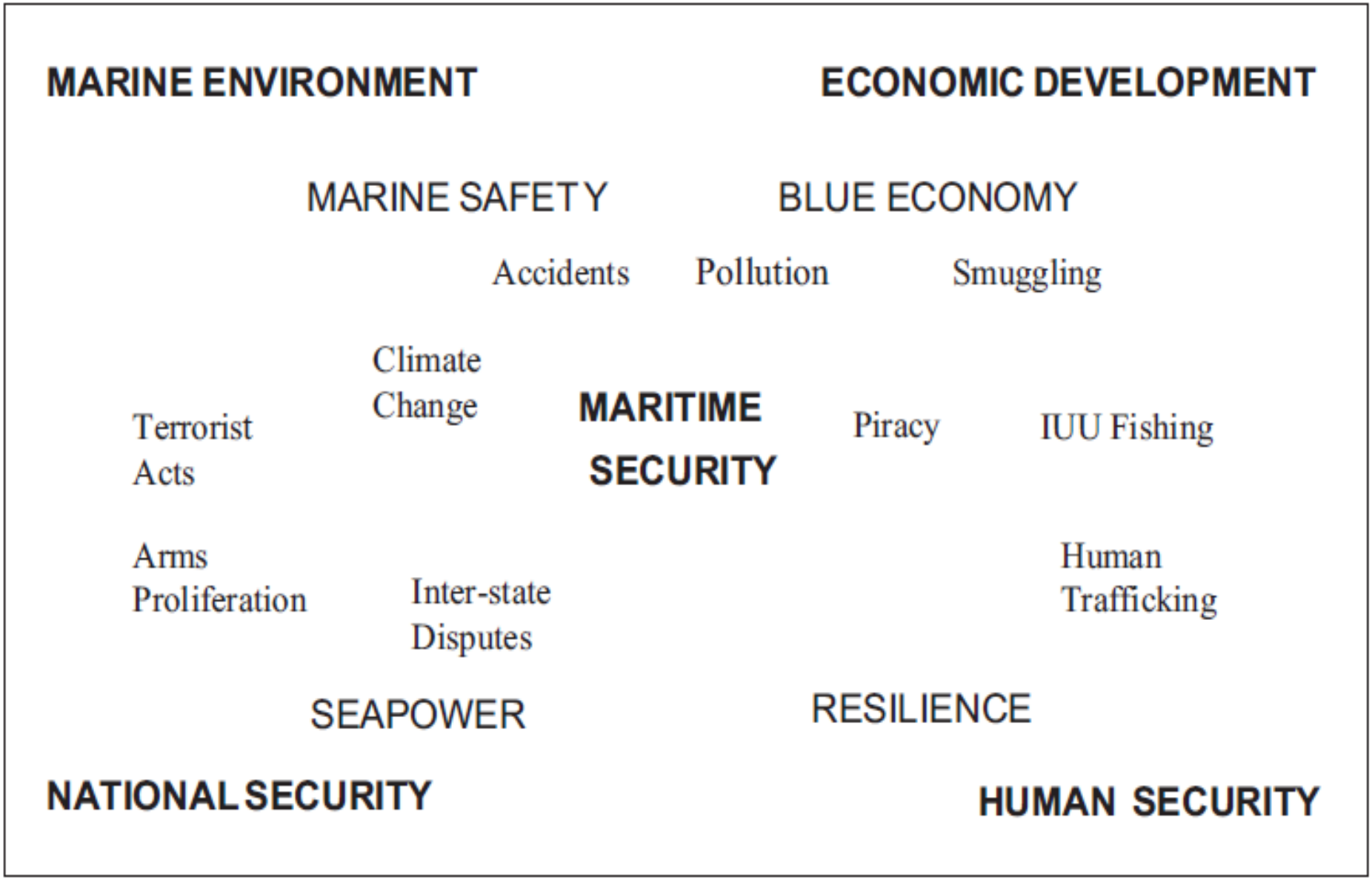
- Quality of the forces based on:
  1. Age of platform
  2. Level of modernity
  3. Feasibility of follow-on modernization
- Individual platform vs. overall force structure
- Relative, not absolute, measure
- How these assets fit into operational concepts tailored for specific scenarios

Capacity

- Usually measured in number of vessels
- Holistically, should also be considered as the size of the force composed of vessels directly related to its specific missions, as well as manpower availability
- Difference in how to define capacity since different navies may count the vessels in different ways

National Interests – The Starting Point

- No one-size-fits-all approach
- National interests
  1. Local
  2. Regional
  3. Global
- National interests constitute an ever-evolving interplay of domestic and external interests, which are prioritized and translated into specific strategies that determine the mission and procurement priorities of navies



Source: Christian Bueger, "What is maritime security?" *Marine Policy* 53 (2015), p. 161.

Notwithstanding their fleet capacity limitations, Bangladesh and Indonesia routinely deploy a warship each to the UNIFIL Maritime

Building Future Fleets

- Due to funding uncertainties in the foreseeable future, new vessels are expected to possess:
  1. Longer service lifespans
  2. Multifunctionality
  3. High levels of automation
  4. Modularity and “plug and play” features
  5. Room for future modernization and upgrades
- One-for-one replacement of vessels has become increasingly a rarity

Shrinking Fleet, Larger Vessels – The PLA Navy Example

		1987	1997	2007	2017
Principal Surface Combatants	>3000 tons	16	18	31	57
	<3000 tons	37	35	44	26
Patrol and Coastal Combatants	>1000 tons	0	0	0	37
	<1000 tons	850	747	233	169

Source: IISS *Military Balance*

Shrinking Fleet, Larger Vessels – The PLA Navy Example

Coastal and Patrol Combatants of the Cold War till 1990s

Type-022 *Houbei*

Type-056/56A *Jiangdao* *(1300 tons)*

Other Measures: Self-Help

- Divestment of assets and task-shedding
- Streamlining of forces and missions
- Relegation of responsibilities to MLE agencies
- Whole-of-government approach involving entire maritime community
- Investments in force multipliers – e.g. C4ISR and networked capabilities
- Cost-cutting in administration and logistics, e.g. energy efficiency measures, alternative fuel sources

Another Solution: Cooperation

More Than Just a Simple Purchase of Hardware

Beyond Capability and Capacity

- Deploying assets to meet operational demands vs. keeping assets in port for essential maintain, repair and overhaul (MRO) services and crew rehabilitation
- Readiness includes
  1. MRO
  2. Requisite supporting infrastructure
  3. Personnel training and proficiency
- Last but not least, it's still about sustained funding

Thank you!