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A maritime security framework for fighting piracy.

By

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TITLE: **A maritime security framework for fighting piracy.**

ABSTRACT: The number of piracy attacks in the Strait of Malacca is significantly reduced from 112 in 2000 to 2 in 2009. While people are celebrating the success of anti-piracy operations applied in the Strait, the number of piracy attacks in the Somalia region increased to its peak. According to the IMO, there were a total of 406 piracy attacks reported worldwide in 2009 and Somali pirates accounted for 217 attacks. There is a total of 1052 crew taken hostage with 68 injured and eight were killed. Since the attacks were well organized and sophisticated weapons such as RPGs were used, it caught the eyes of the world in the news headlines. This paper studies the successful factors as well as the deficiencies in the anti-piracy operations as applied in the two cases and provides an anti-piracy framework for combating piracy to improve maritime security in the high sea.

KEY WORDS: *Maritime security; piracy; Straits of Malacca; Somalia.*

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1.　　Introduction

To many people, pirates were only characters in legends or movies, before the emergence of piracy in the Strait of Malacca in 2000 and off Somalia in 2008. There have been pirate attacks in the high sea since the eighteenth century. Though it never completely subsided, it resurged in 2000 in the Strait of Malacca with 112 attacks recorded (IMO, 2001), catching the attention of the maritime industry. It is estimated that vessels containing a third of global trade and two-thirds of world's liquefied natural gas (LNG) trade passing through the Strait of Malacca every year. The resurgence of pirate attacks forces the littoral states, including Singapore, Malaysia and Indonesia, to collaborate together to set up a series of countermeasures against piracy since 2004. This includes a coordinated sea patrol initiative called MALSINDO, a joint air patrol military force called Eyes in the Sky and an Asian regional anti-piracy agreement called ReCAAP. These countermeasures successfully reduced the number of pirate attacks, with only 2 incidents reported in 2009 (IMO, 2010a).

While the piracy issue in the Strait of Malacca almost subsided, the number of attacks in the Somalia region, including Gulf of Aden, Coast of Somalia, Red Sea, Arabian Sea, Indian Ocean, Coast of Oman, which were caused by Somali pirates, increases significantly. According to the International Maritime Bureau (IMO, 2010a), there were a total of 406 piracy attacks reported worldwide in 2009 and Somali pirates accounted for 217 attacks. Since the attacks are well organized and sophisticated weapons such as rocket propelled grenade (RPG) were used, it caught the eyes of the world in the news headlines. International response to anti-piracy in the Somalia region has come from the naval military, shipping industry and land based programs led by the United Nations. However, there is no sign of a reduction in number, with 100 attacks reported in the Somalia region in the first half of 2010 (IMO, 2010b).

Piracy issues affect international trade economically. Because of the high piracy risk of routing through the Gulf of Aden, insurance premium has increased 350 percent since May 2008. As a result, there was a 25 to 30 percent increase in freight rate (Kraska and Wilson, 2009). Besides, piracy risk also increases the vulnerability of vessel crew. In 2009, there was a total of 1052 crew taken hostage with 68 injured and eight were killed (IMO, 2010a). After the September 11, 2001 attack of the World Trade Centre in the U.S., international community realized that the situation can turn into a nightmare if pirate gangs connect with terrorist groups. Therefore, there is an urgency to call for effective countermeasures to reduce the risk of piracy in the high sea.

This paper studies the successful factors as well as deficiencies of the countermeasures applied against piracy in the Strait of Malacca and the Somalia region. The piracy issues in the Strait of Malacca and the Somalia region are studied in Chapter 2 and Chapter 3, respectively. Chapter 4 provides an anti-piracy framework and Chapter 5 compares the successful factors and deficiencies in combating piracy between the two cases.

2.　　Piracy in the Straits of Malacca

The Strait of Malacca lies between Peninsular Malaysia and Sumatra of Indonesia. It is an 800 km long waterway connecting the Andaman Sea to the South-China Sea. The narrowest point of this shipping lane is only 1.6km in width. This creates a natural choke point with the potential for collision or grounding of a large vessel and the possible closure of the Strait. The waterway carries an annual commercial traffic of more than 50,000 ships, making it the world's busiest waterway. The Strait also gives passage to more than a third of global trade and two-thirds of the world's liquefied natural gas (LNG) trade.

Piracy has existed in the Strait of Malacca for hundreds of years. Dating back to the end of the eighteenth century, the Sulu pirates attacked both coastal settlements and vessels and thousands of seafarers and coastal dwellers were enslaved by the raiders (Eklof, 2006). It resurged and peaked in 2000 (Figure 1), with reported attacks reaching 112.

It is believed that the Asian financial crisis of 1997 triggered people living in coastal villages along the Strait to resort to piracy to supplement their income (Raymond, 2009). The most common types of piracy attacks around this area are armed robberies and vessel hijacking. Kidnap-for-ransom type of attacks has emerged since 2000. The pirates take over the vessel and crews are held for ransom. They are usually released unharmed after ransom is paid. The ransom eventually paid range from US$10,000 to US$20,000 (Raymond, 2005).

According to Bateman (2006), the majority of pirate attacks target smaller vessels employed in local trades, where these vessels are destined or originated at ports along the Strait. They are usually smaller, have lower freeboard and sail away from the main shipping channels. Therefore they are more vulnerable to pirate attacks. On the contrary, large vessels, such as large tankers, LNG carriers, large container vessels and vehicle carriers, employed for international trades that pass through the Strait are comparatively harder to attack unless they slow down, stop or anchor. However this traffic is of the most concern to the international community.

After the September 11, 2001 attack of the World Trade Centre in the U.S., it is believed that pirate attack can be linked with terrorism. Littoral states of Malaysia, Indonesia and Singapore are pressured to deal with the issue. Three major countermeasures were introduced.
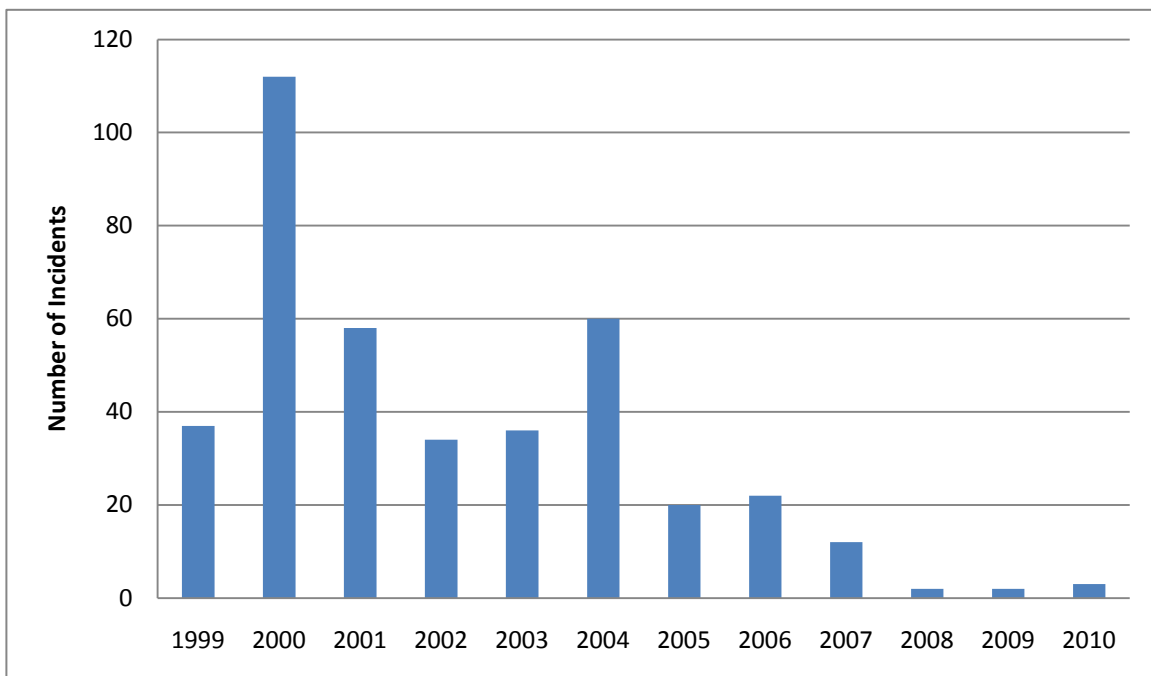
Data source: IMO Annual Report 2000 (IMO, 2001), IMO Annual Reports 2001 (IMO, 2002), IMO Annual Report 2002 (IMO, 2003), IMO Annual Report 2003 (IMO, 2004a), IMO Annual Report 2004 (IMO, 2005a), IMO Annual Report 2008 (IMO, 2009), IMO Annual Report 2009 (IMO, 2010a), IMO Report for the period of January to 30 June 2010 (IMO, 2010b)

* Number of attacks up to end of June 2010

Figure 1: Number of piracy incidents in the Straits of Malacca from 1999 to 2010

2.1 MALSINDO

The first multilateral measure initiated by the three littoral states was a trilateral coordinated sea patrol called MALSINDO on 24 July 2004 (Roach, 2005). It involves the navies of the three littoral states patrolling in a coordinated fashion in their own territorial waters (Raymond, 2009). The number of attacks dropped from 15 (IMO, 2004b) to 7, (IMO, 2004c) in the third quarter, compared with the number in the second quarter of 2004. However, it bounced back to 16 in the fourth quarter (IMO, 2004d). Critics commented that the measure appeared to receive little success due to a lack of cross-border pursuit into each other's territorial waters as a protection of infringement of sovereignty by each state (Roach, 2005), which created a haven

for the criminals who were able to escape into neighbouring state's territory. On the other hand, the number of attacks in the first two quarters in 2005 decreased down to 5 and 7 (IMO, 2005b and 2005c), respectively.

2.2 *Eyes in the sky*

On 13 September 2005, the littoral states implemented another initiative, a joint air patrol called Eyes in the Sky (Ong, 2006), which was considered as one of the contributing factors to the decline of incidents. This joint air patrol permitted aircraft to fly above the territorial waters of the participating states and thus allowed foreign force to cross the border (Roach, 2005) as opposed to MALSINDO. The number of attacks further decreased to 3 and 1 in the third and fourth quarters of 2005 (IMO, 2005d and 2005e), respectively. However, there were some criticisms after the launch of this countermeasure mainly focusing on the insufficient capability. To cover the whole strait 70 sorties were needed in place; however, at that time there were only eight (Raymond, 2009).

2.3 *ReCAAP*

Asian Regional Anti-Piracy Agreement (ReCAAP), coming into force in 2006, was the most recent antipiracy imitative implemented by the three littoral states (Roach, 2005). This agreement involves all the members of the Association of Asian Nations and Japan, China, Korea, among others with an aim to foster multilateral cooperation among governments in combating the threat of piracy through the forms of information sharing, capacity building, coordinative surveillance, and facilitating respective countries' law enforcement (Raymond, 2009). This countermeasure encourages exchange of information, which facilitates criminal study among states, prevents and alerts other ships in the nearby territories to the incident, and facilitates states to use each other's effort to construct a criminal combating network. IMO data shows that the number of attacks declined after all these countermeasures were implemented (Figure 1). It is hard to judge whether any of these countermeasures is more effective than the others, the decline of attacks due to the combination of all.

3.   Piracy off the Coast of Somalia

The Gulf of Aden is a 900 km long and 500 km wide waterway situated between Yemen and Somalia. It connects the Mediterranean Sea and the Indian Ocean. It is an essential transit avenue for transporting Persian oil between Europe and the Far East. There is approximately 3.3 million barrels of crude oil per day, accounting for 12 percent of the world's seaborne petroleum, and 22,000 ships per year pass through it to the Suez Canal (Siemens et.al., 2009). Vessels travelling from the Indian Ocean to the Suez Canal must pass through the often congested Strait of Bab el Mandeb. The Strait of Bab el Mandeb is divided into two narrow channels of 3 km and 25 km wide. In order to pass through this narrow choke point, ships need to significantly slow down, which increase their vulnerability to pirate attacks.

Somalia is one of the poorest countries in the world. According to World Bank, there are around 43.2 % of the population, around 3 million people, living on less than one dollar a day in 2002 (World Bank, 2003). It is divided into three autonomous regions of Somaliland, Puntland and Central Somalia. The country suffers from decades of violence and instability due to lack of an effective central government. It is ruled by a system of clans and the major piracy networks operate in the regions of Puntland, the most effected region with 1500 out of 2000 Somali pirates operating from Puntland (Hansen, 2009), Hobyo, Hardheere and Mogadishu. It is believed that piracy began in Somalia in response to illegal dumping of toxic waste off the coast and illegal fishing carried out by foreign fishermen in its territorial waters (Waldo, 2009). In retaliation, they began taxing these fishing vessels and gradually progressed to capturing crews and ransoming the vessels and thereby gaining experience in piracy operations. Currently the pirates attack all types of vessels from oil, energy tankers to container, bulk, general cargo and passenger cruise liners in return for huge financial rewards. A lack of central government and

pirates working in collusion with corrupted government officials of Puntland has facilitated the growth of piracy. It has also led to the formation of organized piracy gangs who are financed by warlords. Piracy operations in Somalia are well organized. It begins with information gathering from port and government officials regarding a ship's route, crew, capacity, cargo, defense systems etc. Armed with this information they plan a coordinated attack using skiffs, more recently mother ships, ladders, hooks, RPGs which usually results in a boarding and takeover. Once the vessel is taken over, they force the crew to steer the vessel to a pirate mooring where they can get the provisions for themselves and their captives. The negotiation process follows which could last from days to months and ransom money of usually U.S. $2-$4 million is demanded. The ransom money is usually delivered to the hijacked vessels via boats and more recently being dropped from light aircraft from above. On receipt of the ransom, the hijackers take off and provide a safe passage for the vessel. According to reports from the captured pirates, the ransom is then divided among the pirates, their sponsors and the corrupted government officials. It provides a pirate several times the income earned by an average Somali. The apparent profitability of the business model along with a large pool of unemployed Somali men has increased the number of piracy gangs. Thus, the nature of piracy in Somalia is a highly planned and organized operation (Gilpin, 2009).
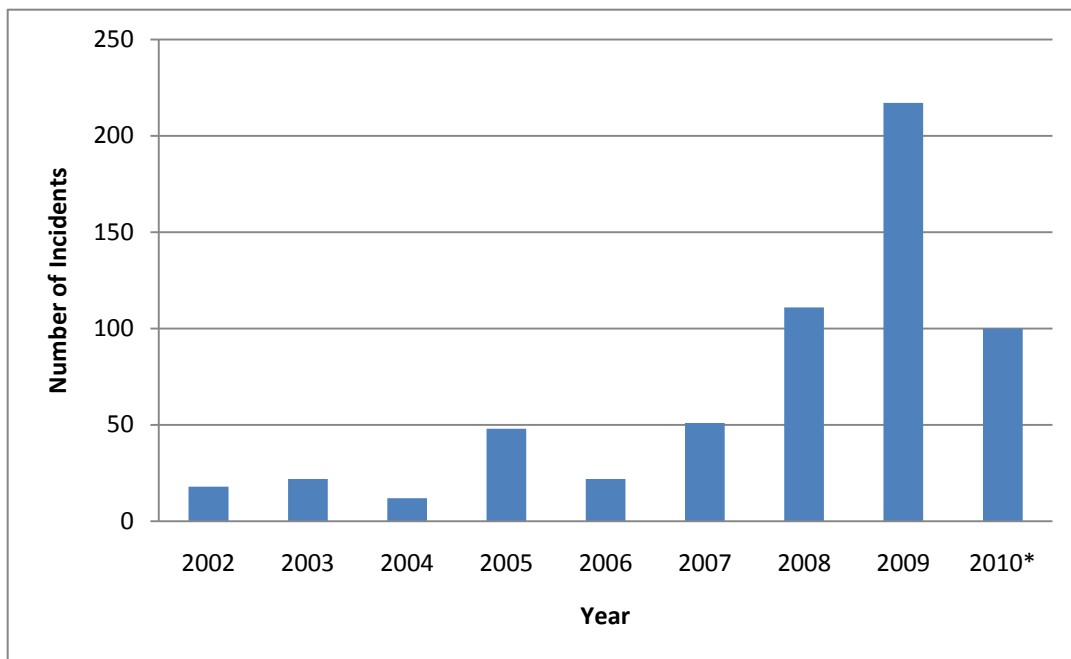
Data source: IMO Annual Report 2006 (IMO, 2007), IMO Annual Report 2007 (IMO, 2008), IMO Annual Report 2008 (IMO, 2009), IMO Annual Report 2009 (IMO, 2010a), IMO Report for the period of January to 30 June 2010 (IMO, 2010b)

* Number of attacks up to end of June 2010

Figure 2: Number of piracy attacks in the Somalia region, from 2002 to 2010

IMO (2010a) reveals that the number of successful hijackings, attempted attacks and crews taken hostage has increased in 2009 compared to the figures from 2008 (Refer to Figure 2). In the first half of 2010, there have been 100 incidents of piracy attacks in the Somalia region.

Piracy and maritime crime off Somalia poses threats to international seaborne trade, especially international oil trade. It directly impacts the importing and exporting countries around the area. It is predicted that the traffic through Suez Canal will be reduced if the issue keeps escalating. According to Siemens et.al. (2009), insurance premium for vessels travelling through the Gulf of Aden has increased 350% since May 2008. For vessels travelling around the Cape of Good Hope to avoid piracy risks in the Gulf, there is an extra annual fuel cost of around U.S. $3.5

million. As such, there is a 25 to 30 percent increase in freight rate. International response to anti-piracy in Somalia region has come from the naval military, shipping industry and land based programs led by the UN.

3.1 International taskforce

After the September 11, 2001 attack of the World Trade Center in US, a multinational Combined Task Force 150 (CTF150), led by U.S., was established. Naval forces from the United States, the United Kingdom, Denmark, France, Pakistan, India, Iran, Russia and other countries are patrolling the area. These patrols have had limited success because CTF 150 was operating under counterterrorism authority, they were not specialized in anti-piracy operations. Therefore CTF 150 has been unable to prevent most attacks. Moreover, once pirates successfully board and hijack a ship, they take the crew hostage and threaten to sink the vessel, limiting options by on-scene warships to rescue the crew and free the vessels. In January 2009, CTF 151 was created by the US Fifth Fleet, which is dedicated solely to confronting maritime piracy.

Other than CTF150 and CFT151, various nations who use the passage also provide naval forces in patrolling the area. European Union Naval Force Somalia (NAVFOR) deployed its ships to actively fight against piracy in the area since December 2008. After the MV Semlow, a vessel chartered by the UN for transporting food relief to Somalia, was hijacked on June 27 2005, all shipments transporting humanitarian aids were suspended by the United Nations World Food Programme (ENS, 2005). In November 2008, UN requested the North Atlantic Treaty Organization (NATO) for providing escorts to the food relief vessels going to Somalia. Last but not least, Japan, China, Russia and South Korea have also sent navies to provide escort services to their own flagship vessels in the high-risk waters.

Somalia has the longest coastline in Africa. The area suffered from piracy risks spread across a very large area of around two million square miles of sea. In order to provide a more effective patrolling service, an International Recommended Transit corridor (IRTC) was set up to provide safe movement for ships in the high risk area since 2009. Vessels transiting the Gulf of Aden are recommended to transit through the corridor.

3.2 United Nations Security Council Resolutions

According to the United Nations Convention on the Law of the Sea (UNCLOS), which came into force in 1994, vessels are only allowed to pass the territorial water of a coastal nation in an expeditious and continuous manner (innocent passage). In other words, international warships are not allowed to patrol within the territorial waters of Somalia. Because Somalia lacks an effective central government, there is no coast guard patrolling within its territorial waters and this became a haven to the pirate gangs. In view of this, in June 2008, the United Nations Security Council, which was notified by the Transitional Federal Government of Somalia (TFG), adopted Resolution 1816, which authorized a naval vessel to undertake 'all necessary measures' to combat piracy and armed robbery within the territorial waters of Somalia. Naval vessels are allowed to treat Somalia's territorial waters as if they were international waters for the purpose of repressing piracy. Later in December of the same year, Resolution 1851 was passed to authorize UN's member states to conduct anti-piracy operations involving attacks on land or by air in Somalia if approved by the TFG.

3.3 The Djibouti Code of Conduct

In January 2009, organized by the IMO, a high-level meeting of 17 States from the Western Indian Ocean, Gulf of Aden and Red Sea areas, was conducted. The Djibouti Code of Conduct concerning the repression of piracy in the Western Indian Ocean and the Gulf of Aden was signed by the participating states (IMO, 2009). It recognizes the extent of the problem of piracy and armed robbery against ships in the Somalia region. Similar to ReCAAP, it is a cooperative agreement between littoral states to enhance piracy information sharing. Piracy information

exchange centers will be established in Tanzania and Yemen. An anti-piracy training centre will be set up in Djibouti. The effects of these anti-piracy countermeasures are yet to be seen. The number of piracy attacks in 2009 as well as the first half of 2010 is still high. However, the success rate of attack reduced to around 20 percent in 2009.

4. A maritime security framework for fighting piracy

Because of the resurgence of piracy attacks worldwide, there is an urgency for the international community to develop efficient and effective countermeasure to combat piracy in the high sea. By studying the piracy situations and ways of combating the issues in the Strait of Malacca and the Somalia region, an anti-piracy framework which can help to maintain a safe and secure maritime environment for commercial shipping is developed.

4.1 An anti-piracy framework

In general, the affected area can be categorized into land, territorial waters and international waters. Littoral states should provide effective legislation and prosecution regarding piracy activities conducted on land and the territorial waters. International support is important to improve the capacity of littoral states in fighting piracy. It is extremely important when littoral states are too weak to combat piracy. It is also important for international user states working together to provide a safe and security maritime environment for merchant shipping. Figure 3 shows the anti-piracy framework.

4.1.1 Responsibilities of littoral states

Littoral states that have sovereignty on the land and territorial waters have direct impact on the success of anti-piracy countermeasures. Their efforts in fighting piracy are more efficient and effective. This can be seen from the success of anti-piracy countermeasures set up by the littoral states in the case of Malacca Strait. Littoral states should combat piracy by legislation and prosecution. Laws concerning piracy conducted in its territorial waters as well as on nationals who conducted piracy related crime in any international waters should be established. Land bases of pirate gangs should be traced and completely destroyed by inland police force. Pirates caught should be prosecuted according to the laws of the littoral state. In addition, coast guards should be organised by the littoral state to ensure the security of its territorial waters. However, the success of these contributions is affected by the geographic location as well as the incentives and capacity of combating piracy of the littoral states. The size and geographic location of the land and the territorial waters affect the capacity, in terms of both financially and technologically, needed to combat piracy.

The volume of import and export trade of a littoral state directly influences its incentive in combating piracy. If the economy of the state is highly dependent on import and export trades, which is the livelihood of the state, the incentive of combating piracy in its territorial water is high. It will also influence its incentive in maintaining a safe and secure environment with international partners in the international waters. On the other hand, the economic status of the littoral state will directly affect its capacity and incentive on combating piracy in its territorial waters. If the economy of the littoral state is poor, there is poverty and political instability in the state, combating piracy will not be its first priority, it will be more reluctant to spend money and effort in combating piracy.
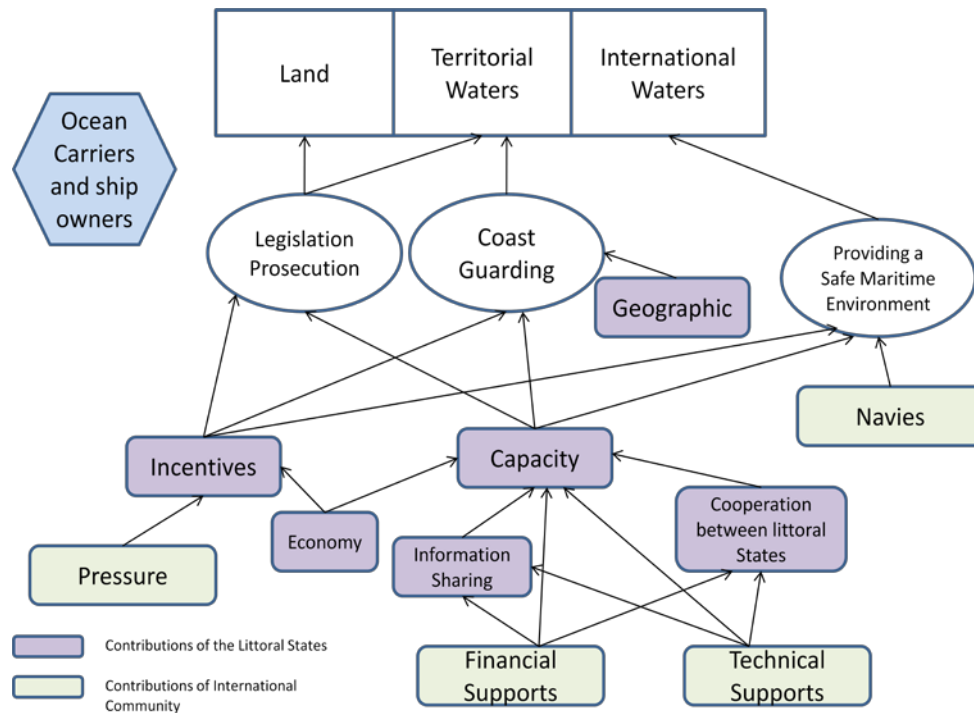
Figure 3: An anti-piracy framework

4.1.2 Cooperation between littoral states

The success of the countermeasures applied in the Strait of Malacca is partly due to the regional cooperation among littoral states. However, strong regional concern over sovereignty, which prevents across border enforcement, makes it easier for criminals to escape from pursuit. Cooperation between littoral states can actually increase the capacity of combating piracy financially and technologically. Coordination in anti-piracy operations between littoral states can optimize the use of resources and naval forces. In addition, innovative technologies can be shared between littoral states to combat piracy more effectively with less resource. On the other hand, the success of ReCAAP is largely due to the exchange of information, which facilitates criminal study among states, which prevents and alerts other ships in the nearby territories to the incident, and facilitates states to use each other's effort to construct a criminal combating network.

4.1.3 International responsibilities

The most direct international response is to provide naval forces to patrol in the high sea and escorting vessels passing through vulnerable area. In the case of the Somalia region, anti-piracy actions highly rely on international forces. Naval forces from the United States, the United Kingdom, Denmark, France, Pakistan, India, Iran, Russia and other countries provide CFT150 and CFT151 to patrol the area. NAVFOR, NATO and individual countries, such as Japan, China, Russia, South Korea, among others also send their navies to escort vessels that flying their own flag and provide assistance when requested by vessels flying flag of other countries. This is especially useful when the littoral states are too weak to combat piracy around the area. According to the 2009 annual report of IMO (2010a), these naval forces successfully stopped some of the attacks in the Somalia region. However, these international joint forces are limited in the international waters only. Any anti-piracy operations will not be successful without the involvement of the littoral states. Therefore, when the littoral states are too weak to provide sufficient capacity in fighting piracy, financial and technical support from international community is crucial. When there is poverty and political instability in the littoral states, they have enough problems in their own hands and there are other issues more important for them to

solve, it is normal that they do not have the incentive to combat piracy. Financial and technical support can help reduce the burden and increase their incentives to solve the piracy issue. The international community can also put pressure on littoral states, even when their incentives in doing so are low. In the case of the Strait of Malacca, littoral states, such as Indonesia and Malaysia, were reluctant to take on full gear on the piracy issue. However, after pressures coming from international user states and the effort from Japan and other countries in pulling the littoral states together, the three littoral states including Singapore successfully combated piracy issue in the area.

4.1.4   Ocean carriers and ship owners

The model will not be complete without the involvement of the ocean carriers and ship owner which use the passages. Analysis of all failed piracy attempts of the Somalia region reveals that the large majority of attacks were unsuccessful due to the efforts of merchant ships themselves. In the Gulf of Aden, even with presence of coalition patrols, 65% of attacks were foiled by preventive measures taken by merchant ships whereas in the Indian Ocean, which is rarely patrolled, it is 96% (Refer Figure 4). With low probability of timely naval help, it is imperative that the merchant ships adapt self protective measures. Also, analysis of in cases of successful hijackings reveals that the hijacked ships had inadequate planning and procedures in place, were proceeding at a low speed, in low state of alert and therefore slow to respond. Low free board and lack of protective measures is another common factor among successful hijackings. Based on the above analysis, IMO recommended Best Management Practices would be the best defense (IMO, 2010d, 2010e and 2010f).

4.1.4.1 Before voyage

It is suggested that the shipping companies should review their ship security plans, ensure that anti-piracy measures are included, before the voyage. It should be exercised, briefed and discussed with the master and the ship security officer. Crew members are drilled with the security plan before the voyage and the entering of the risk area such that they are fully aware of the risks involved during attacks by pirates or armed robbers and the company's actions upon attack. Besides, shipping companies should maintain an accurate record, including identity, next of kin and medical conditions of each crew member.

4.1.4.2 During voyage

Watch-keeping should be arranged all the time during voyage. When entering the high risk area, additional lookouts should be arranged to increase vigilance. Crew members are drilled again with the contingency plan before entering the area. The ships transiting through the region should inform and register with the UK Maritime Trade Operations (UKMTO), the Maritime Security Centre, Horn of Africa (MSCHOA) and the Maritime Liaison Office (MARLO). They should only use the IRTC while transiting through the Gulf of Aden. Night passage through high risk areas is the safest as statistically very few attacks have succeeded at night. Liaison with Naval forces, such as UKMTO, MSCHOA and MARLO is needed. A speed of over 18 knots is currently recommended by the IMO for preventing pirates from boarding.

4.1.4.3 Preventing boarding

Small speed open boats are commonly used by pirates for approaching from either quarter or the stern of the vessel being attacked. Lightweight ladders are then used to climb up the side of the vessel. Self-protective measures, such as water spray and foam monitors can be used to prevent pirates from approaching the vessel. Besides, razor wire and anti-climb paint is effective from preventing pirates from climbing up the vessel. Electrified fence can also be used, however, warning signs must be provided. In fact, interviews from captured pirates reveal that they find it very difficult to board a ship with effective water hosing (Hansen, 2009). It is also recommended that zigzag manoeuvre makes the boarding of pirates difficult. Crew members who are not involved in anti-piracy measures should be mustered in safe musters.

4.1.4.4 When boarded

If the vessel is boarded by pirates, all crew members should try to muster in safe musters. CCTV should be installed in musters such that crew members can monitor the situation. Moreover the ships should also give an immediate emergency mayday call and activate Ship Alert System and Automatic Identification System so that it can be tracked in any event. It is recommended that firearm should not be used as it can provoke the pirates. Sudden movements around pirates should also be avoided as this exposes crew members into danger.

4.1.4.5 After the incident

The shipping company and the ship master should report to UKMTO, MSCHOA and IMO after the incident. Reviews on the company's emergency plan should be done.

5. A comparison of the two cases

In light of the anti-piracy framework provided in chapter 4, we would like to investigate the successful factors and deficiencies in the countermeasures applied in the Strait of Malacca and the Somalia region.
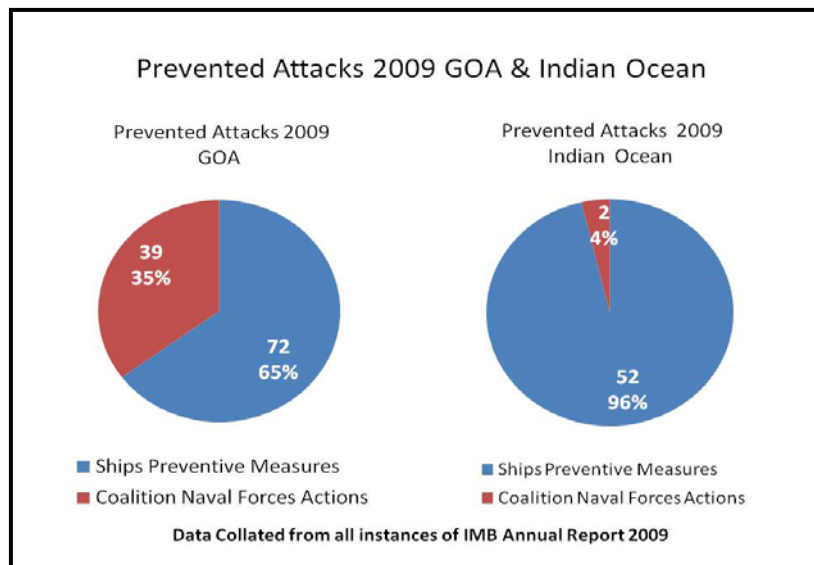
Source: (IMO, 2010a)

Figure 4: Prevented attacks in the Gulf of Aden and Indian Ocean in 2009

5.1 Root cause

It is believed that the Asian Financial crisis of 1997 triggered people living along the coastal area of the Strait of Malacca to engage in piracy activities to supplement their income. The poverty of Somalia is quite another story. After the collapse of Siad Barre regime in 1991, there was no government in charge and the economy and infrastructure of the country were devastated. As there was no governmental protection of the fishing waters, fishing resource which is the main source of living for coastal communities for generations were exploited by foreign companies, which put the livelihood of coastal people in danger. Table 1 shows the percentages of population suffering from poverty of the littoral states of the Strait of Malacca and the Somalia region. It can be seen that the poverty situations in the littoral states in the Somalia region are much more serious than those in the Strait of Malacca. Most of the littoral states have more than 40% of the population living below two U.S. dollar a day. The situation in Somalia is much worse than the others.

Table 1 Percentages of population suffering from poverty

|	Population living below $1.25 a day (%)	Population living below $2 a day (%)	Population living below the national poverty line (5)
Indonesia	7.1 (2007)	60 (2007)	2.9 (2004)
Malaysia	0.5 (2004)	7.8 (2004)	-
Singapore	-	-	-
Djibouti	5.3 (2002)	41.2 (2002)	-
Kenya	6.1 (2005)	39.9 (2005)	16.6 (2006)
Somalia	43 (2002)[#]	-	-
Yemen	4.2 (2005)	46.6 (2005)	13.8 (1998)

Source: (World Bank 2009)

Source from (World Bank 2003)

5.2 Nature of piracy

Most of the pirate attacks in the Strait of Malacca are in the form of robbery and focus on small vessels and barges with simple weapons such as pistol. In contrast, kidnaps and hijacks dominate the piracy issue in Gulf of Aden and the pirates target on oil tankers and bulk vessels with sophisticated weapons such as RPG. Even at its peak, piracy in Malacca accounted for 75 incidents in 2000 which sharply reduced in subsequent years as regional countries focused their resources. Presently, it is more of opportunistic armed robbery with limited incidence of hijacking and that too mostly limited to small crafts and tugs (Raymond, 2009). In contrast the pirates originating from Somalia vary from small family teams to organized criminal gangs, with multimillion dollar revenues; they aim to hijack large ships for ransom and are in collusion with corrupted government officials. It has a viable business model and financial sponsorship mechanisms promising high rate of return (Gilpin 2009, Hansen 2009). These robust, intelligent and evolving gangs cannot be countered by the weak anti-piracy capacity of the littoral states. Unlike piracy in Malacca which reduced substantially when the patrolling was set in place, the piracy off Somalia has actually increased and spread out from Gulf of Aden, engulfing most of the West Indian Ocean after the international navies started anti-piracy operations in 2008.

5.3 Geographical factor

The geographical situations of these two areas are not the same either. As is shown in Figure 5, the Strait of Malacca is a relatively narrow waterway which is easy for the littoral states to patrol along, while the Gulf of Aden, in contrast, is vast open waters which make the full patrol coverage of the area impractical and impossible.
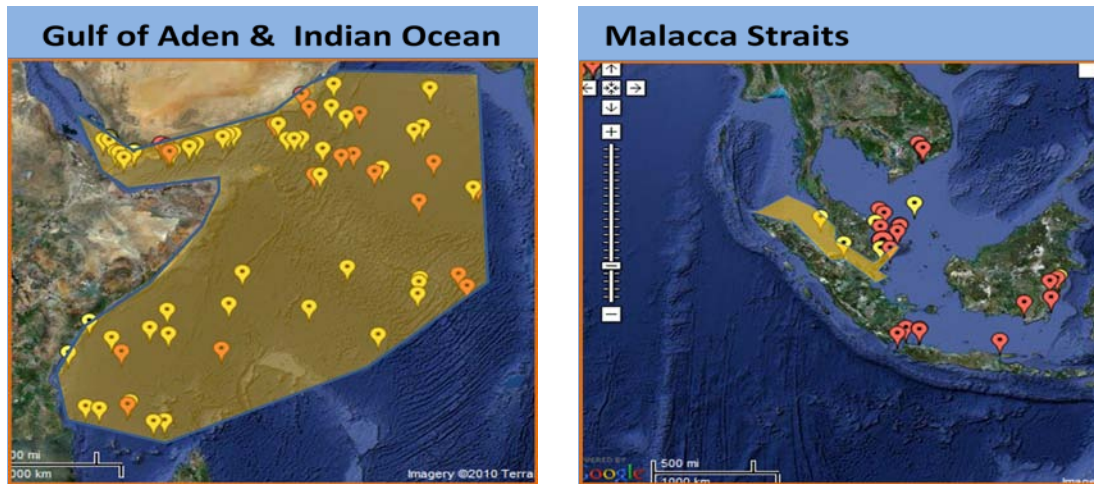
Source: (IMO Live Piracy Map, 2010)

Figure 5: Map of Somalia and Straits of Malacca

The international forces have tried to reduce the patrol areas by implementing International Recommended Transit Corridor in Gulf of Aden. While 60 ships are required to fully patrol IRTC; at most 25 to 30 ships are available at any one time. Considering that it takes around 15 minutes to hijack a ship, if naval forces are not in close proximity, by the time they arrive it is already too late. The patrolled area is only a fraction of the total affected area. According to an estimate it would take hundreds of naval ships to fully patrol such a large area (Tharoor, 2010) – a force that can never be assembled even by world maritime powers let alone the regional states.

When countries around Malacca signed Regional Cooperation Agreement on combating piracy, being located at the borders of the affected strait, they were able to establish joint reporting and patrolling mechanisms. On the other hand, regional countries around Somalia not located around the area and are more spread out and hence constrained by long geographical distances from the piracy affected region.

5.4   Littoral states

In this section, economy and political situation of the littoral states of the two areas are discussed. Export and import trades of the littoral states are also studied as an indicator of their incentive in fighting piracy in their territorial waters.

5.4.1   Economy

It is shown in Table 2 that all littoral states in the Somalia region seriously suffered from poverty, most of them depend on UN aids. Therefore, their motivation for regional cooperation may only be the small investments expected out of the bargain. Table 2 shows the GDP of each littoral state. The littoral states of the Strait of Malacca are much wealthier, their GPD level are 10 times more than the littoral states in the Somalia region. It explains that the littoral states of the Strait of Malacca can afford to provide large scale naval supports and high technological countermeasures. On contrast, the littoral states in the Somalia region have limited capability that they can only afford a few low endurance gunboats.

Table 2: GDP of the littoral states of Straits of Malacca and Somalia region

GDP (billions)	2004	2005	2006	2007	2008
Indonesia	256	286	365	432	511
Malaysia	124	138	156	187	222
Singapore	110	121	139	167	182
Djibouti	0.67	0.71	0.76	0.82	0.88
Kenya	16.1	18.74	22.5	27.12	30.35
Somalia	-	-	-	-	-
Yemen	13.87	16.75	19.08	21.66	26.58

5.4.2   Political

In case of the Strait of Malacca, the regional countries have authority on their lands to establish law and order and to apprehend, prosecute and punish pirates. On the other hand, in the Somalia region, all piracy stems from Somalia where its Transitional Federal Government has almost no control over areas where the pirates are based. Most of piracy originates from Puntland which is an autonomous region governed by a system of clans. Here the corrupted authorities actually are considered to collude with the pirates (Hansen, 2009). This forms a hindrance on international support. Since there is no central authority ruling the country, it is difficult to know who to support in order to improve the littoral states' capacity on anti-piracy operations. When a pirate is caught, no government enforces the law and prosecution. Furthermore, it is difficult to identify the political party has the power and authority to coordinate with neighbouring states.

5.4.3   Incentive in fighting piracy

Table 3 shows value of import and export goods and services compare with GDP of each littoral state. It can be seen that import and export activities in the littoral states in the Strait of Malacca are important contributors to the country's economy. In the case of Singapore, the value of import and export goods and services equals to 200% of its GDP. Singapore port is famous for transshipment and one of the main contributors to the country's economy. However, in the case of the Somalia region, import and export trades are comparatively lower. In the case of Somalia, there are barely import or export activities, except international food aids, in the country for the last two decades. This explains that the littoral states in the Strait of Malacca have higher incentive to maintain a safe and security environment in their territorial water because it directly affects the economy of these countries.

5.5   International supports

In the case of the Strait of Malacca, littoral states are strong economically and are highly motivated as import and export trades directly affect their economy. Therefore, they don't need a high level of support internationally. The role of international support is less significant than the case in the Somalia region. International community acts as facilitators to enhance collaborations between littoral states and provide technical advices. On the other hand, littoral states in the Somalia region are much poor and they have lower incentives to combat piracy as import and export have less influence in the country's economy. In this case, anti-piracy countermeasures highly rely on international supports. Littoral states are relying on UN's aids to fight with poverty. They don't have enough capacity to fight with piracy, even though they are willing to, with the necessary technical and financial support from international states.

Table 3: Import and export goods and services compare with GDP

	Import					Export				
	2004	**2005**	**2006**	**2007**	**2008**	**2004**	**2005**	**2006**	**2007**	**2008**
Indonesia	28	30	26	25	29	32	34	31	29	30
Malaysia	95	95	94	90	-	115	117	117	110	-
Singapore	199	208	213	198	215	224	236	243	230	234
Djibouti	54	51	58	80	-	37	41	40	59	-
Kenya	33	36	36	37	41	27	29	26	26	27
Somalia	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-

Conclusions

This paper studies the piracy issues in the Strait of Malacca and the Somalia region. From the two cases and the anti-piracy framework, we can see that involvements of the littoral states are the primary drivers of success in combating piracy. However, geographical and economical factors affect the incentive and capacity of the littoral states in the fight of piracy. Local cooperation can optimize the use of resources, and hence, improve countermeasures capacity. Without a strong local anti-piracy capacity, international community needs to put extra effort in combating the issue with a less effective outcome.

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