The protection of shipping and sea lines of communication (SLOC) is a major maritime security issue for many countries around the world. With the vast bulk of international trade carried by sea, globalization has led to sea-borne trade growing at a faster rate than the world economy generally.¹

Another factor leading to a greater focus on SLOC protection is increased concern for energy security, especially among the economic powers of Asia. SLOC protection has long been a concern of European countries but the interest shown by the emerging powers of Asia is relatively new. China, India and Japan are all concerned for the security of supply routes, which pass through the shipping “choke points” created by the straits in South-East Asian waters.

SLOC protection has thus become a major reason for the expansion of naval forces in Asia and the growth of naval budgets. However, it may serve as a politically acceptable justification for naval expansion when real motives could be the fear of military threats from other countries, realist competition between rising powers, and the Mahanian use of naval forces to project national power and influence.²

Threats of piracy and armed robbery against ships are a particular manifestation of the need for SLOC protection. This was first evident around 2004 after an upsurge in attacks in the Malacca and Singapore Straits, which led to considerable international pressure on the littoral countries to increase safety and security in those waterways. With an improved situation in South-East Asia, international attention has shifted to waters off the Horn of Africa, where there has been a significant increase in attacks by pirates from Somalia. Meanwhile in South-East Asia, attacks have increased in the southern part of the South China Sea.³

While piracy is undoubtedly a major problem in some parts of the world, it must be kept in perspective. A piracy attack can make a good media story, but it often over dramatizes the original event and its implications. The attack on the chemical tanker Dewi Madrim in the Malacca Straits in March 2003 is such an example. The robbers did not steal anything, which led to stories that the attack was a case of prospective terrorists practising operation of a “large vessel” in crowded shipping lanes.⁴ However, the size of the vessel is rarely mentioned. The Dewi Madrim was in fact very small, only 737 gross registered tons (GRT),⁵ and no great skill would have been required to drive her.

The costs of sea piracy to the global economy are also often overstated to achieve more dramatic impact. The costs that have been quoted range from US$ 1 billion to as much as
The reality is that global sea-borne trade has been little affected overall by the incidence of piracy, with the top end of the market especially, in terms of value of ships and cargoes, carrying on business as usual. The global financial recession has had an infinitely greater impact on the international shipping industry.

To borrow from the title of Al Gore’s critically acclaimed movie on global warming *An Inconvenient Truth*, the situation with piracy is marked by three leading inconvenient truths. The first is that apart from the pirates themselves, many organizations gain from piracy and exploit the threat of piracy to promote their own interests. The second is that despite the major international efforts to counter piracy off the Horn of Africa, attacks persist. The third is that although there are regular calls from the shipping industry for greater efforts by international agencies to counter piracy, the industry itself could be doing more to ensure that merchant ships are not vulnerable to attack. Before discussing these issues in turn, this article reviews the global situation with regard to piracy and armed robbery against ships.

**Current situation**

Table 1 shows the number of acts of piracy and armed robbery against ships (actual and attempted) worldwide between 2003 and 2009. By far the greatest concentration of these incidents was off the Horn of Africa and in the Red Sea, with attacks attributed to Somali pirates (217 incidents). The global increase in the number of attacks in 2009 was entirely due to this situation.

**Table 1. Global piracy: actual and attempted attacks, 2003–2009**

<table>
<thead>
<tr>
<th>Location</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-East Asia*a</td>
<td>187</td>
<td>170</td>
<td>118</td>
<td>87</td>
<td>78</td>
<td>65</td>
<td>67</td>
</tr>
<tr>
<td>South Pacific</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian Subcontinent</td>
<td>87</td>
<td>32</td>
<td>36</td>
<td>53</td>
<td>30</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>Americas</td>
<td>72</td>
<td>45</td>
<td>25</td>
<td>29</td>
<td>21</td>
<td>14</td>
<td>37</td>
</tr>
<tr>
<td>Somalia/Gulf of Adenb</td>
<td>21</td>
<td>10</td>
<td>45</td>
<td>20</td>
<td>44</td>
<td>111</td>
<td>217</td>
</tr>
<tr>
<td>Nigeria</td>
<td>39</td>
<td>28</td>
<td>16</td>
<td>12</td>
<td>42</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td>Other Africa</td>
<td>33</td>
<td>35</td>
<td>19</td>
<td>29</td>
<td>34</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>Rest of World</td>
<td>6</td>
<td>8</td>
<td>17</td>
<td>9</td>
<td>12</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>445</strong></td>
<td><strong>329</strong></td>
<td><strong>276</strong></td>
<td><strong>239</strong></td>
<td><strong>263</strong></td>
<td><strong>293</strong></td>
<td><strong>406</strong></td>
</tr>
</tbody>
</table>


**Notes:** a South-East Asia includes attacks in the South China Sea and Viet Nam, which appear under the Far East in the IMB data; b Somalia/Gulf of Aden includes attacks in the Red Sea, Arabian Sea, Indian Ocean and off Oman, all of which are attributed to Somali pirates.
Elsewhere the situation has steadily improved over recent years. In the waters off Nigeria, which have been another high-risk area, there has been some improvement with 28 incidents in 2009 as compared with 40 in 2008. South-East Asian waters were a major area of concern in the early 2000s, but have since improved. The situation in these waters in 2009 shows little change from that of 2008 (67 attacks in 2009 compared with 65 in 2008). However, there have been major changes within the region itself: there has been a marked fall in attacks in Indonesian waters (15 attacks in 2009 compared with 28 in 2008), and a big increase in attacks in the South China Sea (13 as against 0 in 2008), and a small increase in Malaysian waters and the Singapore Strait.

Types of piracy

There are marked differences in the types of attacks that occur in the three main current piracy hot spots—Somalia–Gulf of Aden, South-East Asia and Nigeria, with 217, 67 and 28 attacks respectively in 2009 (representing over three-quarters of the total global attacks during the year). Several different types of piracy and armed robbery against ships might be identified, varying according to region.

Off the Horn of Africa, the attackers are well organized and their strategy involves hijacking ships and crews for ransom. The ransom paid is typically in excess of US$ 1 million—US$ 3 million in the case of the large oil tanker *Sirius Star* hijacked in 2008. US$ 3.3 million was reportedly paid in November 2009 to secure the release of the large and sophisticated Spanish fishing vessel *Alakrana* and her crew. The pirates appreciate that ship-owners and insurance companies will pay the ransom and that patrolling navies will not use force to recover a ship that has been successfully hijacked due to the risk of casualties among hostages and among the warship’s crew. There have been few casualties so far among the crews of ships hijacked in these waters, who are normally relatively well looked-after by the pirates.

The situation is different off Nigeria, where attacks are usually much more violent. Vessels, particularly ones associated with the offshore oil and gas industry, are attacked in coastal waters and rivers. There is frequent loss of life as heavily-armed pirates attack ships and kidnap crew members and other personnel for ransom. The ships themselves are not hijacked.

In South-East Asia, the risk is mainly of opportunistic petty theft from ships at anchor or in port. This type of piracy occurs in and around ports in Indonesia, the Philippines and Viet Nam. A second type of piracy in the region occurs when ships are underway in confined waters such as the Malacca and Singapore Straits and the Indonesian and Philippine archipelagos. The pirates board vessels to steal cash and valuables. Although the pirates are armed, violence is not normally used unless resistance is offered.

A third type of piracy committed in South-East Asia is the theft or hijacking of an entire ship. In the 1990s, some ships were hijacked with the objective of giving them a false identity and
turning them into "phantom ships" with fraudulent registration documents. However, creating a phantom ship has become difficult: the introduction of the International Ship and Port Facility Security Code, requiring ships to have a ship identification number and a continuous synoptic record, which provides a record of a ship’s movements, changes of name, owner, etc., has made it much harder to falsify registration documents for a ship. Nevertheless, smaller ships, such as tugs, barges and small product tankers, which do not have to meet these requirements, are occasionally hijacked in South-East Asia and may be recycled for service under another name.

In contrast, ship hijackings by Somali pirates are not about creating a “phantom ship”. The pirates are not interested in selling off the ship’s cargo, or in using the ship for further service. Their only interest is in holding the ship, her crew and her cargo until such time as a ransom is paid for their release.

Vulnerability of ships

The vulnerability of ships to piracy and sea robbery depends on factors such as the type of ship, its size, speed, freeboard (the height of the deck above the water level) and voyage. Ships successfully hijacked by Somali pirates tend to be older and smaller vessels. Of the 47 vessels successfully hijacked off Somalia in 2009, 24 were under 5,000 GRT; 4 were between 5,000 and 10,000 GRT; 8 between 10,000 and 20,000 GRT and 11 over 20,000 GRT. Of the 11 largest vessels, all were bulk carriers with the exception of one very large crude carrier (VLCC), and one listed as a general cargo ship, but possibly also employed in a bulk trade. The largest ship hijacked during this period was the Greek-flag VLCC Maran Centaurus, hijacked off Somalia on 29 November 2009. Smaller ships are easier to attack because they have a lower freeboard and are usually slower, with fewer crew than a larger vessel.

Sub-standard ships tend to be more vulnerable than well-operated and maintained vessels, which are more likely to be taking all the precautions against attack recommended by the International Maritime Organization (IMO) and ship-owner associations. The IMO often draws attention to the number of sub-standard ships engaged in bulk trades and often operating within complex ownership structures that obscure the true background of a vessel. The author has heard anecdotal reports that Somali pirates may target vessels that appear to be sub-standard.

Ship safety and security, regardless of flag, depends fundamentally on efficient operation and maintenance with a properly qualified and well-trained crew, and on being managed by a company that strictly observes all applicable regulations and guidelines. The flag state is ultimately responsible for ensuring its vessels meet national regulations and the requirements of international agreements to which it is a party, but port state control (PSC) provides a useful safety net. Port state control involves the inspection by the officers of a national maritime authority of foreign vessels visiting the country’s ports to ensure compliance with the international maritime safety and marine pollution prevention conventions. Regional
memorandums of understanding (MOU) provide harmonized systems of PSC, with regional databases that facilitate effective data exchange on inspections and agreements on target inspection rates for the ports of participating countries.

It may be relevant that the Indian Ocean Memorandum of Understanding on Port State Control, to which most successfully hijacked ships are exposed, appears less effective, in terms of inspection rates, than other major MOUs, for example the Paris MOU for Europe and the Tokyo MOU for the Asia–Pacific region. Thus the Horn of Africa may be an area where sub-standard ships are prevalent.

A poor PSC record (indicated by the number of detentions or deficiencies detected at recent PSC inspections) may be considered an indication of a sub-standard ship, as can age. While there will be exceptions, an older ship is more likely to be sub-standard. A ship may start her life with a reputable company, but over the years will be bought and sold, perhaps changing her name and flag and progressively ending up with less responsible owners. It is significant therefore that the average age of the three main classes of commercial ship (i.e. general cargo vessels, bulk carriers and all types of tanker) hijacked by Somali pirates during 2009 was higher than the global average for that class of ship.

Leaving aside the fishing vessels, yachts, tugs and dhows, 30 commercial vessels were hijacked off the coast of Somalia during 2009. Of these, 8 were general cargo ships with an average age of 25.1 years (as compared with a global average age for general cargo ships of 17.1 years); 8 were tankers with an average age of 22.7 years (global average age is 10.1 years); 11 were bulk carriers with an average age of 15.7 years (global average age is 12.7 years); and 3 were container ships (average age 15.3 years as compared with a global average of 9.0 years). The oldest ship hijacked was the 36-year-old 4,932 GRT general cargo ship Sea Horse taken off Somalia in April 2009. This ship also had a poor PSC record, with several detentions over recent years for excessive deficiencies, and may have been scrapped since its hijacking.

While it is not always the case, a large merchant vessel travelling at its normal operating speed and taking all appropriate precautions should not be successfully attacked. The pirates will therefore do what they can with the intimidating use of weapons to persuade a vessel to slow down or stop. The successful attacks on two VLCCs, Sirius Star and Maran Centaurus (attacked in 2008 and 2009, respectively), appear an exception to this principle, but other considerations may explain the successes. Information after the event suggests the Sirius Star was steaming slowly or stopped at the time of the attack. The Maran Centaurus is relatively old (14 years) and, when attacked, she was not proceeding in any recognized maritime corridor. These considerations serve to highlight the importance of analysing the circumstances of individual attacks rather than taking a generalized view of causal factors.

Bulk carriers also appear an exception to the principle that larger vessels are difficult to attack when proceeding at their normal operating speed. Attacks have occurred on some bulk carriers while apparently underway. There are three factors that help explain this. First, bulk carriers
are generally slow compared with other types of vessel, and have a low freeboard when laden. Second, bulk carriers are relatively unsophisticated vessels and have the reputation for lower standards of ship maintenance and crew proficiency than ships such as tankers and container ships with higher value cargoes. The crew may be less vigilant and security conscious.

The third factor is the way in which bulk carriers are employed. The author’s analysis of ship voyage records shows that at the time of being attacked, many bulk carriers were on a slow passage, or possibly unemployed and waiting for a new spot charter. That means they might well be stopped while proceeding slowly or even loitering in potentially high-risk areas, including off the Horn of Africa and in South-East Asian waters. Rather than paying off crew and leaving the ship at anchor, a ship-owner may prefer to keep a vessel fully crewed in expectation of further employment. Instead of paying the costs of anchoring the ship in a secure anchorage, the owner may direct the ship to remain at sea. These are trends that may have been accentuated by the impact of the global financial crisis on the international shipping industry.

**South-East Asia**

Most attacks in South-East Asia are on vessels at anchor, in port, or entering or leaving harbour. These attacks are minor and are best countered by more effective policing by port authorities. The successful attacks at sea are on small ships or larger vessels that are stopped or proceeding slowly. Most high-value sea-borne trade is carried in larger vessels that are transiting the region, but it is mainly smaller, more vulnerable vessels carrying trade within the region or local fishing and trading vessels as well as cruising yachts that are attacked. Larger vessels gain considerable protection from their size and speed. Most large, modern merchant ships engaged in international trade travel at speeds in excess of 14 knots, and it is difficult for small craft to attempt to approach them at this speed.

Two locations in South-East Asian waters can be identified as regional hot spots, where the number of incidents is increasing. The first area is the southern part of the South China Sea near Tioman Island and Aur Island off the east coast of Malaysia, and near Mangkai and the Anambas Islands in Indonesia. There were four attacks off Aur Island in 2009 (three tugs and barges and one general cargo ship), but the last attack occurred in June 2009. This apparent improvement in the latter half of the year might be attributed to increased patrolling by the Malaysian Maritime Enforcement Agency. However, the situation off Mangkai and the Anambas Islands remains serious, with 13 attacks in 2009. These attacks are usually “hit and run”, under cover of darkness, with parangs and pistols as the main weapons. The pirates are normally satisfied if they access the ship’s safe, seize any valuables and rob the crew.

The second area of concern is the eastern approaches to the Singapore Strait off Tanjung Ayam and Tanjung Ramunia in Malaysia. Thirty incidents occurred in 2009, all involving ships
at anchor. The anchorage, in Malaysian waters, is a preferred location for ship-owners to lay up their ships or take on bunkers (fuel) as they do not have to pay anchorage fees.20

**Indirect benefits of piracy**

The first inconvenient truth with the current situation is that apart from the pirates themselves, many organizations actually benefit from piracy. The media gets a good story. Marine insurance companies increase their premiums even though the insured vessel might be at relatively low risk of attack. For example Lloyd’s, the world’s largest insurance market, currently lists extensive areas of the Indo-Pacific region as war risk areas, including Djibouti, Somalia and adjacent areas of the Indian Ocean, the Gulf of Aden, Yemen, Pakistan, Sri Lanka, the ports of Balikpapan and Jakarta in Indonesia, the Sulu archipelago and the north-east coast of Sumatra.21

Ship hijackings off Somalia have also created a new business for private security companies, who arrange the payments of ransom monies for a large fee recoverable from insurance. Private security companies win all-round from piracy, conducting risk assessments, offering protection services for ships and crews, even deploying armed escort vessels.22 Their activities are supported by the United States, which has made it mandatory for US-flag vessels in high-risk areas to embark private security guards. The admiral in command of US naval forces in the Middle East has praised the actions of private security guards who thwarted a second attack on the US-flag container ship, *Maersk Alabama*.23

Navies benefit from piracy too. At a time when the budgets of most Western navies are under pressure, piracy allows navies to demonstrate their utility. As the executive overview to the latest *Jane’s Fighting Ships* observes, “the pirates of Somalia have performed at least one useful purpose over the last year: they have provided a much needed reminder of the importance of the sea and of potential threats to global security”.24

The naval operations to counter piracy provide justification for sustaining or increasing naval spending. While Western navies are facing a tighter budgetary environment, the same is not the case for Asian navies. Over the five years from 2003 to 2008, China’s defence budget grew by a massive 12.1% in real terms per annum, the Republic of Korea’s by 6.7% per annum, India’s by 3.8%, and the Association of Southeast Asian Nations’ by 4.1%.25 Naval capabilities figure prominently in these larger defence budgets. The opportunity costs of this increased spending are high, particularly in a world concerned about fundamental problems of poverty, hunger, disease, overpopulation, climate change and the degradation of the global environment.

Indeed, the cost of the naval operations off the Horn of Africa is much higher than the quantity of humanitarian assistance being delivered to Somalia. EUNAVFOR Somalia–Operation Atalanta, the European Union’s anti-piracy operation off Somalia, is reported to cost about US$ 735 million a year.26 On the basis of those costs and taking into account the extent of
operations by the US Navy and other navies, the total cost of naval operations in the area would be approaching US$ 2 billion per year. To put these costs in perspective, the United States contributed US$ 150 million of humanitarian assistance to Somalia in 2009, and the total value of international humanitarian assistance to Somalia in 2008 was US$ 542 million.

Deploying warships to counter piracy off the Horn of Africa may also serve the foreign policy objectives of governments. The region is politically unstable but vitally important as a source of energy. Many countries, major powers in particular, have an interest in establishing a strategic presence and influence there. Some warships may remain on station even if piracy, as it may be, is effectively eradicated in the area: France and the United States already have naval facilities in the Horn of Africa region, and a senior Chinese naval officer has suggested that China establish a permanent base in the Gulf of Aden to support its anti-piracy operations.

**Inadequate anti-piracy measures**

The responses to piracy off the Horn of Africa include multinational naval patrols, the establishment of a Maritime Security Patrol Area in the Gulf of Aden with an Internationally Recommended Transit Corridor protected by warships, the option of escorted convoys, improved arrangements for surveillance and information sharing among participating navies and a series of IMO meetings that have promoted cooperation and developed a Code of Conduct among littoral countries covering matters such as the prosecution of offences. The UN Security Council has adopted several resolutions relating to Somalia and these have helped facilitate cooperation to suppress piracy in the area, for example the deployment of naval forces and the investigation, trial and punishment components of repression efforts “unprecedented in scope and authority for the international community to counter a threat in the maritime domain”.

Despite all these measures, attacks in the waters off the Horn of Africa continue. The naval operations have several limitations. Most warships have restrictive rules of engagement and they lack the national legal authority to arrest pirates and bring them to trial.

The most serious limitation, however, is the lack of resources in terms of the number of ships and surveillance aircraft covering the piracy-prone waters off the Horn of Africa that now include large areas of the north-west Indian Ocean around the Seychelles. For the United States and NATO countries, counter-piracy operations are a lower priority than the conflict in Afghanistan. Comprehensive air surveillance is a basic requirement but there are insufficient military patrol aircraft. The United States has deployed surveillance drones to the Seychelles but these do not provide a visible deterrent to pirates. However, modern warships and military aircraft with their sophisticated military equipment are in many ways an “overkill” for anti-piracy operations. Cheaper and less well-armed coast guard vessels and aircraft would be quite sufficient for the task. A cheaper option would be to use civilian aircraft under charter.
Sea piracy: some inconvenient truths

perhaps to the United Nations. Finally, many merchant ships fail to take all appropriate precautions against attack. For example, there are still slow and vulnerable vessels sailing in the area independently of the escorted convoys.

Industry’s contribution to piracy

The third inconvenient truth is that while the international shipping industry is the victim of piracy, it also pursues practices that facilitate piracy. This problem has been exacerbated by the global financial crisis and the associated shipping recession. The measures taken by some ship-owners in response to the economic downturn have contributed to the resurgence of attacks in South-East Asia, as well as possibly to attacks off Somalia.

For example, there are larger numbers of laid-up ships with skeleton crews in anchorages that are prone to acts of armed robbery against ships, such as in Malaysian waters in the eastern approaches to the Singapore Strait. Laid-up ships are major problems for port authorities and maritime law enforcement agencies responsible for security in the anchorages used by laid-up ships.

Instead of reducing the crew and laying up a ship, a ship-owner may prefer to keep it in service waiting for its next charter. This may be particularly the case with bulk carriers due to the unpredictable nature of their employment, which typically involves single voyage “spot charters” rather than long-term contracts. Laying up a ship is a major business decision that, as well as taking a ship out of service, might involve significant costs, for example, immobilizing engines and paying off crew before their contracts have expired. As an alternative to paying off a ship and leaving it at anchor, a ship may be loitering at sea, unsure where the next charter may be coming from, and could find itself in high-risk areas in the southern part of the South China Sea or off the Horn of Africa.

Ship-owners are also tempted to cut corners by employing cheaper crews, reducing crew numbers and lowering maintenance standards. This cost-cutting could increase the risks of accidents at sea, including groundings, collisions and ship losses, with greater risks of marine pollution and vulnerability to piracy. Underpaid and overworked seafarers are not conducive to maritime security.

The IMO is the international agency responsible for shipping safety and security. It has done good work in helping littoral states to establish a regime for safety and environmental protection in the Malacca and Singapore Straits, and in facilitating cooperation in countering piracy off the Horn of Africa. However, it has not addressed the maritime security consequences of the downturn in global shipping, including issues such as the role of the flag state and the ship-owner in countering piracy. This is partly because flag states and ship-owners are powerful interest groups at the IMO, and effectively control the work of the organization.
Conclusions

Piracy is a serious issue, but it is all too easily oversimplified in terms of numbers of attacks and responses required. It is a complex problem that needs to be kept in perspective. As a previous commander of naval operations off the Horn of Africa recently observed, the piracy problem in this area is “overpublicized”. Piracy is prone to exaggeration and obfuscation about the true interests and contributions of stakeholders. There are some inconvenient truths about sea piracy that need to be appreciated.

Some countries are using sea piracy for their strategic advantage, but others may lose out. A senior Yemeni minister recently noted that “internationalizing the Red Sea” with the increased presence of foreign warships posed “a real threat on Yemen’s security and stability in particular and on the region in general”. The threat of piracy is also used as justification for naval spending. In direct terms, this leads to an environment of increased naval activity that is potentially destabilizing, with greater numbers of aircraft, warships and submarines at sea, including in areas such as the seas of East Asia, where sovereignty disputes and bilateral tensions already exist. In indirect terms, defence spending has a high opportunity cost as it diverts resources from important programmes for economic development, social improvement and poverty alleviation.

For the international shipping industry, the direct economic losses as a consequence of piracy are relatively low, although insurance premiums for ships passing through piracy-prone areas have increased. Much depends on the quality of a ship and her crew. A valuable ship with a valuable cargo is more likely to be operated by a well-trained and motivated crew who will take all precautions against being successfully hijacked.

Insufficient attention has been given to the responsibilities of flag states and ship-owners in preventing piracy. The depressed state of the international shipping industry has led to greater numbers of unemployed or underemployed ships and cost-cutting measures that are contributory factors to the increase in piracy. Flag states should be more proactive in ensuring ships are not vulnerable to attack, and the IMO might look more closely at the problem of sub-standard ships, their vulnerability to attack and the consequences of the shipping recession for maritime security.

Notes


2. The eminent American maritime strategist, Alfred Thayer Mahan, promoted the notion that control of the sea by maritime commerce and naval power were fundamental elements in the power and prosperity of nations. Geoffrey Till, 2004, Sea Power – A Guide for the Twenty-First Century, London, Frank Cass, pp. 39–45. Numerous recent writings have reflected on the possible impact of Mahan’s thinking on the contemporary maritime strategies of the rising naval powers of Asia: China, India and Japan. See, for
8. This article follows the International Maritime Organization in using the expression "piracy and armed robbery against ships" to describe incidents. This overcomes the limitation under international law that an act of piracy can occur only in international waters: this expression covers not only acts against vessels at sea, but also acts against vessels in port or at anchor, regardless of whether they were within national waters when attacked.
12. By the end of 2008, 6 of the original 19 signatories to the Indian Ocean MOU had not become parties to the agreement, and of the 13 parties, 6 did not achieve their target inspection rates during 2008 and one did not report data. Under the Indian Ocean MOU, parties are committed to inspecting at least 10% of foreign ships visiting their ports. Indian Ocean MOU, Annual Report 2008, see especially p. 26, Figure 1; Memorandum of Understanding on Port State Control for the Indian Ocean Region, document MOU.Rev1.Oct 2000, Article 1.3.
13. The global average age for the different classes of ship is taken from United Nations Conference on Trade and Development, op. cit., Table 11, p. 37 and the age of the ships hijacked and their PSC record were retrieved mainly from the database of the Indian Ocean MOU on Port State Control <www.iomou.org>, with some from the Riyadh MOU on Port State Control for the Gulf region <www.riyadhmu.org> and the Paris MOU for European countries <www.parismou.org>. Some ages of ships were from the World Shipping Register’s Ships and Shipping Company database, at <http://e-ships.net/index/A4.shtml>.
14. Age from the World Shipping Register, op. cit.
16. A ship is underway if she is not anchored, secured to a buoy, made fast to the shore (e.g. alongside a wharf or jetty) or aground. A vessel stopped at sea is still regarded as being underway.
17. A spot charter is a charter for a particular vessel to move a single cargo between specified loading port(s) and discharge port(s) in the immediate future. Bulk carriers are the modern “tramps” of the sea, often chartered for single voyages rather than operating on time charters covering several voyages. They may therefore loiter at sea waiting for a new charter.
18. Of the 21 commercial vessels hijacked off the Horn of Africa in the first nine months of 2009, ten (including four of the six bulk carriers) appear to have been on very slow passages. The vessel database maintained by Lloyd’s Marine Intelligence Unit (MIU) was used to identify the particular voyage a ship was on at the time she was attacked and features of her movements prior to the attack (typically a very slow passage from her previous port) that may have made her more vulnerable.
Maritime security


21. The Joint War Committee of Lloyd’s Market Association and the International Underwriting Association of London circulars listing risk areas can be found at <www.lmalloyds.com/AM/Template.cfm?Section=Joint_War1&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=3&ContentID=3888>. The most recent at the time of writing was 25 November 2009.


32. For example, Australia uses civil chartered De Havilland Dash 8 aircraft with a range of different sensors and a surveillance information management system on board to undertake most maritime surveillance tasks in Australia’s large exclusive economic zone. An estimate of the comparative costs of Royal Australian Air Force P3C aircraft and the Dash 8 aircraft in 1998–1999 found that the military aircraft were at least ten times as expensive as the civil aircraft. The Auditor-General, 2000, *Coastwatch: Australian Customs Service, Audit Report no. 38*, Canberra, Australian National Audit Office, p. 66.

33. The author observed this himself when he travelled through the area in September 2009 in the large and fast container vessel CMA CGM Strauss.


