



MARITIME PIRACY

PART I AN OVERVIEW OF TRENDS, COSTS AND TRADE-RELATED IMPLICATIONS



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

MARITIME PIRACY

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TRADE-RELATED IMPLICATIONS**

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ABBREVIATIONS AND ACRONYMS

AFRICOM	United States Africa Command
AMISOM	African Union Mission in Somalia
AMSSA	African Maritime Safety and Security Agency
APS	Africa Partnership Station
ASF	Asian Shipowners' Forum
BIMCO	Baltic and International Maritime Council
BMP	Best Management Practices
CGPCS	Contact Group on Piracy off the Coast of Somalia
CMI	Comité Maritime International
CSDP	Common Security and Defence Policy
CTF-150	Combined Task Force 150
DCoC	Djibouti Code of Conduct
ECHR	European Convention on Human Rights, 1950
EEZ	Exclusive Economic Zone
EUCAP NESTOR	European Union Regional Maritime Capacity-Building for the Horn of Africa and the Western Indian Ocean
EU-NAVFOR	European Union Naval Force
EUTM	European Union Training Mission for Somalia
FAC	Foreign Affairs Committee (United Kingdom of Great Britain and Northern Ireland)
FAO	Food and Agriculture Organization of the United Nations
FATF	Financial Action Task Force
GISIS	Global Integrated Shipping Information System
IBF	International Bargaining Forum
ICC	International Criminal Court
ICC	International Chamber of Commerce
ICG	International Contact Group on Somalia
ICS	International Chamber of Shipping
ICOC	International Code of Conduct
IGAD	Intergovernmental Authority on Development
IMB	International Maritime Bureau
IMB PRC	International Maritime Bureau Piracy Reporting Centre
IMO	International Maritime Organization
IMO FAL	International Maritime Organization Facilitation Committee
IMO LEG	International Maritime Organization Legal Committee
IMO MSC	International Maritime Organization Maritime Safety Committee
IMSA	Independent Maritime Security Associates
INTERPOL	International Criminal Police Organization (also ICPO)
INTERTANKO	International Association of Independent Tank Owners
IOC	Indian Ocean Commission
ISAN	International Seafarers Assistance Network
ISF	International Shipping Federation
ISO	International Organization for Standardization
ISPS	International Ship and Port Facility Security Code

ITF	International Transport Workers' Federation
ITLOS	International Tribunal for the Law of the Sea
IUMI	International Union of Marine Insurance
LMA	Lloyd's Market Association
MLC	Maritime Labour Convention
MMSS	Multi-Mode Sensor Seeker
MOWCA	Maritime Organization of West and Central Africa
MPHRP	Maritime Piracy Humanitarian Response Programme
MSC-HOA	Maritime Security Centre – Horn of Africa
MSPWG	Intersessional Maritime Security and Piracy Working Group
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
NSC	NATO Shipping Centre
OEF	One Earth Foundation
OGTCL	Open General Trade Control Licence
PCASP	Privately Contracted Armed Security Personnel
PMPF	Puntland Maritime Police Force
PMSC	Private Maritime Security Companies
RAPPICC	Regional Anti-Piracy Prosecution and Intelligence Coordination Centre
ReCAAP	Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia
ReCAAP ISC	ReCAAP Information Sharing Centre
SAMI	Security Association for the Maritime Industry
SCEG	Security in Complex Environments Group
SOLAS	International Convention for the Safety of Life at Sea 1974, as amended
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
SUA	Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988
TFG	Transitional Federal Government of Somalia
UDHR	Universal Declaration on Human Rights
UKMTO	United Kingdom Marine Trade Operations
UNCLOS	United Nations Convention on the Law of the Sea, 1982
UNCTAD	United Nations Conference on Trade and Development
UN-DOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
UNDP	United Nations Development Programme
UNICRI	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drugs and Crime
UNODC CPP	United Nations Office on Drugs and Crime Counter-Piracy Programme
UNPOS	United Nations Political Office for Somalia
WFP	World Food Programme

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I. Introduction and background

1. Maritime transport is a key economic sector that underpins international trade, supports globalization and deepens global economic integration. With some 50 per cent of global merchandise trade involving flows between partners located more than 3,000 kilometres apart,¹ global trade is predominantly carried by sea across established international routes and trade lanes.

2. The importance of oceans and seas for trade-led economic prosperity has increased in tandem with growth in the world economy, global merchandise trade and maritime transport activity. However, increased international trade volumes and value have also heightened the exposure and vulnerability of international shipping as a potential target for piracy,² armed robbery³ and other crimes. Over 2006–2010, piracy incidents rose by 86.2 per cent worldwide, with the number of actual and attempted attacks moving up from 239 in 2006 to 445 in 2010.⁴ The rapid escalation in piracy activity off the coast of Somalia since 2006 has particularly startled the international community, with piracy incidents in East Africa (off the coast of Somalia/Gulf of Aden/Indian Ocean) exceeding those in some of the traditional global hotspots of piracy such as Indonesia, Malaysia, Singapore and the Philippines.⁵ The concentration of piracy activity around major maritime passages such as the Straits of Hormuz and the Gulf of Aden illustrates the risks associated with geographically constrained transit points in terms of blockades and successful boarding and hijacking of ships.

3. Piracy off the coast of Somalia is increasingly perceived as an organized crime and, in view of the scale, level of sophistication and degree of violence of incidents reported, may be considered a special case. Essentially motivated by the prospect of large monetary gains from ransom payments and cargo theft, maritime piracy in East African waters has its own

¹ Jean-Paul Rodrigue (2013). *The Geography of Transport Systems*. Department of Global Studies and Geography. Hofstra University. New York. <http://people.hofstra.edu/geotrans/eng/ch5en/conc5en/ch5c2en.html>.

² Piracy is defined in article 101 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS): "Piracy consists of any of the following acts:

(a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed: (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship; or aircraft; (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State; (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft; (c) any act inciting or of intentionally facilitating an act described in sub-paragraph (a) or (b)."

³ "Armed robbery against ships" is defined in the International Maritime Organization (IMO) Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery Against Ships (resolution A.1025(26), Annex, paragraph 2.2), as follows: "Armed robbery against ships" means any of the following acts:

(a) any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy, committed for private ends and directed against a ship or against persons or property on board such a ship, within a State's internal waters, archipelagic waters and territorial sea; (b) any act of inciting or of intentionally facilitating an act described above."

⁴ ICC International Maritime Bureau (2013). *Piracy and Armed Robbery against Ships*. Annual Report. 1 January–31 December 2012. January.

⁵ Ibid. See also Kennedy K. Mbekeani and Mthuli Ncube (2011). *Economic Impact of Maritime Piracy*. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

'business model' that involves a complex web of interactions between numerous stakeholders, including financiers, instigators and pirates.⁶ While intensified international counter-piracy efforts in East Africa have, according to latest figures, contributed to a reduction in the number of incidents in the region, piracy off the coast of Somalia remains a serious threat, as pirates appear to be changing their modus operandi to increasingly attack ships while anchored. More recently and with reports of a sustained surge in piracy activity in the Gulf of Guinea, West African waters are also emerging as a dangerous hotspot for piracy; the growing number of incidents of piracy that had started off the coast of Nigeria is now expanding farther offshore as well as into waters off the coasts of neighbouring countries, including Benin, Cameroon, Côte d'Ivoire, Gabon and Togo.⁷

4. At a basic level, maritime piracy is a maritime transport issue⁸ that directly affects ships, ports, terminals, cargo and seafarers. Above all, piracy is associated with considerable human costs, as seafarers are the first to be affected by piracy attacks. They are usually held hostage and may be injured or killed. Between 2005 and 2012, 61 seafarers were killed as result of piracy and 5,420 were held hostage on some 279 ships hijacked worldwide. Piracy off the coast of Somalia accounted for nearly 50 per cent of all the hijackings over this period⁹. While periods of captivity are shorter in the Gulf of Guinea region, it appears that victims there are subject to greater violence.¹⁰

5. As piracy activities have evolved and become more widespread and complex, the issue of maritime piracy has developed into a multifaceted transnational security challenge that threatens lives, livelihoods and global welfare. Piracy gives rise to considerable direct and second order costs and has broad repercussions both at a regional and at a global level. Piracy disrupts transport and trade flows as well as other economic activities, such as fisheries and energy production, thus potentially jeopardizing the development prospects of both coastal and landlocked economies in affected regions. Moreover, piracy threatens the safety of navigation and delivery of humanitarian aid and has broader implications for transport and trade across interconnected global supply chains, as well as for energy and food security.

6. This report, published in two parts, highlights some of the costs as well as trade-related implications of maritime piracy and takes stock of key regulatory and other initiatives that have been pursued by the international community in an effort to combat piracy, in particular following the escalation of piracy off the coast of Somalia/Gulf of Aden/Indian

⁶ BIMCO (2012). Reflections 2013. An Ocean of Expertise.

⁷ ICC International Maritime Bureau, IMB Piracy Report highlights violence in West Africa, 15 July 2013, <http://www.icc-ccs.org/news/865-imb-piracy-report-highlights-violence-in-west-africa>. See also, Ryan Cummings, West Africa: The Rise and Rise of Piracy in the Gulf of Guinea, ThinkAfricaPress, 18 July 2013.

⁸ Peter Chalk (2008). The Maritime Dimension of International Security, Terrorism, Piracy, and Challenges for the United States. Prepared for the Air Force of the United States of America.

⁹ ICC International Maritime Bureau. Piracy and Armed Robbery Against Ships. Annual Report. Various Issues. In 2012, of the total 28 hijackings taking place worldwide, ten hijackings were carried out by pirates off the coast of Somalia and of the six seamen killed in 2012, two killings resulted from the piracy off the coast of Somalia and four from Nigeria's.

¹⁰ One Earth Future Foundation (OEF) (2013). The Human Cost of Maritime Piracy 2012. Working Paper. Ocean Beyond Piracy Project.

Ocean. Part I of the report sets the scene and provides some figures and statistics describing overall trends in maritime piracy and related crimes. It also highlights some of the key issues at stake by focusing on the potential first order and second order costs and some of the broader trade-related implications of maritime piracy. Part II of the report provides an overview of the contemporary international legal regime for countering piracy and identifies key examples of international cooperation and multilateral initiatives to combat piracy.¹¹

II. Maritime piracy in figures

7. Instances of piracy are monitored both by the International Maritime Organization (IMO) and the Piracy Reporting Centre of the International Maritime Bureau (IMB PRC).¹² An industry association, the IMB PRC is a 24-hour manned, single point of contact, set up in 1991 specifically to collect and disseminate information on maritime incidents worldwide. The information is widely communicated to regional governmental, intergovernmental and law enforcement organizations as well as broadcast immediately to all ships in the ocean region via InMarsat-C Safety Net service. The IMB PRC records attacks or attempted attacks on any ship, whether at anchor, berthed or at sea irrespective of type of ship or its flag/nationality. Data presented in this section draws heavily on the IMB PRC annual reports on Piracy and Armed Robbery against Ships.¹³

8. Over the past decade (2003–2012), some 3,436 acts of piracy¹⁴ have been reported worldwide (figures 1 and 2). The number of actual attacks increased from 49 in 2008, before peaking at 249 in 2010 and falling back to 202 in 2012.¹⁵ The number of successful hijackings totalled 49 in 2008 before reaching a peak of 53 in 2010 and a low of 28 in 2012. More recently, the number of overall attacks (attempted and actual) fell from 445 in 2010 to 297 in 2012,¹⁶ reflecting a reduction in piracy levels in East African waters. During the first nine months of 2013, 188 incidents of piracy and armed robbery against ships have been reported, the lowest third quarter figure since 2006. By September 2013, there had been 140 actual attacks with ten vessels being hijacked, 266 crew members taken hostage, 34 kidnapped, 20 injured and one killed.¹⁷

¹¹ *Maritime Piracy, Part II: An Overview of the International Legal Framework and of Multilateral Cooperation to Combat Piracy*, UNCTAD/DTL/TLB/2013/3.

¹² The discrepancies between IMO and IMB statistics result from differences in data collection methods. The IMO obtains statistics from flag states, regional centres and IMB. On the other hand the reports of the IMB reflect data obtained by the IMB from ship masters or owners.

¹³ Note that the IMB PRC uses the definition of Piracy contained in Article 101 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) as well as the definition of Armed Robbery as set out in the 2009 IMO Resolution A.1025 (26).

¹⁴ ICC International Maritime Bureau. *Piracy and Armed Robbery Against Ships. Annual Report. Various Issues.*

¹⁵ *Ibid.*

¹⁶ ICC International Maritime Bureau (2013). *Piracy and Armed Robbery Against Ships. Annual Report. 1 January – 31 December 2012.* January, and ICC International Maritime Bureau (2012). *Piracy and Armed Robbery Against Ships. Annual Report. 1 January –31 December 2011.* January.

¹⁷ ICC International Maritime Bureau (2013). *Piracy and Armed Robbery against Ships. Annual Report. 1 January–30 September 2013.*

9. Incidents in Asian waters and in the Gulf of Guinea have, however, increased significantly since 2010, with attacks in 2012 numbering 26 in East Africa against 55 in the Gulf of Guinea and 130 in Asia.¹⁸ In the first three quarters of 2013, 43 incidents were reported in the Gulf of Guinea, including seven hijackings and 132 crew members being taken hostage.¹⁹ Overall, six tankers and an offshore supply vessel have been hijacked by September 2013.²⁰ This is an alarming development in a region already burdened by oil cargo theft and attacks against vessels servicing the oil industry.

Figure 1 (a). Maritime piracy activity, 2011



Source: IMB PRC Live Map.

Note: Red = Actual attacks; Yellow = Attempted Attacks; Purple = Suspicious Vessel.

¹⁸ ICC International Maritime Bureau (2013). Piracy and Armed Robbery against Ships. Annual Report. 1 January–31 December 2012. January.

¹⁹ ICC International Maritime Bureau (2013). Piracy and Armed Robbery against Ships. Annual Report. 1 January–30 September 2013.

²⁰ Ibid.

Figure 1 (b). Maritime piracy activity, 2012



Source: IMB PRC Live Map.

Note: Yellow = Attempted Attack; Orange = Boarded; Blue = Fired upon; Pink =Hijacked; Purple = Suspicious Vessel.

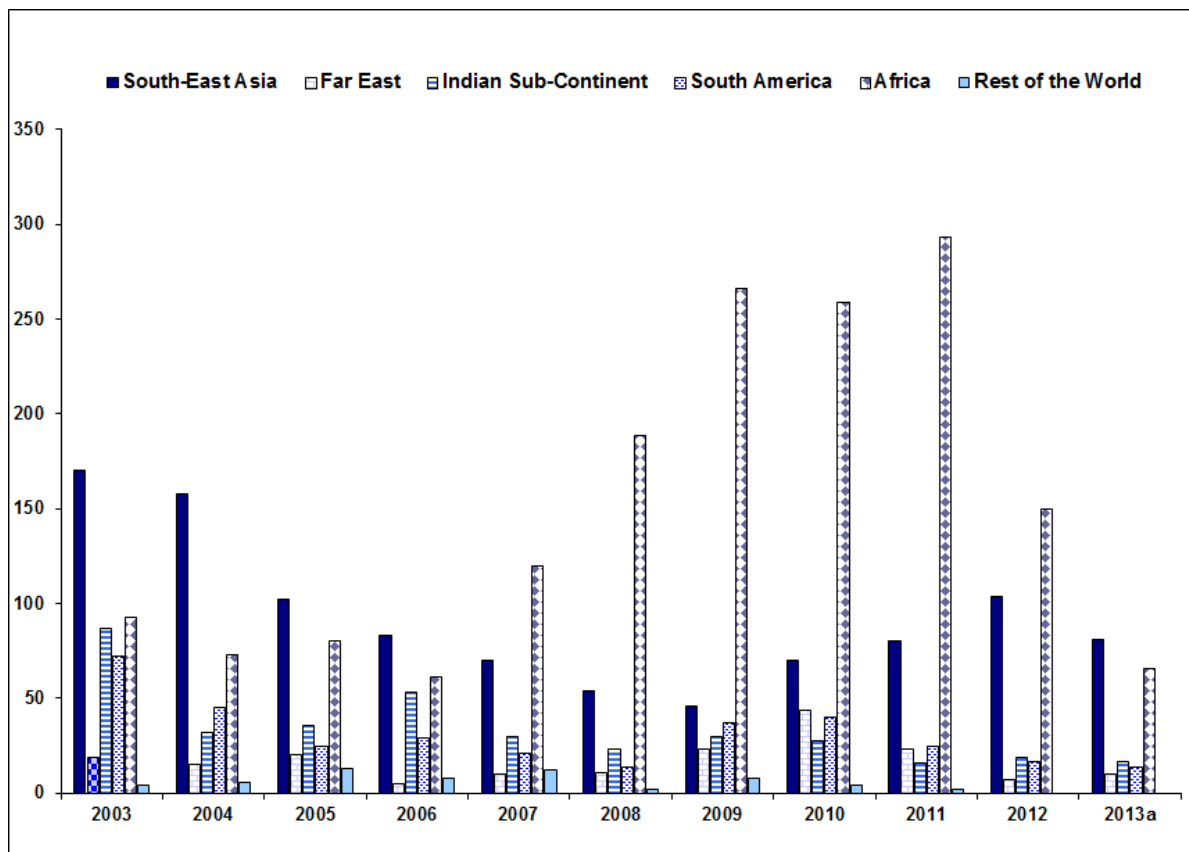
Figure 1 (c). Maritime piracy activity, 2013



Source: IMB PRC Live Map.

Note: Yellow = Attempted Attack; Orange = Boarded; Blue = Fired upon; Pink =Hijacked; Purple = Suspicious Vessel.

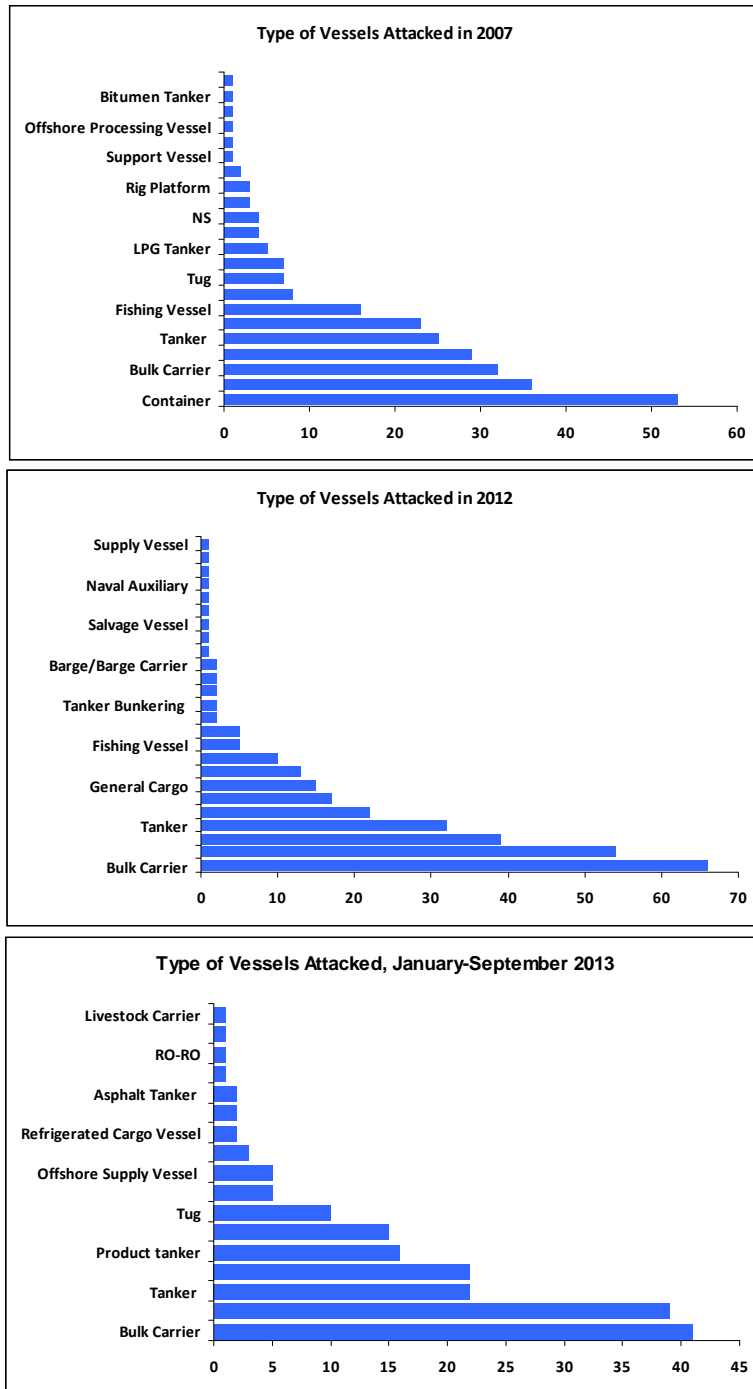
Figure 2. Actual and attempted attacks by region, 2003–2013* (Number of incidents)



Source: UNCTAD secretariat based on ICC International Maritime Bureau. *Piracy and Armed Robbery Against Ships, Various Issues*. * From 1 January to 30 September 2013.

10. Global piracy affects all ships, irrespective of their type and flag (figure 3). However, tankers, containerships and bulk carriers remain among the main targets owing to their high economic value and given their strategic role in global merchandise and energy trade. An added factor in the case of tankers and bulkers is the relatively lower speed at which they operate and their relative “low height” which facilitates boarding by pirates.

Figure 3. Type of vessels attacked in 2007, 2012 and 2013*

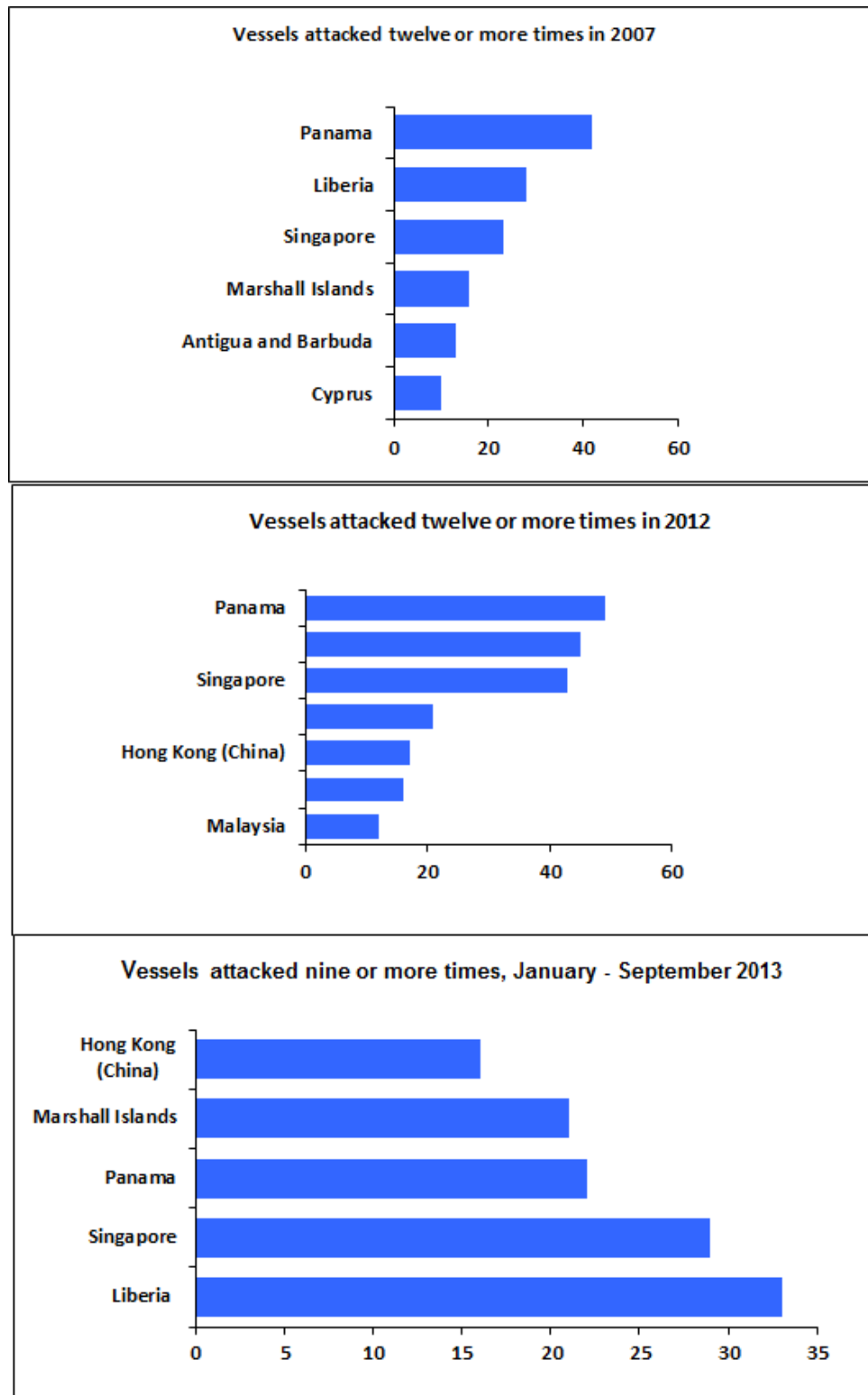


Source: UNCTAD secretariat based on ICC International Maritime Bureau. *Piracy and Armed Robbery against Ships, Various Issues*. * From 1 January to 30 September 2013.

11. Piracy in East African waters is generally concentrated off the coast of Somalia/in the Gulf of Aden/the Mozambique Channel/the Cape of Good Hope lane. However, unlike in other regions where attacks tend to occur in coastal waters or nearby trade lanes, pirates off the coast of Somalia have, since 2000, adopted a different approach by widening their geographical presence and moving farther away from the coast and territorial waters into the Indian Ocean, the Red Sea, the Gulf of Oman, the Mozambique Channel, Maldives, and the Indian territorial waters. Consequently, with the incidence and the impacts of maritime piracy expanding geographically, monitoring and policing the region has become more challenging. The list of countries directly affected by piracy has become more extensive, and includes the Comoros, Djibouti, India, the Islamic Republic of Iran, Kenya, Madagascar, Mozambique, Oman, Qatar, Seychelles, the United Republic of Tanzania, the United Arab Emirates and Yemen.

12. As already noted, a distinctive feature of piracy off the coast of Somalia has been its 'hijack-for-ransom' business model, which depends for its success on a supporting infrastructure on land and attaches high economic value to hostages. Once ships are captured, they – together with the crew and passengers - are held hostage, for an extended time to compel large payments of ransom. With shipping being a globalized business, typically involving a variety of countries and nationalities (e.g. flag, control, ownership, manning, building, operation and insurance), the implications of piracy attacks are far from being local or specific to any one country or stakeholder. Figure 4 illustrates some of the flag States that have been directly affected by piracy worldwide in 2007, 2012 and during the first three quarters of 2013.

Figure 4. Vessels attacked by flag State



Source: UNCTAD secretariat based on ICC International Maritime Bureau. *Piracy and Armed Robbery against Ships. Various Issues.*

13. Since 2008, the United Nations Security Council has adopted a number of resolutions to support counter-piracy action in East African waters. The European Union, the African Union, the League of Arab States, and North Atlantic Treaty Organization (NATO) are all active in fighting piracy off the coast of Somalia.²¹ Over 40 countries are involved in counter-piracy operations in East Africa, either in a national capacity or through joint forces (for example, the European Union Naval Force Somalia – Operation Atalanta; the Standing Naval Group of the North Atlantic Treaty Organization – NATO Operation Ocean Shield; and Combined Task Force 151).²² Reflecting actions by international navies, as well as preventive measures by merchant ships, including the deployment of privately contracted armed security personnel in the region, the share of East Africa in the total number of piracy incidents occurring in African waters, has dropped from nearly 50 per cent in 2008 to about one third in 2010 and 17.3 per cent in 2012. Yet, despite the apparent drop in incidents since 2010, maritime piracy remains a major concern, including for the shipping industry which has welcomed the “clampdown” on piracy in East African waters, but has also cautioned against any potential complacency.²³ The fear is that pirates off the coast of Somalia may not have totally given up on maritime piracy as a source of revenue but instead, may be changing their strategy by increasingly targeting ships at anchorage.²⁴

14. Of increasing concern is the recent escalation of piracy attacks in the Gulf of Guinea which have also been expanding in terms of geographical scope, range of targeted ships and level of violence (figure 5). A total of 55 piracy incidents were reported in seven countries in the Gulf of Guinea region in 2012, up from 44 incidents in 2011.²⁵ The share of the Gulf of Guinea in overall reported incidents in Africa was 17.3 per cent in 2008, 13.5 per cent in 2010, 37 per cent in 2012 and 66.7 per cent between January and September 2013.²⁶ Increasingly, the severity of incidents appears also to be changing, from low level armed robberies to hijackings, cargo thefts and kidnappings.²⁷ Accordingly, the London-based group insurers, namely the Lloyd’s Market Association (LMA) designated the region as a war risk zone for shipping,²⁸ with Benin, Nigeria and Togo waters being identified as ‘high risk’ areas that is to say in the same risk category as Somalia.²⁹ As Angola, Cameroon, Ghana, Guinea and Nigeria are significant oil producers, piracy in the region raises particular concerns for trade-led

²¹ World Bank (2013). The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

²² One Earth Future Foundation (OEF) (2012). The Economic Cost of Maritime Piracy 2011. Working Paper. Ocean beyond Piracy Project. See also World Bank (2013). The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

²³ Jing Yang (2013). Somali piracy has not gone away. *Lloyds List*. 8 April.

²⁴ *Ibid.*

²⁵ ICC International Maritime Bureau. Piracy and Armed Robbery against Ships. Various Issues.

²⁶ *Ibid.*

²⁷ ICC International Maritime Bureau, IMB Piracy Report highlights violence in West Africa, 15 July 2013, <http://www.icc-ccs.org/news/865-imb-piracy-report-highlights-violence-in-west-africa>.

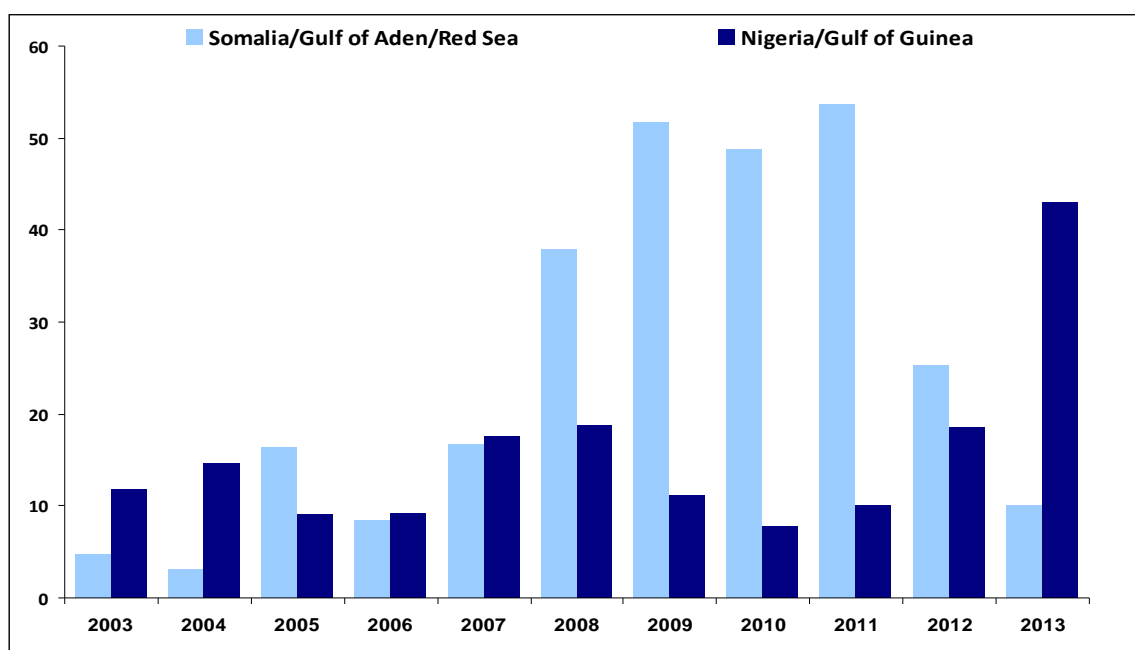
²⁸ One Earth Future Foundation (OEF) (2012). The Economic Cost of Somali Piracy 2011. Working Paper. Ocean Beyond Piracy Project.

²⁹ Mark McNamee (2012). Piracy on the Rise in the Gulf of Guinea as Niger Delta Militants Move Offshore. The Jamestown Foundation. *Terrorism Monitor* Volume: 10 Issue: 15. 27 July.

development and regional security, as well as for global energy trade and supply.³⁰ Moreover, the potential for ship-source oil pollution incidents in the region and the related economic and environmental consequences, which may be devastating, is emerging as an additional major concern.³¹

15. Piracy in the Gulf of Guinea differs from piracy in East African waters in that relevant incidents tend to be linked to oil production and usually occur in territorial waters, while ships are anchored or berthed. The aim appears not to hijack ships and hold hostages to obtain ransom payments, but rather to capture ships, in particular oil tankers, and resell their cargo. Tankers are extremely vulnerable to pirate attacks in the Gulf of Guinea, given their high value cargo and their being stationary during ship-to-ship oil transfers. Thus, tankers and offshore energy exploration infrastructure have been the main targets of piracy and other criminal activities. Pirate networks in the region appear to be generally well informed about the operations of the oil industry and to have access to important information, including the names of ships, intended voyage course, value of the cargo, whether or not armed guards are aboard, and the extent of the insurance cover.³²

Figure 5. Piracy in East and West African waters, 2003–2013*



Source: UNCTAD secretariat based on *ICC IMB Annual Report, various issues*. * From 1 January to 30 September 2013.

³⁰ Stephanie Hanson (2011). As piracy in West Africa increases, risks on land grow. *The National*. 17 November. <http://www.thenational.ae/thenationalconversation/comment/as-piracy-in-west-africa-increases-risks-on-land-grow>.

³¹ UNCTAD, *Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers*, Studies in Transport Law and Policy – 2012 No. 1, UNCTAD/DTL/TLB/2011/4.

³² Tom Thompson, *Piracy May Be Getting Worse, Not Better*, *The Maritime Executive*, 31 May 2013.

16. With many piracy attacks occurring in territorial waters, the use of international military forces in the Gulf of Guinea remains difficult given, among other things, restrictions applied at the national level.³³ Drawing from the experience in East Africa and with many Private Maritime Security Companies (PMSCs) emerging on the international scene and countries starting to regulate the PMSC industry through licencing,³⁴ it appears likely that prevailing restrictions will in due course be lessened or removed to authorize the employment of private companies' armed guards.³⁵ Meanwhile, countries in the region are seeking to establish navies and increase coastal policing resources³⁶ as well as cooperate further under the European Union Critical Maritime Routes Programme.³⁷

III. Costs and trade-related implications of maritime piracy

17. In today's globalized and interdependent world, the implications of maritime piracy are far reaching and extend to all countries, whether coastal or landlocked. While short term impacts often involve an increase in costs, longer term implications can be of a different scale. As oceans and maritime activities support livelihoods and promote growth and development, security threats affecting the maritime domain have the potential to significantly compromise the economic prospects and well-being of societies and to undermine peace, political security and stability.³⁸ Critical benefits derived from the maritime domain include subsistence and nutrition (e.g. fishing), energy security and supply, economic opportunities (e.g. trade, maritime transport, tourism, submarine installations) and associated revenues (including foreign currency earnings from port activities and from oil and gas exploration and trade). The following sections provide an overview of some of the costs associated with maritime piracy and highlight some of the broader trade-related implications that maritime piracy may have.

³³ Ibid.

³⁴ Dimitrios Angelopoulos, German legislation regarding PMSCs: The accreditation process is not yet clear, Piracy Daily, 4 June 2013, <http://www.piracydaily.com/german-legislation-regarding-pmscs-the-accreditation-process-is-not-yet-clear>.

³⁵ Liz McMahon (2013). Gulf of Guinea waters open to western armed guards. Lloyd's List. March 28.

³⁶ International Crisis Group (2012). The Gulf of Guinea: The New Danger Zone. Africa Report N°195. 12 December. <http://www.crisisgroup.org/en/publication-type/media-releases/2012/africa/the-gulf-of-guinea-the-new-danger-zone.aspx>.

³⁷ A European Union-funded programme to ensure coast guard training and knowledge sharing. Girija Shettar, Gulf of Guinea countries join forces to cut piracy lifelines, Fairplay, 24 January 2013.

³⁸ Thierry Vircoulon (2012). Pirates of the Guinean. 20 December. http://www.foreignpolicy.com/articles/2012/12/20/pirates_of_the_guinean.

1. Assessing overall economic costs

18. The global cost of piracy, including the cost of piracy off eastern Africa, remains uncertain, with existing assessments providing divergent estimates and conclusions. Existing studies tend to primarily focus on calculating first-order costs such as the cost of ransoms, security deterrence equipment and naval forces deployment. The secondary costs of piracy, such as the effects on foreign investment in the affected and neighbouring regions, or on commodity prices appear so far to have benefited from much less attention. Existing studies differ in terms of their methodology and approach and, therefore, are neither directly comparable, nor provide a definite authoritative assessment of piracy-related costs. However studies carried out so far provide an indication of the order of magnitude of the economic costs associated with piracy.

19. The RAND Institute and the IMB for example, have estimated piracy costs to range between US\$1 and US\$16 billion per year.³⁹ A large scale study in the field was carried out by the One Earth Future (OEF) Foundation as part of its Oceans Beyond Piracy (OBP) project.⁴⁰ The OEF carried out three assessment reports, the results of which were published in 2011, 2012 and 2013, respectively⁴¹. The OEF estimates the total cost of piracy off the coast of Somalia at US\$7–US\$12 billion in 2010; US\$6.6–US\$6.9 billion in 2011⁴² and US\$5.7–US\$6.1 billion in 2012 (see table 1)⁴³. While over 80 per cent of these costs were estimated to be borne by the shipping industry, 20 per cent were estimated to be borne by governments.⁴⁴ Averaging out all related expenses, the cost per incident was valued at US\$82.7 million in 2012 – a total of 189 per cent increase over the US\$28.6 million estimated for 2011.⁴⁵ This reflects the 70 per cent drop in the incidence of piracy between 2011 and 2012 and a much smaller drop in the cost (8.2 per cent) of combating piracy during that same time period.

³⁹ Chalk, Peter (2008). *The Maritime Dimension of International Security: Terrorism, Piracy and Challenges for the United States*. The RAND Institute. See also *The Maritime Security Market 2010-2020: Piracy, Shipping and Seaports*. April 2010.

⁴⁰ For some criticism of the OEF approach, see Archer Venetia, and Pelton Rober, Young. Can we ever asses the true cost of piracy? Somalia Report, 21 February, 2012, <http://www.somaliareport.com/index.php>. The authors point out the importance of distinguishing between government costs (paid by taxpayers), insurance costs (passed on to consumers) and opportunity costs (e.g. impact on the tourism of regional countries) and argue that separating “true costs” from “profits” (e.g. gains that may arise from taxation of piracy insurance and anti-piracy business) was fundamental.

⁴¹ One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2012). *The Economic Cost of Somali Piracy 2011*. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2013). *The Economic Cost of Somali Piracy 2012*. Working Paper. Ocean Beyond Piracy Project.

⁴² The lower cost estimate does not necessarily suggest that the impact of piracy declined in 2011. The different estimations are related in part to improved information availability, as well as changes in the methodology used to calculate the overall cost.

⁴³ However, it should be noted that the reported figures are not directly comparable. The report for 2010, in addition to first order costs also provided an estimate of the cost to regional economies (US\$1.25 billion). The reports for 2011 and 2012 considered some additional first order cost items (labour, increased speed) but did not consider the cost to regional economies.

⁴⁴ One Earth Future Foundation (OEF) (2012). *The Economic Cost of Somali Piracy 2011*. Working Paper. Ocean Beyond Piracy Project.

⁴⁵ One Earth Future Foundation (OEF) (2013). *The Economic Cost of Somali Piracy 2012*. Working Paper. Ocean Beyond Piracy Project.

Table 1. The economic costs of maritime (Somalia) piracy

Cost Factor	2010	2011	2012
Ransom	\$176 million	\$160 million	\$31.75 million
Insurance	\$460 million - \$3.2 billion	\$635 million	\$550.7 million
Re-routing Ships	\$2.4 - \$3 billion	\$486 million - \$681 million	\$290.5 million
Security Equipment and Guard	\$363 million - \$2.5 billion	\$1.064 - \$1.16 billion	\$1.65 - \$2.06
Naval Forces and Military Operations	\$2 billion	\$1.27 billion	\$1.09 billion
Prosecutions and Imprisonment	\$31 million	\$16.4 million	\$14.89 million
Counter Piracy Organizations	\$19.5 million	\$21.30	\$24.08 million
Cost to Regional Economies	\$1.25 billion	N/A	N/A
Labour	N/A	\$195 million	\$471.6 million
Increased Speed	N/A	\$2.71 billion	\$1.53 billion
Total Estimated Cost	\$7 - \$12 billion	\$6.6 - \$6.9 billion	\$5.7 - \$6.1 billion

Source: One Earth Future (OEF), Oceans Beyond Piracy Project (OBP): *The Economic Cost of Piracy 2010; The Economic Cost of Somali Piracy 2011; The Economic Cost of Somali Piracy 2012.*

Note: for 2010, while the focus was on Somali Piracy, the OBP analysis also set out to analyse the cost of piracy to the Horn of Africa, Nigeria, the Gulf of Guinea and the Malacca Straits.

20. More recently, in 2013, the World Bank has estimated the global economic cost of piracy off the coast of Somalia at US\$18 billion, with a margin of error of roughly US\$6 billion.⁴⁶ Acting as a hidden tax on world trade, this amount reflects in particular increased trade costs; it does not account for losses to tourism and fisheries, which are addressed separately. The report notes that in terms of order of magnitude the estimate is in line with other assessments which, however, adopt a different methodology, notably the 2012 OEF/OBP assessment⁴⁷. According to a preliminary assessment by the OEF, published in 2013, the direct economic impacts on West Africa of piracy in the Gulf of Guinea region are estimated to range between US\$740 million and US\$950 million in 2012.⁴⁸

21. Bearing in mind the limitations underlying existing estimates and drawing to a large extent from the OEF assessment reports which focus in particular on piracy off the coast of Somalia, an overview of the various types of cost most directly associated with maritime piracy is set in the following section. This is followed by an overview of some of the second order costs and trade-related implications of maritime piracy.

⁴⁶ The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

⁴⁷ Ibid. Differences in methodology between existing assessments by others are discussed at pp.15–16 and pp.25–27 of the report.

⁴⁸ One Earth Future Foundation (OEF) (2013). *The Human Cost of Maritime Piracy 2012*. Working Paper. Ocean Beyond Piracy Project. The relevant cost headings include insurance (49 per cent), private armed guards (19 per cent), military expenditure (15 per cent), labour (8 per cent), stolen property (8 per cent) and capacity-building (less than 1 per cent).

2. First order costs

22. In addition to the considerable human cost of piracy,⁴⁹ there are a range of first-order costs arising from maritime piracy.⁵⁰

2.1 Ransoms

23. One of the largest increases in the piracy-related costs observed over recent years relates to the size of ransom payments. According to one recent study in the field, while some ships have been released without a ransom, including as a result of a military intervention or negotiations leading to other compensations paid to pirates, overall, most of ships hijacked between 2008 and 2012 have been released against the payment of a ransom.⁵¹ Between 2005 and 2012 the value of ransoms paid for ships and/or seafarers kidnapped by Somali-based pirates is estimated at US\$339 million and US\$413 million.⁵² In 2005, ransoms paid averaged around US\$150,000 per incident,⁵³ before escalating to US\$3.4 million, US\$4 million, US\$5 million and US\$3.96 million, in 2009, 2010, 2011 and 2012, respectively.⁵⁴ While in 2010 the total amount of ransoms paid was US\$176 million, this amount fell to US\$160 million in 2011 and US\$31.75 million in 2012.⁵⁵ Examples include the *Samho Dream* tanker which was released in 2010 against a ransom payment of US\$9.5 million and the *Irene SL* which attracted US\$13.5 million in ransom payment in 2011.⁵⁶ Figure 6 illustrates the evolution of ransoms collected by pirates per year, including both low and high estimates.

⁴⁹ On this, see in particular One Earth Future Foundation (OEF) (2013). *The Human Cost of Maritime Piracy 2012*. Working Paper. Ocean Beyond Piracy Project.. See also Nincic, Donna (2009). *Maritime piracy in Africa: The humanitarian dimension*. *African Security Review* 18.3 .

⁵⁰ Aly Elmaghawry (2009). *Overview of Somali piracy impacts on maritime industry and international response*. Maritime safety programs. AASTMT. Alexandria. October. Direct impacts of maritime piracy noted include the effects on seafarers, shipping, rerouting of ships, insurance as well as impacts resulting from counter-piracy measures.

⁵¹ World Bank; United Nations Office on Drugs and Crime; Interpol (2013). *Pirate Trails: Tracking the Illicit Financial Flows from Pirate Activities off the Horn of Africa*. Washington, DC: World Bank.

⁵² *Ibid.*

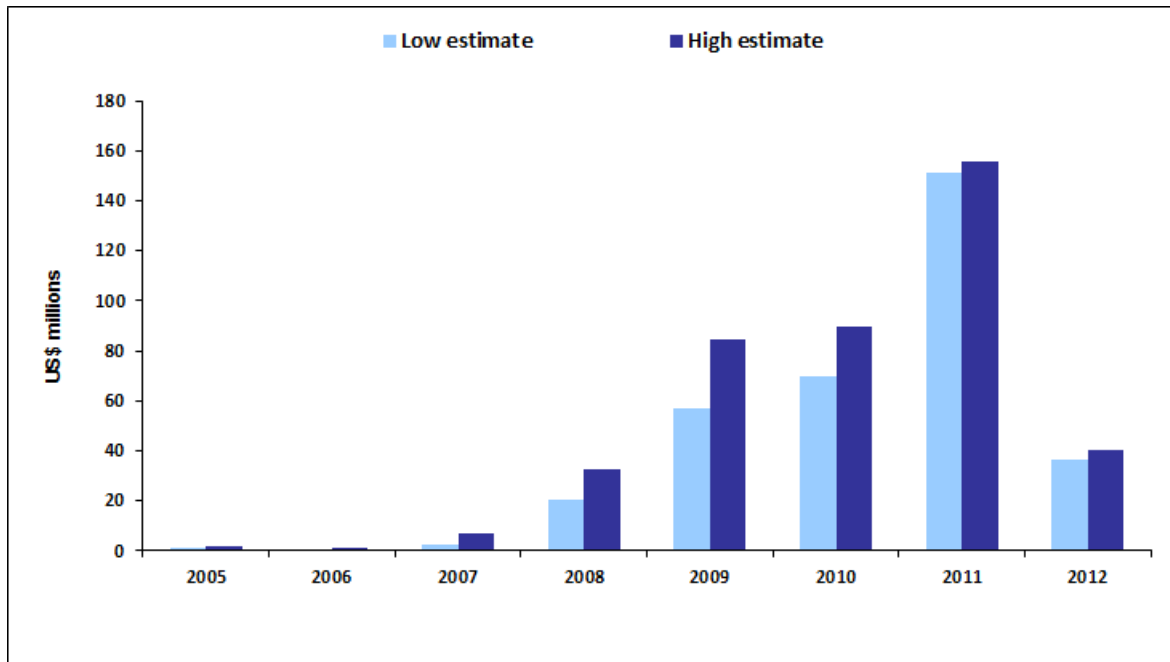
⁵³ Bhakta David Nollmeyer. *The Effect of Maritime Piracy and Somalia on International Trade*.

⁵⁴ One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project. See also address by L N Sisulu, MP, Minister of Defence and Military Veterans at the SADC Extraordinary Meeting on Regional Anti-Piracy Strategy 25 Jul 2011.

⁵⁵ Based on figures published in One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2012). *The Economic Cost of Somali Piracy 2011*. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2013). *The Economic Cost of Somali Piracy 2012*. Working Paper. Ocean Beyond Piracy Project.

⁵⁶ One Earth Future Foundation (OEF) (2012). *The Economic Cost of Somali Piracy 2011*. Working Paper. Ocean Beyond Piracy Project.

Figure 6. Evolution of ransoms: Annual amounts collected by Somali-based pirates in ransom for vessels and/or crews kidnapped between 2005 and 2012



Source: UNCTAD secretariat based on *World Bank*; United Nations Office on Drugs and Crime; Interpol (2013). *Pirate Trails: Tracking the Illicit Financial Flows from Pirate Activities off the Horn of Africa*. Washington, D.C., World Bank.

24. The actual value of ransoms is much higher however, as in addition to the ransomed amounts, there remain other associated costs that are not accounted for, including the cost of ransom value negotiations and means used to deliver the ransom money. As the value of ransoms paid has increased, so have the duration of negotiations and of captivity. Up from 55 days in 2009, seafarers are now being held hostage for an average duration of three to four months.⁵⁷

25. While ransom payments may be the most effective means of securing the release of hostages and ships, ransom payments provide both a commercial incentive to pirates and the main source of funds to support further piracy activity. They strengthen the criminal elements that benefit from them, fuel corruption, and undermine the rule of law (see Box 1). To develop a greater understanding of the issues surrounding piracy ransoms, and to put forward policy recommendations to the international community, with the ultimate ambition of stopping ransom payments, an International Piracy Ransoms Task Force was set up following the London Somalia Conference, held in February 2012.⁵⁸

⁵⁷ Ibid.

⁵⁸ Fourteen countries have come together since then to form the International Piracy Ransoms Task Force: Australia, Denmark, France, Germany, Italy, Liberia, Malaysia, Norway, Panama, Spain, Ukraine, the United Arab Emirates, the United Kingdom and the United States. The task force published its final report in December 2012, identifying a range of options for reducing and avoiding ransom payments and some of these are being explored

Box 1. Tracking the illicit financial flows from pirate activities off the Horn of Africa

It is estimated that **US\$339 million to US\$413 million** was claimed in ransoms for pirate acts off the coast of Somalia and the Horn of Africa between April 2005 and December 2012. The three main categories of beneficiaries of the proceeds of piracy are:

- Low Level Pirates; who typically receive a pre negotiated standard fee of between **US\$ 30,000 to US\$ 75,000** per hijacked ship, which amounts to about **0.01 per cent to 0.025 per cent** of an average ransom payment.
- Pirate Financiers; those who invest in the piracy business model and are the main beneficiaries of the proceeds of piracy. They collect typically between **30 and 50 per cent** of the total ransom payment, depending on the piracy business model.
- Local Community; such as khat suppliers, cooks etc. who are paid for their provision of goods and services to pirates.

The main reported locations of pirate financiers' assets, suggest that contrary to conventional wisdom, many investments of proceeds of piracy are actually made within Somalia. As expected, the proceeds are typically moved by cross-border cash smuggling, trade based money laundering, bank wire transfer and the abuse of Money Value Transfer Services in Somalia.

An analysis of the investments made by a sample of *59 Pirate Financiers* reveal the range of sectors – legitimate business activities and criminal activities that pirate financiers invest into:

- Some of these proceeds from piracy are recycled into **financing criminal activities, including further piracy activities**.
- Deeper dive analysis into the khat trade, suggests that proceeds from piracy find their way into the **khat trade particularly in Kenya**, where the khat trade is not monitored and therefore the most vulnerable to this risk.
- However, despite the perception that the real estate boom in parts of the region is fuelled by proceeds from piracy, the study finds that this is not the case. There are other factors that influence the real estate market, including bank credit to the real estate sector. Consequently, **the ransom payments cannot influence the property prices**, as is suggested by many in the public and private sectors. In general, the data and evidence on the ground was limited, therefore this common perception cannot be substantiated.

The study suggests the following recommendations among others:

- There is a need for a strong commitment by countries to bolster regional cooperation and to effectively make use of tools to follow “dirty money”.
- There is a need to step up action against cross border cash smuggling, by strengthening capacity of countries in the Horn of Africa to adequately detect, interdict, seize, and ultimately confiscate illegal cross-border cash smuggling. This is paramount to any strategy aimed at tackling the issue of financial flows linked to piracy and other illicit proceeds.
- There is a need to implement a risk- based oversight of Money Value Transfer Service (MVTs) Providers, to avoid a further shift to cash and pushing MVTs providers underground.

There is a need to step up monitoring of the khat trade and to develop a mechanism to monitor financial flows into the khat trade.

Source: UNCTAD secretariat based on the World Bank; United Nations Office on Drugs and Crime; Interpol (2013). Pirate Trails: Tracking the Illicit Financial Flows from Pirate Activities off the Horn of Africa. Fact Sheet. Washington, D.C., World Bank.

through a series of international initiatives under the aegis of the Contact Group on Piracy off the coast of Somalia. For further information, see www.thecgpcs.org.

2.2 Insurance costs

26. Piracy off the coast of Somalia has altered the insurance market landscape. While piracy is not a new insured risk, the increase in pirate attacks has affected premiums and coverage. Ships that continue to pass through the Gulf of Aden and the Suez Canal require a war risk insurance coverage. Since the Gulf of Aden was classified as a war risk area by the Lloyd's Market Association (LMA) in May 2008, the cost of war risk premiums has increased significantly, from US\$500 per ship, per voyage to up to US\$150,000 per ship, per voyage, in 2010.⁵⁹ While Kidnap and Ransom insurance traditionally covers the crew against ransom demands, but not the vessel or cargo, some marine insurance policies have recently been expanded to include both crew and property. Munich Re estimates that Kidnap and Ransom premiums have increased tenfold between 2008 and 2009.⁶⁰

27. Cargo insurance which covers the cargo carried on board ships has also recorded an increase in premiums with the onset of maritime piracy. The additional premiums paid on cargo transiting piracy regions are estimated to have increased by US\$25 to US\$100 per container in the past few years.⁶¹ The cost for hull insurance which covers physical damage to the ship has also increased and is estimated to have doubled in 2010.⁶² However, the increased presence of private armed guards aboard merchant ships appears to have lowered the overall piracy-related insurance cost.⁶³ In 2012, these fell by 13.3 per cent, down from US\$634.9 million in 2011 to US\$550.7 million.⁶⁴

2.3 Shipping networks and rerouting of fleet

28. For many years the Suez Canal has been a favoured shipping route for east-west trade flows. However, with the rise in maritime piracy activity in the region, the threat to shipping operations along this route has also increased. While the viability of alternate shipping routes, including the Cape of Good Hope remains uncertain, given the potentially significant associated operational costs, some rerouting has however already taken place during the surge of maritime piracy in East Africa (e.g. A.P. Moller-Maersk tankers).⁶⁵

29. One study predicts that in the absence of counter-piracy measures, the proportion of shipping vessels passing through the Gulf of Aden could decline by as much as 30 per cent.⁶⁶ It is estimated that the shipping industry pays around US\$2.3 to US\$3 billion per year to

⁵⁹ One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ The cost of hull insurance is not included in the section on piracy-related insurance as hull insurance is considered to be a normal cost of the shipping industry.

⁶⁴ One Earth Future Foundation (OEF) (2013). *The Economic Cost of Somali Piracy 2012*. Working Paper. Ocean Beyond Piracy Project.

⁶⁵ One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean beyond Piracy Project.

⁶⁶ Fu, Xiaowen, Adolf Ng and Yui-Yip Lau (2010). The impact of maritime piracy on global economic development: the case of Somalia. *Maritime Policy and Management*. Vol. 37 No. 7, pp. 1–21.

reroute ships to avoid piracy each year.⁶⁷ Diverting fleet and trade from the Suez Canal to the Cape of Good Hope on a trip from the Middle East to Europe doubles the typical transport time.⁶⁸ Rerouting a trip in the opposite direction (Europe to the Far East) will in the case of a liner ship, for example, add some six additional days to the voyage.⁶⁹ Longer transit times are likely to increase shipping rates and lower trade competitiveness, especially when dealing with perishables and time-sensitive goods. Taking into account all cost factors, it was estimated that rerouting 33 per cent of cargo via the Cape of Good Hope would cost shipowners an additional US\$7.5 billion, annually.⁷⁰

30. Diverting traffic to alternate routes can have sizeable implications not only for trade⁷¹ but also for the Egyptian economy (loss of foreign currency earnings), the Suez Canal Authorities (loss of operating earnings and employment) and the Mediterranean ports and terminals (e.g. reduced vessel calls and trans-shipments). The Suez Canal fees range between US\$200,000 and US\$600,000 per vessel, depending on their size.⁷² Assuming that around 10 per cent of ships might opt to reroute to avoid the Suez Canal, Egypt could be losing up to US\$642 million per year as an indirect result of piracy.⁷³

31. It has also been observed that rerouting via the Cape is not the only option adopted by shipping. As pirates off the coast of Somalia extended their presence across the Indian Oceans, ships are reported to be sailing closer the Arabian Peninsula and Indian coast. In 2012, shipping companies are estimated to have spent US\$290.5 million rerouting along this route as opposed to taking a direct route through the high risk area.⁷⁴

2.4 *The cost of deterrent security equipment and armed guards*

32. To protect ships and crew from piracy attacks, ships are increasingly equipped with security equipment and personnel and guards. The total cost of deterrence equipment and guards to the shipping industry is estimated to range between US\$363 million and US\$2.5 billion in 2010, US\$1.06 and US\$1.16 billion in 2011 and US\$1.65 and US\$2.06 billion in 2012.⁷⁵ Greater acceptance of armed guards by both flag States and ship owners and

⁶⁷ Kennedy K. Mbekeani and Mthuli Ncube (2011). Economic Impact of Maritime Piracy. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

⁶⁸ Ibid.

⁶⁹ One Earth Future Foundation (OEF) (2012). The Economic Cost of Somali Piracy 2011. Working Paper. Ocean Beyond Piracy Project.

⁷⁰ PowerPoint presentation by G. De Monie, Senior Director, Policy Research Corporation, European Commission. Seminar: Piracy and armed robbery against shipping, 21 January 2009. See also chapter 1 of the UNCTAD Review of Maritime Transport 2009.

⁷¹ Aly Elmaghawry (2009). Overview of Somali piracy impacts on maritime industry and international response. Maritime safety programs. AASTMT. Alexandria. October.

⁷² One Earth Future Foundation (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project.

⁷³ Ibid.

⁷⁴ One Earth Future Foundation (OEF) (2013). The Economic Cost of Somali Piracy 2012. Working Paper. Ocean Beyond Piracy Project.

⁷⁵ One Earth Future Foundation (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2012). The Economic Cost of Somali Piracy

operators have contributed to driving up the costs. The number of armed guards used to protect merchant ships transiting the piracy affected areas has increased together with the proportion of ships employing armed guards (30 per cent in 2011 and at least 50 per cent in 2012).

2.5 *Additional labour costs*

33. Maritime piracy results in direct costs related to labour in the form of hazard pay and payment for seafarers while held hostage on the captured ship. Hazard pay offers seamen the right to obtain double pay while transiting the high piracy risk areas. In 2012, these costs totalled US\$471.6 million, a significant increase as compared to the US\$195.1 million estimated in 2011.⁷⁶

2.6 *Costs associated with increased speed*

34. In 2012, shipping companies are estimated to have spent an extra US\$1.53 billion on fuel costs due to steaming at faster than optimal speeds in order to prevent pirate attacks.⁷⁷ The cost of this practice dropped by 43.3 per cent as compared with 2011 as a lesser proportion of ships is sailing through the high risk area at a faster speed and as the average speed of those ships steaming at faster than optimal speeds decreases.⁷⁸

2.7 *Loss of earnings*

35. Additional concerns from the perspective of the shipping sector include the potential violation of the principles of free access and safe passage and potential earning losses due to the long duration of ships' captivity (i.e. out of service). These costs have been estimated at around US\$3 million for a cargo ship held for two months at a charter hire rate of US\$50,000 per day⁷⁹ and at US\$3.15 million for a bulk carrier held hostage for six month at a charter hire rate of US\$17,500 per day.⁸⁰

2.8 *The cost of naval forces*

36. A number of countries currently contribute naval forces to fight maritime piracy in East Africa, including the three major anti-piracy alliances.⁸¹ In 2012, the cost of military operations including vessel deployments, vessel protection detachments, the administrative

2011. Working Paper. Ocean Beyond Piracy Project; One Earth Future Foundation (OEF) (2013). The Economic Cost of Somali Piracy 2012. Working Paper. Ocean Beyond Piracy Project.

⁷⁶ Ibid. The increase reflects a revised estimate that 70 per cent of seafarers transiting the high risk area as opposed to the 30 per cent assumed in 2011.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ One Earth Future Foundation (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project.

⁸⁰ Ibid.

⁸¹ For further details, see *Maritime Piracy, Part II: An Overview of the International Legal Framework and of Multilateral Cooperation to Combat Piracy*, UNCTAD/DTL/TLB/2013/3.

budgets of naval operations, amounted to US\$1.09 billion.⁸² This represents a 14 per cent decrease from the US\$1.27 billion reported in 2011.⁸³

2.9 The cost of piracy prosecutions

37. As countries where pirates originate and operate may have limited capacity to conduct prosecutions, the international community has provided some financial aid to allow some countries such as Kenya and Seychelles to build their capacity. The cost of piracy prosecutions was estimated at around US\$31 million in 2010⁸⁴ while, in 2012, the cost of prosecution and imprisonment was estimated at US\$14.89 million. A breakdown of these costs indicates that the cost of prosecutions decreased by 24 per cent in 2012, while that of imprisonment increased by 26.7 per cent. The reduction in prosecution costs appears to be almost entirely due to a decrease in the number of suspects prosecuted, while an increase in the cost of imprisonment reflects the long term imprisonment of pirates. In early 2013, over 1,000 suspects were reported to be awaiting prosecution in around 20 countries.⁸⁵

2.10 The cost of piracy-deterrence organizations

38. A number of national and multi-national organizations have emerged with the aim of fighting maritime piracy. The costs through the annual budgets of these organizations ranging from United Nations agencies to independent NGOs was estimated at US\$24.5 million in 2010 and at US\$24.08 in 2012.⁸⁶

3. Second order costs and some trade-related implications

39. As already noted, cost calculations have generally focused on the first order costs borne by the shipping industry and governments. Assessing with sufficient detail the broader impacts of maritime piracy remains a challenge, among others, due to the difficulty in accurately breaking down the broader effects of piracy on economic sectors such as foreign direct investment, tourism or commodity prices. Furthermore, it is difficult to distinguish the specific impacts of piracy from the impacts of other amplifying factors such as the dampening effect of the latest global economic downturn. Another limitation relates to the measuring of “unintended” effects such as the commercial opportunities arising for security equipment manufacturers and service provider companies.

40. While so far these second order impacts and costs have not been sufficiently assessed, some attempts have nevertheless been made to consider for instance relevant implications

⁸² One Earth Future Foundation (OEF) (2013). The Economic Cost of Somali Piracy 2012. Working Paper. Ocean Beyond Piracy Project.

⁸³ Ibid.

⁸⁴ One Earth Future Foundation (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project.

⁸⁵ BIMCO (2012). Reflections 2013. An Ocean of Expertise.

⁸⁶ One Earth Future Foundation (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project ; One Earth Future Foundation (OEF) (2013). The Economic Cost of Somali Piracy 2012. Working Paper. Ocean Beyond Piracy Project.

for the trade of neighbouring regions as well as for some key strategic economic sectors such as fisheries and tourism. Moreover, as already noted, a recent study by the World Bank assessing the economic impacts of Somali piracy on global trade, has estimated the relevant cost to the global economy at US\$18 billion (with a margin of error of roughly US\$6 billion).⁸⁷ Bearing in mind the limitations inherent in existing studies, the following section describes briefly some of the second order costs and broader trade-related implications of maritime piracy.

3.1 *Ports in regions affected by piracy*

41. While shipping companies are most immediately affected, maritime piracy can also heavily undermine the reputation and business of ports in piracy-prone regions and may result in a detrimental multiplier effect that raises costs. Ports reputedly vulnerable and located in high risk areas will likely suffer from profit margin erosion resulting from a loss in traffic, overcapacity and high operating costs. Port fees and customs duties are important revenue sources for African coastal countries such as in Benin, where they generate half of government revenues.⁸⁸

42. Benin, has recently upgraded its port in Cotonou which increased the volume of goods transiting via the port, reduced custom clearance times and costs to shippers.⁸⁹ Yet, hikes in insurance premiums after attacks off Benin in 2011 have led to a 70 per cent drop in traffic to Cotonou port.⁹⁰ Cameroon and Nigeria could face similar problems in view of their respective planned port developments. Cameroon has set out a 20-year vision to develop at least two new deep water ports (Kribi and Limbé) to serve its own trade as well as the trade of neighbouring landlocked countries such as the Central African Republic and Chad.⁹¹ Nigeria has started work on a state-of-the-art port (Ibaka Port) to make the region a destination hub for countries around the Gulf of Guinea.⁹² However increased piracy levels in the Gulf of Guinea and the rise in insurance rates for ships transiting this region could seriously undermine these investments and dampen interest in these countries ports.

3.2 *Transport and transit costs of geographically disadvantaged countries*

43. Maritime piracy can have important consequences not only for maritime nations and coastal countries but also for landlocked economies. Lack of access to the sea makes landlocked countries critically dependent on transit transport services through neighbouring and coastal countries. In Africa for example, ports in coastal countries are key strategic openings servicing the trade of the entire continent. Out of the total 44 landlocked countries

⁸⁷ The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

⁸⁸ Joe Bavier, Nigerian pirate gangs spreading across the oil-rich Gulf of Guinea, Reuters, 29 May 2013, <http://www.reuters.com/article/2013/05/29/westafrica-piracy-idUSL6N0BIAJ520130529>.

⁸⁹ Stephanie Hanson (2011). As piracy in west Africa increases, risks on land grow. The National. 17 November. <http://www.thenational.ae/thenationalconversation/comment/as-piracy-in-west-africa-increases-risks-on-land-grow>.

⁹⁰ Joe Bavier, Nigerian pirate gangs spreading across the oil-rich Gulf of Guinea, Reuters, 29 May 2013.

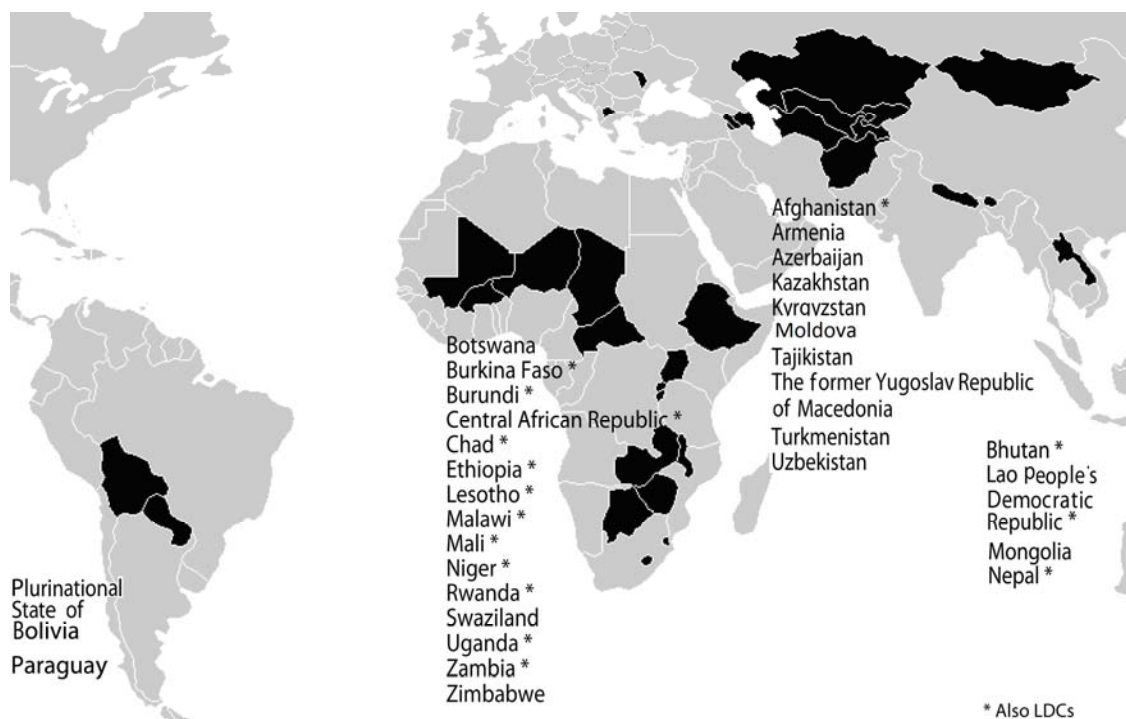
⁹¹ Jem Newton, Vision for Central Africa's go-to port, Ports and Harbours, May/June 2013.

⁹² Ibid.

worldwide, 31 are classified by the United Nations as landlocked developing countries (LLDCs); of these, 16 (including South Sudan) are located in Africa, 10 in Asia, 2 in Latin America and 4 in Central and Eastern Europe (see figure 7). Sixteen of the landlocked countries are also classified as least developed countries (LDCs).

44. It is widely recognized that the trade of LLDCs' is hampered by disproportionately higher transport costs. On average, exporting and importing a container in LLDCs costs, respectively US\$2600 and US\$3300, while transit developing countries pay half these rates.⁹³ The United Nations Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing State (United Nations – OHRLLS) estimates transport costs for LLDCs to be 45 per cent higher than transport costs for representative coastal economy and finds that, generally, these countries record lower trade volumes when compared to a representative coastal economy.⁹⁴

Figure 7. Geographical distribution of landlocked countries



Source: UNCTAD (2013). *The Way to the Ocean – Transit corridors servicing the trade of landlocked developing countries*. UNCTAD/DTL/TLB/2012/1.

Note: South Sudan is not included in this list.

⁹³ United Nations, OHRLLS (2013). *The Development Economics of Landlockedness: Understanding the development costs of being landlocked*. United Nations, New York.

⁹⁴ Ibid.

45. A number of common factors are driving up the transport costs of LLDCs, including their (i) lack of direct access to the sea, (ii) remoteness and isolation from the world market place, (iii) small size of domestic markets, (iv) need for cumbersome transit procedures, and (v) high transit costs and risks. While these challenges undermine the trade competitiveness and overall socio-economic development of these countries, any disruption to neighbouring coastal countries' maritime transport systems magnifies the challenge. Although it more than doubled between 2003 and 2012, the share of the LLDCs in global trade remains modest, at about 1.25 per cent (in 2012),⁹⁵ reflecting a lasting marginalization from the world economy. Piracy-related concerns about the safety of ships, ports and shipping routes, increasing insurance costs as well as disruption and delays that undermine the reliability of services and schedules and raise inventory requirements mean that piracy is also driving up shipping rates. This, in turn, heightens the relative marginalization of LLDCs and of other geographically disadvantaged States, such as small island developing States (SIDS), from the global transport and trading systems and further hinders their ability to fully share in the benefits of globalization.

46. Thus, by raising transport costs, maritime piracy may exacerbate the particular logistics and trade-related challenges facing landlocked (and sea-locked) countries; it may also undermine efforts made so far to address these challenge through, inter alia, infrastructure investment, trade facilitation initiatives, the adoption of transit agreements and the strengthening of transit corridors.

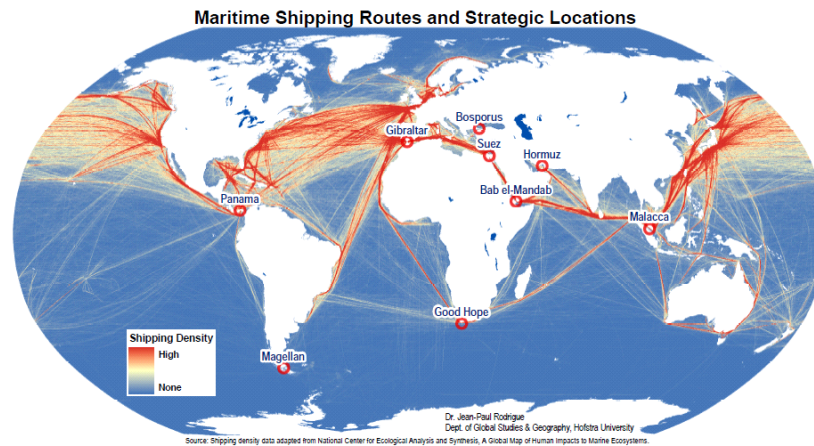
3.3 *Global and regional trade*

47. Apart from generating growth, employment and revenue, maritime transport is of strategic economic importance and vital for global trade. Shipping and ports may be considered as 'gateways' to trade, providing access to international markets for the exports of all countries, including those that are landlocked. Maritime piracy disrupts maritime transport operations and hinders the movement of international freight. In a globalized trading system, this is a matter of concern for all countries although developing countries in Africa where piracy activity levels have soared over the past decade are most immediately affected.

48. Piracy off the coast of Somalia, in particular, poses a serious threat to the Asia-Europe trade corridor and the Suez Canal, one of the main international maritime passages (see figure 8) enabling global trade and a strategic national asset and source of revenue for Egypt.

⁹⁵ UNCTAD. UNCTADstat. International Trade in Goods and Services. Trade Trends. Values and shares of merchandise exports and imports, annual, 1948-2012. <http://unctadstat.unctad.org/TableViewer/tableView.aspx>.

Figure 8. Main shipping routes and strategic passages



Source: *How Costly is Modern Maritime Piracy for the International Community?* Sami Bensassi and Inmaculada-Zarzoso, Universitat Jaume I, University of Goettingen, MPRA Paper No. 27134, posted 1. December 2010, based on Rodrigue, Jean-Paul. Department of Global Studies and Geography, Hofstra University, New York.

49. In 2012, more than 40 per cent of world containerized trade carried across the three major East-West routes passed through the Gulf of Aden and the Suez Canal which remains the first choice for traders engaged in the East-West trade.⁹⁶ Globally, approximately 7 per cent of maritime transport⁹⁷ passes through the Suez Canal, involving the passage of 1,700 to 2,000 ships every month or some 60 ships every 24 hours.⁹⁸ In 2012, 17,225 ships transited the Suez Canal in both directions, with container ships being the largest user.⁹⁹ In 2005, 36 per cent of ships passing through the Canal were containerships, 20.5 per cent were bulkers and 19.6 per cent were tankers.¹⁰⁰ In 2012, these shares reached, respectively 36.8 per cent, 17 per cent and 25 per cent.¹⁰¹

50. Piracy directly affects the cost of trade as ships carrying cargo are intercepted and prevented from delivering the goods. However, trade also suffers when regions are considered to be unstable and volatile, trading routes are altered, insurance premiums increase, and clients are lost to ports.

51. As already noted, a recent study by the World Bank, estimates the risk of piracy off the coast of Somalia to equate about a 1 per cent *ad valorem* rise in trade costs, acting as a

⁹⁶ See, in particular UNCTAD Review of Maritime Transport 2013, Geneva (forthcoming).

⁹⁷ Aly Elmaghawry (2009). Overview of Somali piracy impacts on maritime industry and international response. Maritime safety programs. AASTMT, Alexandria. October.

⁹⁸ Ibid.

⁹⁹ The Suez Canal authority. Traffic Statistics. Yearly Number and Net Ton by Ship Type, Direction and Ship Status. 2012. <http://www.suezcanal.gov.eg>.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

hidden tax on world trade;¹⁰² with over US\$1 trillion of international trade passing through the affected area the overall cost of piracy to global trade is assessed at about US\$18 billion.¹⁰³ Meanwhile, trade costs in Somalia alone are estimated at US\$6 million annually, not including the impact on other sea-based economic activities.¹⁰⁴

52. Some estimates indicate that piracy activity in East African waters could lead to a welfare loss of between US\$0.9 and US\$3.6 billion.¹⁰⁵ These costs are equated to welfare losses to the extent that labour and resources are moved away from productive tasks (e.g. manufacturing and services) towards security and protection tasks (for example, expenditure on security measures).¹⁰⁶ The value of welfare lost reflects a ‘transfer’ from importers and exporters to pirates and pirate-related activities together with the cost of financing response measures. Interestingly, the value of the estimated welfare costs dwarfs the value of transfers received by Somali-based pirates, the value of which, as noted above, was estimated at only US\$120 million in 2008¹⁰⁷ and at between US\$339 million and US\$413 between 2005 and 2012.¹⁰⁸

53. Other estimates indicate that in addition to the “direct costs” for industry and government of piracy off the coast of Somalia, the aggregated cost incurred to countries in the region in terms of negative impact on trade, revenue loss resulting from lower traffic volume passing through the Suez Canal and a dampening effect on tourism was estimated at 1.25 billion in 2010.¹⁰⁹ As noted above, with some vessels choosing to bypass the Suez Canal and reroute around the Cape of Good Hope, less revenue is collected by Egypt. Revenue from the Suez Canal accounted for around 3.2 per cent of Egypt’s gross domestic product (GDP) in 2008, making it the country’s third largest source of foreign currency.¹¹⁰ One study estimates that the overall macroeconomic welfare loss to the international economy of rerouting from the Suez Canal to the Cape of Good Hope would be around US\$30 billion.¹¹¹

54. Illustrating the implications that piracy may have for regional trade, the Kenyan Shippers Council has estimated that piracy increases the monthly cost of imports and exports

¹⁰² World Bank (2013). *The Pirates of Somalia: Ending the Threat, Rebuilding a Nation*. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁰³ The relevant assessment combines comprehensive data on worldwide trade flows for 2000-2010 with a novel dataset of shipping distances between pairs of countries to examine econometrically the impact of Somali piracy on trade flows.

¹⁰⁴ *Ibid.*

¹⁰⁵ Timothy Besley, Thiemo Fetzer and Hannes Mueller (2012). *The Welfare Cost of Lawlessness: Evidence from Somali Piracy*. 27 July.

¹⁰⁶ *Ibid.*

¹⁰⁷ *Ibid.*

¹⁰⁸ World Bank; United Nations Office on Drugs and Crime; Interpol (2013). *Pirate Trails: Tracking the Illicit Financial Flows from Pirate Activities off the Horn of Africa*. Washington, DC: World Bank.

¹⁰⁹ One Earth Future Foundation (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project.

¹¹⁰ *Ibid.*

¹¹¹ Fu, Xiaowen, Adolf Ng and Yui-Yip Lau (2010). *The impact of maritime piracy on global economic development: the case of Somalia*. *Maritime Policy and Management*. Vol. 37 No. 7, pp. 1-21.

by US\$23.8 million and US\$9.8 million, respectively.¹¹² In 2010, the trade impact on Kenya was estimated at US\$414 million, while the cost to Yemen's trade was estimated at US\$150 million. Another study found that that Nigeria had lost around US\$600 million in export earnings in 2008 due to piracy threats to its fisheries.¹¹³

55. As the geographical scope of piracy attacks has expanded to reach the Indian Ocean, a number of Indian industries and other stakeholders are increasingly impacted. An estimated US\$110 billion worth of Indian trade transit through the Gulf of Aden each year and India imports 75 per cent of its oil supply from the Middle East.¹¹⁴ Indian imports and exports incur additional costs from increased war risk insurance and longer transit times and, potentially, from changes in trading partners; a pattern that appears to have already started (e.g. cancellation of coal imports from South Africa).¹¹⁵

3.4 *Energy production, prices and security*

56. International energy trade depends heavily upon reliable transportation networks; therefore, disruptions or delays to energy trade flows can substantially increase energy prices.¹¹⁶ Given the energy-intensity of economic activities and sectors in the globalized trading system, a surge in energy prices may have potentially serious trade-related implications. In this respect, the 2007/2008 hike in oil prices when the oil price (Brent spot crude oil) increased by almost 150 per cent between January 2007 and July 2008, reaching a peak of close to US\$150 per barrel¹¹⁷ provides a poignant illustration. The rapid surge in oil prices had, at the time, led some trade observers to argue that the resulting increase in transport costs may potentially reverse globalization and cancel out the comparative advantage of low cost remote production locations such as China.¹¹⁸ A 2010 empirical study by UNCTAD investigating the relationship between oil prices and maritime freight rates underscored some of the important implications of rising oil prices on transport costs and, by extension, on trade competitiveness.¹¹⁹ While the analysis focused on container transport, it also covered some dry and wet bulk trades, namely, iron ore and crude oil. The study confirmed that rising oil prices drive up maritime freight rates in all three trades examined, with estimated elasticities varying, depending on the market segment and the specification. For container trade, the effect of oil prices on container freight rates was estimated to be

¹¹² One Earth Future (OEF) (2012). The Economic Cost of Maritime Piracy. Working Paper 2011. Ocean Beyond Piracy Project.

¹¹³ Ibid.

¹¹⁴ One Earth Future (OEF) (2012). The Economic Cost of Somali Piracy. Working Paper 2011. Ocean Beyond Piracy Project.

¹¹⁵ Ibid.

¹¹⁶ United States Energy Information Administration (EIA) (2012). World Oil Transit Chokepoints. 22 August.

¹¹⁷ United States Energy Information Administration (EIA): daily and monthly Europe spot prices FOB (dollars per barrel).

¹¹⁸ See for example Rubin and Tal (2008), who argue that increased oil prices significantly impact global trade and production processes and might reverse a significant amount of globalization. See also UNCTAD (2010). Oil Prices and Maritime Freight Rates: An Empirical Investigation. Technical report by the UNCTAD secretariat. UNCTAD/DTL/TLB/2009/2. 1 April.

¹¹⁹ UNCTAD. Oil Prices and Maritime Freight Rates: An Empirical Investigation (UNCTAD/DTL/TLB/2009/2) available for downloading at <http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=367>.

larger in periods of sharply rising and more volatile oil prices. These results entail some potentially important implications for maritime transport and trade, if oil prices resume the spiralling trend observed in 2007/2008 and remain at sustained high levels.

57. As many countries in regions affected by piracy are also major hydrocarbon producers and suppliers of global energy markets (see figure 9), maritime piracy affects the oil industry and tanker trade, as well as energy security.¹²⁰ In 2012, Africa accounted for 7.8 per cent and 7.7 per cent, respectively of the world's oil and natural gas reserves. During the same year, the continent's share in the global output amounted to 10.9 per cent with respect to oil and 6.4 per cent with respect to natural gas.¹²¹ In 2012, Africa accounted for nearly 4 per cent of the global refinery capacities and 3 per cent of refinery throughputs.¹²² Over 40 refineries are said to be located in more than 20 African countries.¹²³ For African economies to fully benefit from energy exploitation and related-activities, safe and secure sea routes and ports are of paramount importance.

58. Piracy attacks off the coast of Somalia threaten the oil industry in the region, such as in Bahrain, the Islamic Republic of Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Yemen. With nearly 45 per cent of global crude oil production being carried in tankers, well-functioning and secure strategic transit points such as the Gulf of Aden are critical for global energy supply and security.¹²⁴ In 2012, nearly 1.79 billion tons of crude oil and over 1 billion tons of petroleum products and gas were carried on tankers and gas carriers.¹²⁵ With oil cargo passing through the Strait of Hormuz estimated to account for some 35 per cent of all seaborne oil traded in 2011, the strategic importance of the maritime route involving the passage through the Strait of Hormuz and the Gulf of Aden/Suez Canal cannot be overstated.¹²⁶ The stakes are further amplified by growing volumes of liquefied natural gas (LNG) being loaded at ports in Qatar, a country that accounted for nearly one third of global LNG exports in 2012.¹²⁷

¹²⁰ Aly Elmaghawry (2009). Overview of Somali piracy impacts on maritime industry and international response. Maritime safety programs. AASTMT, Alexandria. October.

¹²¹ British Petroleum (BP) Statistical Review 2013, June 2013.

¹²² Ibid.

¹²³ Address by L N Sisulu, MP, Minister of Defence and Military Veterans at the SADC Extraordinary Meeting on Regional Anti-Piracy Strategy, 25 Jul 2011.

¹²⁴ Based on UNCTAD's calculations on world seaborne trade of crude oil and the BP Statistical Review 2013.

¹²⁵ UNCTAD, Review of Maritime Transport 2013, Geneva .

¹²⁶ United States. Energy Information Administration (EIA) (2012). World Oil Transit Chokepoints. 22 August.

¹²⁷ British Petroleum (BP) Statistical Review 2013, June 2013.

Figure 9. Tanker port designation in Africa



Source: Clarkson Research Service (2013). *The Shipping Diary 2014*. London. United Kingdom.

59. Maritime piracy in the Gulf of Guinea, the leading sub-Saharan African oil producing region, is unfolding in the context of renewed geostrategic interest in the region. In 2012, the Gulf of Guinea accounted for over 5 million barrels of oil per day (bpd) out of the total of 9.5 million bpd produced in Africa during the entire year.¹²⁸ Oil reserves in the region are mainly offshore and are exploited and carried by sea to the United States, Europe and Asia. The Gulf supplies around 40 per cent and 29 per cent of oil demand in Europe and the United States, respectively.¹²⁹ Nigeria alone is estimated to have exported about US\$70 billion worth of petroleum products in 2010.¹³⁰ With new discoveries of minerals, countries such as Benin, Cameroon, the Congo, Côte d'Ivoire, Gabon, Ghana and Togo are well positioned to become important producers, raising the geostrategic importance of the region and the level of investments by oil companies.¹³¹

60. However, in Nigeria for example, oil production is estimated to have dropped by 20 per cent, since 2006 costing the Nigerian economy US\$202 million between 2006 and 2008.¹³² According to the same study, cargo theft and illegal trading of oil cargo has led to revenue losses in the form of lost tariffs or taxes. Ten per cent of Nigeria's daily oil output worth US\$1.5 million is estimated to have been stolen.¹³³ Over the last 50 years, the value of oil stolen or wasted in Nigeria has amounted to between US\$300 and US\$400 billion.¹³⁴ While much of this cost is borne by the oil companies and the Government, the loss in revenue translates into lower resources being made available for social and economic development programs.¹³⁵ This is detrimental for the local population, the majority of which lives below the poverty line.¹³⁶

61. With implications of maritime piracy for oil production and investment, tanker trade as well as energy security involving major stakes and potentially significant costs, oil companies in the Gulf of Guinea are investing heavily in maritime security to protect installations. These additional security expenditures borne by oil companies could, however, undermine the feasibility of oil-related investment projects, discourage potential investors, raise the cost of doing business and, in some cases, drive out some established companies. By threatening the profitability of energy exploration, maritime piracy puts at risk existing

¹²⁸ Ibid.

¹²⁹ Thierry Vircoulon (2012). Pirates of the Guinean. Foreign Policy, 20 December, http://www.foreignpolicy.com/articles/2012/12/20/pirates_of_the_guinean.

¹³⁰ One Earth Future Foundation (OEF) (2012). The Economic Cost of Somali Piracy 2011. Working Paper. Ocean Beyond Piracy Project.

¹³¹ International Crisis Group (2012). The Gulf of Guinea: The New Danger Zone. Africa Report No. 195. 12 December. <http://www.crisisgroup.org/en/publication-type/media-releases/2012/africa/the-gulf-of-guinea-the-new-danger-zone.aspx>.

¹³² One Earth Future (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project. See also Nincic, Donna (2009). Maritime piracy in Africa: The humanitarian dimension. African Security Review 18.3.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Lisa Otto (2011). Piracy in the Gulf of Guinea: attacks on Nigeria's oil industry spill over in the region. CAIntelligence. September 16. See also, Nincic, Donna., 2009. Maritime Piracy in Africa: The Humanitarian Dimension', African Security Review, Vol. 18 (3).

¹³⁶ Stephanie Hanson (2011). As piracy in West Africa increases, risks on land grow. 17 November.

and future investment - both in terms of level and quality – in the West African oil industry as well as in East Africa.¹³⁷ To put things in perspective, it is worth noting that in 2009 for example, China’s investment in the mining sector in sub-Saharan African countries accounted for about one third of the country’s foreign direct investment (FDI).¹³⁸ Moreover, following another discovery of natural gas reserves off the coast of the United Republic of Tanzania, an oil company is now planning the construction of a liquefied natural gas (LNG) facility worth \$14 billion.¹³⁹ Similarly and reflecting the expected growth, investments in the free zones of Nigeria are reported to have reached \$9.4 billion, with six out of the total 25 free zones in the country said to be under construction and four at the design stage. All in all, escalating piracy levels constitute a major setback to investment projects, growth and development prospects in Africa and raise concerns for a wide range of stakeholders including local governments, trading partners and investors.¹⁴⁰

3.5 Fisheries

62. Lack of maritime security threatens the fishing sector of affected local and regional economies. In addition to the hydrocarbon sectors, fishing provides an important resource for many countries in the countries affected by piracy. Africa’s fishing industry generates around US\$10 billion annually through internal trade, global exports and fishing licenses issued to foreign operators.¹⁴¹ On the west coast, the Gulf of Guinea Regional Fishing Commission estimates that the region has an annual potential of one million tons of sea fish and 800,000 tons of inland fisheries.¹⁴² In terms of natural maritime resource importance,¹⁴³ fisheries, after agricultural products or energy, constitute the second highest source of exports of many countries in the Gulf of Guinea.¹⁴⁴ Moreover, subsistence-fishing plays a critical role by providing a nutrition source and ensuring food security in many African countries. By disrupting fishing activity, maritime piracy can have sizeable social and economic consequences for the affected regions.

63. According to IMO, in 2009, tuna vessels fishing 650 to 800 kilometers beyond Somali territorial waters were attacked by pirates at least three times.¹⁴⁵ One ship was captured,

¹³⁷ Lisa Otto (2011). Piracy in the Gulf of Guinea: attacks on Nigeria’s oil industry spill over in the region. CAIntelligence. September 16. See also Stearns, S., ‘Piracy Cuts Oil Production in Cameroon, Threatens Future Investment’, VOA News, 2010, <http://www.voanews.com>.

¹³⁸ UNCTAD (2012). Review of Maritime Transport 2012. Chapter 1. New York and Geneva.

¹³⁹ UNCTAD (2013). Review of Maritime Transport 2013. Chapter 1. New York and Geneva.

¹⁴⁰ Ibid. See also International Crisis Group (2012). The Gulf of Guinea: The New Danger Zone. Africa Report No. 195. 12 December. <http://www.crisisgroup.org/en/publication-type/media-releases/2012/africa/the-gulf-of-guinea-the-new-danger-zone.aspx>.

¹⁴¹ Address by L N Sisulu, MP, Minister of Defence and Military Veterans at the SADC Extraordinary Meeting on Regional Anti-Piracy Strategy 25 Jul 2011.

¹⁴² One Earth Future (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project.

¹⁴³ International Crisis Group (2012). The Gulf of Guinea: The New Danger Zone. Africa Report N°195. 12 December. <http://www.crisisgroup.org/en/publication-type/media-releases/2012/africa/the-gulf-of-guinea-the-new-danger-zone.aspx>.

¹⁴⁴ Ibid.

¹⁴⁵ Kennedy K. Mbekeani and Mthuli Ncube (2011). Economic Impact of Maritime Piracy. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July

leading to a ransom payment in excess of US\$1 million.¹⁴⁶ Since 2006, East African countries¹⁴⁷ have seen a marked decline in their fishing yields and exports of fish products from piracy-affected countries have dropped by 23.8 per cent.¹⁴⁸

64. The fishing industry is crucial for many East African countries. Over the past two decades, the industry accounted for over 90 per cent of Seychelles' exports and for over 20 per cent of exports in Madagascar. In Seychelles, tourism and fisheries together account for 65 per cent of GDP and provide employment for 36 per cent of the country's workforce.¹⁴⁹ Tuna fishing and related industries, including port services, electricity and water used by ships, account for up to 40 per cent of Seychelles foreign earnings.¹⁵⁰ Given the strategic economic importance of this highly sensitive sector, the negative impact of piracy has been significant, with the tuna catch in affected areas estimated to have fallen by 26.8 per cent annually and with exports of fishing products said to have dropped by 23.8 per cent in East African countries.¹⁵¹ For Seychelles, the cost of piracy stood at approximately 4 per cent of the island's GDP in 2009.¹⁵² Other countries in the region have also recorded declines in their fishing sector, including Yemen with an estimated loss of \$150 million in 2010.¹⁵³

3.6 Food security and food price inflation

65. Approximately 30 per cent of piracy attacks between 2008 and 2012 have targeted bulk carriers and general cargo ships. As bulkers carry the majority of the world's food staples such as rice and grain, pirate attacks have direct consequences on the price of food given the delays in delivery and the loss of cargo in the case of perishable goods. Rapid rises in food prices can have dire humanitarian consequences, but may also lead to social unrest, riots and conflict. In August of 2010, African countries such as Mozambique and Somalia were extremely concerned about social instability resulting from the most rapid increase in food prices since November 2009.¹⁵⁴ More generally, increasing food prices pose a significant threat for the prospects of the world's poor.¹⁵⁵

¹⁴⁶ Ibid.

¹⁴⁷ The World Bank defines piracy-affected countries as the Comoros, Djibouti, Kenya, Mozambique, Madagascar, Mauritius, Seychelles, Somalia and the United Republic of Tanzania, as well as Pakistan, Yemen and the countries of the Persian Gulf.

¹⁴⁸ World Bank (2013). *The Pirates of Somalia: Ending the Threat, Rebuilding a Nation*. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁴⁹ Kennedy K. Mbekeani and Mthuli Ncube (2011). *Economic Impact of Maritime Piracy*. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

¹⁵⁰ Ibid.

¹⁵¹ World Bank (2013). *The Pirates of Somalia: Ending the Threat, Rebuilding a Nation*.

<http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁵² Kennedy K. Mbekeani and Mthuli Ncube (2011). *Economic Impact of Maritime Piracy*. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

¹⁵³ One Earth Future (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project.

¹⁵⁴ One Earth Future (OEF) (2011). *The Economic Cost of Maritime Piracy 2010*. Working Paper. Ocean Beyond Piracy Project.

¹⁵⁵ See for example, UNCTAD. *Addressing the Global Food Crisis: Key trade, investment and commodity policies in ensuring sustainable food security and alleviating poverty*, UNCTAD/OSG/2008/1. See also General Assembly

66. Piracy off the coast of Somalia has also imposed a direct cost on humanitarian assistance as it has affected the delivery of food aid that is predominantly carried by sea.¹⁵⁶ In 2007 the World Food Programme (WFP) reported a drop of 50 per cent in the number of ships willing to carry food aid given increased dangers faced by humanitarian relief ships in Somali waters.¹⁵⁷ Preventing the delivery of humanitarian aid can have a devastating impact on a country such as Somalia that has been weakened by civil war and droughts and has been suffering from a humanitarian crisis.¹⁵⁸

3.7 Tourism

67. Africa has a large untapped tourism potential with relevant industries carrying a significant capacity to drive economic growth in the continent. Already, tourism is a major source of income, especially for island economies such as Mauritius and Seychelles which directly benefit from tourist visits. Tourism is also important for other neighbouring countries which derive indirect benefits such as revenues from cruise ships calling at ports for stopovers and refuelling.¹⁵⁹

68. Tourism activity in East African coastal countries and the Middle East (see table 2) have been affected by a surge in the incidence of piracy, in particular in terms of attacks on yachts, cruise ships, and diving boats.¹⁶⁰ Expenditure on tourism in East Africa since 2006 is estimated to have grown 25 per cent slower as compared with other sub-Saharan African countries.¹⁶¹ The increase in piracy activity over the past few years has probably reduced the attractiveness of this region as a holiday destination, with tourist arrivals in East African coastal countries dropping by nearly 6.5 per cent.¹⁶² The drop in tourist spending levels may have resulted from the compositional change in tourists as well as from lower prices applied in affected countries to keep attracting tourists.¹⁶³ In Seychelles, an island economy that depends heavily not only on fisheries, but also on the tourism sector, the tourism industry has also been severely affected, particularly activities such as boat charters.¹⁶⁴

Resolution "Addressing excessive price volatility in food and related financial and commodity markets", A/RES/66/188 of 14 February 2012.

¹⁵⁶ Kennedy K. Mbekeani and Mthuli Ncube (2011). Economic Impact of Maritime Piracy. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

¹⁵⁹ See for instance Kennedy K. Mbekeani and Mthuli Ncube (2011). Economic Impact of Maritime Piracy. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

¹⁶⁰ World Bank (2013). The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁶¹ World Bank (2013). The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ One Earth Future (OEF) (2011). The Economic Cost of Maritime Piracy 2010. Working Paper. Ocean Beyond Piracy Project.

Table 2. Countries affected by Somali piracy, by region

Sub-Saharan Africa	Middle East and North Africa
Comoros	Bahrain
Eritrea	Djibouti
Kenya	Islamic Republic of Iran
Madagascar	Iraq
Mauritius	Jordan
Mozambique	Kuwait
Reunion	Oman
Seychelles	Qatar
Somalia*	Saudi Arabia
Sudan	United Arab Emirates
United Republic of Tanzania	Yemen

*Somalia is excluded from the analysis due to the lack of tourism data.

Source: *The Pirates of Somalia: Ending the Threat, Rebuilding a Nation*, World Bank, 2013.

69. In Kenya where tourism accounts for approximately 12 per cent of GDP,¹⁶⁵ the Kenya Tourist Board estimates that the number of tourists visiting Mombasa by cruise ships between January and April 2010 declined by 95 per cent. During 2011, the potential revenue loss resulting from the impact of crime on Kenya’s tourism industry was estimated at US\$129 to US\$795 million.¹⁶⁶

3.8 Environmental pollution

70. The potential for pollution arising in connection with piracy attacks on tankers, offshore installations and related coastal infrastructure (e.g. refineries, oil storage) poses a threat not only for marine ecosystems and biodiversity, but may also give rise to important economic implications for affected coastal states; in the case of incidents involving ships carrying hazardous and noxious substances (e.g. chemicals) the potential risk also includes the loss of human life due to explosions.

71. An oil spill arising in connection with piracy, could cause significant damage to coastlines and to areas within the territorial sea and exclusive economic zones of several countries. A spill involving oil carried as cargo or as bunkers could, irrespective of its size, seriously damage marine biodiversity and jeopardize economic opportunities and livelihoods derived from the exploitation of seas and oceans (e.g. fisheries, tourism, cruise-shipping).¹⁶⁷

¹⁶⁵ One Earth Future (OEF) (2012). *The Economic Cost of Somali Piracy*. Working Paper 2011. Ocean Beyond Piracy Project.

¹⁶⁶ Ibid. For criticism of this assessment, see Archer Venetia, and Pelton Rovert, Young. Can we ever asses the true cost of piracy? Somalia Report, 21 February, 2012, <http://www.somaliareport.com/index.php>.

¹⁶⁷ For additional information see, in particular the UNCTAD report entitled “Liability and Compensation for ship-source oil pollution: An overview of the international legal framework for oil pollution damage from tankers”, *Studies in Transport Law and Policy – 2012 No. 1*. UNCTAD/DTL/TLB/2011/4. 2012.

While a robust international legal regime is in place to provide for liability and compensation in cases of tanker oil pollution,¹⁶⁸ the situation is less clear in respect of offshore units or craft, such as floating storage units or floating production, storage and offloading units and in respect of ships used for the purposes of storage rather than for the carriage of oil, as is frequently the case, for instance, off the coast of West Africa.¹⁶⁹

72. Marine pollution is of particular concern in the Gulf of Guinea, which is emerging as one of the fastest-growing regions for oil and gas supply. In late 2011, the Gulf of Guinea was affected by a spill of 40,000 barrels of crude oil, originating from the 200,000 bpd day Bonga field, located offshore Nigeria (120 kilometres off the Nigerian coast).¹⁷⁰ Prior to that, in 1998, the Exxon Mobil Idoho platform off the coast of Nigeria also saw some 40,000 barrels leak into the sea.¹⁷¹ Although not caused by pirates, these incidents illustrate the potential disasters that could result from piracy attacks on oil tankers and installations in the region.

73. With oil spills often caused by operational factors and sabotage activities in the Niger Delta, oil exploration and exploitation in Nigeria already has a heavy record in terms of environmental disasters. In 2006, a report by the World Wildlife Fund estimated that over the past fifty years, up to 1.5 million tons of oil had been spilled in the Niger Delta, equivalent to one Exxon Valdez incident every year.¹⁷² Amnesty International estimates that two large spills in Nigeria's Oganiland in 2008 alone have destroyed the livelihoods of 69,000 people.¹⁷³ More recently, relevant government agencies in Nigeria have requested the Royal Dutch Shell company to pay US\$11.5 billion as compensation for the damages caused by the biggest oil leak in the history of Nigeria (i.e. the 40,000 barrels of crude oil spilled from the day Bonga field in late 2011).¹⁷⁴

74. East Africa's coast where piracy has been thriving over recent years is also highly vulnerable to environmental risks given the significant tanker traffic sailing through the region. In July 2011, a pirate attack on an oil tanker off of the coast of Yemen resulted in the tanker catching fire, while in April 2008, an attack on the Japanese tanker Takayama off the

¹⁶⁸ Relevant international conventions, collectively known as the CLC-IOPC Fund regime, include the 1969 Civil Liability Convention (CLC); the 1971 Fund Convention; the 1992 CLC, the 1992 Fund Convention and the 2003 Supplementary Fund Protocol. For additional information visit the website of the IOPC Funds at <http://www.iopcfunds.org>.

¹⁶⁹ See, in particular "Liability and Compensation for ship-source oil pollution: An overview of the international legal framework for oil pollution damage from tankers", Studies in Transport Law and Policy - 2012 No. 1. UNCTAD/DTL/TLB/2011/4. 2012.

¹⁷⁰ Alexis Flynn (2011). gCaptain. Shell Scrambles To Clean Nigeria Oil Spill 22 December.

¹⁷¹ Ibid.

¹⁷² Martin N. Murphy, Petro-piracy: predation and counter-predation in Nigerian waters, In Modern Piracy: Legal Challenges and Responses, ed. Douglas Guilfoyle, Edward Elgar, United Kingdom and United States of America, 2013.

¹⁷³ Christiane Badgley, West African Oil Boom Overlooks Tattered Environmental Safety Net, 19 January 2012, <http://pulitzercenter.org/reporting/ghana-oil-offshore-drilling-boom-industry-environmental-safety-spill-disaster-plan-jubilee-west-africa-gulf-of-guinea>.

¹⁷⁴ Reuters, Nigerian agencies seek US\$11.5 billion oil spill payout from Shell, 27 March 2013, <http://uk.reuters.com/article/2013/03/27/uk-shell-nigeria-idUKBRE92Q17D20130327>. A total of US\$5 billion is sought as a fine for environmental damage while US\$6.5 billion are intended as compensation for 100 affected communities.

coast of Somalia resulted in the ship's fuel tanks being penetrated and the oil flowing into the sea.¹⁷⁵ Although the consequent damage was limited, the incident underscores the elevated risks,¹⁷⁶ including the risk of more sustained attacks that could result in environmental catastrophes.

75. While not related to piracy, the 2010 Deepwater Horizon blow-out in the Gulf of Mexico also provides some indication as to the type and potential magnitude of problems¹⁷⁷ that could be associated with future pirate attacks that might target offshore platforms in hydrocarbon producing and trading regions such as the Gulf of Guinea.

3.9 *Submarine installations*

76. Intercontinental submarine cables that improve telecommunication connectivity are increasingly being installed in Africa,¹⁷⁸ thus creating new business opportunities, including the provision of data and mobile telephony services. With a number of cables currently being planned in the east and west African coasts, maritime piracy could seriously undermine the installation and well-functioning of such systems.¹⁷⁹

3.10 *Weather and climate-related data collection*

77. Apart from posing immediate threats to the safety of navigation in affected areas, piracy is also hampering ocean observations and weather and climate-related data collection under international research programs, thus affecting the availability of relevant data, observations and forecasts. These are required both for safe navigation and for the purposes of obtaining information on climate variability and change. Relevant programs include the *Global Drifter Programme*,¹⁸⁰ which provides satellite-tracked surface drifting buoy observations of currents, sea surface temperature, atmospheric pressure, winds and salinity and Argo,¹⁸¹ an international programme that calls for the deployment of 3,000 free drifting profiling floats, distributed over the global oceans, which measure the temperature and salinity in the upper 2,000 m of the ocean. This allows continuous monitoring of the state of the ocean, with all data being made publicly available within hours after collection, for scientific use and assimilation into weather forecasting and climate prediction models. Both programs are part of efforts under the World Climate Research Programme's Climate

¹⁷⁵ Roger Middleton (2008). Piracy in Somalia Threatening Global Trade, Feeding Local Wars. Africa Programme. October. Chatham House. See also German warship helped fend off pirate attack. 23 April 2008. CNN.com. <http://edition.cnn.com/2008/WORLD/africa/04/23/somalia.pirates>.

¹⁷⁶ NOAA's Response and Restoration Blog (2011). Pirates and Oil Pollution: Hijacking the High Seas in the 21st Century. 7 July.

¹⁷⁷ Kiley Kroh and Michael Conathan (2012). The Lasting Impact of Deepwater Horizon – Five Reasons We Can't Forget About the BP Oil Spill. Centre for American Progress. 19 April.

¹⁷⁸ See for instance, Kennedy K. Mbekeani and Mthuli Ncube (2011). Economic Impact of Maritime Piracy. Africa Economic Brief. African Development Bank (AfDB). Vol 2. No. 10. 14 July.

¹⁷⁹ Ibid.

¹⁸⁰ <http://www.aoml.noaa.gov/phod/dac/index.php>

¹⁸¹ <http://www.aoml.noaa.gov/phod/argo/index.php>

Variability and Predictability (CLIVAR) project¹⁸² and its partners, such as the Global Ocean Observation Systems, and rely heavily on commercial shipping and research and chartered vessels to deploy the relevant instruments. While the need to understand the effects of the Indian Ocean on climate variability is essential, as the region is bounded by countries that collectively are inhabited by one-third of the world's population, Somali piracy in the northwest Indian Ocean is impeding the completion of this array, adversely impacting Indian Ocean climate research, observations and modelling, with implications for the understanding of weather and climate in the region.¹⁸³ With the region north of Mauritius having turned into 'a no-go area for most vessels due to pirate activity', scientists have requested assistance from the Australian and United States navies in the deployment of instruments.¹⁸⁴ Nevertheless, data collection coverage in the region remains limited.¹⁸⁵

¹⁸² Inter alia, CLIVAR has been involved in increasing the ocean-observing capability in the tropical Indian Ocean and the use of model-generated data to study ocean and coupled air-sea processes in the basin. For further information, see <http://www.clivar.org/about/about-clivar>

¹⁸³ See Indian Ocean pirates impede climate observations, 14 July 2011, <http://www.csiro.au/news/Indian-Ocean-pirates-impede-climate-observations>

¹⁸⁴ Ibid.

¹⁸⁵ See the current Status of Global Drifter Array, available at <http://www.aoml.noaa.gov/phod/dac/index.php>

IV. Summary and concluding remarks

78. The scourge of piracy has plagued seafarers in many parts of the seas over the centuries. However, over the past decade, with a dramatic rise in maritime piracy in East African waters and pirates becoming more sophisticated, violent and resilient, the issue has increased considerably in importance and has emerged a humanitarian, economic and security challenge.

79. Following a surge in piracy levels off the coast of Somalia, the Horn of Africa, and in the Gulf of Aden, attacks expanded geographically to threaten shipping in the waters off Kenya, Madagascar, Seychelles, the United Republic of Tanzania, the Mozambique/Mozambique Channel and the Indian Ocean and Arabian Sea / off Oman, Gulf of Oman and off the west coast of India and off western Maldives.

80. According to most recent figures, attacks by Somali pirates appear to have dropped significantly in 2012 and 2013, reportedly as a result of increased/active military action on suspected skiffs, military land-based piracy operations, preventive measures by the shipping industry and an increase of armed guards on board ships.¹⁸⁶ However this positive trend is still fragile and could be undermined and reversed unexpectedly. Some observers highlight the sustained levels of Somalia-based piracy threats within the Indian Ocean region.¹⁸⁷ Moreover, attacks in the Gulf of Guinea region are on the increase, in many cases exhibiting greater levels of violence.¹⁸⁸ In contrast to the modus operandi adopted by Somali pirates – holding ships and crews for ransom – pirates in the Gulf of Guinea region appear to be focused on stealing the ship's cargo, especially crude oil and oil products, for subsequent resale on the black market, with little regard for the life of crew-members.

81. As Africa continues to attract attention as a region with significant potential for energy and mineral resources, trade, and maritime transport, the incentives for piracy are likely to grow over time, rather than diminish. Africa's impact on the globalised trading economy is poised to expand as the continent sets out to exploit its vast resources and as consumption demand increases in tandem with improved income levels. However, to be able to tap into the significant potential of the continent, addressing major persistent and emerging hindrances, in particular security threats and maritime piracy is key.

82. While estimates of the economic costs of piracy vary, it is clear that both the costs and trade-related implications of piracy are significant. Direct costs arising from Somali piracy alone have been assessed to be in the region of billions of United States dollars. A recent report puts the value of ransoms claimed for pirate acts off the coast of Somalia and the Horn of Africa from 2005 to 2012 at between US\$339 million and US\$413 million.¹⁸⁹ Global

¹⁸⁶ ICC International Maritime Bureau (2013). Piracy and Armed Robbery against Ships. Annual Report. 1 January – 31 December 2012. January.

¹⁸⁷ See e.g. Moran Security Group, On Piracy Threats in the World's Oceans, 100.09.2013. [http://www.saarpsco.com/Threats_for_Shipping_in_the_World_oceans%20\(5\).pdf](http://www.saarpsco.com/Threats_for_Shipping_in_the_World_oceans%20(5).pdf).

¹⁸⁸ Elsewhere, for instance in South East Asia, incidents of piracy are also increasing in number. However, according to the IMB, such incidents tend to be low-level attacks against vessels and cannot be compared to the more serious and violent attacks in the Gulf of Guinea and off Somalia.

¹⁸⁹ World Bank (2013). The Pirates of Somalia: Ending the Threat, Rebuilding a Nation.

<http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

economic costs of piracy off the coast of Somalia have been estimated at US\$18 billion, with a margin of error of roughly US\$6 billion.¹⁹⁰ Acting as a hidden tax on world trade, this amount reflects in particular increased trade costs and does not account for losses to tourism and fisheries.

83. Some of the types of second order costs and broader trade-related implications of piracy have been outlined in this report, including for ports in regions affected by piracy, for transport and transit costs of geographically disadvantaged countries, for global and regional trade, for energy production, prices and security, for fisheries and tourism, food security and food price inflation. Piracy also poses additional risks, for instance in terms of the potential for pollution, which in turn may have severe economic as well as environmental effects and in terms of jeopardizing economic and development opportunities arising from the installation of submarine cables. Also worth noting is the fact that piracy hampers the collection of weather and climate related data which are required for the purposes of safe navigation and for the study of climate variability and change.

84. In a world where trade, economies and populations are growing fast, the long-term availability of cost-effective, efficient, environmentally sustainable, safe and secure maritime transport services is crucial. As the issues covered in this part of the report show, maritime piracy has evolved from a localized maritime transport concern into a cross-sectoral global challenge, with a range of important repercussions for the development prospects of affected regional economies as well as for global trade. Just as the ships targeted by pirates, maritime piracy remains a 'moving target'. Given the issues at stake and the broad range of costs and trade-related implications of maritime piracy at both the regional and the global level, sustained long-term efforts to combat and repress piracy clearly remain a matter of strategic importance.

85. Addressing the challenge in an effective manner requires strong cooperation at the political, economic, legal, diplomatic and military levels, as well as collaboration between diverse public and private sector stakeholders across regions.

86. Part II of this report¹⁹¹ provides an overview of the contemporary international legal regime for countering piracy and identifies key examples of international cooperation and multilateral initiatives to combat piracy.

¹⁹⁰ The Pirates of Somalia: Ending the Threat, Rebuilding a Nation. <http://siteresources.worldbank.org/INTAFRICA/Resources/pirates-of-somalia-main-report-web.pdf>.

¹⁹¹ An Overview of the International Legal Framework and of Multilateral Cooperation to Combat Piracy, UNCTAD/DTL/TLB/2013/3. Available at <http://unctad.org/ttl/legal>.