

TRENDS AND CHARACTERISTICS OF MODERN MARITIME PIRACY: A Comparison of Somali Piracy, Gulf of Guinea Piracy and Asian Piracy

ABSTRACT

Maritime Piracy has existed since ancient times. In recent decades there has been a resurgence in piracy. The major focus for much of the past 10 years has been on piracy in the waters off the Horn of Africa conducted almost exclusively by Somali pirates. In 2011 and 2012 attention was drawn to piracy in the Gulf of Guinea. This “new piracy” was associated predominantly with Nigerian pirates and related to petroleum product issues. This paper draws upon data sources of the International Chamber of Commerce - International Maritime Bureau to develop statistical profiles of piracy over the 10 year period 2003-2012 for the regions mentioned above as well as three areas in Asia where piracy has also flourished. The actions of the pirates have economic and human consequences. A World Bank study estimated the annual, global cost of Somali piracy alone to be US\$ 18 billion. Over the time period analyzed more than 6000 crew were held hostage, or kidnapped, for ransom. Guns were the most frequently cited weapon used in attacks. The data shows that the most successful attacks were those on ships at berth while the success rates were lowest for attacks on steaming ships. Drawing upon additional information in Reports of the UN Office of Drugs and Crime, and studies by the World Bank, the paper discusses the differences in the strategies used by the Somali pirates and those employed by the pirates in the Gulf of Guinea.

1. INTRODUCTION

On April 8 2009, the cargo ship Maersk Alabama, sailing under the American flag and bound for Mombasa Kenya, was attacked by four Somali pirates. The pirates boarded and ultimately hijacked the Alabama. This was the first American-flagged ship to be hijacked in about 200 years. Actions taken by the ship’s crew resulted in the pirates’ inability to control the Alabama. The pirates kidnapped the Captain and left the Alabama in the ship’s lifeboat. The captain was rescued on April 12, 2009 when a US Navy Seal Team shot three of the pirates. The fourth was taken into custody. This incident is featured in the 2013 film *Captain Phillips*.

On February 18 2011, 19 pirates boarded a yacht with four Americans onboard off the Horn of Africa. The pirates intended to take the hostages to Somalia to be ransomed. The US Navy intervened and four days of negotiations followed. When the negotiations broke down the pirates killed the hostages. Four pirates were killed in the conflict. As of November 2013, 14 pirates have been sentenced for the crimes committed. One pirate was judged to be a juvenile at the time of the incident, and was not prosecuted (BBC NEWS, 2013).

On October 23 2013, the oil platform supply ship, the C-Retriever operating under the American flag, was attacked by pirates off the coast of Nigeria. The pirates boarded the ship and took the ship’s captain and chief engineer, both American citizens, hostage (Starr and Shoichet, 2013). The captain and engineer were released on the weekend of November 09/10 2013 following successful negotiations with the pirates.

These particular cases illustrate interesting points in the cycle of piracy in two very dangerous regions of the world for international shipping. The Alabama incident occurred in the third year of a doubling in the number of attacks by Somali pirates operating mainly off the coast of Somalia. The seizure of the yacht occurred in the year that Somali piracy peaked. The attack by Nigerian pirates came at a time when piracy in the Gulf of Guinea was the dominant hunting ground for pirates in African waters. ICG (2012) referred to the Gulf of Guinea as the “New Danger Zone.”

This paper provides an introduction to various aspects of modern maritime piracy. In order to set the stage a very brief treatment of maritime piracy in ancient times is presented. The basic principles of international maritime law related to piracy are outlined. A statistical overview of piracy incidents for the period 2003—2012 highlights the different time profiles of piracy by Somalis, piracy in the Gulf of Guinea and in selected Asian areas. In addition to discussing the number attacks annually, the paper considers the success rates for attacks on ships while the ships under attack are at berth, or at anchor or steaming. The types of violence to crews and the weapons used in the attacks are given. The paper discusses the differences in the strategies used by the Somali pirates and by the pirates in the Gulf of Guinea.

2. A (VERY) BRIEF HISTORY OF PIRACY THROUGH THE AGES

Polybius, a Roman historian is credited with introducing the term pirates to refer to the sea marauders (Uher, 2008). Plutarch, the Greek historian, is credited with providing the first known definition of a piracy act as “an illegal attack on a ship or coastal town that is not of a warring nature, but for plunder or monetary gain alone.” (Uher, 2008) Plutarch’s definition is broader than RNM’s due to the inclusion of attacks on coastal towns as well as those on ships.

The oldest documented account of “plundering attacks” by ships not flying a nation’s flag occurred around 1350 BC in the time of the Egyptian Pharaoh Akhenaten. It seems reasonable to speculate that maritime piracy has probably existed since goods began being transported by sea. According to National Geographic, the Phoenicians established trade routes in the Mediterranean around 1000 B.C. (National Geographic, 2013).

The so-called Golden Age of Piracy, which is what likely comes to most of our minds when we think of piracy (meaning maritime piracy), is much more recent, and includes an era about 100 years long, ranging from about the middle of the 17th century to the middle of the 18th century. The most notorious of the Pirates of this period was Edward Teach better known as Blackbeard—a very fierce-looking man. The title of “King of the Pirates” however belongs to Henry Morgan. The pirates’ flag, the skull and bones known as the Jolly Roger, is likely the most recognizable symbol of the Pirates.

Several terms have been used to distinguish the type of pirate-like activities carried out by attackers on, and from, the seas. Privateers were “lawful” pirates who were authorized by their respective governments to attack and pillage ships of enemy nations with the understanding that profits would be shared with the governments. The most well-known English privateer was Sir Francis Drake.

In the mid-18th century many of the ongoing wars ended leaving many sailors and privateers without (legal) naval employment. They resorted to piracy, mainly in the Caribbean but also along the Atlantic coasts, the West Coast of Africa, in the Indian Ocean and the South China Sea. Generally, these were areas which lacked strong governments which could counteract the pirates.

Buccaneers were pirates and privateers who attacked Spanish shipping in the Caribbean. Henry Morgan was a buccaneer. Corsairs were pirates, Muslim and Christian, operating in the Mediterranean. The Barbary corsairs were Muslim pirates operating from the North Africa states of Algiers, Tunis, Tripoli, and Morocco (known as the Barbary States). The Maltese corsairs were Christians holding licenses from the Christian Knights of St. John to attack barbarian Turks. Norse sea raiders operating in the 9th-11th centuries were known as Vikings or Danes rather than pirates.

The foregoing discussion focuses on the Western experience” with piracy. Piracy also prevailed in the Asian theater. The Strait of Malacca has been a “prime location for pirates to capture vessels” from the 1400s to modern day (Hughes, 2007).

The presence of women pirates was rare since it was considered bad luck to have women aboard ship. While not a common occurrence there were some notable exceptions. The best known female pirates in the Golden Age were Anne Bonney, Grace O’Malley, and Mary Reed. Mary Reed concealed her gender for most of her pirate days.

3. INTERNATIONAL LAW AND MARITIME PIRACY

The major international legal instrument covering maritime piracy (and other matters related to oceans) is the 1982 *United Nations Convention on the Law of the Sea* (UNCLOS), also known as the *Law of the Sea Treaty*, or *LOST*. Piracy is defined in Article 101 of the Convention as 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 a 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 of inciting or of intentionally facilitating an act described in subparagraph a. or b.

As of December 2012, there were 164 signatories to the Convention. The US had not signed the Convention as of December 2013.

Maritime piracy is a transnational organized crime, although it was not included in the *United Nations Convention against Transnational Organized Crime (CTOC)* of 2000 (generally referred to as The Palermo Convention), nor as one of its three associated Protocols, which provide the legal framework for transnational organized crime (UNGA, 2000a-d). Responsibility for the Palermo Convention and its Protocols is vested with the United Nations Office on Drugs and Crime (UNODC).

The Palermo Convention defines an ‘organized criminal group’ as a “structured group of three or more persons...acting in concert with the aim of committing one or more serious crimes... in order to obtain...a financial or other material benefit.”

According to the Palermo Convention, a criminal offense is transnational if it satisfies one or more of the following criteria:

- a. It is committed in more than one State
- b. It is committed in one State but a substantial part of its planning, direction or control takes place in another State
- c. It is committed in one State but involves an organized criminal group engaged in criminal activities in more than one State
- d. It is committed in one State but has substantial effects in another State.

The transnational nature of maritime piracy is illustrated quite well by the case of the hijacking of the Italian cargo ship, the *Enrico Levoli*, by Somali pirates. The ship was transporting a cargo of Caustic soda from Iran to Turkey. The ship was hijacked off the coast of Oman. The ship’s crew of 18 was comprised of seven Indians, six Italians and five Ukrainians (BBC NEWS, 2011). This particular hijacking involved eight countries in one fashion or another, including Somalia. The act of piracy requires significant organization, planning and specialized expertise. Luft and Korin (2004) described modern pirates as “trained fighters aboard speedboats equipped with satellite phones and global positioning systems and armed with automatic weapons, anti-tank missiles and grenades.” Over time the piracy game becomes more complex, so do the strategies of the agents involved.

The UNODC included Maritime Piracy in its regional “Threat Assessments” of Transnational Organized Crime (UNODC, 2013a-b).

4. THE ICC/IMB AND THE PIRACY REPORTING CENTER

In response to increasing acts of maritime piracy, the International Maritime Board (IMB) established, in 1992, the Piracy Reporting Center (PRC) located in Kuala Lumpur, Malaysia. The PRC operates on a 24 hr. basis with two main functions:

- 1) Providing a single point of contact for shipmasters under attack by pirates anywhere in the world. The reports are relayed immediately to the appropriate local law enforcement agencies.
- 2) Broadcasting the information to all vessels in the area.

The ICC/IMB Reports classify attacks as either *Actual Attacks* or as *Attempted Attacks*. Actual attacks are attacks which were *successful* while *attempted attacks* are attacks which were *unsuccessful*. Successful attacks are those attacks which result in the ship under attack being either boarded or hijacked. Unsuccessful attacks are those for which the ship under attack was fired upon or had an unsuccessful boarding attempt. In either case, an act of aggression is mounted against a ship that has potential consequences for the ship under attack. In the tables and discussions below pirate attacks are designated as successful or unsuccessful. This classification is in line with the May 2012 ruling of the US Court of Appeals for the Fourth Circuit that any armed attack aimed to hijack a ship, successful or not, is an act of maritime piracy (Tagioli, 2012). The terms attack and incident will be used interchangeably in this paper.

The tables which follow below are developed from the ICC/IMB reports for the years 2008, 2011 and 2012 (ICC/IMB (2009, 2012, 2013a). Such tables will not show the source again.

Table 1 documents the numbers of Piracy incidents (successful and unsuccessful combined) attributed to Somali pirates, pirates operating in the Gulf of Guinea, and in Selected Asian waters during the 2003-2012 time-period.

[illegible]

GULF of GUINEA PIRACY*											
Angola	3	0	0	4	1	2	0	0	1	0	11
Benin	1	0	0	0	0	0	1	0	20	2	24
Cameroon	2	4	2	1	0	2	3	5	0	1	20
D R Congo	0	0	0	3	4	1	2	3	4	2	19
Equatorial Guinea	0	0	0	0	0	1	0	0	0	0	1
Ghana	3	5	3	3	1	7	3	0	2	2	29
Ivory Coast	2	4	3	1	0	3	2	4	1	5	25
Nigeria	39	28	16	12	42	40	29	19	10	27	262
The Congo	0	0	0	0	0	1	0	1	0	4	6
Togo	1	0	0	1	0	1	2	0	6	15	26
TOTAL G of GUINEA	51	41	24	25	48	58	42	32	44	58	423
PIRACY IN SELECTED ASIAN WATERS											
Bangladesh	58	17	21	47	15	12	18	23	10	11	232
Indonesia	121	94	79	50	43	28	15	40	46	81	597
Malaysia	5	9	3	10	9	10	16	18	16	12	108
WORLD TOTAL	445	329	276	239	263	293	410	445	439	297	3436

*: Countries listed in the Gulf of Guinea are those, listed in ICG (2012), which experienced at least one attack in the relevant time period.

In the 2003-2012 time period, the number of piracy attacks globally had two peak years with 2003 and 2010 each having 445 attacks. Attacks reach a low point of 239 in 2006. The number of attacks globally increased each year from 2007 to 2010 with the largest increases occurring in 2008 and 2009. The upward trend reverses after 2010 with a small decrease in 2011 followed by a significant drop in 2012.

Total attacks by Somali pirates oscillated between 2003 and 2006. Attacks declined by 43% in 2004 and then increased by 300% in 2005. Somali attacks dropped by 54% in 2006. From 2007 to 2009, Somali attacks almost doubled each year. The number of attacks in 2010 increased only by one. Somali attacks peaked at 237 in 2011 and then dropped drastically to 75 in 2012. Total Somali attacks over the 2003-2012 period accounted for almost 30% of World attacks. The large drop in Somali attacks is the dominant cause of the global decline in 2012.

The observed drop in piracy incidents in 2012 was foreshadowed by the quarterly trend in 2011. Table 2 shows that quarterly figures in 2011 drop steadily from 150 in Q1 to 74 in Q4. Incidents in 2012 Q1 jump upward to 107 from the 74 incidents recorded in 2011 Q4. 2012 incidents decrease in Q2 and again in Q3. The number of incidents increases in Q4 to 64 but this is still 10 incidents below the 2011 Q4 number.

**Table 2: Quarterly Changes in Global Piracy Incidents
2011, 2012 and 2013 Q1**

2011				2012				2013		
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
150	123	92	74	107	74	52	64	67	72	49

Source: Developed from ICC/IMB (2012, 2013b)

The downward trend continued through the first three quarters of 2013 with 188 incidents reported globally. Each 2013 quarter had fewer attacks than the corresponding quarter in either 2011 and 2012.

Table 3 shows the breakout of successful attacks and unsuccessful attacks as well as the results of the attacks for 2011 and 2012

**Table 3: Successful and Unsuccessful Attacks by Piracy Group and Result
2011 and 2012**

Location	Successful Attacks				Unsuccessful Attacks			
	Boarded		Hijacked		Fired Upon		Attempted Boarding	
	2011	2012	2011	2012	2011	2012	2011	2012
SOMALI PIRACY								
Gulf of Aden	1	0	4	4	19	4	13	5
Oman	0	0	1	0	0	0	0	0
Red Sea	4	0	0	0	13	0	22	13
Somalia	15	2	23	10	78	16	44	21
TOTAL SOMALI ATTACKS								
	20	2	28	14	110	20	79	39
GULF OF GUINEA								
Angola	0	0	0	0	0	0	1	0
Benin	10	1	8	1	0	0	2	0
Cameroon	0	1	0	0	0	0	0	0
Congo	3	4	0	0	0	0	0	0
DR Congo	4	2	0	0	0	0	0	0
Ghana	2	2	0	0	0	0	0	0
Ivory Coast	1	4	0	1	0	0	0	0
Nigeria	5	13	2	4	2	8	1	2
Togo	0	2	0	4	0	0	6	9
TOTAL G of GUINEA								
	25	29	10	10	2	8	10	11
SELECTED ASIAN WATERS								
Indonesia	41	73	3	0	0	0	2	8
Malaysia	13	11	1	1	0	0	2	0
Bangladesh	10	11	0	0	0	0	0	0
WORLD TOTAL								
	176	174	45	28	113	28	105	67

attacks and Globally, successful in 2011 totaled 221

unsuccessful totaled 218. In 2012, global successful attacks numbered 202 and the unsuccessful ones totaled 95. For Somali Pirates, unsuccessful attacks out-number successful ones with successful attacks in 2011 numbering 48 and unsuccessful ones numbering 189. Similarly, in 2012, successful Somali attacks totaled 16 and unsuccessful ones totaled 59.

“Boarding” was the most frequent form of Successful Attack with comparable numbers in both 2011 and 2012. Non-African waters have the largest share of boardings with almost 70% of boardings in 2011 and 74% in 2012. In 2011, 45 ships were hijacked with all but 7 occurring in African waters. Somali pirates accounted for 28 hijackings in 2011 while pirates in the Gulf of Guinea had 10. In 2012, the number of hijackings fell to a world-wide total of 28 of which 14 were attributed to Somali pirates, another 10 were attributed to Gulf of Guinea pirates. In the Gulf, the area of hijacking swings from Benin in 2011 to Nigeria and Togo in 2012. For Benin, 2011 was an anomalous year as shown in Table 1. The upward jump in attacks off Benin likely reflects a reallocation of Nigerian pirate resources in response to increased pressure by the Nigerian Navy in Nigerian waters. For Togo, 2012 was an anomalous year with an upward spike in attacks as shown in Table 1.

Table 4: Status of Ships During Successful Attacks: 2011 and 2012

Location	Berthed		Anchored		Steaming	
	2011	2012	2011	2012	2011	2012
SOMALI ATTACKS						
Gulf of Aden	0	0	0	0	5	4
Oman	0	0	1	0	0	0
Red Sea	0	0	0	0	4	0
Somalia	0	0	0	1	38	11
TOTAL SOMALI						
	0	0	1	1	47	15
GULF OF GUINEA						
Angola	0	0	0	0	1	0
Benin	0	0	13	1	5	1
Cameroon	0	1	0	0	0	0
Congo	0	0	3	4	0	0
DR Congo	0	0	4	2	0	0
Ghana	0	0	2	2	0	0
Ivory Coast	0	0	1	5	0	0
Nigeria	0	0	2	4	5	13
Togo	0	0	0	4	0	2
TOTAL G of GUINEA						
	0	1	25	22	11	16
SELECTED ASIAN WATERS						
Indonesia	2	6	36	59	6	8
Malaysia	1	0	6	8	7	4
Bangladesh	1	0	9	11	0	0

WORLD TOTAL						299
	5	15	120	130	96	~~300~~
						301

Most successful attacks globally were on ships at anchor in both 2011 and 2012. This venue was the dominant one for Gulf of Guinea and Asian pirates. Globally, successful attacks on ships steaming fell significantly in 2012. Somali successful attacks on ships under steam fell to about 30 percent of their 2011 number. Successful attacks on steaming ships in the Gulf of Guinea increased by 50% driven by a surge in Nigerian successes.

**Table 5: Status of Ships during Unsuccessful Attacks
2011 and 2012**

Location	Berthed		Anchored		Steaming	
	2011	2012	2011	2012	2011	2012
SOMALI PIRACY						
Gulf of Aden	0	0	0	0	32	9
Red Sea	0	0	0	0	35	13
Somalia	0	0	0	0	122	37
Tanzania	0	0	0	0	0	1
TOTAL SOMALI						
	0	0	0	0	189	60
G of GUINEA						
Angola	0	0	0	0	1	0

Benin	0	0	2	0	0	0
Guinea	0	0	0	0	1	0
Nigeria	0	0	1	0	2	10
Togo	0	0	5	9	1	0
TOTAL G of GUINEA						
	0	0	8	9	5	10
SELECTED ASIAN WATERS						
Indonesia	1	1	1	7	0	0
Malaysia	0	0	0	0	2	0
WORLD						
	2	3	12	20	204	72

Most unsuccessful attacks occurred on ships while they were steaming, and Somali pirates wereresponsible for 189 of the global total of 204 unsuccessful attempts in 2011, and 60 of the 2012 total of 72. The number of unsuccessful attacks on steaming ships exceeded the number of successful attacks in each year.

Table 6: Global Success Rates of Attacks on Ships

	Berthed		Anchored		Steaming	
	2011	2012	2011	2012	2011	2012
Successful Attacks	5	15	120	130	96	57
Total Attacks	7	18	132	150	300	129
% Successful	71	83	81	87	32	44

As shown in Tables 4 and 5, the success rates of attacks mounted vary depending upon the status of the ships under attack. The success rates of attacks on ships at Berth or at Anchor are much higher than for ships attacked while steaming. As the old adage says, 'it is harder to hit a moving target.'

Tables 7 and 8 provide information on the violence to crew members during pirate attacks

Table 7: Types of Violence to Crew: 2003-2012

	03	04	05	06	07	08	09	10	11	12	TOTAL
Hostage	359	148	440	188	292	889	1050	1174	802	585	5927
Threatened	65	34	14	17	6	9	14	18	27	13	217
Assault	40	12	6	2	29	7	4	6	6	4	116
Injured	88	59	24	15	35	32	69	47	42	28	399
Killed	21	32	0	15	5	11	10	8	8	6	116
Kidnap/Ransom	0	86	13	77	63	42	12	27	10	26	356
Missing	71	30	12	3	3	21	8	0	0	0	148

. Over the 10 year period covered in Table 7, almost 6000 hostages were taken. The annual number of hostages taken increases from 188 in 2006 to the peak of 1174 hostages taken in 2010. The number of hostages declined over the next two years to 802 in 2011 and to 585 in 2012. The numbers for 2011 and 2012 are below the number of hostages taken in 2008. In addition to the hostages taken, 356 people were kidnapped for ransom.

Over the ten-year period, 116 crew were assaulted; another 399 crew were injured, and 116 were killed.

Table 8 shows the distribution of incidents of violence across pirate groups/areas for 2011 and 2012.

Table 8: Types of Violence to Crew by Piracy Group: 2011 and 2012

Location	Hostage		Threatened		Assault		Injured		Killed		Kidnap	
	'11	'12	'11	'12	'11	'12	'11	'12	'11	'12	'11	'12
SOMALI PIRACY												
Gulf of Aden	47	38	0	0	0	0	0	0	1	0	0	0
Oman	21	0	0	0	0	0	0	0	0	0	0	0
Somalia	402	212	0	0	0	0	3	1	7	2	10	0
TOTAL SOMALI PIRACY												
	470	250	0	0	0	0	3	1	8	2	10	0
GULF OF GUINEA												
Benin	140	19	16	0	0	0	2	0	0	0	0	0
Cameroon	0	1	0	0	0	0	0	0	0	0	0	0
DR Congo	0	0	0	0	0	0	0	1	0	0	0	0
Ghana	0	0	0	2	0	0	0	1	0	0	0	0
Ivory Coast	0	25	1	1	0	0	0	0	0	0	0	0
Nigeria	45	61	0	0	0	1	32	7	0	4	0	26
Togo	0	79	0	0	0	0	0	1	0	0	0	0
TOTAL GULF OF GUINEA ATTACKS												
	185	185	17	3	0	1	34	10	0	4	0	26
SELECTED ASIAN WATERS												
Indonesia	48	47	5	4	0	3	3	4	0	0	0	0
Malacca Strait	19	6	0	0	0	0	0	0	0	0	0	0
Malaysia	39	49	2	0	1	0	0	8	0	0	0	0
WORLD TOTAL												
	802	585	27	13	6	4	42	28	8	6	10	26

The major form of violence inflicted upon crews is “hostage taking” with 802 hostages world-wide in 2011. Of these, 655 (82%) were taken by Somali pirates and those operating in the Gulf

of Guinea combined. Somali pirates accounted for 470 (59%) of hostages taken globally. Benin waters had the second largest set of hostages with 140. There were eight crew members killed in 2011, all of whom were killed by Somali pirates operating off Somalia (7) or in the Gulf of Aden (1). The number of hostages taken fell to 585 in 2012 as a result of the drop in successful attacks. Hostages taken by Somali pirates dropped by almost one half. Benin took only 19 hostages in 2012 compared with 140 in 2011. On the other hand, Nigeria took 16 more hostages in 2012 and Togo which had no hostages taken in 2011 took 79 in 2012. Six crew members were killed in 2012. Nigeria accounted for four killings, and Somali pirates accounted for the remaining two.

Table 9 presents the number of incidents in which various weapons were used. The ICC/IMB Reports present three weapons categories: Guns (G), Knives (K), and Other Weapons (OW). A fourth category is essentially unknown since there was No Weapon Stated (NWS).

**Table 9: Number of Piracy Incidents involving the Use of Specified Weapons
2003-2012**

	03	04	05	06	07	08	09	10	11	12	TOTAL
G	100	89	80	53	72	139	243	243	245	113	1055
K	143	95	80	76	67	68	71	88	69	73	436
OW	34	15	13	10	14	6	6	6	8	7	47
NWS	168	130	103	100	110	80	90	108	117	104	609
Total	445	329	276	239	263	293	410	445	439	297	2147

Guns were used in almost half of total pirate attacks over the 2003-2012 time period, and gun use in attacks was more than double the number of incidents featuring knives. Other weapons were used in only two percent of attacks. “No weapon” was stated in 28 percent of attacks. Gun usage in attacks declined significantly between 2003 and 2006, and then increased almost five-fold from 2006 to 2009. From 2009 to 2011 gun usage was almost constant. In 2012, gun usage in attacks dropped by 54%. The trend in gun usage in attacks mirrors the trend in attacks by Somali pirates as seen in Table 1. Knife usage decreased steadily from 2003 to 2007. After 2007, the number of knife-use attacks was basically flat fluctuating between 68 and 73 incidences except for a spike to 88 incidences in 2010. Other Weapons use peaked at 34 in the first year of the interval and dropped to less than half the peak number for the rest of the time interval. Other Weapon use dropped into single digit use for 2008-2012.

Table 10: Weapon Use by Pirates Groups in 2011 and 2012

	2011					2012			
	G	K	OW	NWS		G	K	OW	NWS
Somali	201	0	0	36		56	0	0	19
G of Guinea	29	7	0	11		37	11	0	10
Indonesia	3	18	2	23		4	34	6	37

Table 10 shows the preference for the use of guns by the Somalis—there was no knife use by Somalis in the two years shown. The Gulf attacks feature guns and to a lesser extent, knives. Indonesia used knives predominantly.

6. SUCCESS RATES OF PIRACY INCIDENTS IN VARIOUS AREAS

The number of attacks by Somali pirates increased in each year from 2006 to 2011 (Table1). The upward trend reversed in 2012. Total attacks by Somali pirates in 2012 dropped to slightly less than one-third their 2011 level.

Table 3 above allows an examination of success rates of attacks in the various regions. Table 11 shows the break-out of Successful (S) attacks, Unsuccessful (U) attacks, Total (T) attacks and the Success rates (S-Rate) in 2011 and in 2012 for selected regions.

Table 11: Successful (S) attacks, Unsuccessful (U) attacks, Total (T) attacks, and Respective SuccessRates (S-R) in 2011 and 2012

	2011					2012			
Region	S	U	T	S-R %		S	U	T	S-R%
Gulf of Aden	5	32	37	14		4	9	13	31
Oman	1	0	1	100		0	0	0	0
Red Sea	4	35	39	10		0	13	13	0
Somalia	38	122	160	24		12	37	49	24
Total Somali Attacks	48	189	237	20		16	59	75	21
Gulf of Guinea									
Angola	0	1	1	0		0	0	0	0
Benin	18	2	20	90		2	0	2	100
Cameroon	0	0	0	0		1	0	1	100
Congo	3	0	3	100		4	0	4	100
DR Congo	4	0	4	100		2	0	2	100
Ghana	2	0	2	100		2	0	2	100
Ivory Coast	1	0	1	100		5	0	5	100
Nigeria	7	3	10	70		17	10	27	67
Togo	0	6	6	0		6	9	15	40
Total G of Guinea Attacks	35	12	47	75		39	19	58	67
Selected Asian Waters									
Indonesia	44	2	46	96		73	8	81	90
Malaysia	14	2	16	88		12	0	12	100

Bangladesh	10	0	10	100		11	0	11	100
WORLD TOTAL	221	218	439	50		202	95	297	68

Somali pirates, collectively, have the lowest success rates among the other regions which are listed in Table 11, with roughly one-fifth of the attacks being successful. While attacks by Somali pirates dropped significantly in 2012, the success rate rose by one percentage point. Collectively, the Gulf of Guinea pirates have higher success rates than the Somalis. Gulf attacks in 2012 increased but the success rate dropped. Asian pirates have very high success rates. Using a hunting analogy, the Somalis appear to prefer the use of a shotgun approach in which they launch a large number of attacks in the expectation that some will hit the target (i.e. be successful) and have a high payoff. Indonesia makes fewer attacks but they are highly successful- they prefer to use a well-aimed rifle shot rather than a shotgun approach. The success rates reflect the status of ships targeted: at berth, at anchor, or under steam (Table 6).

7. Objectives of Somali and Gulf of Guinea Pirates

The (British) Royal Navy defines pirates as “...*sea robbers who prey upon other ships and rob them of their goods, and sometimes capture the ship for their own purposes.*”

The main objective of the persons who resort to piracy is to receive the highest (expected) financial gain for their efforts. Individuals will opt for illegal activities if these are perceived to provide the greatest financial gain amongst the set of alternative options in accordance with Jeremy Bentham’s quote at the front of this paper. A successful pirate attack yields a set of products which can lead to financial gain: the goods carried by the ship, the vessel itself, and the persons onboard.

7.1 The Rise and Decline of Somali Piracy

The Somali pirates focused most on capturing the vessel and then ransoming the crew and possibly the vessel with, or without, its cargo. The cargo itself does not appear to be a central objective of the attacks. Table 12 shows the vessels released and ransom status of vessels released, and an estimate of ransoms paid. Some vessels seem to have disappeared from the inventory of ships held by the pirates. It is presumed that either these vessels have been used as mother ships to allow pirates to move further off-shore for their prey, or have been sunk or otherwise disappeared. Also a strong possibility is that the gap is due to reporting error (World Bank, 2013b).

**Table 12: Number of Ships released with or without ransom paid and the (Mid-point)
Estimate of Ransoms Paid
2005-2012**

		05	06	07	08	09	10	11	12
# of Ships Released	No Ransom Paid	0	0	0	4	7	3	9	4
	Ransom Paid	8	8	11	22	39	24	32	8
US \$ Amount of ransoms paid (mid-point of high/low estimates)		1.8	0.7	4.7	26.4	71.2	79.8	153.4	38.4

Source: Developed from World Bank (2013, Figures 4.1 and 4.2). Ransom paid figures are the mid-point of the high-low estimates provided in Figure 4.2.

The rise in Somali piracy in the 2000's is generally explained as a response by Somali fishermen to the consequences of foreigners over-fishing Somali waters and dumping toxic wastes in Somali waters. While these may have been initiating factors, piracy became very lucrative. Ironically, the ship companies' collective actions contributed to the rapid increase in attacks in the early phase of the piracy expansion. In response to ships being hijacked and the crews being held for ransom, the companies preferred response was to pay the ransom rather than to avoid bad publicity and the delays caused by time-consuming investigations that were likely to follow (Gwin, 2007). The ransoms would be covered by insurance. Thus the shipping companies shifted the financial burden to the insurance industry. As a result the ship owners' collective actions, unintentionally, created perverse incentives for the would-be pirates. The owners signaled that they would not resist attack and would oblige the ransom demand. If they could board the ship and take control the pirates would be rewarded financially. In the early days, entry to piracy was relatively open especially for fishermen who had boats and a crew. They could attack ships that sailed relatively close to shore. The average successful attack in 2005 took place 109 km from the Somali coast (UNODC, 2013b). The success of the early attacks would lead to an increase in those choosing piracy for gain.

A World Bank (2013a) study estimated that Somali piracy alone cost the global economy about US \$18 billion annually. Economic agents are not passive creatures. Instead they respond to external stimuli in ways that serve their self-interests.

Not surprisingly, insurance companies began to adjust rates upwards. According to one source the rate jumped from \$500 per ship, per voyage to \$150,000 per ship, per voyage for travel through risky waters (Ploch et al., 2011).

The shipping companies began using "Best Management Practices." One adjustment was to sail alternate routes keeping a distance away from the risky waters. This forced the pirates to have to search further from shore. In 2012, the average successful attack took place 746 km from the Somali coast ((UNODC, 2013a). This increase in the distance to be travelled increased the need for more sophistication in planning the attacks. The smaller craft used initially were not

sufficient. This resulted in the use of “mother-ships” which could handle the greater distances and serve as a platform for launching the smaller, swifter and more versatile craft to attack the ships. The need for information regarding the ships placements or lanes became more important. The resulting process was more complex, and the attacks more costly. This increase in cost led to the need for financiers to fund attacks up-front. The financiers now had a claim on the proceeds from any attack. This would lead to a shake-out in the piracy industry. Crews unable to find financial backing would either drop out of the industry or continue as before but seeking easy hits in areas not being covered by the larger operations. World Bank (2013b) provides an excellent analysis and discussion of the illicit financial flows involved in Somali piracy.

The ships also began to take measures to repel boarders. One particularly effective approach was the hiring of trained and armed personnel to ward-off attempts to board the ship. Ship companies had resisted this approach. International naval forces patrolling the waters off the Horn had a substantial impact. These factors combined substantially increased the risk to the pirates attempting to board ships.

The time taken for hostage negotiations also increased. Consequently, the costs of holding and caring for the hostages also rose, thereby reducing the net take of the ransom funds. Raids on coastal communities by military forces and the rise in prices caused by the inflow of pirate money caused a drop in community sympathy for the pirates.

The expected net return for the pirates had declined, and consequently, piracy off the Horn of Africa declined.

7.2 *Changes in Piracy in the Gulf of Guinea*

The motivation, and nature, of piracy in the Gulf of Guinea are quite different from that of the Somalis. According to UNODC (2013b), most of the piracy attacks in the past were “nothing more than maritime robbery” in which the robbers counted on the attacks going unreported. The recent attacks have aimed at securing the ship’s cargo, particularly refined petroleum products “typically carried in fairly small craft known as ‘product tankers’ or ‘chemical tankers’.” Between 2010 and late 2013, Gulf pirates stole an estimated 117,000 tons of petroleum products valued at \$100 million according to *Risk Intelligence* (Miklaszewski et al., 2013). These petroleum attacks have spawned robberies in waters previously deemed safe (UNODC, 2013b). The piracy can be seen to be an extension of the petroleum thefts on land in the Niger Delta. Hijacking ships for their cargo has implications for the crews. Unlike crews on ships hijacked by the Somali pirates, the crews on ships attacked by pirates in the Gulf are seen as an impediment. In 2011 and 2012 combined, attacks in Nigerian waters resulted in 39 crew members being injured and four killed.

According to UNODC (2013b) all the hijackings in 2011 and 2012 involved tankers and these were confined to three countries Benin, Nigeria and Togo with all other attacks in the Gulf being “simple robberies.” Their hijacking assessment conforms to the data in Table 3 with the exception of one hijacking off the Ivory Coast in 2012.

In discussing the fore mentioned shift in attacks from Benin in 2011 to Togo in 2012, UNODC (2013b) asserts that “Most of the pirate attacks to date have been close to shore, and none have involved ships actively underway (“steaming”).” However, Table 4 shows successful attacks on six ships while steaming off Benin, two steaming off Togo and 18 steaming off Nigeria in 2011 and 2012 combined. There were also unsuccessful attacks on ships while steaming.

Continued success of hijacking in the Gulf depends on finding buyers for the petroleum products. According to UNODC (2013b), the major concern regarding Gulf piracy is the damage to trade caused by the increase in insurance rates resulting from adjustors putting Benin’s waters in the same risk category as Nigeria’s.

8. CONCLUSIONS

This paper has synthesized and analyzed information regarding maritime piracy from various sources to develop profiles of piracy in different waters, primarily those off Africa. The data shows different time-trends as well as different tactics used in pursuit of a common objective – financial gain. The success rates of types of attacks and different waters. In particular Somali pirates attack ships under steam using guns exclusively. Their objective is to capture the ship in order to ransom the crew and possibly the vessel and cargo. The success rate is low compared to other pirates.

Somali piracy resulted in a set of responses by affected groups which in turn resulted in counter responses by the pirates and so forth. The ultimate result was a decline in the lucrativeness of piracy and a drop in attacks. A “notorious and influential” Somali pirate leader nicknamed Afweyne (Big Mouth) announced he was quitting “this dirty business” and encouraged his colleagues to renounce piracy as well (Telegraph, 2013).

Some questions arise following the decline of Somali piracy.

1. Where are the former pirates now?
2. What are the former pirates doing to support themselves and their families?
3. Will the piracy resume after naval forces withdraw from patrolling the waters?

The piracy in the Gulf of Guinea consists of those classified as simple opportunistic robberies and those seeking to capture ships for their cargos of refined petroleum products. Continued success by the petro- pirates of the Gulf of Guinea will depend upon the pirates enhancing their operations and securing outlets for the stolen petroleum products. UNODC (2013b) observed that “There are few places in the world where one can offload thousands of tons of stolen fuel.” UNODC (2013b) further suggested that the pirates would need “a buyer with links to a formal distribution operation”.

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APPENDIX 1: MAP OF CURRENT DAY AFRICA



Source: Map supplied by Professor John T. Bauer of the University of Nebraska at Kearney.

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