Trends in Modern Piracy: Cycles, Geographical Shifts, and Predicting the Next “Hot Spots”

Donna J. Nincic

The period of modern maritime piracy has now been with us long enough to show certain trends and patterns. Piracy's success contains within itself the seeds of its own demise: as it becomes too successful, it provokes a reaction from the international community, which causes a decline in the profitability of piracy. Piracy has also demonstrated a remarkable tendency towards clear geographical shifts from one “hot spot” to the next. Our increased understanding of piracy cycles and geographical trends has provided us some level of predictive ability, allowing us to suggest some of the next “hot spots” for maritime piracy.

Introduction

Modern maritime piracy has shown evidence of transitioning through cycles of both intensity and geography. Piracy peaked during the late 1990s into the early 2000s, and again in 2011, with lower levels of activity in 2005–6 and 2012–13. At the same time, modern piracy has shifted in geographical location, with earlier piracy concentrated in the Strait of Malacca region before shifting to the Horn of Africa in the mid to late 2000s. In the last few years, activity has largely shifted back to the Indonesia, Singapore, and Malaysia region as well as to the Gulf of Guinea.

Not only does maritime piracy show clear cycles of geography, and intensity, but left unchecked, piracy tends to transition through levels of increasing complexity and violence. When it first appears, piracy tends to be little more than petty crime; left unchecked, it will tend to become more organized, moving from “mom and pop” operations to sophisticated criminal gangs. Similarly, piracy shows a tendency to become more violent over time, and there is increasing evidence that it has become more intertwined with other forms of maritime criminality, including terrorism, drug and weapons trafficking, and even human trafficking.

Dr. Donna J. Nincic is The Cropper Family Distinguished Professor and Director of the ABS School of Maritime Policy and Management at the California Maritime Academy, California State University. She received her doctorate in Political Science/International Relations from New York University, and has held previous positions at the University of California, Davis; the Hoover Institution; and the US Department of Defense. Her research focuses on maritime security, particularly piracy and terrorism.

All of this allows us not only to begin to map patterns of maritime piracy, but to begin to identify linkages to other form of maritime crime.

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Trends in Modern Piracy

Piracy has occurred as long as ships have gone to sea. However, we date the period of “modern” piracy from the mid-1990s, when pirate attacks in the Strait of Malacca and the South China Sea region became so prevalent as to come to the attention of the international shipping community and, subsequently, to the United Nations.¹

As can be seen in Figure 1, maritime piracy has fluctuated significantly between the years 2002 and 2012, with clear peaks in 2003 and 2010. What is not clear from the figure, however, is the geographic fluctuation in attacks. During the period 2002–2005, most of the world’s reported pirate attacks were situated in and around the Strait of Malacca, East Asia and the South China Sea. During this period, the international shipping community placed considerable pressure on the nations bordering the Strait of Malacca—Indonesia, Malaysia and Singapore—to take action to stop the frequency of attacks. With the increased security measures subsequently adopted, piracy dropped substantially in the region by 2005 (the drop can also be partially attributed to the Indian Ocean tsunami that hit Southeast Asia in December 2004) and remained very quiet for several years.

However, as piracy began to decline in Asia, it began to increase in the Gulf of Aden, specifically off the coast of Somalia; rises in global maritime piracy after 2005 are attributed mostly to the rise in acts of maritime piracy committed by Somali pirates. By 2008, the number of pirate attacks in Africa had surpassed those in Asia, with 64.5 percent of the world’s attacks reported in Africa in that year. Somali pirates committed most of these attacks, with attacks by Nigerian pirates a distant second. By 2009 Somalia and Nigeria were the top two piracy “hot spots” in the world, with 211 attacks reported in Somalia, and twenty-eight reported in Nigeria.²

The continued rise in global attacks from 2007 to their peak in 2010 is attributed almost exclusively to the Somali pirates and their ability to operate farther and farther from the Somali coast. By 2010, Somali pirates had expanded their attacks to the south and to the east as they began to master increasingly sophisticated methods of operation, including hijacking and hostage taking. At the height of their operations they were able to

Figure 1. Global Maritime Piracy: Number of Attacks, 2002–2012

Source: International Maritime Bureau, 2013

stage successful attacks well into the Indian Ocean; one within 400 nautical miles of the Indian coast, another in proximity to Madagascar, and another near the entrance of the Persian Gulf. Their use of “mother ships” capable of operating at sea for months at a time, multiple smaller attack boats, a seemingly endless supply of rocket-propelled grenades and other light arms, combined with the adoption of global positioning systems, satellite phones, and ship tracking methods, made attacks by Somali pirates increasingly difficult to intercept and prevent.

However, by 2012, attacks by Somali pirates had dropped substantially. As can be seen in Table 1, Somali pirate attacks on merchant shipping, yachts and fishing vessels dropped from a high of 237 attacks in 2011 to a low of seventy-five in 2012. This represents a remarkable drop of over 300 percent in just one year.

Table 1. Attacks by Somali Pirates: 2009–2013
Selected Pirate Attacks: January–June, 2012–2013

	2013	2012
Indonesia	48	32
Nigeria	22	17
Bangladesh	6	6
Colombia	6	2
India	6	4
Egypt	5	5
Togo	5	5

(Source: International Maritime Bureau, 2013)

Maritime piracy has continued to drop in 2013, with 138 pirate attacks in the first six months of the year, the lowest recorded for the six-month period since 2008, when attacks committed by Somali pirates dropped to eight, with only two of these resulting in a successful hijacking. At the same time, there has been a corresponding rise in the number of attacks in Nigeria and the Strait of Malacca region. To date in 2013, seven countries have accounted for 70 percent of all pirate attacks (Table 1). Prior to this year, little attention has been paid to these areas as particular concerns for mariners; however, given the recent drop in Somali piracy, attacks in these countries now contribute more meaningfully to overall attack figures and may continue to do so in the future.

Cycles of Maritime Piracy: The Case of Somalia

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1) the success of global multi-national naval task forces and independent operators in combatting piracy, 2) the increasing adoption of best management practices by merchant ships, and 3) developments on the ground in the internal political situation in Somalia. The reasons for the initial rise and current drop in Somali piracy are important to understand, especially as we are currently seeing increases in piracy in other parts of the world.

In 2004, traditional fishermen were dismayed by the inability of the Somali central government to protect their country's 200-nautical-mile (one nautical mile is equal to

1.15 statute miles) exclusive economic zone, as well as the number of foreign fishing vessels illegally exploiting their traditional fisheries. Consequently, the fishermen transitioned from a fishing "business model" to organized crime. They initially armed themselves to chase off foreign invaders. Some fishermen acted as "coastguards," protesting the extent of foreign illegal dumping of highly toxic wastes at sea and on land.⁴ However, other fishermen quickly realized that robbing the vessels could become a lucrative way to make up for lost income, as the drought-stricken and flood-ravaged land lacked other viable economic alternatives.

Taking advantage of the power vacuum and the rise of "ungoverned geographical spaces," rival warlords carved out influence over regional territories—first on land, and then increasingly at sea. The land-based warlords co-opted some of the pirates and organized them into increasingly sophisticated gangs. By 2008, as piracy became technologically more sophisticated, better armed, and better organized, it began to have not only negative impacts on Somali society, but, somewhat counter-intuitively, some positive impacts as well. Piracy has led to increased income and social status for Somalis connected to the pirate economy in cities like Boosaaso, on Somalia's northern coast.⁵ Both the negative and positive impacts have created "feedback loops," increasing the attractiveness of maritime piracy as an economically viable option.

The development of piracy in Somalia, with its related social reinforcing mechanisms, can be represented by the framework depicted in Figure 2. Initially, degraded social conditions (economic destitution, lack of enforcement against fisheries exploitation), led to what could be termed "vigilante piracy." During this period (roughly 2000–2004), most pirates

were small-scale in nature, capable of only moderate attacks. Many of these pirates are well-documented to have been protesting the illegal fishing in Somali waters. Subsequently, as these initial pirates became increasingly emboldened by success, they turned their attention to other vessels, robbing ships within their

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territorial waters and up to one hundred nautical miles offshore ("territorial piracy.") A few well-publicized attacks, including those on the M/V *Faina*, which many suspected was carrying arms for the conflict in Sudan, and the M/V *Sirius Star*, the largest very large crude carrier ever captured, as well as the beginning of hijacking for ransom, led to the recent period of "warlord piracy." During this period, operations became increasingly well-armed, technologically sophisticated, and organized. Somali piracy at its height extended over a geographical territory stretching over 1,000 nautical miles offshore reaching out to the Seychelles, south to Mauritius and into the Indian Ocean.

It is in the current period that the negative impacts of piracy (continued degradation of social conditions and increasing ineffectiveness of the state in controlling the ungoverned geographical spaces) create the vicious reinforcing mechanisms whereby both the social benefits (increased income from ransoms, decreased alienation due to cohesion and group identity) and diminished costs of piracy create incentives to turn to maritime crime.

The dotted line demonstrating this "positive" feedback loop is expected to be of short duration. For example, while ransom *demands* can run

Figure 2. The Progression of Somali Piracy

as high as \$35 million (for the release of the M/V *Faina*, a Ukrainian-flagged vessel captured in September 2008), actual ransom *payments* averaged approximately \$5 million in 2011, dropping to \$3.9 million in 2012.⁶ While the 2010 figure was an increase from the average ransom in previous years, the number of stakeholders with a claim on the ransom had increased; pirates started having to split the ransoms they received with their investors. Investors typically received 35 percent, with hijackers receiving 50 percent and guards on the ship getting the remaining 15 percent.⁷ This trend has been coupled with a trend towards more individuals participating in single attacks. For example, an unprecedented nineteen pirates took part in the ill-fated hijacking of the *Quest* in 2011. In 2012, the average ransom dropped as a result of the increased difficulty of capturing vessels due to global and ship-level anti-piracy measures that had been put in place, making pirates willing to settle for less.

The pattern of piracy in Somalia is consistent with the observed “cycles of maritime piracy.” According to Phillip Gosse, maritime piracy goes through three distinct phases (depicted below): 1) the turn to mari-

time crime, 2) increasing network formation, driving out individuals, and 3) "war" between the pirates and the international community, leading to the eventual defeat of the pirates.⁸ Early years of Somali piracy saw small level operators responsible for most of maritime piracy, then an increasing level of sophistication and organization. As the international community responded, piracy became more difficult for the Somalis, resulting in an eventual decline in attacks.

Table 2. Cycles of Maritime Piracy

Phillip Gosse	Somalia
Individuals turn to maritime crime	Entry and success (vigilante, territorial piracy)
Pirate networks form and drive out individual operators	Additional entrants; division of labor, "pirate groups" form, learning, technology adoption (warlord piracy)
"War" between pirate organizations and those seeking to suppress them; pirates eventually lose	International response; increased competition, technical bar rises on diminishing marginal returns
	Diversion
	Collapse

The "war" between pirate organizations and those seeking to suppress them began in 2008 with the deployment of international task forces to the region. Largely led by western nations, these include: Combined Task Force 151, initially led by the United States and now under rotating command; the European Union's NAVFOR/Operation Atalanta; and NATO's Operation Ocean Shield. Individual countries, including China, India, Iran, Russia, and Malaysia, patrol the area as well.

The task forces began to show some level of success almost immediately. While overall numbers of pirate attacks remained high prior to 2012, they were preceded by a decline in the overall *success rate* of pirate attacks.⁹ A study of pirate attack success rates noted that, by 2010, while the number of total attacks had not decreased, the percentage of successful attacks had declined since the international task force deployments: from 37.8 percent in 2008 to 23.9 percent in 2009 (after the task forces became operational in the region), and down to 31.3 percent in 2010.¹⁰

As the international task forces were deployed in the Gulf of Aden region, the global shipping community began to more aggressively adopt and implement "best management practices." Ships began to adopt measures such as standing extra watch and increasing speed, which have always been recommended when transiting dangerous waters, more thoroughly. The reason for this is clear. While the international task forces can provide a strong deterrent to piracy and may assist in rescue operations, they cannot

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Finally, recent political developments in Somalia have led to further reductions in piracy. These include strikes on pirate attack vessels by French air forces, pirate kingpin retirements, and amnesty for children in piracy (this involves over 900 children who had been functioning

as part of pirate organizations). An understanding of the current "collapse" of piracy in Somalia is important for several reasons: 1) it illustrates that maritime piracy tends to be cyclical, 2) it gives us an understanding of those actions which can lead to a reduction in piracy, and 3) this understanding gives us a sense of which anti-piracy measures are best transferrable to other piracy "hot spots" around the world.

The "Web of Criminality" and Emerging Areas of Maritime Piracy

An emerging area of concern is "diversion," or the expansion of known pirates into other forms of illicit activity, such as drug, weapons, and human

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trafficking as maritime piracy collapses. What may actually be the most significant threat for the maritime industry is the emerging "web of criminality" with pirates, terrorists, and ordinary criminals working in an ad hoc manner around criminal opportunities.

From 1997 through mid-2012, the U.S. Coast Guard (responsible for all U.S. maritime drug interdiction) seized 806,469

pounds of cocaine and 333,285 pounds of marijuana; maritime interdiction accounted for 52 percent of all U.S. government cocaine seizures.¹² Arms

smuggling occurs freely and openly throughout many parts of the world as well, particularly in Africa and Asia, with the shipping industry wittingly or unwittingly transporting many of these illegal cargoes. Finally, trafficking in human beings is estimated to be the third largest criminal enterprise in the world, behind illegal drugs and arms trafficking, with between 600,000 and 800,000 people, often women and children, trafficked across international borders annually, frequently by sea.¹³

While of concern in and of themselves, trafficking in drugs, weapons, and human beings is even more problematic because it is all part of the increasingly overlapping "web of criminality" connected through the global maritime domain. Such activities use the same shipping routes as legitimate merchant trade, and oftentimes, illicit goods are smuggled using legitimate merchant trade vessels.

Case Study: Africa

Africa has the least efficient ports in the world, suffering from poor maintenance, infrastructure limitations, bureaucratic red tape, inadequate law enforcement, and lax security.¹⁴ Lax port controls and ineffective or non-existent patrolling of territorial waters have led to the use of some African ports as entry points for the drug trade from Latin and South America into Europe. For example, cocaine trade from Brazil and Venezuela increasingly transits through West Africa on its way to Europe.¹⁵ By 2010 the amount of cocaine trafficked through West Africa accounted for one quarter of Europe's annual consumption.¹⁶ Additionally, there are estimates that up to 50 percent of non-U.S. bound cocaine, or 13 percent of global flows, transits through West Africa. Much of this trade is by sea; at-sea seizures of illicit cocaine increased 166 percent between 2005 and 2006.¹⁷ Marijuana and hashish have various maritime points of entry in West Africa, with ports in Liberia and Sierra Leone being particularly noted.¹⁸ In Nigeria, the militant groups Movement for the Emancipation of the Niger Delta (MEND) and the more radical Boko Haram have been associated not only with piracy and oil theft, but are believed to be involved in the illegal drug trade transiting through the country as well.

Additionally, weapons smuggling through African ports has been a long-standing problem. As with Somali pirates occasionally smuggling guns on behalf of suspected terrorist group al-Shabaab, pirates or criminals with boats are often willing to expand their operations to include other forms of maritime crime. A state that is lax or ineffective in pursuing maritime piracy, for example, is likely to be equally ineffective in thwarting drug smuggling and other forms of illegal maritime activity. Of possible concern for the future is that maritime piracy in Africa will be drawn into the "web" of international crime, linking arms and drug trafficking, prostitution and human trafficking, and other forms of transnational crime into an increasingly integrated network. This has occurred with terrorist and criminal groups, including Al Qaeda, the Liberation Tigers of Tamil Eelam, and the Kurdish Workers Party (known as the Kurdish PKK), who have all been implicated in narcotics, weapon and human trafficking.¹⁹ In a recent

statement, the Executive Director of the United Nations' Office on Drugs and Crime noted that, in addition to maritime piracy, the Horn of Africa has become an "illicit trafficking zone" for weapons, counterfeits, migrants, children, and drugs,²⁰ which includes al Shabaab's involvement with the illegal charcoal and khat trades (most of which is transited by ship). While not strictly related to maritime piracy, the experience of other national and international criminal groups offer some evidence of conflation between various forms of maritime criminality.

Conclusion: Future Hot Spots

Future "hot spots" of maritime piracy will depend on two conditions. First, maritime piracy will develop and/or increase in those areas where the foundational conditions are ripe for piracy to occur. In addition to the known increases in maritime pirate attacks in Nigeria and the Strait of Malacca, there are a few regions of the world showing signs of possible increases in piracy as well. By the first quarter of 2013, Vietnam, Bangladesh, India, Columbia and Peru had all shown attack figures equal to—or nearly equal to—their numbers for all of 2012, and there are signs that Haiti may become an area of possible piracy or maritime criminal potential. While there have been no reported maritime crimes in Haiti through the first quarter of 2013, and only one to two attacks per year in recent years, the socio-economic conditions present there point to possible exploitation by maritime criminal elements. Second, future "hot spots" may emerge in those areas where other forms of maritime criminality conflate with maritime piracy—areas such as Nigeria where piracy converges with other forms of illegal activity such as oil theft and drug transit, or in Southeast Asia where areas of human trafficking are showing possible signs of increasing overlap with maritime piracy (in countries such as Vietnam).

Maritime criminality will regrettably always be a fact of life at sea; despite the current 2012–2013 downturn in global maritime piracy, the numbers of attacks are actually increasing in Nigeria and the Strait of Malacca. Of further concern is the evidence that individuals involved in maritime piracy, terrorism, and illegal trafficking are increasingly working together in an expanding "web of criminality." The criminal exploitation of the maritime domain is an area that merits far more research and attention in the future.

Notes

¹ In 1998 the International Maritime Organization of the United Nations mandated the collection of pirate attack statistics, and in 2002 the International Maritime Bureau began to keep statistics as well.

² Attacks are generally considered to be under-reported in Nigeria, due to the large number of fishing vessels attacked; fishing vessels are far less likely to report attacks than commercial ships.

³ Aaron S. Arky, "Trading Nets for Guns: The Impact of Illegal Fishing on Piracy in Somalia" (Thesis, Naval Post Graduate School, September 2010).

⁴ "UN envoy decries illegal fishing, waste dumping off Somalia," *Agence France Presse*. July 25, 2008, http://www.google.com/hostednews/afp/article/ALeqM5gVV_gQDsp1m8v7n-PcumVc5McYV-Q.

⁵ R.M. Schneiderman, "Somalia's Pirate Economy," *The New York Times Economix Blog*, October 31, 2008, <http://economix.blogs.nytimes.com/2008/10/31/somalias-pirate-economy/>.

⁶ Anna Bowden and Shikha Basnet, "The Economic Cost of Somali Piracy," Working Paper, One Earth Future Foundation, Oceans Beyond Piracy, 2011, http://oceansbeyondpiracy.org/sites/default/files/economic_cost_of_piracy_2011.pdf.

⁷ Abdiqani Hassan, "Somali pirate: I made \$2.4 mln from ransoms in 2010," *Reuters*, March 10, 2011, <http://www.reuters.com/article/2011/03/10/us-somalia-piracy-idUSTRE7292PV20110310>.

⁸ Philip Gosse, *The History of Piracy* (New York: Longmans, Green and Co., 1932).

⁹ The International Maritime Organization divides pirate attacks into "actual" and "attempted." Actual attacks are those that are successful from the point of view of the pirate; they managed to board the vessel, rob it and/or hijack it for ransom. Attempted attacks are those where the ship managed to avoid being boarded.

¹⁰ Donna Nincic, "Countering Maritime Piracy: An Analysis of Best Practices," (Technical Cooperation in Maritime Education and Training: Proceedings of the 11th Annual General Assembly of the International Association of Maritime Universities, Korea Maritime University, Busan, South Korea, October 15–18, 2010).

¹¹ "Best Management Practices" include things like sounding the alarm, steering an erratic pattern to swamp pirate attack boats, using water hoses to repel boarders, lining the deck with barbed wire – even the use of tapes of barking dogs to frighten off attackers. Private maritime security companies (PMSC), or "armed guards", continue to be in the "grey area" of best management practices. While it is true that no ship carrying PMSCs, the use of PMSCs has not been universally adopted for a number of reasons. First, there are concerns about legal liability if injuries or fatalities occur. Second, the cost alone is prohibitive to many shipping companies; PMSC protection for a vessel is reported to cost \$80,000 per transit; a figure well out of the reach of many shipping companies. And third, acceptable universal rules of engagement have yet to be adopted.²¹

¹² "Drug Interdiction," US Coast Guard, US Department of Homeland Security, last modified 6/25/2012, http://www.uscg.mil/hq/cg5/cg531/drug_interdiction.asp.

¹³ "Trafficking in Persons Report, 2007," U.S. Department of State, June 2007, <http://www.state.gov/j/tip/rls/tiprpt/2007/>.

¹⁴ Michael Lyon Baker, "Swapping Pirates for Commerce," *Foreign Affairs*, October 4, 2010, <http://www.foreignaffairs.com/articles/66762/michael-lyon-baker/swapping-pirates-for-commerce>.

¹⁵ Denis Destrebecq, *Cocaine Trafficking in Western Africa: Situation Report*, United Nations Office on Drugs and Crime, October 2009.

¹⁶ V. Felbab-Brown, "The West African Drug Trade in the Context of the Region's Illicit Economies and Poor Governance," (paper presented at the Conference on Drug Trafficking in West Africa, Arlington, VA, October 14, 2010).

¹⁷ Denis Destrebecq, *Cocaine Trafficking in Western Africa*.

¹⁸ Stephen Ellis, "West Africa's International Drug Trade," *African Affairs*, 108 (2009):431.

¹⁹ Ali M. Köknar, "Maritime Terrorism: A New Challenge for NATO," Institute for the Analysis of Global Security, January 24, 2005, <http://www.iags.org/n0124051.htm>.

²⁰ A.M. Costa, "Assisting Somalia to Deal with its Pirates," (statement to the United Nations General Assembly, May 14, 2010).