Trends in Piracy: Piracy in the Horn of Africa
March 2015

This is a report from the Maritime Piracy Event & Location Data project. The focus of the report is piracy activity off Somalia and around the Horn of Africa from 1993 to 2014. The geographical area under scrutiny includes the Red Sea and the Western Indian Ocean, that is the Gulf of Aden and the Somali basin.

Reports from the International Maritime Bureau record piracy incidents off Somalia since the early 1990s, though the number of attacks has never exceeded 40 before 2005. After this year, piracy activity off Somalia reached unprecedented levels with tens of attacks reported each month and hundreds occurring by year (Figure 1 and Figure 2). This explosion in the intensity of maritime piracy around Somalia has generated increasing concerns and turned the shipping route through the Suez Canal and the Gulf of Aden into one of the most dangerous sea-lanes in the world. Only since 2012, two years after the mission was established, the counter-piracy initiative led by the European Union has achieved some success in curtailing the phenomenon. The following sections of this report identify specificities and patterns of Somali piracy and finally assesse the achievements of the EU naval mission in the area.

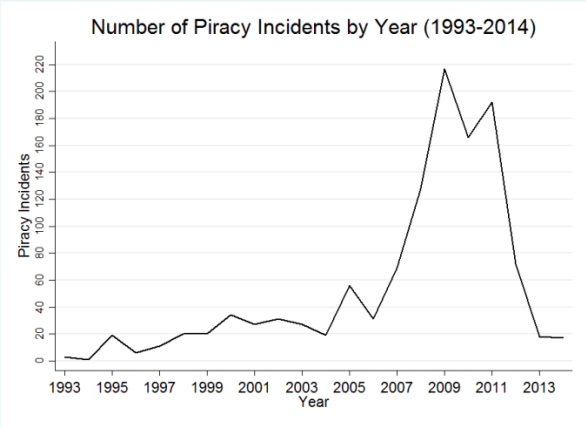

Figure 1. Piracy incidents by year (1993-2014)

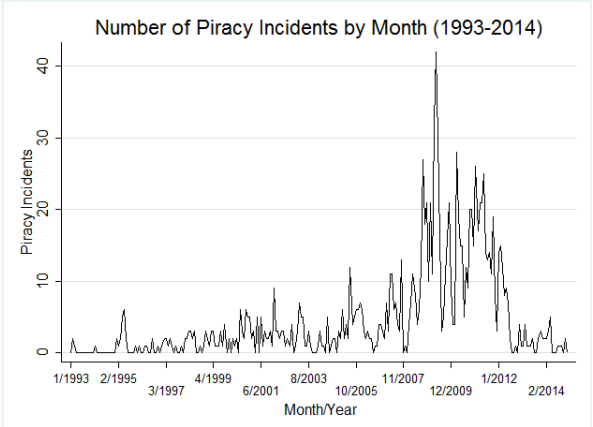

Figure 2. Piracy incidents by month (1993-2014)

Characteristics of Somali Piracy

Compared to other piracy-affected areas such as South-East Asia, Somali piracy has exhibited specific features. First of all, there is the location of the incidents. As Figure 3 shows, attacks are very scattered throughout the Western Indian Ocean with only 13% occurring within Somali territorial waters. Indeed, more than 80% of the vessels were underway during the attack and only 9% were either anchored or berthed (Figure 4). An additional factor facilitating attacks

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against steaming vessels is that the high density of shipping traffic through the Gulf of Aden combined with the chokepoint of the Bab-al Mandeb straits facilitates hit-and-run attacks against transiting ships from the Somali coast, especially from the Puntland area. Indeed, the map in Figure 3 precisely shows that most points are concentrated around the Gulf.

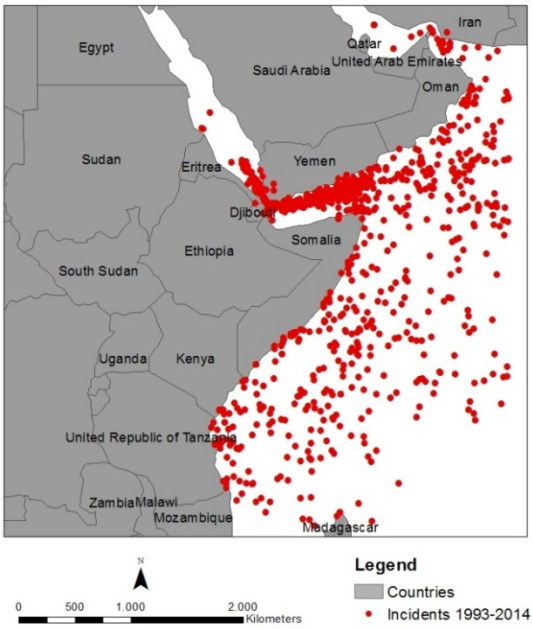

Figure 3. Map of Piracy incidents 1993-2014

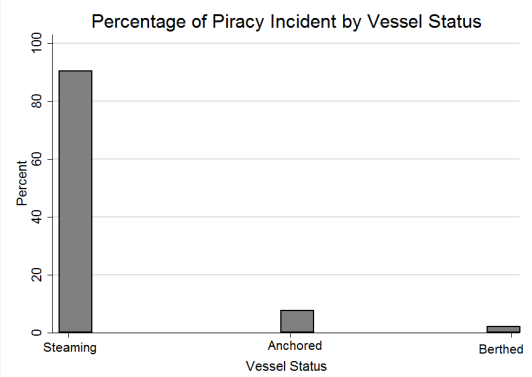

Figure 4. Percentage of Incidents by vessel status

Notably, however, the ability for pirates to reach locations further away from the coast has increased over time. Thus not only did the number of incidents dramatically rise after 2005, but also the geographic scope of the phenomenon widened. Pirates are now able to travel longer distances up to the Gulf of Oman and down to the waters of Mozambique. This pattern of diffusion is graphically represented in Figure 5 and Figure 6, where the ellipses describe the spatial spread of attacks. It is evident that the area increased in 2007 and 2009, while also moving the area of operation further away from the coast. In 2011 the area of risk shifted North, towards the Gulf of Aden, and became even wider. It is only around 2013 that piracy retreated and the spread stopped. I will discuss later the role played in this regard by the EU NAVFOR counter-piracy initiative, which was deployed to the area in the early months of 2009.

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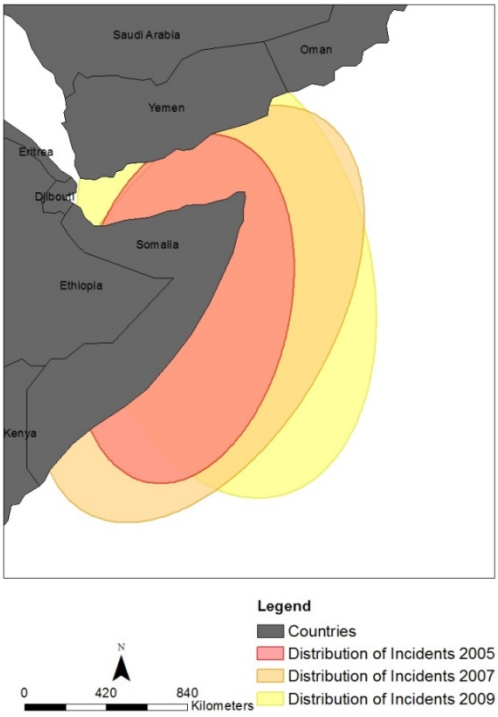

Figure 3. Distribution of incidents (2005, 2007, 2009)

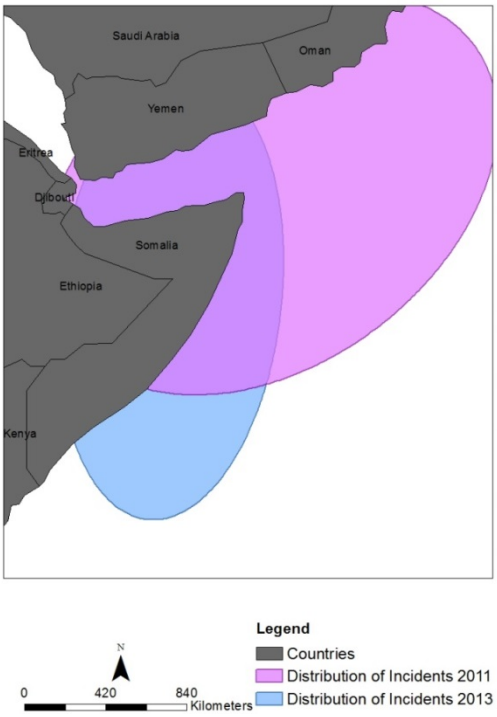

Figure 4. Distribution of incidents (2011, 2013)

Another feature of Somali piracy is that it commonly involves the hijacking of vessels. The number of boardings is approximately constant in time; hijackings, on the other hand, exceeded boardings after 2005 and peaked in 2009 (Figure 5). It is worth noting that overall, the large majority of the incidents reported to IMB are attempted attacks. In 2009 for example 164 attacks out of 217 were not successful; the remaining 53 incidents involved 47 hijackings and only 6 boardings. Comparing this peak to 2014, the reduction is striking: 17 total attacks, with only 4 instances of successful boarding and no hijacking.s

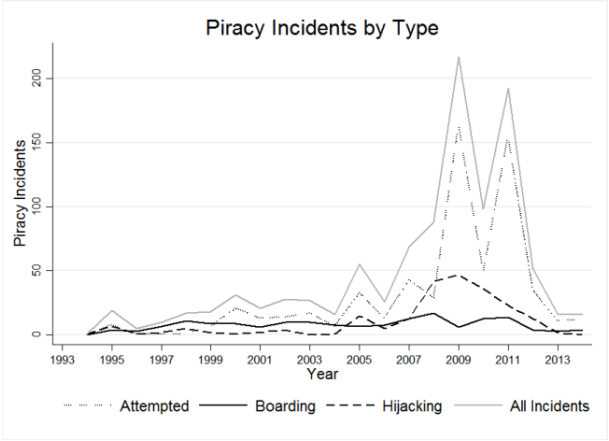

Figure 5. Incidents by type

As a third point, Somali pirates tend to be more violent that their South-East Asian and West African counterparts. Figure 6 graphs violent incidents and it emerges that in the overwhelming majority of cases pirates have used violence against the ship crews. Instances of violence go from physical threats and damages to the equipment to the voluntary killing of one or more

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crewmembers. Automatic guns, RPGs, AK47, rifles and even machetes are among the most commonly used weapons by Somali pirates.

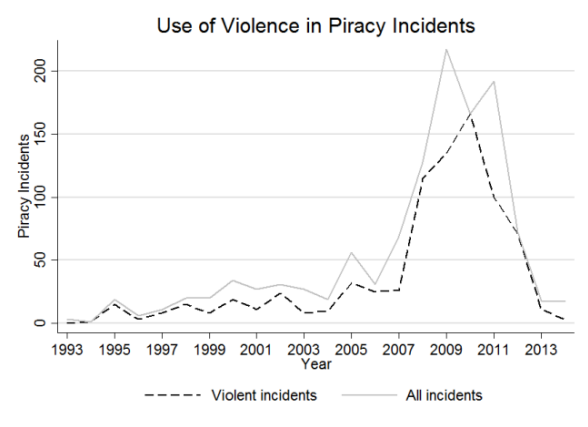

Figure 6. Piracy and use of violence

Seasonality and weather conditions also affect piracy. In particular, there are two monsoon seasons that increase the risk of going out at sea to attack vessels, namely the winter (North-East) and summer (South-West) monsoons.

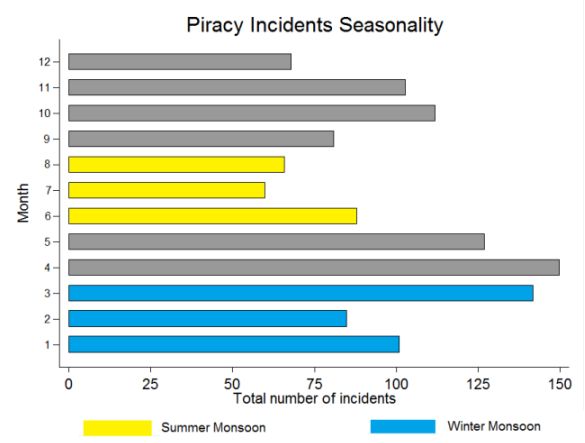

Figure 7. Piracy attacks by month

By looking at the number of incidents aggregated by month throughout the whole period under analysis, the number of attacks clearly decreases during the summer monsoon (yellow bars in Figure 7). The winter monsoon, however, seems not to have a similarly strong effect (blue bars in Figure 7). Indeed the statistical effect of the northern monsoon is not robustly associated to a decline in piracy (see for example Cook and Garrett 2013). Here an explanation for the different impact of the two monsoon seasons is advanced based on the plausible impact of both monsoons on the labor market or alternative livelihood for coastal communities. The upwelling caused by the summer winds are notably stronger than in winter and, with the concurrent role of high temperatures, are associated with an increase in the production of sea nutrients, i.e. plankton (Wiebinga et al. 1997). These nutrients, in turn, increase the availability of fish, hence favoring fishing activities. It is plausible, then, that coastal communities are able to substitute piracy with fishery during the summer monsoon but not in winter, when the upwelling and temperatures are more moderate. It is not the case that the number of summer attacks drop in the Somali basin more remarkably than in the Gulf of Aden as here the productivity of plankton is higher in this period and the substitution effect is more pronounced (Figure 8).

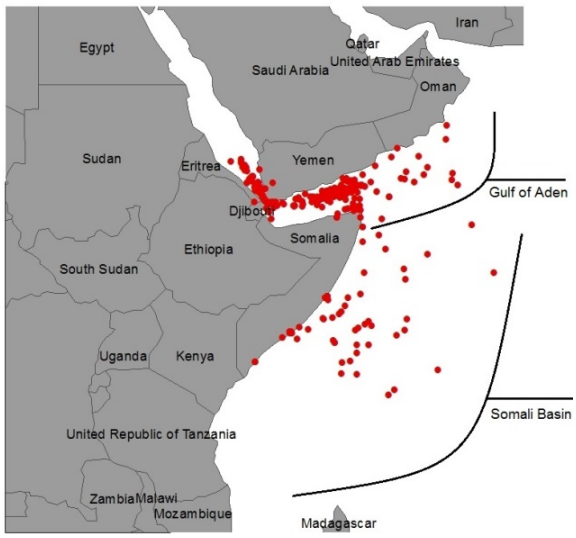

Figure 8. Piracy during summer monsoon

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EU Counter-piracy Initiative

The EU NAVFOR Atalanta mission was launched in December 2008 to counter the outburst of piracy in the Horn of Africa. The first warships were deployed in January 2009 and have been patrolling and rescuing vessels under attack since then. In addition, a transition corridor has been established to reduce the risk of attacks for vessels sailing through the Gulf of Aden. As depicted in Figure 1, however, the decline of piracy incidents only started in 2012. Figure 9 maps the location of the attacks as in Figure 3 but it also distinguishes whether the vessel under attack was successfully rescued or not by EU NAVFOR warships. Interventions are scattered in the region, meaning that the EU was able to project its power throughout the entire high-risk area. It is interesting to note that the transition corridor in the Gulf of Aden has not reduced the number of incidents although more than 83% of them are attempted, thus not successful. Before the establishment of the corridor, the percentage was about 70%. This suggests that the corridor has reduced the rate of success for pirates but has not deterred them from attempting boardings or hijackings. Overall, the presence of EU warships has resulted in a decline in attacks especially in the Somali basin, where the high number of rescues has imposed actual costs on pirates and effectively deterred them.

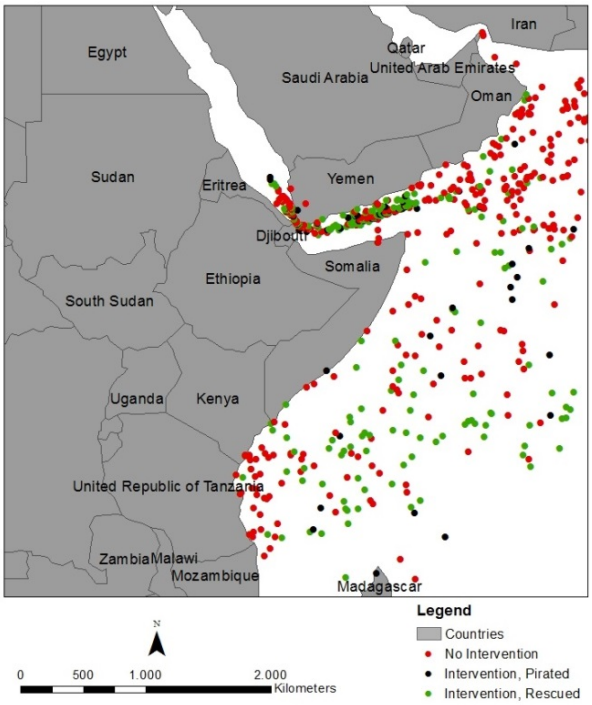

Figure 9. Piracy incidents and EU NAVFOR intervention

Conclusions

This report has identified features of Somali piracy and briefly traced its evolution from 1993 to 2014. It has highlighted the wide geographic reach of the phenomenon and the growing capabilities of Somali pirates to travel very long distances (up to almost four thousands kilometers). Additionally, the use of violence and the frequency of hijackings generates even more security concerns. An interesting feature of Somali piracy, which has important policy implications, is its seasonal character which appears to relate both to weather conditions but also to labor opportunities. The decrease in piracy during the summer monsoon and its association with larger fishing production suggests that, besides the military counter-piracy mission currently deployed, a land-based and long-term solution to the problem should rely on interventions aimed at promoting/restoring the fishing sector and the financing of infrastructure including ports. Studies showing that clan elders are willing to switch

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to licit activities when they can choose between providing protection to pirates or legal sources of income such as collecting taxes from trade (Shortland and Varese 2012, 2014) point in the same direction. The Atalanta mission has largely succeeded in its counter-piracy mission, but it is implausible to deploy warships indefinitely. It is worthwhile in recalling that, as many researchers have pointed out, the solution to piracy is on land rather than at sea (Chalk 2010; Menkhaus 2009; Percy and Shortland 2013; Shortland 2012).

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