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#### **Research Report**

What Can Be Done to Reduce the Occurrence of Piracy in the Short and Long Run?

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# EUSECON

#### Olaf J. de Groot and Marc Vothknecht



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- What can be done to reduce piracy in Somalia?
- What are the factors that make it likely for piracy to take root?
- Is there an important role for policymakers?

Summary: The problem of piracy and other forms of maritime security is actually less severe than many people perceive. Nevertheless, it is a problem that needs to be addressed. To solve the problems around Somalia, the naval involvement should continue, and effective punishment for piracy must be increased. Finally, in order to fight the long-term occurrence of piracy, a land-based solution must be found. Such a solution can only work when the focus is on building institutions and particularly the fight against corruption. There are other regions in the world that may succumb to piracy and where such land-based reforms can prevent piracy from being established in the first place.

### **POLICY BRIEFING**

September 2011 EUSECON Policy Briefing 2

## What Can Be Done to Reduce the Occurrence of Piracy in the Short and Long Run?

#### Introduction

In recent years, the occurrence of piracy has received increasingly much attention, both in the popular media and from policymakers. This is despite the fact that piracy is an old phenomenon that has taken place for centuries, with a fairly strong surge in recent decades. For example, Indonesian pirates were a powerful and very lethal force in the late 1990s and early 2000s. Within the EUSECON project, there have been several studies that look at piracy (or maritime security), and we use these studies to answer a number of policy-relevant questions on what should and can be done to solve piracy. In particular, we address the following questions: In the short term, what can be done to stop piracy in the seas around Somalia? Next, what are the long-run reasons why piracy takes place in specific locations? Finally, are there specific policy options to be explored that could effectively address the problem?

The research underlying the answers to these questions was conducted at DIW Berlin and is published as Shortland and Vothknecht (2011) and De Groot et al. (2011). Further research is referenced both in this text and in these original studies.

#### The piracy problem in perspective

How big is the problem of piracy really? As figure 1 shows, recent years have not seen the spectacular rise in piracy that one would expect, given media reporting

on this issue. However, it is clear that there is a somewhat increasing trend in recent years. These basic figures also hide the fact that over time there has been a large geographic shift, in particular from the Malacca Strait and nearby regions to the Gulf of Aden and the western Indian Ocean. Even in the waters around Somalia, the rate of attacks is still only around 1 in 300 or less frequently, though. It is also not immediately clear from the data that the death toll associated with piracy has decreased. On the other hand, the average level of sophistication of the attacks has increased.

The objectives of modern pirates are not so different from historical pirates (Leeson, 2009): obtaining wealth. However, the methods for doing so have changed. Where historical pirates aimed to obtain the marketable valuables available on board ships, the focus of Indonesian pirates during the 1990s-2000s was on obtaining entire ships and cargo to sell. Today, the most visible forms of piracy consist of attempts to hijack ships in order for the pirates to attract ransom fees. The optimal strategy for such pirates is not to hurt their victims, since this reduces their value. This is important to remember when looking at the objective functions of modern-day pirates.

# The decision to become involved in piracy is a combination of push- and pull-factors

However, it should also be noted that the majority of the acts of piracy reported by the International Maritime Bureau are not this form of violent and highly visible piracy: the great majority of pirate attacks are what can be referred to as "petty maritime theft".

Unfortunately, it is also not clear what the actual impact is of piracy on the world economy. The total impact of piracy in the financial sense is highly debated, with Chalk (2008) providing estimates between 1 and 16 billion USD. This high level of

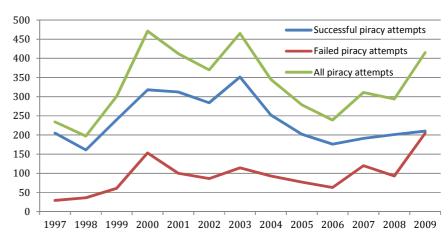


Figure 1 Piracy over time (data from the International Maritime Bureau)

uncertainty is clearly a part of the literature on maritime security that warrants further attention.

#### Why does piracy take place?

From a macroeconomic perspective, explaining the occurrence of piracy is a relatively easy task. Like with most actions of rational actors, the decision to become involved in piracy is a combination of push- and pull-factors. In this particular case, we distinguish between *opportunity, means* and *motive*. By opportunity, we mean that it is more likely that individuals become involved in piracy when they have easy opportunities do so. For example, this means being located near a *shipping choke point*, which gives relatively easy access to large number of ships or having large ports with many anchorages, which gives easier access to

stationary ships for petty theft. The means of piracy are another necessary condition: access to weapons, for example due to ethnic

strife in a country, and access to financing, for example from a flourishing drug trade. The motive for piracy is mainly related to poverty and the related low opportunity costs.

The important factor left out of the equation so far is the role of the government. Low levels of governance, particularly related to low controls for corruption are generally associated with high levels of criminality (including piracy). However, in order for pirates to be able to convert their loot into consumables, pirates need functioning markets, which are dependent on somewhat good governance. At the same time, in order for the state not to interfere with the pirates, they also need government officials to be corruptible. This leads to the surprising conclusion that the relationship between governance and piracy is actually non-linear (De Groot et al, 2011). At extremely low levels of governance, piracy is unlikely to take place, whereas at somewhat low levels of governance, piracy is expected to be more common. The most important mechanism for this conclusion is the role of corruption. In order to reduce the

probability that piracy takes root, it is vital to reduce corruption and any land-based solution to the piracy problem should be based on that.

#### Does naval intervention help?

In order to reduce the occurrence of piracy near Somalia, several countries and international coalitions have recently resorted to the use of naval capacity in the region. The national navies of India, China, Russia, Japan, United States and others have all taken to defending maritime trade in the region. Additionally, both NATO and the European Union have sent patrols that focus on the increasing maritime security in the waters around Somalia. The important question is whether these counter-piracy operations have been successful or not. In short, the answer is: partly.

Using data from 2008-2010, Shortland and Vothknecht (2011) find that the increasing attention to the problem of piracy seems to have contributed to a stabilization of the piracy problem in the Gulf of Aden, albeit at a high level. However, one impact of the mission has been the relocation of new pirate attacks from the Gulf of Aden to the Indian Ocean, stretching as far south as the Maldives and the Mozambique Channel. There appears to be a difference between experienced pirates, who follow this strategy and new entrants, who prefer the more established, albeit more detection-prone, Gulf of Aden.

An unqualified success from the naval intervention has been the prevention of advanced cooperation between pirates and Islamist insurgents. It is clear that the pirates realize that their involvement with Islamist insurgents would significantly increase the attention they receive. This is in line with Leeson's (2008) assessment of historical piracy, in which pirates also take care to work on their image in order not to be associated with less savory characters that could attract more negative attention from the authorities.

#### The success of other policies

A number of the policies initiated by countries, ship owners and alliances have been successful. Shortland and Vothknecht (2011) find that the threat of trial in

# The naval intervention has prevented cooperation between pirates and Islamists

Kenya reduced the occurrence of piracy in that region, and may be shifting it to other regions. In contrast to this, NATO's catch-and-release policy dictated by international human rights laws is not an effective deterrent. One way in which the catch-and-release method could be made more efficient, is by depriving the pirates off their capital. The largest investment required to participate in piracy is the expensive high-powered motor: if this is replaced by something cheaper that can only be used in fishing, this would decrease pirates' abilities to plan new missions. Finally, there is also no evidence that a new US ransom policy that reduces the capacity for ship owners to pay the necessary bribes is effective.

The increase of private protection on board ships also does not seem to have had much effect. Passive or active measures to reduce the probability of capture can endanger the crew, for whom it may be preferable to undergo the ransoming process rather than risk getting injured or killed during the actual capture. Having armed guards on board ships is difficult from a legal perspective as well as from a practical perspective in the case of flammable cargo, and does not seem to have the desired effects either. Passive safety features, such as barbed wire, bright lights and dummies dressed as armed guards, can successfully be used to stall pirates while waiting for military intervention to rescue the crew. However, this tactic is only feasible in zones that have a relatively dense naval presence and thus cannot be employed in the Indian Ocean. Finally, so-called "panic rooms", where the crew can go into hiding seemed to be a useful improvement when first introduced, but they have merely led to an increase in the amount of violence used during the attacks.

#### **Policy recommendations**

The most important thing that has become clear on basis of the body of research is that the solution for piracy is on land. The impact of naval interventions is relatively small and has mostly led to a replacement effect between different regions around Somalia. For a land-based solution to work, efforts must be made to increase the quality of governance in Somalia, particularly when it comes to corruption. This will also have the positive side effect of enabling the local population to develop alternative sources of income, which will reduce their willingness to undertake piracy.

From a naval perspective, it is vital to increase the disincentive of piracy by increasing punishment. This can be done with floating courts to guarantee that pirates who are caught are indeed punished and by routinely replacing the costly high-powered motors of ships with motors more suitable to fishing.

#### **Credits**

This EUSECON Policy Briefing was authored by Olaf J. de Groot and Marc Vothknecht from the German Institute for Economic Research. The views expressed in this briefing are the authors' alone.

#### References

Chalk, Peter (2008). *The Maritime Dimension of International Security: Terrorism, Piracy and Challenges for the United States*. Arlington: The Rand Corporation.

De Groot, Olaf J, Matthew Rablen and Anja Shortland (2011). Gov-aargh-nance – "Even Criminals Need Law and Order". *Economics of Security Working Paper* No. 46. Berlin: Economics of Security.

International Maritime Bureau (different years). *Piracy and Armed Robbery Against Ships. Annual Report.* Kuala Lumpur: International Maritime Bureau.

Leeson, Peter T. (2009). *The Invisible Hook: The Hidden Economics of Pirates*. Princeton: Princeton University Press.

Shortland, Anja and Marc Vothknecht (2011). Combating 'Maritime Terrorism' off the Cost of Somalia. *Economics of Security Working Paper* No. 47. Berlin: Economics of Security.



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