

IGC Policy Brief

Title: The Economic Costs of Piracy

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Policy Motivation, Policy Impact and Audience:

This research project attempts to identify the costs of modern piracy on shipping costs. There is a large interest in this issue in the shipping industry, insurance industry and governments affected by the threat to trade routes. But existing research do not identify the effects of piracy from differences across time and location of piracy.

We develop a model for how piracy should affect shipping prices on different shipping routes and test the theory with two new datasets: detailed information on piracy attacks in the area of Somalia and Indonesia and information on 24.000 time charter agreements of dry cargo between 2002 and 2011.

We calculate the welfare loss caused by piracy in Somalia. Our intermediate estimate suggests, that the creation of \$120 million of revenue for pirates in the Somalia area led to a welfare loss of over \$1.5 billion in 2010. The extra spending due to piracy could finance one year of employment for more than 1.5 million laborers at the going market rate in 2010.

Our results highlight the fact that the cost of predation is much larger than its benefit to the predators. It is likely that private, un-coordinated law enforcement is not the most efficient solution to the problem of security in the area. The estimated costs to the industry give an idea of the aggregate “willingness to pay” for a solution of the piracy problem. However, this amount is spread of many different actors on different trade-routes.

Policy Implications:

- Controlling predation will save resources.

Estimates of piracy revenues suggest numbers around \$120 million. This stands in stark contrast our estimates of the costs to the shipping industry of more than \$1.5 billion

(up to \$4 billion). Right now this money is spent on things like preventive measures, insurance rates and private security teams. It is a well-established fact that the decentralized provision of security is inefficient compared to a centralized solution. This raises the question of whether more efficient ways to trade resources for security could be found if private resources were pooled and spent differently.

- Willingness to pay is high in the aggregate but spread over many actors.

The overall cost to the industry is very high both as an absolute number and compared to what the pirates earn. A problem in practice is that these costs are spread out over different actors and trade routes. We find, for example, that trade routes through the Indian Ocean are affected as well – even without travel through the Gulf of Aden. This means that all trade between the Middle East and Asia and Africa is affected by the problem as well. This spreads the cost of piracy over even more actors and will make it difficult to realize the overall “willingness to pay” for the problem.

Dissemination:

UNCTAD, Commercial Crime Services (ICC), International Maritime Bureau (IMB), Oceans Beyond Piracy.

Further Readings:

Tim Besley, Thiemo Fetzer, Hannes Mueller (2012) One Kind of Lawlessness: Estimating the Welfare Cost of Somali Piracy. GSE Working Paper 626.

http://research.barcelonagse.eu/tmp/working_papers/626.pdf