



The Economics of Piracy: Who Wins? Who Loses?

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Since publishing an independent report titled “**Economics of Piracy: Pirate Ransoms and Livelihoods Off the Coast of Somalia**” in 2011, this author argued that not only are pirates the very essence of rational profit maximising entrepreneurs described in neo-classical economics, but also that understanding ‘who wins’ (those who benefit) and ‘who loses’ (those who pay the costs) across what we call the ‘*Pirate-Value-Chain*’ is critical to effective long-term mitigation. While this report and the economic model underpinning it only focused on incidents ‘*Off the Coast of Somalia*’—which accounted for 275 of the 439 piracy attacks in 2011—it does however provide significant insights into how best to combat pirates recidivistic tendency.

A National Business with Global Market Connectivity

In allocating the costs and benefits across the ‘*Pirate-Value-Chain*’ it becomes clear that piracy is a business with significant global supply and demand dimensions, given the direct linkages between an act of piracy and global maritime shipping, underwriters, public and private security forces, regional law enforcement, international payment transmission operators and international naval forces and aid donors. Moreover, the term ‘*Off the Coast of Somalia*’ has become increasingly misleading given that the majority of incidents in 2012 so far are ‘*Off the Coast of Yemen and Oman*’ and not Somalia per se, despite pirates being largely Somali nationals (See Figure 1). Furthermore, we also know more about the value of benefits to pirates than how costs and benefits accrue higher up the value chain. Individual pirates are therefore in many ways the weakest-link in the entire pirate value chain; just as opium farmers in Afghanistan receive only 2-4% of the total value of opium sold on international markets.

The Multi-Billion Dollar Industry

The economic model we developed provides a comprehensive (and independent) framework of trend analysis, whilst also highlighting across the value chain where costs and benefits



accrue. In estimating costs we need to add the costs of maritime piracy to the international community and the costs of running piracy operations on land and sea. To include trend, comparator and predictive analysis, the model included (i) cost-benefit analysis at the level of the individual pirate, based on existing socio-economic and market data (ii) the aggregate costs and benefits at the international systems level and (iii) comprehensive data on the resurgence of piracy by functional classification, sovereign jurisdiction. Even though '*winners are essentially paid by losers*', because piracy is a business with global supply and demand dimensions and as costs and benefits are public and private in nature, outlining winners and losers in exact monetary terms is a complex exercise. Illustrative findings, based on 2010 data, but with continued relevance to piracy in 2011 and 2012, include:

- The cost of piracy to the international community was between US\$4.9-8.3 billion based on upper and lower bound assumptions. This cost likely increased in 2011 despite the implementation of the International Maritime Bureau's (IMB) Best Management Practices (BMP) and the deterrent effect of Private Maritime Security Companies (PMSCs), precisely because implementation of preventive measures costs more than the total cost of pirate ransoms annually;
- Total piracy income off the Coast of Somalia was around US\$110 million in 2010, around US\$4.85 million per hijacking. Even though global piracy incidents decreased marginally from 445 in 2010 to 439 in 2011, and figures show 87 attacks worldwide by March 18, 2012, a reduction in pirate earnings as direct beneficiaries does not compare to the costs of preventive action which benefit insurers and Private Maritime Security Company (PMSC) operators; and,
- Assuming there to be some 1,500 pirates operating off the coasts of Somalia, Yemen and Oman on average a pirate could expect to earn between US\$33,000 and US\$79,000 a year, with potential average lifetime earnings of US\$168,630 and US\$394,200 over a five-year career; assuming ransom profits are sustained over time. Pirate incomes would therefore be 67-157 times higher than national incomes, or the next best alternative, which is US\$14,500 over their entire working adult life.¹ This highlights the significant income disparity between pirates and non-pirates and consequently the incentives that exist to begin with.



Figure 1 below identifies the actors across each stage of the value chain, off shore and on land, nationally and internationally. This indicative value-chain, around which broad-order costs and benefits can be allocated, allows us to identify the greatest areas of value addition in broad order terms only, because while pirates are visible and known, financiers are harder to track, sponsors remains invisible and other costs and benefits are globally dispersed.

Figure1: Agency & Institutional Actors Across the 'Pirate Value Chain'



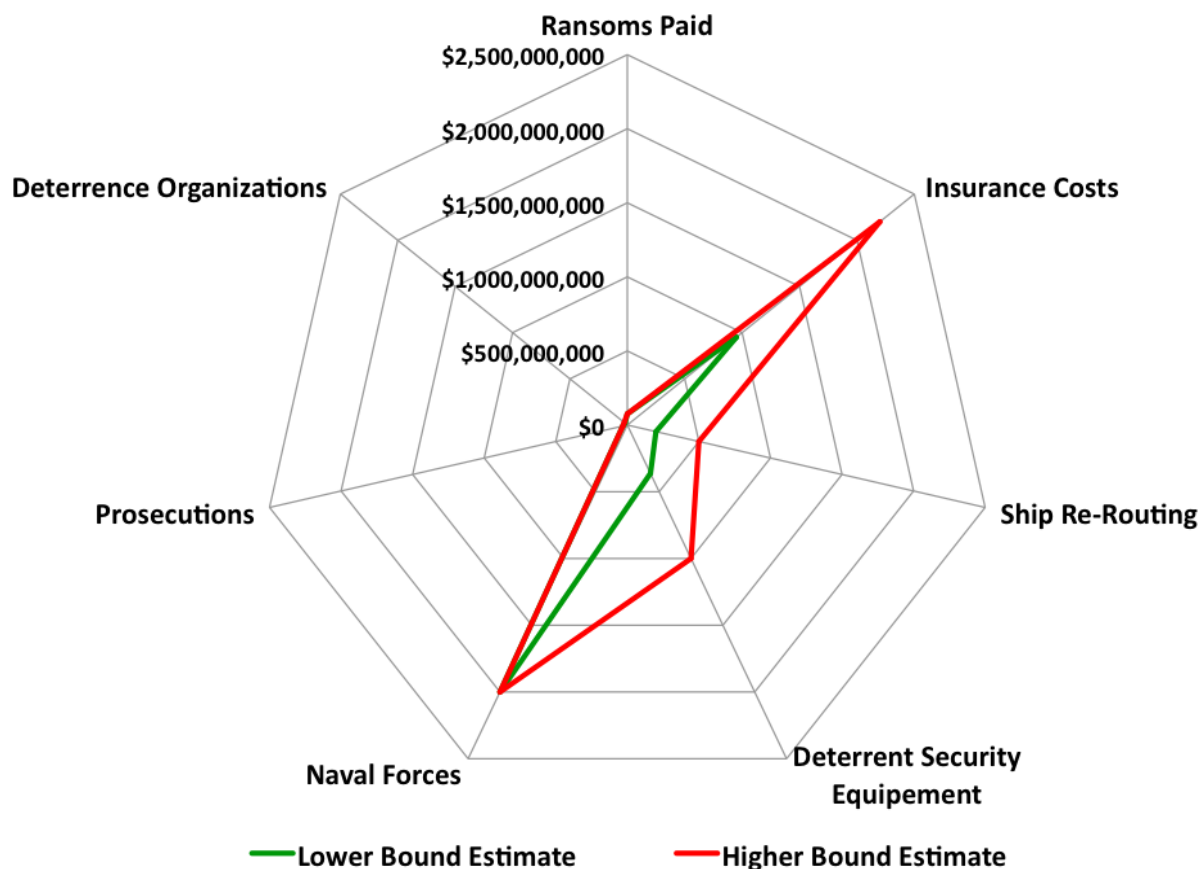
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Who are the Winners?

Analysis shows that the biggest winners in the piracy game are not pirates per se, although pirates do reap considerable profits from their activities. Figure 2 below provides low and high bound ranges based on different data for 2010, highlighting that ransom payments are in fact marginal to total costs, with the green line showing the lower bound cost range and red line the higher bound estimate. Clearly, the costs of insurance and security deterrent equipment substantially exceed pirate ransoms, adding to the logic of moving from curative to preventive measures.

Figure 2: Lower and Higher Bound Cost Estimates (2010)





Moreover, anecdotal evidence suggests that a significant proportion of profits paid from ransoms go to financiers and sponsors and to local communities. What is clear though is that international security companies remain the largest indirect winners, as a result of the need for private security and on board deterrent equipment, alongside global insurance companies, which reap considerable profits from charging higher war-risk premiums. According to the Indian National Ship Owners Association such premiums increased 300 fold for certain routes. Those involved in illegal fishing and the dumping of toxic waste have benefited from the absence of an effective Coastguard. Finally, with the Government of Puntland national budget around US\$30 million in 2011, clearly the proceeds of piracy have boosted the local economy despite food and fuel price inflation triggered by increases in the nominal wage.

Who are the Losers?

With 8 hostages killed in 2010 and 2011 respectively, the thousands of seafarers taken hostage since 2005 and their families are clearly the biggest losers. In 2012 alone, 102 incidents of piracy and armed robbery have taken place with 11 vessels hijacked and 212 crew taken hostage. Furthermore, the shipping industry and ship owners have been terribly affected by piracy, and the direct costs and disruption caused have often been devastating. These costs are also subsequently passed on to consumers in the UAE, Oman, Saudi Arabia and beyond to mainland Europe, at a time when food and fuel price inflation are already hurting poorer consumers. The image of Somalia too, which imploded following the ousting and death of Siad Barre in 1991, will long be remembered through such negative acts.

Economic Solutions

Solutions must be both preventive and curative, and efforts to generate national incomes to remove the economic incentive to engage in piracy must be strengthened, alongside the issuance of measures such as fishing licences to generate revenues to finance the re-establishment of a National Coastguard. As shown above, the cost of ship re-routing are at least ten times the



national budget of the Government of the Puntland in 2011, and the costs of EU-NAVFOR and maritime insurance are many multiples greater; implying significant cost savings for alternative land-based income generation approaches. Currently, much of the work of the international counter piracy task force has resulted in high-cost ex-post facto responses rather than on preventive actions, and this is where a fundamental gear shift is required. Moreover, Geopolicity has recently advised the Government of Puntland on alternative national economic development strategies and with ground-based security not a serious impediment to alternative approaches, shifting the battle from sea to land must surely be the primary track to balance the current sea based approach. In the long term, increased domestic and foreign direct investments are also necessary as are the strengthening of law enforcement, judicial and other punitive measures.

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For more information, see the conference website at www.counterpiracy.ae.

¹ GDP/capita in Somalia is estimated at US\$500/annum. Over an average working lifetime, which we assume to be 29 years, a Somali man may earn US\$14,500. This is used as the next best alternative to engaging in piracy.