The Law and Economics of International Cooperation
Against Maritime Piracy

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by

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Abstract:
Article 100 of the U.N. Convention on the Law of the Sea requires signatories to “cooperate” against maritime piracy, but “cooperate” is undefined. Enforcement is a public good – creating uncompensated benefits for others, so suffering from free-rider problems. Our analysis readily explains why more pirates captured are released than prosecuted; why the U.N. and International Maritime Organization are seeking to reduce enforcement costs; why some in the shipping industry want to apply the 1988 Convention against terrorism at sea; and why still others want to move prosecution of pirates out of national courts to an international court.

Key words: International law, law enforcement, maritime piracy
JEL codes: K14, K33

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THE LAW AND ECONOMICS OF INTERNATIONAL COOPERATION AGAINST MARITIME PIRACY

1. Introduction

This paper discusses the law and economics of international cooperation against maritime piracy under international law – the United Nations Convention on the Law of the Sea (signed 1982, ratified 1994). We argue that, while the Convention enjoins States Parties to ‘cooperate’ in the provision of a global public good – maritime security – problems arise because ‘cooperation’ is nowhere defined in the Convention as it would have to be in a binding contract. As a result any States Party can choose its preferred degree of ‘cooperation,’ which may or may not include making financial contributions to costs, participation in policing of the oceans by naval task forces, or accepting suspected pirates for trial and punishment in domestic court and prison systems. We argue therefore that under-investment in a multi-enforcement system is very likely to occur (relative to optimal enforcement by a single enforcement agency). In fact, over the period August 2008 to September 2009, navies in the Horn of Africa region disarmed and released 343 pirates while only 212 others were handed over for prosecution (US Central Command, 2009).¹

The paper proceeds as follows: Section 2 discusses the nature and scope of modern-day piracy, emphasizing its costs to the international community; the efficacy of the pirate business model; problems arising from trying pirates in States Parties’ courts; the use and financing of naval task forces; and the character of international law. We also question two ad hoc explanations for the failure to contain maritime piracy, noting

that providing maritime policing against piracy has the nature of a public good from which serious problems can arise. Section 3 then turns to a theoretical examination of the consequences of providing this international public good within a framework of ‘voluntary’ cooperation. Section 4 notes that the international community per force continues to search for solutions to the problem of maritime piracy; and section 5 examines two recent proposals for further reform. Finally, Section 6 concludes.

2. The Nature and Scope of Modern-Day Piracy

2.1. Incidence of Maritime piracy

The International Maritime Bureau (IMB) records details of pirate attacks on shipping around the world. Table 1 shows the number and location of ships attacked in 2010; Africa, especially off the Horn of Africa, easily suffered the most attacks, with Southeast Asia and the South China Sea also suffering. Table 2 shows the types of attack: the many boardings have led either to hijacking or robbery, though in a few cases pirates have left empty handed. Table 2 also records the type and number of personal violations suffered by crews of boarded ships over the five years to 2010. Notable is the rising trend, from 317 violations of the person in 2006 to 1,270 in 2010. By far the largest component is the taking of hostages – 93% of the total in 2010, with the Gulf of Aden and the Western Indian Ocean accounting for the bulk of the hostage taking that year – 998 of the 1,181.

2.2. Pirate organization

The more efficient is a pirate organization the greater is the probability of the perpetrators not being caught on any given attack against shipping and, it can be
supposed, the greater is the value of the booty they capture. Indeed, Leeson (2007) argues from historical examples that pirate organization developed so as to render piracy an efficient endeavor. As a criminal organization, participants were outside of the rule of law, yet they had to have incentives in place to encourage cooperation. To achieve incentive alignment – aimed at maximizing the take of booty from piracy voyages – the rank and file had to be satisfied that they would enjoy their fair share and would not be expropriated by the captain and the group around him. To achieve this outcome, the pirate organization, in the heyday of piracy, 1690-1730, used elected captains who had charge only when the ship was in a conflict. Otherwise, a quartermaster, also, elected, had charge of the ship. Pirate ships had agreed-upon constitutions governing things like compensation for wounded men, the sharing of booty, restrictions on the captain’s privileges, and allowable punishments for sailors who broke the rules.

Somali pirates likewise have developed a social organization. Thus, certain “ports in Somalia … have been identified as havens for pirate gangs... Within these ports the pirates rely on facilities for shelter, food, and buildings to keep hostages. A key characteristic shared by these port cities that make them advantageous for pirate gangs to be based at is they are strongly armed, have sympathetic populations, and are in areas beyond the control of the local Somali Transitional Federal Government (TFG)” (O’Connell and Descovich, 2010, page 33).

Using to interviews with pirate leaders in northern, central and southern Somali ports conducted by Bahadur (2009), a number of factors can be deduced as helping to create group identity between Somali pirates.
1) Many pirates are ex-fishermen and hold the complaint that foreign fishing vessels intruded into Somalia’s Exclusive Economic Zone, severely reducing fish stocks and harming the fishermen’s well-being. Somali pirate attacks on foreign shipping are therefore legitimate, aimed only at levying a ‘tax’. This justification for legitimacy is heightened by the fact that, as a failed state, Somalia has no national government to look after the fishermen’s interests, so they must look after their own.

2) Boyah, a pirate clan leader of 500 men in the North, claims that everyone who seeks the position of pirate must see him and swear allegiance until death, natural or otherwise. This leads to low turnover within the group.

3) Many Somali pirates, at least those based in the North, are ex-Coast Guard recruits and therefore share something of a common background and training. The same is true for the ex-militiamen who have become pirates.

4) Somali piracy is a repeated profitable ‘game’ that would be expensive in terms of forgone income if any pirate or pirate leader chose to renge on his commitments to the group. One interviewee claimed to have earned $350,000 in the first three years he was a pirate.

2.3. A piracy business model

The Somali piracy business model was developed sometime early this century and is based on the profit-motive with profit sharing (Minney, 2010, O’Connell and Descovich, 2010). There is even a stock exchange in Harardhere where pirates can raise money to purchase the tools of the trade, and which also allows non-pirates to share in

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the profits of piracy. According to Minney (2010), “One wealthy former pirate named Mohammed took Reuters around the small [stock exchange] facility and said it had proved to be an important way for the pirates to win support from the local community for their operations, despite the dangers involved. “Four months ago, during the monsoon rains, we decided to set up this stock exchange. We started with 15 ‘maritime companies’ and now we are hosting 72. Ten of them have so far been successful at hijacking,” Mohammed said. “The shares are open to all and everybody can take part, whether personally at sea or on land by providing cash, weapons or useful materials … we’ve made piracy a community activity.” … “Shareholder Ms Sahra Ibrahim, 22 years, whose initial stake was a rocket-propelled grenade received as part of the settlement when her husband divorced her, says: “I have made $75,000 in only 38 days since I joined the ‘company’” Minney (2010).

It makes sense that the more efficient is the pirate organization(s), the greater will be the economic rents that can be extracted from international shipping.

2.4. Cost of maritime piracy

The annual cost of piracy has been variously estimated to lie between $1 and $16 billion (Bowden, 2010, O’Connell and Descovich, 2010, Wright, 2008). Table 3 reproduces the estimate of Bowden. Costs incurred include ransoms, increased insurance premiums, costs of re-routing ships, costs for ‘hardening’ merchant vessels against attack, and costs incurred by regional economies. Costs are also incurred countering piracy, including deployment of naval forces ($2 billion), costs of operating regional piracy deterrence organizations, and costs of prosecution. There is, however, no mechanism under international law for cost-sharing. Hagemann (2010, page 45) points out, “costs lie
where they fall”, with each States Party paying the entirety of its own costs, even if its 
expenditures also benefit other countries. Some States Parties have taken on extra costs 
to aid in the establishment of “in-region” enforcement facilities—consisting of courts and 
prisons in Kenya and littoral states in the Gulf of Aden—under the Djibouti Code of 
Conduct of 2009. Voluntary contributions have been made to the Trust Fund by South 
Korea and the United Arab Emirates.

2.5. Problems arising from trying pirates in States Parties’ courts

Trying pirates far from where their crimes were committed is expensive. Per-
pirate prosecution cost is estimated at between 5 and 7 times more expensive outside the 
Horn of Africa region than in the region (such as in Kenya, Seychelles, Somaliland); for 
example, the cost is $52,000 in-region versus $246,000 in Europe, and $336,000 in the 
USA (Bowden, 2010). Moreover, legal questions can arise concerning the relevance of 
national laws to the crime of piracy. And problems can arise for civilian courts given that 
the arresting agent is a military rather than a police authority.

These issues are illustrated in the flowing case. A German ship flying a German 
flag, the MV Taipan, on route from Djibouti to Mombasa, was boarded by 10 Somali 
pirates April 5th, 2010, 500 nautical miles east of Somalia. The Dutch naval vessel 
HNMLS Tromp happened to be nearby and a contingent of its marines landed from

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3 He was referring to the UK’s Operation Headquarters in Northwood which had been established in 2008 
as the operational headquarters for EUNAVFOR, the umbrella for the European Union’s naval forces off 
the Horn of Africa (and the first joint maritime operation by the EU).

4 This Code of Conduct is discussed in more detail below.

5 Alshihad News and Analysis, “S. Korea pledges US$500,000 to anti-piracy trust fund”, April 24th, 2011 
http://english.alshahid.net/archives/20085. Emirates 24/7 News, “UAE donates $1.4m to fight piracy: 
Money will go to Counter-Piracy Trust Fund”, April 19th, 2011 http://www.emirates247.com/news/uae-
donates-1-4m-to-fight-piracy-2011-04-18-1.382219
helicopters on the *MV Taipan* and after a skirmish arrested all suspects.\(^6\) After being held in chains for several days on the *Tromp* the suspects were passed on for trial in Germany.\(^7\) The trial took place in the Youth Chamber of the Hamburg Criminal Court, Room 337, Strafjustizgebäude (Criminal Court Building), Sievekingplatz 3, 20355 Hamburg; beginning November 22\(^{nd}\) 2010 and was on-going in May 2011 at a rate of two days per week.

The court proceedings indicate several difficulties of putting pirates on trial far from their homes.\(^8\) Without legal documents, suspects’ ages were hard to determine, and were never known for sure; but age is relevant as persons have to be over 14-years to stand trial in a German court. Secondly, problems arose with the simultaneous translations into Somali language of legal proceedings being held in German, especially technical terms, thus questioning the fairness of the trial from the defendants’ point of view. Third, naval officer-witnesses had to travel long distances from their ships (and/or home country) to the trial in a foreign country. Fourth, as military personnel, some witnesses were restricted from giving evidence on certain military matters that the defense thought relevant. Evidence had to be collected, in this case by Dubai detectives, and then transported to the German court – with a German detective having to travel to Dubai to collect it. Fifth, finger printing of evidence (for example, of guns found on the *MV Taipan*) was not performed, as it is not the practice of the arresting naval force. Sixth, an important question was raised over whether evidence gathered through interviews on

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\(^7\) The Dutch were not willing to put the suspects on trial themselves, however, under Universal Jurisdiction – any country can prosecute (on universal jurisdiction see Randall, 1988).

\(^8\) This information is summarized from a blog of the trial: “Reclaiming the Seas”, http://reclaim-the-seas.blogspot.com/p/reports-from-court-case.html
the *Tromp* was found through ‘interrogation’ of suspects or through ‘voluntary statements’. If the former, and without proper legal procedures being followed (such as the issue of a court-issued arrest warrant), some evidence might not be allowed in court. Finally, the fact that the accused were not told their rights was a violation of German, Dutch and international law. The German court had to rule on this and decided that as the statements were made on a Dutch ship they could be introduced into proceedings. However, there was an extra complication that a Dutch court would later have to rule on regarding admissibility.

2.6. Naval task forces

The international community has to some extent rallied to cooperate against piracy, with several naval task forces operating off the Horn of Africa. The European Union has Operation Atalanta with about twenty warships and 1,800 personnel in situ. The USA has Combined Task Force 151 in the Horn of Africa area, while NATO has Operation Allied Protector – an escort system. Several individual countries also have warships in the area, including China, India, Saudi Arabia and South Korea. The EU also operates a voluntary information exchange where merchant and other ships transiting the area can coordinate with EU naval forces. Similarly, the US operates recommended transit corridors through the Gulf of Aden. The International Maritime Organization also collects and broadcasts information on piracy incidents.

However, even as these policing efforts are being made it was reported that a Finnish warship, *Phojanmaa*, arrested 18 Somali pirates, only to release them back onto Somali soil because “no country would take them and they had not offended against
either Finnish shipping or Finnish nationals”. A similar case was the arrest of 16 suspected Somali pirates by a Danish warship, The Esbern Snare. The pirates were apprehended aboard a hijacked vessel and, according to NATO Allied Maritime Command, were holding two Yemeni hostages and were in possession of rocket launchers, assault rifles, ammunition, large quantities of fuel and two skiffs. However, the task force determined there were not sufficient grounds to prosecute, and the suspects were taken back to land. If these facts are accurate, one has to wonder what evidence would be sufficient to bring suspected pirates to justice. Indeed, in the UK Julian Brazier, the Conservative Party’s shipping spokesman, commented that “It’s shameful that so many pirates are being returned to do it again; the fault lies not with the hard-pressed naval commanders but the ridiculous rules of engagement and operating instructions they are being given by their political masters” (Ungoed-Thomas and Woolf, 2009).

2.7. International law

International cooperation against maritime piracy is authorized by Articles 100 to 107 of the 1982 United Nations Convention on the Law of the Sea. According to Article 100 “All States shall cooperate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State”. But neither “cooperate” nor “fullest possible extent” are defined anywhere in the Convention, which

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leaves room for each States Party to ‘cooperate’ as it sees fit. Thus, a States Party may choose to send in naval forces or not; and if naval forces are deployed and arrests made, it can choose whether to incur prosecution costs, or to hold the suspects prior to handing them over to a third country, or, simply, to let them go. And as we have seen, the latter is often the choice made.

2.8. Ad hoc explanations or cooperation failures

Two explanations have been put forward for the failure of international cooperation to bring maritime pirates to justice. First, the Convention’s relevant Articles have not been written into some States Parties’ national laws, thus creating jurisdictional issues. As Dutton (2010a, p. 3) has observed: “The apparent reasons for this refusal to accept these judicial burdens are many: for example, inadequate or non-existent national laws criminalizing the acts committed, concerns about the safety and impartiality of local judges, the difficulties of obtaining and preserving evidence, and fears that if convicted, the pirates will be able to remain in the country where they are prosecuted.” Second, evidentiary problems might arise if suspected pirates were not actually caught in the act of piracy. The Esbern Snare case referred to above is an example of this; and on the face of it appears to be an application of Article106 of the Convention - liability for seizure without adequate grounds. However, we are not at all persuaded by this argument, as suspects had been spotted far out at sea using the small fast skiffs favored by Somali pirates and in possession of hijacked vessels, hostages, and piracy equipment such as grappling hooks, firearms, and even rocket propelled grenades.

In our view, both of the forgoing arguments for releasing maritime pirates are ad hoc and result from a more fundamental problem. This, as we spell out in Section 3 below, is that unavoidably under the Convention, maritime piracy outside of States
Parties’ twelve mile territorial seas is enforced by multiple enforcement agencies. As a result, there are ‘policemen’ from many countries patrolling off the Horn of Africa and, if they have written the relevant international law into national law, there are many different sovereign countries where suspected pirates can be prosecuted and imprisoned. As we will show, the economic ‘dynamics’ of this situation are radically different compared to the case of a single enforcement agency – policing, prosecution, imprisonment—as exists in its purest (though not ‘pure’) form on a State Party’s sovereign soil.

2.9. Provision of global public goods

Policing, of course, is a public good because, if it is effective, it reduces crime for everybody.\(^\text{12}\) Provision of global public goods is quite rare in history, and seems best to coincide with the existence of a global hegemon (Kindleberger, 1986). Two examples in the maritime context are: the UK in the nineteenth century providing a good deal of maritime security; and the establishment by USA, with cost-sharing by the UK, of the International Ice Patrol following the sinking of the Titanic in 1912 (Wiswall, 1983).

3. The economics of enforcing laws against maritime piracy

In principle, an economic approach to the control of maritime piracy is a direct application of the general theory of law enforcement as first examined by Gary Becker (1968) and refined by Polinsky and Shavell (2000).\(^\text{13}\) The theory relies on two fundamental claims: first, that potential offenders (criminals or pirates) respond to the threat of legal sanctions in deciding whether or not to commit illicit acts—that is, they are

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\(^{12}\) We do not intend to enter into a discussion of the nature of global public goods but Kaul, Grunberg and Stern (1999, pages 455-456) note that international peace keeping, of which policing crime on the high seas is a case in point, is an example of provision of a ‘flow variable’ as a continuous effort is needed to supply it. This stands in contrast to maintaining the stock of a global commons – such as the ozone layer.

\(^{13}\) See Hallwood and Miceli (2011) for a formal application of this theory to the control of piracy, on which this section is based.
rational maximizers; and second, that an enforcement authority stands ready to enforce those sanctions by expending resources to apprehend and prosecute any offenders who violate the law. If either of these assumptions fails to hold, then threatened legal sanctions will not be effective in reducing piracy.

In the context of ordinary crime, there is ample evidence that most offenders do in fact behave rationally in the above sense, especially when committing property crimes. This is reflected by empirical studies showing that increases in the likelihood or severity of punishment do reduce the crime rate. (See, for example, Shepherd, 2002.) And since the primary motivation for maritime pirates is material gain, whether derived from the confiscation of cargo or the seeking of ransom for hostages, it seems reasonable to suppose that they too are acting in a rational way – as we argued in section 2.3.

The next question concerns the enforcement of laws against piracy, and it is here that problems emerge. Optimal enforcement of laws against ordinary crime requires the existence of a single enforcer, usually a city or state government, that has both the will and the resources to carry out the threatened sanctions (assuming, of course, that laws against crime have been enacted, an assumption that, as we have seen, is not always met in the case of piracy). Enforcement of international laws against piracy, in contrast, necessitates the cooperation of multiple nations in order to achieve optimal deterrence.¹⁴ In practice, however, there are several reasons why this seems not to be happening.

First, the gains from deterring piracy consist of the savings in lost profits and other costs incurred by all countries engaged in shipping along routes threatened by pirate

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¹⁴ Since enforcement is costly, optimal deterrence will not generally result in complete deterrence of piracy. Rather, resources should be devoted to enforcement up to the point where the marginal savings from deterring an additional act of piracy equals the marginal cost of those resources. See Hallwood and Miceli (2011) for details.
attacks. Thus, each country has an interest in reducing piracy in proportion to its share of those costs. As noted above, however, the deterrence of piracy, like law enforcement in general, has public good qualities in the sense that actions by any one country to apprehend offenders will benefit all countries. Thus, each country has an incentive to free-ride on the efforts of others. It follows that, in the absence of some mechanism that obligates countries to contribute to a unified enforcement effort, the level of enforcement will likely be sub-optimal in the same way that public goods will be underprovided if solely financed by voluntary contributions.

A second reason countries will tend to under-invest in enforcement against piracy is that prosecution and punishment also involves costs. But any disincentive effect on the incidence of piracy benefits the shipping of all countries. Thus, countries will have an incentive to avoid these costs, especially if the offender’s acts were not against the apprehending country’s vessels (as in the Finnish example described above), creating a kind of “reverse rent-seeking” problem – that is, a country acting to minimize its costs and its costs alone. Note that both of the above problems are due to the collective nature of enforcement of international laws, and will arise in any law enforcement context where crime overlaps jurisdictional boundaries. For example, a similar problem plagues the enforcement of laws against drug trafficking. (See, for example, Naranjo, 2010; Poret, 2003.)

A third enforcement problem, unrelated to the collective action issue, concerns the credibility of threats to actually impose sanctions once a pirate is apprehended. Specifically, once an offender is caught, the apprehending country may simply choose not to spend the resources necessary to detain, prosecute, and punish him. This issue is
largely ignored in the economics of crime literature,\textsuperscript{15} where it is generally assumed that threats to prosecute criminals are credible, but it is amplified in the context of piracy because of the absence of a unified enforcement authority that can develop a reputation over time for carrying out threatened sanctions. As the above anecdotes show, this outcome is therefore not an uncommon one.

A final issue concerns the choice of the sanction to be imposed on a convicted pirate. If individual countries choose their own sanctions, there will likely be considerable variability in the nature and severity of the sanction, and some countries may have no sanctions at all against piracy. There will also be differences in criminal procedure and evidentiary standards. In theory, international agreements can specify uniform sanctions and procedures, but philosophical differences regarding appropriate punishments (e.g., disagreements over the death penalty) will make this difficult. And besides, for the reasons already noted, pre-specified sanctions may not be viewed as binding by the country that actually apprehends a pirate and has to bear the cost of imposing them.

\section*{4. Attempts aimed at promoting greater international cooperation}

In the preceding section it was argued that States Parties will tend to under-invest in provision of maritime enforcement because of its public good nature. Thus, if maritime policing is to be provided at anything like the socially optimal level, some degree of increased international cooperation needs to be organized beyond commitments made in the \textit{United Nations Convention on the Law of the Sea} Articles 100 to 107. In fact, several such efforts have been attempted. The U.N. Security Council in 2008 issued

\textsuperscript{15} But see Boadway, Maceau, and Marchand (1996) and Baker and Miceli (2005).
Resolutions 1816, 1838, 1846 and 1851, which exhorted States Parties with warships in the Horn of Africa area to cooperate and to undertake greater efforts to capture and bring pirates to justice. Resolution 1816 allowed states cooperating with the Somali Transitional Government (STG) to pursue pirates in Somalia’s territorial waters; Resolution 1838 urged States Parties to protect shipping engaged in World Food Program activities; Resolution 1846 extended the period in which States Parties warships could enter Somalia’s territorial sea; and Resolution 1851 enabled States Parties to pursue Somali pirates ashore. But none of these resolutions required States Parties to step up their anti-piracy efforts.

Another attempt at international cooperation occurred in January 2009 under the auspices of the International Maritime Organization (IMO). Seventeen regional governments met in Djibouti to discuss issues related to piracy with nine of them signing the Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden. The signatories declared their intention to cooperate ‘to the fullest possible extent’ to repress piracy (IMO, 2009). The specific aims are to improve communication between states, increase the capacity of regional states to arrest and prosecute pirates, and to improve the capabilities of their coast guards.

Another attempt at promoting international cooperation against piracy was held in Dubai in April 2011 at the instigation of the Dubai government and international shipping interests, with about fifty countries in attendance.16 Apart from a few commitments to contribute financially to the setting up of enforcement facilities in Horn of Africa

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regional countries, nothing much concrete seems to have come out of this conference. By contrast an attempt at cost-sharing, functioning since 2006 and now with seventeen contracting parties, is the *Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia* – which practices information sharing and performs anti-piracy patrols. According to Noakes (2009) these efforts have met with a good deal of success.

5. Two suggestions for reforming international law

5.1. *Use the International Criminal Court*

Dutton (2010b) suggests trying pirates in the International Criminal Court. She points to a number of advantages: a) no new international institution is needed as the ICC already exists; b) piracy under customary international law is a crime against the international community; c) under the Rome Statute the ICC can be used even when national courts are unwilling or unable genuinely to carry out the investigation or prosecution; d) the cost of using ICC relative to the current cost of prosecuting cases in Kenya would not be prohibitive.

In the light of the analysis offered in this paper, this suggestion has the particular advantage of possibly reducing the free rider problem that leads to the under-funding of the prosecution of pirates. Under the Rome Statute that established the ICC and its governing Assembly there would be, if the same financing system was carried over, international sharing of the cost of prosecuting pirates. As described by Romano and Ingadottir (2000, page 4-5) the Rome Statute lays out how the ICC is funded: the Court and its governing Assembly are financed from assessed contributions from States Parties.

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17 See the ReCAAP web site at www.recaap.org/
who are members of the ICC (in 2011 there are 114); these contributions are based on a scale adopted by the U.N. for its regular budget (itself based on ‘capacity to pay’), and also from funds provided by the U.N. and approved by the General Assembly. Voluntary contributions are also welcomed.

However, as Dutton (2010b) acknowledges, if the ICC were to take over the prosecution of pirates, its Statute would have to be modified to allow it to do so. It is beyond the scope of this paper to venture an opinion on the likelihood of such a modification occurring, but it is worth noting that any countries that have thus far chosen not to contribute to enforcement of the Law of the Sea against piracy, or to contribute to the financing of the same, could take the stance of attempting to block changing the Rome Statute or otherwise refuse to finance prosecution of pirates by the ICC. Nevertheless, it is most interesting that Dutton (2010b) recognizes these relevant financial problems and has suggested a way to resolve them.

5.2. Apply SUA 1988

There is also the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA1988) that is aimed at illegal acts on the high seas, though in this case acts of terrorism rather than piracy. There are 149 signatories, and Article 6 requires that SUA’s legal provisions be written into national laws, with signatories agreeing to prosecute any suspects delivered to them. Noakes (2009), the chief maritime security officer for the Baltic and International Maritime Council (BIMCO, a ship-owners association), argued before a US House of Representatives Committee that SUA1988 can and should be used to combat piracy, and that it is incorrect to think that this Convention applies only to terrorism and not to piracy on the
high seas. Indeed, the Introduction to SUA1988 recognizes that the States Parties to the Convention are: “deeply concerned about the world-wide escalation of acts of terrorism in all its forms (italics added).” The next paragraph makes clear that the unlawful acts it has in mind are “against the safety of maritime navigation [and] jeopardize the safety of persons and property, seriously affect the operation of maritime services, and undermine the confidence of the peoples of the world in the safety of maritime navigation”.

However, while SUA 1988 nowhere defines “terrorism”, nor draws a line between it and piracy, it can be construed that it is intended to be used against the former rather than the latter. Thus, further on in the Introduction, it is stated that SUA is aimed at acts “which jeopardize friendly relations among States and their security”. Such acts would appear to pertain to terrorism – politically motivated acts—rather than piracy aimed at personal gain. Anyway, as far as we are aware, the argument of applying SUA 1988 against piracy has not been taken any further, perhaps in part because signatories have been slow in writing its provisions into national law.

6. Conclusions

The background to this paper is that in 2010 more captured maritime pirates were released by the warships that captured them than were passed on for prosecution. We do not believe that existing ad hoc explanations for this failure are the whole story – namely that many States Parties have not written relevant international law (Articles 100 to 107 of the United Nations Convention on the Law of the Sea, 1982) into national law, and that evidence is usually insufficient to prosecute suspects. Rather we offer the more encompassing argument that maritime enforcement as governed by current international
law has the nature of a public good and as such suffers from free-rider problems. That is, as the shipping of no one States Party can be excluded from the benefits of reduced crime created by enforcement expenditures by other States Parties, incentives for all actors to invest in enforcement at an optimal level are lacking. In particular, we have argued that aversion to incurring costs that benefit others helps to explain why States Parties are in no rush to write international law into national law, and also why there is a preference for letting arrested suspects go rather than going to the expense of putting them on trial and imprisoning them.

Ultimately, we believe that blame for failure to bring so many captured maritime pirates to justice lies with international law which, while requiring “cooperation” (Article 100 of the *Convention*) nowhere defines what is meant by “cooperation” in a detailed manner. This allows signatories to choose their preferred degrees of “cooperation”. In this regard, as Article 100 is not a binding contract, requiring a pre-specified “cooperation”, one should not be surprised that what cooperation is offered is too often insufficient.
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Table 2: Types of Piracy Attacks and Violence, 2006-2010

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<td>46</td>
<td>121</td>
<td>107</td>
</tr>
<tr>
<td>Hijacked</td>
<td>14</td>
<td>18</td>
<td>49</td>
<td>49</td>
<td>53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>239</td>
<td>263</td>
<td>293</td>
<td>410</td>
<td>445</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of violence</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assaulted</td>
<td>2</td>
<td>29</td>
<td>7</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Hostage</td>
<td>188</td>
<td>292</td>
<td>889</td>
<td>1050</td>
<td>1181</td>
</tr>
<tr>
<td>Injured</td>
<td>15</td>
<td>35</td>
<td>32</td>
<td>69</td>
<td>37</td>
</tr>
<tr>
<td>Kidnap/Ransom</td>
<td>77</td>
<td>63</td>
<td>42</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Killed</td>
<td>15</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>3</td>
<td>21</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Threatened</td>
<td>17</td>
<td>6</td>
<td>9</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>317</td>
<td>433</td>
<td>1011</td>
<td>1169</td>
<td>1270</td>
</tr>
</tbody>
</table>

Table 3: Piracy Costs.

<table>
<thead>
<tr>
<th>Cost Factor</th>
<th>Value (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ransoms: excess costs</td>
<td>$176 million</td>
</tr>
<tr>
<td>Insurance Premiums</td>
<td>$460 million to $3.2 billion</td>
</tr>
<tr>
<td>Re-Routing Ships</td>
<td>$2.4 to $3 billion</td>
</tr>
<tr>
<td>Security Equipment</td>
<td>$363 million to $2.5 billion</td>
</tr>
<tr>
<td>Naval Forces</td>
<td>$2 billion</td>
</tr>
<tr>
<td>Prosecutions</td>
<td>$31 million</td>
</tr>
<tr>
<td>Piracy Deterrent Organizations</td>
<td>$19.5 million</td>
</tr>
<tr>
<td>Cost to Regional Economies</td>
<td>$1.25 billion</td>
</tr>
<tr>
<td><strong>TOTAL ESTIMATED COST</strong></td>
<td><strong>$7 to $12 billion per year</strong></td>
</tr>
</tbody>
</table>

*Bowden (2010) page 25*