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Piracy in shipping

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Abstract

Piracy in its various forms has posed a threat to trade and shipping for millennia. In the 1970s, a steady rise in the number of attacks ushered in the present phenomenon of modern piracy and not many parts of the world's seas are free from piracy in one form or another today. This paper reviews the historical and geographical developments of piracy in shipping, with a discussion on contentious issues involved in defining piracy. Using data available on piracy acts collected from the IMB related to 3,957 attacks that took place between 1996 and 2008, we shed light on recent changes in geography and modi operandi of acts of piracy and investigate how poverty and political instability may be seen as the root causes of piracy.

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1.0. INTRODUCTION

Piracy in its various forms has posed a threat to trade and shipping for millennia. Ancient accounts record piracy as having been a menace to the security and efficiency of the flourishing Minoan maritime commerce in the eastern Mediterranean as early as four thousand years ago (Sestier 1880, Gosse 1932, Sundberg 1999, Ormerod 1997, Dubner 1980). Arguably made extinct around the turn of the 19th and 20th centuries, this proved to be a mere short-lived respite.

In the 1970s, less than a century after piracy's supposed demise, a steady rise in the number of attacks ushered in the present phenomenon of modern piracy. In fact, not many parts of the world's seas are free from piracy in one form or another today. The last three decades have recorded a steady increase in the number of piratical incidents. According to the latest annual report from the International Chamber of Commerce's International Maritime Bureau (ICC-IMB), a total of 406 piracy and armed robbery incidents were reported worldwide in 2009, a 40% increase compared with the previous year. Contrast these totals with those from 1992 (106 reported attacks) and one observes that annual figures have increased almost four-fold. In the year 2009, 8 persons were killed, 1,052 seafarers were taken hostage, 68 were injured, and 8 are still missing as a result of the attacks, the waters around Somalia being the most piracy-prone with 53% of all reported cases in 2009 (ICC 2009).

This chapter reviews the historical and geographical developments of piracy in shipping. The next section offers a review of piracy in an historical perspective. The third section presents a discussion on contentious issues involved in defining piracy.

Section four focuses on recent changes in geography and modi operandi of acts of piracy, while section five investigates how poverty and political instability could be seen as the root causes of piracy.

2.0 PIRACY IN AN HISTORICAL PERSPECTIVE

The origins of piracy predate written historical records. Writers in general agree that it is probably as ancient as shipping itself. As stated by Lucie-Smith (1978), “As soon as men learned to build boats, and to cross even short stretches of water in them, other men were making plans to attack and rob them”. Piracy in the Mediterranean seems to be given the earliest mention in surviving records.

King Minos of Crete, credited for having built the first navy in recorded history (21st century BC), did so to rid the Aegean Sea of pirates (Ormerod 1997). Piracy is mentioned in the writings of the ancient Greeks and Romans; Homer (13th century BC) described it in the *Iliad* and the *Odyssey*, and Thucydides (5th century BC) included accounts of Aegean Sea piracy in his chronicles. In the early days of the Roman Empire, no less than a promising military leader named Julius Caesar was held hostage by pirates (Ormerod 1997). In Southeast Asia, the narratives of Buddhist monk Shih Fa-Hsien (414 AD) tell of “raising, robbing, and other instance of marauding in the waters of the South China Sea” (Chalk 2002).

Piracy was also rampant in the eastern and southern fringes of the Mediterranean such as in the Maghreb where “privateering and captive taking (came as) a response to declining trade” (Viktus and Matar 2001). In the Adriatic, it is claimed that “one of

the prime causes for the Roman intervention in... (that region)... was maritime piracy... When the forces of the Republic first crossed that sea in 229 B.C., the purpose was to curb the activities” of Illyrian pirates (Dell 1967). In Northern Europe the *dani piratae*, Viking marauders, were notorious for attacking ships and pillaging villages (Rubin 1998).

In India, piracy on the Malabar coast in the 17th and 18th centuries flourished under the control of the Angrias “dynasty of pirates”; in the Middle East, the most significant centre of piracy was established by the Joasmees in the 18th and 19th centuries along the southeast shore of the Persian Gulf (Thomson 1994). In the Malay Archipelago, piracy became such a threat to commerce in the 1840s that Labuan Island was ceded by the sultan of Brunei to British forces “for the suppression of piracy and the encouragement and extension of trade” (Thomson 1994). In the 1800s, “the Iranun and Balangingi of the Southern Philippines who were sponsored by the local sultans were the most feared of all pirates” (Ke 2006). In 18th and 19th century China, the legendary woman pirate Cheng I Sao presided over “six (and at times seven) well-ordered and regulated fleets consisting of between 40,000 and 70,000 individuals” (Murray 2001).

By far the most popular depiction of piracy in history is that of the Caribbean pirate of the 16th to the 19th century. Names like Captain Kidd, Sir Henry Morgan, Calico Jack Rackham, Bartholomew Roberts, and Blackbeard are associated with colourful, swashbuckling, free-spirited adventurers. Fact or fiction, the stories woven around these characters have helped cultivate the romantic image accorded to these criminals by literature and the entertainment industry (Gosse 1932).

Until recently, it was widely believed that, “as a result of strong punitive action by legitimate users of the sea” (Brittin 1986) the fearful days of piracy as a global and regional threat to shipping had ended at the dawn of the 1900s. In 1981, the creation of the International Maritime Bureau (IMB) by the International Chamber of Commerce (ICC), with a mandate to prevent fraud in international trade and maritime transport, reduce the risk of piracy, and assist law enforcement in protecting crews proved this assertion to be wrong. IMB quickly received the support of the International Maritime Organization (IMO) through an assembly resolution that urged governments and law enforcement agencies to cooperate with the new body. At the same time, the IMO’s resolution A545(13) on Measures to Prevent Acts of Piracy and Armed Robbery Against Ships in 1983 led the following year, to a separate and fixed item in the work program of IMO’s Maritime Safety Committee.

3.0 DEFINITIONS OF PIRACY

The definition of “piracy” has been a perennial bone of contention among bureaucrats, academics, and industry practitioners. The different interpretations and permutations of these terms condition the manner in which the crimes have been treated and the gravity with which these are perceived. Any confusion in terminology invariably leads to debates between state sovereignty and universal jurisdiction over such crimes. A discussion on the definition is therefore *de rigueur* in any comprehensive treatment of the subject and has preoccupied jurists for many centuries (Genet 1938). In *The Law of Piracy*, Rubin (1998) suggests that the numerous meanings of the word piracy include the following:

- (1) *vernacular usage with no direct legal implications;*

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- (2) *an international law meaning related to unrecognised states or recognized states whose governments are not considered to be empowered at international law to authorize the sorts of public activity that is questioned, like the Barbary States of about 1600-1830, the Malay Sultanates of about 1800-1880, and the Persian Gulf Sheikhdoms of about 1820-1830;*
 - (3) *an international law meaning related to unrecognised belligerency, like Confederate States commerce raiders and privateers during the American Civil War of 1861-65 in the eyes of the Federal Government of the United States;*
 - (4) *an international law meaning related to the private acts of foreigners against other foreigners in circumstances making criminal jurisdiction by a third state acceptable to the international community despite the absence of the usual territorial or national links that are normally required to justify the extension abroad of national criminal jurisdiction;*
 - (5) *various special international law meanings derived from particular treaty negotiations; and*
 - (6) *various municipal (i.e., national, domestic) law meanings defined by the statutes and practices of individual states.”*

The Oxford Concise Dictionary provides the following definition of piracy: “the practice or crime of robbery and depredation on the sea or navigable rivers, etc., or by descent from the sea upon the coast, by persons not holding a commission from an established civilized state” (Oxford University 1987). It is a layman’s definition that covers a broad range of violent acts, thus reflecting the common or vernacular

meaning of the term. Passman (2009) offers the following description in the context of maritime law: “Piracy has one meaning in the insurance industry, another in the international shipping industry, another in international law, another in criminal law, and yet another in the ‘common law.’ Therefore, there are no less than five reasonable interpretations of the word ‘piracy’ and the context of the word may determine its meaning.” One could add to this a sixth usage of the word piracy, to do with intellectual property law rather than maritime law. The use of the word piracy has been extended to different late 20th century issues such as video, software, and recorded music, among others.

Article 15 of the Convention on the High Seas (Geneva High Seas Convention, 1958) and Article 101 of the United Nations Convention on the Law of the Sea (UNCLOS, 1982) are generally recognized as providing the definition of piracy in international law. These two articles define piracy as consisting of any of the following acts:

- (a) *any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:*
 - (i) *on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;*
 - (ii) *against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;*
- (b) *any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;*
- (c) *any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).*

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The above definition essentially retains the same elements that came out of debates in the early 1900s over the development or codification of the international law of piracy (Rubin 1988). While the intervening period between the conferences for the Geneva High Seas Convention, 1958 and UNCLOS, 1982 was marked by dramatic geopolitical developments that would result in the adoption of the modern regime of maritime zones, the high seas piracy provisions remain trapped in a time period where the high seas were only three miles from shore (Halberstam 1988, Murphy 2007, Collin and Hassan 2009). This asynchronous situation has been likened to a gerrymandering of the oceans that effectively legislated piracy away to areas far beyond its traditional locus (Mejia 2003). The international convention definition of piracy is seen as being highly restrictive particularly because it requires the act to be motivated by private ends involving two ships located on the high seas. According to numerous reports and studies (IMO, ICC, ReCAAP, Farley 1993), the majority of acts reported today take place in waters within the jurisdiction of states. This causes a potential inconsistency in the case of many coastal states where the crime of piracy may not carry the same definition in municipal law (Birnie 1987) or, as in some cases, where it might not even be defined at all.

The confusion as to what constitutes piracy in international law is compounded further by its occasional use as a political or journalistic pejorative. Menefee (1999) writes, “international lawyers have come to expect, whenever there is an act of violence or lawlessness on or above the sea which involves community sensibilities, that the Press will describe the act as piracy.” Brown (1994) presents the submarine attacks against neutral merchant vessels during the Spanish Civil War, the seizure of

the *Santa Maria* in 1961, the Cambodian seizure of the *Mayaguez* in 1975, and the hijacking of the *Achille Lauro* in 1985 as classic examples of the use of the term piracy as a political pejorative.

In order to ensure that all crimes against shipping that resemble piracy are addressed in its documents and deliberations, IMO uses the compound “piracy and armed robbery against ships.” IMO defines armed robbery against ships as “any unlawful act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy (as defined in Article 101 of UNCLOS), directed against a ship or against persons or property on board such a ship, within a State’s jurisdiction over such offences.” The ICC also employs the compound “piracy and armed robbery against ships,” which it defines as “an act of boarding or attempting to board any ship with the apparent intent to commit theft or any other crime and with the apparent intent or capability to use force in the furtherance of that act” (ICC 2009). ICC’s definition is intentionally broad and is designed to capture all reports of violence against ships, is used for statistical purposes only and has no standing in international law.

4.0 GEOGRAPHY AND MODI OPERANDI OF PIRACY IN RECENT TIMES

Piracy in recent times has also experience drastic changes. We now attempt to further document further these evolutions in terms of number, geography and modi operandi of acts. For that purpose, we rely on data available on piracy acts collected from the IMB related to 3,957 attacks that took place between 1996 and 2008. Some descriptive results are reported in Table 1 and Figures 1-5.

Insert Table 1 around here

Insert Figure 1 to 5 around here

The increase in the number of reported acts of piracy since 2006 (Figure 1) is particularly striking when considering the relative slow down in previous years (2003-2006). However, it should be noted that the number of attacks is still significantly lower than that observed in 2000 or 2003 for instance. In fact, it is certainly more a factor of the changes in the location and modi operandi as well as the incredibly enormous ransom payments involved that piracy has become the subject of so much media attention over the last two or three years.

Considering first the location (Figure 2), a shift took place during last years from Asia (Indonesia, Bangladesh and Malacca Straits for instance) to attacks taking place in Nigeria, Gulf of Aden, Somalia and Tanzania. The other area of concern is that together with this change in the location of attacks, the types of attack have also evolved (Figure 3 and 4). Recent years have witnessed a marked decrease in the number of reports of subsistence or opportunistic piracy, that is, piracy in its simplest form, perpetrated by petty criminals or out-of-work fishermen who target the victim ship's safe, coils of rope, buckets of paint, and anything else that is portable and easily converted to cash and a noticeable increase in the number of vessels fired upon or hijacked (Table 1).

The more recent phenomenon of Somali hijackings are quite different from the ship hijackings reported in Southeast Asian waters in the 1990s. The objective of the former variety is to demand ransom payments, while the latter variety was carried out

in order to steal the ship and its cargo. Both varieties differ with the unplanned, opportunistic variety of piracy, because these are “more sophisticated; rather than pirating for petty cash and mooring ropes, international piracy rings seek a bigger prize – the vessel itself.” (Garmon 2002).

The Southeast Asian hijackings of the 1990s were popularly referred to as the “phantom ship” phenomenon, of which the case of the *M/T Petro Ranger* is one classic example. On April 16, 1998, the oil tanker laden with a cargo of petroleum products, sailed from Singapore for its next destination, Vietnam. Less than ten hours into the voyage, a speedboat came alongside the vessel and transferred a dozen heavily armed men in balaclavas. They strapped the captain to a chair and threatening him with one machete to the throat and another one to his groin. The hijackers kept the crew locked in the mess room while they sailed the vessel to Hainan Island, off the southern coast of China. They renamed the ship to *Wilby* and supplied it with fresh registration papers and false bills of lading for the cargo. Shortly after their arrival in Hainan, two tankers came alongside the *Petro Ranger/Wilby* and offloaded about USD 3 million worth of cargo.

In an ironic and frustrating twist of events, Chinese authorities boarded the *Petro Ranger*, accused the original crew of smuggling, detained and questioned the original crew for over two weeks, and even kept the master for a further month. The twelve Indonesian pirates, while eventually discovered by the authorities, were never prosecuted and were simply repatriated to Indonesia. Petroships, the vessel’s owner, had to pay a hefty fee to the Chinese authorities to retrieve the vessel. The cargo owner never recovered his property (Abhyankar 2005, Anonymous 1999).

Ship hijackings are well-planned operations carried out by highly organized criminal groups. Such attacks are pre-meditated, highly sophisticated, and oftentimes extremely violent. Nowadays, these are particularly prevalent in Somalia (31.3% of hijacked ships and 30.7% fired upon) or in the Gulf of Aden (respectively 22.9% and 25.5%). The recent move to hijacking of ships in Somalia and in the Gulf of Aden for the purpose of kidnapping the crew for ransom also implies that attacks occur more often nowadays when the vessel is steaming (67.5% for Somalia and 88.9% for Gulf of Aden). In 2009, Somali pirates were reported attacking ships as far as 1,000 nautical miles from the Somali coast. The Somali brand of piracy is perpetrated by an alliance between fisherfolk who provide knowledge of navigation, militiamen who bring with them expertise in the use of violence, and information technology-savvy individuals assigned the task of carrying out sophisticated ransom negotiations with the shipowners.

Somali pirates extend the range of their attacks by employing mother ships that carry the smaller boats and skiffs used to deliver pirates aboard the victim ships. The waters surrounding Somalia provide rich hunting grounds for pirates who are aware that an average of up to 50 ships transit between the Indian Ocean and the Suez Canal through the Gulf of Aden every day. While maritime kidnap for ransom has always been closely associated with Somali piracy, similar attacks have been reported elsewhere around the world. Secessionist and terrorist groups in Indonesia and the Philippines have in the past been known to use kidnapping for ransom to supplement their movements' revenues. Today, however, it is the Delta region of Nigeria that represents the second greatest threat (i.e., after Somalia) in terms of the kidnapping of

ship's crew but this time, with a notable difference due to the fact that attacks are mainly performed when vessels are anchored (45.6%).

Turning to the type of vessels subject to attacks (Figure 5), bulk carriers (21.9%) followed by general cargo vessels (16.7%) and containerships (14.3%) are the first three types of vessels subject to attacks (Mejia, Cariou and Wolff 2008, 2009). The over-representation of Asian flag vessels (Singapore with 8.54% of all attacks, Malaysia with 5.81%) compared to their importance in the world fleet (Table 1) is largely explained by the presence of vessels flying these flags trading in regions where attacks occurs (Indonesia 25.5% of attacks, Bangladesh 8.4%, Malacca Straits 5.5% and India 5.1%).

To conclude, while acts of piracy have not increased considerably over the last years in number (the numbers reported in 2008 are about one-third lower than in 2000), the changes in terms of location and type of attacks (hijacking/fired upon when steaming) during the same period are much more remarkable. The next section investigates whether this shift can be explained by poverty and political instability, as these factors are very often mentioned by professionals and media as the root causes for piracy development.

5.0 ECONOMIC AND SOCIO-POLITICAL INSTABILITY AS ROOT CAUSES OF PIRACY

The changes in the location and type of piracy over different periods in time suggest a link between piracy and the level of poverty, economic hardship, and socio-political

instability prevailing (Anderson 1995, Nankivell 2004, Eklöf 2005). Some writers point to Somalia as a glaring example. For instance, Fouché (2009) highlights “political instability and poverty” as being highly relevant particularly in the case of Somalia as “Piracy seldom takes place in isolation, frequently occurring in concert with poverty, weak or no governance and economic stagnation.” Kraska and Wilson (2009) assert that the renaissance in piracy can be attributed in part, to “the dire situation within Somalia.”

This section investigates this potential relationship. The changes in the socio-political state of a country was assessed from 1996 to 2008 using various indicators: firstly, the real GDP per capita in USD 2005 (US Department of Agriculture’s Economic Research Service - USDA 2010¹); secondly, political rights (scale from 1 to 7 for “Worst”), civil liberties (1 to 7) and freedom status (1 from “Free”, 2 “Partially Free” and 3 “Not Free”) indicators as reported by the independent organization Freedom House. The indicators relative to political rights and civil rights are evaluated by experts from the Freedom House “based on a checklist of 10 political rights questions and 15 civil liberties questions while for the freedom status, each pair of political rights and civil liberties ratings is averaged to determine an overall status of “Free,” “Partly Free,” or “Not Free.” Those whose ratings average 1.0 to 2.5 are considered Free, 3.0 to 5.0 Partly Free, and 5.5 to 7.0 Not Free” (Freedom House 2010²). Our calculation is based on 152 countries that were selected as being locations where attacks could potentially take place (all landlocked countries were removed as well as attacks taking place outside the jurisdiction of a specific country such as Malacca Straits).

¹ <http://www.ers.usda.gov/data/macroeconomics/>

² <http://www.freedomhouse.org>

Figure 6 represents the relationship between the real GDP per capita and the number of attacks from 1996 to 2008 while Figure 7 presents results for countries aggregated in three groups (countries without attacks, countries between 1 to 5 attacks and countries with more than 5 attacks in a given year).

Insert figure 6 around here

Insert figure 7 around here

Results presented in Figure 6 suggests that a strong, decreasing relationship exists between the economic development of a country expressed in GDP per capita and the number of attacked reported in a given year. This finding is further supported when calculating the mean GDP for various countries where attacks are taking place or not (Figure 7). The mean GDP from 1996 to 2008 is for instance 10,885 USD per capita in countries without attacks, around 4,430 USD for countries with between 1-5 attacks and 1,836 USD for countries with more than 5 attacks for a given year.

For indicators on political rights, civil liberties and freedom status and comparing the two extremes cases (mean for countries with more than 5 attacks and mean for those without attacks), a tendency exists to record attacks in countries in which political rights (mean score of 3.67 compared with 3.01 for a maximum of 7), civil liberties (3.96 compared with 3.02 for a maximum of 7) and freedom status (2.19 compared with 1.71 for a maximum of 3) are lower than countries without attacks.

To complement the former analysis, the last four figures compare the evolution in the number of attacks (over 100), real GDP per capita (over 1,000), political right, civil liberties and freedom status (over 10) for the 4 main location of attacks from 1996 to 2008 (Indonesia, Bangladesh, Nigeria and Somalia).

Insert figure 8 around here

Insert figure 9 around here

Insert figure 10 around here

Insert figure 11 around here

In Indonesia (25.5% of all attacks from 1996 to 2008), a reduction in the number of attacks over time goes together with the increase in GDP per capita as well as improvement in political rights, civil liberties and freedom status. It would confirm the potential relationship between the socio-economic conditions of a country and the likelihood to record acts of piracy. The situation in Bangladesh also stresses the potential negative relationship between economic development and piracy, while Nigeria offers a more mitigated answer as economic indicators and number of attacks move together. Finally, Somalia which is subject to so much recent attention represents the clear case of a country in which economic development, political and civil rights and freedom status are shown to be stagnating from 1996 to 2008, while acts of piracy are sky rocketing in the last few years.

6.0 CONCLUSIONS

The last three to four decades have seen resurgence in the number of reported cases of piracy and armed robbery against ships. This is borne out in the number of reported

incidents of piracy and armed robbery against ships collected and published by international bodies such as the ICC-IMB, IMO, and ReCAAP.

The data available for the last twelve years have shown an increase not only in the sophistication and organization of attacks, but also shifting patterns and trends in location and modi operandi of piracy and armed robbery against ships. These, more than simply the comparative absolute number of incidents reported, are telling indicators that piracy has returned in modern times not merely as an isolated threat, but as a global menace. While subsistence piracy is reported in all corners of the globe, specific areas are known to have become the locus for particular types of organized attacks. The phantom ship phenomenon was a worrying trend in 1990s Southeast Asia. Today, attacks against ships and crew off the waters of Somalia and Nigeria, involving ransom demands amounting to millions of dollars, are causes for much alarm in the maritime industry.

The link between the incidence of piracy and robbery against ships on the one hand, and economic and socio-political instability on the other, has long been postulated by a number of writers. This view is easily supported by connecting the rise and fall of reported attacks in specific locations with prevailing levels of poverty and political uncertainty in those areas. This chapter examined and confirmed the potential relationship through a comparison of the data on attacks contained in the IMB's annual reports on piracy and armed robbery against ships from 1996 to 2008 with data relating to real GDP per capita provided by the USDA and to socio-political indicators made available by Freedom House.

No more is this relationship as apparent as in the case of the current hotspot for piracy, Somalia. The country has had no central government since the regime of Siad Barre fell in 1991. It records a per capita GDP of USD 600. In the preamble of a

recent Assembly resolution (IMO 2007), IMO recalls a UN Security Council's statement that summarizes the problem of Somali piracy. The statement asserts, "that piracy and armed robbery against ships in waters off the coast of Somalia... is caused by lack of lawful administration and the inability of the authorities to take affirmative action against the perpetrators, which allows the 'pirate command centres' to operate without hindrance at many points along the coast of Somalia." In not as many words, piracy is a land-based economic and socio-political problem manifesting itself at sea.

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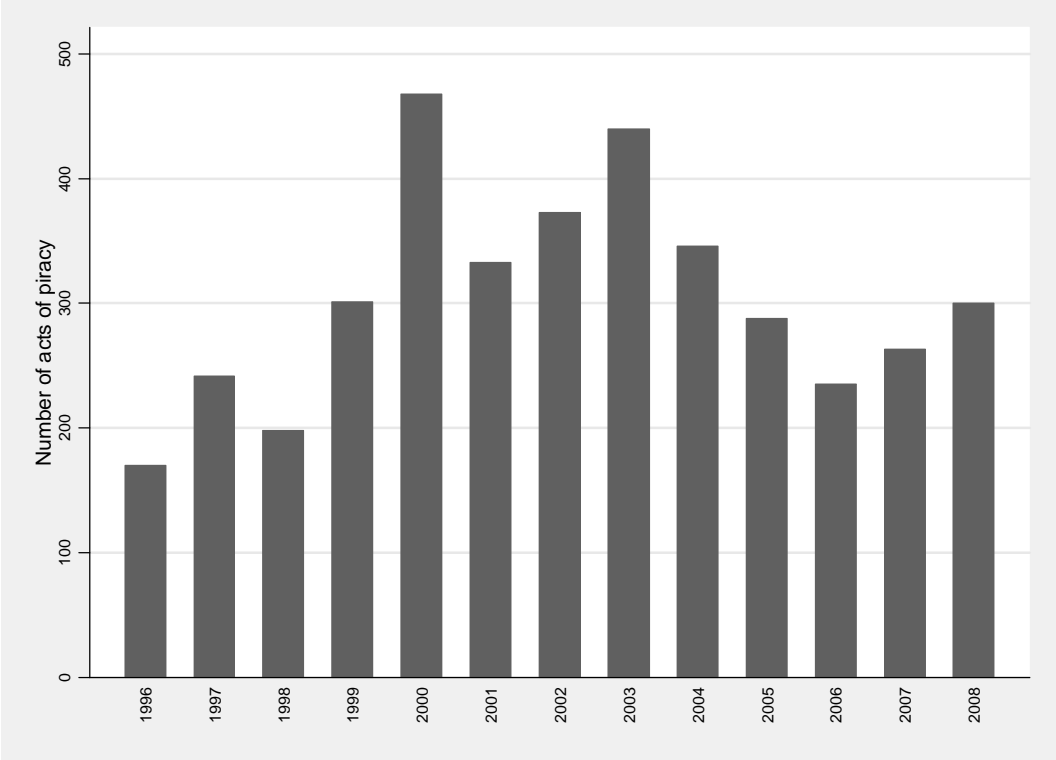
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Table 1. Characteristics of 3,957 acts of piracy and armed robbery against ships (1996-2008), by location of attack

Variables		Indonesi a	Bang- ladesh	Nigeri a	Malacca Straits	India	Somali a	Gulf of Aden	Malaysi a	Philippin es	Brazil	Vietna m	Tanzani a	Other	Total
Type	Boarded	52.82	62.95	69.46	22.02	56.65	12.27	3.92	49.65	38.53	61.96	71.25	79.45	67.16	49.99
	Not stated	27.70	27.41	10.88	43.12	29.56	12.88	6.54	28.67	26.61	31.52	22.50	9.59	36.79	26.08
	Attempted	14.34	8.13	10.46	21.56	12.32	12.88	41.18	7.69	19.27	4.35	2.50	10.96	18.28	14.18
	Hijacked	3.66	1.20	3.35	4.13	1.48	31.29	22.88	13.99	6.42	1.09	1.25	0.00	2.60	5.03
	Fired upon	1.48	0.30	5.86	9.17	0.00	30.67	25.49	0.00	9.17	1.09	2.50	0.00	3.95	4.73
Status	Not stated	40.95	36.45	21.76	51.38	50.74	22.70	11.11	46.15	46.79	48.91	35.00	27.40	57.11	39.73
	Anchored	30.17	45.18	45.61	0.92	34.48	7.36	0.00	25.87	20.18	34.78	48.75	31.51	37.25	28.58
	Steaming	24.13	13.55	25.10	47.71	9.85	67.48	88.89	20.28	30.28	1.09	7.50	35.62	24.27	26
	Berthed	4.75	4.82	7.53	0.00	4.93	2.45	0.00	7.69	2.75	15.22	8.75	5.48	10.16	5.69
Ship type	Bulk Carrier	33.23	23.80	18.83	13.30	20.69	15.34	26.14	15.38	16.51	18.48	21.25	5.48	22.01	21.96
	General Cargo	12.46	23.80	9.62	12.84	12.32	22.70	14.38	13.99	14.68	18.48	21.25	13.70	27.31	16.73
	Containership	10.19	15.36	6.28	13.76	13.30	9.20	7.84	10.49	19.27	30.43	25.00	54.79	21.44	14.33
	Tanker	15.43	7.53	12.55	15.14	17.73	6.75	10.46	10.49	6.42	7.61	13.75	15.07	12.87	11.93
	Chemical Tanker	9.30	6.33	11.72	4.13	12.32	3.07	16.34	5.59	0.92	6.52	7.50	4.11	7.56	7.53
	Fishing Vessel	0.40	7.53	0.84	14.22	0.00	11.04	2.61	17.48	13.76	1.09	3.75	0.00	4.40	4.22
	Other	18.99	15.66	40.17	26.61	23.65	31.90	22.22	26.57	28.44	17.39	7.50	6.85	33.18	23.30
Flag of registry	Panama	21.86	14.76	7.95	15.60	12.32	12.27	20.92	13.29	12.84	7.61	6.25	15.07	16.48	15.21
	Singapore	13.85	9.94	2.09	14.22	8.87	1.84	5.23	11.19	10.09	4.35	13.75	6.85	5.98	8.54
	Liberia	8.41	3.92	15.48	5.05	4.93	3.07	3.92	2.80	8.26	11.96	3.75	6.85	9.26	7.1
	Malaysia	5.84	3.92	1.26	27.06	1.48	0.61	3.27	36.36	5.50	0.00	5.00	2.74	2.60	5.81
	Cyprus	4.45	3.61	3.77	0.92	6.90	6.75	3.27	4.20	3.67	7.61	7.50	15.07	9.03	5.36
	Not stated	2.47	2.11	5.44	0.92	2.96	3.68	3.27	2.10	8.26	3.26	1.25	1.37	11.06	4.52
	Malta	3.96	6.33	7.53	1.83	7.88	4.91	3.92	2.80	0.00	4.35	6.25	2.74	4.63	4.27
	Bahamas	3.36	2.71	6.69	1.83	1.48	3.07	3.27	0.70	2.75	5.43	8.75	4.11	6.43	3.84
	Hong Kong	3.26	1.81	2.51	1.83	2.46	3.07	7.19	2.80	7.34	0.00	5.00	1.37	3.61	3.01
	Antigua & Barbuda	0.79	3.92	1.67	1.38	1.48	1.84	2.61	0.00	1.83	8.70	5.00	8.22	5.76	2.75
	Others	31.75	46.99	45.61	29.35	49.26	58.9	43.14	23.78	39.45	46.74	37.5	35.62	53.95	39.57
Total		25.55	8.39	6.04	5.51	5.13	4.12	3.87	3.61	2.75	2.32	2.02	1.84	28.83	100

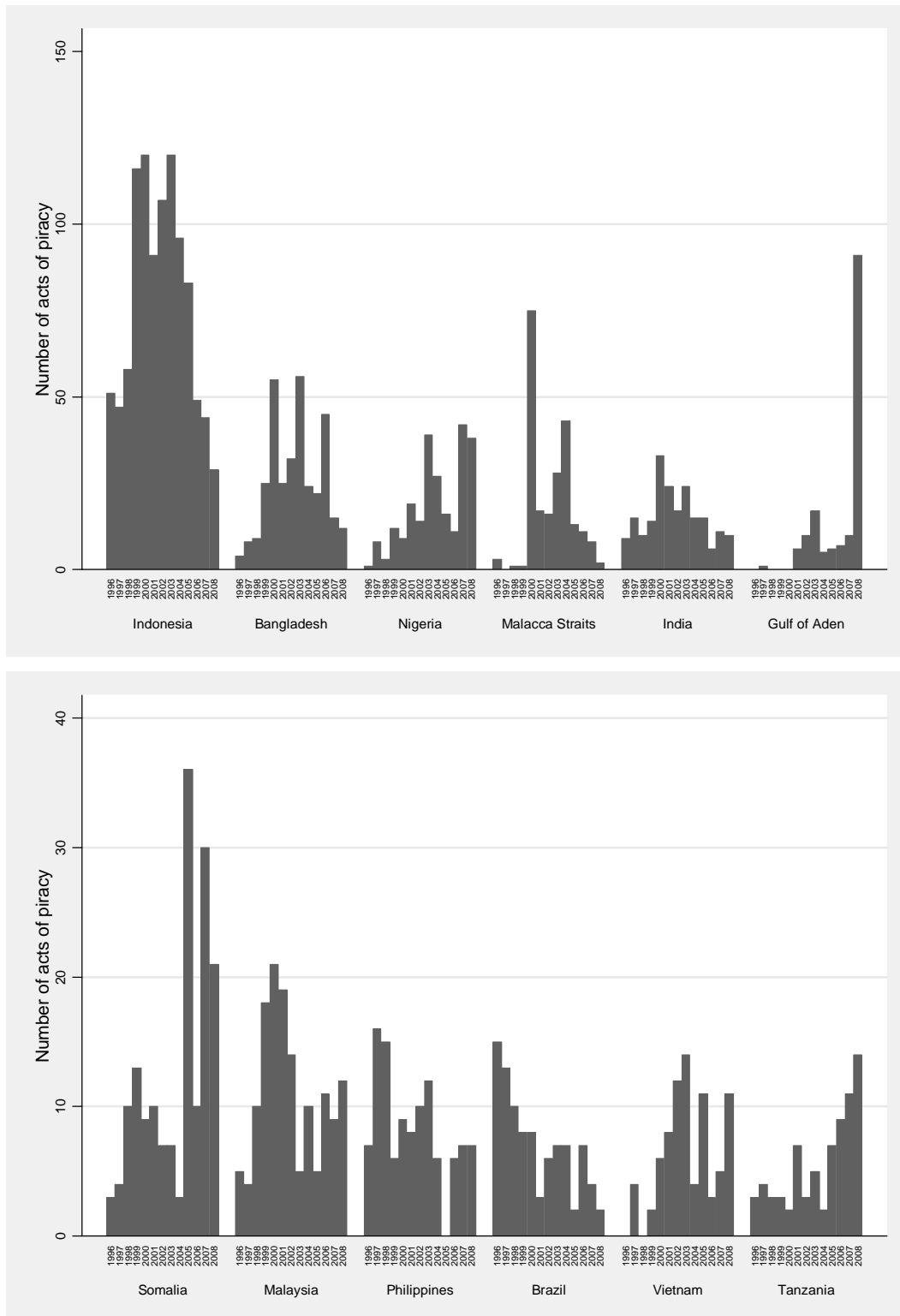
Source: authors' calculations from IMB (1996-2008)

Figure 1. Number of reported acts of piracy and armed robbery against ships (1996-2008), by year



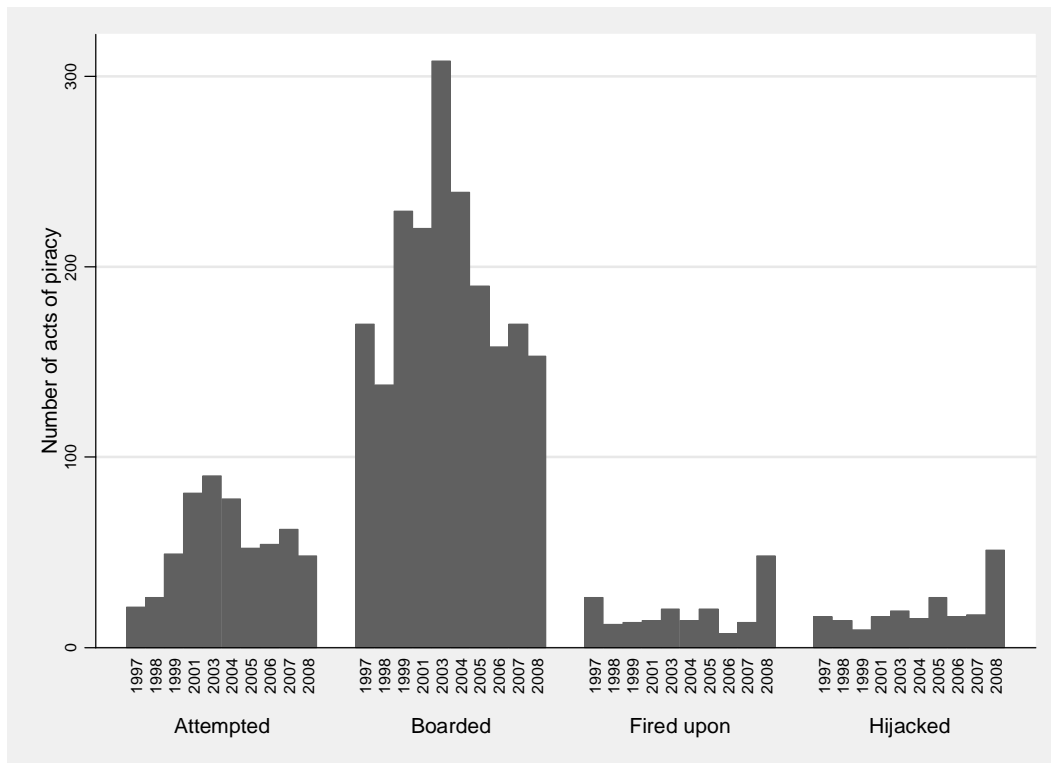
Source: authors' calculations from IMB (1996-2008)

Figure 2. Number of acts of piracy and armed robbery against ships (1996-2008), by location



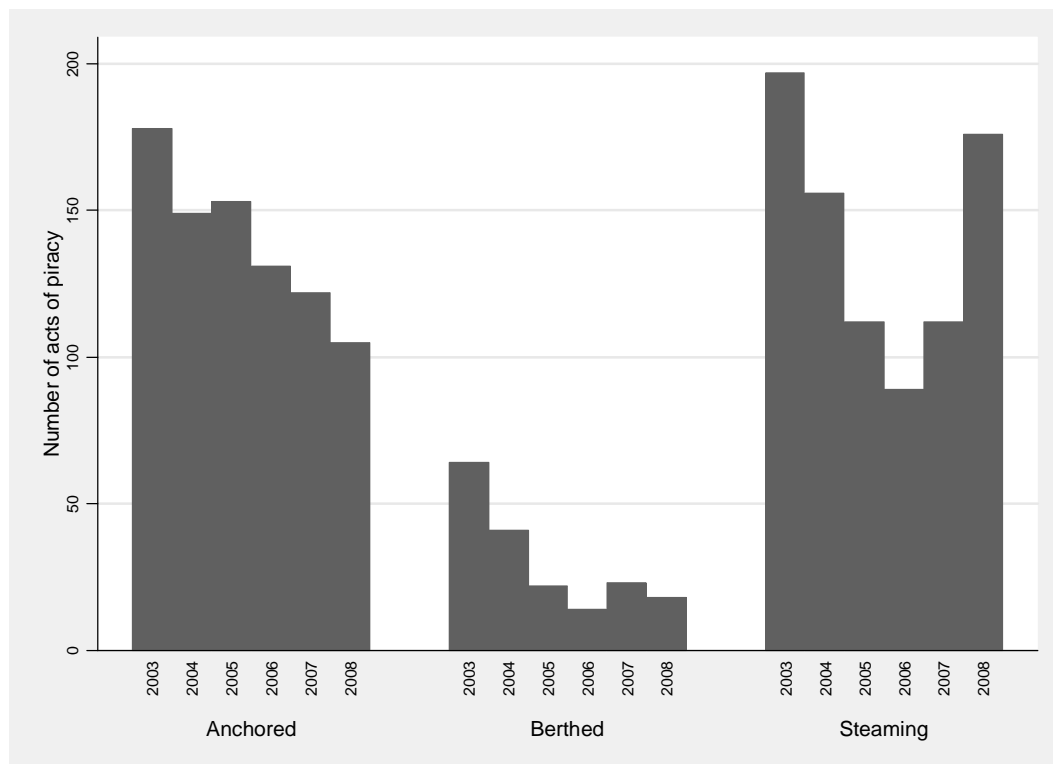
Source: authors' calculations from IMB (1996-2008)

Figure 3. Number of acts of piracy and armed robbery against ships*(1996-2008), by type



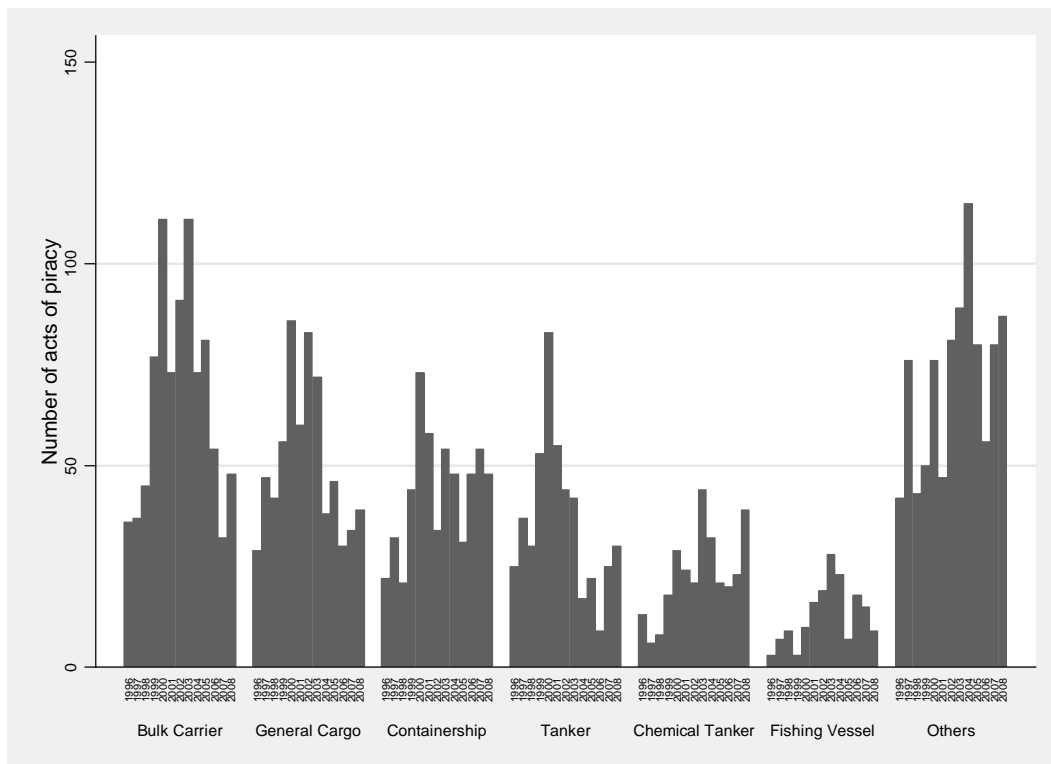
* Years 1996, 2000 and 2002 for which most information on types is not stated were removed
 Source: authors' calculations from IMB (1996-2008)

Figure 4. Number of acts of piracy and armed robbery against ships (2003-2008), by status of ship when attacked



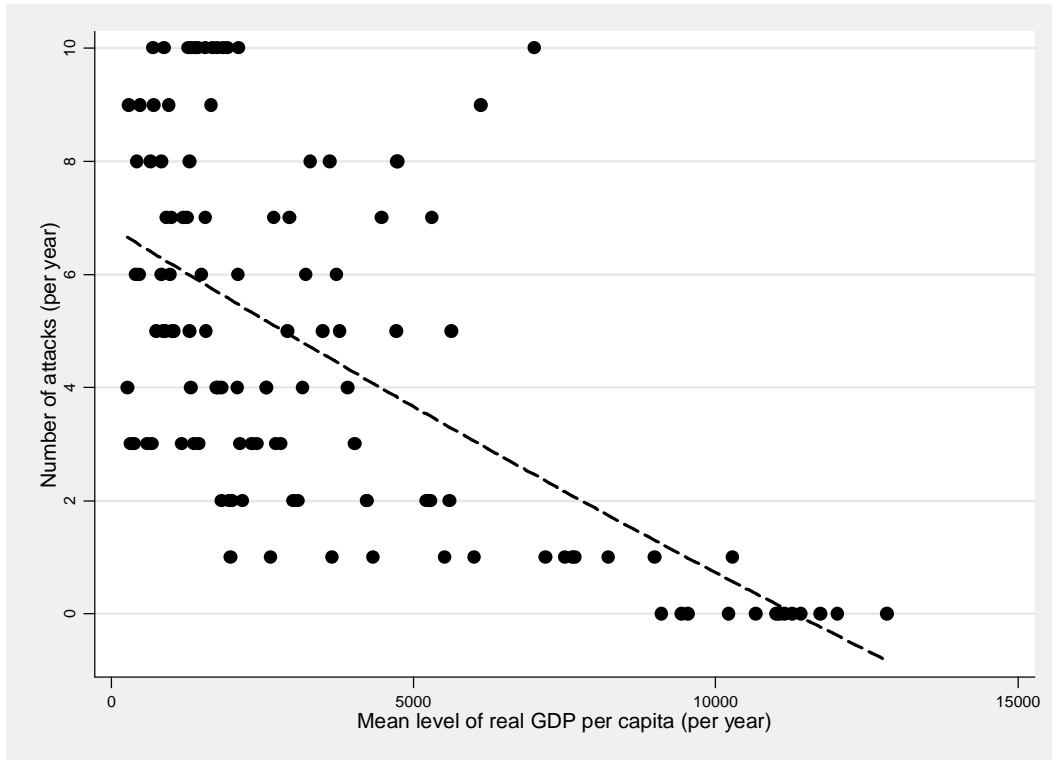
* Years 1996-2002 for which most information on status is not stated were removed
 Source: authors' calculations from IMB (1996-2008)

Figure 5. Number of acts of piracy and armed robbery against ships (1996-2008), by type of vessels



Source: authors' calculations from IMB (1996-2008)

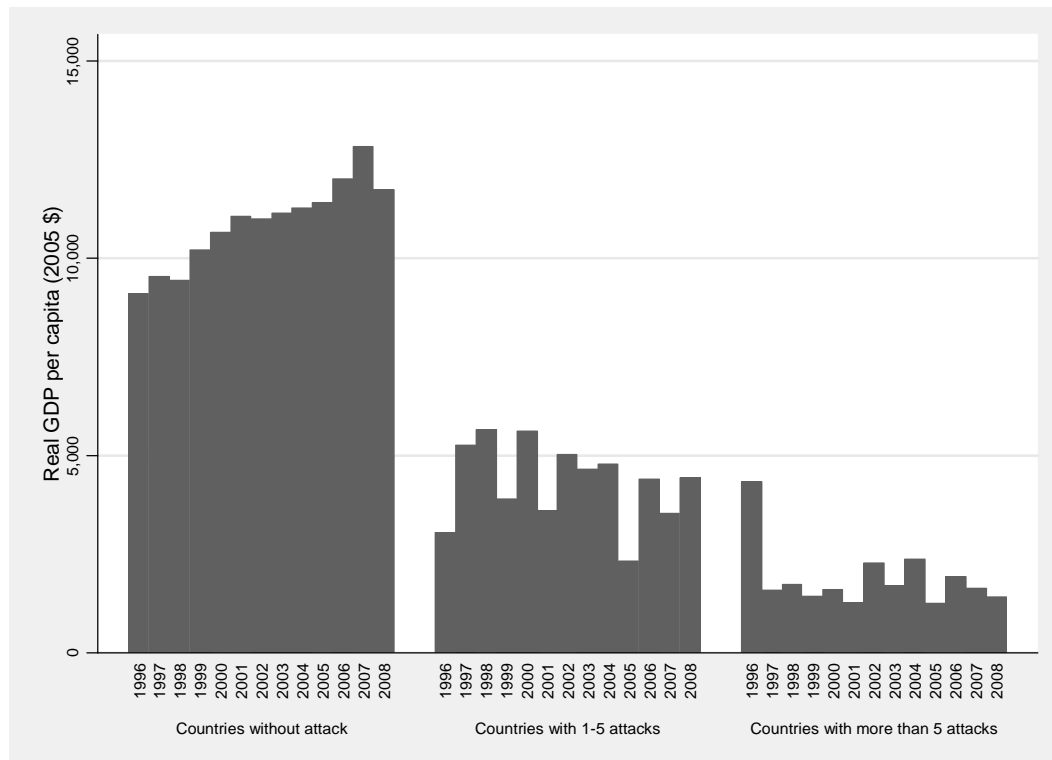
Figure 6. Relationship between number of attacks* and GDP per capita (1996-2008)



* Each bullet corresponds to one country-year observation. The upper category concerning attacks comprises countries with at least 10 attacks per year.

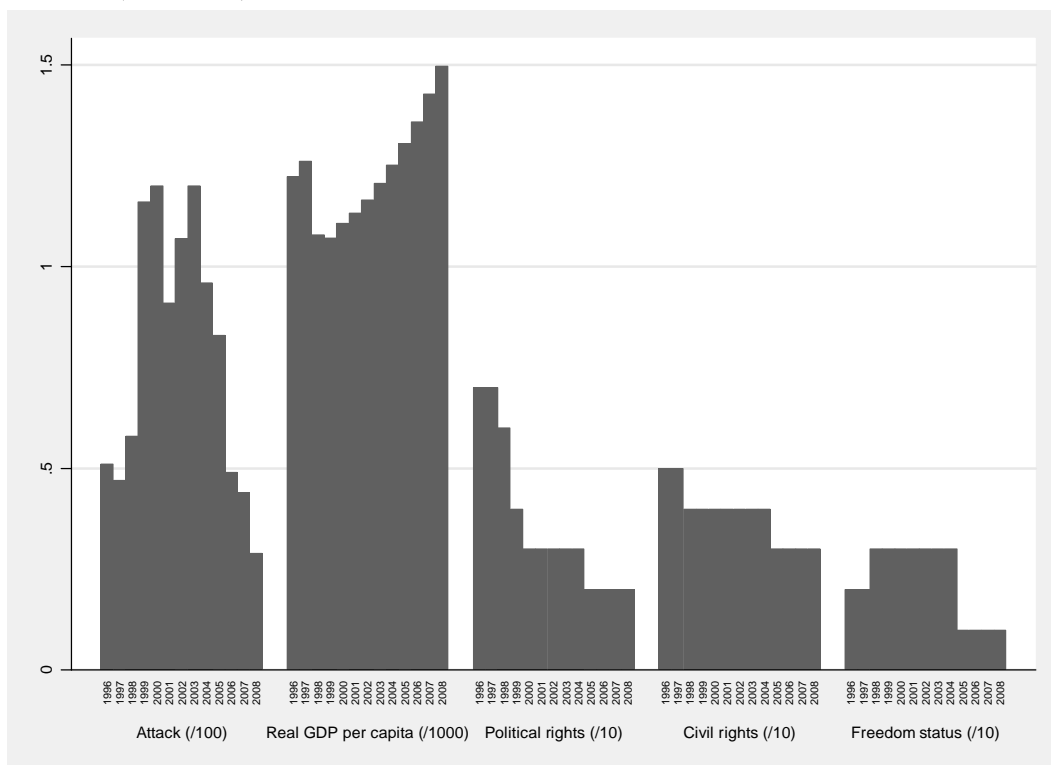
Source: authors' calculations from IMB (1996-2008) and USDA macroeconomic indicators (2010)

Figure 7. Real GDP per capita (in 2005 \$) and location of attacks (1996-2008)



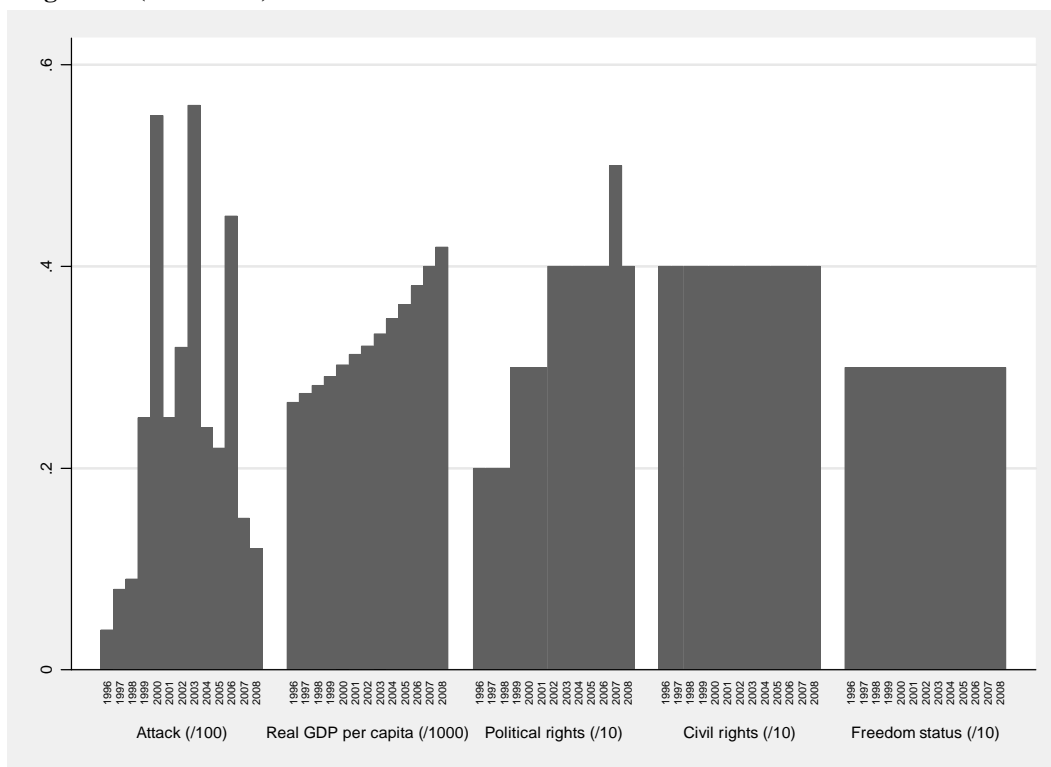
Source: authors' calculations from IMB (1996-2008) and USDA macroeconomic indicators (2010)

Figure 8. Number of acts of piracy and armed robbery against ships and socio-political indicators in Indonesia (1996-2008)



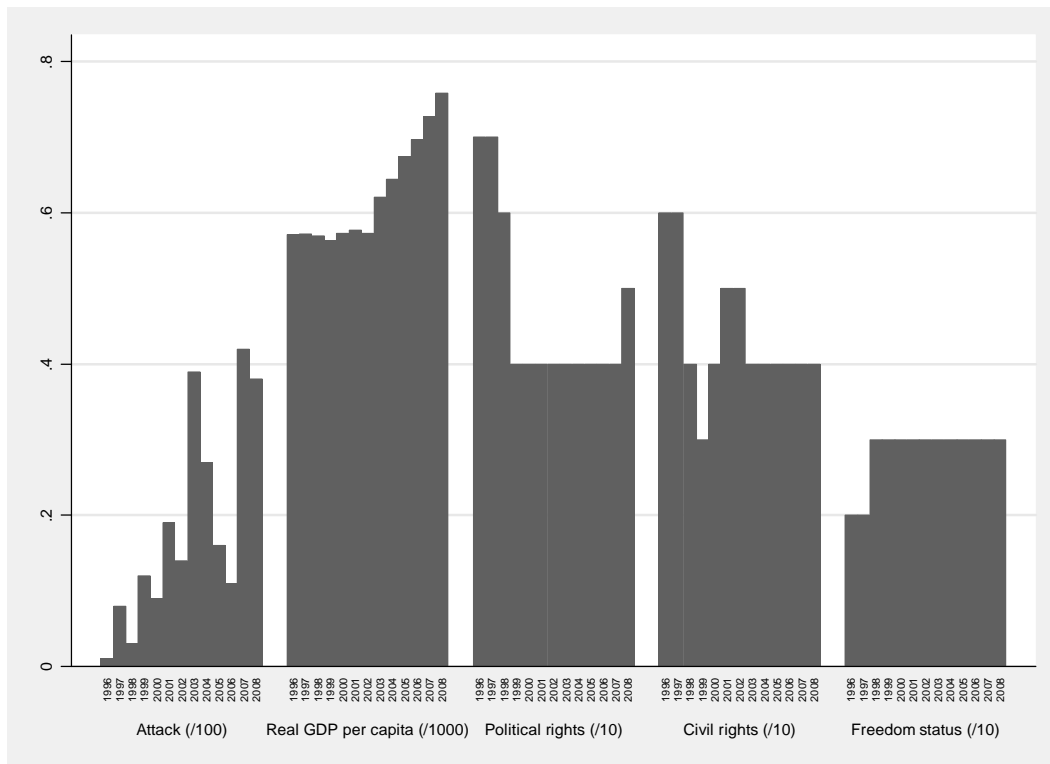
Source: authors' calculations from IMB (1996-2008), USDA macroeconomic indicators (2010) and Freedom House indicators (2010)

Figure 9. Number of acts of piracy and armed robbery against ships and socio-political indicators in Bangladesh (1996-2008)



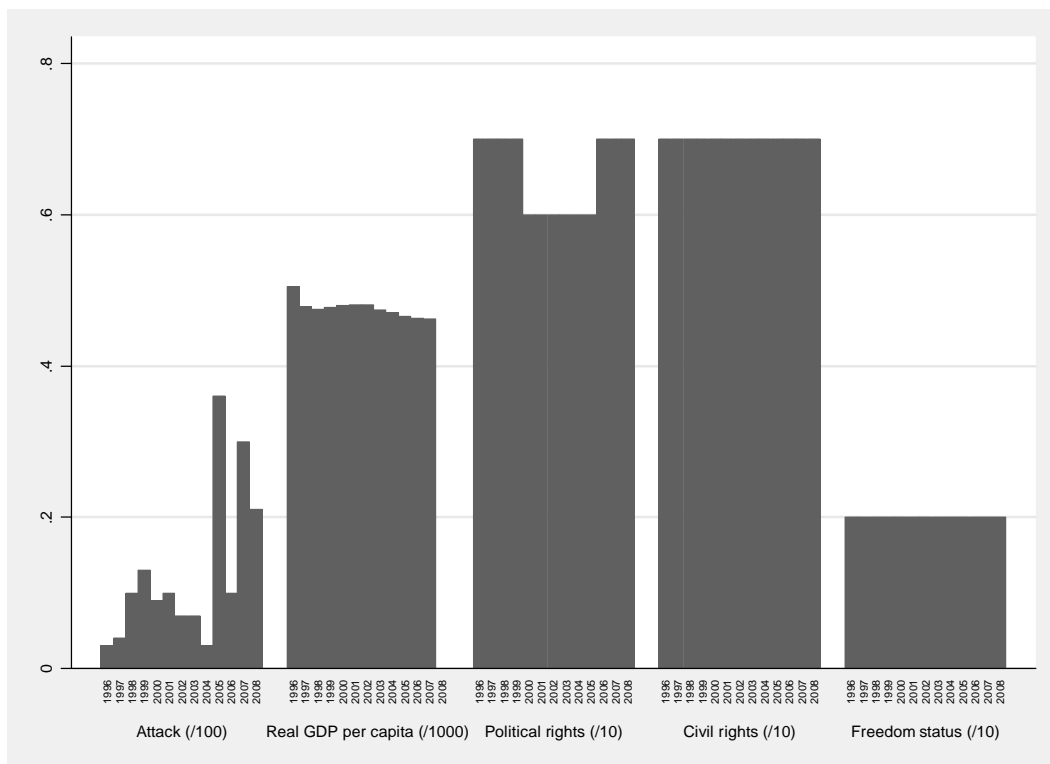
Source: authors' calculations from IMB (1996-2008), USDA macroeconomic indicators (2010) and Freedom House indicators (2010)

Figure 10. Number of acts of piracy and armed robbery against ships and socio-political indicators in Nigeria (1996-2008)



Source: authors' calculations from IMB (1996-2008), USDA macroeconomic indicators (2010) and Freedom House indicators (2010)

Figure 11. Number of acts of piracy and armed robbery against ships and socio-political indicators in Somalia (1996-2008)



Source: authors' calculations from IMB (1996-2008), USDA macroeconomic indicators (2010) and Freedom House indicators (2010)