#### **Research article**

# Maritime piracy and its impacts on international trade

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Abstract: Piracy is one of the burning issues that imposes additional costs on international trade and requires immediate actions from the international community for the solution. Pirate incidents such as boarding, hijacking, or firing upon the vessels of shipping companies, not only damage the crews, ships, or cargos but also cause route diversions, delays, and additional costs in international maritime trade. Therefore, both the direct and indirect cost of piracy to industry and its impact on international commerce cannot be ignored. Studies indicate that piracy imposes significant costs on the global economy. On the other hand, pirate activities result in not only economic but also humanitarian affairs. Therefore, regulations and international agreements should be made for the solution of legal issues related to piracy. Most importantly, the roots of the problem must be addressed and the factors that cause and facilitate piracy must be well comprehended.

Keywords: International trade; maritime piracy; maritime crime; maritime commerce.

**JEL codes:** F18, F59.

#### 1. Introduction

Piracy has been an issue for traders since the day humankind commenced to carry out trade activities by the sea. Throughout human history, civilized societies that are located far away and have access to the sea have connected and traded via maritime. Although road and rail are mainly used for inland trade and transportation, they are mostly regarded as too expensive for long-distance shipping. However, even today physical goods are conveyed via maritime for long-distance international destinations despite technological developments. Nowadays, approximately 90 % of world trade is executed by maritime, and in terms of value, 25 % of the trade navigates through shipping routes in which piracy is actively taken place (Chalk, 2008; Bendall, 2010). Therefore, it is likely to consider that maritime piracy is one of the pivotal obstacles to international trade.

Contemporary trade activities by the sea in today's globalized world are exposed to piracy threats and pirate attacks. The number of pirate attacks on the vessels of shipping companies in recent years has soared and this directly increased the shipping costs and indirectly influenced international trade. Even though piracy of today is not a white screen phenomenon in Hollywood, not much study examined the effects and consequences of maritime pirate activities on international trade (Bensassi & Martinez-Zarzoso, 2012; Ece, 2015; Besley, Fetsel, & Mueller, 2015; Burlando, Cristea, & Lee, 2015; Robitaille, 2020).

Piracy can be seen as more of theft or raid on merchant ships (Aydin, Gedik, Uğurlu, & Yıldırım, 2016). The acts of pirates should not only be considered as attacking the ships. The consequences of pirates' illegal acts include kidnapping crews for ransom, damaging ship equipment, and property, or cargo theft (IMB, 2021). These illegal acts not only damage regional trade activities but also global marine transportation and commerce. Pirate attacks against vessels of shipping

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companies take place in the narrow and strategically choke points of waterways such as the Malacca or Singapore Straits, the Suez Canal, Bab el-Mandeb Strait, Gulf of Aden (Ece, 2015).

Chan and Laffargue (2020), mention that the cost of establishing a community that lives on piracy is low, and finding an investor is just as easy. Hence, the number of pirate vessels will increase, and the threat for merchant ships will become unavoidable. Bendall (2010) claims that pirate-invaded waters represent spots that vessels should stay away from and mostly divert the route so that cost of time increases and additional operating expenses are incurred. All these costs affect freight rates and consequently have negative impacts on businesses and customers. Apart from that, there are many other costs induced by security services and insurance premiums of ships navigating through pirate-invaded waters as well as costs of killed, injured, or taken hostage crews. However, it is not easy to calculate the total cost caused by pirate attacks and their impacts on international trade.

The cost of piracy to industry and the impact of pirate attacks on international trade is an undeniable fact. However, within the current literature, comprehensive studies on the economic impacts of maritime piracy are not yet available. Due to the increasing number of piracy incidents in recent years, container ships belonging to shipping companies direct their shipping routes to Cape of Good Hope instead of the Gulf of Aden and the Suez Canal. These circumstances have caused a significant increase in both monetary costs and time (Fu, Ng, & Lau, 2010). Understanding such deficiency is a critical point to start considering the impacts of maritime piracy on the global economy.

This paper aims to review the previous studies in the literature in order to find out and understand the antecedents of piracy and the effects of maritime pirate incidents on international trade. Within this context, the study firstly covers the maritime piracy problem by trying to define the concept and comprehend the motives behind pirate attacks. The next subsection presents the conspectus of piracy in 2020. Then, the study presents the results of the previous studies related to the topic in the literature. Lastly, the paper ends with concluding remarks and suggestions for practitioners.

### 2. Contemporary maritime piracy

The International Maritime Bureau (IMB, 2021, p.3) defines piracy as "the act of boarding any vessel with intent to commit theft or any other crime, and with an intent or capacity to use force in furtherance of that act". Besides, one of the renowned scholars Murphy (2009, p.7), defines piracy as "unlawful depredation at sea involving the use or threat of violence, but not necessarily, involving robbery". Hassan and Hasan (2017) claim that gaining recognition of pirate activities as a crime enables states to apply criminal laws on the seas and justify the use of power to preserve commercial activities by marine from pirate assaults.

	Definition		
Boarded	"An illegal act of perpetrators successfully gaining access on the ship."		
Hijacked	"An illegal act of perpetrators successfully gaining access on the ship and taking over the control of the ship from the Master and the crew."		
Fired Upon	"An illegal act of perpetrators discharging weapons towards the ship while attempting to gain access onto the ship."		
Attempted	"An illegal act of perpetrators attempting to approach a ship with possible intention to board but remain unsuccessful due to the timely actions of the crew."		

 Table 1. Piracy or armed robbery attacks

Source: IMB, 2021, p.4.

The definition of piracy was first made by the Geneva Convention on the high seas in 1958 and then it was adopted by the UN 1982 Convention (Bendall, 2010). The United Nations Convention on

the Law of the Sea (UNCLOS) defines piracy in Article 101 that states "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 private aircraft that is directed on the high seas against another ship, aircraft, or against persons or property on board such ship or aircraft" shall be regarded as piracy (IMB, 2021, p.3). Given that, Fu et al. (2010) highlight the fact that "it can be committed against a ship, people, or property in a place outside the jurisdiction of any state, maritime piracy is a typical example of universal jurisdiction". Piracy or armed robbery incidents reported under the definition of piracy are presented in Table 1.

According to Chalk (2008, pp.5-6), three types of pirate activities are common in today's global waters. With "anchorage attacks", pirates target the vessels at harbors taking advantage of comfortable circumstances of ports around the world. These attacks are described by the IMB as a low-level armed robbery that targets confiscating cash and portable items from the crew. The second type of pirate activity takes place in territorial waters or on the high seas where pirates strive to looting and robbing the vessel. These assaults mounted by well-equipped pirates are described by the IMB as medium-level armed robbery involving injuries or casualties. The last type of pirate attack aims at seizing the vessels and involves converting them for illegal trading. These assaults are known as the "phantom ship" phenomenon. These pirate incidents are described by IMB as major criminal hijackings.

However, as argued by Bendall (2010), certain issues related to definition and context exist. The illegal act of piracy must be committed in a place outside the jurisdiction of any state or not subject to any state sovereignty. Hence, it can be considered that maritime piracy involves illegal activities and violence taking place in international waters. In addition to that, the same acts in national waters are regarded as maritime robberies. According to Robitaille (2020), the only difference is the location where the illegal act is committed.

As also mentioned by Hassan and Hasan (2017), domestic laws define the act of piracy differently. While the illegal act must be committed on high seas to qualify as piracy in some national laws such as the US and UK, the act in other national laws (e.g., Australia) must take place on either the high seas or in the territorial waters. Hence, to rectify this issue, several international meetings have been assembled and international treaties and regulations have tried to agree upon a uniform definition. Despite these efforts, it would not be correct to say that a conclusion has been reached.

In addition to that, the law that shall be applied is not explicit in the issues as to illegal acts of piracy. Bendall (2010) claims that the definition of piracy varies in the legal systems of states and whether international law or national law shall be applied is a vital problem for pirate incidents. The other issue is that more than 75 percent of assaults take place in the territorial waters and at ports. Hence, according to the definition of piracy under the UN 1982 Convention, these attacks are disregarded as piracy. In this respect, Bellamy (2020) discusses maritime crime and maritime security and draws attention to two different but complementary approaches. While the negative approach seeks protection against threats at sea, the positive approach emphasizes sustainable employment of the seas. In addition, it was stated that the affair calls for an interdisciplinary approach with expertise.

Even though there are definitions of maritime piracy determined by international organizations, the legal systems of sovereign states possess their definitions. What kind of illegal activity shall be deemed as piracy and whose laws shall be applied in the territory of sovereign states need to be clarified. This complexity of maritime piracy poses problems to properly combat and eradicate piracy both in territorial waters and on high seas. Therefore, it can be explicitly stated that one of the issues that the international community fails is to determine a definition regarding piracy agreed upon.

#### 2.1. The reasons behind piracy incidents

In the literature, it has been mentioned that both economic and humanitarian roots underlie piracy incidents. Chalk (2009, pp.2-3) argues that two pivotal reasons underlie piracy incidents. These reasons consist of the magnitude of the trade volume carried out by sea and the choke points of

waterways that the vessels of shipping companies should navigate through. In addition to the main reasons, he mentions other factors that make it easier for pirates such as downsizing the number of crew thanks to the technological advancements, limited resources of states for monitoring the coastline and territorial waters, and lack of maritime police or coastal security.

Moreover, wherever maritime trade is intense and in the case in which anarchy and lack of authority and control prevail, pirate activities are a common occurrence. The main reasons for piracy can be stated as follows (Chalk, 2008, pp. 10-14; Ece, 2010, p. 4; Ece, 2015, p. 79):

- In parallel with the ascendance of the volume of international trade by sea, the marine traffic and the number of ports increase.
- The marine routes for bilateral trade pass through narrow, congested, and risky waterway choke points close to areas criminal activities prevail.
- The impacts of the financial crisis, low wages, high food prices, unemployment, etc.
- Inadequate coastal/port surveillance and inspection.
- Inadequacy and lack of the central government result in political instability and corruption, bribery, loopholes in the legal system, privileged behavior due to the civil war.
- Former fisherman and new sea bandits attacking to protect their fish resources against ships of other countries.
- Inadequacy of the naval police and security forces in the pre-mentioned areas.
- Successful attacks on vessels by using more destructive and sophisticated methods and receiving high amounts of ransom.

As in the past, it is seen that piracy incidents occur today for the same reasons and the reasons behind pirate attacks seem to remain unchanged. Although the tactics used by pirates are not cast in the same mold, it is obvious pirate attacks pose both economic and humanitarian hazards to maritime commerce. Robitaille (2020) argues that the geographical, social, or political contexts encouraging pirate activities are the reasons behind the different tactics adopted by pirates. Thus, in a different parts of the world, pirates apply different tactics and prefer to attack different types of vessels even though the reasons that drive them to involve in piracy incidents are almost identical.

Although many reasons underlie piracy activities, Chalk (2008) draws attention to the presence of choke points. Passing through these congested and narrow waterways, vessels of shipping companies become easy targets for the assaults of pirates. However, the ungoverned territories close to chocking points - where the anarchy prevails, loopholes in the legal system due to lack of central government exist, pirates can harbor, sell their loot, and repair their ships – create pirate-friendly environments and are heavens for piracy activities. 90 percent of international trade is carried out via maritime transport. The major shipping routes pass through narrow waterways such as the Strait of Malacca and the Gulf of Aden, offering pirates ideal opportunities to attack and board cargo ships with speedboats often controlled by a mothership (The Economist, 2008; 2011).

In the opinion of Chan and Laffargue (2020), the model developed in their study reveals that piracy will be minimal or removed if piracy can be established without any entry costs. The reason behind this is that pirates will not be capable of targeting big vessels and will have to attack weak and small ships on the shore. Besides, shipping companies will manage to repel the attacks, but the costs of international trade incurred by these companies will raise. It was also argued that pirates would be much more powerful if they gathered around a central authority with no competition. Therefore, pirate activities will be appealing because piracy is likely to be considered as a substitute for trade. In the light of these, authors claim that the development of international trade and inadequacy of commercial vessels in terms of defense are two underlying reasons for piracy.

Hastings (2009) claims that weak states are more problematic than failed states since they are capable of providing markets and infrastructure for piracy. Under these circumstances, pirates enjoy the perks of the black market to proceed with their activities. According to Baniela (2010), the roots of piracy activities are based upon land though the assaults are executed at sea. Therefore, international

community must take comprehensive preventive precautions not only offshore but also onshore to effectively combat piracy.

Taken all these into consideration, economic, political, and geographical reasons may be reckoned to play pivotal roles as to pirate activities. In terms of economic reasons, regions with lower GDP are likely to confront higher piracy incidents and states with higher unemployment rates will be likely to report more piracy incidents. Politically, off the coasts of weak states, the number of reported piracy incidents will be higher. Last but not least, the shorter the distance of a state to choke-points, the more piracy incidents are likely to be reported, and the higher the trade volume by sea by years, the more piracy incidents will take place.

# 2.2. Conspectus of piracy against vessels in 2020

According to the annual report published by ICC International Maritime Bureau, the number of piracy and armed robbery incidents that have taken place in 2020 has increased to 195, in comparison to 162 in 2019. The increase in the number of incidents is attributed to the assaults reported within the Gulf of Guinea and in the Singapore Straits. As can be seen in Table 2, approximately 45 percent of the piracy incidents are reported off the coasts of Africa. With 35 reported incidents, Nigerian coasts are by far the most intensive locations for pirate activities. 49 percent of total attacks reported in 2020 took place on four locations including Nigeria (35), Indonesia (26), Singapore Strait (23), and Benin (11), respectively (IMB, 2021).

Southeast Asia and South America tag behind Africa with 62 and 30 reported incidents, respectively. Off the East Asia coasts, there is a slight decline trend. However, despite the fluctuations in the total number of reported incidents, neither getting better nor worsening in numbers can be observed. The IMB states that these are the reported incidents and actual numbers can be doubled. That is because, in order to avoid additional insurance costs, shipping companies are inclined to conceal their losses.

Location	2016	2017	2018	2019	2020
Southeast Asia	68	76	60	53	62
East Asia	16	4	7	5	4
Indian Sub-continent	17	15	18	4	10
South America	27	24	29	29	30
Africa	62	57	87	71	88
Rest of the World	1	4	-	-	1
Total	191	180	201	162	195

Table 2. Location of actual and attempted attacks between January 2016 and December 2020

Source: IMB, 2021, p. 6.

Table 3. Comparison	of the type of attacks	s between January	2016 and December 2020

Category	2016	2017	2018	2019	2020
Boarded	150	136	143	130	161
Hijacked	7	6	6	4	3
Fired Upon	12	16	18	11	11
Attempted	22	22	34	17	20
Total	191	180	201	162	195

**Source:** IMB, 2021, p. 11.

A total of 195 piracy and armed robbery incidents in 2020, 161 vessels were boarded, three ships were hijacked, 11 vessels were fired upon, and 20 attempts were made. Also, the slight decline trend regarding hijackings of ships can be seen in Table 3. Each year more than 70 percent of the vessels were boarded by pirates. IMB report explains that the average number of kidnapping incidents are over 60 nautical miles from land. Considering the increasing capability of pirates, it is advised vessels in the region remain at least 250 nautical miles from the coast (IMB, 2021).

As can be seen in Table 4, the number of kidnapped crew tends to increase. While 62 crews were kidnapped in 2016, 135 kidnapping events occurred in 2020. The number of crew kidnapped within the Gulf of Guinea accounts for over 95 percent of the total figure. Contrary to this, hostage incidents have been in a declining trend since 2018. Contemporary piracy incidents jeopardize the lives of people from different countries. In addition to injuries and deaths, the crew exposed to pirate assaults confront psychological problems and most of them never sail again (Chalk, 2009).

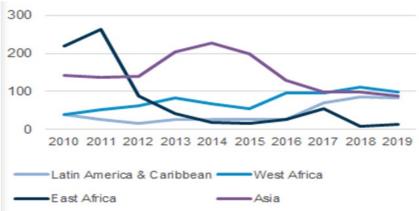
Types of Violence	2016	2017	2018	2019	2020
Assaulted	5	6	-	3	5
Hostage	151	91	141	59	34
Injured	8	6	8	7	9
Kidnapped/Ransom	62	75	83	134	135
Killed	-	3	-	1	-
Threatened	10	10	9	6	8
Total	236	191	241	210	191

Table 4. Types of violence to crew between January 2016 and December 2020

Source: IMB, 2021, p. 11.

In 2020, 23 incidents against vessels within the Singapore Straits were reported. In 22 of these incidents, vessels were boarded, and it was reported as low-level assaults. At Indonesia ports, vessels were boarded while berthed or anchored. During these low-level incidents, one crew was injured, three were taken hostage, and four were threatened. At the South American ports, the crime of robbery was the illegal act mostly reported in 2020. 25 vessels were boarded while anchored at ports. In the meantime, two vessels were fired upon and three attempts were reported in Ecuador and Mexico (IMB, 2021).

Off the coasts of Somalia, no incidents were reported in 2020. However, IBM warns mariners that Somali pirates are capable of carrying out attacks in the Somali basin and wider Indian Ocean. Therefore, it is highly recommended that Masters and the crew must stay on alert and remain cautious while transiting these waters. The pirates were better armed than in previous years and prepared to assault and injure the crew (IMB, 2021).



Graph 1. Piracy and armed robbery of vessels between 2010 and 2019.

Source: IMB, 2021.

As can be seen in Graph 1, pirate incidents, which were common in East Africa - off the coasts of Somalia and Asia in the beginning, have spread to West Africa - the Gulf of Guinea and Latin America & Caribbean over the last decade. Trends in piracy incidents demonstrate a shift among regions. There is a huge reduction in the number of piracy incidents off the coasts of East Africa whereas a rise in the numbers off the coasts of West Africa. On the other hand, the threat of piracy and armed robbery of vessels ranges between 100 and 200 each year in the Asia region and follows an upward trend in Latin America over the last decade.

## 3. Consequences of maritime piracy on international trade

It has been annually estimated that the cost of piracy incidents varies at least between \$7 billion and \$12 billion. Table 5 demonstrates the estimated total cost of piracy in 2010 (Bowden, 2010, p. 25). As can be seen in table 5, cost items include ransoms, insurance premiums, costs of rerouting ships, costs for equipment necessary to provide security of vessels against pirate attacks, and costs incurred by regional economies. However, Hallwood and Micheli (2012, p. 191) state that international law has not addressed cost-sharing. Moreover, Hagemann (2010, p. 45) points out that each state covers its costs although other states take advantage of these expenditures, and some states even undertake extra costs to aid in the installment of regional enforcement facilities. According to Bendall (2010), pirate activities still involve a net cost. Piracy puts millions of dollars more burden on shipping companies' costs per year when opportunity costs are also considered.

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Table	5.	Maritime	piracv	costs
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Value (dollars)		
176 million		
460 million to 3.2 billion		
2.4 billion to 3 billion		
363 million to 2.5 billion		
2 billion		
31 million		
19.5 million		
1.25 billion		
7 billion to 12 billion per year		

Source: Bowden (2010, p. 25).

Fu et al. (2010) conducted their study to investigate the impact of piracy on global economic development through the Somali sample with the data obtained between 2003 and 2008. By using historical data, they applied their economic model to the container liner shipping market so that it was tried to estimate the welfare loss and efficiency loss due to the decline in trade volumes and rerouting. In their study, it was revealed the way the economic values and global development in the region were affected by pirate activities. According to the study, piracy actions cause serious losses with 30 billion us dollars annually to the economy on a global basis in the region. In addition to that, the traffic volumes along the Far East-Europe route would decline by approximately 30 % without governments' efforts. Therefore, the importance of international cooperation was emphasized to minimize the welfare and efficiency loss because of the pirate activities in the region.

Piracy incidents in certain regions of the world cause vessels of shipping companies to avoid these locations by re-routing and bear additional costs. In addition to that, vessels passing through pirate-invaded waters must pay high insurance rates to be able to cover the losses in case of assaults. In the study of Bendall (2010), it was aimed to demonstrate the economic impact of piracy on shipping lines that chose to re-route to avoid known pirate trouble spots. Based on the comparative voyage costing approach, the study shows that re-routing creates a considerable amount of costs. Study results indicate that fuel bills of vessels soar due to re-routing and millions of dollars were added to the total cost when opportunity costs were taken into consideration.

In their study, Hallwood and Micheli (2012) claim that more pirates are released than the number of pirates sued. They partly explain this situation in a way that many countries are lack national laws criminalizing piracy, and that evidence is usually insufficient to prosecute suspects. Hallwood and Miceli (2012) examined the economic role of international cooperation in combating piracy and reducing anxiety caused by piracy. In the study, international legal regulations and the effects of these regulations on the maritime economy of piracy actions in the region were examined. They emphasize that the measures taken are effective in preventing physical attacks and harms, but

that concern and anxiety are gradually increasing, and that more international cooperation is needed in this regard.

In her study, Ece (2010) studied the definition and types of piracy, its reasons, the regions, regulations, and measures taken to prevent piracy. In the study, according to the results of the relationship analysis (Chi-Square) between the years of piracy and nonparametric variables (piracy areas, the types of attack, and the type of violence applied to the crew), she found a statistically significant relationship between the years of piracy and the aforementioned non-parametric variables. As a result of her study, she gave recommendations on the measures to be taken to prevent piracy based on the statistical analysis results.

On the other hand, Martinez-Zarzosso and Bensassi (2013) examined the cost of modern piracy in their study. In the study, they established a transport cost equation by stating that piracy has a substantial and significant impact on the economy on a global basis. The fact that existence of politically and economically weak and failed states along the maritime trade route jeopardizes and threatens the trade between Europe and Asia. The downward trend in trade barriers has been proven to facilitate the entry of small firms into international markets (Chaney, 2008), and the disadvantage of high shipping costs between Europe and Asia damage European interests over their competitors in Asia's expanding markets. According to equality results, piracy severely affects trade between Europe and Asia. Again, according to the results of the study, it has been reported that piracy actions in these regions in recent years have increased significantly in terms of both impact and cost.

Campbell (2014) studied acts of piracy in the Indian Ocean. In the study, the commercial value of piracy in the Indian Ocean is explained and the historical process of piracy in this area is mentioned. Then, the region was examined in terms of the global economy and the effects of pirate activities on the economic cycle, and the ramifications of these effects were investigated. In the study, the fact that the rise and development of the Indian Ocean World (IOW) global economy have been neglected by the Eurocentric view was argued. Additionally, it is mentioned maritime commerce in this region (IOW) is characterized by a sophisticated system from Africa to the Middle East, South Asia, Southeast Asia, and the Far East. According to the author, "there appears a clear correlation between the upturns in the IOW global economy and piratical activity, but piracy also appears to have increased during downturns in that economy, possibly as a reflection of economic uncertainty". In another word, a significant relationship was found between the character and frequency of piracy acts and their economic effects.

Both in the long run and the short run, pirate attacks are highly influential on international maritime trade. Besley et al. (2015) investigated the trade flows of vessels passing through areas in which pirate activities prevail. Results of their comparison revealed that the increase in the number of pirate attacks caused an approximately 10 percent increase in the cost of shipping. It has been concluded that the increase in costs is due to the increase in insurance and security costs. Long-term impacts of pirate activities on international trade were demonstrated by Bensassi and Martinez-Zarzoso (2012). Authors state that impacts of pirate attacks proceed even after years. In their study, the trade from European Union to Asia between 1999 and 2008 was examined, and concluded that the 10 attacks were associated with an 11 percent decrease in total exports (Bensassi & Martínez-Zarzoso, 2012). Besides, Shepard and Pratson (2020) investigated the effects of piracy on tankers conveying petroleum through the Strait of Hormuz and energy exports. The results of their analysis demonstrate that there has been a decrease in tanker transit, and it has been observed that refined oil exports from Bahrain and Kuwait were significantly affected. It was stated that few significant long-term impacts were observed.

### 4. Conclusion

According to Murphy, "piracy is a global phenomenon but not a global problem" (2009, p.21), because "it is geography that distinguishes piracy from other crime" (2009, p.410). Most pirate attacks occur in waters under the jurisdiction of the states, rather than on the high seas. In such cases, "if the

political will to suppress or control piracy is missing for whatever reason, then piracy will continue" (2009, p.178). In addition to this view, Fu et al. (2010) acknowledge that maritime piracy is neither a static activity nor restricted within a particular area or region. In their opinion, piracy is mutually dependent on global economic development, corporate strategies, and/or government policies. Acknowledgment of the problem in this way fills the gap in the literature which mostly treated maritime piracy as a non-dynamic activity separate from the effects of developments in the global economy, institutional strategies, and government policies.

Some level of state weakness creating environments that pirates take advantage of is required for a minimum level of pirate attacks. This is because weak or failed states provide a certain level of transportation infrastructure to carry their booty and repair their vessels and guns, and a black market that enables pirates to sell a share of loots. As Hasting (2009) mentioned, weak states provide better conditions for piracy in comparison with failed states. In addition to this, Campbell (2014) argues that pirate activities require far more investment in vessels, weapons, and human resources than the indigent states can afford. Most pirate activities are funded directly by local authorities and are argued to be conducted under a command hierarchy with military discipline and organization. Besides, the pirates get a share of any loots, and the widows of the pirates killed receive compensation. Hence, the humanitarian side of pirate activities should not be ignored.

It is undeniable that pirate activities still involve a net cost. Piracy causes millions of dollars additional burden on shipping companies' costs per year when opportunity costs are taken into consideration. If the necessary precautions with pirate activities cannot be taken by both states and international organizations, and if it continues to grow, international trade and transport will confront serious ramifications for international transport and trade affecting both developed and developing economies. The cost imposed by piracy on the global economy and international trade was demonstrated by the aforementioned studies. Therefore, it is a fact that cannot be ignored.

For a decline in the number of pirate activities, leaders of states where piracy is widely reported and experienced, such as Somalia and Nigeria, must begin to successfully rule their country. These leaders must be able to better integrate their states into the global economy. The security problems posed by state weakness are something to be considered when trying to rebuild the economies and political institutions in failed or weak states (Hastings, 2009). The covid19 pandemic has affected the economies of hundreds of countries and during this time, poor people become even poorer. Economic conditions cause not only severe social unrest but also political turmoil. As can be seen from the figures for 2020 and previous years, the terror of piracy will be more severe in the following years. Therefore, the international community must take proactive precautions instead of reactive ones to terminate piracy.

In order to deal with the piracy problem, the roots of the problem should be addressed and the factors that cause and facilitate piracy should be well comprehended. It might be considered that taking precautions in the regions where piracy incidents are intense, especially in Somalia, Nigeria, and Indonesia, and where major economic problems such as political turmoil, instability, hunger, and unemployment prevail, is likely to serve the purpose of peace. Providing both financial and military aids to these regions to increase the welfare of the people and secure them will be a radical solution to end the piracy incidents. In addition, regulations and international agreements should be made for the solution of legal problems that may arise, such as which country will be held and how they will be prosecuted if pirates are caught on high seas.

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