

Master thesis, BE 501

Counting the costs of piracy around the Horn of Africa

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Preface

The master thesis is carried out as the last part of the master education in economics and administration at the University of Agder and is therefore approved as such. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.

The shipping industry is one of the most competitive industries in the world, and due to its global nature it is influenced by so many factors which makes it highly volatile and difficult to foresee. The border between wealth and bankruptcy can be very thin, fortunes are made fast, and lost even faster.

One of today's threats to international trade is piracy. Piracy strikes trade where it hurts badly, the very important transportation of cargo. I wanted to look into this more closely, because it allowed me to work in areas of international economy and trade, shipping, geography and most children's heroes, pirates.

I will use this opportunity to thank my supervisor, Sigbjørn Sødal, for his helpful advice, remarks and comments to my thesis. His knowledge on these subjects and how to structure the thesis as best possible has been an asset to me while writing this thesis. I would also like to thank Oddmund Wallevik for allowing me to research this very fun and interesting theme.

Last, but not the least, I send my appreciation to my loving Christine, who has been patient and hard working with our twins, Nathaniel and Theodor, while I have been working on this thesis. She has been understanding with me, and given me great encouragement the whole way.

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Brief summary

This thesis has identified three key factors that are present in the hot spots of piracy around the world. A hot spot is typically very trafficated by international merchant ships, the local people are usually less fortunate, and the countries where the pirates are located, often have weak and corrupt governments.

It is shown how piracy around the Horn of Africa differs from piracy elsewhere. The pirates operate from a country, Somalia, which has been without an efficient government for almost two decades, and the gangs that control the country rule their territories as semi autonomous enclaves, so criminals can operate almost freely.

The Gulf of Aden is a part of the international maritime highway between Europe and Asia, and the trade between these two continents is now threaten by the pirates, and in worst case scenario the ships that provide transportation for the traded goods can be forced to avoid the area. The alternative route is longer, and fewer roundtrips will be available per year. The delivery time will also be lengthen, fuel price and freight rates will peak and new demands related to ship design will influence the shipyards will be the results if every ship is forced to use this alternative route.

Piracy has been around for centuries, and experiences have been made. But newer laws and regulations makes it difficult to handle piracy in this area, and methods that previous have been efficient have not been as successful here as elsewhere. The issues with regulations and laws are described to better understand this problem.

Six methods, three at a government level, and three at a corporate level, are identified as the possible solutions to deal with, and relate to piracy around the Horn of Africa. All are used today to a somewhat degree. The costs of each of these methods are estimated to the degree possible, and compared with the effect it has. The methods are then evaluated against each other.

My analysis and evaluation finds that the best way for the governments to protect their shipping industry, is to back a Somali government conquering the difficulties that it needs to overcome in order to efficiently govern the country. This is a long process, and in the meantime pirates can be trialed in other countries, and serve their sentence in new prisons in Somalia. While the shipping companies wait for this to happen, the best way they can protect themselves is to hire armed forces to protect the ship when it is in transit. Evasive maneuvers have also proven efficient, but are not always enough.

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Part 1

1.1 Introduction

After WW1, the European countries wanted to be self sufficient and had no desire to engage in trade with other countries. Germany had to pay large war indemnity, and had to follow many restrictions. Great trade barriers were set up among countries, and combined with the stock market crash 24 October, 1929, international trade in the interwar period collapsed almost entirely.

After WW2, the Marshall help was given to European countries to avoid that history repeated itself, and the receivers had to join the GATT agreement, which has later become known as WTO, and OEEC. The purpose of this was economic integration and reducing and removing barriers to trade, so economic progress and increased welfare could flourish. The result has been largely increased international trade.

Countries that engage in international trade will experience that their economic welfare increase, and that they become more political dependant on other countries. The result of the GATT and OEEC agreements were positive and international trade and world GDP experienced a significantly large growth as can be seen in figure 1 and appendix 1. The importance of shipping has grown accordingly to the world economy.

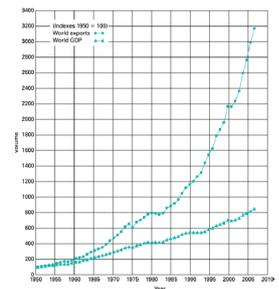


Figure I GDP and world export growth over the latter half of the 20th century

The trade we commence in today is worldwide. Even though regional trade accounts for most of the trade, inter regional trade is of growing importance.

(See appendix 1) The increase in inter regional trade has contributed to a growing importance of the shipping industry, the main provider of transportation of goods and commodities.

Today, the shipping industry is faced with a great challenge as piracy flourish in the middle of a maritime highway, and this can change shipping as we know it. The voyage costs increase, as ship-owners are faced with higher insurance premiums, extra risk salary to the involved seamen, and the costs of protective efforts. The governments who host shipping industries wants to show that they will protect them as best they can, so the society also pay a price for this. Tax money is spent for protection of merchant ships and additional war risk charges will be introduced to the customers.

If piracy remains undealt with, ships can be forced to sail around the Cape as an alternative route, which again will lead to new demands in the shipbuilding industry. Also the message will be that piracy is ok, and the risk will then be that piracy will begin to evolve more in other areas as well, and then ultimately threaten world trade in other areas too.

Piracy must be dealt with; the alternatives are not good enough. This thesis will identify 6 different methods, at a government level and at a corporate level, of how piracy can be handled and stopped.

1.2 Problem definition

The costs involved with efforts to fight piracy, are in the range of billions of dollars. Warships are deployed, trained personnel are hired and ships engage in evasive maneuvers. Piracy itself leads to higher insurance premiums, extra risk salary and eventually higher freight rates.

Piracy is not a new phenomenon, but the pirates have evolved and seek refuge in lawless countries to avoid being caught by the forces that try to stop piracy from happening, a coalition of mostly western nations and some Asian.. The problem is that some countries don't cooperate with these forces; they rather cooperate with the pirates and benefit economically from this by accepting bribes. This creates great problems for the rest of us, since the sovereignty of a country must be respected. The deployed forces cannot enter the inland waters of a country without permission from its government.

This thesis will look at the cost of the different methods that can be applied, identified through the thesis, and the effect they have. The problem is great, and 6 different methods to deal with modern piracy are identified through this thesis. A comparison of the cost/benefit of these 6 methods will then follow to see if a solution can be identified as more effective than the others.

1.3 Sources

Pirates don't like attention, and piracy takes place in far corners of the world and involves few or none western people. These are reasons for not giving the problem of piracy attention in the media, it doesn't directly concern us. With this in mind, obtaining good sources for this thesis could be hard, but the sources used in this thesis are often checked against other sources to ensure the quality of the information used. A source that is listed in this thesis, have been checked against one or more different sources in most cases. Use of sources like wiki answers, Wikipedia and the similar has also been avoided. As far as possible I have gone back to the main document to read the original statements and comments, first hand information.

1.4 Outline

This is a descriptive thesis, which mostly collocate facts. The different agents that are connected to the industry are presented, and a brief history of piracy is given to give the reader an insight to the experience we have and how things have been handled before. From the history, combined with what we see today, we can find the circumstances and the economic, political and geographic assumptions that need to be present in order for piracy to exist.

This thesis starts with an introduction about shipping, to explain and describe different sides and aspects of the shipping industry. It continues with an overview of the geography involved, a description of the so called hot spots of piracy, before we look into who the legislators of the industry are, and what the valid laws around the issue of piracy states.

Part 3 start with piracy as most people know them, the pirates from the Golden Age. Part 3 will give a description of piracy, and look into how piracy has evolved from the Golden Age of piracy and to present time. We then move to modern time and look at how and where piracies exist/have existed, and how piracy can differ among the hot spots. We then take a closer look at piracy around the Horn of Africa, which is the main theme for this thesis, and a background note of Somalia is given to raise understanding of how piracy can flourish like it does in this area. Then we identify 6 methods of how piracy can be dealt with, and an attempt to see the case from a pirate's perspective.

Part 4 describe and calculate the different costs involved when dealing with piracy around the Horn of Africa, and the cost inflicted on the shipping companies and the nations involved. This part also looks into the problems connected to each of the methods.

Part 5 evaluate the alternatives on the basis of the cost/benefit analysis, and part 6 gives my conclusion on what I believe will be the best solution at hand to relate and deal with the issue of piracy around the Horn of Africa.

Part 2

2.1 About shipping

(Stopford, 2009)

"God must have been a ship-owner. He placed the raw materials far from where they were needed and covered two thirds of the earth with water." (Naess)

As Naess says, the earth's resources are unevenly distributed and often located far from where the greatest demand is located. This is also the case for many labor intensive products. Most products which are labor intensive are manufactured far from the location where they are consumed due to differences in labor cost.

In an autarky, which means that a country is self sufficient, a country normally cannot fully exploit its comparative advantage. Without engaging in trade, some goods will be in overflow, countries will have inefficient production of many products, and the variability offered to consumers will be very limited.

International trade theory often distinguishes between two types of trade. For a company to exploit its potential of economies of scale and due to difference in taste among consumers there is a great trade in similar products or in the same industries. We also have trade where a countries exports and imports are in different industries, due to comparative advantage and differences in demand among regions. These types of trade are called intra-industry trade and inter-industry trade.

An example of intra-industry trade can be that labor intensive products are often manufactured in countries where labor is relatively cheap, and due to economies of scale a manufacturer can produce more than it is demanded in the local market, and export to surrounding markets cheaper than having a factory in every location. Only a few countries have a home market that is large enough for producers to offer a variety of goods to their consumers. Consumers have different taste and will therefore demand different products. Trade in similar products, as for example cars, are therefore one of the most traded commodities.

An example of inter-industry trade can be that a country might have more oil than it consumes domestically, but at the same time not be able to grow enough grain to meet domestic demands. When a country has excessive supply of a product, it can engage in international trade and export its surplus, and use the revenue to import the goods that the country has excess demand for, in this case, export oil and import grain.

Without a sufficient transport provider, import/export possibilities are limited and the result would be great price variation among regions, and limited supply with small variations. This is where shipping comes in.

Shipping is the transport of goods and people at sea and sea transport have been around for thousands of year. The first ships that offered transportation at sea, was for about 3-4000 years ago in the Arabian Gulf, and since then, shipping has developed into a line of business the world is highly dependent upon. Shipping provides a suitable transportation for most goods and can transport large quantities at the same time. Around 90%, almost 95% of world trade is served by the shipping industry. (Round Table, 2010) Needless to say, shipping is highly essential to the world economy.

International shipping industries provides low transport cost for most goods. Intercontinental transportation cost less than 2% of the shelf price for many products. (Round Table, 2010) The misalignments described above evens out and the variety of goods offered to consumers increase. Nations worldwide are able to exploit their comparative advantages and trade cheaply with other nations. This has contributed to evening out the prices of different commodities among regions, so more consumers can afford heating, food and other consumables. It is said that without the shipping industry, half the world would starve, and the other half would freeze. (Round Table, 2010)

2.1.1 The four markets of shipping

William Stanley Jevons definition of a market from 1871 is still valid as a good description.

“Originally a market was a public place in a town where provisions and other objects were exposed for sale; but the word had been generalized, so as to mean any body of persons who are in intimate business relations and carry on extensive transaction in any commodity. A

great city may contain as many markets as there are important branches of trade, and these markets may or may not be localized. The central point of a market is the central exchange; mart or auction rooms where trader agrees to meet and transact business... But this distinction of locality is not necessary. The traders may be spread over a whole town, or region or country, and yet make a market if they are...in close communication with each other.” (Jevon, 1871)

As a great city that has many markets, shipping has four important branches of trade with its own market.

The freight market is the industry’s main source of revenue. In this market, sea transport is traded. Ship-owners offer their service, transportation, to companies or others that need transportation of goods. This market is the main source of revenue for the industry.

Sales and purchase market is a zero sum game for the industry. Ship-owners value ships differently, and trade their ships among themselves, so no money enters or leave the industry through this market, but ships change owners.

New building market is the market where ship-owners buy new ships from the shipyards. This ship can be a standardized vessel or a vessel that is tailored for that particular client. The industry grow in amount of ships, but some money exit the industry here as payments to the shipyards.

Demolition market is a small source of revenue for the industry. When a ship gets old and inefficient, there are no longer any interested buyers so the old ships are scrapped. The ship-owner receive a payment, often a dollar amount per light weight ton (lwt), the weight of a ship’s hull, machinery, equipment and spares, when he scrap the ship.

2.1.2 The supply and demand of shipping

The freight revenue a ship-owner receives is determined from supply and demand. When there is high demand for sea transport, and low supply, the freight rates increase. The value of a ship will also increase, as its potential earnings increase, so second hand prices and new

building prices increase. On the other hand, when there is excessive supply of sea transport, freight revenue will decrease.

The demand and supply for sea transport are dependent on many factors. Demand is determined by the world economy, seaborne commodity trade, average haul, random shocks and transport costs.

The world economy is probably the most important determinant for demand for sea transport. When there is economic growth, demand for products and raw materials will increase, and thereby increase demand for shipping services.

Seaborne commodity trade will often be subject to seasonality. Grain from the US Gulf is harvested in September, creating great demand for sea transport, but the months before September, the seaborne commodity trade for grain is almost zero. Heating is also subject to seasons. Consumers in the Northern Hemisphere demand oil and coal for heating from November till April, and this create great demand for sea transport.

Average haul refer to the distance the goods travel. If EUs import of grain normally comes from Ukraine, but Ukraine has a bad harvest this year, and the grain needed has to be imported from the US, the distance the imported grain needs to travel increases dramatically. This distance effect is referred to as average haul. When average haul increases, demand for shipping services increases.

Random shocks disturb the balance in the industry. A random shock can be closing of the Suez Canal as we saw in the 50s, the recent financial crises, a war or a decision from OPEC to raise the oil price. A random shock can increase the average haul, increase trade in seaborne commodities, or change the world economy, and this way affect the demand for shipping.

Transport cost is of course significant for the demand. Intercontinental trade will decline if the cost of transport gets too high, because the possibility to earn a profit will decline. In the long run if shipping cost remains high, substitutes may become more available as for example transport by train.

The willingness for ship-owners to supply their services is also dependent on several factors as the merchant fleet, fleet productivity, shipbuilding, scrapping and freight revenue.

The merchant fleet is the available capacity the industry can provide. The merchant fleet has grown steadily over the last century, as more new ships are delivered than old ships are scrapped, but the capacity of the merchant fleet has also grown much because of the great increase in size of the newer ships. The worlds merchant fleet count today around 50 000 ships, including all kinds of ships. (Round Table, 2010)

Fleet productivity is how well the merchant fleet is utilized. During a year a ship will have a number of backhauls with no cargo, spend time in repair, maintenance, waiting and port time. The time spend on these activities can be significant, and if shortened, the efficiency of the fleet will increase. The steaming speed is also important. The available supply can be enlarged with as much as 35% if the steaming speed of the ships increases from 11 to 15 knots.

Shipbuilding takes time; the time lag from ordering to delivery can be as much as 1-4 years depending on the order book of the shipyard. The level of output a shipyard can provide is dependent on demand, but changes happen slowly. Shipbuilding can this way affect the size of the merchant fleet by adjusting their output.

Scrapping of old ships is a necessity. Old ships, typically at age 25-35 years, cannot compete with modern and more efficient ships, and when demand decreases, the only ships that survive the hardened competition is the newer and more efficient ships. Some of the old ships are put in domestic trade, while most of them are scrapped. Most years since WW2, new deliveries have outnumbered scrapping, and the merchant fleet has grown.

Freight revenue is the main determinant for shipping supply. Ship-owners will, depending on the freight revenue adapt their fleet by making it more efficient and larger when the revenue is high, and minimize costs when the revenue is low.

2.1.3 Shipping cycles

Supply and demand for shipping activities depend on many factors as seen above, and this lead to great fluctuations. Because of these fluctuations, we see that the freight rates move in cycles.

There are three types of cycles, long, short and seasonal. **A long cycle** move over several decades, and technology, economy and regional change drive the cycle through its stages. The regional change in China at this time is an example of a long cycle where we can see a long trend of economic growth.

A short cycle regulates demand and supply and helps them meet each other. A short cycle consist of a **through** with excessive supply, low freight rates and desperation in the market, a **recovery** where a better balance between supply and demand is acquired and rates and ship values increase, a **peak** where there is excessive demand, high rates and many new orders, and then a **collapse** where people are not sure how to handle falling rates. These stages of a cycle are manmade, for example when freight rates are high, ship-owners order more ships, and at a point supply will exceed demand. When the next stage, collapse come, ship-owners resist that the good times are over, making the collapse worse by continue to keep high rates and order ships. The cycle push the rates downwards so inefficient ships leave the market, until supply again meets demand.

Seasonal cycles take place within a year. We have seasons for harvesting, grain and fresh fruit, and during the winter months we demand more coal and oil for heating. During these seasons, demand for that specified type of transportation will peak, and the rest of the year it will be significantly lower.

Every cycle is highly unpredictable, and no two cycles look the same. They follow a pattern, but there is no rule that a cycle must behave to this pattern. A cycle could go straight from recovery to collapse.

2.1.4 The cost of running a shipping company

The costs of running a shipping company is divided into operating costs, periodic maintenance costs, voyage costs, capital costs and cargo handling costs.

Operating costs is the day to day cost of running the ship. These costs include manning, insurance, maintenance and repairs stores and consumables onboard and administration costs as registration costs and management fees. Manning and insurance are the biggest expenses in this category. The size of the crew is set by the flag state and can vary. Economies of scale can be obtained because operating costs do not increase in proportion to the deadweight, the weight a ship can carry, of the ship.

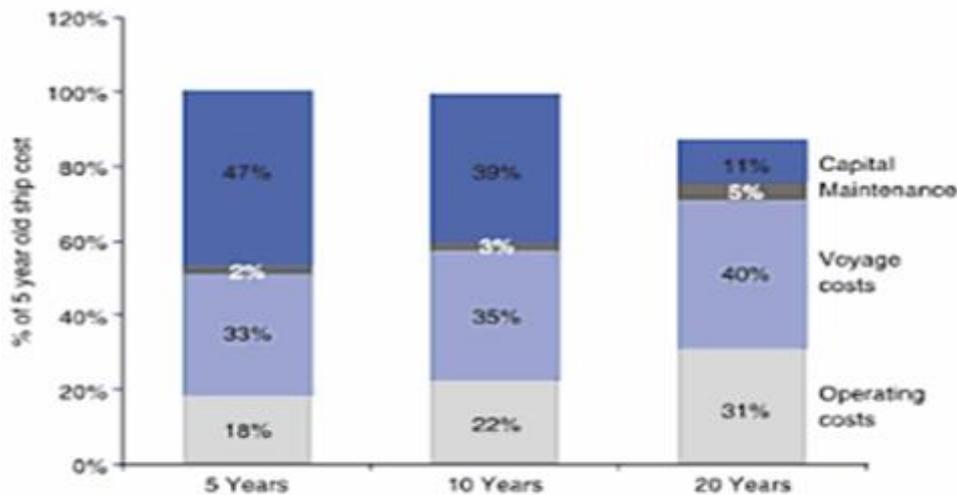
Periodic maintenance is needed to maintain its class for insurance purposes. With regular intervals, dry docking is needed to conduct a greater survey to determine the ships seaworthiness. The expense of these surveys, increase with the age of the ship.

Voyage costs are the variable costs incurred when undertaking a voyage. Examples of variable costs can be fuel costs, canal and port fees, pilot age and tugs. These costs are a direct result of undertaking the voyage, and will not be inflicted otherwise.

Capital costs are significant in this line of business, and can be a start up barrier for entrepreneurs. To purchase a ship you will need a considerable amount of cash to pay the shipyard or the ship-owner, and money borrowed from the bank will come with an interest fee, and money from equity investors will come with a demand for dividends. Either way, the money needed to buy a ship, comes at a cost.

Cargo handling costs is the cost of unloading and loading cargo, and also includes claims that may arise.

In the figure below, you can see the proportion of each cost group compare to each other for a capesize bulk carrier over its lifetime. The costs will differ between different types of ships. The most significant changes over time for capesize bulk as shown below, is the decline in capital costs, and increase in voyage and operating costs. This just reflects the fact that an older ship is more expensive to operate and sail, and that the loan you needed initially to purchase the vessel has been paid off to a degree.



Capesize bulk carrier cost and age

Figure II Comparison of different costs applicable to shipping

(Stopford, 2009)

2.1.5 Profits from shipping

Shipping is subject to high volatility, making this a high risk industry. At the same time, profits from the freight market are quite low over time, making this a high risk, low profit industry. A comparison made by Ibbotson Associates show that shipping lose the competition against other investments as corporate bonds, long term government bonds and LIBOR, when it comes to returns on investments and standard deviations. (Stopford, 2009)The high profits are not made in the freight market; it's made in the sale and purchase market, and by people who know how to time their investments.

The competition in this industry is great. Shipping is probably the most international industry in the world today, so a small shipping company located in Bergen, Norway, face competition from all over the world. There are no costs in connection with changing shipping supplier to the customer. The news of a scandal in a company spread quickly and can therefore, and will harm business, so most companies try to keep a low profile and just get the job done. Ship-owners and shipping companies are shy, and avoid media to the greatest extent possible. Most of them want to be completely anonymous to not stick themselves out.

Shipping companies constantly try to make higher profit in the freight market and the industry has witnessed great changes. The economic advantages for new and more efficient ships more than outweigh the extra capital costs incurred to the ship owner, so expansion in ship sizes to obtain economies of scale, and research in new technology have been tremendous. New market segments have risen and more ships have been specialized and purposely built for a specific segment to reduce cargo handling costs.

New technology has automated features that previously needed to be done manually, so the size of crew needed to operate and run ships have decreased substantially. A ship's crew has also seen substantial changes. Earlier, ships had their crew, both cadets and officers, coming from the same nation as the ship itself. Norwegian ships had Norwegian crewmembers and so on. Nowadays, "all" the cadets are from labor abundant countries and some officers as well, all to reduce operating costs. Ships sail under flags that demand the least tax, have a minimum of regulations and allow the companies to offer the lowest salary to the smallest crew. This is called flying a flag of convenience.

This does not mean that everyone fly a flag of convenience. It will always be a question of cost/benefit, reputation and so on. For some types of cargo, a good reputation can be crucial. Then the extra costs of a Western crew, or a distinguished flag might be worthwhile. Some minimum standards are also set by the UN through organizations like the ILO who determine a minimum payment among other things that every company should adapt to, regardless of flag.

2.1.6 Shipping segments

Bulk transport is transport of cargo inside the hull in large open rooms or tanks. There are three classifications of bulk, liquefied bulks, major bulks and minor bulks. Liquefied bulk consists of oil and oil products and this segment stand for about 50% of the total demand for bulk transport. The major bulks are iron ore, coal and grain while the minor bulks are sugar, fertilizers, agribulks, steel and forest products and metals and minerals. The major bulks stand for a third of the total demand for bulk transport, while the minor stands for a fifth.

Liner shipping business offer transport in the same way as train. All cargo that fit in a standardized container is accepted. All sailings are listed as in a timetable, with multiple port calls in the same trip, so cargo for different ports can be shipped on the same vessel. The ships are specially made for container transport, and can bring as many as several thousand containers or teu (twenty foot equivalent unit) at once on the largest ships.

Some cargo needs more **specialized ships**. There exist a great trade in chemicals, and chemicals are transported in specially built chemical tankers. The chemicals are transported in tanks below deck, and a ship can bring different chemicals at once in separate parcels.

Liquefied natural gas (LNG) and liquefied petroleum gas (LPG) must be in tanks with a temperature below 0, so it is transported in specially build ships that are able to freeze the cargo, some below 150 degrees Celsius.

Food and diaries also need to be cooled under transportation, and earlier specially built reefer ships provided this sort of transportation. Nowadays, the liner industry has captured a large share of this segment due to the increased use of reefer containers.

Some cargo can be more efficiently shipped as unit load. Examples are cars and other vehicles. This type of cargo is transported on specially build ships called ro-ros. These ships have multiple decks which the cargo is loaded on to by either just driving it, or lifted by fork-lift trucks.

Bulk, LPG, LNG are examples of segments that serve the inter-industry trade, while liner and ro-ros are examples of segments that serve intra-industry trade.

2.2 Maritime seaways

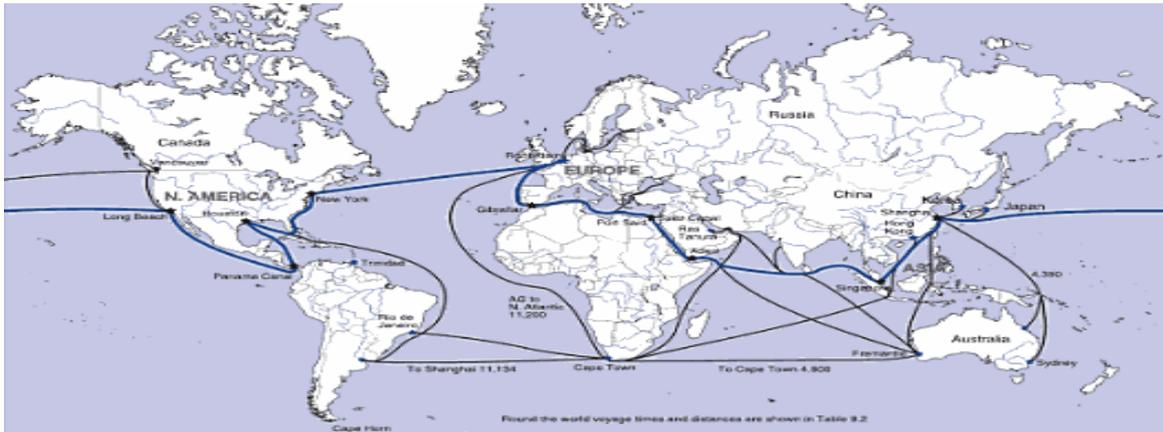


Figure III Map of the main maritime seaways

(Stopford, 2009)

The Northern Hemisphere demand most of the world's natural resources, and over 90% of the world's manufacturing industry is located here. Asia, which is labor abundant, produces most of the world's labor intensive products, while Europe and North America which is capital abundant produces most of the world's capital intensive products. The companies in these regions hold most of the world's patents, and almost all R&D is conducted here. There are both intra-, and inter-industry trade among these continents.

Naturally, the world's main shipping routes will then be between these continents. This is shown on the map above. The heavy line is the main route for the shipping liner industry and other specialized ships, while the bulk industry follows the weaker lines. What is worth noticing is that the main route for the shipping liner industry goes through the Suez Canal and the Gulf of Aden, the Suez express route.

Most of the world's oil comes from the Arabian Gulf and its neighboring countries, so the liquid bulk industry has a main route from this destination worth noticing, that goes from the Arabian Gulf and fairly close to the African shore, around Cape Town to Europe. The northwest corner of the Indian Ocean has therefore a considerable amount of traffic.

What we also can see, is that traffic headed to or from Asia, including bulk, liner and specialized shipping, all goes down the Malacca Strait, making this one of the busiest seaways in the world, with 60 000 ships passing each year. In the end of the Strait is one of the busiest

ports in the world, Singapore, where enormous amounts of cargo is transferred through. The route goes on to China and Japan, and continues eastwards.

We have three areas of interest for this thesis that we now will look closer into, Strait of Malacca, Gulf of Guinea, and the Gulf of Aden and the northwest corner of the Indian Ocean.

2.2.1 Strait of Malacca

As shown on the map over maritime seaways, both bulk and liner shipping go through the Strait of Malacca on its way to the Far East. Ships from Europe, the Middle East and Africa bound for the Far East, use this highway to and from the Far East. Being one of the most important waterways with over 60 000 passing vessels each year, the Malacca strait is a long and narrow waterway, over 800 km long and at one point only 2,5 km wide. All sorts of vessels, from liner and cruise shipping to very large crude carriers (VLCC) pass here every day, and many of them stop in maybe the busiest harbor in the world, Singapore, which is mostly used for transshipment and refueling. Because of its strategic location, this harbor is of great importance to world commerce, linking Asia with the West. Malaysia, Indonesia and Singapore are the surrounding countries to the Strait of Malacca.



Figure V Strait of Malacca



Figure IV Strait of Malacca

2.2.2 Gulf of Guinea

At the coast of Nigeria, large quantities of oil have been discovered, and Nigeria is the 10th largest oil producer in the world and has almost 3 % of the world's oil reserves. (Mbendi, 2010) Most of the major oil companies, as Chevron, Mobile, Agip and Shell are represented in the area. Nigeria has become



Figure VI Map of Gulf of Guinea

highly dependent on their natural resources, and has neglected their other industries as agriculture and some minor light manufacturing industries.

Nigeria is located on Africa's west coast, with a coastline to the Gulf of Guinea. Even though there are little or none traffic of international merchant's ships here, the discovery of oil attracted oil companies from all over the world to get established here. They built oil rigs that need ships for transportation of crew and supplies. The presence of target of opportunities thereby rose into large numbers.

The oil here is of strategic importance to the west, especially the US, because it is so much closer than for example the oil fields in the Middle East. Nigeria provide the US with 8% of the oil they need to import, and the total trade profit from trading with the US amounts to 38 billion dollar (2008). (Bureau of African affairs, 2009) The US is the largest foreign investor in Nigeria.

2.2.3 Gulf of Aden and the northwest corner of the Indian Ocean

Somalia is located at the horn of Africa, with large areas of sea with large quantities of different natural resources. Somalia has the longest coastline in Africa, stretching 3330km. Ships from Europe and Asia pass here every day on their way either westbound or eastbound. 7% of the world seaborne trade use the Suez express, approximately 22 000 ships. (Round Table, 2010) The size of Gulf of Aden is around 2, 8 million square kilometers. The surrounding countries are great producers of petroleum

and welcome international ships. Oil from the Middle East that are brought to the Red Sea, have no options but to go through the Gulf. But the Somali people, which is a special case that we will return to later, has different interests.



Figure VIII Horn of Africa



Figure VII Gulf of Aden

2.3 Regulators

Ships and the management of ships are subject to different regulations. To obtain insurance of a ship, and to be allowed into ports and participate in the transporting business, a ship must be approved by a classification society as Det Norske Veritas. The maritime law is provided by the UN, but the flag state is the main legal authority (UNCLOS). A ship sailing a Norwegian flag must follow Norwegian laws at all times. When ships arrive in ports, or pass the territorial waters of different coastal states, they must naturally act as guest and follow the laws of the respective country that hold the jurisdiction.

The International Maritime Organization (IMO) is a specialized agency of the UN that develops and maintains regulations for shipping and its reprints. IMO regulate safety, environmental concerns, legal matters, technical co-operation, and the efficiency of shipping and maritime security. IMO has made conventions to prevent accidents, what to do in case of an accident and conventions about liability and compensation. IMO has 167 member states that follow these conventions and enforce them.

Another specialized agency of the UN is the International Labor Organization (ILO). The ILO makes labor standards and work to ensure that labor and human rights are taken care of, and that workers have a decent workplace, also in the shipping industry.

2.3.1 Laws and jurisdiction concerning piracy

UN Convention on the Law of the Sea (UNCLOS) provides us with a definition of piracy:

”Piracy consists of any of the following acts: any illegal acts of violence or detention or any act of depredation committed for a private ends by the crew or passengers of a private ship or a private aircraft and directed on the high seas against another ship or aircraft, or against persons or property on board such ship or aircraft, or directed against a ship, aircraft, persons or property in a place outside the jurisdiction of any state. 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 and any act of inciting or of intentionally facilitating an act described above.” (UN, 1982)

The high seas have had different borders over time. The Lord Admiral or Admiral of England held a jurisdiction from the low tide mark in the river Thames and beyond. The Lord Admiral was responsible for the waterways and the high seas most of the 18th, 19th and 20th century, and all crimes that took place outside the low tide mark were in the jurisdiction of the Lord Admiral. Pirates from all over the world were brought to England for trial and prosecution, and most of them were hanged on the execution dock in London. This was to show that they were in the jurisdiction of the Lord Admiral. On the other side of the low tide mark, the civil courts took over.

The jurisdiction onboard a ship is, according to UNCLOS article 94, held by the flag state. This means that a crime committed on a ship that sails with a Norwegian flag, has broken Norwegian law and should be put to trial and punished accordingly.

2.3.2 Legal authorities

The UN, as a provider of maritime law, made a convention on the territorial sea and the contiguous zone in 1958, stating that “*Article 1 1. The sovereignty of a State extends, beyond its land territory and its internal waters, to a belt of sea adjacent to its coast, described as the territorial sea.*” According to article 3 the breadth of the territorial sea is 12 nautical miles from baseline. But each coastal nation also has an exclusive economic zone which according to article 57 reaches 200 nautical miles from the coast.

The Malacca Strait goes between Malaysia in the north and Indonesia in the south and Singapore, a small island at the eastern end of the Strait. Malaysia and Indonesia hold the jurisdiction of the Strait, divided in the middle.

Ships of all states can pass through the territorial sea according to article 17, but a country can demand prior permission for warships to enter, and if a warship enters without permission” the coastal state may take the necessary steps in its territorial sea to prevent passage” according to article 25. This makes it hard for the international society that try to fight piracy, because

international naval warships cannot chase pirates into territorial waters without permission from the coastal state.

2.3.3 International Maritime Bureau (IMB)

(International Chamber of Commerce)

ICC, short for International Chamber of Commerce, is an organization for the world's business. Shipping serves almost 95% of world trade (see section 2.1), so ICC established a specialized division, the IMB to “*protect the integrity of international trade by seeking out fraud and malpractice.*” One of the IMB's concerns is piracy. UNCLOS definition of piracy is

”directed on the high seas against another ship or aircraft, or against persons or property on board such ship or aircraft, or directed against a ship, aircraft, persons or property in a place outside the jurisdiction of any state”.

By this definition, the crimes committed in the Strait of Malacca are not defined as piracy, because it takes place within the jurisdiction of a country. IMB's definition of piracy is therefore more inclusive and read.

“An act of boarding or attempting to board any ship with the intent to commit theft or any other crime with the intent or capability to use force in the furtherance of that attack”.

This definition includes ships that are attacked or an attempt to attack in domestic and international water, and ships that are in a port or wait for their turn at anchor.

IMB established in 1992 a piracy reporting centre, a place to call when under an attempted attack or an actual attack, sort of an emergency centre like 112 (911). All services of the IMB are free of charge, including this one. This emergency center aims to inform ships about attacks that have taken place, so a daily rapport is sent out to ships in dangerous waters, and to raise awareness of the problem to all parts that are involved in shipping IMB hold international conferences among other efforts. The IMB also provide maps, see section 3.2, showing all attempted and real attacks of a specific year, and have much experience and knowledge about the issue after dealing with it for so many years.

Part 3

3.1 Pirates, a romanticized figure

(Cordingly, 1996), (Gibson, 1994,2007)

3.1.1 The picture of a pirate

As long as goods have been transported at sea, there have been people who saw their chance to make their fortune by stealing from ships passing by. In the Mediterranean there were Greek and Roman pirates and the Vikings from Scandinavia ruled the North Sea and Northern Atlantic Ocean. There are several other examples, because a pirate is no more than an outlaw that has moved its business to sea.

When we think of pirates, we think of people with a wooden leg, black patch over an eye, a parrot on their shoulder, and a great big wooden ship filled with this type of people. They cruise around in the Caribbean, and land on beautiful islands with sandy beaches, where they bury their golden treasures which they have captured on their latest raids.

This picture is obtained by popular culture. Most people have read a book, or seen a play or a movie about pirates. There are written books and plays about most famous pirate figures, but even though they are often based on naval logbooks, reports from governors, trial documents and the depositions of captured pirates and their victims, they are more fiction than reality.

The authors have made the stories more appealing to its audience, and this way made pirates a beloved figure in kid's fantasies and imagination, and some adults. Henry Morgan and Francis Drake were pirates, and are examples of pirates that are showed as a romantic figure, someone you desired to be like. In modern days we have Captain Hook, Captain Sabeltann and Captain Sparrow as examples of romanticized pirates. Kids have always been fascinated by these pirates, because they are presented as an appealing figure like cowboys and fire men. But a pirate is quite different from this picture.

The popular picture of a pirate and piracy is taken from the great age of piracy, which lasted from 1650 till 1725 when it came to an abrupt end. At that time, the vast and spread islands with few or none inhabitants of the Caribbean and the West Indies provided a good location, a safe haven for pirates, with many hideouts and little or none government forces present in the

area. The merchants that traded with the colonies were their targets, and without protection they were an easy target for the pirates.

3.1.2 Who were the pirates

England was central in the trade with the new colonies in the Caribbean and the West Indies. But this trade was also the target of a growing piracy. Almost every ship inbound or outbound from Jamaica was at a time plundered, and trade was in danger of being completely ruined and needed protection and escort from warships.

Pirates in the Caribbean took all the time they needed to do their horror on a captured ship; the crew had no possibility to signal for help without radio. Even if they could call for help, it was unlikely that anyone would come. The great area of the Caribbean with several hundred islands was controlled by a highly insufficient number of naval ships that had an impossible task of protecting the merchant ships from the pirates. This was truly a safe haven for pirates.

The Caribbean was the most lucrative and profitable colonies that England had at that time, but their priorities for the naval force was elsewhere. The war of the Spanish succession swept over Europe, and the Royal Navy had few ships to spare. But something needed to be done; to avoid that trade with the colonies was ruined.

England's navy was not large enough to perform all the tasks that the government wanted. Therefore England hired private warships, called privateer, an old solution used for decades by several nations, and its crew was known as privateers. The privateers was given a document, called Letter of Marquees, that authorized them to perform acts of war against enemy's ships and/or towns and ports in times of war and when needed. At maritime museums you can find these letters today. The letters stated targets, area, time and what nations the privateers could attack. In reality, the privateers plundered French and Spanish settlements and ships in the name of the English king, and were given a portion of the profit while the rest was given to England. In return for this, the privateers were protected by England, and could use her ports safely. Most of the pirates, or privateers in the Caribbean were British, (35%), but other nationalities as Americans and Blacks were also present.

England was not the only one using privateers. Other countries, as Spain, France and later the US have also been using privateers when needed, so every countries merchant ships could be attacked by privateers. Since a privateer was nothing more than a licensed pirate, one country's navy was looked upon as pirates by other nations. A privateer hardly attacked its own merchants that would have been high treason.

An example of privateers in the Caribbean was French settlers, the buccaneers. The buccaneers had settled on Caribbean islands, and lived of hunting. They increased in numbers, and became a threat to Spain's New World. Spain tried to get rid of the buccaneers by killing them, and the buccaneers on their side began robbing Spanish ships and when strong enough, Spanish settlements. Spain was the superpower at the time, and her navy was the biggest and strongest. England wanted to be a superpower, but her navy was not large enough to compete with that of Spain. England saw an opportunity to earn some on the buccaneers, and gave them letters of marquees and legalized their business and protected them, in return for some of their profits. This gave England a cheap way of fighting the Spanish.

The buccaneers saw how large profits that was involved in piracy, so when the war of the Spanish succession ended, they continued their operations, so they became illegal pirates. The conditions in the letter of marquees were no longer present, so they were no longer authorized and protected by it. But they had seen how easy it was to plunder ships with little or no risk of being arrested and punished; so many privateers became illegal pirates.

Everyone could become a pirate, and it appealed to many men. Most pirates were young sailors who had volunteered when their ships were captured. They came from several different nations, and also included slaves on captured ships. As payment for becoming an outlaw and risking your life, was a share of the profit. The profit was divided with two shares to the captain, the master one and a half and the doctor, mate, gunner and boatswain one and a quarter. You also received a vote so you could participate in the decisions that were made, and you received compensation for injuries. To young people, from lower class used to no responsibility and no or very limited chance of ever getting a promotion, combined with low salaries, no wonder why this sound appealing. So most pirates were young men, from lower classes and piracy offered them an opportunity to become someone.

The pirates choose their leaders democratically and the men that became their leaders were cruel and ruthless, capable of torture and murder. The pirates at this time killed and raped as they pleased, and horror stories about their actions are plentiful. There is really not much to love about a pirate.

Letters of Marquees had provided England with a solution to its Royal Navy's limited capacity and had been used since the 14th century. Other countries, as Spain, France and later the US, have also been using privateers in addition to their navy. It was a cheap way of financing wars, and in the Caribbean it was meant to help out merchants that struggled with pirates. Privateers were used as escort for merchants and protection of coastal areas, and in the great age of piracy, fighting, seizing and arresting other pirates. But privateers began acting as licensed pirates, and attacked neutral ships as well and were no better than the pirates they fought. As the buccaneers, also other privateers continued their operations as pirates when the condition stated in the letter of marquees expired. Without the protection of the letter of marquees, the number of illegal pirates increased. The use of Letters of marquees was abolished in 1856.

England's need for privateers can explain the romanticized picture that was created of pirates. Privateers, as Henry Morgan and Francis Drake helped England becoming a superpower, and they helped the Royal Navy fight the Spanish and Britain's other enemies. In England, privateers were seen as heroes fighting the enemy, whoever that might have been. It's a paradox, that licensed pirates as Drake was respected and honored, even knighted by the Queen, and licensing pirates was so accepted in European countries. Drake didn't even have a Letter of marquees, so he was an illegal pirate really. Drake was for example without license when he set of plundering the Spanish ships.

3.2 Modern day piracy

During the days of the Cold war, piracy was not a debated issue. The two superpowers, USA and USSR, had their navies patrolling the oceans of the world but even more important, they provided the world with a power structure since either USA or USSR were close with most of the worlds countries. An experience from history is that the most efficient way to fight, stop and prevent piracy is by having presence of the navy and/or strong authorities on land. The

navies from these two countries enforced regional control for almost the entire latter half of the 20th century. However, when the Cold war ended the superpowers withdrew their navies and the power structure on land was affected and changed accordingly. USA and USSR did no longer wish to be present and operative around the world to the same degree as in the Cold War. Safeguarding and patrolling the sea was now left to coastal nations for the first time in almost 50 years.

Some countries were not able, or did not desire to prevent crimes from happening at sea, and this led to the reemergence of piracy in modern days. Piracy in these areas grew quickly, and the threat to merchant ships was greater than ever before. Piracy had grown in violence, numbers and riches. The costs of piracy have reached new heights compared to earlier, and its influence is far reaching.

Piracy is present in certain areas, called hot spots. If you mark attacks and attempted attacks on a map, you will see that they cluster together in three hot spots.



Figure IX Piracy hot spots

(IMB, 2008)

As shown on this map, pirate attack happens frequently in the Malacca Strait, east coast of Africa and the Gulf of Guinea. There are some attacks spread elsewhere as well, but these three areas are the so called hotspots, areas where piracy takes place very

frequently.

As we will see in the following these three hotspots have some factors in common:

- *Heavily trafficked by international merchants
- *Poverty among the local inhabitants who often live in harsh conditions
- * The local authorities are weak and do not efficiently enforce laws and justice.

Piracy goes on quietly, nor the pirates or the ship-owners want the attention attached with it. That a ship is attacked or hijacked is exactly the bad word of mouth that ship-owners are afraid that will hurt their business and many attacks goes unreported. To report an attack to local authorities can take days, and that is days of lost earnings, and you risk bad publicity, delays and damaged reputation, exactly the bad word of mouth ship-owners try so hard to avoid. The numbers of unreported attacks are therefore high.

Piracy doesn't receive much coverage by the media; it doesn't really have a direct impact on the people in the west. The crews are mostly from Asian countries and are small in number, and it is hard to obtain an interview with shy pirates or ship-owners.

3.2.1 Piracy in the Malacca Strait

Both Malaysia and Indonesia have large populations that live as fishermen, and the Malacca Strait contain great amounts of fish, providing the local fishermen with a livelihood. However, fishing does not give them great profits, and most fishermen live in poverty.

When the US and Soviet navies withdrew from the High seas and the waterways, it opened up great opportunities to these local fishermen. Due to the nature of the Strait, being so narrow at some points and so heavily trafficated, ships must reduce their speed when passing. When they arrive in the busy port of Singapore, which often is the destination, they must anchor up and wait for their turn to offload/load. The authorities, both in Malaysia and Indonesia were at this time, from the 80s and onwards to the 2000, not very strong, so locals could with little or no risk steal from ships.

Armed with long knives, fishermen sail up on ships from behind to avoid being seen on the radar, and enter on the aft deck. Their ultimate goal is the ships safe, but they take whatever they can find. When on board, they threatens the crew and the captain to open the safe, and to obtain their goal and show that they are serious they use violence. The violence is raw and brutal, and many crewmembers have lost their lives in fights with the pirates or been executed. When the pirates receive their money, and have grabbed whatever valuables they can find, they leave into the darkness.

Ships waiting for their turn at the port of Singapore are also an easy target. When many seamen have land leave, and the rest is sleeping while waiting for their turn at the port, pirates can climb up the anchor or enter on the aft deck unnoticed. Their target is the same, the ships safe and whatever valuables they can find. Their profit was usually a few thousand dollars, and some cameras, sneakers and etc if they succeeded.

Merchant ships are not the only targets. Private yachts have also been targeted. Being smaller in size and with only a few people onboard it is easier to board, while the profit can be greater. Electronically equipment is not fastened as good as on bigger merchant ships and the people onboard private boats often bring more personal valuables.

Piracy in this area seems to have started unorganized. It could have been a father and his sons that were out fishing and saw an opportunity to make a quick buck, or local fishermen that wanted to test their luck and score some extra. It evolved into larger syndicates controlled by a few bosses in big cities around in Asia. (Sekulich, 2009)

The syndicates are just a more organized way of committing the crime. The pirates started to work together, and made their business bigger and more dangerous. The concept and their methods remained the same, enter and rob ships and use violence to get it their way. To commit their crimes without getting arrested they paid off government officials, customs, ports, bankers, immigration officers and even ship-owners. These modern pirates monitor radio frequencies, they convince a crew member to cooperate with them and feed them intelligence about the ship and they use spies in ports and elsewhere to find the best targets. (Sekulich, 2009)

The syndicates also hijack ships, and either kill or set of the crew somewhere, and sail off. They give the boats new names, sell the cargo on the black market which can amount to millions of dollar and then use the ships to transport illegal immigrants or illegal drugs. Renaming a ship, and register it, could be done in manner of a few hours. These ships get registered in countries that are highly corrupt and lack accountability, a flag of convenience for the syndicates. (Burnett, 2002) The country doesn't even need to have a coastline; some ships are registered in landlocked countries. There are agents that fix the paperwork with no questions asked, and the hijacked ship is never found, becoming a so-called phantom ship.

Instead of using the ship, the syndicates could sell them on the black market; some ships are even hijacked on order from clients. (Burnett, 2002)

3.2.2 Piracy in the Gulf of Guinea

Together with the supply ships and the other vessels related to the oil industry, some liner and bulk ships also gets attacked by pirates in the Gulf of Guinea. The revenues from oil have of course benefitted some of the inhabitants around the Gulf of Guinea, especially Nigeria, and demand for consumables has therefore increased. All imports into Nigeria are inspected on arrival, and due to poor infrastructure and uneven regulations, ships have to wait outside the port for their turn to offload. (Bureau of African affairs, 2009) The ports are highly congested, and the time ships have to wait to get berthed can be awfully long, providing a target of opportunity for local pirates.

While the oil has benefitted some, most of the inhabitants have seen their living conditions getting worse. Different corrupt governments have been supported by western oil companies, so they still can exploit the natural resources Nigeria rule over. Shell cooperated and financed Nigerian military that used deadly force against the ogoni people and hung one of their leaders, Ken Saro-Wiva. The oil companies have neglected the environment, and don't for example clean up their oil spills which then pollute their waters and give locals health problems. An investigation conducted to reveal the influence the presence the oil companies have had in Nigeria read:

- 1. Oil corporations in the Niger Delta seriously threaten the livelihood of neighboring local communities. Due to the many forms of oil-generated environmental pollution evident throughout the region, farming and fishing have become impossible or extremely difficult in oil-affected areas, and even drinking water has become scarce. Malnourishment and disease appear common.*
- 2. The presence of multinational oil companies has had additional adverse effects on the local economy and society, including loss of property, price inflation, prostitution, and irresponsible fathering by expatriate oil workers.*

3. *Organized protest and activism by affected communities regularly meet with military repression, sometimes ending in the loss of life. In some cases military forces have been summoned and assisted by oil companies.*
4. *Reporting on the situation is extremely difficult, due to the existence of physical and legal constraints to free passage and free circulation of information. Similar constraints discourage grassroots activism.*

(Essential Action and Global Exchange, 2005)

People have lost their livelihood, their food and water, their properties and their freedom to speak and protests are being limited by the government with the assistance of the different oil companies as the case was with Shell. When an African country discover natural resources, the inhabitants life very often get affected negatively due to greedy national leaders that want to exploit the resources for their own benefit. In Nigeria the inhabitants saw their life as they knew it disappear, and a new reality with harsh condition and poverty grew into life.

Again we have a situation of weak authorities, harsh condition and poverty among the population and plenty of targets of opportunity. Most of the pirates, both here and elsewhere, do what they do because they are desperate. They have nothing and see the ships that pass by as floating opportunities. They know that whatever they can find onboard these ships, can be worth more than anything they ever had. Some pirates do not only steal valuables, they also steal common consumables as a toothbrush and clothing. This was also seen in the Malacca Strait after the Asian economic crises. (Burnett, 2002)

3.3 Dealing with piracy

3.3.1 How piracy was dealt with in the 18th century

The pirates at this time operated from small boats, and their profits from piracy were much more often some sails, an anchor and other spare parts, silk and cotton, gunpowder and maybe some slaves, than gold and silver. What they did not steal, they were likely to destroy, throw overboard or burn. Victims did not exactly walk the plank that took too much time. They were more likely to be chopped to pieces, or thrown overboard.

After peace came to Europe in 1714, the European superpowers, lead by England changed their attention to the troubled area of the Caribbean. It was time to make journeys safe for merchants, and stop the illegal pirates. Different measures were put to action to obtain this goal.

The captured pirates were originally brought back to London and the court of the Lord Admiral for trial, and prosecution, if not pardoned as many was, but this had minimal warning effect to pirates in the West Indies. This brought out a solution that captured pirates should be prosecuted and hanged, if found guilty, in the waterfront of the Caribbean islands to prevent piracy and warn them of possible consequences.

Many pirates were offered amnesty, and pardons were offered to pirates that wanted to give up their life as criminals. Large rewards were offered to anyone who could capture pirates but even though these solutions had an effect, it was not until heavy naval marine of the European nations, especially the Royal Navy from Britain, was set in, that piracy in this area ended.

Pirate ships were very efficient when attacking merchants, but when facing a warship with all its cannons and armed military forces, they stood no chance. A great increase in marine warships made piracy in this area hard, and capture pirates were hanged as soon as the warships made it to ports. Piracy and illegal privateers was a dying breed in this area. Some pirates fled elsewhere, but this was a true end of an era. The use of naval marine, combined with efficient ways of dealing with the captured pirates, gave results.

3.3.2 Dealing with piracy in the Strait of Malacca

The problem of hijacked ships could often be solved with the help of IMB Piracy Reporting Center in Kualu Lumpur. When IMB received calls that ships were stolen, they asked if the ship-owner wanted to set up a reward for its recovery. (Burnett, 2002) A ship itself is worth everything from a few hundred thousand to millions of dollar, and its cargo can also be worth millions. The safety of the crew often comes third.

A reward for its recovery amounting at maybe \$100 000 is for most ship-owners than a small price to get a ship back. IMB has connections and informants they use, and could therefore obtain the coordinates of a ship in exchange for the money, and thereby recover it. Nowadays

most ships have a tracking device, so its owners can follow the ships whereabouts at all times and report to local authorities where the ship is and that it needs assistance. However, some nations have been reluctant to interfere with piracy, and don't seize stolen ship or try to prevent piracy from happening as the case was with for example Indonesia for a long time. (Burnett, 2002)

Malaysia has experienced an economic boom, and is an agent of growing importance in international trade. The country has seen positive developments, and has spent more money on fighting piracy on their side of the Malacca Strait. (Sekulich, 2009) The problem they are faced with, which we will come back to later, is that they could not chase the pirates into Indonesian water. The three surrounding countries, including Singapore, were at the beginning not able to cooperate about patrolling the Strait and fight piracy. Indonesia is a highly corrupt country, on Transparency International perception index it comes on 111th place for 2009 while Malaysia comes on 56th place. Indonesia has been one of the countries that not have been too eager to fight piracy, and some will say that Indonesia have provided safe ports for pirates and hijacked vessels. Indonesia on their hand, said they don't have sufficient funds to fight piracy. With all their islands and hideaways it is a gigantic job for its coastguards and navy. They don't want assistance from foreign ships, but they gladly accept financial aid so they can fight the problems themselves.

The demand for increasing effort to fight piracy has been followed up, and in 2004 The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) was established as the first government to government agreement to share information with each other to better be able to meet the challenges piracy impose. Since fighting pirates in this area has received increased priority among the surrounding countries which also started to cooperate, and the press has covered more of the problem, piracy towards international merchant shipping has decreased. Piracy has not disappeared from the area, but the target now is local fishermen, since they receive no attention, not being of international concern. Pirates steal local fishermen's boats, engines and equipments, hurting those who have little already. Especially after the tsunami this was a problem. Many have lost their boats and could not afford new ones. It takes a local 10 years of saving to afford a doable fishing boat. (Sekulich, 2009)

3.3.3 Methods to prevent an attack in the Strait

Pirates don't like to be seen, and when they seek an opportunity and try to board a ship, they sneak in from behind, covered by the darkness of the night and hidden from the radar.

Merchant vessels don't carry firearms, so they don't have much of a defense once pirates are onboard. Precautions to stop pirates from coming onboard a ship is therefore the main solution shipping companies and captains enforce.

From land, it must be quite a view looking at all the ships coming and leaving up and down the Malacca Strait. At nighttime most ships have all their lights on deck lit, and their fire hoses "piss a little" over the side. This shows the pirates that the ships are alert, and even though some still get attacked, this has proven as a good method to avoid getting attacked. Some owners and captains are more alert than others, and take the threat more serious, especially those who already have been attacked before. The captains and their crews have instructions for what to do before entering and while in pirate waters, and exercise on what to do in case of an attempted attack. Nighttime guards on deck, maybe some dummies and armed with fire hoses are the means they use. The citadel gets closed down with all entrances locked to avoid unwanted guests.

It is all about preventing them from entering the citadel. If they succeed to enter, the instruction read that nobody should try to be a hero, just give them what they want and hope that they will leave. Armed guards have been a debated issue. The pro argument is the crews protection if pirates succeed to enter, but the against argument ways heavier; if pirates see firearms among the crew the chance of more and brutal violence and killing increase dramatically. Most nations have therefore banned weapons onboard their merchant ships, with the exception of Russia and Israel. The word that goes around is that ships from these nations rarely get attacked.

Another rumor is that some companies pay protection money to the syndicates to avoid getting attacked. This is an old method used even by the Americans at the end of the 18th century when they used tribute payment to protect their merchants from the barbarians. (Gawalt)

3.3.4 Dealing with piracy in the Gulf of Guinea

The prime targets of the pirates are the supply vessels of the oil companies. The Pirates here used speed boats and are armed with machine guns and coordinate their attacks via radios. Ships with low freeboard are plenty in the areas, and are easy targets, just a little jump, and they are onboard. (Burnett, 2002) An attack often leave wounded and dead.

The Nigerian coast is a lawless area, there are only a few operational navy vessels to patrol the coast and ensure safety of the men and women working here. In the first quarter of 2008, the coast of Nigeria was the number one hotspot for piracy in the world. (LHULLERY, 2008) The companies operating here protect their supply ships, cargo vessels and oil rigs with hiring private armed security personnel, people that have previously been in the Special Forces like SAS or SWAT. They are more concerned for their employees here, since many of them are from Europe and the US and demand more safe environments. (Burnett, 2002) But still, some firefights take place.

3.4 Different degrees of piracy

Up to this point we have learned that pirates was at first licensed by a government, in other words, they worked and did their piracy for a nation. When the nations no longer desired to keep pirates in their staff, the pirates continued what they were already doing, but now without the protection of a nation they became illegal pirates. The ones to fight these criminals were their former employers, European nations.

We have seen that there are similarities in why people become criminals, and their approach and goal are very much the same. In the area where piracy persists, there are weak authorities, desperation among the population and many targets of opportunity. The goal has been to rob the ship for whatever valuables they could find, and ultimately the ships safe. The profit for an attack ranged maybe up to 100 000 dollar.

Piracy begins in the small, with local fishermen that see a target of opportunity and try their luck. It has evolved into larger syndicates which are lead by bosses in major Asian cities that divide the hot areas among themselves. These pirates operates more advanced, and have tried and succeeded in hijacking vessels, either for ransom or for their own use. The ransom have

been relatively low, and hijacking a ship for their own use to transport drugs or illegal immigrants have become harder due to new technological gadgets as a satellite transmitter or an Automated Identification System (AIS) that makes it easier for ship-owners to follow their ships and at all times know their whereabouts. AIS provide information about a ship as its current location, flag, ship type, status, speed, size of the ship and the destination it is headed for. Pirates could earlier sail the ship away, repaint it with a new name and register it in a flag of convenience and profit from selling the cargo of their hijacked ship on the black market, but again, this line of business have become harder because they have very little time before the authorities will find them and the transmitter will always inform where the ship is located. Thereby a new name is not enough hiding anymore.

Up till now we have seen that the pirate's targets are mostly:

- *The ships safe and other valuables as cameras and similar

- *Everything that can be used and is easily stolen, from toothbrushes to laundry

- *The ship itself, and make it into a phantom ship for "personal" use, human and drug trafficking

- *The ship's cargo that can be sold on the black market

In addition there have been incidents of hijacking a ship for ransom. This has not been a severe problem, and has usually been solved quickly for a relatively small amount.

Piracy for these reasons has normally been accompanied with a great deal of violence and killing. Pirates sneak up on the ship; works fast and use whatever violence necessary to obtain their goal.

Dr Manwaring (Manwaring, 2007) recognizes how gangs evolve over time. He groups them in three generations.

- *First generation of gangs is very local; the area they operate within is usually no more than a few city blocks or a neighborhood. They have a loose and unsophisticated hierarchy of leaders, and operate largely opportunistic and individually. The scale of their criminal affairs limits itself to petty crimes and theft.

*Second generation of gangs has become more sophisticated and organized. The gang is more structured with a centralized leadership, and the territories they operate in have expanded to include neighboring cities, even in different countries. Vulnerable communities may come under the control of these gangs. The gangs at this point act more as businessmen, and run their criminal affairs as if it was a corporation. They engage in business for commercial gain, and use whatever violence that is necessary to obtain their goals. Some of these gangs develop a political agenda, and this way starts to challenge state security and sovereignty.

*Third generation of gangs have become so organized and sophisticated that they make their own state within a state, an autonomous enclave. These areas are controlled by the gangs, led by warlords, drug barons and the similar, and are run as criminal free states. The third generation gangs are so well organized and their activities include smuggling humans, body parts and weapons. They commit murders, kidnappings, money laundering and other criminal acts that are necessary and provide them with a profit. These gangs have ambitious economic and political agendas, and by controlling these autonomous enclaves the leaders, warlords and drug barons, gain political power so they can ensure the safety of their criminal operations and their business.

Pirates follow a similar pattern, and as we will see later, gangs and piracy can be closely connected.

Pirates in the Malacca Strait and Gulf of Guinea match the characteristic of first and second generation of gangs. If we look at the Strait, piracy started unsophisticated and unorganized, and grew into larger syndicates over time that were highly organized and had many fields of business. The characteristic of first generation gangs are very similar to the characteristic of the first pirates that emerged in the Strait, and later when piracy became parts of the more organized syndicates it match the characteristic of the second generation. Some of the pirates are more sophisticated. These pirates prepare their attacks better by gathering relevant information, coordinate their attack with others, board and takeover the ship and sail it to safe water. The pirates then start negotiations with the company the ship belong to about ransom for letting the ship go and grant it with free passage. These pirates bribe the officials

necessary to do their business, and give percentages of their ransom to communities for support and protection. These are the third generation pirates.

While piracy in the Strait of Malacca has decreased substantially, at least against international shipping industry as a result of cooperation of the surrounding countries, piracy has begun to bloom in another area. Even though there are recordings of piracy in this area that go back centuries, it is first in the last decade that this has become a serious threat to international shipping. But it is a totally new challenge in many ways. Previously we dealt with weak and corrupt authorities, but now there are no efficient authorities. We will see that we are now dealing with third generation gangs/pirates. This have paved way for a large scale “new” way of piracy, hijacking ships and hold them for as long as it takes for ransom, ransom that have reached new heights and gives the pirates great profits, compared to earlier. From here on, this thesis will mainly concentrate on piracy around the Horn of Africa, and the analysis will mainly focus on the cost pirates from this area inflict.

Background: Somalia

1. Somalia, a safe haven for pirates?

Sailors and Merchants from Somalia were of great importance to the regional trade in ancient time. Somalia is located at the Horn of Africa, with a long coastline to the Indian Ocean and the Gulf of Aden, and its sailor and merchants traded with Egyptians, Arabs, Greeks and Romans. (Somalipress)

From being of great importance to regional trade, Somalia has become a great concern to international trade nowadays. The country’s inland waters are heavily trafficated by international liner ships and specialized cargo ships on their way westwards to the Suez Canal and Europe or eastwards to Asia. But Somalia cannot provide a safe voyage through their inland waters or the nearby international waters.

2. Somalia's modern history

This section is based on (Dagne, 2007) (Bureau of African affairs, 2009) (Nowrasteh, 2006)

On July 1, 1960, the independent Somali republic was formed out of the two former territories, British Somaliland and Italian Somaliland, and a year later a constitution was ratified. But turmoil consisted, and continuously changing government leaders did not help to make Somalia stable. In 1969 the president was assassinated, and a power vacuum was established. Barre, a military general, made a coup, and became the new leader and the constitution was abolished. Barre made a socialist oriented government and was close with Moscow and the communist. Somalia was never a high priority in USSR but received some assistance. Somalia was only used by the USSR to undermine the western capitalism in Africa and received some aid in return. Barre remained in office until overthrown in December 1991.

This period was relatively stable for the Somali people. Even though the country was ruled as a military dictatorship, the inhabitant's experienced economic progression, and some large scale public programs to increase literacy among others, was implemented successfully. The Somalis paid taxes, and laws were enforced. The state was strong, and the only way to achieve some wealth was through the state as the private sector was destroyed by regulations and bureaucrats.

Pan Somali nationalism has had a strong position among the leaders of Somalia. The idea of uniting all the areas where Somali people live into a greater Somalia, has constantly thrown the country into new conflicts with its neighboring countries about border lines. Djibouti, Ethiopia and Kenya all have areas which are mainly populated by Somalis. (Bureau of African affairs, 2009)

When president Barre was violently overthrown by different Somali groupings, the country was thrown into civil war by different warlords that wanted to take over as the new dictator. None succeeded and the war managed to destroy the little infrastructure the country had.

For the next two decades the country was without an efficient government. Somalia turned to their old clan system for governance but some change had taken place. Clan leaders had lost their power to warlords that were armed with modern weapon. The warlords were often

former military officers that were backed by an army. Different clans and various groupings now lead by warlords fought against each other for control of smaller territories and power.

Since the country had no efficient government, there were no government officials or government police to enforce rules and stop people from committing crimes. Anarchy ruled parts of Somalia.

That Somalia did not have a government does not mean that the country was not governed. It was not governed by a publicly chosen government, but by warlords and clans that took the power and control of territories and created autonomous enclaves and used their power to enrich themselves, leaving the people suffering under their actions. The clans provided some social services as education, courts and health service. Somalia came under control of third generation gangs.

The international society has tried several times to bring peace to Somalia, both diplomatically and by deploying armed forces. In total there have been 14 peace conferences or reconciliations to bring peace to Somalia over the last two decades. Forces have been deployed, but without success. The most famous case is known as the Black Hawk Down incident thanks to the movie with the same name. The Americans wanted to take out the warlord that controlled Mogadishu, general Aidid, but in their attempt 17 Americans and more than 1000 Somalis were killed. 2 weeks later the American forces were withdrawn.

First in 2004 a Transitional Federation Government (TFG), a combination of elders from all the clans in Somalia was established. This was a government supported by the UN and African Union, but because of powerful warlords that controlled the capital city, Mogadishu, did not welcome the new government, exercising efficient government control and power became a hard task. TFG made themselves very unpopular too by for example raising port taxes by 300%. (Gettleman, 2007)

3. Resisting change

” Gangs contribute to the evolutionary state failure process by which the state loses the capacity and/or the will to perform its fundamental governance and security functions”
(Manwaring, 2007)

Some factors are needed in order for businesses to operate. A court system to settle disputes, laws to protect a company’s property and safety and a banking system. There must be a way to enforce the rules, in other words, punish those who don’t follow them. A currency needs to be in place so goods and services can be traded. One would believe that without a state, these functions cannot be in place, but the clans had their methods for dealing with these issues. Laws were based on customs, and even though clan elders cannot make laws, they interpret them and rule accordingly. This way business also gets their needed security. Without jails, punishment becomes difficult, so in order to enforce laws, compensation, specified in camels, is used. If a person is not able or willing to pay compensation, his extended family becomes liable. For big transactions, US dollars are used, and local currencies as the pre 1991 Somali shillings are still accepted for smaller amounts. Bank loans are secured through family members and a long line of questions are asked to identify persons.

Private sector has grown impressive in primary and tertiary sectors. (UNDP/World Bank, 2003) Private entrepreneurs have started businesses where the government have failed, and abandoned government property has been taken by the warlords. (Gettleman, 2007) The warlords became very powerful, and some even taxed and/or demanded protection fees from fellow Somalis.

The private businesses started when Barre still were in office. The state failed to offer more and more services that private businesses took over and ran illegally on the black market. By mid 1980s, the black market was the largest employer in Somalia. (Mubarak, 1997) These businesses became able to operate freely when Barres regime fell, and many do so with great success. They have to pay some fees, but they are considerably below the pre 1991 tax levels, to warlords. International companies, as Coca Cola and DHL have also started doing business in Somalia after Barres fall.

Mubarak (Mubarak, 1997) finds that” *“as far as economic welfare is concerned, absence of government has proven to be better than the repressive institutions and improper policies of Barre’s government”*

Since 1991, businesses have been allowed to grow freely, entrepreneurs earn a profit, and the Somali living standards has actually increased while being stateless (Nowrasteh, 2006) No wonder why they protect their businesses, regarding their bad experience with previous government and the fact that they now can make a living. They have lost their trust in a superior government, and those who have the means needed, will use them to stop any new attempt of a new superior government.

4. Islamic courts

Law and order in Somalia has been kept by individual Islamic courts held by different clans providing clan allegiance. The courts were part of a network that took responsibility were the government had failed or was not present, and provided governmental services as education and health services to the people. By offering these social benefits, warlords and clans gained popularity.

To create a better foundation for lasting peace and order, 11 clans came together and united their power by creating the Supreme Islamic Courts Union (ICU) in 2000. (Globalsecurity) The ICU differs from other attempts to govern the country, by not referring to themselves as government, but as administration, and they have not tried to ruin somebody’s business by confiscating property or the similar. The ICU has gained a lot of power since it was established. The warlords have lost their power of the capital city to the ICU and ICU succeeded in creating peace in the capital by 2006. (Fevik, 2009) They gained control of almost half the country, and enforced strict laws, mostly sharia laws, in the areas they took control over. Khat, a very popular leaf that you chew to obtain a buzz, became illegal and corruption was fought and declined ultimately.

Even though ICU had this great success, and brought back some order to the country, the west, especially the US, did not like the idea of a country governed by Islamic. When ICU declared war on Ethiopia, who received help from the Americans and the approval of western

countries, armed forces that supported the TFG so they regained control by overpowering the ICU, and the country was again set back and lost the little order that had been established.

5. Regions of Somalia

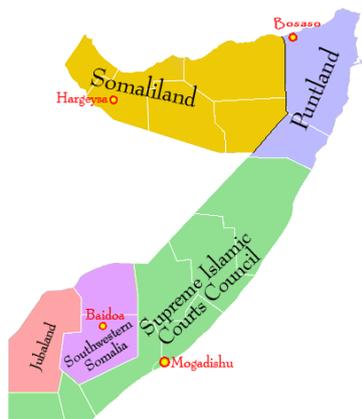


Figure X Regions of Somalia

The political situation in Somalia is roughly divided into 3 autonomous parts controlled by different groups with mixed success. (Gilpin, 2009). Somaliland, the former British Somaliland, has claimed its independence as a republic, but has not yet been recognized by anyone. Somaliland has been successful in its attempt of self-governing compared to the other autonomous enclaves, with economic progress and stability, and even a small but growing tourism industry.

The Puntland state of Somalia has no interest in becoming an independent country as Somaliland, but it is declared an autonomous state by its own clan leaders. Puntland have abundant marine resources, and most likely unexplored oil reserves. (Puntland Government, 2006-2009). Puntland have been severely damaged by the war, and official responsibilities as education, health, guarding their waters and protect its citizens has been neglected. Puntland is really a criminal free state.

The middle and the southern parts of Somalia, including the capital, is now controlled by the ICU, which has proven strong and capable of maintaining order, back in 2006 before they were overthrown. ICU has again implemented strict sharia laws, and the leader of ICU, President Sheikh Sharif is both popular domestically and internationally. He has respect among the people, and he is the one that can bring peace to Somalia, experts believe. (Fevik, 2009) January 31, 2009, Sheikh Sharif was sworn again as the president of Somalia.

There are parts in the southwest that are controlled by the group of Al Shabab which is officially listed as a foreign terrorist organization by the US department of state. (ABC news, 2009). This is a group of radical Muslims, and they use violent methods to fight the government. Al Shabaab is the biggest threat to president Sharif and ICU, (Fevik, 2009) and they are linked to the more famous terrorist network, Al Quida.

6. Somalia's inhabitants

In a country where there has been no efficient democratically chosen government for two decades, and wars, both civil and with neighboring countries, it is needless to say that the inhabitants have been suffering. Hundreds of thousands of people have died as casualties of wars, mostly civilians, and another hundreds of thousands of people have died because of starvation or diseases. Over a million people have been refugees of war, and the countries houses, schools, hospitals and other buildings have been destroyed by the wars. (Tjissen, 2009)

According to the world food program, 1 of 5 children in Somalia is acutely malnourished. Half the population, or 3, 5 million people were in need of assistance from the international community to cover their humanitarian need in 2009, mostly food assistance. There are hundreds of thousands of people in 2009 that are threatened by malnutrition. (World food programme, 2009)

” The World Bank estimates that over 40 percent of Somalis live in extreme poverty (less than a dollar a day) and almost 75 percent of households subsist on less than \$2 a day. Approximately two-thirds of Somali youth are without jobs.” (Gilpin, 2009)

Somalia's inhabitants live mostly in extreme poverty. 25% of the children die before they reached the age of 5, and the life expectancy in the country overall is 46 years. (Sekulich, 2009) A large part of the population live as nomads, and depend on their livestock's Agriculture is the most important sector, along with fishing. Only 38% of the population over the age of 15 can read and write. (Bureau of African affairs, 2009)

7. A failed state

To compare the situation in Somalia with other countries, it can be of interest to look at a selection of indexes made by different organizations.

Transparency International makes an annual list of the perceived level of corruption in the public sector. The list is made on the background of annual surveys and experts assessments.

The scores that can be obtained goes from 1 to 10, where 10 are very transparent. For the last 3 years, Somalia has been the holder of the lowest score among the countries on this list meaning that Somalia is the least transparent country of the 180 countries investigated. (Transparency International, Annually)

The Fund for Peace have since 2005 made annual list of the worlds countries, and ranked them according to 12 indicators, demographic pressure, internal and external refugees and displaced persons, uneven development among different groups, economic decline, human flight, violation of human rights, rise of elites, falling legitimacy of the government, deterioration of public services, group differences, intervention from other states and growth of militias. Details of the indicators can be found on www.fundforpeace.org.

This section is based on (Fund for Peace, Annually)

On each indicator a score from 1 to 10 can be obtained, so a total of 120 points can be given to each country. If a country has a severe problem with human flight, that country will obtain a high score on that indicator. The more points the country gets, the more failed that country is according to this index. The information needed to give the countries their scores is collected from hundreds of thousands of articles and rapports from international and regional sources each year.

Since this list was made in 2005, Somalia has been among the top 10 with scores over 100 points, and for the last two years, Somalia has been the most failed country on this index. The human development index does not contain data from Somalia. GDP for Somalia is, according to CIA world fact book, \$ 600 per inhabitant. Only 4 countries in the world have a lower GDP per capita.

What is worth noticing, is that the other countries that come out bad on these indexes, are land locked countries or countries with limited access to the sea. See appendix 1 for details. A key factor for a country to succeed seems to be access to the oceans. Somalia, with its 3025 km long coastline, is a clear exception. Somalia has not been able to use this advantage for good, but they use it on illegal acts and make millions of dollar annually on this.

When a state fails the conditions in that state goes from bad to worse. When there is no responsible governance, and no personal security, poverty, violence and instability increase.

The criminal gangs will win, while the rest of the state's population will lose and suffer. A failed state will eventually, if not dealt with, influence the surrounding countries, the entire region and in the end, the peace and security of the world. The indirect costs of a failed state must be handled by the world society in the end.

It should be clear, that Somalia is a country with enormous problems which cannot be solved easily. Erupting wars, hunger, lawlessness, internal division, corruption, danger, violence and poverty are words to be associated with Somalia. The Norwegian state of foreign affair asks all Norwegians not to travel to Somalia, and if you find yourself in Somalia now, you are asked to leave as soon as possible.

The absence of authority and control of a superior government for the last two decades, has led to criminal free states within the country with limited abilities and willingness to ensure safety for passing ships and Somali pirates have been able to operate freely and hijack international ships with little or no risk of being arrested and/or punished.

3.5 Piracy in the Gulf of Aden

Piracy in the Gulf of Aden and the northwest corner of the Indian Ocean has grown to become of great concern to international shipping companies. These pirates used advanced technical equipment as GPS and via internet, they, as everyone else, have access to AIS. All ships above a certain size that operate in international shipping are obliged to have an AIS transmitter. (Kystverket (Coastal service))The reason for this is to increase safety for ships and the environment, and it makes it easier for coastal states to collect data about ships and monitor traffic. But AIS also provides pirates with much needed information to prepare for attacks. The pirates in the Gulf use speedboats when they look for targets to attack, and to increase the range of how far from land they are able to operate, they use so-called mother vessels. A mother vessel is a larger boat that is able to go further off the coast, typically a large fishing trawler that can carry the speedboats, and from the mother vessel, the pirates use their speedboats when attacking. The pirates are trained fighters, and are armed with Kalashnikovs and rocket-propelled grenades.

If the pirates succeed to hijack the targeted vessel, it is brought into Somali waters as fast as possible. Due to international maritime law, warships cannot follow the pirates into nation's

sovereign waters without permission from the government. Since Somalia has not had an efficient government for the last two decades, there has been no one in place to grant permission to the warships. (Sekulich, *Terror on the seas true tales of modern day pirates*, 2009) When the ship is brought into the territorial water, the pirates demand ransom for the ship and more important the crew. The ransom demanded have reached heights never seen before, and ships are held in captivity for several months before the pirates gets their ransom and release the ship.

Some might want just to pay whatever the pirates ask for initially, and get over with it. If the ship is in captivity for three months, they will probably lose more in lost revenue than the ransom they have to pay and the other costs involved. But the pirates must work for their money, if not, piracy will become too easy and the problem will increase in size. Another thing to consider are that if you just pay, the pirates might find out that they can demand more from you, you are a willing payer, so they say that this was just the first payment. The ransom demanded to other shipping companies will then increase as well. A ships value together with the value of its cargo and what flag it sails, will determine what level the ransom will be at. (Brennpunkt, 2009) But if a company pay overprize in order to solve the problem quickly, they drive up the ransom demanded to other companies in the future. (Brennpunkt, 2009) Long negotiations therefore takes place before an agreement is found and the ship is released so the pirates must really work for the money. (Brennpunkt, 2009)

In 2009 Somali pirates attacked 217 ships, and 47 ships were successfully hijacked, while in 2008 there were 111 attacks and 42 hijackings. In 2008, 815 crewmembers were taken hostage, while in 2009 867 crewmembers were taken hostage by Somali pirates. (IMB, 2010) 35 million USD was paid in ransom in 2008, 80 million USD in 2009. (George, 2010) These amounts may differ according to what source you use, but it is no doubt that pirates make tens of millions in ransom in 2008, and even more in 2009.

3.5.1 Sirius Star, a ship that was too big to be hijacked

MV Sirius Star, property of Saudi Aramco, is a tanker vessel that can carry 2, 2 million barrels of crude oil, in other words a very large crude carrier (VLCC). John Burnett was, when making his book “*Dangerous Waters: Modern Piracy and Terror on the High Seas*”,

onboard a VLCC, and talked to the crew about piracy and how they dealt with the threat. One thing that goes over and over again is that the crew believes their ship is too big to be hijacked, so they are not in the danger zone and don't take the threat seriously. (Burnett, 2002). The hijacking of MV Sirius Star changed it all.

As discussed earlier, piracy doesn't get much attention in the media. But when the US Navy announced on November 17, 2008 that the pirates had hijacked a VLCC on November 15, and a few weeks earlier pirates had captured MV Faina with 22 tanks and other military equipment, the media took great interest in the issue. Every ship was vulnerable, even far out at sea.

MV Sirius Star was headed for the US loaded with oil when it was captured 450 miles off the Kenyan coast, far from where pirates in this area usually have operated, and very far out at sea. MV Sirius Star is the largest ship ever to be captured, and never before have a ship been captured so far off the coast. (AFP, 2008) The value of a ship this size, combined with its cargo, estimated to 100 million USD, was at the time of capture close to a quarter billion dollar. This made the ransom demanded by the pirates the highest asking price ever, 25 million USD. The ransom is always set very high, and long negotiations take place. The crew remains in captivity, but are treated well, according to their own statements. They can call their families, and go around inside the ship as they please. The pirates have no interest in hurting the crew; this could damage the ongoing negotiations for ransom.

On January 9, 2009, after 54 days in captivity, Sirius Star was released. The shipping company, Saudi Aramco, had come to an agreement with the pirates about a ransom of 3 million USD. A month later MV Faina was released after a ransom of 3,2 million USD was paid. The money is usually smuggled into Somalia at night, loaded onto a small plane that first flies over the ship to check if all of the crew is alright. The crew is lined up on deck, called proof of life, and when everyone is accounted for, the money is dropped in a parachute. The pirates count and divide the money between them before they split up, and the ship is free to sail. (Brennpunkt, 2009)

3.5.2 Who are the pirates

The movie “Blood Diamond” starring among others Leonardo DiCaprio showed the world how Africans are taken advantage of in order to offer consumers in the West what they want at a low price. The people suffer, while some powerful warlords earn fortunes selling the diamonds that they use slave labor to find to western companies. We can see the same happening in Somalia.

The sea around the Horn of Africa had large quantities of fish that provided locals with a livelihood. Fishing boats from as far as Western Europe and the Far East come here to fish. Some of them pay a fee in the range of \$50 000 to \$150 000, a fishing permit in their own words, to the warlords for the privilege to fish in the area. (Sekulich, Terror on the seas true tales of modern day pirates, 2009) Others take their chance with piracy, thinking that Somalia is a “lawless free for all”. The warlords also sell permits to dump toxic waste in the sea, an offer countries in Western Europe have taken advantage of. The local fishermen saw their livelihood first given to foreign fishing companies that effectively vacuumed the sea for fish, and then they saw their sea get polluted by western industrial toxic waste. The warlords made great profits, profits that again can be used to buy more weapons and equipment to fuel their other industries.

The previous fishermen made up the first pirates in Somali waters. The pirate gangs were formed to protect their livelihood and their own sea. They called themselves names as the National Volunteer Coastguard of Somalia or Somali Marine and seized fishing trawlers from foreign nations. They demanded a fee for their release, and often received a quick ransom from the boat owners that were afraid of the media to roll up their illegal operations. (Tharoor, 2009) These private coastguards operate from former fishing villages as Eyl in Puntland and Haradhere in the central part of Somalia. These are typically small and very isolated villages. There are about 700 pirates that operate from the small village of Eyl. In addition there are some pirates in other previous fishing villages further south as Haradhere and Garaad an even Mogadishu, but Eyl stand out as one of the most important home base for the Somali pirates.

At some point, the private coastguards got greedy, and saw large opportunities in what they were doing. The warlords began to take an active role in this new line of business too, and equipped the pirates with better arms and boats so they could expand their hunting grounds.

Eyl and Haradhere are still central villages for the fishermen that do piracy. Captured ships are often brought here and anchored up while waiting for the ransom to be paid.

Earlier, letters of marque were given to pirates for a share of their profit and the pirates were given protection in return and safe ports in the issuing country, see section 3.1.2. The warlords in Somalia do the same thing today really; pirates are offered protection and safe ports in Somalia in return for a share of their profit. Piracy is then almost legalized in reality in that country.

3.5.3 Business of piracy

Businessmen negotiate and receive the ransom, the former fishermen, poor young men and military men, some even have training from anti terror departments in France and Great Britain, attack and seize the ships, while young "cadets" guard the ships while waiting at anchor. (West, 2007)

The money that the pirates receive in ransom is dropped from a small plane in a parachute and normally lands on deck of the captured ship. The money is divided in the following manner:

"- Maritime militia 30 per cent distributed equally between all members, although the first pirate to board a ship receives a double share or a vehicle.

- Pirates who fight other pirates must pay a fine. Compensation is paid to the family of any pirate killed during the operation.

- Ground militia 10 per cent.

- Local community 10 per cent (Elders, local officials, visitors, and for hospitality for guests and associates of the pirate).

- Financier 20 per cent the financier usually shares his earnings with other financiers and political allies.

- Sponsor 30 per cent"

(Sekulich, Somali piracy in detail, 2008)

The money from piracy also contribute to finance other illegal business as illegal fishing, logging and mining ventures, drug traffic, human trafficking and the internal fighting's that still consists in some parts. (West, 2007)

Pirates have really made their operations into a real business with investors. They take social responsibility by giving the community a percentage of each ransom received that goes to schools, hospitals and infrastructure, and employ large amounts of young men that otherwise probably would not have much of a future.

Piracy has become an industry in Somalia with its own stock exchange. Now people can take part in piracy without actually hijacking a ship or guarding it, but by providing cash, weapons or other useful material. A woman made \$ 75 000 in 38 days by providing a rocket propelled grenade. (Ahmed, 2009) More importantly, pirates have now gained more support for their activities in the community.

The stock exchange success has been tremendous. When first started, it only had 15 companies, and now, Dec 1, 2009 there are 72 companies listed. (Ahmed, 2009) These maritime cooperation's give their investors huge profits if a hijack succeed, and this way opportunities, that not were present before, have opened up for locals as the woman above to invest and earn some money. (Ahmed, 2009)

The pirates nowadays, have the same luxury as western millionaires. They have the newest and fastest cars, live in great houses and surround themselves with the most glamorous women. The pirates have received tens of millions combined in ransoms over the last years, and according to the Economist, the pirates have financial advisers in Dubai to manage their funds. No wonder why piracy appeals to young people in Somalia who are used to have nothing.

3.5.4 Dealing with pirates

Piracy has been a major threat to international trade as long as it has existed. From the Golden Age of piracy we have the example of Britain's trade with Jamaica that was in danger of coming to an end because pirates attacked almost every vessel inbound or outbound from Jamaica. Pirates in the Strait were for many years of great concern to ship-owners, and this had an impact on the intercontinental trade to and from the Far East. The international society must step in, because the surrounding countries as shown in previous examples are usually

governed by weak and corrupt government, if any, that benefit from bribes and don't want to stop their source of income.

Piracy has been dealt with in many ways over the years with different results. The methods applied and discussed if should be applied when dealing with the Somali pirates are:

1. Military force and naval convoys
2. Disarming and arresting pirates
3. Govern the country properly
4. Arming the crew/hired trained security personnel
5. Evasive maneuvers and self protection
6. Avoid the area

3.5.4.1 Military forces and naval convoys

All countries that are involved in international trade want to protect their interests. Military force has often been the solution. It stopped piracy in the Caribbean in the 1720s and increased effort from the coastguard and navy and cooperation among the surrounding countries of the Strait made piracy in that area decrease to almost none existing towards international shipping. (Sekulich, Terror on the seas true tales of modern day pirates, 2009) The problem that the international society is faced with is that a warship needs permission from a state to enter its territorial waters. Indonesia was reluctant to accept outside help to fight piracy, and Somalia did not have an efficient government, see section 3.3.2, that could give permissions.

Warships from western countries have been present in the region around Somalia for 60 years. Combined Task Force (CTF) 150 has been in the area around the Horn since 9/11 to perform maritime security operations and in addition to its assigned tasks, it participated in the counter piracy operations. But the threat of piracy needed a broader and better approach, so CTF-151 was created by the Combined Military Forces (CMF) in early 2009 to solely focus on fighting

piracy. (Navy MIL, 2009) More than 20 countries contribute with naval force to CTF-151 which goal is to create a lawful maritime order and to develop security for passing ships by performing counter piracy operations. (Navy MIL, 2009)

Operation Atalanta is the European Union's approach to combat piracy. The force will consist of at least 6 frigates at any time in addition to aircrafts. EU members as Britain, France, Germany and Italy and third countries as Norway participate in Operation Atalanta. (MSC (HOA)) The forces have been authorized to use necessary force to bring an end to piracy, they can seize pirate ships and arrest and detain suspects or pirates who have committed an act of piracy. (EU NAVFOR)

To monitor traffic in the Gulf of Aden and to provide information to parts involved, EU initiated the Maritime Security Center, Horn of Africa (MCS (HOA)). This center works like the IMB Piracy center in the Strait. Prior to transit through the Gulf, ships are asked to rapport to MSC (HOA) and rapport in regularly. Ships are asked to turn of the AIS under transit, in order to avoid giving this information to pirates. That all information about merchant ships passing, and naval ships operating is channeled through one source, makes it easier for joint operations.

To better attack the problem, CMF, EUNAVFOR, NATO and other participating countries and organizations share information and tactics on monthly meetings called SHADE (Share Awareness and Deconfliction). Cooperation's like this have enabled the creation of an internationally recommended transit corridor (IRTC) through the Gulf of Aden as shown on the map with group transits at different times of the day with different cruising speed. (MSC (HOA), 2009) This is a highly protected corridor, 1000 km in length, but do to the size of the area pirates operate in, the large amounts of passing vessels, and limited capacity by the forces, safety of all ships cannot be obtained.



Figure XI Transit corridor in Gulf of Aden

The effect of the increased presence of military forces in the Gulf of Aden in 2009, made the pirates shift their attention to the east coast of Somalia where among others Sirius Star was

hijacked. In the last quarter of 2009, 33 attacks were reported, and 13 successful hijackings were committed in this area. (IMB, 2010)

3.5.4.2 Disarming and arresting pirates

When pirates enter a ship, they enter the territory of the nation determined by which flag it flies. The pirates should stand trial in the flag state for the crimes they have committed. The one pirate that survived their failed hijack of Maersk Alabama was sent to the US, the flag state of that ship, and stood trial in New York. Last time a pirate stood trial in the US was in 1861. The same goes for other countries. Pirates have not been standing trial in Western countries for over 100 years, so some countries don't have laws that deal with piracy today.

Bringing the pirates to every corner of the world every time a hijacking takes place, would be a great job with large costs involved, not to speak of who that should be responsible for bringing the pirates to and from the home country and the costs involved by holding the trial and have the condemned pirates serve its sentence in prison for a long time. After that they can be eligible for asylum and/or citizenship. Most of the pirates do what they do because there are really no options for them, so coming to a western country could be hitting the jackpot for these persons, even though they might have to serve some years in prison. But many ships fly flag of convenience, and some countries would not have the necessary funds or the interests in bringing the pirates to their countries for trial. The warship in the area that seize the pirates should then be responsible for bringing them to justice, allegedly in the country the warship belong to, often tens of thousands kilometers away. But confusion rule. One time a pirate was onboard a US warship for 7 months because it was unclear where he should be sent for prosecution. Others have caught pirates, disarmed them, given them some food and water and let them go again. Since international law gives the right, but not the obligation to prosecute suspected pirates, countries can and will avoid the issues combined with a prosecution.

An example how this have been dealt with before, is taken from the Great Age of piracy, see section 3.3.1, when England brought all captured pirates from the Caribbean and other places to London to stand trial for the High Court, and the punishment was hanging on the hanging dock by the river Thames. Eventually they changed this practice and started to prosecute and

punish the pirates locally in the Caribbean, as a warning to others and a method to scare people from becoming pirates. Somalia is a sovereign country, even without a government, and pirates are not prosecuted here, so this solution cannot easily be used.

EU and NATO have persuaded Kenya to accept pirates that they catch, and for this service they receive an annual amount of money. But the funds are not sufficient to cover the costs of a trial, lawyers, imprisonment, and the suspected pirates just keep coming. When the documentary that described these events was made in the fall of 2009, 130 pirates were waiting for trial. Most of them will be released. According to Kenyan law, a pirate must be caught while attacking a ship in order to get condemned. (Bogen, 2009) The sentence they receive is no more than 7 years; piracy is not a serious crime in Kenya.

The large increase in pirate activity in 2009 led to many arrests, but Kenya does not have the legal capacity longer to handle all the cases. (Bogen, 2009) The issue of bringing the pirates to Europe, USA and Asia for prosecution then comes back. The costs might just outweigh the gain.

3.5.4.3 Governing the country properly

To ensure a long lasting solution, most experts agree that the situation on land must be stabilized. The effect that was seen as a result of the increased military presence in the Gulf of Aden was that the pirates moved to the east coast of Somalia, and made the area they operate in too large for the warships to secure it. The main area, the bloodline in international trade, is of course the transit through the Gulf of Aden which the warships have their focus on, but the region as a whole cannot be long-lasting stable unless the situation onshore is dealt with.

The Transitional Federation Government backed by UN and the African Union, see section Background Somalia is the closest the west has come to help Somalia create an efficient government which tried to take control of the domestic situations. This government also agreed to resolution 1816 made by the UN Security Council to let countries that cooperate with the TFG enter Somalia's territorial waters. (UN Security Council, 2008) Resolution 1816 condemns all acts of piracy around the Horn, and allows ships from US, France and India to

engage in hot pursuit inside Somalia's territorial boundaries for 6 months. (UN Security Council, 2008) (CNN-IBN, 2008)

However, as stated earlier, TFG was not able to fully regain control of Somalia, especially due to the resistance of powerful warlords in the capital. ICU on the other hand with its strict sharia laws, has proven successful before and the president, Sheikh Sharif, is more likely to succeed in stabilizing Somalia and should and do receive the support of Western nations. Sheikh Sharif said in his inauguration speech in 2009 that *"My government will bring an adequate plan to overcome the difficulties the nation is facing,"* (IOL, 2009) To the Norwegian channel, TV2, the president said in April 2009 that 75% of all the hijacks can be stopped if Somalia get enough money to establish a state police and an army. How trustworthy this is, is another question, and even though Ahmed have proven a good leader before, aid given by supporting countries should be followed carefully, to make sure they are used where they are supposed to. The last 50 years have many examples of aid given to African countries with the best incentives, but the result has often been that the money is used to benefit the few at the expense of the many.

Secretary of State, Hillary Clinton, and the president of the EU commission, Jose Manuel Barroso, have both acknowledged that maybe the best solution to stop piracy is to go into the villages and towns of Somalia and create a better development there. To invade Somalia to get control in the country, as the Americans try with Iraq, has also been a debated solution. But these solutions involve great risks and responsibility that no one yet has been willing to take, not to mention the costs involved.

3.5.4.4 Arming the crew/hire trained security personnel

To give the crew on merchant ships firearms so they can protect themselves has been discussed earlier in combination with piracy elsewhere. The problem with this solution is that the crew is not trained to use guns, and the risk of anyone getting injured when the pirates see a gun increases dramatically. The extra responsibility incurred to the ship-owners by providing guns and the increased risk involved, together with the question of law and declaring the guns in every port have ruled out this solution, even though its proven efficient on Russian and Israeli ships.

If more special flags, like the Russian and Israeli, get attached to having guns onboard, the situation might end up in a prisoner’s dilemma. Many of the Somali pirates have long experience from wars, and know how to efficiently use guns. If they expect the crew to be armed, they might act more violently when trying to seize a ship. The crews that are not armed will then be the big losers in this situation. The matrix will look like shown in the figure.

		Flag 2	
		Arm	Not arm
Flag 1	Arm	win, win	win much, lose much
	Not arm	lose much, win much	lose, lose

Figure XII Prisoners dilemma: Weak pirates

		Flag 2	
		Arm	Not arm
Flag 1	Arm	lose more, lose more	win much, lose much
	Not arm	lose much, win much	lose, lose

Figure XIII Prisoner dilemma: Strong pirates

What we see is that as the situation is now, ships under both flag loose because they have no arms to fight back so they can only resort to evasive maneuvers, and if that does not hold, they will be hijacked and be held hostage for a period of time. If one of the flags arms their ships, they will gain much because they will be able to defend themselves and pirates won’t attack ships flying that particular flag. The other flag, however, will lose much, because all the pirates will attack them as the only target. Therefore, they will arm themselves as well.

Then we have a situation where all the ships have inexperienced, armed crew on the one hand, and experienced pirates on the other hand. For the pirates there are no longer any easy targets, and we don’t know how they will respond to this. In the case pictured in figure XII, the pirates are weak, and they don’t take the fight. They give up, and piracy as a threat to

maritime trade disappears. But in the case pictured in figure XIII, the pirates will adapt and bring the “war” onto the ships, and many more seamen will probably lose their lives. The case will then be that the threat of piracy is more real than ever before, and seamen who earlier have only been held in captivity now risk physical damage and their lives as well. They lose more, together with the other agents involved due to higher risk, premium and so on.

To deal with the crew’s inexperience with guns, hiring trained personnel from private military companies as the practice is in the Gulf of Guinea could be a solution. This solution is encouraged by the US Navy. (Associated Press, 2008) But this solution also like arming the crew, increase the risk of somebody getting injured, but not as much. The pirates don’t want to hurt the crew, they need the crew to be safe and in a good condition in order to receive their ransom. But if someone fire one gun, the pirates that are heavily armed, well trained and possess great experience with guns are likely to fire back. So far, no ship with trained personnel has been hijacked.

3.5.4.5 Evasive maneuvers and self protection

Since the presence of the military warship is insufficient to provide a safe transit for every vessel, a passing through these waters is still combined with a risk of getting attacked by pirates. There are 22 000 transits through the Gulf of Aden each year, and in 2009 217 ships got attacked, about 1 percent. Only 25% of these attacks were successful, so there was a 0, 2% chance that a ship transiting the Gulf of Aden in 2009 would be successfully hijacked.

The reasons that so many attacks are not successful, are that the crews and captains are more aware of the problem now, and as in the Strait when piracy was a threat there, ships deploy nighttime guards, have their hoses ready and engage in evasive maneuvers like trying to run them over, go zig zag or increase the speed and run them out. Anti piracy devices has been invented in high speed lately. Creative minds come up with everything from slippery foam to sonic device that ships can use to prevent pirates from getting onboard but the classic methods as guards on deck, dummies and use of fire hoses are also still being used.

Attempted attacks are now immediately reported to MSC (HOA) so warships comes as fast as they can, but helicopters can naturally respond even faster and are used more frequently to scare the pirates away. (Wegener, 2009) During an attack, the crew must lock themselves in the citadel and wait for help. Evasive maneuvers have proven several times to be the most effective method to avoid getting attacked by pirates.

3.5.4.6 Avoid the area

Some companies are not satisfied with the risk involved with a transit through the Gulf of Aden, and have determined that all the ships under their command should avoid this area. When Odfjell, a chemical freight company based in Bergen, decided in the fall of 2008 to reroute all its ships, most of the international media took an interest. The alternative route from Europe to Asia and back would be around the Cape of Good Hope, a journey that increase the average haul substantially, as figure XII, and figure XIII below shows.



Figure XIV The alternative route

	By Cape(nm)	By Canal (nm)	Saving (nm)	Saving (%)	Saving(days at 17knots/h)
Rotterdam to					
Mumbai	9378	5471	3908	42 %	9,6
Kuwait	9813	5644	4169	42 %	10,2
Melbourne	10594	9552	1042	10 %	2,6
Calcutta	10160	6860	3300	32 %	8,1
Singapore	10247	7208	3040	30 %	7,5
Marseille to					
Mumbai	9031	3995	5037	56 %	12,3
Melbourne	10334	8163	2171	21 %	5,3
New York to					
Mumbai	10247	7121	3126	31 %	7,7
Singapore	10855	8858	1997	18 %	4,9
Ras Tanura	10216	8287	1930	19 %	4,7

Figure XV Comparison of the routes

The Northeast Passage could also become an alternative route. The distance from Japan to Rotterdam via the Bearing Strait is 40% shorter than the route through the Suez Canal. This alternative potential is still highly unexplored, but the chances are there, especially due to the distance saved to Japan and China.

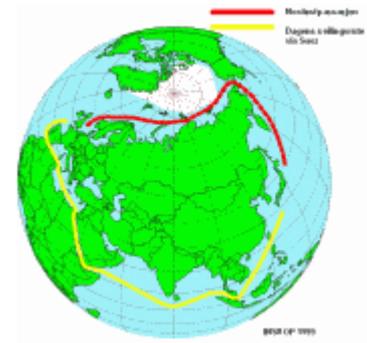


Figure XVI The north east passage

The problem with this route is the very little hospitable environment. The sea is still frozen large parts of the year, so at this time it is only possible to sail this route from June to October, and convoys led by icebreakers will probably be necessary. According to DNV, ships who wish to use this route must be classified for ice. This set new demands for the hull.

Lack of infrastructure in the area and the vulnerability of the local environment will also be great challenges. There are little or none shore based facilities to help ships in need, and the weather is peevish. (Skipsrevyen, 2010)

The conditions for this route will probably change in the future. Breakdowns and run aground can be solved by having convoys like in the Suez Canal, and the ice will probably fade away more and more due to climate changes. Two German merchant ships have sailed through the north east passage late June, 2009 so it is possible. (Telegraph, 2009)

This solution cannot yet offer an all year solution, and many problems are still to be solved before this can be a good enough alternative to the Suez Canal. But the problems around the Horn of Africa can participate in speeding up this process, and the northeast passage is likely to become an option later, also due to the climate changes. For now, due to the time limitation (June-October), this is not an option that will be considered further in this thesis.

3.6 A pirates perspective

(Also see Background Somalia, 7 A failed state)

In an attempt to see piracy from a pirate's perspective some factors are essential:

*Money

*Risk

*Moral

3.6.1 Money

Somali inhabitants have limited or poor options available to make a decent living. It is the same with pirates in other areas as the Gulf of Guinea and the Strait of Malacca as well. But in Somalia a youth really have two options, become a pirate or some other work for the warlords, or try to flee the country and become a refugee. There are of course a few that are able to make a living, but as described in Background Somalia, most Somalis live in extreme poverty.

When conditions are as bad as it is in Somalia, most people will be willing to do anything in order to obtain food or money to buy food. The stake here is your own survival. The life expectancy and the percentage of people that are malnourished describe this. The United Nations World Food Program supply Somalia as best it can, but the situation at sea makes it hard for ships to deliver food, and the situation on land with roads that are filled with "toll" and in poor condition does not make land transportation an option. Some Somalis lived as fishermen and gathered some food that way, but they witnessed Asian and European fishing vessels vacuuming their sea illegally for fish, and then dump toxic waste there.

The fishermen started to demand a toll from the fishing vessels, and believed that they were entitled to do so, see section 3.5.2. The fishing vessels paid to avoid conflict and media coverage, and the pirates discovered an opportunity. For someone who really has no other way to turn, why should he not exploit this opportunity?

Bernoulli used expected utility theory in analyzing money gambles and found that people's utility of money is marginally decreasing. (Baron, 2008) In

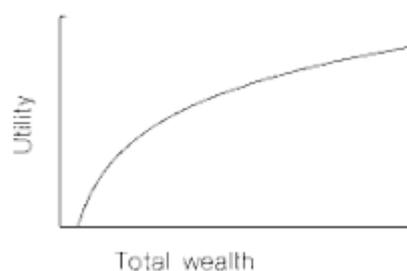


Figure XVII Marginal utility of wealth

other words, an additional dollar would have less utility to an individual as the individual's total wealth increases. This is shown on the graph.

People that live in poverty, have a much greater marginal utility of an extra dollar and will thereby be willing to commit actions that a more fortunate person never would even consider. If you put yourself in the shoes of 75 % of the Somalis, that make less than 700 USD a year, it should be clear that the utility an extra dollar is much higher than western people ever will experience, and therefore are the Somalis willing to become pirates.

3.6.2 Risk

The risk involved with committing a crime is imprisonment and in some cases your life. You will also probably limit your future options, as a record of people's criminal acts are kept by the state. This is normally enough to prevent people from committing a crime, but in a country where there are no efficient government and no jails, the situation changes. There are courts, as described in section Background Somalia, but the only penalty they can rule are in terms of compensation. The courts are also held by warlords and clans, the same people that runs most of the illegal business, and they are playing on the same team as the pirates.

Imprisonment in other countries has been used, but for a Somali pirate to end up in a Western country where he later can apply for asylum would be like hitting the jackpot. The pirate that survived the attempted hijacking on Maersk Alabama smiled when he arrived in New York prior to his trial.

The biggest risk the pirates face when attempting to hijack a ship therefore becomes the risk of being shot or killed. But a life is not worth much in Somalia, and the spirit among the pirates is "do or die".

3.6.3 Moral

The biggest reason perhaps for a person not to commit a crime is because he knows it is wrong and he respects the law and the existence of other people. But in a country that have

been facing so many problems as wars, starvation, unemployment, lawlessness and so on, the line between what's right and wrong become invisible, and people don't see the problem in their actions. This is seen among the pirates, who believe in their own mind that they are just protecting their own sea. They call themselves the coastguards, not pirates.

If you don't have a sense of right and wrong, no efficient provider of law and justice, and starvation and famine among the people, it is no longer hard to understand that people take necessary steps to provide food and shelter for their own. It is all about survival, and there are very limited options to do otherwise. And if they succeed in hijacking, their lives will be changed forever. The profit amounts to millions of dollar, and after the money is split, even those with the lowest "rank" receive a descent amount.

Part 4 The different types of costs when dealing with piracy

To deal with piracy, the shipping companies and the society can take active and passive actions. The costs involved will of course affect the decision, but piracy cannot be left to itself

and endanger world trade, so some actions will be necessary. Everybody that are influenced by piracy, that be among others governments, shipping companies and the crew on the ships involved have some actions that they use to protect themselves and try to eliminate the threat of piracy. We have in section 3.5.4 identified 6 different actions that are frequently used, both today in Somalia and in other areas where piracy continues to exist and have existed. This section will describe an estimated cost-benefit analysis of these 6 actions. The first three sections describe active actions that can be taken by the international society on a government level, while the last three sections describe actions that can be taken by the individual shipping companies.

4.1 Use of military force and naval convoys

Previous incidents described in this thesis, have shown that the presence of naval warships has had a strong and good effect throughout times. This is an active solution that government can engage in, in order to protect their merchant vessels and their trade routes. But the use of military force might be one of the most expensive actions to be taken. The costs of deploying a typical frigate, to the Gulf of Aden are estimated to be £1 million per month. (Knott, United Kingdom: Somalia: Clan Rivalry, Military Conflict, And The Financial And Human Cost Of Piracy, 2009) There are at any one time around 20 warships from either CTF-151 or Operation Atlanta, so the cost of this solution would be between £15-25 million a month, or £180-300 million annually. In addition to this come the additional costs of shore based support and surveillance aircrafts and a number of helicopters.

Even though piracy attacks increased from 2008 to 2009, both attempts and successful attacks, the presence of warships have again proven successful. The Gulf of Aden has become safer, and if you map the attacks as seen in appendix 3 you see that the pirates have shifted their attention more to the east coast of Somalia. Every ship that transits the Gulf of Aden cannot be protected, and there is no guarantee that you are not getting attacked even though the warships are there. The convoys that are set up are a good effort, but in order to secure the convoys efficiently, 60 ships are needed according to a commander Jane Campbell, a spokeswoman for the force. (BBC News, 2009) The costs would then be around £720 million annually.

The numbers above are the costs estimated to keep the military force operative in the Gulf of Aden. The entire costs can only be directly related to piracy if the ships otherwise would have been in layup and not incurred any costs. Having the ships in operative service also give a good opportunity for the men and women to get combat experience, something that can be price in monetary value.

The problems with this solution are that the pirates adapt. They have changed their attention from the Gulf of Aden to a new hunting ground, the Indian Ocean. Their new area is stretching far and wide, Sirius Star was captured 450 miles of the Kenyan coast, and the newest hijacked ship, UBT Ocean was captured of the coast of Madagascar on March 5 (written on March 7, 2010).

Another problem is that foreign warships need permission from the state to enter its territorial waters. Without an efficient government to grant such permission, this becomes impossible, but warships are still not allowed overrule a nation's sovereignty. A few countries, among them USA and France have later been given the necessary permissions from TFG, but most countries that participate in this area cannot go after hijacked ships beyond the territorial border of Somalia.

A third problem with this solution is that it demands the warships to be everywhere. The pirates must be stopped when in pursuit of a targeted ship, after the pirates are on board a ship there is not much the warships and their men can do because of the human risk involved. Helicopters have been efficient due to their high speed and good ability to react on short notice, but the area is too large for them to secure.

4.2 Disarming and arresting pirates

The risk that Somali pirates take when attacking a merchant vessel, is quite low compared to the reward if successful. In a civilized society, criminals are brought to justice for their actions, but in Somalia pirate's live happy days without concern for the government. In many cases the government has been on their side, because they have had interests in piracy as well and probably still do. The international society have therefore been looking elsewhere in the region, and made agreements with neighboring country Kenya to prosecute suspected

prisoners. Kenya have benefitted from this in form of payment from the agreement with EU that pays 30 million NOK annually (Bogen, 2009). A similar agreement with the US has contributed to improve the prison facilities in Kenya. (Knott, 2010) But as Kenya's willingness to accept more pirates has diminished, the prosecution of pirates has again become a hard task.

The costs of bringing the suspected pirates to trial in Europe or the US will be quite high. The costs of imprisonment in the state of California amounts to around \$ 50 000 which include safety, healthcare and rehabilitation. In Norway the costs is estimated to be around 600 000 NOK or approximately \$100 000 annually (NTB, 2008). In addition comes the costs of trial which is hard to obtain, but you need an interpreter, defendant, police, a judge, experts and so on. Just the costs of a defender and an interpreter would be from around 15 000 NOK per day and up in an ordinary trial and probably higher in this sort of a trial, according to a fair estimate by an employee in the Norwegian Sivilavdeling at the Justice and police department.

The costs and responsibilities have made countries involved reluctant to prosecute pirates. The difficulties involved have done so that captured pirates only get disarmed and released, either at shore or in their own boat. The naval force in the area had by March 5, 2009 captured 247 pirates where 121 of them had been disarmed and released, 117 delivered for prosecution while the rest had an undecided faith. (Knott, 2010) The risk involved is therefore too low to prevent piracy from committing criminal acts.

The costs for the 250 pirates to be prosecuted and imprisoned would then be more than 15 000 NOK or \$ 2500 per day per person, given that they are prosecuted individually, and then from \$ 50 000 in the US or \$100 000 in Norway annually while they are in prison, per person or a total starting from around \$12 million in US or \$25 million in Norway annually. The real costs come when the pirates seek asylum in the country they are imprisoned in. If granted asylum, they will obtain rights to social benefits, healthcare, schooling and so on, so the costs involved with prosecution and imprisonment may bleach in comparison.

A solution could be to prosecute and punish pirates in Somalia, in domestic courts and prison. Prisons in Puntland and Somaliland are being built right now for this purpose, and are scheduled to be ready in the summer of 2010 (Knott, 2010). The problem is that they probably not would get a fair trial in Somalia, and the new prisons must be built to meet international

minimum standards for other countries to send convicted prisoners there. The costs involved with this solution will be hard to estimate but the alternative cost described above is probably a lot higher.

4.3 Govern the country properly

Somalia was without an efficient government for nearly two decades, and during this time anarchy ruled parts of the country. Without an efficient government, crimes like piracy will continue to happen, because the opportunity is there while the risk is low or none at all. Western effort to create a new government failed, the latest effort, TFG was not able to gain control of the country, not even the capital.

Warships, naval patrols and escorts have been shown to have limited capabilities when it comes to the situation in Somalia. A solution to many of Somalia's problems could be an international coastal land operation, asked for by the Russians. But this solution comes with great responsibilities and costs, just look at Afghanistan where the costs for US alone are close to \$20 billion annually and no solution to the conflict seems to be nearby. (US Department of defence, 2006) The Black Hawk Down incident (see part 2) also makes the Americans a little more reluctant to this solution. An invasion will probably just make matters worse, as the Somali people don't look at the pirates as criminals, but as coastguards protecting their sea, and Somalis are very protective of their own.

An efficient government is still needed, one that can gain control, so the best thing to do, would be to establish one that will receive the necessary backup from the international society since Somalia don't seem to be able to solve their problem on their own. This has been done, over and over again, but with no success. The TFG was the one government that should be a start of the new era, but without control of the country is hard to exercise good leadership. ICU however, have proven both efficient, they have gained control, and later received the support of western nations, especially in their fight against the terrorist organization that operates in the southern parts of the country. During their 6 months leadership in 2006, they reinforced laws and fought piracy efficiently.

Sheikh Sharif Ahmed now receives support and recognition among western leaders. In 2009 his forces received 40 tones of arms and ammunition from the US (McConnell, 2009), and the hope and belief is that president Ahmed and his government can stabilize the country. This solution will probably cost less than the alternatives described above, but it is important that the international society follow up and support them in the following, and also have a watchful eye with the aid given, so the funds that are meant for fighting piracy and stabilizing the country not fade away, as so often happens in Africa. Piracy could then become a better source of income, used as an excuse to get financial aid.

4.4 Arming the crew/hire trained security personnel

Arming the crew is a cheap and an efficient solution, see section 3.5.4.4. But the extra responsibilities and risk involved, concerning the safety of the crew, has ruled out this as a viable option. A firefight onboard a ship can lead to devastating lawsuits, ruin the cargo and even sink the ship. Another reason is that it "poses incredible logistical challenges, potentially violates many national and international laws, and is contrary to maritime conventions," says James Christodoulou, chief executive of Industrial Shipping Enterprises Corp.

Instead hiring trained security personnel has become a great business. This provides protection immediately; so far no ships that have armed guards onboard have been hijacked. (Askins, 2010) Maritime security has grown rapidly as an industry, and there are now several companies that offer "the very best". In his book, "Dangerous waters", John Burnett interview a former military officer that runs such a company. His employees are former US Navy SEAL Team Six, the US Army Delta Force, and the Royal Navy's SAS and so on.

The price for this type of service can look like this:

On board armed price - \$12,000- per day for 30-day package - \$10,000 per day for 60-day package

Armed Escort vessel - \$17,000- per day for 30-day package - \$15,000 per day for 60 day package

If your company does not use 30 transit days in a year, contact us for a solution to fit your needs. (Gulf of Aden, Piracy, Maritime Security, Somalia, 2010)

The prices will differ, but a crossing in the Gulf of Aden will range from \$25 000-\$100 000 (Miller, 2010) for a team of armed guards. In addition you could pay extra for an armed vessel to follow you. This is a cost that the shipping companies would have to take, so it contributes to run up the voyage costs.

There are 22 000 transits each year in the Gulf of Aden. If we say that every transit purchase a team of guards for the lowest price, \$25 000, the annual cost for this solution will at least amount to \$550 million, a cost that the shipping companies would have to divide among themselves.

If a shipping company hires a team of guards, they will save some on their insurance expenses, see section 4.7.1

4.5 Evasive maneuvers and self protection

Evasive maneuvers are the most effective means that the crew can engage in to protect themselves from pirates. These low cost but highly effective methods can be used by the crew in order to protect themselves while waiting for help. It does not provide a solution to end the problem of piracy, but while waiting for better alternatives and the other parts involved to come up with a final solution to the problem, this is often the only way that the crew can protect themselves without imposing large costs on the shipping company.

The costs involved with this method are relatively small. Some equipment as dummies, slippery foam or sonic devise can be purchased. A sonic device, or a long range acoustic device can be purchased for less than \$20 000. (Smith, 2009) The fire hoses are already there, and dummies cannot be expensive to purchase.

At night, most of the crew sleep and having a night time guard will mean that some people have to work extra. The crew on these ships is already very limited in order to save costs; see section 2.1.5, so putting this extra task on them will wear them out in the end. A small increase in the crew should therefore be evaluated; the cost of some extra low cost workers at minimum pay according to ILO is \$712 a month for an ordinary seaman. (ITF, 2009)

Going zig zag will mean driving an extra distance, depending on the angle, the extra distance can range from 50% onwards. This will mean extra fuel consumption and time spent. Simple calculation can provide us with an example.

A panamax bulk carrier use 30 ton of crude oil and 2 ton of diesel fuel per day at a speed of 14 knots. (Stopford, 2009) A transit through the Gulf of Aden is 1000 km long, or 540 nautical miles. At 14 knots per hour, the transit takes 38, 5 hours, and consumes approximately 48 ton of crude and 3 ton of diesel. The fuel price is subject to large fluctuations so in order to estimate the costs of the extra consumption involved with evasive maneuvers, an average can be used. This can give a wrong picture of the costs because in times of peak the costs can be dramatically



Figure XVIII Crude price per barrel previous year

higher. As seen on figure XVIII the oil price has been as low as \$40 and more than \$80 per barrel during the last year. (Oil-price.net, 2010) At a price of \$60 per barrel, or \$511 per metric ton, the cost of a transit will be approximately \$24 600 plus the cost of diesel. If the vessel engage in zig zag driving, let say during the whole transit, at a low angle so the extra distance incurred is 50%, the price rise to almost \$37 000, a rise of \$12 400 per vessel per transit. 22000 transits a year, this cost adds up to \$ 272, 8 million a year in extra fuel costs + the cost of the extra diesel consumed. The same goes for increasing the speed as an evasive maneuver. By increasing the speed by only two knots to 16 knots, the fuel consumption rise almost 50 % to 44 ton of crude per day. Normally, a ship will, when engaging in an evasive maneuver, both increase the speed and go zig zag. The cost of a transit will then be \$47 400, so the extra cost will be \$22 800 per transit or \$501, 6 million in total.

The assumptions here are that the ship will go zig zag during the entire transit at a higher speed and go at a low angle. This will probably be done otherwise in reality. The assumption of crude price per barrel at \$60 will probably not hold the largely increased demand the alternative route will inflict, and will surely make the oil price rise beyond levels seen before.

This example shows that the costs of evasive maneuvers easily can amount to big money. Going zigzag and increasing the speed will increase the fuel costs by more than \$500 million, and the extra time involved by going zig zag will also come at a cost, since fewer roundtrips will be available with the same expenses to manning, maintenance and so on.

4.6 Avoid the area

The distance from London to Mumbai is 8800km shorter if you go through the Suez Canal compared to going around the Cape. This extra long haul will increase cost due to the increased voyage costs incurred as fuel cost, but some will also be saved on the insurance and the canal fee.

An example can again be useful to illustrate this. A panamax use 30 mt of crude a day at 14 knots. The longer journey will then be approximately 14 days longer than a transit through the Gulf of Aden, assuming that the shortest available route is used, meaning no evasive maneuvers or the similar. If the ships are rerouted to take the longer route, the fuel costs increase. The panamax will consume 424 mt more fuel than on the short route which will cost approximately \$217 000 if we again assume that the price per barrel of crude is \$60. If 22 000 transits are rerouted, the extra costs will be approximately \$4, 77 billion.

Some ships will naturally consume less fuel, some more than in the example above. These are the numbers if everyone consumed the same as a Panamax. In addition to this comes the cost of diesel. The extra time will also mean that fewer round trips per year are possible, so the earning per ship will decrease. This is however, the only solution where you don't have to worry about pirates.

There will also be some external effects. You will save a great amount on the insurance bill, see section 4.7, extra pay to the crew for the risk, see section 4.7.3 and the canal fee which for a laden panamax exceed \$200 000 per transit (Leth Agency, 2010), about the same as the extra fuel needed will costs. A container ship pays on average \$ 600 000 per transit. (Nall, 2009)

In the short term, this solution will largely increase the demand for fuel, and the fuel price will surely then reach need heights, making the alternative route around the Cape much more expensive than the numbers used above. Since fewer round trips per year will be possible, another short term effect will be a large increase in demand for shipping, and shipping rates will increase. We have seen this happen twice before, in the events of Suez Canal closure, so transportation of goods become more expensive.

The long term effect of rerouting all the ships around the Cape will be demand for more ships, and especially larger ships, more fuel efficient ships, and ships with greater capacity. Capital costs will in other words rise. The big loser of this alternative will be the Suez Canal, Egypt's main source of revenue. From 2008 to 2010 the revenue from the canal was expected to decrease by 30%, from \$5,1billion to \$3, 6 billion, (Gilpin, 2009) much because of the situation in the Gulf of Aden.

So this solution is without doubt the most expensive one, concerning fuel and time spent per roundtrip (see figure XV). The external consequences will also be great, and even though the example show that the costs of the extra fuel consumed by choosing this solution amounts to \$5 billion, the price will be much greater when accounting for the extra time spent and the external effects.

4.7 The costs of status quo

The situation as it is is quite expensive as well. The shipping companies see their insurance premiums rise, wages rise, and the risk of having to deal with pirates, which again will incur large costs.

4.7.1 Insurance premium

The insurance premiums liable to the shipping companies per voyage have risen fortyfold.

"The all risks insurance policy contained a war risks exclusion for "loss, damage or expense caused by ... capture, seizure, arrest restraint or detainment (piracy excepted), and the consequences thereof or any attempt thereat." A further clause avoided cover for a CTL except where "the subject-matter insured is reasonably abandoned either on account of its actual loss appearing to be unavoidable or because the cost of recovering, reconditioning and forwarding the subject-matter to the destination to which it is insured would exceed its value on arrival." (Knott, Mondaq, 2010)

From an estimated \$500 per voyage in 2008, insurance premiums have risen to \$20 000 and more per voyage in 2009 due to the special risk insurance needed to cross the Gulf of Aden. If all the ships that use this route have a proper insurance, this extra costs amounts to more than \$400 million for the industry as a whole.

But the insurance rates will naturally differ. A vessel insured for \$50 million will need a standard annual war risk to cover risks not included in the all risk insurance. The price this vessel normally pays is around \$10 000, but the additional war risk premium for a transit in the Gulf of Aden amount to at least \$60 000 per transit. (Nall, 2009) Up to 40% can be saved by using armed guards as a measure of protection.

4.7.2 Negotiating ransom

When pirates first have boarded a ship, and brought it into Somali waters, they come with their claim of ransom for the ships release. The negotiation process is long, see section 3.5.1, and the costs involved are great. First of all the ships go out of service for up to 3 months, so 3 months of earnings are lost. But the cost of negotiations, legal expenses, the ransom and the huge costs of delivering the ransom make the combined cost likely to be in the range of \$100-150 million, excluding the lost earnings. (Knott, United Kingdom: Somalia: Clan Rivalry, Military Conflict, And The Financial And Human Cost Of Piracy, 2009) 47 ships was hijacked in 2009, if the costs of each hijacking were \$100 million per ship, the combined cost would be close to \$5 billion. The estimated annual income of the merchant fleet is about \$380 billion in freight rates. (Round Table, 2010)

The ransoms themselves have been on an upward trend. In the beginning of 2009 the average ransom paid was \$1, 5 million, but at the end of 2009 it had rose to about \$3, 5 million. The highest ransom reported was between \$5, 5 and \$7 million. (Askins, 2010)

4.7.3 Human costs

The human costs involved cannot be calculated, but are worth mentioning. Seamen have lost their lives due to piracy, and many struggle with trauma from incidents. A fight between pirates and the crew in the Strait often got very violent, but in Gulf of Aden the wellbeing of

the crew is necessary in order for the pirates to receive their ransom. But being held hostage for up to three months and more gets to you psychic and many seamen will no longer sail in certain areas or sail at all due to bad memories that never will heal. Their livelihood is lost, and in some countries without social benefits were many of the seamen today reside, they are left on their own. The families of the seamen have also been victimized, in grief, worry and anxiety.

In 2008, 889 seamen were taken hostage worldwide. 11 crewmembers were reported dead and 21 are missing. 32 were injured. (Knott, United Kingdom: Somalia: Clan Rivalry, Military Conflict, And The Financial And Human Cost Of Piracy, 2009) Just in the waters around Somalia 815 seamen were taken hostage in 2008, and 867 in 2009.

Another human cost is the cost the people of Somalia have to pay. World Food Program has been attacked several times, and require now escort to deliver food supplies to Somalia. Somalis that suffer from starvation becomes victims of piracy because of this. The European Union's forces have set escorting the World Food Program as one of their prime operations.

Part 5 Evaluating the alternatives

5.1 Use of military force and naval convoys

The first option, a military solution as the one used today, should work but suffer from great limitations. The costs involved are enormous, and the result of the increased effort was that the pirates changed their hunting grounds. Now the hunting ground is too large, we are talking about large parts of the Indian Ocean, so to efficiently guard the waters to ensure everyone's safety becomes an impossible task.

The convoys and the warships deployed lead to the result they wanted, fewer ships get attacked in the Gulf of Aden now than before, but there are still some attacks here, and piracy still remains a threat to merchant ships in the area. The pirates in this area are wealthy and

eager enough to adapt to changing conditions, and this makes them tougher to deal with than the pirates in other areas where naval patrols have been more successful, as in the Strait and the Caribbean. It is understandable that the nations present here will show that they take the threat of piracy seriously, and that they support their shipping industry, but this solution cannot be a long term solution. However, in the short term, it is the best that they can do, but the costs involved are too large to be protected when looking at the result. The result is not satisfying at all.

5.2 Disarming and arresting pirates

The second option, arresting pirates, has to be seen in relation with the first one, it is more of an extension of the first one. But this solution incurs many costs on its own, and suffers many problems, so it is analyzed separately.

Arresting pirates today, involves a great responsibility and a cost to the host country, so most pirates are released without further consequences. Thereby there will be no end to the threat of piracy, because the pirates are likely to receive new weapons and necessary equipment fast, and pirates can be ready for a new attempt quickly. If they are sent to a Western country for prosecution and imprisonment, they will possibly live their lives when freed in the host country as asylum seekers and be much better off than in Somalia. Much because of this, there is a lack of political will to prosecute pirates, unless it is a high profile case like the one of Maersk Alabama where the one survivor was brought to the US.

A solution with domestic prisons and courts in Somalia could make the costs involved for the pirates high enough to prevent them from committing their criminal acts. It will be hard to obtain a fair trial, but trials can be held elsewhere, in neighboring countries probably, and then convicted prisoners can be delivered to prisons in Somalia for serving their sentence. This provides a long lasting solution for the problem, because pirates will be removed from the society and this will also prevent others from becoming pirates.

While arresting pirates and sending them to prisons in Somalia for serving their sentence provide a long term solution, in the meantime other efforts will be needed. It should also be noted that recruiting pirates is not difficult in a country where most people have a shortage of

most things, and their alternatives for a good life often comes to becoming a pirate or fleeing the country seeking asylum somewhere else.

5.3 Govern the country properly

The third option is probably the best thing that can be done on government level. Backing a government to regain control of the country is the option that receives most support among the experts. ICU has proven efficient before, and receives praise from many world leaders today. This solution is long lasting, but the results do not show immediately. This will be a long and delicate process, which will enter difficulties at many levels. It will surely not be as costly as invasion or keeping up the military force present today that cannot protect all the merchant ships anyway and cannot end the situation. The financial costs of backing a government can hardly be estimated but financial aid will probably be needed for many years to come.

This rundown country has received much help from the international society already, help that has not brought them anywhere, but maybe ICU can get Somalia up on the right track again, or just maybe are they just another idealistic group who later see the opportunity to gain large sums to their own pockets. That is the risk of this solution.

5.4 Arming the crew/hire trained security personnel

The shipping companies need a solution that can protect their employees from the immediate threat. The fourth alternative provides an immediate solution to protecting the ships, but the costs have to be covered by the individual shipping companies. A guarded ship has so far not been captured, but this is a very expensive solution. It provides a short term solution to the shipping companies, while they are waiting for a better option. Some of the costs related to hiring armed guards can be saved on the insurance bill, as armed guards reduce the increased insurance premium by up to 40%.

5.5 Evasive maneuvers and self protecting

Left to themselves mostly, seamen do whatever they can to protect themselves from being held hostage and likely injured and killed. The military have admitted that they only intervened in about 20% of attacks and much of the reason why many attacks failed was because of the crew themselves. (Askins, 2010) This is probably the cheapest solution, and even though it is not always enough, it is one of the alternatives with the best results in proportion to its costs on a firm level

5.6 Avoid the area

The last method, avoiding the area, is the only one that can guaranty no attacks from pirates around the Horn of Africa. The costs of extra fuel needed will be almost the same as the saving in canal dues. The big problem here is the extra time it takes for a round trip.

The difference will not be exactly 14 days as described above, because transit in the canal often requires waiting for the convoy, and now you also have to wait for the convoy in the Gulf of Aden. The cruising speed during the Suez transit will also be lower then what the cruising speed is at the high sea. But still, if we exaggerate and say that the extra time related to the two convoys is two days, the journey around the Cape will be 12 days longer. This reduces possible round trips per year, and thereby the company's earnings. The delivery time, which is often very essential, will also increase by these extra 12 days+/-.

This will mean large extra costs for other businesses. The delays can eventually be even larger, if shipping companies start avoiding ports in east Africa. Then land transportation or air freight will be the alternative, which will either be very slow or very expensive. (Nall, 2009)

These extra costs that now are described will eventually drive up the costs of transportation for the customers. Maersk Line, the world's greatest container freight company will increase the price per container that goes to a port in East Africa by \$50-100 per container, and cargo that needs to go through the Gulf of Aden will have an additional war risk charge of \$25 per twenty-foot equivalent unit and 50\$ per forty-foot equivalent unit. (Nall, 2009)

Part 6 Conclusion

The methods described differ largely, from international cooperation on government level to the crew that throws a piece of timber on the pirate's ship in order to protect themselves. The costs also varies greatly, but dealing with pirates, as well as not dealing with them, are certain to cost the society billions of dollar. The six methods of dealing with piracy, including avoiding the area, are today all used to some degree at the same time. Additionally the cost of negotiations and insurance, fuel, ransom and risk payment to the crew is added. To put this in perspective, Somalia's combined estimated gross domestic product was \$5, 7 billion in 2009. (CIA World Factbook, 2010) and the freight revenue from all the merchant ships combined in 2009 was around \$380 billion.

The absence of authority and control of a superior government for the last two decades, has led to criminal free states within the country with limited abilities and willingness to ensure safety for passing ships and Somali pirates have been able to operate freely and hijack international ships with little or no risk of being arrested and/or punished.

Piracy often happens outside the jurisdiction of any state, and the flag states will therefore receive the responsibility to protect their merchant ships. EU and USA, together with some Asian countries, have sent warships to patrol and protect merchant ships around the Horn, but this need to be followed up by a way to deal with the captured pirates.

When the Britons and a few other nations started to hunt down the pirates in the Caribbean at the beginning of the 18th century, they used warships and arrested the pirates that survived the fights. This gave good results, because captured pirates were treated in a way which made them incapable of committing similar crimes again. The use of warships around the Horn of Africa has not given the same results, not even close, because they lack the follow up on the captured pirates.

The problem with the Somali pirates is that no one prosecutes and houses the condemned pirates in their jails. No one wants to take the responsibility and all the extra effort needed in order to imprison the captured pirates. Somalia had for almost two decades no efficient government and no jails, criminals were punished otherwise. Therefore the warships have no place to deliver the captured pirates. Agreements with neighboring countries have been made, but this is obviously not a long lasting solution. Captured pirates are often therefore just disarmed and released again, and within a few hours, maybe a few days, they have rearmed themselves and are fully operative again. So the same pirates are allowed to commit multiple attacks, over and over again.

Some results have been seen. The Gulf of Aden is the most patrolled area, and pirates have lost their lives in this area in gunfights with the warships. The warships present are in a highly insufficient number, but the number of attacks has decreased because the warships or helicopters are able to be at the site before the pirate's board the ship. After a ship is boarded, there is not much for them to do. Measures like IRTC are therefore the ones applied and have given part of the good result in the Gulf of Aden.

This does not mean that the pirates have retired. As seen in appendix 3, the pirates have just changed their territory to a much larger area, the Indian Ocean. This is too big to be patrolled, and ships like VLCC are even hijacked, the last one on April 5, 2010, 1500 km from the shore of Somalia. This just proves that the use of warships, without imprisonment, is a great waste of money. The pirates that used to hunt in the Gulf of Aden now hunt in the Indian Ocean.

Evasive maneuvers are sort of a last resort for the crew. When left to themselves, they have to do what they can to avoid getting hijacked, so they fight for their life really. But it should never have to come to this. Seamen deserve a safe working environment as every other worker. Piracy should be stopped before they come close enough to endanger the life of seamen. Therefore evasive maneuvers cannot be the final solution.

Rerouting all ships will have too great consequences, in both long and short term. The costs and the changes necessary will become too great, and could endanger the seaborne trade between Europe and Asia. Delivery time will also increase, and some goods will probably no longer then be traded.

The use of armed guards is the one solution that seems to handle piracy the best. No ships with armed guards have so far been hijacked. My conclusion is that governments should rather subsidize the use of armed guards for their merchant fleets, instead of using warships to patrol the area as long as the problem of imprisonment is valid. In the meantime, they should support president Sharif's government, and get the prison facilities up and running. It is important that the use of armed guards not become a permanent solution, because than the danger will be that the pirates adapt again, and start fighting the armed guards, endangering the life of the crew.

The only long lasting solution is stabilizing Somalia and imprisoning the pirates. When the prison facilities in Somalia are ready, warships could be used to arrest pirates and thereby removing them from society by imprisoning them in Somali prisons. The cost for the pirates will also rise, and this could discourage people from becoming pirates.

Appendix 1

(World Trade Organization, 2008)

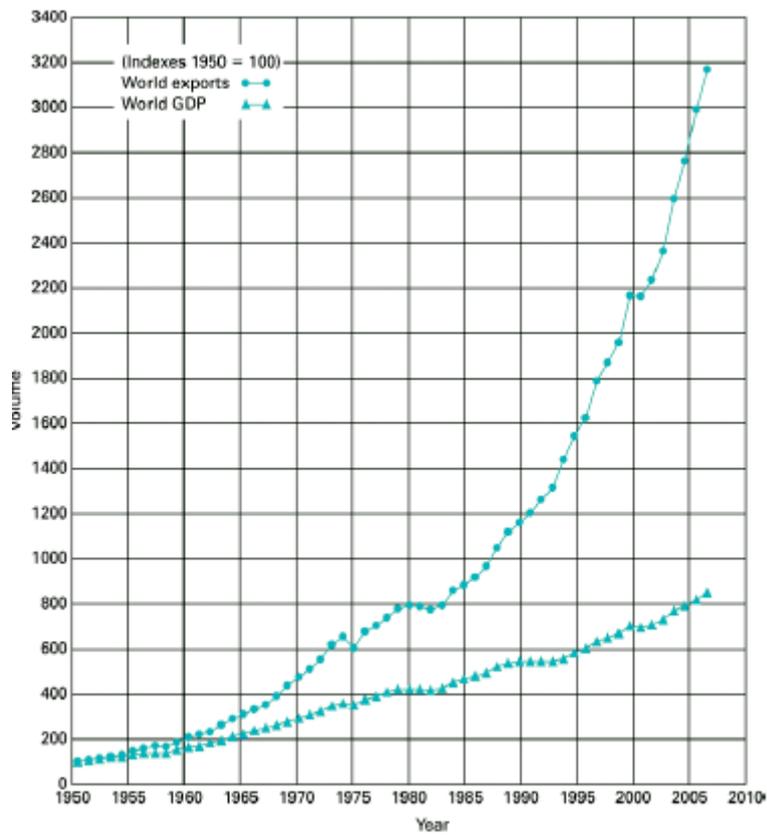


Figure XIX World GDP and exports



Figure XX Intra VS Extra regional trade

Appendix 2

	10 countries with lowest HDI	Land area (sq.km)	Coastline (km)
1	Niger	1266700	None
2	Afghanistan	652230	None
3	Sierra Leone	71620	402
4	Central African Republic	622984	None
5	Mali	1220190	None
6	Burkina Faso	273800	None
7	Dem. rep. of the Congo	2267048	37
8	Chad	1259200	None
9	Burundi	25680	None
10	Guinea-Bissau	28120	350

Figure XXI HDI

	10 countries with lowest BNP	Land area (sq. km)	Coastline (km)
1	Zimbabwe	386847	None
2	Dem. rep. of the Congo	2267048	37
3	Burundi	25680	None
4	Liberia	96320	579
5	Somalia	627337	3025
6	Guinea-Bissau	28120	350
7	Niger	1266700	None
8	Eritrea	101000	1626
9	Central African Republic	622984	None
10	Afghanistan	652230	None

Figure XXII BNP

	Failed states index, 10 most failed	Land area (sq.km)	Coastline (km)
1	Somalia	627337	3025
2	Zimbabwe	386847	None
3	Sudan	2376000	853
4	Chad	1259200	None
5	Dem. rep of the Congo	2267048	37
6	Iraq	437367	58
7	Afghanistan	652230	None
8	Central African Republic	622984	None
9	Guinea-Bissau	28120	350
10	Pakistan	770857	1046

Figure XXIII Failed

	Transparency Index, 10 highest score	Land area (sq.km)	Coastline (km)
1	Somalia	627337	3025
2	Afghanistan	652230	None
3	Myanmar	653508	1930
4	Sudan	2376000	853
5	Iraq	437367	58
6	Chad	1259200	None
7	Uzbekistan	425400	None
8	Turkmenistan	469930	None
9	Iran	1531595	2440
10	Haiti (island)	27560	1771

Figure XXIV TI

Sources: CIA World Fact book, Transparency International, UN and Fund for Peace.

What we see is that many of the same countries go again, and comes out badly on the different indexes. But another thing these countries have in common is lack of access or very limited access to the sea. Countries with access to the sea have an advantage when engaging in world trade, and with trade come economic growth and welfare.

Appendix 3

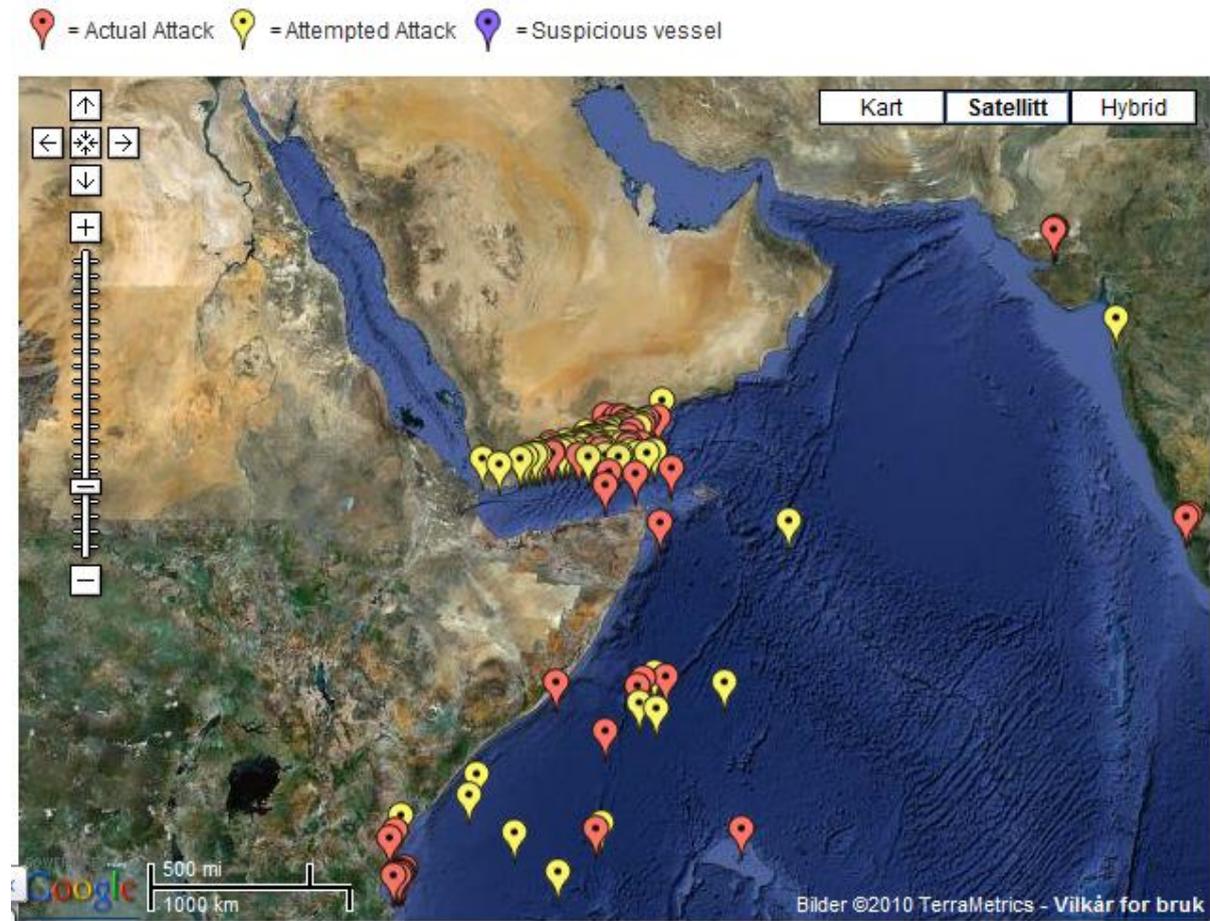


Figure XXV Overview of pirate attacks in 2008 around the Horn of Africa

As seen on figure 13, pirates operated almost solely in the Gulf of Aden, and the number of attacks was quite high.

📍 = Actual Attack 📍 = Attempted Attack 📍 = Suspicious vessel



Figure XXVI Overview of pirate attacks around the Horn of Africa for the first three months of 2010.

As seen on figure 14, from 2010, there are still attacks in the Gulf of Aden, but you can clearly see a change as more and more activity are taking place far out in the Indian ocean, almost in Indian waters.

7.0 Sources

ABC news. (2009, August 29). *Al Shabaab placed on terrorism list*. Retrieved January 17, 2010, from <http://www.abc.net.au/news/stories/2009/08/21/2663193.htm?section=justin>

AFP. (2008, November 18). *Saudi super-tanker taken to Somali pirate lair*. Retrieved February 19, 2010, from http://www.google.com/hostednews/afp/article/ALeqM5hN1EMARGCe11pJ_7BXMKIedC_DVA

Ahmed, M. (2009, December 1). *Somali sea gangs lure investors at pirate lair*. Retrieved February 20, 2010, from <http://www.reuters.com/article/idUSTRE5B01Z920091201>

Askins, S. (2010, february 25). *United Kingdom: Piracy - A Review Of 2009*. Retrieved March 9, 2010, from http://www.mondaq.com/article.asp?article_id=94576&lk=1

Associated Press. (2008, October 26). *Private security firms join battle against Somali pirates*. Retrieved February 28, 2010, from <http://www.foxnews.com/story/0,2933,444103,00.html>

Baron, J. (2008). *Thinking and deciding*. New York: Cambridge University Press.

BBC News. (2009, January 8). *US to lead new anti-pirate force*. Retrieved March 7, 2010, from <http://news.bbc.co.uk/2/hi/africa/7817611.stm>

Bogen, Ø. (Director). (2009). *Kritikk mot marineinnsats: - Mislykket piratjakt* [Motion Picture].

Brennpunkt (Director). (2009). *Fanget av pirater (Captured by pirates)* [Motion Picture].

Bureau of African affairs. (2009, October). *US department of state*. Retrieved January 17, 2010, from Background note: Somalia: <http://www.state.gov/r/pa/ei/bgn/2863.htm>

Bureau of African affairs. (2009, December). *US Department of state*. Retrieved February 5, 2010, from background note: Nigeria: <http://www.state.gov/r/pa/ei/bgn/2836.htm>

Burnett, J. S. (2002). *Dangerous waters modern piracy and terror on the high seas*. New York: Plume.

- CIA World Factbook. (2010, March 2). *Somalia*. Retrieved March 15, 2010, from <https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>
- CNN-IBN. (2008, November 20). *India gets the right of hot pursuit in Somali waters*. Retrieved February 25, 2010, from <http://ibnlive.in.com/news/india-gets-the-right-of-hot-pursuit-in-somali-waters/78607-3.html?from=rssfeed>
- Cordingly, D. (1996). *Under the black flag*. New York: Random house.
- Dagne, T. (2007). *Somalia: Current conditions and prospects for lasting peace* .
- Essential Action and Global Exchange. (2005). *Oil For Nothing: Multinational Corporations, Environmental Destruction, Death and Impunity in the Niger Delta*.
- EU NAVFOR. (n.d.). *European Union Naval Operation Against Piracy*. Retrieved February 22, 2010, from <http://www.eunavfor.eu/about-us/mission/>
- Fevik, A. (2009, August 8). *Aftenposten*. Retrieved January 17, 2010, from Endelig et håp om fred i havarete Somalia: <http://www.aftenposten.no/fakta/innsikt/article2965538.ece>
- Florida department of correction. (2009, June). *Cost of Imprisonment*. Retrieved March 8, 2010, from <http://www.dc.state.fl.us/pub/statsbrief/cost.html>
- Fund for Peace. (Annually). *Failed States Index*. Fund for Peace.
- Gawalt, G. (n.d.). *America and the Barbary Pirates: An International Battle Against an Unconventional Foe*. Retrieved February 4, 2010, from http://memory.loc.gov/ammem/collections/jefferson_papers/mtjprece.html
- George, J. (2010, February 10). *Ransom takes a toll on shipping firms:\$ 80m paid in 2009*. Retrieved February 22, 2010, from http://www.business24-7.ae/Articles/2010/2/Pages/09022010/02102010_337c2bd0008044eeb1a260fb8efd6534.aspx
- Gettleman, J. (2007, April 25). In Somalia, those who feed off anarchy fuel it. *The New York Times* .
- Gibson, T. (1994,2007). *Pirates of the Caribbean, in fact and fiction*. Retrieved January 24, 2010, from What be a pirate: <http://blindkat.hegewisch.net/pirates/diff.html>
- Gilpin, R. (2009). *Counting the cost of somali Piracy*. usip.org.
- Globalsecurity. (n.d.). *Globalsecurity*. Retrieved January 17, 2010, from The Supreme Islamic Courts Union: <http://www.globalsecurity.org/military/world/para/icu.htm>

Greepeace. (n.d.). *KEN SARO WIWA AND 8 OGONI PEOPLE EXECUTED: BLOOD ON SHELL'S HANDS*. Retrieved February 5, 2010, from <http://archive.greenpeace.org/comms/ken/murder.html>

Gulf of Aden, Piracy, Maritime Security, Somalia. (2010, March 5). Retrieved March 9, 2010, from <http://maritime-security-seamarshal.blogspot.com/>

IMB. (2010, January 14). *Updated Internationally Recommended Transit Corridor (IRTC)*. Retrieved February 22, 2010, from http://www.icc-ccs.org/index.php?option=com_content&view=article&id=385:2009-worldwide-piracy-figures-surpass-400&catid=60:news&Itemid=51

International Chamber of Commerce. (n.d.). *ICC- Commercial Crime Services*. Retrieved February 4, 2010, from International Maritime Bureau: http://www.icc-ccs.org/index.php?option=com_content&view=article&id=27&Itemid=16

IOL. (2009, January 31). *Somalia swears in new president*. Retrieved February 25, 2010, from http://www.iol.co.za/index.php?set_id=1&click_id=87&art_id=nw20090131134703757C181130

ITF. (2009, February 16). *ITF Seafarers*. Retrieved March 11, 2010, from ILO wage and scale your pay: <http://www.itfglobal.org/fusetalk/blog/blogpost.cfm?threadid=261&catid=6>

Jevon, W. S. (1871). *The theory of political economy*. London: Macmillan and Co.

Knott, J. (2009, March 17). Retrieved March 12, 2010, from United Kingdom: Somalia: Clan Rivalry, Military Conflict, And The Financial And Human Cost Of Piracy: <http://www.mondaq.com/article.asp?articleid=76272&login=true&nogo=1>

Knott, J. (2010, January 21). Retrieved March 8, 2010, from http://www.mondaq.com/article.asp?article_id=92442&lk=1

Knott, J. (2010, February 23). *Mondaq*. Retrieved 10 2010, March, from <http://www.mondaq.com/article.asp?articleid=94366>

Knott, J. (2009, March 17). *United Kingdom: Somalia: Clan Rivalry, Military Conflict, And The Financial And Human Cost Of Piracy*. Retrieved March 7, 2010, from <http://www.mondaq.com/article.asp?articleid=76272&login=true&nogo=1>

Kystverket (Coastal service). (n.d.). *Kystverket*. Retrieved February 18, 2010, from <http://www.kystverket.no/?did=9140988>

Leth Agency. (2010, March 12). *Leth agency*. Retrieved March 12, 2010, from Calculate cost: http://www.lethagencies.com/calculator_result.asp?Port=SUEZTREG&CTBreakdown=True&PortName=Suez+Canal+Transit&CB2=08-01&SCNT=45000&GRT=40424&SDR=&Draft=12%2C4&Beam=32%2C31&LadenBallast=Laden&NBorSB=Northbound&GasFree=Yes

LHULLERY, J. (2008, May 20). Nigeria becomes world piracy hot spot. *MailGuardian online* , pp. <http://www.mg.co.za/article/2008-05-20-nigeria-becomes-world-piracy-hot-spot>.

Manwaring, M. G. (2007). *A contemporary challenge to state sovereignty: gangs and other illicit transnational criminal organization in Central America, El Salvador, Mexico, Jamaica and Brazil*. US Government.

Mbendi. (2010, February 5). *Oil and gas in Nigeria*. Retrieved February 5, 2010, from <http://www.mbendi.com/indy/oilg/af/ng/p0005.htm>

McConnell, T. (2009, August 7). *Hillary Clinton pledges US support to Somali Government*. Retrieved March 9, 2010, from <http://www.timesonline.co.uk/tol/news/world/africa/article6742318.ece>

Miller, J. (2010, January 6). *Loaded: Freighters Ready to Shoot Across Pirate Bow* . Retrieved March 9, 2010, from <http://online.wsj.com/article/SB126265833983415885.html>

MSC (HOA). (n.d.). *EU NAVFOR EU OPERATION ATALANTA*. Retrieved February 22, 2010, from <http://www.mschoa.org/ForceInfo.aspx#EUNavfor>

MSC (HOA). (2009). *Updated Internationally Recommended Transit Corridor (IRTC)*. MSC (HOA).

Mubarak, J. (1997). *The hidden hand behind the resilience of the stateless economy of Somalia*. World development.

Naess, E. (n.d.).

Nall, S. (2009, June 1). *The costs of piracy are passed along*. Retrieved March 15, 2010, from <http://www.america.gov/st/peacesec-english/2009/June/20090529160944berehellek0.8213159.html>

Navy MIL. (2009, January 8). *New Counter-Piracy Task Force Established*. Retrieved February 22, 2010, from http://www.navy.mil/Search/display.asp?story_id=41687

Nowrasteh, P. F. (2006). *Somalia After State Collapse: Chaos or improvement*. Independent Institute.

- NTB. (2008, July 7). *Utenlandske fanger får betalt ferie i Norge*. Retrieved March 8, 2010, from <http://www.hegnar.no/okonomi/politikk/article297989.ece>
- Oil-price.net. (2010, March 11). *Oil price*. Retrieved March 11, 2010, from <http://www.oil-price.net/>
- Puntland Government. (2006-2009). *Puntland State of Somalia*. Retrieved January 17, 2010, from <http://www.puntlandgovt.com/profile.php>
- Round Table. (2010). *Shipping facts*. Retrieved January 11, 2010, from Shipping and world trade: <http://www.marisec.org/shippingfacts//worldtrade/index.php>
- Sekulich, D. (2008, December 23). *Somali piracy in detail*. Retrieved February 20, 2010, from <http://piratebook.blogspot.com/2008/12/somali-piracy-in-detail.html>
- Sekulich, D. (2009). *Terror on the seas true tales of modern day pirates*. New York: Thomas Dunne Books.
- Skipsrevyen. (2010, January 19). *DNV heller (is)kaldt vann i blodet på Nordøstpassasje-optimistene*. Retrieved March 24, 2010, from <http://www.nordglobal.no/article/dnv-heller-iskaldt-vann-i-blodet-p%C3%A5-nord%C3%B8stpassasje-optimistene>
- Smith. (2009, November 18). *Global news*. Retrieved March 11, 2010, from Long range acoustic device : <http://www.khurak.net/long-range-acoustic-device-005156/>
- Somalipress. (n.d.). *Ancient Somalia*. Retrieved January 17, 2010, from <http://www.somalipress.com/somalia-overview/ancient-somalia-1050.html>
- Stopford, M. (2009). *Maritime Economics, 3rd edition*. Routledge.
- Suez canal traffict statistic. (2008). *Suez canal*. Retrieved January 10, 2010, from <http://www.suezcanal.gov.eg/TRstat.aspx?reportId=3>
- Telegraph. (2009, September 11). *German ships sailing through North East Passage* . Retrieved March 24, 2010, from <http://www.telegraph.co.uk/earth/6176989/German-ships-sailing-through-North-East-Passage.html>
- Tharoor, I. (2009, April 18). *How Somalia's fishermen became pirates*. Retrieved February 19, 2010, from <http://www.time.com/time/world/article/0,8599,1892376,00.html>
- The International Northeast Economic region. (n.d.). *Atlantica*. Retrieved from <http://www.atlantica.org/atlanticastory.asp?cmPageID=87>

Tjissen, W. (2009). *Somalia*. us-africa.org.

Torgersen, H. H. (2009, June 19). *Somaliske pirater kan søke asyl i Norge*. Retrieved February 23, 2010, from <http://www.abcnyheter.no/norge/090619/somaliske-pirater-kan-soke-asyl-i-norge>

Transparency International. (Annualy). *Corruption Perception Index*. TI.

UN. (1982). *Preamble to the UN Convention on the Law of the Sea*. Retrieved January 22, 2010, from http://www.un.org/Depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm

UN Security Council. (2008, June 2). *SECURITY COUNCIL CONDEMNNS ACTS OF PIRACY, ARMED ROBBERY OFF SOMALIA'S COAST, AUTHORIZES FOR SIX MONTHS 'ALL NECESSARY MEANS' TO REPRESS SUCH ACTS*. Retrieved February 25, 2010, from <http://www.un.org/News/Press/docs/2008/sc9344.doc.htm>

UNDP/World Bank. (2003). *Country re-engangement note Somalia*. UNDP/World Bank.

US Department of defence. (2006).

Wegener, A. (2009, November 5). (TV2nyhetene, Interviewer)

West, S. (2007, December 19). *Piracy Revenues Financing Warlords in Somali Insurgency*. Retrieved February 18, 2010, from [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=4618](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=4618)

World food programme. (2009). *Somalia*. Retrieved January 18, 2010, from <http://www.wfp.org/countries/somalia>

World Trade Organization. (2008). *International trade statistics 2008*. Geneva: WTO publications.