Master’s Thesis

Submitted to:
Reykjavik University
School of Business

INTERNATIONAL BUSINESS

THE ICELANDIC INTERNATIONAL SHIP REGISTER
Why Has It Not Achieved Its Set Goal In
Registering Vessels Under
The Icelandic Flag?

Auður Ósk Vilhjálmsdóttir 05/01/2015
Supervisor
Mr. Kristján Vigfússon

Reykjavik, January 2015
Abstract

The discussion over whether or not the Icelandic government needs to implement an International Register for its shipping industry, had been an ongoing debate for over two decades before the issue was finally addressed and the Icelandic International Ship Register (ISS) was introduced. Since its introduction not a single vessel has registered and no interest has been shown in regards to addressing that lack of success. The objective of this research is to examine why the current international registry has not achieved its set goal in registering vessels under the Icelandic flag. In other words, the faults and drawbacks of the register will be examined, as well as which factors need to be taken in to consideration to obtain desirable outcomes. The examination will be conducted with the relevance of a policy structure in mind.

The findings of this research concluded that a large part of the unsuccessfulness of IIS was due to the Icelandic Government’s lack of preparation and research on the matter as well as insufficient policy formulation concerning the registry and the Icelandic maritime industry. A crucial factor of its failure lies in the omission of the fourth paragraph of the 11th Article of the bill that was presented to Parliament. By changing the bill’s intentions of allowing shipping companies to hire international crew on wages based on the crewmembers domestic union contracts did it render the register incapable of competing with foreign flags.

Key Words: Shipping, Policy, International Register, IIS, Globalization, Maritime Industry
Declaration of Research Work Integrity

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature of any degree. This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

By signing the present document I confirm and agree that I have read RU’s ethics code of conduct and fully understand the consequences of violating these rules in regards of my thesis.

...................................................................................................................

Date and place        Kennitala        Signature
# Table of Contents

1 The Maritime Transport Industry ................................................................. 3
   1.1 The Sector of Shipping ........................................................................... 3
       1.1.1 Cargo liners and container ships.................................................. 3
       1.1.2 Wet bulk: Tankers ....................................................................... 4
       1.1.3 Dry bulk ..................................................................................... 4
       1.1.4 Coastal and short sea vessels ....................................................... 5
       1.1.5 Passenger liners and cruise ships ............................................... 5
       1.1.6 Specialized ships: offshore operations ........................................ 6
   1.2 Tonnage Measurements ......................................................................... 6
   1.3 Classes and Sizes .................................................................................. 7
   1.4 Trends of the EU Fleet .......................................................................... 8

2 Policies Framework and Objectives ............................................................... 9
   2.1 Driving Factors of Shipping Policy ...................................................... 11
   2.2 The Relevance of the National State Level .......................................... 18

3 The Maritime Industry and its Global Characteristics ................................. 20
   3.1 The Economic Impacts of the Shipping Industry ................................. 22
   3.2 Economic Conditions of the EEA/EU Shipping Industry ...................... 24
   3.3 Direct and Indirect Contributions to Tax Revenues ............................. 25
   3.4 The Aspects of Fierce Global Competition ......................................... 29

4 The Shipping Industry within the EU/EEA ................................................. 32

5 Flag of Convenience or “Open Registration” of Ships .................................. 33
   5.1 The Need to Discourage Vessels not Meeting International Obligations ... 35
   5.2 Ship Registry Selection ....................................................................... 38

6 The Tonnage Tax ......................................................................................... 41
   6.1 The Difference Between the Tonnage Tax Models ............................... 43
   6.2 The EU and its State Aid Regime ......................................................... 46
       6.2.1 The Shipping Industry in the Absence of State Aid: Alternative Scenario .... 48

7 The Icelandic Shipping Industry ..................................................................... 52
   7.1 The Main Shipping Companies in Iceland .......................................... 53
       7.1.1 Eimskip ..................................................................................... 53
       7.1.2 Samskip ................................................................................... 54
       7.1.3 Nesskip ................................................................................... 54
       7.1.4 Fáfnir Offshore ....................................................................... 55
Table of Figures

Figure 1. Context of shipping policy-making................................................................. 13
Figure 2. DGV added contribution to GDP of the EU shipping industry by country .... 25
Figure 3. The direct tax contribution of the EU shipping industry.............................. 26
Figure 4. Indirect gross value added contribution to GDP of the EU shipping industry by country ................................................................................................................. 27
Figure 5. Total tax contribution of the EU shipping industry........................................ 28
Figure 6. Total gross value added contribution to GDP of the EU shipping industry by country ....................................................................................................................... 28
Figure 7. Globalization and National Shipping Policy................................................... 30
Figure 8. White, Gray and Black List............................................................................ 37
Figure 9. Reasons given for choice of flagging out......................................................... 40
Figure 11. Comparison between the three main types of tonnage tax systems......... 45
Figure 12. Denmark controlled fleet 1994-2012 ......................................................... 49
Figure 13. UK controlled fleet 1994-2012................................................................ 50
Figure 14. Sweden controlled fleet 1994-2012............................................................ 51
Figure 15. Countries where Eimskip’s vessels are registered........................................ 53
Figure 16. Countries where Samskip's vessels are registered....................................... 54
Figure 17. Establishment of tax base in several EEA States......................................... 66
List of Tables

Table 1. The 28 largest owned fleets by country.......................................................... 24
Table 2. The 24 flags of registration with the largest registered fleets...................... 35
Table 3. Partnership taxation and availability of tonnage tax in the EU and Norway.... 42
Table 4. Basis for calculation of taxable income......................................................... 73
Table 5. Basis for calculation of taxable income......................................................... 80
Table 6. Basis for calculation of taxable income......................................................... 85
Table 7. Registration requirements of Norway, Denmark and Faroe Islands............. 90
Abbreviations

BIMCO  Baltic and International Maritime Council
CIT    Corporate Income Tax
DGV    Direct Gross Value
DIS    Danish International Ship Register
DSA    Danish Shippers’ Association
DWT    Deadweight tons
ECSA   European Community Shipowners’ Association
EEA    European Economic Area
EFTA   Economic Free Trade Association
EQUASIS The European Quality Shipping Information System
EU     European Union
FAS    Faroe Islands International Ship Register
FMA    Faroese Maritime Authority
FOC    Flag of Convenience
FTE    Full-time equivalent
GDP    Gross Domestic Product
GT     Gross Tons
GRT    Gross Registered Tons
GWT    Gross Weight Tons
ICS    International Chamber of Shipping
ILO    International Labor Organization
IMO    International Maritime Organization
ISS    Icelandic International Ship Register
ITF    International Transport Workers’ Federation
LÍÍU   Landssamband Íslandska Útvegsmanna
MOU    Paris Memorandum of Understandings on Port State Control
MS     Member State
NAFTA  North America Free Trade Association
NCS    Norwegian Continental Shelf
NIS    Norwegian International Ship Register
NRS    Net Registered Tonnage
NSA    Norwegian Shipowners’ Association
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT</td>
<td>Net Tons</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PSC</td>
<td>Port State Control</td>
</tr>
<tr>
<td>STCW</td>
<td>Standards of Training, Certification and Watch keeping</td>
</tr>
<tr>
<td>TAKS</td>
<td>Faroese Tax Authorities</td>
</tr>
<tr>
<td>ULCC</td>
<td>Ultra Large Crude Carriers</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>VLCC</td>
<td>Very Large Crude Carriers</td>
</tr>
</tbody>
</table>
Introduction

Since the beginning of 1980’s the shipping industry in the Western world has been faced with increased competitiveness, which can be attributed to the emergence of greater opportunities for operators within the sector to benefit from cheaper labor, tax incentives and all too often, lower safety standards. Many third world countries have developed shipping registers that are supported by efficient international services infrastructure, thus attracting shipping companies through a fiscal climate, which is considerably milder than in the developed countries. This low-tax environment has resulted in a trend in Europe, of “flagging-out” from national registers as well as an incentive for companies to consider corporate relocation. Another consequence has been the significant decline in the number of seafarers within these countries, which many maritime nations have been determined to reverse. Mainly to ensure, that the loss of knowledge, that this implies, will not occur. The continued decline in Europe encouraged the Commission of the European Union to take a different view on their maritime policies, which resulted in the subsidiarity for the European shipping industry that most maritime Member States have now introduced.

In the last three decades this same view has affected Iceland and the Icelandic shipping industry after it underwent a dramatic change, defined by the significant collapse of its registered fleet and drastic decline in the number of domestic seafarers. In 2004 was the last merchant ship registered under the Icelandic flag relocated under the Faroese flag. The Icelandic Government’s reaction was characterized with a rather stagnant response by not introducing an international registry until three years later, or in 2007. The legislation was not only followed by another Act on tonnage tax regime but also with a special refund scheme for ship-owners. However, by then, all the other Nordic countries had long before addressed their declining national fleets by assorting to different counteracting measures with widespread regression. The main purpose of the Icelandic legislation was to facilitate the repatriation of vessels back under the Icelandic flag. Since the Icelandic International Ship Registry was introduced, not a single vessel has registered under the Icelandic flag and, the government has shown minimal interest in addressing the issue and its failure to increase registrations. Therefore, the research objective of this thesis is to examine why the current international registry has not achieved its set goal in registering vessels under the
Icelandic flag. In other words, the faults and drawbacks of the register will be examined, as well as which factors need to be taken in to consideration to obtain desirable outcomes.

To assist in the examination of the proposal a theoretical perspective and policy structure model is introduced for deeper understanding of the complex relationship that can influence the creation of international registries, as well as their successes or failures. There is a deliberate focus on the past development of the “flagging-out” trend of the shipping industry within the European Economic Area/European Union and the various state aid regimes that have been introduced in most major EEA maritime countries in response to the threatening decline. In being a member of the EEA Agreement through EFTA, which today implements the majority of EU regulation, it is significantly important and of great concern to the Icelandic industry how the EU/EEA shipping industry legislations develop. Attention will also be directed towards the other Nordic countries and their reaction concerning this matter with an examination of Norway’s, Denmark’s and the Faroe Island’s approach to a secondary registry.

The first chapter gives a brief overview of the maritime transport industry. The second chapter examines relevant literature and introduces theoretical structure of policy framework. Furthermore, an examination of the maritime industry is given in chapters three and four with a focus on globalization, which is inherent to the shipping sector, with special attention on the EU/EEA shipping industry. Chapters five and six give an explanation of certain aspects and features of the shipping industry and the regulatory regime that it follows and is supported by. An overview of the Icelandic maritime industry is presented in chapter seven with a focus on the research topic and chapters eight, nine and ten include a review on Norway, Denmark and Faroe Islands, and their approach to the topic, with a comparison between those countries in chapter eleven. Chapter twelve concludes the previous chapters and results are summarized with a further discussion in chapter thirteen. Chapter fourteen then concludes the thesis and possible topics for future analysis in the field are proposed.
1 The Maritime Transport Industry

Around 90% of world trade is carried by the international shipping industry (IMO, 2012; International Chamber of Shipping, n.d.). Seaborne trade has continued to expand, bringing various benefits for consumers across the world through competitive freight costs. Without shipping, intercontinental trade, the transport of raw materials, import and export of food and manufactured goods would simply not be possible. The same can be said of the seafarers that operate the world's fleet, they are in effect, the lubricant without which the engine of trade would simply grind to a halt (IMO, n.d.). Still today, it seems to be a general misconception that most trade is carried via airplanes. However, aircrafts carry only a fraction of today’s world trade, not that many have really considered the immense tonnage of primary commodities, manufactured goods, oil and coal that is carried by sea every single day. The reality of shipping is:

- It is a prime method of carrying commodities over huge distances.
- It is the most environmentally friendly means of transportation.
- It is essentially safe, tragic incidents of collisions and losses are the exception.
- It is the cheapest and cost-effective means of transportation, excluding high-value, low density cargoes (Mukherjee & Brownrigg, 2013).

1.1 The Sector of Shipping

Shipping is not comprised of only one industry, but of numerous basic sectors. The European Quality Shipping Information System (Equasis), an international database covering the whole world fleet, uses over 100 descriptions of ship types provided by IHS Maritime. General cargo ships, specialized cargo ships, container ships, Ro-Ro cargo ships, bulk carriers, oil and chemical tankers, gas tankers, passenger ships, offshore vessels, service ships, tugs and other tankers are just few of the listing of the database (Equasis, 2014). To simplify the complexity of the industry these types have been aggregated into 6 main sectors that will be explained in the following paragraphs.

1.1.1 Cargo liners and container ships

Although general cargo ships are still the largest single category in terms of number of vessels, the trend among new ships is more and more in favor of specialization (IMO, 2012). Container vessels are becoming increasingly more predominant in many cargo
liner trades (Branch, 2007). Liners offer scheduled services on fixed routes at published, and often, stable rates and carry most of the world's manufactured goods and products. They can be considered to be the trains of international shipping. Generally, they do not offer the whole ship for hire (charter), but only for partial shiploads. They offer their clients the facility of carrying parcels, crates or mostly nowadays, containers. The essentials of liner operation is service, fixed schedule, published rates, accuracy, door-to-door service, local offices and trustworthy agents (Mukherjee & Brownrigg, 2013).

1.1.2 Wet bulk: Tankers

Tankers make up the second largest category. This sector specializes in wet cargoes, ranging from those carrying oil and chemicals to highly specialized ships that carry liquefied petroleum gas and natural gas (IMO, 2012). There are even tankers designed to carry cargoes such as fresh water, wine or orange juice, thus the phrase “tankers”. Tankers trade where cargoes are on offer, not on any previously determined trade route. This sector is very conscious of the need to avoid polluting the seas and the consequences if they do (Mukherjee & Brownrigg, 2013). Tankers can appear very similar to bulk carriers, but the deck is flush and covered by oil pipelines and vents.

1.1.3 Dry bulk

Bulk carriers, often referred to as the workhorses of the international shipping fleet, can be thought of as simple and unsophisticated as well as highly efficient. This sector transports “dry” commodities such as fertilizers, sugars and mineral ores. Coal, grain, steel and iron ore constitute the four main commodities (Branch, 2007). If tankers provide the fuel that powers the economy, bulk carriers are responsible for moving the raw materials that are its lifeblood (IMO, 2012). The world trading requirements in the dry sector are far more complex than in the wet sector, as it is more concerned with the wider economic and commercial problems of the world trading patterns. The dry bulk operator has to know his market and have a keen eye for world developments, whether they be of an economic or
political nature, natural disaster or failure in crops in one country or a region in the
world (Mukherjee & Brownrigg, 2013). These carriers can be identifiable by the
hatches raised above deck level that cover the large cargo holds.

1.1.4 Coastal and short sea vessels

These all-purpose cargo carriers operate around the coast or in the “short-sea”. They
operate by either scheduled or tramp service, are usually small, take short voyages and
are specially designed for the particular circumstances and trades in which they operate.
This type of shipping is becoming increasingly favored as a means of siphoning of
cargoes from gridlocked roads and rails (Mukherjee & Brownrigg, 2013).

1.1.5 Passenger liners and cruise ships

Passenger ships are categorized into two basic
categories that can be termed “fun” or “functional”. The former category, cruise ship, is a floating resort
dedicated to the leisure business (Mukherjee & Brownrigg, 2013) and the latter category refers to
ferries, which are designed to move people and vehicles on regular itineraries from one place to another as quickly and cheaply as
possible. In both categories, the size, sophistication and the sheer number of passengers
that can be carried have reached mind-blowing proportions. These ships tend to be the
best known and recognized among the general public at large (IMO, 2012).

The cruise industry has enjoyed dynamic growth over the last 30 years, with an
astounding 77% increase in demand over the past decade. Mostly, the initial demand
comes from North America, thereafter comes the growing demand from Europe and
most recently Australasia (Business Research and Economic Advisors, 2014). This
rapid growth has led to a new generation of large and luxurious floating hotels.

Ferries usually perform short scheduled
liner services but within a much different
competitive environment, e.g. low-cost airlines,
bridges and tunnels. They range from small
passenger ferries crossing rivers or small
channels to big Ro-Ro (Roll-on Roll-off)
ferries with substantial size and high standards of comfort. Most of them have facilities
for cars and commercial vehicles to be driven straight on and off, making it a speedy and easily accessible way to travel, hence the Ro-Ro phrase (Mukherjee & Brownrigg, 2013).

1.1.6 Specialized ships: offshore operations

This sector is relatively new and referred to as “offshore” and embraces all sorts of vessels. The main purpose of this sector is to deliver ancillary support service by conducting mining or drilling operations with different types of rigs. This has generated a growing range of vessel types and many of them multi purpose (Mukherjee & Brownrigg, 2013). Platform supply vessels (PSV) handle the transportsations of all necessary equipment such as pipes, cement, tools and provisions to destinations such as platforms and drilling rigs. Other vessels include multi-purpose anchor handling, tug supply vessels, which are advanced multi-purpose offshore support ships. The ultimate support vessels not only tow drilling rigs, but also handle anchors, work as fire-fighting vessels and are equipped to assist in restraining oil pollution (Branch, 2007). There are also vessels that serve as salvage tugs, ice breakers and research vessel.

1.2 Tonnage Measurements

There have been five main kinds of tonnage used in the shipping industry. They are cargo, displacement, deadweight, gross and net tonnages. Of those five, the tree tonnage figures that are usually discussed are the following:

*Deadweight tonnage* (dwt) measures how much weight a ship can carry, the sum weight of cargo, fuel, fresh water, ballast water, provisions, passengers and crew (Oxford Economics, 2014). It is the difference between the number of tons of water a vessel displaces “light” and the number of tons of water a vessel displaces when submerged to its load line (Branch, 2007).

*Gross tonnage* measures the volume inside a vessels, not the cargo (Oxford Economics, 2014). It is determined by dividing by 100 the volume in cubic feet of the vessel’s closed-in spaces, and is usually referred to as the gross registered tonnage (grt). The spaces exempt from the measurement include light and air spaces (Branch, 2007).
Net tonnage is a vessel’s gross tonnage after deducting space occupied by crew accommodation, spaces used for navigation, water ballast and fresh water spaces. A vessel’s net tonnage expresses the space available for the accommodation of passengers and stowage of cargo, and is usually referred to as net registered tonnage (NRT). It is on this tonnage figure that most harbor dues and other charges are calculated. The aim of the average ship owner is to achieve a low net tonnage consistent with a maximum cubic capacity for cargo and/or passengers (Branch, 2007).

There is, however, considerable difference between those tonnage figures, so it was recognized that there was a great need for one single international system. The “International Convention on Tonnage Measurement of Ships, 1969”, in short “Tonnage 1969”, was the first successful attempt to introduce a universal tonnage measurement system (The Maritime Transport Coordinating Platform, 2006). The Convention provides for gross and net tonnages that are calculated separately. The rules apply to all ships built after July 1st 1982. The terms transitioned from the traditionally used terms of gross register tons (grt) and net register tons (nrt) to gross tons (GT) and net tons (NT). Gross tonnage forms the basis for manning regulations, safety rules and registration fees, but both gross and net tonnages are used to calculate port dues. The gross tonnage is a function of the moulded volume of all enclosed spaces of the ship. The net tonnage is produced by a formula that is a function of the moulded volume of all cargo spaces of the ship (Branch, 2007).

1.3 Classes and Sizes

Vessels come also in different sizes to meet the various demands of marine cargo transportation. Ships are categorized, partly by capacity and partly by dimensions and these categories are related often to the different canals and canal locks that they are traveling through. The main categories are (Branch, 2007):

Panamax tankers range from 50.000 dwt to 80.000 dwt. These tankers are mainly identified with coal, crude oil and petroleum products. This fleet is rather small and is likely to remain so.

Aframax tankers range between 80.000 dwt and 120.000 dwt. This classification usually refers to oil tankers. The fleet has expanded significantly in recent years due to growing demand.
Suezmax tankers are mid-sized cargo vessels with a capacity ranging between 120,000 dwt to 150,000 dwt. They are designed to pass through the majority of the ports in the world. Today these vessels are primarily associated with crude exports from West Africa.

Very Large Crude Carriers (VLCC) range from 150,000 dwt to 300,000 dwt capacity. These vessels exploit the economics of scale, are very flexible in the use of terminals and can operate in ports with depth limitations. They are very popular in the Arabian Gulf export trade that represents 80% of demand and West African crude trade to Asia.

Ultra Large Crude Carriers (ULCC) are the largest shipping vessels in the world with a size ranging from 300,000 dwt up to 500,000 dwt. Often called Super Tankers, ULCCs, are used for long-haul oil crude transportation from Middle East to Europe, Asia, and North America. However, these vessels are being faced out due to their inflexibility of the tonnage as few ports can accommodate them.

The type of merchant vessel employed on a trade route is basically determined by the traffic carried. Lately, there has been a shift towards the development of multi-purpose vessels and combined transport systems. This need has arisen to meet the trade’s fluctuations and enable the vessels to become more flexible in their operations (Branch, 2007).

1.4 Trends of the EU Fleet

Three types of vessels dominate the EU (including Norway) controlled fleet, they are bulkers 28% of gross tonnage, oil tankers 25% and container ships 25%. The EU controls 60% of the world’s container ships in gross tonnage terms, which is the largest controlled share. Although smaller in terms of their significance within the EU fleet, EU countries control 61% of roll-on roll-off vessels, 57% of ferries and 52% of multi-purpose ships. The strongest growth between 2005-2014 within the EU controlled fleet was, however, recorded amongst offshore vessels. The EU’s share of the world offshore fleet increased from 28% in 2005 to 37% in 2014 (gt) (Oxford Economics, 2014). The offshore sector is particularly important in terms of economic impact because it is more labor-intensive than many other sub-sectors, and many of the jobs created are high-skill and high-value positions.
2 Policies Framework and Objectives

Shipping cannot be viewed only from a nationalistic viewpoint as many industries, for it is the most international industry of the world. Therefore, the global environment is a fundamental factor of the maritime industry. The notion of freedom in international shipping is also considered a vital aspect of the industry; a ship from any nation can navigate the ocean freely, the ship’s national state has exclusive dominion over the ship and no other nation can exercise dominion over that ship (Alderton & Winchester, 2002). This concept does not mean an absence of regulations but that no one state has an unilaterally right to regulate an activity such as shipping that is inherently international in scope (Mukherjee & Brownrigg, 2013). The issue of shipping policies and the relationship between policy makers and enforcers is very complex and at different spatial levels. In such a globalized sector where ship owner, cargo owner, ship/cargo insurer, ship registration, officers, crew, legal advisers, personnel management, financiers and the ship itself might all be based in different countries, is it no wonder that when it comes to the nature of policy making, on regional, governmental and international levels is it extremely complicated (Selkou & Roe, 2004).

When it comes to policy structure in the shipping industry, various characteristics and motivations of policy makers as well as the complex relationship that exist between them has to be taken into account. To clarify conflicts that exist in the policy making of the maritime sector, Button (2010) provides a structure that assists in explaining the reasons for policy making. He specifies his discussion towards the transport sector in general, but it can equally be applied to the maritime sector. Following are the main factors that he has identified for state policies, summarized and explained further in relation to the maritime industry by Selkou and Roe (2004):

1. *Containment of monopoly power.* The shipping sector is full of monopoly abuse and specialized infrastructure that lends itself to monopoly provisions to maximize scale of economics. State-like authorities like the European Union (EU) may attempt to control such abuses through the application of cabotage rules and competition policy in Europe.

2. *Control of excessive competition.* It assists in reducing the number of players in the market so that it becomes more stable and reliable but inevitable towards monopolization. E.g. the EU protects such markets with cabotage rules so that operators have a guaranteed market throughout the year.
3. *Regulation of externalities.* Market forces are unable to provide a framework to control externality production such as pollution, disposal of garbage, ballast water and overall safety, in the maritime sector so policies at state level and above are necessary. The main aspect of the regulations has increasingly attracted attention at global, national and local levels.

4. *Provision of public goods and high-cost infrastructure.* Public goods are items where there is no practical limit of consumers and identifying the amount of consumption is equally as difficult. Classic example is the lighthouse where most ships can benefit from the light at any time and the amount of light that is consumed is rather impossible to assess. Such goods are usually responsible by the states. High-cost infrastructure refers to items that can be extremely expensive, such as facilities, ports, navigation aids etc. This encourages state interference because only the state may have the resources to invest.

5. *Long payback time periods.* Expensive investments, especially ports, have extended payback periods that may be very unattractive to private investors.

6. *Needs.* Within the shipping industry are social objectives that have to be met but may not provide sufficient or any return to the investor. For example, accessibility needs of a remote communities/small islands (Herjólfur in Vestmannaeyjar) can be met but only with state involvement in the market place.

7. *National development.* State involvement in shipping is often a result of a perceived need to support and protect an industry that employs many people and earns considerable income for the country. Many countries around the world have adopted state involvement policies in the maritime sector for just these reasons. This argument will be discussed further in later chapters.

8. *Integration and Coordination.* State involvement in the shipping industry is sometimes intended as a process that can encourage and facilitate the integration of wider economic policies, including attempts to maximize regional development, reduction of unemployment levels or for protection of the environment. The various tonnage tax proposals introduced across the EU can be seen as having this objective in a micro aimed manner. With integrative policies are there also more specific coordination issues that the state may have policies to achieve in the shipping sector to ensure that investment from both the private and public sector is coordinated to maximize its impact.
9. **Prestige, representation and votes.** State involvement might be required on the notion of its prestigious role in representing a county around the world, particularly through flying a state flag, or other flags might be selected. There is also an argument that to retain a significant place on the international maritime stage a country needs to have a support policy for its fleet. Many countries now have tax regimes for shipping companies that are designed to encourage domestic registration in part for prestige reasons. In some countries where the maritime sector is important politically, vote chasing becomes an issue that can be met by active state policies towards the sector.

10. **Social conditions and training qualifications for workers at sea.** The market may not achieve these issues, as the linkage between commercial success and standards of training and work conditions is not always direct or clear.

11. **Defense.** A common but rather specific issue in the shipping industry is the strategic nature of the industry and the need for the state to be involved in the policy making process. Ports are commonly seen as strategic infrastructures that need the state behind its investment and plans. Even where there has been extensive privatization undertaken, the port authorities and port land remains within the state’s ownership. A good example of this emerged less than a decade ago, when the U.S. Congress forced Dubai Ports World, a United Arab Emirates based company, to abandon its plans to enter the U.S. port market, because U.S. lawmakers cited security concerns and argued that foreign governments should not own strategic assets such as U.S. ports (Graham & Weisman, 2006; Riddell, 2014).

There are number of objectives behind the derivation of maritime policies, differing on how they are combined, depending upon each situation and which authorities are involved (Selkou & Roe, 2004). Considerable overlap will exist between these factors and of course not all of them apply to each country, however, they should provide a useful framework. Additionally, it should also be noted that some categories have more emphases on them than others, as we will see in later chapters.

### 2.1 Driving Factors of Shipping Policy

Shipping policy is a focus of great interest and has been thoroughly discussed in many papers over the past decades. The more compelling work of those who will not be
discussed further include Gold (1981) who examined the international maritime sector in general, Frankel’s (1989; 1992; 1999) detailed works relating the shipping sectors, logistics and ports, Goss (1982) with his earlier influential work and Yannopoulos’s (1989) generic shipping policy issues. Particularly notable publications on a national level include Brownrigg et al. (2001) and Gardner et al. (2001), as well as Colvin and Marks (1984) with more extensive policy discussion. With more focus on shipping policy on supra-national level Peeters et al. (1995), Bredima-Savopoulous and Tzoannos (1990) and Hart et al. (1993) include the particularly more notable publications.

On the issue of mobility, which has been mentioned above, it is one of the important features of the sector and affects shipping policies at each level, without excluding large range of other factors that will be incorporated into this analysis (Selkou & Roe, 2004). The focus here will be on spatial implications of shipping policy because that is the regulatory environment that the Icelandic shipping sector is obligated to comply to. It considers and incorporates the intense difficulties intrinsic in coordinating and making effective the different levels of policy-making. The discussion deliberately focuses on the national and supra-national levels since those levels generate a direct connection to the discussion of policy implications.

The policies of the shipping industry emerge and are applied within the industry at a wide variety of spatial levels that is summarized in Figure 1. The figure attempts to demonstrate the main features of the maritime policy framework and the factors that influence those policies that appear along with the players involved in its development.
These spatial factors are divided into five levels, which form a distinct hierarchy and show clear distinguishing features that are essential in the processing of policy derivation, implementation and impact. This is to clarify the development of the different spatial levels because in reality these factors overlap and have considerable confusion between them (Roe, 2010). These differing spatial policy levels and the problems that emerge of coordinating and making consistent policy initiatives across and between them, have been identified as a highly significant issue in earlier work by Cafruni (1985; 1991) and Aspinwall (1995). At the top of the hierarchy of spatial levels are the international policies, which comprise of international shipping related organizations that should provide an overarching structure for the policies derived at
lower, spatial levels. These include imperative policy making institutions such as the United Nations International Maritime Organization (IMO) and the Organization for Economic Cooperation and Development (OECD). There is, however, no legal requirement for countries to abide by these organization’s policies since they have no law making power. Despite that fact, a nation’s membership is extensive and enforces these international policies to be followed (Selkou & Roe, 2004). The supra-national level, e.g. the European Union (EU), the European Free Trade Association (EFTA) and North America Free Trade Association (NAFTA), generates shipping policies that are applied to all member states and are backed up by laws that are normally superior to national legislation if there is any conflict (Brooks & Button, 1992; Paixao & Marlow, 2001). EU or/and EEA States shipping policy is therefore highly significant as it supersedes any conflicting national legislation and, as a result, becomes a major driver of policy within the sector (Selkou & Roe, 2004). Often inter-spatial inconsistency occurs, Aspinwall (1995) provides a good example of problems in compatibility between the supra-national and national level with the prolonged discussion between the EU and Greece about opening up shipping cabotage markets within the EU to all EU flagged ships. The concessions that were agreed upon had the notable effect of diminishing the overall ambitions of the EU, to open all shipping markets to all ships and operators, and reflected a clear divergence in policy ambitions between the two spatial levels. The shipping state aids has presented a similar set of difficulties where the EU Commission has compromised its fundamental principles of liberalizing markets (Selkou & Roe, 2004). Figure 1 also presents two more levels of policy making, regional (regional governments) and local (city governments) level, that should aim to derive shipping policies that are compatible with the levels that lie above them. That actually applies to all the spatial levels, if they do not consider the regulatory framework above them will it inevitably lead to problems of policy implementation. A relevant reference to that is the case brought against the regional government, Vestmannaejjar in Iceland, due to amendments to the Icelandic Harbour Act. Claims were brought to the EFTA Surveillance Authority that the additional funding for the Harbor Improvement Fund constituted state aid, which could not be justified under the EEA state aid provisions (EFTA surveillance authority No 658/07/COL decision). Interest groups or stakeholders have a significant role in the creation and application of the shipping policy. They are the ones with an active position in the shipping sector and
who are both the generators as well as the ones who are most affected by the policies that are created. These interest groups can be found at each spatial level:

**International level** - International Maritime Organization (IMO), Greenpeace and leading charities are important interest groups that act both roles, as a creator and an absorber of international shipping policy measures.

**Supra-national level** – The European Community Ship-owner Association (ECSA) represents ship-owners within the EU that attempts to place pressure on national policy makers and the EU to take their views into greater account. The European Free Trade Association (EFTA) affects as well the national level policy makers of its member states.

**National level** – the Federation of Icelandic Fishing Vessel Owners (LIU, now SFS) acts a similar role in relation to the Icelandic government, but is also in discussion with other interest groups, e.g. the European Shippers Council or the Icelandic Seafarers Labor Union.

**Regional level** – the ports of Faxaflóahafnir that include several municipals like Reykjavík, Akranes and Grundartangi or local truck haulier associations.

**Local level** – within the town Vestmannaeyjar, the port of Vestmannaeyjar.

All of these groups give voice to the policy making process at a greater or lesser degree, as well as adding to the inherent complexness, acting across each of the spatial levels. For example, in 2010 Seatrans (a Bergen based shipping company) announced that they had planned to reflag ten vessels from the Norwegian International Register (NIS) to Malta by the end of the year because of imminent taxation on their Polish crewmembers. This change in the crews’ taxation resulted after the Norwegian finance ministry negotiated a new tax treaty with Poland without consulting Norwegian ship owners (Lomas, 2006). It is evident how increasingly complicated the policy making process gets, not only does it have to follow consistency and compatibility up and down the state level bodies but in addition, function horizontally with interest groups as well as diagonally with groups at different spatial levels. Furthermore, to add extended complexity, do these interest groups inter-relate (dependent upon each policy level and issue) with each other to a lesser or greater extent, in either collaboration or opposition (Selkou & Roe, 2004).

The last part of this increasingly complex shipping policy and governance model is provided by the series of context within all these policy initiatives and relationships.
must operate and in turn affect their development, potential and success/failure. They can be identified by the earlier work of Ledger and Roe (1996). Following are the factors incorporated from Figure 1 and put into perspective by Roe (2010):

**Economic:** refers to the impact of economic factors upon the derivation and characteristics of shipping policy for any particular level (national, supra-national etc.). E.g. the impact of the introduction of the Euro to the member states, the global depression in 2008-2009, development of free markets etc.

**Legal:** refers to the legal framework within which the shipping sector has to operate, including national laws and regulations of supra or international nature. The legal framework is constantly changing at each spatial level as a response to a countless of social, political and economic pressures and it is within this context that some of the more important failures of coordination between jurisdictions emerge.

**Managerial:** refers to the relationship of the internal structure of shipping companies with the policy framework that is imposed from the governmental level. Size and complexity of shipping organizations and the altering range of functions that shipping companies have incorporated in terms of policymaking and implementation is important since they increasingly integrate vertically, absorbing logistical functions that are traditionally carried out by separate organizations. For example, Maersk’s (a Danish company) interests in full range of logistic, from shipping to trucking. This increase in the range of functions by traditional shipping companies adds to the complexities and increases pressure on the industry to conform to a wider range of policy initiatives.

**Organizational:** refers to the structure and characteristics of the shipping industry as a whole with two important trends, privatization and globalization, affecting the policy making at all levels. The significance of state control has diminished as the development has been towards privatization, leading governments to become distant from company decisions, finance and operations but at the same time has there been substantial increase in supra and international policy making levels, with the aim to increase control over external effects of the industry (the EU, EFTA, IMO etc.). A significant problem that emerges between spatial policy making levels is that often can it be advantageous for competition policy to be neglected at a national level as it may lead to a strong international presence for a domestic fleet. E.g. subsidy for domestic shipping fleets may be
made available by state governments whilst its application is being strictly controlled at a supra-national level, like EFTA or the EU that tend to be more restricting concerning state aids than the national levels, as was evident with the Icelandic subsidy laws that will be discussed in later chapters. The substantial growth in globalization has changed the nature of the shipping industry on a global scale. That has become evident with the increased impact of flags of convenience and international registers for shipping. Another result is the perpetual increase of nationally based companies having to work within an internationally derived policy framework such as national and international policies towards training and labor, which often conflict with each other.

**Political:** refers to the political context from which all shipping policies emerge. Political acceptability of policies is commonly the most significant context of all because sometimes legislators are known to be acting in a political manner, under pressure from influential parties, rather than in a legal or economic context. Examples of that are the concessions granted to Greece over the delay in imposing cabotage laws as mentioned above and the continued existence. A recent example shows the conflict that has emerged from the tonnage tax system (e.g. between the national levels such as Iceland and Norway, and EFTA), a political concession that does not aid in creating a consistent policy framework for the shipping sector.

**Social:** refers to a multitude of complex relationships between the shipping industry and the society in which it operates. Including issues such as maritime employment and the policies that are aimed at its promotion or reduction. The introduction of new tax regimes for the shipping industry, by various national governments are partly aimed to encourage and sustain employment levels within that country or region (EU and EFTA). In addition, there have been number of policy initiatives with strong social implications concentrating upon seafarer training, conditions of service and the environment.

**Spatial:** refers to the fact that shipping policy is not only derived at a variety of spatial levels (local, regional, national, supra-national and international) but also affected and influenced by a wide variety of spatial issues. Peripherality is a major theme within the EU, where disadvantage felt by peripherally located regions or states can be reduced through policies that promote improved transport links including those by ship and through ports. In doing so, the
friction that stems from a peripheral location can be substantially reduced (evident in the EU by cabotage regulations that allow countries to protect some domestic routes for social reasons). Other spatially related issues that are important to shipping industry include regional policies to develop economically backward areas and the consequent industrial and commercial impacts.

*Technical:* refers to the changes in technical facilities and methods that have direct and indirect effects upon the shipping industry. Shipping policies need to take all these changes into account at most levels (national, supra and international) that can range from new safety protocols to environment regulation.

These important contexts provide an external framework that can assist and guide policy makers on all levels. Policy making that ignores their influence will not have much chance of succeeding because the relative influence of each context is dependent on the spatial level and issue concerned as well as a host of other interconnected factors (Selkou & Roe, 2004). To consider and take into account the complexity of all the influences that determine and shape shipping policy as the importance of ensuring compatibility across all spatial levels is fundamental to its success. What is more, shipping policy cannot ignore the wider context in which it has to be introduced and implemented, it is required to coordinate with the other factors and to be aware of their influence. Therefore, failing to do so will result in conflicts between policy makers and other relevant players within the shipping sector, which leads to nothing else but an ineffective policy making (Roe, 2010).

### 2.2 The Relevance of the National State Level

Given the superiority of international and supra-national jurisdiction it might seem useless to implement national maritime policies, but their function is fundamental. They carry the obligation to enforce the regulations and according to Selkou and Roe (2004) carry out the responsibility of following factors:

*Employment.* The shipping industry generates not only direct employment but indirect as well, both on board and on shore.

*Politics.* This factor plays different role between countries, for some more than others. E.g. depending on whether or not the country is a maritime nation relates differently in a political aspect.
Prestige. In developing countries, having a nationally flagged fleet is considered prestigious and certain representation of the country around the world.

Ship owners. They are a factor that holds a lot of weight as a pressure group. Although pushing for their own agenda is their role inherently vital to the industry and in bringing all the various indirect (ancillary) employment, both on shore and off.

Expertise. The ancillary sector in shipping (insurance, legal, finance, P&I etc.) needs a steady inflow of people with maritime experience. For those jobs not to be lost the national policy must protect the fleet.

History & tradition. Shipping is a highly traditional industry that is often enlaced into the country’s history and should not be understated.

Defense. National maritime policy is needed because of the necessity of a merchant fleet in times of war to support naval vessels.

Financial earnings. The economic effects can be tremendous for the nation if the legislation is created in a resourceful manner, as they have done in the Faroese Islands.

It is apparent that the national jurisdictional level remains central to policy development and effectiveness. Although the supra-national and international jurisdictions levels seem overwhelming in their influence in policy making over maritime nations should it not be forgotten that those levels are occupied with national representatives along with their national agenda and priorities.
3 The Maritime Industry and its Global Characteristics

International and national maritime policies have essentially changed significantly in the past three decades as a consequence of a number of fundamental adjustments to economic and political pressures and circumstances worldwide. The maritime industry is especially mobile, capital intensive and riskier than most other businesses (Roe, 2010). Various factors contribute to this situation; the ship-owners are spread throughout the world, therefore inherently mobile, and have to operate under many different jurisdictions. Also ships are expensive and by definition, mobile and exposed to all manner of jurisdictions. Moreover shipping services (including insurance, legal services, finance, broking, freight forwarding, agencies etc.) can be provided from almost any global location to clients of any nation, shipping companies vary considerably in size, characteristics, owner-ship, structure etc. Furthermore is there virtually no centralized control as far as demand and supply are concerned (Roe & Selkou, 2005). As a consequence, shipping is an international industry characterized by multiple nationalities and jurisdictions (Paixao & Marlow, 2001). The legal, physical and capital mobility that these circumstances generate, unrivalled by any other industrial sector, have resulted in shaping attitudes and reactions towards shipping policy by the industry itself as well as the many governmental institutions that influence it (Aspinwall, 1995). The shipping sector is therefore inherently global, has a widespread impact and represents a specific and extreme example of globalization.

Globalization is motivated by the recognition of resources and goods that are not always co-located with the populations who desire them, and so global transport services are required. Therefore, the concept of globalization refers to the shift towards a more integrated and interdependent world economy (Hill, 2009) that possesses several facets and has a major affect on industries such as the maritime sector. The globalization of markets is a facet that refers to falling of barriers of cross-border trade and has made commerce easier to sell internationally. A significant difference exists amongst national markets, that difference changes on the other hand with the need for industrial goods and materials, carried by the industry, that serve a universal need over the world (Hill, 2007), hence creating a global market or a homogeneity across markets. This has also lead to the relocation of the shipping companies to more fiscal- and tax-beneficial regimes, offered by less regulatory oppressive foreign registers. The global nature of the industry offers the shipping firms increased alternatives to more favorable
conditions in addition to larger markets. Another facet that influences the shipping industry to a great extent is the globalization of products. This aspect refers to sourcing of goods and services from location around the world and the shipping industry takes advantage of national differences in the cost and quality of factors of production, such as labor, capital etc. (Hill, 2009). Another affect that globalization has on maritime industry, is the influence it has had on countries’ tax systems. Increased forces of globalization have fueled resurgence in taxation laws, as the tonnage tax regime has demonstrated. Despite the vast differences in national characteristics (such as history, language, natural resources etc.) the implication of globalizations has increased closeness and has caused chain reactions within countries, transcending traditional borders to shape and affect other sovereign nations (Purcell, 2011). This cross-country dependency generates ripples of cause and effect on taxation and has run the risk of being redefined on a national and international level (OECD, 2010). As nations become increasingly interdependent, the risk of countries being pressured into tax competitions may intensify. Moreover, the inherent mobility of the industry intensifies the pressure on the maritime countries to compete for these resources by lowering and amending their tax rates and, subsequently, strategically broadening their bases.

Being so essentially global puts the shipping industry consequently under permanent competitive pressure from low cost open registers, as will be discussed further in later chapters. Mobility, one of the industries previously mentioned characteristics, has created an environment where the industry is able to avoid many of the requirements and regulatory higher cost framework by registering vessels in other countries (Coleman, 2000). This trend of flagging-out is an apparent example of how globalization can be a force of exploitation and injustice. Critics of globalization argue that it inflicts not only harm through loss of jobs and stagnant, or decreased, salaries but also that foreign direct investment and open trade can lead to the loss of employment of workers in advanced industrial economies as well as transfer them to less expensive workers in developing countries (Gaspar et al., 2014). That in fact is exactly what has been occurring within the shipping sector for the past decades. Flagging-out implies not only a direct global competition between the developed and third country vessels in international trades but also the loss of employment from the developed world- to the third world-countries. In addition, the flagging-out has been followed by relocation of derivative activities outside of the developed countries, leading to an even greater loss of employment, not only offshore but also on-shore. All this has occurred mainly due to
the continued effects of globalization on trade and in markets (Selkou & Roe, 2004) with its inherently increased competition. Another trend associated with globalization is the pace of trade. Globalization has encouraged transactions of goods and service in smaller packages delivered “just-in-time”, which has increased the velocity of freight. This shift has had an impact on the shipping industry in the last two decades to justify faster, larger containerized vessels. In a globalized market, containerization has offered the advantage of integrated freight transport across all modes (Corbett et al., 2010).

Moreover, countries also need effective policies as complements to globalization. Nations with sound economic policies are more successful in the global competition. In attracting foreign and domestic shipping companies to a particular international register, governments play a crucial role in establishing high-quality governmental management. The quality of administration is extremely important, adequate policies alone do not inspire respect and confidence without competent administrators and consistency over time (Gaspar et al., 2014), as well as a government’s long-term commitment to the policy.

It should also be noted that in being so intensely mobile, both in physical and capital terms, the shipping industry is set apart from other industrial and commercial sectors. These characteristics are tied inherently together as the capital mobility of shipping is enhanced by its physical mobility of the assets. This leads to any sort of compulsory national association to be very difficult (Roe, 2002)

### 3.1 The Economic Impacts of the Shipping Industry

The global GDP seems to have finally recovered after the recession in 2008 and returned to its almost pre-recession rates of 3.4% if the global growth projection for 2014 will come to pass (World Economic Outlook, 2014). Since the recession, there has been a slow pace of recovery in developed economies, particularly within the EU. Over the last decade, seaborne trade has grown more strongly than GDP, reflecting the increasingly globalized nature of production and consumption. But the impacts of the recession, combined with continuous growth in the global fleet have led to an industry-wide challenge of over-capacity, which has put pressure on freight rates (Oxford Economics, 2014). In addition, shipping companies have faced significant increases in fuel prices, but marine fuel costs increased from an average of $234 per tons in 2005 up to $640 per ton in 2012 (UNCTAD, 2013). With fuel costs accounting for up to 50-60%
of operating costs, it is bound to have a significant impact on profitability for the shipping industry (World Shipping Council, 2008). European shipping companies have continued to face strong competitive pressure from other rapidly growing centers of world shipping, particularly from Asia and the Middle East.

Although economic prospects in the United States improved in 2013, it does only partly counterbalance the weakness in Europe. However, China’s growth has continued to outperform other leading economies, thus alleviating the slowdown, but exports are still constrained by weak demand in Europe. All of these developments have a straight impact on the maritime sector. In relation to these economic conditions, ECSA (2013) has stressed continuously that maintaining the structural framework of the European Union’s State Aid guidelines is still essential. An abandonment of the guidelines could lead to a dramatic change in the relocation of EU shipping to global maritime centers, which would of course have a negative impact on European trade and employment in the maritime sector.

Below, table 1 demonstrates an overview of the top 25 maritime fleet countries in the world. It illustrates the number of vessels and total deadweight tonnage controlled by the main developing ship-owning countries, including the share of nationally flagged and foreign and international flagged vessels by country.
Table 1. The 28 largest owned fleets by country

<table>
<thead>
<tr>
<th>Country</th>
<th>NUMBER OF VESSELS</th>
<th>DEADWEIGHT TONNAGE</th>
<th>TOTAL TONNAGE</th>
<th>TOTAL % OF WORLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREECE</td>
<td>825</td>
<td>2870</td>
<td>3695</td>
<td>244,850,578</td>
</tr>
<tr>
<td>JAPAN</td>
<td>738</td>
<td>3253</td>
<td>3991</td>
<td>223,815,008</td>
</tr>
<tr>
<td>CHINA</td>
<td>2665</td>
<td>2648</td>
<td>5313</td>
<td>190,078,835</td>
</tr>
<tr>
<td>GERMANY</td>
<td>396</td>
<td>3437</td>
<td>3833</td>
<td>125,778,528</td>
</tr>
<tr>
<td>SOUTH KOREA</td>
<td>768</td>
<td>812</td>
<td>1576</td>
<td>75,095,806</td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>1090</td>
<td>798</td>
<td>1888</td>
<td>64,152,804</td>
</tr>
<tr>
<td>US</td>
<td>768</td>
<td>1175</td>
<td>1943</td>
<td>58,278,064</td>
</tr>
<tr>
<td>UK</td>
<td>415</td>
<td>822</td>
<td>1237</td>
<td>50,304,696</td>
</tr>
<tr>
<td>NORWAY</td>
<td>414</td>
<td>1494</td>
<td>1908</td>
<td>45,992,245</td>
</tr>
<tr>
<td>TAIWAN</td>
<td>102</td>
<td>712</td>
<td>891</td>
<td>44,259,845</td>
</tr>
<tr>
<td>DENMARK</td>
<td>45</td>
<td>946</td>
<td>991</td>
<td>40,714,843</td>
</tr>
<tr>
<td>BERMUDA</td>
<td>4</td>
<td>206</td>
<td>210</td>
<td>32,896,307</td>
</tr>
<tr>
<td>TURKEY</td>
<td>645</td>
<td>935</td>
<td>1580</td>
<td>29,090,600</td>
</tr>
<tr>
<td>ITALY</td>
<td>673</td>
<td>211</td>
<td>884</td>
<td>25,342,964</td>
</tr>
<tr>
<td>HONG KONG</td>
<td>269</td>
<td>297</td>
<td>566</td>
<td>24,325,269</td>
</tr>
<tr>
<td>INDIA</td>
<td>584</td>
<td>158</td>
<td>742</td>
<td>22,441,287</td>
</tr>
<tr>
<td>UNITED ARAB EM.</td>
<td>82</td>
<td>617</td>
<td>699</td>
<td>19,473,569</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>1195</td>
<td>532</td>
<td>1727</td>
<td>19,384,251</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>472</td>
<td>142</td>
<td>614</td>
<td>17,114,550</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>757</td>
<td>450</td>
<td>1207</td>
<td>16,672,566</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>202</td>
<td>108</td>
<td>310</td>
<td>16,152,555</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>39</td>
<td>291</td>
<td>330</td>
<td>15,650,896</td>
</tr>
<tr>
<td>IRAN</td>
<td>108</td>
<td>121</td>
<td>229</td>
<td>15,316,761</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>1383</td>
<td>147</td>
<td>1530</td>
<td>15,301,421</td>
</tr>
<tr>
<td>CYPRUS</td>
<td>183</td>
<td>192</td>
<td>375</td>
<td>13,923,933</td>
</tr>
</tbody>
</table>

Source: (UNCTAD, 2013)

3.2 Economic Conditions of the EEA/EU Shipping Industry

Although the poorer economic conditions of recent years have had impact on the sector, the shipping industry is still a high productive industry. In April 2014 the Oxford Economics published a study commissioned by ECSA that offered a good indication of the value of the shipping industry and its impact on the European area, both as a source of revenue and employment. The shipping industry indirectly supported an estimated €59 billion contribution to GDP and 1.1 million jobs through its European supply chain in 2012. Each worker was estimated to have generated around € 88,000 of GDP, which is significantly above the EU average of €53,000. The spending of earnings by those
employees in the shipping industry and its supply chain sustained an estimated additional €30 billion of GDP and employment for 550,000 people. The industry also supported employment for an estimated 2.3 million people and tax revenues estimated at €41 billion (Oxford Economics, 2014).

![Figure 2. DGV added contribution to GDP of the EU shipping industry by country](image)

There are different direct contributions to the GDP amongst the European countries. The direct gross value added contribution to GDP within the shipping industry in Germany, Norway and Belgium. In these countries the contribution was seen to increase strongly between 2004 and 2012. On the other hand, the direct contribution to GDP declined by 5% between 2004 and 2012 in Greece, because the industry had faced adverse conditions that resulted into the most severe economic crisis the country had ever faced before. Italy saw an even sharper fall, reflecting the orientation of its fleet towards large tankers and bulk carriers, which have been hit particularly hard by the challenging conditions in the shipping industry since 2008 (Oxford Economics, 2014).

### 3.3 Direct and Indirect Contributions to Tax Revenues

The shipping industry does not only generate tax revenues in the country where it registers its fleets but causes also a cross-country impact amongst other European countries. Oxford Economics (2014) conducted a detailed analysis of the EU member
states and Norway in:

Estimating the value of revenues generated in the form of employee and employer social security contributions, income tax levied on the earnings of the workforce, VAT on the spending of employees, and corporation and tonnage tax revenues from shipping firms. (p. 33)

According to the findings of the report, the EU shipping industry was estimated to have directly generated €6 billion in tax revenues in 2012. Almost four-fifths of this total was recorded within only six countries: Germany, Norway, Italy, France, the UK and Denmark as figure 3 shows.

**Figure 3. The direct tax contribution of the EU shipping industry**
Source: (Oxford Economics, 2014)

In fact, by using Oxford Economics’ Global Input-Output model, the report estimated the indirect GDP impacts of the shipping industry, found that the indirect gross value added contribution to GDP of the European shipping industry of €59 billion in 2012. In consistency with the direct contribution to GDP, the largest figures were attributed to Germany and Norway.

Below, figure 4 demonstrates the indirect contribution to GDP according to whether it occurs domestically or within another EU member state.
For Germany, Italy, the UK, and France, at least four-fifths of the indirect impact is estimated to have occurred domestically. It is interesting to see that some countries such as Denmark and Norway have very internationalized supply chains. Denmark has around 77% of the indirect impact occurring elsewhere within the EU, and 63% for Norway. The total indirect employment contribution of the EU maritime sector is estimated to have been equivalent to around 1.1 million jobs across Europe in 2012 and the induced impact estimated to have been 547,000 employments. Just over half of these employments were created in the same country that the direct impact occurs, and just under half were created in other European countries (Oxford Economics, 2014).
Overall, the industry is estimated to contribute a total of €41 billion in tax revenues, either directly, through its supply chain or through the induced spending of its employees and those in the supply chain (Oxford Economics, 2014).

When the factors of direct, indirect and induced impacts are combined, the total gross
value added contribution to GDP from the European maritime industry is estimated to have been €145 billion in 2012. €57 billion, or 39% of this value came from Germany and Norway. Altogether, the report concluded that the complete economic contribution of shipping is equivalent to 1.1% of EU GDP. However, in some countries, as can be seen in Figure 6, it is considerably greater or between 5% and 7% in Norway, Denmark and Greece.

3.4 The Aspects of Fierce Global Competition

The international competitive environment has intensified with increased globalization and has manifested in the form of joint ventures and mergers within certain sectors of the shipping industry as well as in the constant trend towards shipping services sourcing from anywhere in the world. For example, a vessel is built in Turkey, financed in Britain, owned in Iceland, insured in Norway, manned by Russians and Poles and maintained in the Netherlands (Selkou & Roe, 2004). This variability reflects the internationalized market that the shipping industry faces today. This increased competitiveness, particularly in international freight markets has been partially due to increased opportunities within third world countries to benefit from having cheaper labor, tax incentives and sometimes lower safety standards. The result has been the rush to flag out from European registries. Another consequence has been the significant decline in the number of Western European and Scandinavian seafarers, factor that the EU is committed to alter and to ensure that important knowledge is not lost or shipped out (Oxford Economics, 2014). This maritime skillset is believed to be important because of the extensive ancillary maritime activities to be found in various maritime districts across Europe, which depend highly upon a regular supply of EU ex-seafarers (Gardner et al., 2001). The leading reasons for shipping companies to choose a foreign flag has been the tax regimes and the possibility to employ foreign seafarers at a lower cost. The latter reason has been particularly important for countries with higher labor costs, which is mostly the member states of the EU and other developed countries (Cullinane, 2005).

Selkou and Roe (Selkou & Roe, 2004) attempt to explain the globalized shipping complex in Figure 7 in terms of national, international and EU regulation and show how these interact and co-operate with each other within the competitive framework of the maritime sector.
International and supra-national regulations provide framework of international standards and agreements by constructing conventions that are implemented by the countries involved.

The main role and policy motivation behind the facilitation of the European Commission in regards to the State Aid Guidelines (tonnage tax), is to provide a leveled playing field in terms of taxation, both within the EU and against other regimes, especially those of the Open Registries (Selkou & Roe, 2004). A valued concern about consequences of the tonnage tax regime is fiscal competition between member states. The European Commission (“Information from EU institutions,” 2013) asserts that there is no evidence of schemes distorting competition in trade between EU Member States that would affect common interest. Flagging out between member states seems to be a rare phenomenon. Fiscal competition is mainly an issue between member states on the one hand and third world countries on the other, since cost savings measures available to ship owners through third country registers are considerable in comparison.
to what is offered within the EU. While most maritime nations like Norway, the Netherlands and Germany decided that shipping should be seen as a strategic industry worthy of government promotion, other nations, e.g. Iceland and Portugal, seemed to decide not to treat the competitiveness of their national fleets as an issue of vital national economic interest (Sornn-Friese & Hansen, 2012) However, nations such as UK and Denmark caught up and reconsidered their strategy by adopting a more shipping friendly policy approach. According to the British Chamber of Commerce, resulted in a major revival of the UK marine fleet over the first decade of the millennium.

Due to the extreme competitive conditions, ship owners from developed countries main goal is to work towards cost minimization and exploiting the lower cost benefits that the open registers can offer. It should be clear that shipping companies are intensely interested in the financial consequences of their decisions (Marlow, Pettit, & Bergantino, 1997). It needs to be recognized that shipping companies have the freedom to choose the flag flown by their vessels for their own commercial reasons and that their choice gives them various commercial benefits (Selkou & Roe, 2004). Until lately, the main responsibilities of flag states have been ensuring compliance with international regulations, but lately, and due to the constant increase in international competition, another vital factor in the function of maritime authorities has emerged. It is the role of providing high quality service, quick handling and 24 hour a day access to registry officials (Branch, 2007). Most ship owners from developing countries choose to register their fleets under foreign flags that offer a solid institutional framework and have a good compliance reputation (UNCTAD, 2013).

It should also be mentioned that in 2013 the European Commission advised on its decision not to prolong the sector-specific Competition guidelines for the shipping industry from 2008 that assist shipping companies to assess the compatibility of cooperation and pool agreements with the EU competition legislation. This amendment is in line with the EU’s general policy to phase out sector-specific competition rules (ECSA, 2013).
4 The Shipping Industry within the EU/EEA

The European shipping industry represents not only one of the largest but also one of the leading players in the global market. This is demonstrated by the 90% of trade to and from the Euro area. The EEA’s control of 40% of the world’s trading fleet as well as it’s registered fleet in the global capacity, represents 20.1% of the world tonnage (ECSA, 2013). It is, therefore, logical to suggest that the challenges of a continuously developing global economic system will strengthen and extend the significance of maritime transport within the process of globalizing trade. The shipping industry is strategically important for the European Union. It both enables international trade and helps in securing the EU energy supply through imports of oil and other fuels. The EU merchant fleet may also be called upon to support military operations in times of crisis, or in peacekeeping missions. European shipping has been able to maintain its leading global position by controlling 40% of the global merchant fleet. At the beginning of 2014, the EU controlled fleet comprised of 660 million deadweight tons, 450 million gross tons, and 23,000 vessels (Oxford Economics, 2014). If that position is to be kept unchanged, substantial adaptations to its internal and external regulatory framework and its shipping policy is imperative, particularly where conflicts between policy makers emerge (Selkou & Roe, 2004). Furthermore, maintaining the EU structural framework of the State Aid guidelines under which shipping operates today is essential (ECSA, 2013).

For the European shipping industry, globalization of trade represents a substantial opportunity in terms of newer and larger markets in which to become involved. This suggests that the main aim of the EU/EEA should be to ensure that the European maritime foundation is safeguarded on a long-term basis (Selkou & Roe, 2004). This presents problems because of the increased competition from outside the EU in the shipping sector, which has been made easier by the very same globalization forces that have been released in recent years (Grimaldi, 2000). It is additionally very troublesome for ship owners within the EU to battle this increased competition as findings of Thanopoulou (1998) showed that contribution of policy measures to address any erosion of shipping competitiveness was limited for the European fleets, adding that it would take a revolutionary approach for the EU in a form of massive fixed cost subsidies or full tax exemptions to alter the competitive position of European shipping.
5 Flag of Convenience or “Open Registration” of Ships

Shipping companies are generally subjected to income and profit taxes of the state where they operate, which makes the tax level very important to ship owners. Ship owners are therefore at a serious disadvantage when competing with tax-free or virtually tax-free national merchant fleets under flags of convenience (Branch, 2007). The term “flag of convenience” (FOC) emerged in the practice of international shipping during the mid-1940’s when several countries (Panama, Liberia and Honduras) began to grant their flag to any foreign shipping company for a specified payment, confined merely to registering it. These ships came to be called ships under a “flag of convenience” and the countries trading in their flag “international flag countries” or “flag of convenience countries” (Egiyan, 1990). An international flag country or State is thereby, simply and by definition, one where registration of ships is open to nationals of any country, and sometimes referred to as an open register or international open register. Open register is an all-encompassing term that has gained currency in many quarters as an alternative to the pejorative term “flag of convenience” (Mansell, 2009). Doganis and Metaxas (1976) offer a slightly more expounding definition, “Flags of convenience are the national flags of those States in which ship owners register their ships so as to avoid: financial obligations and the nature and conditions of shipping were their vessels registered in their own countries” (p. 85).

When it comes to open registries it should be considered that not all registries fall under the same hat. They can be referenced to as “full-open” registries, and “quasi-open” registers. Full-open registers provide optimum cost saving possibilities, accepting all vessels regardless of their current classification, and will provide total flexibility with regard to the enforcement of international safety, environmental and labor regulations (such as Panama and Liberia). Choosing this kind of registry implies that the shipping company assigns the most weight to flexibility and cost savings measures provided by open register. Quasi-open registers on the other hand, offer most of the flexibility of an open register, but at the same time impose high requirements on quality of the ships flying their flags and international regulations. International registers in the EU/EEA usually fall under the latter. Ship owners opting for this alternative seek certain cost savings benefits offered by open registry while at the same time want to avoid poor safety reputation associated with open registers (Luo, Fan, & Li, 2013).
From the middle of the 1970’s European ship owners started flagging out their ships to open registers. The decline in the numbers and size of vessels registered with the mainland or domestic registers of traditional maritime nations was quite dramatic in the following decade, demonstrated by the 20% loss of the total market of the OECD fleets (Thanopoulou, 1998). Flagging out implies a direct competition between EU registered ships and third world country vessels, not only in international trades but also in most trades within the community because it implies the loss of economic and potential military resources. For many years flagging out was followed by relocation of ancillary activities such as ship management to countries outside the EU, leading to an even greater loss of employment, both on-board and on-shore, with all the related consequences, such as the loss of maritime know-how and less incentives for Europeans to join the maritime profession (Selkou & Roe, 2004). This process has led to a global market for seafarers and bred new types of companies like, professional crewing companies and third party ship management companies. There has also been an additional tendency for shipping companies to replace local agents in foreign markets with their own subsidiaries and local headquarters and a shift within large companies to start outsourcing knowledge based shipping activities e.g. ship broking, chartering, various back-office functions such as IT management, pay, financial accounting etc. to independent companies in other countries (Sornn-Friese & Hansen, 2012).

This decline in nationally owned and registered fleets has led most maritime countries, especially within Europe, to establish second registers like Norway (with NIS), Denmark (with DIS), the Faroe Islands (with FAS), Finland, UK, the Netherlands and Germany. International registers such as these are usually not categorized the same as fully open registers where legal, administrative and economic factors are weak. They can therefore, serve the dual purpose of retaining some control over the national shipping industry and satisfy the need for a more competitive environment on the ship owners part (Haralambides & Yang, 2003).

Lately, the traditional distinction between “national” flagged fleets and “open registers” has become increasingly blurred. Among the top 24 fleets that can be seen in Table 2, 11 registries could be considered purely open and less than 2% of the ships flying their flags belong to owners from the same country. At the other end of the spectrum, 8 registries are flagged almost exclusively by the same country (UNCTAD, 2013).
Table 2. The 24 flags of registration with the largest registered fleets

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Number of vessels</th>
<th>Deadweight tonnage</th>
<th>National ownership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panama</td>
<td>8580</td>
<td>350,506</td>
<td>0.14</td>
</tr>
<tr>
<td>Liberia</td>
<td>3144</td>
<td>198,032</td>
<td>0.01</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>2064</td>
<td>140,016</td>
<td>0.11</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2221</td>
<td>129,806</td>
<td>12.15</td>
</tr>
<tr>
<td>Singapore</td>
<td>3339</td>
<td>89,697</td>
<td>36.6</td>
</tr>
<tr>
<td>Greece</td>
<td>1551</td>
<td>75,424</td>
<td>92.6</td>
</tr>
<tr>
<td>Bahamas</td>
<td>1446</td>
<td>73,702</td>
<td>1.18</td>
</tr>
<tr>
<td>Malta</td>
<td>1794</td>
<td>68,831</td>
<td>0.35</td>
</tr>
<tr>
<td>China</td>
<td>3727</td>
<td>68,642</td>
<td>98.18</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1030</td>
<td>31,706</td>
<td>19.51</td>
</tr>
<tr>
<td>Isle of Man</td>
<td>422</td>
<td>22,629</td>
<td>0</td>
</tr>
<tr>
<td>UK</td>
<td>1343</td>
<td>21,095</td>
<td>49.88</td>
</tr>
<tr>
<td>Italy</td>
<td>1506</td>
<td>20,612</td>
<td>93.46</td>
</tr>
<tr>
<td>Japan</td>
<td>5379</td>
<td>20,409</td>
<td>99.32</td>
</tr>
<tr>
<td>Norway</td>
<td>536</td>
<td>18,093</td>
<td>82.33</td>
</tr>
<tr>
<td>South Korea</td>
<td>1894</td>
<td>17,720</td>
<td>96.47</td>
</tr>
<tr>
<td>Germany</td>
<td>781</td>
<td>17,128</td>
<td>97.59</td>
</tr>
<tr>
<td>India</td>
<td>1385</td>
<td>15,876</td>
<td>96.16</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6293</td>
<td>14,267</td>
<td>90.28</td>
</tr>
<tr>
<td>Antigua &amp; Barb.</td>
<td>1302</td>
<td>14,142</td>
<td>0</td>
</tr>
<tr>
<td>Denmark</td>
<td>482</td>
<td>13,739</td>
<td>92.53</td>
</tr>
<tr>
<td>US</td>
<td>168</td>
<td>12,378</td>
<td>1.69</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3452</td>
<td>12,321</td>
<td>73.93</td>
</tr>
<tr>
<td>Turkey</td>
<td>1539</td>
<td>10,508</td>
<td>92.82</td>
</tr>
</tbody>
</table>

Source: (UNCTAD, 2013)

The practice of flagging out from national registries to open registries has been a large growth sector but the situation may change as national governments offer more favorable terms to encourage ship owners to register with their national flag (Branch, 2007).

5.1 The Need to Discourage Vessels not Meeting International Obligations

One of the most effective ways to implement international (IMO) and supra-national (EU and EFTA) regulations is through Port State Control (PSC). It can effectively decrease the number of substandard ships visiting ports with harmonized procedures for inspections and detentions set up by the legal mechanism of the PSC (Lalis, 1999).
One of the more pressing problems that have affected international registers in the past is failing to rectify the deficiencies detected during Port State Control inspections and not having enough solid infrastructure and qualified technical personnel within the maritime administration to handle international regulations concerning maritime safety and security. Flag States must uphold compulsory regulations developed by the International Maritime Organization (IMO) relating to construction, operation, maintenance, training, safety management and pollution prevention. Their ships must undergo strict inspection and certification controls, which was often done through their own officials resulting in the problem mentioned above. The trend of recent years has been delegating this authority to especially recognized organizations for that purpose (like DNV GL or Lloyds) to attain and maintain class certification, especially by Port States (Llácer, 2003). The system is designed to ensure that at the minimum 25% of all vessels going through ports anywhere in the world will be inspected and if any faults are found, will be detained until the faults have been rectified (Alderton & Winchester, 2002).

Port State Control has become one of the most effective tools to verify if ships comply with international safety, pollution prevention and working regulations. The three major PSCs` authorities are the countries of the Paris Memorandum of Understanding (MOU), the Tokyo MOU and the United States Coast Guard (USCG). All three authorities target particular flags on the basis of deficiencies and detentions recorded for ships flying that flag (International Chamber of Shipping & International Shipping Federation, 2014).
These records are in the form of a “Black”, “Grey” and “White” lists that present the full spectrum, from quality flags (White list) to flags with a poor performance (Black list). Flags with an average performance appear on the “Grey” list (European Maritime Safety Agency, n.d.). Appearing on the Black or the Gray list usually acts as an incentive to improve and move to the “White” list because these lists have had the late tendency to be used by the shipping industry as a measure of flag quality. It is therefore important for both the International Shipping Registry and the ship owners to be a White Flag registry. It is not in the interest of either parties to end up with the repercussion of perpetual detentions or delays that often follow ships that sail under a Gray or a Black listed registries. It is therefore consequential for International ship registries to keep balance between commercial advantages of desired number of vessel registered under their fleet and the need to discourage the use of flags to those who do not meet their international obligations.
5.2 Ship Registry Selection

Policy competition for retaining and attracting national fleets falls into two main categories (Raines & Brown, 1999). The former being an incentive-based approach that aims to influence flag choice directly by flag preference or discrimination (e.g. exclusions of foreign flags, cabotage, port surcharges, investment grants and tax benefits) and the latter consisting of a rule-based approach, affecting the regulatory and operating environment of ship owners via an indirect impact on flag choice (special regimes that put national fleets on a more equal footing). The second policy approach has become more successful in the fight against the decline of national flagged fleets than the former one. It has become known as International Registries, policy solution aiming to reconcile private profitability considerations and national economic welfare. Governmental authorities need to consider its welfare effects on the overall economy when evaluating the economic and social effects of flagging out (Haralambides & Yang, 2003). The latter policy option combines the advantages of an open registry with those of the national registry (like the NIS and NOR in Norway). International registries should therefore be acknowledge with the attribute of being the intersection where private interests of ship owners and the wider interests of the national economy meet.

A major attraction in ‘flagging out’ lies in two factors; reduced manning cost and taxation benefits. These factors are very powerful in the global drive of ship owners to develop world trade, increase market share and provide more competitive tariffs (Branch, 2007), but they are not the only influential factor as Cullinane and Robershaw (1996), as well as others mention in their research. These other influential factors, which have been identified in various other research papers, will be recited below in no particular order with reference to relevant literature:

- **Crew cost** (Bergantino & Marlow, 1998; C. C. Chung, Hwang, & Wong, 2007; Cullinane & Robertshaw, 1996; Mitchell, Link, Lin, Chung, & Yang, 2011)
- **Tax liabilities** (Bergantino & Marlow, 1998; C. C. Chung et al., 2007; Cullinane & Robertshaw, 1996; Haralambides & Yang, 2003, 2003; Mitchell et al., 2011)
- **Finance and capital costs** (Bergantino & Marlow, 1998; C. C. Chung et al., 2007; Cullinane & Robertshaw, 1996; Haralambides & Yang, 2003; Mitchell et al., 2011)
- **Safety standards and maintenance requirements** (C. C. Chung et al., 2007; Haralambides & Yang, 2003; Mitchell et al., 2011)
Operational flexibility (Cullinane & Robertshaw, 1996; Haralambides & Yang, 2003; Mitchell et al., 2011)

Freedom to use foreign crew (Bergantino & Marlow, 1998; Cullinane & Robertshaw, 1996; Mitchell et al., 2011)

Minimal bureaucracy (Bergantino & Marlow, 1998; C. C. Chung et al., 2007; Cullinane & Robertshaw, 1996; Haralambides & Yang, 2003; Mitchell et al., 2011)

Trading limits (Bergantino & Marlow, 1998; C. C. Chung et al., 2007; Cullinane & Robertshaw, 1996; Haralambides & Yang, 2003; Mitchell et al., 2011)

Trade union considerations (C. C. Chung et al., 2007; Haralambides & Yang, 2003)

Public relation (Bergantino & Marlow, 1998; Haralambides & Yang, 2003)

Ship’s characteristics (Bergantino & Marlow, 1998; Haralambides & Yang, 2003)

Historical (Bergantino & Marlow, 1998)

Another significant work was done by Llacer (2003), where he discusses the impact of shipping companies’ location from political and economic reasons, citing factors of crew cost, 24-hour quality service, simple procedures, freedom to choose crew nationality and a professional and competent shipping administration with an effective shipping policy to be tied to future emerging open registers. Further work has been done by Veenstra and Bergantino (2000), who broke the determinants of flagging out into endogenous and exogenous factors finding that the latter is more influential in flag selection and Winchester and Alderton (2003) compared the regimes of FOC to develop a rating system which allowed comparison of the flag states performance across a range of measures.

Flag selection is evidently a high-level decision usually made on a vessel-by-vessel basis, meaning that ship owners use a mixture of flags for their fleets and is generally based on subjective views and experience. Different companies perceive different factors as being important to their decision on flagging out (Bergantino & Marlow, 1998) and as the global factor increases in the industry with its competitive and demanding nature of rapid, reliable and quality service is it interesting to see that the shipping companies seem to expect and value the same factors when it comes to the level of service of maritime authorities.
There had been the certain belief for decades that flagging out seemed to be mostly tied with the need to enjoy fiscal advantages and low quality standards. Bergantino and Marlow (1998) examined which factors affected flag selection for the UK shipping industry and found that no longer being the case. Figure 9 shows that those companies that flagged out mentioned crew cost as the most common reason, followed by escape of bureaucratic control, high costs of compliance with standards of the national flag, the unavailability of skilled labor and then fiscal reasons.

![Figure 9. Reasons given for choice of flagging out](image)

Source: (Bergantino & Marlow, 1998)

Most of these research publications concur that crew cost is the most crucial factor in the flagging decision, which represents a large portion of total operation costs and can, from a North-European crew double or even quadruple, of those from an international-crew. Hwang and Chung (2005) developed a hierarchical evaluation framework consisting of four different aspects of objects; policy, cost, operation and market. Their findings were in relation to other studies claiming reducing operational cost being the most important objective with the weighted value of 33.5%. Societal and political are influential factors but are more intricate and difficult to assess and differ between researchers.
6 The Tonnage Tax

The trend to flag out along with the constant threat of loosing maritime activities through management relocation to countries outside the EU, lead to a serious loss of employment on- and off-shore. This includes all the relative repercussions, such as the loss of maritime know-how and high value onshore jobs in associated industries, e.g. finance and insurance as well as fewer incentives for Europeans to join the profession. These consequences stimulated European governments to reconsider their shipping policies (Van Der Linden, 2001). State aids provided by individual countries have characterized the world-shipping sector in the past two decades. They are commonly viewed among nations both acceptable and necessary. The tonnage tax regime (TTR) is without a doubt the most popular tax scheme for the maritime sector. Tonnage tax is an alternative to corporation tax. It allows shipping companies to have their taxable profits from shipping activities determined at fixed rates, according to the carrying capacity (tonnage) of the ships in their fleet (Maritime UK, 2012). Meaning, the tonnage tax converts an income tax to a non-income tax by valuing the tax by the ship’s tonnage and the number of days the ship is operated on a year basis. These, rather than the actual profits, are then subject to corporation tax in the normal way, producing a low tax charge that is more competitive in the global shipping markets (European Commission, 2013).

From 2009, 18 out of the 27 Member States of the EU (including Norway) offered tonnage tax systems (Elschner, 2013) and several others countries outside of Europe such as India, South Korea, Japan and USA. The tonnage taxation differs between countries when it comes to the calculating method on how the shipping companies can claim the tax incentives, but how the tax base is determined is usually similar. To qualify for a tonnage tax regime a shipping company must have a certain degree of ownership regarding the vessel. The required degree of ownership differs between the different tonnage tax regimes in each country. Given that taxation is based on tonnage and not profit, taxation levels can be higher than in a classic corporate tax environment if profit is negligible, zero or negative. This plays in favor of low-taxation regimes like Luxembourg (Maritime Watch, 2013). The available data on the effective tax burden is limited but according to Elschner (2013) the income tax equivalent of the tonnage tax regime can be estimated roughly to be one-tenth of the general tax rate. Such an estimate is not very precise but can provide a general impression of the magnitude of
the tonnage tax regime compared with general income tax.

All countries use a degressive scale system because smaller vessels tend to sail with a higher profit margin per ton than larger vessels. Table 3 presents countries within the EU that have taken up the tonnage tax system. It furthermore states the year it was implemented and whether or not the regime claims any limitations on who can claim the tax incentive and what kind of ownership is required.

Table 3. Partnership taxation and availability of tonnage tax in the EU and Norway

<table>
<thead>
<tr>
<th>Country</th>
<th>Introduction of TTR</th>
<th>Amended by the EU</th>
<th>Category</th>
<th>Limitations</th>
<th>Tax incentives for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>1996*</td>
<td>2007 appr.</td>
<td>A</td>
<td>Pass through</td>
<td>All firms</td>
</tr>
<tr>
<td>Denmark</td>
<td>2002*</td>
<td>2004/'05/'07</td>
<td>A(^a)</td>
<td>Pass through</td>
<td>All firms</td>
</tr>
<tr>
<td>Sweden</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Pass through</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Finland</td>
<td>2002*</td>
<td>2011 appr.</td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>The UK</td>
<td>2000*</td>
<td></td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Ireland</td>
<td>2002*</td>
<td></td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Germany</td>
<td>1999*</td>
<td></td>
<td>A</td>
<td>Pass through</td>
<td>All firms</td>
</tr>
<tr>
<td>France</td>
<td>2002*</td>
<td>2004</td>
<td>B</td>
<td>Optional</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Belgium</td>
<td>2002*</td>
<td>2004</td>
<td>B</td>
<td>Like corporations</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Latvia</td>
<td>2002</td>
<td></td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2007</td>
<td>2006</td>
<td>B(^b)</td>
<td>Like corporations</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Estonia</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Like corporations</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Poland</td>
<td>2006</td>
<td>2009</td>
<td>A</td>
<td>Pass through</td>
<td>All firms</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1996*</td>
<td></td>
<td>A</td>
<td>Pass through</td>
<td>All firms</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Pass through</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Pass through</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Pass through</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2005</td>
<td></td>
<td>B</td>
<td>Like corporations</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2008</td>
<td>2009</td>
<td>B</td>
<td>Like corporations</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Romania</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Like corporations</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Portugal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Like corporations</td>
<td>No tonnage tax regime</td>
</tr>
<tr>
<td>Spain</td>
<td>2002*</td>
<td></td>
<td>B</td>
<td>Like corporations</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Italy</td>
<td>2005</td>
<td></td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Greece</td>
<td>1975</td>
<td></td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1963</td>
<td>2010</td>
<td>B</td>
<td>Pass through</td>
<td>Firms subject to CIT</td>
</tr>
</tbody>
</table>

Main source: (Elschner, 2013)

* Source: (“Information from EU institutions,” 2013)
\(^a\) Tonnage tax is granted if a firm or partner is incorporated.
\(^b\) A minimum shareholding is required.
The difference between countries is quite noteworthy when it comes to who is eligible for the taxation benefits. Most of the member states restrict the regime to firms that are subject to corporate income tax (CIT). It is however, not limiting to only corporations. Partnerships and corporations are subject to corporate tax in Greece, Belgium, Bulgaria, Malta, Lithuania, Slovenia and Spain, but not proprietorships. In Norway, Denmark, Germany the Netherlands and Poland the tonnage tax is applied in relation to both corporate and personal income tax but in France, partnerships can be taxed under the corporate income tax (Elschner, 2013). The countries fall therefore, under two different approaches to the tonnage tax regime. Countries in category A allow all firms that operate in their jurisdiction to opt for the tonnage tax and countries in category B provide the tax regime to firms subject to corporate income tax.

The principal aim of the tonnage tax is to create a positive fiscal environment, both to keep shipping companies within the country that offers it and to create an incentive for inward investors, to generate employment, retain skills and contribute to economic growth (Maritime UK, 2012). The tonnage tax regime represents an example of policy integration at the spatial level in the shipping industry where the conflicts that might exist between different levels have been potentially reconciled. Thus, a situations where nation state formulate and implement policy within higher jurisdictional ambitions (Selkou & Roe, 2004).

6.1 The Difference Between the Tonnage Tax Models

The types of tonnage tax system in the EU, is commonly be divided into two groups. The primary model, introduced in 1996 by the Netherlands, is tonnage-based corporation tax and the older model from 1957 that was applied in Greece, consists of the tonnage tax strictly speaking.

<table>
<thead>
<tr>
<th>EU/EEA maritime countries that offer the tonnage tax regime</th>
<th>Norwegian model</th>
<th>Dutch model</th>
<th>Greek model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Norway (EFTA member) • Finland</td>
<td>• Denmark</td>
<td>• France</td>
<td>• Greece</td>
</tr>
<tr>
<td></td>
<td>• Ireland</td>
<td>• Spain</td>
<td>• Cyprus</td>
</tr>
<tr>
<td></td>
<td>• Germany</td>
<td>• Italy</td>
<td>• Malta</td>
</tr>
<tr>
<td></td>
<td>• Netherlands</td>
<td>• Poland</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Belgium</td>
<td>• UK</td>
<td></td>
</tr>
</tbody>
</table>
### Calculation method

<table>
<thead>
<tr>
<th>Norwegian model</th>
<th>Dutch model</th>
<th>Greek model</th>
</tr>
</thead>
</table>
| • Tax calculated at a degressive rate  
  - Norway has 3 degressive size groups  
  - Finland has 4  
  • Based on net tonnage  
  • Tonnage tax is not part of the taxable income. Norway applies environment deduction for qualifying environmental friendly vessels | • Fixed profit calculated using 4 tonnage size groups  
• Based on net tonnage  
• The calculated profit is taxed against the statutory CIT rate, or in case of indiv. entrepreneurs with individual income tax.  
- Belgium has 5 tonnage size groups including a special low rate for qualifying large vessels (<40,000 ton) subject to age conditions | • Taxable tonnage of the vessel calculated based on coefficients using 6 tonnage size groups  
• Coefficients multiplied by taxable gross tonnage  
• Tax calculated by using tax rate that corresponds with the vessels age  
- Cyprus uses 4 size groups and applies 25% deduction for vessels under 10 years of age  
- Additional 30% offered if the vessels management is performed in Cyprus  
• No CIT or dividend tax is levied on shipping profits.  
- Malta uses 8 size groups and applies fixed amount of tax per group + amount of tax for exceeding tonnage |

### Flag requirement

| • EU/EFTA flag requirement | • EU/EEA flag requirement  
  - Germany register requirement instead of flag requirement | • Greece/Malta: Greek/Maltese flagged vessels qualify  
• Cyprus: EU/EEA flag requirement |

### Vessels ownership qualifications

| • Owned vessels  
• Vessels in bareboat charter  
• Vessels in time charter | • Owned vessels (not bareboat chartered out)  
• Vessels in bareboat charter  
• Vessels in time charter (only applicable if additional ownership requirements are met)  
- Denmark: max 80% of the fleet's tonnage on time chartered vessels without purchase options  
- Belgium: and UK max 75% of the fleet's tonnage on time charter | • Greece/Cyprus: vessels registered here (for non Greek flagged vessels, a special regime applies to the operator)  
• Malta: Malta registered, qualifying tonnage tax vessels (>1000 tons, smaller vessels cannot qualify unless having governmental exemption) |

### Ship management companies

| • No possibilities | Only possible to qualify for tonnage tax in:  
• Belgium: commercial management activities for third parties  
• Denmark: performing technical and crew management for another company  
• Germany: tonnage tax can often be used for management activities  
• The Netherlands: performing technical and crew management for another company  
• Poland: under additional conditions | • Greece: not taxed if put under special regime  
• Cyprus: vessel management companies may choose on annual basis to either be taxed under the tonnage tax or have their net profits subjected to corporate tax at the flat rate of 4.24% under conditions |

---

44
<table>
<thead>
<tr>
<th>Capital gains</th>
<th>Norwegian model</th>
<th>Dutch model</th>
<th>Greek model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No capital gains taxes paid as long as profits are not distributed.</td>
<td>• Capital gains are not subject to additional tax</td>
<td>• Capital gains on vessels are not taxed</td>
<td></td>
</tr>
<tr>
<td>• Norway: since 2012 capital gains paid to Norwegian and EEA shareholders are fully tax exempt</td>
<td>• Deferred tax liabilities: valuation at fair market value upon entry into system and claw back rules on hidden reserves realized during lock up period</td>
<td>• No deferred tax liabilities</td>
<td></td>
</tr>
<tr>
<td>- Norway: participation exemption apply to shareholding in companies outside EEA if the company is not regarded as resident in a low-tax jurisdiction and certain ownership conditions are met. Other capital gains and financial income are also taxable at rate of 28% when the company is subject to tonnage tax</td>
<td>• Deferred tax liabilities disappear after the lock up period (10 years)</td>
<td>• Capital gains derived during the lock up period are part of the tonnage tax base. Exceptions are:</td>
<td></td>
</tr>
<tr>
<td>• Norway: no deferred tax liabilities. Finland: tax deferral. Valuation of fixed assets at fair market value upon entry into the system. Taxation of capital gains at normal tax rate under regular taxation rules through indirect gain recognition method. Taxes are paid on a yearly basis, if any. Tax deferral does not disappear after the lock up period</td>
<td>• France: capital gains are subject to regular statutory tax rate</td>
<td>• Poland: capital gains on sale of vessels will be taxed against a flat rate of 15%.</td>
<td></td>
</tr>
<tr>
<td>• Profits that were taxed under the tonnage tax regime are subject to 28% tax if distributed</td>
<td>• UK: no deferred tax liabilities</td>
<td>• UK: no deferred tax liabilities</td>
<td></td>
</tr>
</tbody>
</table>

Figure 10. Comparison between the three main types of tonnage tax systems

Source: (Price Waterhouse Coopers, 2007)

Of the countries that adopted the Dutch model, the UK was first to implement it and later followed by Belgium, Bulgaria, Denmark, France, Germany, India, Ireland, Italy, Japan, Poland, South Africa, South Korea, Spain, Finland, and the USA. The Greek model has on the other hand been taken up by Cyprus and Malta (Maritime UK, 2012). There is also the third model, the Norwegian model, which is used primarily by Norway and Finland (Weintrit & Neumann, 2013).
Weintrit & Neumann (2013) concluded that the providing of only tonnage tax does not seem to be enough to acquire vessels under state flag:

The taxation of income is important expenditure category but not as important as aggregate costs connected to labor expenditure of seafarers. For stimulation of shipping development in a single country the combination of several measures directed to achieving of optimal state aid is essential; the stability of these measures must be guaranteed by legal acts. (p. 202)

The decision for shipping companies to choose the most suitable tonnage tax model, and how and where to locate its shipping activities, is usually based on a combination of the tonnage tax regime, ship financing, freight taxes, wage cost deduction for seafarers and the general tax system. Essentially, the derivation of the decision depends on the circumstances and the activities of the company itself. In an analysis by Selkou and Roe (2004) on the effect of the introduction of the State Aid Guidelines of the EU do they conclude that it appears to have been positive for the shipping industry. European Union member states have been able to adapt to the guidelines with their own national interests and at the same time continued to work within the policy initiatives of the supranational authority.

6.2 The EU and its State Aid Regime

Although state aids provided by many nations was commonly viewed not only necessary but also as a part of the characteristics of the shipping industry. Even the scholar community (Kiriazidis & Tzanidakis, 1995) had observed that the EU shipping sector needed a generous program of fiscal relief to survive the consequences of the unfair international competition, but the EU had a different view in its search for policy harmonization to meet the demands of a free and single market outlined in the Treaty of Rome that caused some intense difficulties. These difficulties presented an interesting example of the introduction of supranational measures in the context of traditional national maritime policies of the EU member states. The tension of these spatial interrelationship conflicts started to relief as the trend of registered ships and seafarers within the EU continuously declined at the end of last century. This evolution finally forced the EU to recognize that some sort of new balance was necessary which emerged in the state-aid package of 1997 (Selkou & Roe, 2004).

The European Commission introduced its first set of state aid guidelines for the shipping sector in 1989 in an attempt to encourage consistency in its policy stand to
member states. This first set of state aid guidelines that proved rather ineffective and had done nothing to relief the tension mentioned before as the flagged fleets of the EU countries continued to decline (Oxford Economics, 2014). This development forced the Commission to change its policy views that led finally to the new guidelines introduced in 1997 where true costs were used to reflect estimated costs rather than some theoretical ones. The EU Commission finally gave recognition to the fact that cost differentials between flags were largely due to fiscal costs in shipping rather than capital costs that were largely the same with all flags (Selkou & Roe, 2004). The scheme was then revised in 2004 and confirmed in 2013 following a public consultation the year before, again with the aim of encouraging a more harmonized approach to supporting the EU shipping sector amongst its member states. As stated in the Guidelines, one of the principle aims considers the following:

Aid schemes should not be conducted at the expense of other Member States’ economies and must be shown not to risk distortion of competition between Member States to an extent contrary to the common interest. State aid must always be restricted to what is necessary to achieve its purpose and be granted in a transparent manner. The cumulative effect of all aid granted by State authorities (including national, regional and local levels) must always be taken into account. (“Information from EU institutions,” 2013, p. 5)

Additionally, the guidelines aim to increase transparency and support the European Union’s maritime interests by clarifying the kinds of state aid schemes that member states may introduce. Generally, any such benefits may only be granted to ships flying the flag of a member state, but aid may also be granted to a non-EU flagged ships that comply with international standards and EU law, which are owned and operated by a company established within the EU. The flat-rate tonnage tax is the main element of the European Union state aid guidelines. Other forms of state operating aid are also permitted, such as reductions in seafarers' social security contributions and income tax exemptions. The main types of aid that can be granted under the guidelines are the following (Oxford Economics, 2014):

- Tonnage tax; a ship owner pays tax linked to the amount of tonnage they operate, regardless of the profit or loss generated. Tax relief is applicable to ship owners, but can also be applied to ship managers under certain circumstances;
- Reduced income tax and social security contribution rates for seafarers employed on board ships
- Aid with the training of seafarers or cadets on board ships; and
• Support with the set-up costs for short-sea shipping between EU member state ports.

The 10 year minimum sign-up period (“Information from EU institutions,” 2013) that the EU enforces is both attributed to ensure some longevity for the arrangement of the tax regime, which is in the mutual interest of both the shipping companies and the national level authorities, but has also been criticized to be to constraining for the shipping companies, which has led to some nations like the Faroese Registry (FAS), which is not a member of the EU or EFTA to offer only 3 year binding time.

The state aid guidelines have been adopted by most of the major maritime countries within the EU over the last two decades (Weintrit & Neumann, 2013). The tonnage tax entered into force very early in Greece (1975) and was progressively extended to the Netherlands in 1996, Norway adopted it in 1996, followed by Germany in 1999, the United Kingdom implemented it in 2000 and two years later, in 2002 Denmark, Spain, Finland, Ireland, Belgium and France also decided to adopt it (“Information from EU institutions,” 2013). Known maritime EU member states that have yet to adopt them are Sweden, which reported "political problems", Portugal that benefits from its association with the Madeira register and Luxembourg, where owners already enjoy low corporate tax rates (Maritime Watch, 2013).

The state aid measures in the maritime sector have safeguarded high quality employment in the onshore shipping industry, as in management directly related to shipping and associated activities, e.g. insurance, brokerage and finance. Additionally, safeguarding quality employment and stimulating a competitive shipping industry established in an EU Member State through fiscal incentives, as well as training and enhancement of safety incentives, will in the European Commissions opinion facilitate the development of EU shipping industry in the global market (“Information from EU institutions,” 2013).

6.2.1 The Shipping Industry in the Absence of State Aid: Alternative Scenario

The report of the Oxford Economics (2014) mentioned above, also conducted an analysis by comparing the estimates of the economic impact of the EU maritime industry with a counterfactual scenario in which the shipping companies would not have been subjected to a tonnage tax, but to the previous traditional tax regimes. This analysis should, however, are only portrayed for purely illustrative purposes. It is
extremely difficult to assert with absolute certainty the development in the absence of state aid measures, but it presents a more elaborate understanding of the effect of the tonnage tax regime. The following figures present the development of the controlled fleet of Denmark and the UK whereas the analysis did not present independent figures for Norway. The development of the Swedish fleet will also be presented in comparison, since Sweden is one of the few EU state members that have not opted for the tonnage tax regime.

![Graph showing the development of the controlled fleet of Denmark from 1994 to 2012](image)

**Figure 11. Denmark controlled fleet 1994-2012**

Source: ISL Bremen; counter-factual scenario estimated by Oxford Economics

Denmark introduced its tonnage tax regime in 2002 and went through several significant amendments in the following years (2004, 2005 and 2007). The increase in the Danish controlled fleet came slower than anticipated. It was not until later, or after the first amendment in 2005, that the fleet stopped declining and started to increase. The Danish controlled fleet has since continued to record strong growth since 2006 (Oxford Economics, 2014).
The UK controlled fleet had been battling rapid decline during the 80s and 90s and by the millennium the fleet had been reduced to just one fifth of its size two decades earlier. After the introduction of the state aid the fleet started to return to its former size and by 2012 it had more than tripled in size. For the alternative scenario it is estimated that the former steep decline of the controlled fleet would have continued in the absence of the tonnage tax. The evolvement would have resulted in 85% smaller fleet than was recorded in reality. This implies that around €5 billion lower direct contribution to UK GDP from the shipping industry (Oxford Economics, 2014).

Figure 12. UK controlled fleet 1994-2012
Source: UK Chamber of Shipping, Oxford Economics
Figure 13. Sweden controlled fleet 1994-2012
Source: UNCTAD, Oxford Economics 2013

Sweden, unlike the other EU countries has not introduced the tonnage tax. However, in 2001, they introduced a system of social security and income tax incentives for Swedish flagged ships. The fleet had a rapid decline in the 80s but has been relatively stabled and flat since, except for a considerable volatility in the late 90s. The difference between the fleet expansion after the introduction of the tonnage tax regime in Demark and the UK compared to the relatively flat-lined status in Sweden is apparent. Especially given the fact that the world fleet has also grown over the last ten years (Oxford Economics, 2014).
7 The Icelandic Shipping Industry

Iceland is highly dependent on its imports and exports because of its location in the North Atlantic Ocean between Europe and North America. Around 99% of all its imports and exports of goods and materials to and from the country are carried via maritime transports. This has resulted in the development of highly efficient transportation systems in Iceland with forwarding networks overseas, and logistics know-how on a par with the best among the industrialized countries (Iceland Trade Directory, n.d.).

Liner and coastal services are operated to the major ports of Europe and North America and are all fully containerized. Both foreign and domestic owned vessels carry bulk imports and exports, as well as imports of oil. The average transport time between Reykjavík and the major ports in Europe is around 4-5 days and 9-10 days to North America (Eimskip, n.d.-b). There are 57 ports in Iceland operated for ocean-going vessels that are ice-free all year-round. The majority of the ports were however built for fishing vessels but 16 of them, although being categorized as large fishing harbors, have substantial or even mainly cargo activity (Samband íslenskra sveitarfélaga, 2011). Large harbors handling ships up to 40,000 dwt. are in operation at three developed industrial sites and deep-water harbors can be extended or constructed at competitive cost to suit larger industry (Iceland Trade Directory, n.d.). Reykjavík is Iceland’s principal seaport, with facilities for handling all types of cargo and a comprehensive range of maritime support services as well as receiving more than 70% of all imports to Iceland. Cargo handling is conducted at the Sundahöfn harbor complex, east of the city center (Faxaflóahafnir, 2013). Direct scheduled sailings to Europe are also operated from three other main ports in the Western, Northern and Eastern regions of the country. The Icelandic Maritime Administration executes all port state control and vessel inspections in Iceland. The Administration operates under the authority of the Icelandic Ministry of Transportation and is obligated to inspect foreign vessels that come ashore at Icelandic ports according to the Paris Memorandum of Understanding on Port State Control (MOU) and obligations under the provisions of the EEA Agreement (Einar B. Axelsson, 2011).

Iceland has two registers, a primary one, the Icelandic Domestic Ship Register and a secondary one, the Icelandic International Ship Registry. The secondary registry has never been officially applied since no ship has ever registered under it. According to the
Act on Registration of Ships No. 115/1985, is it obligatory to register all ships under the Icelandic domestic ship register that are more than six meters in length. The Ships that can be registered under the Icelandic domestic ship register, and as such sail under the Icelandic flag, are those that are owned by:

- Icelandic citizens with legal residence in Iceland
- Icelandic legal entities with residence in Iceland
- Citizens of other states within the European Economic Area (EEA)
- Citizens within the European Free Trade Association (EFTA)
- Citizens of the Faroe Islands.

Special registration rules apply to ships intended for fisheries. Icelandic Maritime Administration carries out all registration.

7.1 The Main Shipping Companies in Iceland

An introduction of the Icelandic shipping industry cannot be made without a brief overview of the main shipping companies that operate in Iceland, as they are inherent to the history of its evolution.

7.1.1 Eimskip

Eimskipafélag Íslands (The Icelandic Steamship Company) was founded in 1914, making it the oldest shipping company in Iceland. Although starting out as Shareholding Company, being owned by most of the Icelandic households, is it today a subsidiary of Burðarás, a holding company. Eimskip having been the first shipping line in Iceland has evolved through the years from being a shipping line to a total transportation and logistics company. Eimskip has always emphasized on maritime transport to and from Iceland, and offers today total transport solutions around the world. The company has offices in 19 countries worldwide, as well as agents in other strategic locations (Eimskip, n.d.-a). As illustrated in

| Reykjafoß | Gibraltar |
| Dettifoss | Antigua & Barbuda |
| Selfoss | Antigua & Barbuda |
| Lagarfoß | Antigua & Barbuda |
| Goðafoss | Antigua & Barbuda |
| Brúarfoss | Antigua & Barbuda |
| Skógafoß | Antigua & Barbuda |
| Laxfoss | Antigua & Barbuda |
| Holmfoß | Antigua & Barbuda |
| Vidfoss | Antigua & Barbuda |
| Stigfoss | Antigua & Barbuda |
| Langfoss | Antigua & Barbuda |
| Svartifoss | Antigua & Barbuda |
| Polfoss | Antigua & Barbuda |
| Herjólfur | Iceland* |

Figure 14. Countries where Eimskip’s vessels are registered

* Ferry/Passenger vessels sailing within the Icelandic coastline
the table on the right, there are no vessels of Eimskip registered in Iceland except for
the ferry Herjólfur. It sails regularly according to schedule to and from Vestmannaeyjar.
Eimskip was the last Icelandic shipping company to have its entire fleet sailing
international routes, registered under foreign flag. In 2006 the company moved its entire
crew management and wages scheme to the Faroe Islands (“Eimskip skráir skip sin í
Færøyjum,” 2006).

7.1.2 Samskip

Samskip is one of the two leading companies of
transport and logistics services in Iceland.
Samskip headquarters resides in the Netherlands
but was founded originally in Iceland in 1990.
Samskip operates a very extensive multimodal
container logistics system in Europe, with services
throughout the Continent and connections
worldwide. The company has an annual turnover
of around Euro 560 million, making Samskip one
of the larger European transport companies, with
offices based in 24 countries within Europe, North
and South America, Asia and Australia (Samskip,
n.d.). All of Samskips vessels are registered under
a foreign flag except the passenger ferry Sæafari that offers scheduled sailing to and from
Hrísey and Grímsey.

7.1.3 Nesskip

Nesskip is Iceland’s third-largest shipping line in Iceland, founded in 1974 by a
group of individuals. Its main activity is bulk shipping. In addition, Nesskip provides a
vast range of maritime support services. In 2006 a long time cooperation partner of
Nesskip, the Norwegian shipping company Wilson EuroCarriers, became a majority
shareholder in the company. Following the Wilson ownership, the Nesskip fleet was
fully integrated into the Wilson fleet that consists of over one hundred ships (Nesskip,
n.d.). Most of Nesskips vessels are registered in the Barbados, Malta, Cyprus and
Antigua & Barbuda (Wilson, n.d.). The merger did not lead to any vessels being moved
from the Icelandic registry as Nesskip had registered its fleet under foreign flags years

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Registry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnarfell</td>
<td>Faroe Islands (FAS)</td>
</tr>
<tr>
<td>Helgafell</td>
<td>Faroe Islands (FAS)</td>
</tr>
<tr>
<td>Akrafell</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Pioneer Bay</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Sæafari</td>
<td>Iceland</td>
</tr>
<tr>
<td>Endeavour</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Innovator</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Courier</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Express</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Doris Schepers</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Spica J</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Veritas H</td>
<td>Antigua &amp; Barbuda</td>
</tr>
<tr>
<td>Canopus J</td>
<td>Marshall Islands</td>
</tr>
</tbody>
</table>

Figure 15. Countries where Samskip's vessels are registered
* Ferry/Passenger vessels sailing within the Icelandic coastline
before.

7.1.4 Fáfnir Offshore

Two years ago the first Icelandic offshore company was founded, called Fáfnir Offshore. The company specializes in operations in the arctic waters and aims in the next few years to establish a fleet of specialized vessels built for harsh conditions. They are fully equipped to service oil and gas operations in the challenging environments of the high north. Last September, the company received a state-of-the art PSV vessel named Polarsyssel. It is the most expensive ship to have been ever made in Icelandic history, costing over 7 billion Icelandic kronurs. The company has already placed an order for a second vessel, a Hybrid-PSV 833 WE ICE that will be delivered in 2015 and has an option for the third and it’s delivery later that year (Fafnir Offshore, n.d.). Fáfnir Offshore has already secured a six-year contract with the Governor of Svalbard and the vessel was specially modified for that assignment. The vessel will serve in Svalbard for 6 consecutive months every year for the next six years.

7.2 Icelandic Vessels and their Crew

In the 80’s, the decline of registered ships started to emerge and continued to decline rapidly throughout the 90’s. From 1987 to 1994, registered merchant vessels went from 50 down to 24 (Jóhann Guðmundsson, Unnur Sverrisdóttir, Benedikt Valsson, Ingvi Már Pálsson, & Helgi Jóhannesson, 2004). In 2004 the last registered ship, Keilir, was moved to the Faroese register (FAS) leaving the country without any flagged merchant ship. The same shift was noticed in the work force of the merchant vessels. In 1988, 425 crewmembers were of Icelandic nationality, accounting for 85% of the work force on board the vessels. However, four years later that proportion had gone down to 73% or 340 Icelandic seafarers (Halldór Blöndal, 1991), which means that foreign crew has increased at the expense of the Icelandic seafarers. What is more, the development of the design of the ships increased in size to optimize crews and leading to the decrease in seafarers per ship faster than before. The average age of Icelandic captains has in addition risen every year and in 2004 when age groups are divided between the 99 Icelandic seafarers in officer position, is as follows:

- 4 were within the age range of 20-29 years,
12 in the age range of 30-39
31 in the age range of 40-49
44 in the age range of 50-59
8 in the age range of 60 and older. (Jóhann Guðmundsson et al., 2004, p. 4)

It is therefore logical to conclude that within the next 17 years, over half of the seafarers will leave the industry due to seniority.

7.3 Negative Impact of a Declining National Fleet and Seafarers

This development of flagging-out from the Icelandic register has lead to a significant decline in the number of Icelandic seafarers. The consequence of losing vital knowledge within the Icelandic maritime industry must be alarming for an island-based nation located in the middle of the North-Atlantic. This knowledge is not only important in ensuring the transportation of goods and material to and from the country but essential as well from pollution standpoint, to protect e.g. spawning areas, eider duck down harvesting, exploitable marine stock and fish rearing within the shores of Iceland. It is also crucial for seafarers to be familiar with the conditions close to the shores of Iceland and to make them better prepared to react to imminent danger when transporting oil. This aspect is even more crucial after the Icelandic government decided to explore and produce oil and gas in the deep waters of Iceland, in an area called Dreka svæðið (Dragon Area). It is part of a micro-continent located between Iceland and the Norwegian island of Jan Mayen (Orkustofnun, n.d.), located east and northeast of Iceland. The Icelandic National Energy Authority (NEA) has recently granted the third application in the second licensing round (Askja Energy, 2013). All petroleum actives can increase the possibility of pollution, which could lead to devastating ramifications for the biosphere surrounding Iceland. Transportation of oil from the production area is a source of pollution and other environmentally damaging effects that must be kept in mind. In a report conducted by the Ministry of Industry on the exploration of oil and gas in the Dreki area (2007), the importance of experience and knowledge of the companies engaged in oil exploration and production is emphasized and noted that it shall be utilized as much as possible. This can easily be transferred to the employees who store and transport the oil and gas from the production site to the coasts of Iceland. The importance of the transport to be conducted by Icelandic seafarers with their knowledge of the territory surrounding Iceland is inherently vital. In an recent interview with the managing director of the field of operations within the Coast Guard (Svavar
Hávarðarsson, 2014). He stated that the biggest concern of the Coast Guard was the increased risk of disaster caused by international ship officers, sailing with foreign crew close to the country, who do not seem to be equipped for their position or possess necessary knowledge of navigation. He cited both older and more recent accidents of cargo vessels such as the Icelandic owned vessel Akrafjall stranded after the navigating officer fell asleep. The stranding of Wilson Muga and the cargo ship Fernanda, resulted in both ships catching fire and burning down. In the case of Fernanda was it apparent that the foreign crew had little notion on how to respond correctly to the fire, unlike the training of Icelandic seafarers and accomplishes due to their training.

The inadequacy of foreign seafarers sailing near to the coast of Iceland is not the only matter that warranties concern. The decline in numbers of Icelandic seafarers leads inevitably to the development that fewer students apply for Stýrimannaskólinn (School of Steersmen) and Skipstjórnarskólinn (School of Navigation), especially since it is a pre-requisite to have served on board prior to commencing academic studies. Gradually, this evolvement will lead to the extinction of Icelandic seafarers within the next decades if nothing changes. That would result in all ships sailing to and from Iceland to be manned exclusively by international crews, who will spend their wages in their home country, causing the multiplier effect to occur there instead.

It should also be mentioned that all chartered vessels within the Icelandic shipping companies come with a stipulation stating that during times of warfare the shipping companies lose the charted vessels to the country of ownership. It is of no concern to the leaseholder, but it could result in Iceland having no ships to transport essential goods and materials to or from the country. That is however one of several reasons why most countries consider it vital to have their own fleet, to have vessels at their own disposal during warfare. Iceland being an island located far in the Atlantic Ocean, and therefore completely dependent on transports of goods by ships, would be considered a necessity by many to have a fleet flying its flag. Few decades ago did the Icelandic Government, in its demands to be in charge of the maritime transport for the US military stationed in Iceland, use that opinion as an argument. The reasoning being that Iceland was an island and needed therefore its fleet to be strengthened (Guðmundur Hallvarðsson, 2003a).
7.4 The Prelude to the Introduction of the Icelandic International Registry

Iceland being an island in the middle of the North Atlantic depends on 99% of its import and export of goods and material being carried via shipping, as mentioned above. It is therefore inherent to its survival and independence to have a national fleet to rely on, as well as trained and experienced seafarers. The reality is, however, that today Iceland has no ships sailing under its flags internationally, despite its reliance on international transports by sea and having strong and solid Icelandic shipping companies possessing large number of vessels sailing from Icelandic harbors to most major ports in the world. Coincidently, the decline in employment of Icelandic seafarers has decreased immensely and job opportunities for newly graduated cadets become scarce. Despite of this downturn in the industry in the past three decades the response of the Icelandic government has been characterized by lack of direction and apathy.

After witnessing the regression in the Icelandic fleet, two members of Parliament proposed in 1993 a resolution about an Icelandic International Registry. The resolution suggested that the international registry should be designed in consideration of the Danish registry and that the legislator would prepare necessary steps towards tax amendments (Steingrimur J. Sigfusson, 1993). It could not be overlooked that a similar shift was occurring in the fleet of the other Nordic countries but they had already taken up some sort of measures in an effort to revert the situation. The resolution was, however, passed to the Committee of Transportation where it came to a halt, which was not too surprising considering that the Minister of Transport had appointed a committee to cover the matter two years prior and had still yet to come to any conclusions (Halldór Blöndal, 1992). Discussions amongst Members of Parliament at that time where characterized by relative ignorance and political quibble (“Ræður í mál í undir dagskrárlíð,” 1993). No progress was made until several years later, in 1998, when another committee turned in its findings concerning the industry. The committee proposed an introduction of a bill on an Icelandic International Registry. Another proposal from the committee was on the stamp duty that was levied on the industry, a matter that the shipping companies had tried to have the Parliament address for years. It was proposed to give merchant vessels exemptions for the stamp duty on deeds and encumbrance. Parliament accepted that exemption stating it would make the Icelandic Registry more appealing to the shipping companies. The industry welcomed the abolishment of the stamp duty (Þingskjal 462, 1998) but that step was not nearly
enough to reverse the abandonment of the Icelandic Registry. As the committee had suggested and Pétur H. Blöndal (1996), a Parliament Member, pointed out in his speech during Parliamentary discussions:

I don’t believe that amending the stamp duty alone is enough. We need to adjust the environment of the shipping companies in other perspectives as well . . . concerning taxation and various governmental obligations that are considerable. First then, can Icelandic companies start to compete with foreign ones and pay the salaries that we want to see for our countrymen. (para. 5)

It should have been apparent to Members of Parliament that this single measure was nowhere near to be sufficient in reverting the inclination of the Register, but no ships flocked to enter the Icelandic Register after the amendment. Two years later, in 2000, no progress had been made in the matter of establishing an International Registry. A bill was proposed to Parliament to rectify a previous error of the legislator by extending the authority to register merchant ships to the Icelandic Ship Registry by allowing chartered vessels to be registered. In the original legislation, the registry of a charted vessel was allowed but by mistake (Þingjárlit 118, 2000) was that provision expunged with the 24. Article, Act nr. 23/1991 relating foreign investments. During Parliamentary discussions was it noted once more that the matter of making the Icelandic Register more attractive to the shipping companies had been under consideration for quite some time, but without any conclusion (Sturla Böðvarsson, 2000a). The committees results from 1998 were still under consideration without any outcome (Sturla Böðvarsson, 2000b). Still the Minister of Transport emphasized “that the main purpose of the bill was [however] to enforce the position of the Icelandic shipping companies in the harsh international competition they were facing” (Sturla Böðvarsson, 2000a, para. 1).

In 2004 when the last ship, Keilir, was removed from the Icelandic Registry, influential parties came together and pressed for action. These influential parties had formed a committee comprising of representatives from Farmanna- og fiskimanna-sambandi Íslands (Icelandic Ship Officers Association), Félagi íslenskra skipstjórnarmanna (Union of Icelandic Marine Commanders), Nemendafélagi Vélskóla Íslands (Student Council of Marine Engineers), Sjómannafélagi Reykjavíkur (The Icelandic Union of Seafarers) and Vélstjórafélagi Íslands (The Icelandic Union of Marine Engineers and Metal Technicians). The committee came to a resolution that was presented to the Icelandic Government and the Committee of Transport stating:

The above mentioned organizations of employers and seamen’s have for years been concerned about the isolation that Iceland has headed into in the area of commerce,
sailing and knowledge of that branch of the economy. They are therefore of one
mind in challenging the Icelandic Government to make the necessary arrangements
to create Icelandic shipping companies equality within the international environment
they work. (Jóhann Guðmundsson et al., 2004, p. 3)

It lead to the formation of a committee that was assigned to review how taxation and
other legislations concerning merchant shipping could be changed so that Icelandic
shipping companies would find it favorable to flag their ships under the Icelandic Flag,
with Icelandic crew (Þingiskjal 756, 2003). The committee turned in its review at the
end of the year 2004, concluding that if the requests of the industry should be
considered a significantly large step it would have to be implemented to make the
Icelandic Registry competitive to its neighboring registries. The reason being the
current position of the Icelandic shipping industry was at its lowest (Jóhann
Guðmundsson et al., 2004). The committee also pointed out that the argument presented
by the Government for the fiscal taxation to be lowered (earlier that year) and could also
be important for the shipping industry, the ships being just as mobile as fiscal capital. In
addition, it concluded that for the Icelandic shipping industry to become competitive on
international bases, an International Registry had to be introduced. It stated further that
the effect of introducing an International Registry would be indeterminate for the
industry but it was clear that such a registry all by itself would accomplish nothing in
reversing the flagging out trend. It would have to be accompanied by some sort of state
aid, which needed to be well though out and implemented, if it were to have desired the
effect and become competitive against other international registries.

After these findings were introduced to the Parliament, it was apparent that the
Minister of Finance at the time was not interested in supporting the Icelandic shipping
industry. The Minister of Finance argued that the purpose of effective international
registries in neighboring countries was foremost to promote the shipping companies as
an industry in the respective country. In other words, acquiring as many vessels to the
registries without any concern to it’s manning (Geir H. Haarde, 2004). This argument
by the Minister was in no consistency of what the neighboring countries at the time
were representing in these matters. They had on the contrary gone to great lengths to
tailor their legislation and/or state aid regime to reverse the decline in domestic
seafarers employment within the shipping industry (e.g. the UK, Denmark, Norway,
Faroe Islands and other EU countries). During Parliamentary discussions, several
Members of Parliament stated that the Government was obviously not concerned or
interested in this matter. One Member of Parliament (Jóhann Ársælsson, 2004) stated in
his discussion that conflict existed between the Ministers of Transport and Finance and it seemed that only the former was actually interested in implementing changes concerning the matter. Another Member (Steingrimur J. Sigfusson, 2004) mentioned internal conflict within the Independent Party (Sjálfstæðisflokkurinn). The issue fell under the Minister of Transportation and Minister of Finance, both of whom were members of the Independent Party. If they were interested exerting themselves in the matter, taking action would have been relatively easy. Despite the Governments emphasis on the matter in 1998, and as the committee stated, led by the Prime Minister of Finance and the Ministry of Transportation:

That most ships under Icelandic operation should sail under the Icelandic flag,

. . . that the employment, knowledge and education of Icelandic seafarers should be guarded,

. . . that the Governments revenues from shipping and indirect industries, such as maintenance and finance should grow to become as great as possible in relation to competitiveness. (Guðjón A. Kristjánsson, 2004, para. 2)

In the following years no progress was made in the matter of the Icelandic shipping industry and its lack of fleet sailing under the Icelandic flag.

In March of 2007 a bill introducing an International Icelandic Ship Registry (IIS) was proposed, followed by another bill on tonnage tax scheme and a special refund scheme for ship-owners who would be entitled to claim a refund for income tax paid on seafarers’ wages. Although its main purpose was to encourage Icelandic vessels to register, it was also intended to attract foreign vessels to register under the Icelandic flag. The bill was ambitiously designed for the registry and it was constructed to be a highly competitive one against the best international registers available. As the Minister of Transport stated at the bills proposal:

The competition is fierce and the shipping companies opt for registries that offer the most attractive cost conditions and the best service provided for the companies. It calls for good practice to get the shipping companies to move their vessels under the Icelandic flag. (Sturla Böðvarsson, 2006a, para. 13)

At the time no merchant ships were registered under the Icelandic flag, and hadn’t been for years. That meant no income in the form of taxes or otherwise, neither direct nor indirect, were turning in to the state from the industry or derivative industries. As a result, the Government had not much to loose and everything to gain by introducing the IIS registry. Not all Members of Parliament embraced the bill as it was introduced and paragraph 4 of Article 11 underwent hard scrutiny:
The crew’s wages are determined by the collective agreement of the unions and the maritime owner association that are effective within the respective country of which the crewmember has legal residence. Moreover, the collective agreements apply only to members of the particular union, and legal citizens of that state, that the union has legal residence, as they are not members of other unions that comply to other collective agreements. (Þingskjal 1013, 2006, Article 11, para. 4)

A Member of Parliament referred to the trend of flagging out, where Icelandic shipping companies were sailing their ships under foreign flags because the crew cost was lower. The shipping companies believed that the Icelandic register limited their competitive options, due to the considerable higher cost of salaries and social security of their crewmembers. A Parliamentary Member considered this to be a misunderstanding. He felt that the environment should be made more competitive without discrimination of paying Icelandic crew wages that were determined by Icelandic union agreements and the foreign crew by international wages (Jón Bjarnason, 2006). He was furthermore worried that the clause gave the shipping companies leeway to negotiate directly with the foreign crewmember if he was not a member of a union and thereby determine their wages more favorable for the company. That scenario is, however, not particularly of much concern whereas the International Transport Workers' Federation (ITF), an international trade union federation of transport workers' unions, oversees ships and its crew management in Europe. The ITF represents the interests of maritime transport workers' unions and monitors inspections on board as well as protecting the international workers minimum wage according to the ITF agreement. If a shipping company tries to bypass the minimum wage agreement, that ship would suffer harassment in every port in Europe. The European Community Ship owners’ Association (ECSA) negotiates a collective agreement with the ITF and any agreement is entrenched into EU Directive. Therefore, giving it legal force across Europe, even in ports where member states have not individually ratified it (ITF Seafarers, 2007).

The Minister of Transport warned that the bill should not be transmuted or overly altered:

The legislation has to regard the regulations in our neighboring countries both concerning aspects facing the 11th Article as well as others . . . we cannot design them so that no ship will be registered here. . . . If we are going to construct a legislation that contradicts what other neighboring countries are offering than the outcome will very likely be that nothing will be accomplished. (Sturla Böövarsson, 2006b, para. 1)
The bill was sent to a committee for review that consisted of two members of the Ministry of Transport and a member of the Icelandic Maritime Administration. The committee met with influential parties to discuss the bill to get their opinion on the matter. The result was that the committee presented its opinion on the bill stating its approval but only if the fourth paragraph of the 11th Article would be omitted. As mentioned previously, the 11th Article caused dispute and was omitted mostly on demand from Alþýðusamband Íslands (Icelandic Federation of Iceland) (Kristján L. Möller, 2006). They were completely against the passing of the Article (Alþýðusamband Íslands, 2006). Eventually, the bill was past into law by Parliament on the 17th of March in 2007, and was supposed to enter into force in January of 2008 but was however, postponed until January 2009, due to lack of preparation concerning the legislation. When the Act finally entered into force, 5 years had passed since the last merchant ship was flagged from the Icelandic Register.

In December 2011 the legislation relating to the special refund scheme for shipowners was abolished. The EFTA Surveillance Authority considered the scheme relating to maritime transport in the form of a tonnage tax scheme and a refund scheme for the employment of seafarers to be incompatible with the state aid rules of the EEA Agreement. The Icelandic Government decided not to take any further action concerning the ruling and complied with the findings by abolishing the Act on the grounds that the main objective of making the Icelandic International Ship Registry attractive for the shipping companies had not been accomplished since no vessels had been registered since the implementation of the International Registry (Bingskjal 200, 2011).

7.4.1 Vital attributes of the Icelandic International Ship Registry

There were some additional particulars that appeared in the Parliamentary discussion worthy of mentioning that has not been given attention. Apparently, a certain opinion had come up during the Committees meetings with the influential parties that the tax related benefits were not as great in the actual cost, as it appeared in the bill. The taxation benefits were not only lower than in the countries where the Icelandic owned vessels were registered, but that the shipping companies had in addition already put in considerable cost concerning registration in respective countries. Therefore, the Icelandic International Ship Registry would have to be extremely attractive if the ships were to return (Anna K. Gunnarsóttir, 2006). As previously stated, the bill for the
International Registry is one of the major aims to make the registry perfectly comparable to the most popular foreign registers available and that cost concerning registration has to be minimal so that the registration fees are considered competitive to other registries (Pingskjal 1013, 2006). This entails considering all the strongest qualities of other registries and tailoring the Icelandic one in relation to what is offered elsewhere. Influential parties have already stipulated the main factors of making the registry competitive, is the inclusion of state aid as offered by most other EEA registries and the flexibility of combining international crew (lower costing crew) with a domestic one (Fylgiskjal Oliudreifingu, 2003). Moreover, the immense importance of the Authoritative service has been brought forward, and further stated in the commentary section of the bill for the introduction of an Icelandic International Registry (Pingskjal 1013, 2006). The registration has to be flexible, simple, user-friendly and completely devoid of bureaucracy. At the same time, it needs to be reliable, efficient, trustworthy and off of the highest quality. The level of service is also required to be extremely high and the Maritime Authority has to be ready to service the shipping companies outside of regular business hours, or 24 hours a day, every day. In order for the registry to be successful, these attributes are inherently vital to be not only considered but also incorporated.

7.5 The European Free Trade Association

As mentioned before, Iceland is one of four a members of The European Free Trade Association (EFTA), an intergovernmental organization set up for the promotion of free trade and economic integration to the benefit of its Member States. Furthermore, the European Economic Area (EEA) Agreement enables three of the four EFTA Member States (Iceland, Liechtenstein and Norway) to participate in the EU’s Internal Market (EFTA, 2014). The EEA consists of the Member States of the EU and the three EFTA States previously mentioned. All new relevant EU legislation is also introduced through the EEA Agreement. The agreements objective is to guarantee equal conditions of competition, and equal rights to participate in the internal market for citizens and economic operators in the EEA. The EFTA Surveillance Authority ensures that the EFTA States respect their obligations under the EEA Agreement by monitoring and enforcing the Agreement, but the Authority has powers that correspond to those of the EU Commission, including enforcing restrictions on state aid (EFTA Surveillance Authority, n.d.).
The Icelandic authorities notified the EFTA Surveillance Authority of their planned aid to the maritime transport sector by letter on 23rd of March in 2007. It was the Authorities conclusion that the introduction of a tonnage tax scheme and the special refund scheme for ship-owners, was incompatible with the functioning of the EEA Agreement within the meaning of Article 61 of the EEA Agreement (Þingskjal 200, 2011). The Authorities objections concerned in particular the following aspects (EFTA surveillance authority No: 303/09/COL decision);

Requirements of registration of vessels in the IIS. Resulting in exclusion from the tax scheme operations of ships registered in other EEA States. A ship-owner with full tax liability in Iceland and merchant vessels registered in another EEA State will be subject to a less favorable tax treatment than a ship-owner with full tax liability in Iceland and its merchant vessels registered in the IIS. The difference in treatment constitutes a restriction on the right of establishment as it deters ship-owners from having ships registered in other EEA States.

Treatment of ship-management companies. Since the Icelandic authorities did not provide the Authority with any information eradicating the doubt it had raised, the Authority did not consider it necessary to analyze this issue in detail

The Icelandic authorities had not submitted a written definition of the notion of seafarer Although they confirmed that nationality is not a requirement, nor the residence of the seafarer, rendering the scheme to benefit seafarers from third country nationals.

Duration of the period for which the ship-owner has to stay within the tonnage tax scheme. The IIS registry offers 3 years when it should be taken into view that a 10 year period should apply within the EFTA States.

Establishment of the tax base. The Icelandic scheme would have operated with a tax base considerably lower than in the other EEA States as can be seen in Figure.
Figure 16. Establishment of tax base in several EEA States.

<table>
<thead>
<tr>
<th>ICELAND</th>
<th>DENMARK</th>
<th>LITHUANIA</th>
<th>ITALY</th>
<th>NORWAY*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Every amount until 25 000 NT</strong></td>
<td>Until 1000 NT</td>
<td>Until 1000 NT</td>
<td>Until 1000 NT</td>
<td>No tax for the first 1000 NT</td>
</tr>
<tr>
<td>ISK 30 (EUR 0,17) per 100 NT</td>
<td>EUR 0,90 per 100 NT</td>
<td>EUR 0,93 per 100 NT</td>
<td>EUR 0,90 per 100 NT</td>
<td></td>
</tr>
<tr>
<td>From 1001 NT until 10 000 NT</td>
<td>EUR 0,70 per 100 NT</td>
<td>EUR 0,67 per 100 NT</td>
<td>EUR 0,70 per 100 NT</td>
<td>EUR 0,22 per 100 NT</td>
</tr>
<tr>
<td>From 10 001 NT until 25 000 NT</td>
<td>EUR 0,40 per 100 NT</td>
<td>EUR 0,43 per 100 NT</td>
<td>EUR 0,40 per 100 NT</td>
<td>EUR 0,15 per 100 NT</td>
</tr>
<tr>
<td><strong>More than 25 000 NT</strong></td>
<td>More than 25 000 NT</td>
<td>More than 25 000 NT</td>
<td>More than 25 000 NT</td>
<td>More than 25 000 NT</td>
</tr>
<tr>
<td>10 ISK (EUR 0,06) per 100 NT</td>
<td>EUR 0,30 per 100 NT</td>
<td>EUR 0,27 per 100 NT</td>
<td>EUR 0,20 per 100 NT</td>
<td>EUR 0,07 per 100 NT</td>
</tr>
</tbody>
</table>

* In Norway the tonnage tax is calculated directly by multiplying the tax rates with the actual tonnage, unlike the notional profit. The rates for Iceland, Denmark, Lithuania and Italy are notional profits rates to which the domestic standard corporate tax is then applied. Although the rates of Iceland and Norway appear to be similar are they not. Thus, as an example, a ship owner with a tonnage of 30,000 NT would pay a tonnage tax of approximately €46 in Norway and of approximately €7 in Iceland.

The Authority’s Decision to initiate the procedure in respect of the state aid to maritime transport in Iceland was published in the Official Journal of the European Union and the EEA Supplement thereto. The Authority called on interested parties to submit their comments thereon but the Authority received no comments from interested parties (EFTA surveillance authority No: 303/09/COL decision, 2009). As mentioned above, the Icelandic authorities decided to comply with this decision by abolishing the Act on the state aid to maritime transport in the form of a tonnage tax and a refund scheme for the employment of seafarers.
7.6 Future Prospects within the Offshore Sector in Iceland

The discovery of recoverable quantity of oil and gas on the Jan Mayen Ridge could have a strong economic impact on the Icelandic economy. Possibilities of indirect, or supply chain, impacts of the oil industry could become immense. Countries generally stipulate that the transport of goods and services for hydrocarbon exploitation should take place directly from the host country (Sagex, n.d.), in this case Iceland. Onshore and offshore services can therefore become quite extensive and include the management of a service center onshore, scheduled delivery of consumables, transport services and labor. Supply services are needed for drilling operations such as drill pipes, tubulars, cement, chemicals and other constituents for mixing of mud, fuel, operational supplies, spares parts, personnel for the rig-operations that need to be transported when taking onshore vacation (normal rig-crew is 60-80 persons), consumables for the personnel and in addition, oil spill contingency equipment is needed (Ministry of Industry, 2007). The numerous needs during exploration drilling operations are normally served through supply services located at an existing harbor and helicopter-operations based at an existing airport, but a drilling rig operation is normally served by both a supply vessel and a helicopter. If the exploration leads to the processing stage it might even be necessary to build a new harbor with service center (Sagex, n.d.). Due to rising global demand for oil and gas in the world today, the global offshore oil and gas industry has been growing tremendously and the perpetually increasing cost of oil and gas prices holds great promise for the industry in coming years. Offshore ships are marine vessels that are specially designed to support the offshore oil and gas industry as mentioned in Chapter 1.1.6. This is a relatively young sector in the industry that forms the primary mode of transportation for carrying goods and workforce to oil stations.

Activity levels on the Norwegian Continental Shelf (NCS) and the High North being so high, has enabled the Norwegian maritime industry to grow a lot, but they have not only had the fortune of prosperous oil industry but also had the cleverness to emphasize on the offshore industry. The expansion that has been occurring is leading to challenges for the Norwegian industry in terms of capacity utilization, recruitment and competence. The mobile rigs in the North Sea are estimated to need over 4,500 new highly skilled employees, with an especially high demand for engineers and other science-based skills, in the next few years. Eight in ten shipping companies are reporting to be already finding it difficult to recruit Norwegian technical personnel. In people’s view, this will
affect the entire maritime industry since demand for maritime competence cuts across the different segments of the industry (Norwegian Shipowners’ Association, 2013).

Further opportunities emerge in the offshore sector as the number of offshore wind turbines, especially in Northern Europe, is expected to multiply in coming years. This growth will provide huge opportunities that Danish ship owners have their eye on as well as their employees. The Danish maritime industry is in addition expecting new prospective jobs in the offshore industry within the next years to have favorable impact on the Danish economy as a whole (Danish Shipowners’ Association, 2014). These prospective opportunities do not exclusively apply to the Norwegian and Danish shipping industry.

As mentioned in Chapter 7.1.4. is Fáfnir Offshore the first and only offshore company in Iceland. Polarsyssel, as stated above, is the most expensive ship ever made in Icelandic history, costing over 7 billion Icelandic kronurs. The company planned on registering the ship in Iceland but found out that in doing so it would render it less competitive (Jón S. Eyjólfsson, 2014). When the stamp duty was abolished in 1998, it only stipulated the exclusion of stamp duty on merchant vessels. Consequently, levying stamp duty on any offshore vessel registered under the Icelandic flag. Just that duty alone would have levied 0.04 % on the 7 billions of the vessel’s cost. In addition, the company would have had to pay all international crewmember wages determined by Icelandic Union’s agreement, regardless of the competitive disadvantage it would have placed on the company. Therefore, Fáfnir Offshore was forced to register its vessel under a more competitive flag, the Faroese Registry, and if changes do not occur it is safe to say that the second ship, which is being built, will be too. In the current shipping environment in Iceland, all future prospects of the indirectly supported industries by the oil industry will be outsourced. In truth, it is in Fáfnir’s best interest to move its personnel management of its crew vessels to the Faroe Islands as well. Furthermore, the company is bound by the registry to have its legal matters and insurance moved as well. The company is additionally required to have a proxy representative located in the Faroe Islands, which usually results in a hiring of locals. By loosing the ships, and, therefore more likely an Icelandic crew to a foreign flag, means that the spending of wages by those employed in the shipping industry and its supply chain, will be lost abroad as well.

The possession of experience and know-how concerning the seafarers as well as
experience and knowledge relating to all the numerous needs during drilling operations is extremely important. With the trend of flagging out in the past three decades in Iceland and the decline in number of Icelandic seafarers follows the inevitable consequence of loss of knowledge and experience. It puts the Icelandic industry in an inadequate situation to service and employ these aspects of the oil industry. Therefore, Iceland would be forced to outsource all of these sub-sectors due to lack of substructure of the industry as well as inadequacy of knowledge and experience. These are the future prospects if the passive attitude of leaving matters of the shipping industry in Iceland unchanged. As stated in the report of the Norwegian Shipowners’ Association (2013) the following factors should be taken notice of:

Petroleum extraction in the Arctic is already taking place . . . once these developments have been set in motion, there will be huge tasks to take on and actors with experience of the region should have excellent business opportunities open to them. It is important for the authorities to scrutinize the opportunities in the Arctic and contribute to a strengthened and more comprehensive focus on competence and knowledge. Both private and public-sector organizations must examine closely what potential is being opened up . . . (p. 39)
8 Norway

Norway was one of the first countries to confront the flagging out trend and with a visionary new approach it established the Norwegian International Ship Register (NIS) in 1987 (Branch, 2007). The register’s main objectives were to ensure that Norwegian owned ships were registered under the Norwegian flag, to improve the competitive conditions for Norwegian registered ships in foreign trade and to maintain employment of Norwegian seafarers. Upon the establishment of the NIS, it was in addition opened up for employment of foreign crew on their homeland's pay conditions (Norwegian Maritime Authority, 2014). Norway decided in 1996 to follow the example of the Netherlands and Greece, and changed the basis on which ship owners were taxed by introducing the tonnage tax regime. A significant condition was that profits must be reinvested and not distributed as dividends (Branch, 2007). The register turned out to be successful as it, together with the transfer of ships from the traditional Norwegian register (NOR) and the repatriation of previously foreign flagged vessels to the International Register, quadrupled the Norwegian flagged share of the world fleet and additionally stimulated Norwegian ship owners to invest in new vessels. This resulted in Norway becoming, once again, one of the world’s largest shipping nations (Brautaset & Tenold, 2008). Furthermore, a strategy initiated by the Norwegian Maritime Authority, in 2007, was actively followed up by the Government. It was an important basis for creating stable and predictable framework conditions for the Norwegian shipping industry (ECSA, 2013), which is in consistency to Norway’s main goal, to be an attractive flag state with high standards of safety at sea for crew, vessels and the marine environment (Norwegian Maritime Authority, 2012).

8.1 The Norwegian Shipping Industry

In 2011, the country’s maritime industry created value of close to NOK 150 billion (ECSA, 2013), or nearly 10% of all Norwegian business value creation and employs around 100,000 people (Norwegian Shipowners’ Association, 2013). Norwegian shipping companies hold particularly prominent market positions in specialized shipping services, e.g. the offshore fleet alone comprised more than 581 vessels with a total value of approximately 24 billion USD. This makes it the world’s second largest fleet and the world’s most valuable intensive offshore fleet in the world (ECSA, 2013). The proportion of Norwegian flagged vessels has changed considerably in the past
decade, going from nearly 60% of the Norwegian controlled fleet sailing under the Norwegian flag ten years ago, down to 43% today. Even though the proportion of the vessels has declined during the past decade, the Norwegian fleet has expanded by nearly 100 ships, although carrying capacity measured in total deadweight tonnage has fallen (Norwegian Shipowners’ Association, 2013).

The Norwegian shipping industry is not only focused on repatriation alone, it has utilized the industries inherently global aspects and focused as well on international expansion, earning revenues from around the world and as a Member of the Icelandic Parliament (Gúðmundur Hallvarðsson, 2003b) pointed out with the hope that the Icelandic shipping industry would be able to peruse. The largest growth markets in the years to come will be the Norwegian Continental Shelf (NCS) and the High North (the Arctic region). The offshore markets in Brazil, West Africa and Australia will be important as well for Norwegian shipping companies (ECSA, 2013). Although the debt crisis in Europe has affected many EU Member States’ developments, the Norwegian economy acquitted itself rather well. One of the key reasons for this was that Norway produces goods that are in strong demand in countries that still exhibit strong growth. Emerging economies with China in the lead are the key drivers behind the increase in demand for crude oil and other raw materials and have helped to sustain the prices of the goods Norway exports, even though the growth among their traditional trading partners in the EU has weakened (Norwegian Shipowners' Association, 2013). The Norwegian maritime industry has demonstrated its ability to create a world leading maritime cluster based on knowledge. This industry is characterized by an ability to innovate and generate value. As Sturla Henriksen (2013) the Director General of the Norwegian Shipowners’ Association emphasized, that without the shipping companies having their head offices and active owners in Norway, and a significant number of Norwegian seafarers, the foundation of the maritime industry’s great capacity to innovate would crumble.

8.2 The Norwegian Tonnage Tax Scheme

After the introduction of the tonnage tax regime in 1996, was the impact over the next two years that several hundred ships were re-flagged to the Norwegian fleet, with a major increase in numbers of Norwegian seafarers by 3,500 and another 4,000 that had trained for a maritime career. However, during the following years thereafter the
Norwegian fleet fell and went from ranking in third place to sixth by January 2005 (Branch, 2007). The introduction of a more competitive taxation system was therefore implemented as an counteraction in 2007 by introducing a final tax exemption for shipping income (Myklebust & Zachariassen, 2011). It proved to be an important measure that generated a strong growth in the fleet under this amended scheme (Norwegian Shipowners’ Association, 2013).

Ships registered in the NIS fly the Norwegian flag and are subject to Norwegian jurisdiction. Norway’s ordinary shipping legislation applies to them, but with some exceptions and special rules specific to the NIS. Norwegian law is recognized in the maritime related industry as being sophisticated and predictable, and to ensure a quality register the rules have been based on the obligations accepted by Norway, particularly in regards to the International Maritime Organization (IMO) and International Labor Organization (ILO) conventions (Norwegian Maritime Authority, 2014). The tonnage tax rules in Norway are in line with those found in other European Economic Area countries and imply that shipping income will be tax-exempt on a permanent basis. Norwegian tonnage-taxed companies are allowed to keep only certain kinds of legal assets inside the tonnage regime and are not allowed to have income from non-tonnage taxed activities except financial income. If the requirements are not fulfilled, the company will fall outside the scope of the model and be taxed at the ordinary rate of 27% (Price Waterhouse Coopers, 2014a).

The tonnage tax regime offers full tax exemption on shipping income, including bareboat income and gains from the sale of vessels, as well as related management activities. However, net financial incomes are taxed at the ordinary tax rate of 28%. Income derived from tax-exempt shipping activities can be distributed as a dividend without any further taxation for the tonnage taxed company (KPMG, 2014). The tonnage tax regime furthermore allows for the inclusion of a wide range of offshore

<table>
<thead>
<tr>
<th>Registration fees</th>
<th>NOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial registration</td>
<td>2,931</td>
</tr>
<tr>
<td>Registration of change in ownership</td>
<td>1,764</td>
</tr>
<tr>
<td>Change in other legal entity</td>
<td>882</td>
</tr>
<tr>
<td>Change of ship's name</td>
<td>2,347</td>
</tr>
<tr>
<td>Change of port of registry</td>
<td>590</td>
</tr>
<tr>
<td>Registration of mortgages</td>
<td>2,061</td>
</tr>
<tr>
<td>Registration of fleet mortgage (per ship)</td>
<td>2,061</td>
</tr>
<tr>
<td>Assignment/endorsement of mortgage</td>
<td>1,764</td>
</tr>
<tr>
<td>Deregistration of vessel</td>
<td>1,764</td>
</tr>
<tr>
<td>Mortgage certificate/ transcript of register</td>
<td>529</td>
</tr>
<tr>
<td>Certificate of ownership and encumbrances</td>
<td>529</td>
</tr>
<tr>
<td>Certificate of deregistration</td>
<td>529</td>
</tr>
<tr>
<td>Journal confirmation</td>
<td>529</td>
</tr>
<tr>
<td>Certified copy of a document</td>
<td>204</td>
</tr>
<tr>
<td>List of registered ships</td>
<td>529</td>
</tr>
<tr>
<td>Annual fee</td>
<td>8,267</td>
</tr>
</tbody>
</table>
vessels, which is not possible in some EEA or EU countries. Additionally, the dividends can be distributed without taxation to Norwegian and EEA shareholders as a result of the Norwegian participation exemption and the legislation does not impose withholding tax on interest. The regime offers overall, flexibility on holding structures and financing (Myklebust & Zachariassen, 2011). Contrary to many European tonnage tax schemes, there is no requirement to having strategic and commercial management in Norway, nor required ratio of owned versus chartered vessels or restrictions on bareboat out of vessels. Nonetheless, pure management companies are not eligible and there is a requirement of a separate company for the business that is employing the tonnage tax regime (KPMG, 2014). Companies that enter into the tonnage tax system are subject to a 10 year lock-in period, which is in accordance to the EFTA/EEA agreement. (Price Waterhouse Coopers, 2014a). In the opinion of the Norwegian Shipowners’ Association (Raun, 2014), the framework’s conditions for ship owners has improved in recent years in Norway, but that the so-called fortune taxation remains problematic for the industry. Norway is the only country in the world that taxes companies on the value of their assets regardless of whether they are making money or not. This is not an objective in the maritime strategy, which so far only deals with the operational aspects, however, it is a concern.

8.2.1 Taxable Income

Norwegian tonnage taxed is levied as an object tax at the following rates and is calculated directly by multiplying the tax rates with the actual tonnage

Table 4. Basis for calculation of taxable income

<table>
<thead>
<tr>
<th>Ship net ton (NT)</th>
<th>Amount</th>
<th>Amount in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 30,000</td>
<td>2.0 NOK per NT</td>
<td>0.23</td>
</tr>
<tr>
<td>30,001 to 70,000</td>
<td>1.5 NOK per NT</td>
<td>0.17</td>
</tr>
<tr>
<td>Over 70,000</td>
<td>1.0 NOK per NT</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Source: (Norwegian Maritime Authority, 2014)

The amount calculated is multiplied by a factor of 1.5247, because in Norway is the tonnage tax calculated directly by multiplying the tax rates with the actual tonnage, unlike the notional profit, which applies in Iceland, Denmark and Faroe Islands.
8.3 Seafarers Refund Scheme

NIS was designed to promote the maritime industries generally within Norway and was successful. However, it did not have the expected effect of stimulating national seafaring skills as was hoped for. It was soon realized within the Norwegian maritime industry that the NIS, while helping with the international crew cost competition the shipping companies had been facing by permitting the employment of low-cost crews from third world countries, was not assisting in rectifying the evolvement of a serious shortages of Norwegian seafarers. This shortage would not just have a negative impact on the profession and the Norwegian shipping companies management, but also on other related industries and services ashore. This problem has been addressed to a greater extend with a wage subsidy for Norwegian seafarers (Mukherjee & Brownrigg, 2013). The main aims of the tax refund scheme for seafarers in the NIS are to safeguard and increase employment of Norwegian and EEA seafarers, to secure recruitment and qualified training of seafarers and to improve the competitive position of companies within the industry. What is more, the scheme has a wider strategic objective of preserving and developing know-how and improving safety in the maritime industries in general (EFTA surveillance authority decision No 356/08/COL).

According to the Norwegian Shipowners' Association (Raun, 2014), the NIS is not as competitive as the Danish DIS in terms of the refund scheme. In Denmark there's a net wage scheme for Danish seafarers, in which the shipping companies do not pay taxes on salaries paid to the seafarers, thus getting indirect state subsidies. In Norway, a reimbursement scheme applies to traffic on the Shelf, shipping abroad under Norwegian flag and for ships under NIS, thus having part of the costs compensated for Norwegian seafarers. The ship owners may be compensated up to a level of 198,000 NOK per seafarer (Sætegaard, 2011). For ships under NIS, the reimbursement is significantly lower and accounts for just 12 percent of the reported gross wage and pension. Therefore, the strengthening of the Norwegian net salary scheme is crucial for maintaining the present number of Norwegian seafarers in foreign trade (Norwegian Shipowners’ Association, 2013).
The Norwegian offshore fleet comprises more than 581 vessels with a total value of approximately 24 Billion USD (ECSA, 2013) and the members of the Norwegian Shipowners’ Association employ nearly 60,000 seafarers and offshore workers from more than 50 different nations (Norwegian Shipowners’ Association, 2013). There has been a trend among some specialization offshore companies to move towards capital intensive activities in the field of seismic research, well services and advanced construction installations on the seabed, making the shipping companies play a key role in the Norwegian maritime cluster (ECSA, 2013). There are three development areas in the High North that are of special interest to Norwegian shipping companies, offshore energy extraction, intra-regional transport and polar transit, which have been leading to an expansion that will keep increasing for the foreseeable future. Within the next 6 years, just the number of rigs is expected to grow by 50%. As a result, there will be a requirement for increased access to personnel in the rig sector for over 4,500 people in the next few years. A high level of activity will produce a tight labor market with intense competition for qualified personnel (Norwegian Shipowners’ Association, 2013).
9 Denmark

The Danish International Ship Registry (DIS) was established in 1988 and was aimed to directly increase the employment of Danish crews. It was introduced a year after the establishment of NIS and the employment aspect was a key point in distinguishing it from the Norwegian Register. Another difference was that, although the DIS was also open to foreign ship owning companies, at least 20% of the foreign company had to be owned by a Danish citizen or company, unlike the NIS (Mukherjee & Brownrigg, 2013). The Danish plan was also to develop a tonnage tax regime that would encourage ship owners to found their investment decisions on market needs rather than tax considerations that would distort demand and supply pressure (Selkou & Roe, 2004). Throughout the 90’s, the efforts of creating national strategy for shipping continued and in 2002 Denmark introduce the tonnage tax regime after heavy pressure from the Danish shipping community, which had been watching the Norwegian, Dutch, German and UK competitors gain from their tonnage tax scheme (Sornn-Friese & Hansen, 2012). The regime was designed to place Denmark on an equal footing with the other EU member states that had already introduced, or were on the verge of introducing, a tonnage tax system. The DIS tax regime made it possible for Danish ship owners to limit their manning costs to an internationally competitive level due to the seafarers’ wages to be tax-free and paid as net wages. Since the introduction, Denmark has managed to keep its position as one of the world’s strongest maritime nations (Danish Shipowners’ Association, n.d.). In 2012, the Danish government presented its reformed maritime growth plan for the industry (referred to as “Blue Denmark”). With the aim to see Denmark develop into Europe’s maritime hub, it produced over 40 initiatives with key focus on various areas, e.g. financial framework conditions, research, environmental regulation, international projects, development of an ambitious and high-level maritime education programs and making the offshore sector a cornerstone of the project. The government took a new visionary and impressing step by basing its growth plan on the work of a team appointed by the Minister of Business and Growth (in 2012), who appointed the President and CEO of D/S Norden and the Chairman of the Danish Shipowners’ Association to chair the committee. It furthermore included corporate managers from all areas of the maritime industry, the Danish Maritime Authority and the Copenhagen Business School (ECSA, 2013).
9.1 The Danish Shipping Industry

Today, Danish ship owners operate approx. 2,100 merchant vessels representing almost 90 million deadweight tons, making Denmark the fourth largest shipping nation. That makes the total tonnage under the Danish flag on a par with its record year 2011 that was the highest in 20 years in terms of numbers (ECSA, 2013). The industry’s performance in 2013, despite harsh times for many shipping companies, generated foreign exchange earnings exceeding DKK 200 billion (Danish Shipowners’ Association, 2014). Therefore, retaining the industry’s status as the largest single contributor to Danish foreign exchange earnings. The Danish shipping industry, including services and industrial production for the industry, represents about 10% of Denmark’s total production and provides jobs for about 115,000 people, whose pay and productivity are above the average for Denmark (ECSA, 2013). Europe, China and the USA/Canada are the Danish shipping companies’ principal markets, but reasonable growth is also occurring in the Middle East/India, East Asia and several South American and African countries (Danish Shipowners’ Association, 2014).

9.2 The Danish Tonnage Tax Scheme

As its foreign models, the taxation scheme in Denmark is based solely on the amount of tonnage at the disposal of the ship owner and the shipping companies can choose whether they opt for the tonnage taxation or the ordinary corporate tax. Merchant vessels and passenger ships may be registered in the Danish International Ship Register (DIS) provided they have vessels of 20 GT or more and meet requirements of being a Danish citizens, Danish partnerships or companies registered under Danish law, an EU/EEA citizens, EU/EEA partnerships or EU/EEA companies, as long as they have appointed a company or a person, who effectively controls, directs and manages the ship from Denmark (Danish Maritime Authority, n.d.-c). Companies that enter into the tonnage tax system are subject to a 10 year lock-in period, as according to the EFTA/EEA
agreement. The tonnage tax income is based on a number calculated both from the ships owned and chartered by the shipping company. In other words, the tonnage tax scheme is, as a starting point, “blind to the flag” (Danish Shipowners’ Association, n.d.) in the sense that the vessels do not need to be registered under the Danish flag. The Tonnage Tax Scheme is restricted to certain types of activities. The entity must carry out commercial transportation of passengers or cargo between different destinations. The ships must be owned or chartered on a ‘bareboat’ or time-charter with a call/buy option by the company’ basis and the ships must be strategically and commercially run from Denmark (Price Waterhouse Coopers, 2014b). Ships used for offshore oil and gas extraction, exploration, diving, fishing, towing, sand dredging, etc. were specifically exempt from the scheme. Ship management companies may also use the Danish Tonnage Tax Scheme, but the term is defined as a company doing business with crew management and technical management of ships qualified for use in the tonnage tax system (PWC, 2014b).

Earnings from business activities that are not included in the transport service itself or among ancillary services are taxable according to general rules. Capital gains concerning the sale of ships will be taxed at the ordinary corporate tax rate prior to 2007, but only if the ship is sold for a higher price than the acquisition price (Bjørnholm & Hansen, 2005). After 2007 the gains of sale of ships are tax-exempt. Masters and officers serving under the DIS do not need Danish certificates of competency but it is preconditioned that the master is a Danish citizen or a citizen of an EEA/EU Member State. Denmark plays an active role in the European Community and IMO as well as in the ILO and has ratified all-important IMO and ILO instruments. The DIS emphasizes quality serves and is known for its non-bureaucratic and swift registration of ships. Digitalization of documents and frequent use of e-mails has made the 24-hour availability easier as well as quick, flexible and non-bureaucratic communication between ship owner and the Danish Maritime Authority (Danish Maritime Authority, n.d.-b).

The Danish Government recently widened the scope of the tonnage tax regime, as a part of a 2014 “growth package”, by including certain types of ships operating in relation to offshore activities (these amendments to the Danish tonnage tax act presuppose an approval from the EU commission). The aim is to ensure the competitiveness of Danish shipping companies. The improved scheme will now include offshore ships such as Accommodation and Support Vessels (ASV), ships used to transport and mount offshore wind turbines, guard, supply and construction ships and
icebreaker ships (Bech-Bruun, 2014). Although the Government is acknowledging the necessity of a more flexible tax regime, it may be argued that the proposal does not respond significantly to the need for a flexible tax regime for drilling ships and oilrigs (Bech-Bruun, 2014). The proposal does not change the current situation that offshore related ships cannot be registered with the DIS, which leads to crewmembers not being covered by the tax exemption offered in DIS. Consequently, the proposed expansion does not fully adhere to the wishes of the Danish shipping industry (Bech-Bruun, 2014). The Danish government has focused on the Danish shipping industries growth in recent years, which has helped the development of the maritime sector in Denmark. This growth is founded on the continued acknowledgement of Danish governments, despite political orientation, that shipping is a growth engine for Denmark ( Danish Shipowners’ Association, 2014).

The latest modernization of the rules has simplified the process whereby foreign shipping companies can establish a business in and operate ships from Denmark, making it easier in the future for Danish ship owners to buy and own ships, even if the ships are registered in a foreign ship register. This new practice evolved through the collaborative efforts of authorities and the Danish Shipowners’ Association as mentioned before and then enacted as part of the government's growth plan (Danish Shipowners’ Association, 2014). This initiative is called The Blue Denmark and the aim to is be known internationally as a European center with special focus on green shipping and maritime solutions, but also more broadly as having quality shipping, maritime technical knowhow and maritime business acumen. The Blue Denmark is a cluster of knowledge and competence, where the employees’ competences, along with their experience gained at sea and in ship owners’ shore-based organizations, are central in terms of the cluster’s continued development and well-being (The Danish Government, 2012).

9.2.1 Taxable Income

The taxable income for the Tonnage Tax Scheme is determined for each ship as a fixed amount of Danish kroner (DKK) per 100 net tons (NT) per day, regardless whether each individual ship is engaged on voyages or not (Danish Maritime Authority, n.d.-a)
Table 5. Basis for calculation of taxable income

<table>
<thead>
<tr>
<th>Ship net ton (NT)</th>
<th>Amount per day (DKK per 100 NT)</th>
<th>Amount in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 1,000</td>
<td>8.97</td>
<td>1.21</td>
</tr>
<tr>
<td>1,001 to 10,000</td>
<td>6.44</td>
<td>0.87</td>
</tr>
<tr>
<td>10,001 to 25,000</td>
<td>3.85</td>
<td>0.52</td>
</tr>
<tr>
<td>Over 25,000</td>
<td>2.53</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Source: (Danish Maritime Authority, n.d.-a)

The income is taxed at the ordinary CIT rate 24.5% (Bech-Bruun, 2014), (declining to 22% in 2016 (PWC, 2014b)). No deductions relating to the shipping income will be allowed. The tonnage tax regime makes the tax assessment predictable, as it does not depend on the actual profit of the shipping company.

9.3 Seafarers Refund Scheme

DIS takes care of crew costs in a way that makes Denmark competitive on a global scale by establishing wages that are not taxed in Denmark. Seafarers employed on vessels registered on the DIS are exempted from Danish income tax, which also covers most of the social security liability. At the same time that the DIS was introduced, the collective agreements between the Danish shipping companies and seafarers’ unions were re-negotiated to apply net rather than gross wages. This meant that the benefit was received directly by the employing shipping companies, subject only to the cost of administering the scheme which rests with them (Mukherjee & Brownrigg, 2013). The Danish Ministry of Taxation estimates that ship owners pay the same amount of tax today as before the introduction of tonnage tax, causing the Danish government not to lose any revenue. Furthermore, tax payments of the 80,000 employees in the maritime industry in Denmark amount to more than 25%, compared to the tax payments of employees in the rest of the country (Danish Shipowners’ Association, n.d.).

Icelandic shipping companies have not utilized the DIS much because of problems that have risen due to the refund scheme (Gerður Guðmundsdóttir, 2014). Iceland and Denmark have a double taxation agreement, in accordance to that agreement the Icelandic crews are forced to pay income tax in Iceland from their salaries even though the vessels are registered in DIS and should by that regime have their income taxation forfeited. Thus, shipping companies from countries that have double taxation agreements with Denmark should consider the DIS as mainly for Danish shipping companies.
9.4 The Danish Offshore Industry

Most markets have felt the effects of the global tonnage over-capacity, with the exception of certain segments, including offshore oil and wind operations. The Danish offshore industry has a strong growth potential but is still facing keen competition from shipping industries in other jurisdictions, which may benefit from more favorable tax regimes and lower labor costs (Hansen, 2014). Its annual revenue is estimated to generate approx. DKK 10 billion and employing over 20,000 people and the installation of offshore wind turbines, in particular, is undergoing massive growth, expected to reach 12-15% annually in the next seven years. There are near to 5,000 prospective new jobs to be seen within a few years and the industry is expecting to have a favorable impact on Danish economy (Danish Shipowners’ Association, 2014) because the opportunities do not only apply for ship owners but for suppliers as well. New offshore wind farms are being established and planned in the Danish, British and German parts of the North Sea and have the installation and servicing of offshore wind turbines presented good employment opportunities in several parts of Denmark. In addition, the production of installation ships and equipment for establishing offshore wind farms and the service of oil and gas installations presents a market with great growth potential (The Danish Government, 2012). The Danish Government considers these activities as one of the industries strengths, just as the maritime cluster has a unique chance of benefitting from the potential in the Arctic region the Danish shipping industry (the Blue Denmark) servicing the entire offshore industry can generate a large number of lasting jobs ashore (The Danish Government, 2012).
10 Faroe Islands

The Faroe Islands are a self-governing nation within the Kingdom of Denmark, but are not a member of the EU or EFTA/EEA Agreement, which puts them in a position to enjoy more leeway than the other Nordic countries due to their none participation. The Faroese International Registry (FAS) was launched in 1992 (Faroese Maritime Authority, n.d.) and was constituted for the same reasons as the Norwegian NIS and the Danish DIS few years earlier, in order to prevent local shipping companies from flagging out (Poulsen, 2013). It has proven to be an excellent alternative to other ship registers. FAS offers a number of financial advantages including a flexible, efficient and uncomplicated administration. In 2005, the Faroe Islands introduced the Tonnage Tax Regime (TTR), which is considered to be quite unique in Europe. The Faroese Tonnage Tax Regime is built on the same structure as other similar schemes in the Nordic countries and the EU/EEA. However, many of the restrictions that are included in the other systems are not included in the Faroese TTR, e.g. restrictions placed on shipping companies regarding their activities and a lesser lock-in period (FAS, n.d.-a). Until fairly recently the register hosted no more than 20 ships, mostly domestic owned merchant ships, with no efforts being made to attract international shipping companies. In 2008, however, FAS and shipping related activities were identified as a new business platform by the Faroese Government and was put into effect in 2009 by legislative amendments, making the FAS more simple and transparent (Poulsen, 2013). FAS is now being marketed abroad as a Scandinavian ship register that is fully competitive and ready to offer its services to foreign shipping companies and the number of international merchant vessels registered under the Faroese flag is expected to reach 100 soon according to the Director of the Faroese Maritime Authority. That makes a 172% increase in the number of entries since 2008, to over 90 vessels (Johannes, 2014). The vision for the register is to grow steadily at a slow pace with the key words being quality, reliability and transparency and with a strong emphasis on the easy accessibility to authorities and administration (Poulsen, 2013). As the Director of the Faroese Maritime Authority stated, that one of FAS competitive advantages is that “. . . the public administration is straight forward and helpful and compared to many other places, it’s a breeze to deal with them” (Johannes, 2014).
10.1 The Faroese Shipping Industry

The Faroese economy is totally dependent on the fishing and fish farming industry as 97% of the export value derives from fish products. The Faroese business sector is becoming more and more diversified, but its foundation lies in the fact that the Faroese people are a seafaring nation with areas of expertise and knowledge on fisheries, shipping, navigation, aquaculture, oceanography, marine biology, biotech and with marine related engineering and physics (Faroe Islands, n.d.-a). Merchant shipping is emerging as an industry to be reckoned with in the Faroe Islands. Since the revision of FAS in 2008, there has been a 172% increase in the number of entries or up to over 90 vessels, including tankers, bulk freighters, workboats, and ferries. Many of the vessels have Scandinavian owners, typically Norwegian, Swedish, Danish or Icelandic. Its success can be attribute to several factors. Their swift and none bureaucratic service contributes greatly to their success as well as being completely international and devoid of national protectionism. Additionally, its tangible financial and operational advantages includes a prompt refund scheme and a fiscally attractive tonnage tax regime (Johannes, 2014).

10.2 The Faroese Tonnage Tax Scheme

Registered limited, liability companies subject to taxation may enter the Tonnage Taxation Scheme. All vessels in FAS must be owned by a company registered in the Faroe Island and there are no restrictions regarding the ownership of a Faroese company. The share capital requirement is a minimum DKK 125,000 or DKK 500,000. There are two different types of limited, liability companies that are regulated by two different Company Acts, P/F company structure that is customarily regarded as more appropriate for larger companies and Sp/f company that is more suitable for smaller

### Wages of Faroese seafarers in FAS

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>141.874.051</td>
<td>187.215.111</td>
<td>32%</td>
</tr>
<tr>
<td>Number of seafarers</td>
<td>529</td>
<td>682</td>
<td>28.80%</td>
</tr>
</tbody>
</table>

### Company registration

<table>
<thead>
<tr>
<th>Company registration</th>
<th>Sp/f DKK</th>
<th>P/f DKK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital (SC)</td>
<td>80000</td>
<td>500000</td>
</tr>
<tr>
<td>Registration fee</td>
<td>2500</td>
<td>3500</td>
</tr>
<tr>
<td>+ add. DKK 4 per thousand of the SC</td>
<td>max. 25000</td>
<td>max. 25000</td>
</tr>
<tr>
<td>Annual fee</td>
<td>700</td>
<td>1200</td>
</tr>
</tbody>
</table>
companies with less market capitalization (FAS, n.d.-b). The company is taxed based on a fictitious taxable income that is based on the net tonnage regardless of whether the available tonnage is used or not. The scheme does not allow normal tax depreciations to establish the taxable income. When a company enters, all ships and other assets owned by that company, fall under the scheme (Tonnage Taxation Act no. 51/2005).

Bareboat chartered vessels may also register in FAS and thereby gain access to all of the advantages and rights provided to Faroese vessels. The scheme is only available for vessels larger than 100 GT. Operations closely linked to ship operations may be included in the system. The Faroese Tonnage Tax Scheme may encompass a company’s own tonnage and tonnage chartered by the company. No restrictions are placed on chartered tonnage requiring, e.g. the registration of tonnage in the Faroe Islands, the flying of the Faroese flag or maintaining a specific ratio with regard to flag. There is no taxation on the profit resulting from the sale of vessels in the regime to a company not within the system (FAS, n.d.-c). The decision to use the Tonnage Taxation Regime is binding upon the company for an obligatory period of 3 years, only calculated from the beginning of the fiscal year (Tonnage Taxation Act no. 51/2005). The Faroese Register is in the position to offer lesser binding time due to their non-participation in EFTA and the EEA agreement. The Faroe Islands is an Associate Member of the International Maritime Organization (IMO). The relevant IMO / ILO conventions are thereby in force in the Faroe Islands.

As previously mentioned, bareboat chartered vessels can access all of the advantages of the FAS. A foreign vessel can be registered in the Bareboat Register if the vessel is bareboat chartered to a company in the Faroe Islands. The chartered vessels can thereby access the wage refund scheme and the tonnage tax regime (FAS, 2013a). This enables shipping companies to register their ships under a flag with extremely favorable taxation cost and bareboat charter them from that register to FAS where they will enjoy the refund scheme. Icelandic shipping companies have been exploiting this alternative, registering their vessels under the Antigua and Barbuda flag and chartering them to the Faroe Islands (Gerður Guðmundsdóttir, 2014).
10.2.1 Taxable Income

Faroese companies that partake in shipping activities can choose to be taxed according to the tonnage taxation scheme. Under the tonnage tax scheme the taxable income is not based on a profit and loss account. Instead a deemed income is calculated based on the company’s total net tonnage, regardless of whether the available tonnage is used or not.

Table 6. Basis for calculation of taxable income

<table>
<thead>
<tr>
<th>Ship net ton (NT)</th>
<th>Amount per day DKK</th>
<th>Amount in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 1,000</td>
<td>6 per 100 NT</td>
<td>0.81</td>
</tr>
<tr>
<td>1,000 – 10,000</td>
<td>4 per 100 NT</td>
<td>0.54</td>
</tr>
<tr>
<td>10,000 – 25,000</td>
<td>3 per 100 NT</td>
<td>0.4</td>
</tr>
<tr>
<td>Above 25,000</td>
<td>1 per 100 NT</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Source: (FAS, 2013b)

The deemed income is taxed at the normal corporate tax rate of 18%. The deemed income is calculated by multiplying the numbers of the days in a year that a vessel is in operation by the following rates (FAS, n.d.-c).

10.3 Seafarers Refund Scheme

The Faroese Maritime Authority (FMA) decides upon the minimum number of officers and crew and there are no requirements for work- and/or residency permit. The FMA issues all officers documents in accordance with the STCW Convention. Collective agreements between organizations of seafarers and ship owners’ association are in force (FAS, 2013b).

Vessels, flying a foreign flag and bareboat chartered to a Faroese company, can register their charter party with the Faroese Tax Authorities (TAKS). According to the Faroese Tax Legislation these vessels are entitled to refund of the 35% personal taxes levied on crewmembers. The crewmembers working on FAS registered vessels pay a 35% income tax and are then given proof of payment to avoid double taxation in their home countries, meanwhile the ship owners are refunded 100% of the crew income tax (Johannes, 2014). The shipping company will receive the 100% tax refund from TAKS usually within in the beginning of each month. Non-resident seafarers do not pay any social security expenses, neither do the shipping companies (FAS, 2013b).
10.4 The Faroese Emphasis on Derivative Service

One clever approach that the Faroese Authorities have adopted is the emphasis on derivative service from FAS. All the indirect employment that FAS has created is amounting to quite the lucrative income for the Government and the Faroese economy. The Faroese Maritime Authority underwent a thorough inside inspection of the industry to get an overall perspective of the benefits deriving from FAS and its derivative service. The results were presented in a report (Sjóvinnustýrið, 2011), which showed a very promising and beneficial outcome, The following information is cited from that report.

To be able to register in FAS, a shipping company is compelled to have certain of its activities managed in the Faroe Islands, e.g. the administration of payroll. In addition, foreign shipping companies opting for FAS have to establish a Faroese bank association and foreign limited liability companies have to hire a Faroese accountant firm. Numerous newly established Faroese companies take on these obligations and has lead to an increase in specialized employment in the Faroe Islands. This increase has resulted in many Faroe Islanders returning to the country after having moved abroad in search for employment satisfactory to their education. Furthermore, in an accordance to the legislation concerning the International Registry, it is required to have a Faroese representative, or a proxy.

Most foreign shipping companies select a Faroese person in a management position to serve in their committees when a limited liability company is established in the Faroe Islands (as a requirement to enter FAS). Subsequently, most board- and annual meetings are held in the Faroe Islands. The Faroese managers get payments for their board membership and they usually appoint other Faroese to sit on their board, creating additional employments within the Faroese economy.

### Derivative on-shore service from FAS

<table>
<thead>
<tr>
<th>Service</th>
<th>FTE</th>
<th>DKK p. month</th>
<th>DKK p. year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship Management</td>
<td>119</td>
<td>38.000</td>
<td>54.264.000</td>
</tr>
<tr>
<td>Lawyers</td>
<td>2</td>
<td>70.000</td>
<td>1.680.000</td>
</tr>
<tr>
<td>Accountants</td>
<td>3</td>
<td>50.000</td>
<td>1.800.000</td>
</tr>
<tr>
<td>Shipping &amp; crew companies</td>
<td>1</td>
<td>40.000</td>
<td>480000</td>
</tr>
<tr>
<td>FAS administration 2011</td>
<td></td>
<td></td>
<td>58.224.000</td>
</tr>
</tbody>
</table>

### Direct income from FAS in 2011

<table>
<thead>
<tr>
<th>Service</th>
<th>DKK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration, cert. of nationality, security &amp; mortgage</td>
<td>1.171.000</td>
</tr>
<tr>
<td>Certificate for vessel size</td>
<td>74.118</td>
</tr>
<tr>
<td>Proof of certificate</td>
<td>112.274</td>
</tr>
<tr>
<td>Annual fees</td>
<td>1.722.158</td>
</tr>
<tr>
<td>Total amount</td>
<td>3.079.550</td>
</tr>
</tbody>
</table>
In 2011, the total income of tax revenues was paid to TAKS, DKK 29,112,000. These tax revenues came from indirect onshore employment, stemming from FAS. The workforce received DKK 16,689,860 in total derivative income and from indirect onshore employment and seafarers’ wages the Maritime Authority received DKK 3,079,550. The indirect employment that has emerged after the establishment of FAS has increased through the years and is still expanding. The following gives an insight into the revenues that have been created indirectly from FAS register:

**Insurance companies**, ship owners in FAS need to take out occupational accident insurance with a Faroese insurance company or other companies that have been approved to operate on the Faroese market. At the moment it is only the Faroese insurance company Tryggingarfelagid Foroyar that provides this service. The income from this insurance is around DKK 100-150,000 per ship and anticipated income of this insurance is DKK 7 million.

**Flight transport**, Atlantic Airways is hired to take every month 3-4 rented trips in connection with crew swaps on FAS ships that are working in the Norwegian and British part of the North Sea. In addition to these trips, there are around 500 seamen who sail on other FAS ships and need transportation to and from the Faroe Islands every 4 to 6 weeks. These tickets are not the cheapest tickets due to the fact that it is seldom possible to determine the day of travel in advance. Furthermore, the Faroese airline has increased its income by transporting ship owner’s administrations for board and annual meetings to and from the Faroe Islands. The estimated income is around DKK 28 million.

**Service industry: Lodging, transport via vehicle etc.** Although many board members in the shipping companies are foreigners, most board meetings held in the Faroe Islands, or at least four a year. The shipping companies are required to have a Faroese auditor and it is preferable if they have a Faroese solicitor as well. This arrangement creates collaboration between Faroese and foreign colleagues in those areas. Faroese hotels, restaurants, taxi’s and other transport companies get also quite a lot of revenues from FAS activity, or an estimated DKK 1.5 million in income.

**Seminars and equipment**, managing officers on FAS registered vessels need to attend a seminar concerning Faroese maritime regulations. These seminars are available at Vinnuháskúlanum (a Faroese University) or at private companies such as Navit and TSM. In addition to the seminars in Faroese maritime regulations, there are also seminars (or certificates) on fire preventions, safety measures, ECDIS computerized
ocean maps, transport of dangerous substances, medical seminars, MOB seminars and more. The well-attended seminars are a good source of revenues for the Vinnuháskúlanum and the private vendors as well as being a good foundation for future development and growth. The Faroese Maritime Authority has received information stating that in 2011, a medium sized shipping company alone spent around DKK 700,000 in seminars in the Faroe Islands. The estimated revenues from this derivative industry are over DKK 3 million.

Consultancy, several Faroese companies offer consulting service of operating systems for ISO9001 ISO014001, ISM etc. These companies also get several other FAS related projects and have stated that around 20% of their turnover has resulted from FAS related operations.

Office and computer equipment, the payroll for FAS registered ships needs to be managed in the Faroe Islands. Crew administration is a demanding area, but in addition to the payroll management, these service companies also administer service concerning crew management, e.g. administering transport on- and off-board, vacations, certificates and overseeing the validation of seminars etc.

Faroese banking and finance service, all salaries managed through FAS need to be processed through a Faroese financial institution, which provides revenues for the Faroese banks, e.g. fees and interest deriving from tax. There are further possibilities for the bank system to increase their area of operation by e.g. syndication and currency management.

This emphasis on derivative service has induced significant additional income for the Faroese economy as well as the Government. The Faroese Authorities seem to be focused on continuing to find more income related imposition to force upon foreign shipping companies. These stipulations can, however, easily become too oppressive in their opinion and start to dispel the shipping companies instead of attracting them. The stipulations are, in fact, not necessary for the shipping companies e.g. for requirements on seminars attendance and increased requirements concerning seafarers knowledge on Faroese regulation. The requirements only increase the companies expenditure with little gain for the owners, but increasing the knowledge of the crew through Faroese regulation is of no importance to them (Gerður Guðmundsdóttir, 2014).
10.5 The Faroese Offshore Industry

The first exploration took place in 2001 on the Faroese continental. Since then activity has been ongoing with data acquisition, scientific work and so far seven wells have been drilled for and an active hydrocarbon system confirmed. However, the discovery of commercial quantities remains elusive, but expectations of financial gain from oil extraction are still high, but energy companies involved are now betting millions of Euros on finding oil and gas (Newman, 2014). When oil exploration started in the Faroe Islands in 1993, the Faroese authorities sought out the advice and counsel of experienced nations such as Great Britain, Norway, Denmark and Newfoundland. In the Faroese authorities opinion, it was extremely important to begin from scratch and learn from the considerable experience of their neighboring countries. This preparatory work greatly facilitated the establishment of an organized and well functioning framework for an emerging oil sector in the Faroe Islands (Faroe Islands, n.d.-b).
11 Comparison off the Nordic Registers

The following table, table 7, provides a brief guide to the registration requirements of Norway, Denmark and the Faroe Islands, so that the relative merits of these registers can be compared. It should be noted that this is not an exhaustive guide and there may be other factors not referred to that may be relevant in particular cases. This table, however, gives some indication of the eligibility of a vessel being registrated under particular flags.

Table 7. Registration requirements of Norway, Denmark and Faroe Islands

<table>
<thead>
<tr>
<th></th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tonnage tax enacted</strong></td>
<td>1996</td>
<td>2002</td>
<td>2005</td>
</tr>
<tr>
<td><strong>Entrance into the tonnage scheme</strong></td>
<td>Entry into the tonnage tax system is optional</td>
<td>Entry into the tonnage tax system is optional</td>
<td>Entry into the tonnage tax system is optional</td>
</tr>
<tr>
<td><strong>Lock-in period</strong></td>
<td>10 years</td>
<td>10 years</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Approved Classification Societies</strong></td>
<td>ABS, BV, DNV, GL, LRS</td>
<td>ABS, BV, GL, LRS, DNV, NKK</td>
<td>ABS, BV, DNV, GL, LR, NK</td>
</tr>
<tr>
<td><strong>Crew Nationality</strong></td>
<td>There are no restrictions on nationality of the crew except that the Master must be Norwegian (although an application for dispensation from this requirement can be made and such applications are normally treated favorably)</td>
<td>There is an Initial Registration Fee of 1 DKr per thousand of the contract price of second-hand tonnage. There is no Annual Fee levied. Fees are also payable to the Danish Welfare Board according to the number of seamen employed.</td>
<td>There are no requirements of nationality to the captain or any of the crew members, if only their certificates are recognized pursuant to the STCW convention and an agreement is in effect between Denmark / Faroe Islands and the respective Flag State Party.</td>
</tr>
<tr>
<td>Ownership Requirements</td>
<td>Norway</td>
<td>Denmark</td>
<td>Faroe Island</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Norwegian and foreign owned ships may be registered, but they must appoint an authorized representative in Norway for the purposes of accepting service of legal process. Technical or commercial management functions falls to a Norwegian manager, which must be either a Norwegian citizen, an unlimited partnership where all participants are Norwegian subjects or a Norwegian company where 60% of the capital and voting power is in Norwegian hands.</td>
<td>The ship must be Danish owned or owned by a foreign company in which a Danish citizen or company owns at least 20% of the capital. The foreign company must also appoint a representative in Denmark</td>
<td>Vessels in FAS must be owned by a company registered in the Faroe Islands. The share capital requirement is a minimum DKK 125,000 or DKK 500,000. There are two different types of limited liability companies that are regulated by two different Company Acts. One shareholder, foreign or Faroese may own all shares in the company.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mortgage Registration Fee</th>
<th>NK 1,310</th>
<th>Registration fee of 1 DKr per thousand of the amount secured</th>
<th>DKK 5,000</th>
</tr>
</thead>
</table>

| Qualifying assets | A tonnage-tax company must own at least one qualifying asset. No required ratio of owned versus chartered vessels or restrictions on bareboat out of vessels | The ships must be strategically and commercially run from Denmark The ships must be owned or chartered on a ‘bareboat’ or time-charter with a call/buy option by the company’ basis | Vessels in FAS must be owned by a company registered in the Faroe Islands Bareboat chartered vessels may be register |

| Age Limit | No restriction provided the technical standard is satisfactory | No restriction provided the technical standard is satisfactory | Ships 20 years of age and older cannot be registered in FAS |

| Minimum size of vessel | Vessels larger than 100 GT | Vessels larger than 20 GT | Vessels larger than 100 GT |

<p>| The Tonnage Tax Scheme is available to | The register is open to owners of all nationalities. No requirement to having strategic and commercial management in Norway | Danish shipping entities organized as limited liability companies Foreign shipping companies with the place of management and control in Denmark EU/EEA citizens, partnerships or companies | Registered limited liability companies. Faroese resident or a legal entity There are no restrictions regarding the ownership of a Faroese company |</p>
<table>
<thead>
<tr>
<th>Ship management companies</th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure management companies are not eligible</td>
<td>May use the Tonnage Tax Scheme, performing technical and crew management for another company</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration of offshore ships</th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed in the scheme</td>
<td>Exempt from the scheme but can enjoy the tonnage tax regime</td>
<td>Allowed in the scheme</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sale of vessels</th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not tax the profit</td>
<td>Does not tax the profit after 2007</td>
<td>Does not tax the profit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional tax information</th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tonnage tax regime offers full tax exemption on shipping income, including bareboat income and gains from the sale of vessels, as well as related management activities.</td>
<td>The scheme does not allow normal tax depreciations to establish the taxable income. When a company enters, all ships and other assets owned by that company will fall under the scheme</td>
<td>Normal tax-depreciations are not permitted to establish the taxable income. A Faroese corp. distributing dividends is obliged to withhold 18% tax on dividends, whether the recipient is resident or not, but does not apply to a parent corporation in the Faroe Islands. 25% withholding tax is levied on royalties paid from the Faroe Islands to a recipient abroad</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional information</th>
<th>Norway</th>
<th>Denmark</th>
<th>Faroe Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income derived from tax-exempt shipping activities can be distributed as a dividend without any further taxation for the tonnage taxed company</td>
<td>Earnings from business activities that are not included in the transport service itself or among ancillary services are taxable according to general rules</td>
<td>Restrictions placed on ship owners/companies regarding shipping activity were not included. Operations closely linked to ship operations may be included in the system. The Faroese Tonnage Tax Scheme may encompass a company’s own tonnage and tonnage chartered by the company</td>
<td></td>
</tr>
</tbody>
</table>

Each of these three registers have their own characteristics even though they are quite similar in many ways. When it comes to selecting a register for Icelandic shipping companies, the Danish register chosen much due to various problems that have risen because of the double taxation agreement between Iceland and Denmark. This problem is, however, not a factor for countries that do not have an active double taxation agreement with Denmark. DIS and FAS seem to offer better attributes than the Norwegian register when it comes to the refund scheme and seem to put more emphasize on the service factor as well, but shipping companies value the quality of service greatly and its relevance has increased greatly in the ever-growing global
competition of the sector. The Faroese register offers lesser regulatory framework than 
the other two and, in addition, it offers a lesser binding time due to the countries none-
participation in EFTA/EEA. They do, however, exclude vessels over 20 years of age, 
unlike the other two registers, which might be a determinant factor for some shipping 
companies.

Ultimately, the selection is based on subjective views and experience and is usually 
on vessel-to-vessel bases. The preconditions of shipping companies are not necessarily 
the same, ship owners have e.g. different needs and emphasis on tax regimes, and, 
therefore, the attributes of a foreign flag are considered differently for each company. It 
is, however, a consideration that the companies acquire more often optimization of cost 
by registering more vessels under the same flag, especially when registers have 
preconditions on overseeing crew management and wages in registers such as in FAS. 
Shipping companies are also constructed differently and this affects the requirements of 
ownership in each register. A shipping company might find itself in the situation of 
having selected its optimal international register but does not meet the ownership or 
assets required. Therefore, assessing the best or the most attractive flag is based on 
subjective views and dissimilar needs, as different companies perceive different factors 
being of importance to their selection of register.
12 Results

A significant and an important factor of the shipping industry is its inherent ties to globalization. The industry has derived from international trade and undertakes the transportation of resources and goods around the world and many vital sectors of production rely on imports of raw material and energy transported through shipping. Furthermore, the flagging-out phenomenon of the industry mirrors the aspects of the open flow of trade, service and employment that globalization has produced. As a result, globalization puts the shipping sector under permanent competitive pressure to produce low cost registers. In addition, the globalization process has had a profound impact on a wide range of policies and practices, not only in the private sector but also the public one, which has led to most major maritime countries to address their tax regimes from a competitive perspective with the introduction of the tonnage tax regime. Since globalization has increased competition, the supra-national level has been forced to intervene to protect the harmony of its Member States. In other words, tax competition involves a strategic, non-cooperative interaction amongst Member States, with each nation designing its tax regime in response to the tax arrangements of other countries to attract and retain the vessels registered under their flag. Globalization plays, therefore, a consequential role in the policy-strategy on both national and supra-national level.

Furthermore, the effect that globalization has had on the employment of seafarers within the EEA countries, has been the main reason for the drastic decline in their numbers. The response to this global effect has been the implementation of different variations of a refund schemes, as discussed in previous chapters. All of these issues surrounding the choice of an open, international or a second register have played a significant role in the internationalization of the shipping industry and, in turn distorted the relationship of vessel nationality.

The previously discussed implications of globalization have obviously affected the Icelandic shipping industry as well. In Iceland, as in most other countries, flagging out has shown to have serious negative impacts on the Icelandic shipping industry, not to mention the plausible economic factors from indirect employment that is being forfeited as well. Just the overall estimation of the indirect gross value added contribution to GDP of the European shipping industry in 2012 was €59 billion and with Norway recording the second largest contribution and Denmark the fourth. The total indirect employment contribution of the EU maritime sector was estimated being an equivalent
of 1.1 million jobs and the induced impact estimated to have been around 547,000 employments. In addition to this, FAS has generated high revenues for the Faroese economy through derivative employment, which is remarkable given the short period since they amended the register. Currently, Iceland is not taking any share of these figures. Truth be told, Icelandic economy is missing out on these revenues and employment due to its lack of participation in the global shipping industry by not having a functional international register and a fleet to bring in the derivative activities.

The shipping industry has a long history. Experience of both national and international regulations is a paramount that policy makers, in this instance the Icelandic legislator, must recognize and understand the complexities that exist within the area and therefore need to be ready to commit to a long-term policy implementation in order to support the Icelandic maritime industry in a concise manner. The importance of policy-strategy for the sector is emphasized with the role of the nation state and its relationship with policy-making regime at a supra-national level. It is apparent that a possibility of conflict between these different jurisdiction levels is formidable as the contention between the Icelandic government and the EFTA authority has demonstrated. The abolishment of the tonnage tax regime and the special refund scheme for ship owners, due to incompatibility with the functioning of the EEA Agreement, was a result of conflicting differing spatial policy levels and the problems that emerged due to lack of coordination and inconsistency. This inconsistency is portrayed in the case with EFTA, an authority at the supra-national level that has laws superior to Iceland’s national legislation. The conflict between the Icelandic legislator and EFTA displays the significance of consistency and interaction between the different spatial levels because conflicts can manifest themselves with contrasting and have detrimental consequences for the industry. There is nothing more likely to inhibit the success of a shipping policy than to have conflicting policy ambitions at national and supra-national levels, as occurred with the Icelandic legislation concerning the taxation and refund scheme.

The importance of influential parties is also apparent when the lack of success of the IIS is examined. The shipping companies were given the opportunity to provide their opinion on the legislation which was not regarded despite the fact that they are the ones who are most affected by the policy and legislation that was created. It should therefore have been logical that they would have been involved in generating them. At the other end of the spectrum was another influential party given to much relevance to the development of the register, when ASÍ persisted on the removal of the fourth paragraph
of the 11th Article. The extensive influence that this interested party had on the legislator was extremely consequential to the register’s lack of success.

The contexts of the external framework provided in Chapter 2 illustrate the fundamental function of providing assistance and guidance to policy makers to implement functional and successful policy strategies. Policymaking that ignores those influencing factors will not have much chance of succeeding. To put it briefly, the complexity of all the influencing factors that can determine and shape shipping policies, it is just as important to its success that harmony is ensured across all spatial levels. Consequently, as the Icelandic Authorities demonstrated by its lack of consideration of these vital influential factors and assurance of compatibility, it resulted in conflicts between policy makers and other relevant players within the shipping sector, as well as the supra-national level, which lead to an ineffective policy making.
13 Discussion

It is quite astounding that the Icelandic government considered IIS to be competitive to other international registers considering the lack of preparation that characterized the process of its making. If the Government had familiarized itself with policy-strategy within the shipping industry and the crucial factors known by extensive research in the field to be intrinsically influential to a registers success or failure, instead of just rushing into the legislation, the outcome would most likely have been very different. The process of formulating a functional and successful international register is a complex one and requires immense preparation as well as good practice. A policy-strategy has to be implemented and actively followed up by the Government if it is to function as an important basis for stable and predictable framework conditions for the shipping industry to work within. The other Nordic countries have long recognized the vital importance of Governments implementing great policy-strategy that should have been taken notice of. To create a successful international register, it is essential for the Icelandic Government to implement a progressive and well-formulated maritime policy-strategy. To generate an optimal result, it would be essential to include the major players of the Icelandic maritime industry in the registration process. Ship owners, lawyers, charterers and financiers should all have equal opportunity to express their opinions and influence the process. That kind of diversity would have a profound effect on the administration as well. It would prove to be not only expedient, but also efficient and profitable as well for the procedure. Having the ship owners point out the most important factors and emphasize issues that could give the register a competitive edge is needed and will most likely be a crucial move in making the register successful. Having this wide range of talent included would lead to a more efficiently run registry as well as having the ability to draw on expertise in house when needed.

Currently, the first step that has to be taken is to amend the stamp duty regulation and include more variety of vessels, such as service vessels. The second, and one of the most important one, is the revision of the 11th Article, to allow shipping companies to hire international crew on wages based on the crewmembers domestic union contracts. Without that amendment it would be pointless to aspire for a successful international register. The importance of the tonnage tax regime and a special refund scheme is also inherently vital for the registers success and the legislator must take a larger step in those subjects than they did with the current IIS. The taxation benefits presented were
not as great as what foreign registers offer, which means that it was not competitive enough. The taxation regime also needs to be revised with these considerations in mind. Additionally, the refund scheme should be revised, as it currently offers only 90% refund to the shipping companies. To be actively competitive the full amount has to be refunded, or at 100%. Moreover, the refund scheme should be revised in accordance to the customers needs. Norway is looking to the Danish approach, paying net wages, while the Faroe Islands refund the whole amount every month to the shipping companies. Deciding on the best approach is exactly were the strength of the incorporation of ship owners would prove valuable. Furthermore, is it important to offer competitive catalogue in terms of price. While the register is still building up its customer’s portfolio it might have to compete on price and bring on added value later on. Moreover, does the Icelandic Government have to recognize the relevance of the considerable cost that the shipping companies have already put in concerning registration under foreign flags. If the Government had reacted sooner and created a secondary register earlier would it be fair to speculate that the Icelandic shipping companies would have registered, at least a portion, of their fleet under the Icelandic flag right from the start. Owing to that fact is the Icelandic Government imposed to make some kind of concession if it inspires for repatriation by omitting e.g. registration fees for a certain period. This incentive should be directed to the Icelandic shipping companies so the time frame should be designed in consideration of that intent. Although the State would be forfeiting revenues, would it have to view this act as a strategic long-term gain.

In this sector, Iceland’s uniqueness can be utilized to its advantage. Iceland can still pride itself on its vast expertise and specialized maritime knowledge and build on further on these important factors. The technology that Iceland can boast of is of great value and elevates the competitiveness of many industries that can be beneficial for the shipping sector as well. The Icelandic workforce and human capital is highly educated and competent to service this sector and any derivative profession that can follow a successful international register. Moreover, it is extremely important to take a grounded decision on where to focus our competitive edge. Whether it being on maritime solutions and quality shipping by emphasizing on the Icelandic maritime technical know-how and maritime business sense of the Icelandic workforce, or, last but not least, on the Icelandic seafarers that encompass immense maritime knowledge or the access of certain technology and skilled and highly educated workforce, a competitive edge is
needed. To be competitive in the global market, Iceland has to take advantage of certain resources to accumulate that edge and utilize them to the fullest by making an attractive and functional register.

When examining other factors that have to be taken into consideration in able to produce desirable changes and begin attracting ships to the register, several factors need to be readdressed. The scheme concerning the regulations and taxation has to be orchestrated to achieve maximum serviceability for the shipping companies by combining optimum income for the state via e.g. registering companies in Iceland and acquiring derivative service to follow the direct employment. The Danish approach to be open to foreign ship owning companies, might be beneficial since the register isn’t fully open due to the minimum percentage required of the foreign company to be owned by a Danish citizen or company. However, it is also important not to over reach when it comes to acquiring extra revenues. Much as the Faroese, who have begun to impose unnecessary seminars on the shipping companies that might start find it a repelling factor. When it comes to the legal aspect and taxation, having tax experts and specialized lawyers directly influencing the making or the revision of the register may optimize its success.

It is also important that the Icelandic Authorities take into account the plausible distrust they may experience from shipping companies because of its impassiveness towards them over the past three decades. They will have to demonstrate with explicit and absolute means that they are going to support the Icelandic shipping industry and are willing to put effort into the project as well as following it through, long-term. The establishment of an international register cannot be viewed as a legislative framework that the government passes and leaves to the market to adhere to. The maritime industry is distinctive and calls for distinct measures. An international register is of a corporate nature and has to be treated as such. It needs to be managed and supervised by a corporate minded authority, not by a bureaucratic institution. Iceland’s next-door neighbors, the Faroe Islands have demonstrated exactly the importance of the corporate perspective and management. Their approach should be taken as an example, although it should be kept in mind that they are not restricted by the regulatory framework of EFTA/EEA as Iceland. The shipping companies are usually corporations that take action from corporate interest and perspectives. This report has established the importance of quality service that needs to be considered and incorporated into the registry if it is to be successful, e.g. unrestricted access to the Maritime Authority’s
personal, high quality and swift service, and void of all bureaucracy. If the main aim of the Icelandic government is to attract shipping companies to Iceland, has to adjust to the market’s needs and demands as well as the competitiveness that exists between the foreign registers. Furthermore, the Icelandic International Ship Register has to be open to further development because of its inherently mobile and changing nature. This global industry calls for a changed approach, new type of policy making that disregards stagnation by promoting opportunities for further advancements internationally.
14 Conclusion

This report has summarized why the current international registry has not produced expected results of increasing the number of ships registering under the Icelandic flag. The Icelandic Authorities had taken several measures prior to the establishment of the register to attempt repatriation to the Icelandic Register. These solutions included focusing on the abolishment of stamp duties on deeds, encumbrance levied on merchant ships, the authorization of chartering of bare boats and the implementation of the Icelandic International Ship Register, but these actions rendered no effect on repatriation to the register. After the publication of the latest committee’s conclusion was turned by the government, it was fairly obvious that stipulations needed to be addressed in the legislation, if it were to become successful. Influential parties had made it very clear by then that the main factors of the insufficient competitiveness of the Icelandic flag was the lack of state aid and flexibility to combine domestic crew with a foreign one. It was also consistent with the main literary findings conducted in the field that the crew cost was considered the most crucial factor in the flagging decision. One of the main aims of the IIS was to guarantee the registry’s competitiveness against other popular foreign registers, prompting it to at least offer comparable attributes, if not superior. Consequently, it should have been fairly obvious that Parliament’s decision to revise Article 11 would render the IIS completely uncompetitive towards other foreign registers. As a consequence a large part of the unsuccessfulness of IIS was due to the Icelandic Government’s lack of preparation and research on the matter as well as its insufficient policy formulation concerning the registry and the Icelandic maritime industry. When the shipping policies formulated by the governments of the other Nordic countries are considered, a remarkable difference is evident. The legislation within DIS is extremely vibrant and responsive to its global and perpetually changing environment, to which the legislator’s response is to incorporate collaborative efforts of authorities and domestic shipping companies. The Norwegian legislator has long since commenced a strategy that has served as a crucial basis for creating stable and predictable framework conditions that has assisted in attracting vessels to NIS. What is more, the commendable initiative that the Faroese Authorities initiated less than a decade ago by emphasizing on derivative service and marketing strategy of their “uniqueness”. The policy strategy of respective authorities is imperative and vital to a register’s success. It is in their best interest to design a registry and subject matters in relation to the global competition the registry will face. The half
measures that characterized the Icelandic’s Authorities’ approach to IIS were by no means sufficient in competing with their foreign competitors.

However, it is evident that the true failure of the IIS lays in the amendment of the fourth paragraph of the 11th Article of the bill that was presented to Parliament. By changing the bills intentions of allowing shipping companies to hire international crew on wages based on the crewmembers domestic union contracts, or in other words, by restricting the shipping companies to pay all crewmembers, Icelandic and international, by Icelandic union agreements, caused the register to become incapable of competing with foreign flags. The tragic part of IIS’s failure is that the Icelandic Government should have known in advance that it was rendering the register incompetent by changing the article. Both by examining the discussions from Parliament that preceded the legislation and with all the research and literary reviews that had been conducted on the subject and was available to the Government at the time. In truth, it gives little leeway to be surprised by the fact that it failed.

14.1.1 Suggestions for future research

When the Icelandic Government finally implemented an international register, it was poorly orchestrated and extremely late. It makes you wonder about the lost opportunities in not creating a prosperous environment for the shipping industry, not utilizing its potentials to the fullest, or their passive attitude towards producing more opportunities and, most importantly, not assuring that valuable knowledge and expertise would not be lost. The current situation gives way to speculation to whether it has become too late to give the Icelandic industry support. Has the chance to become a competitive participant in the globalized environment passed the Icelandic shipping industry? It is out of this paper’s scope to give a definite answer, but the question does warrant further research. By examining the immense progress of the Faroese International Register in just few years, it gives a positive indication of that anything is possible and that it is, by far, not such a far-fetched option.

With this in mind, the Icelandic Government must take into account future opportunities concerning the oil industry that has been expanding and is forecasted to continue to do so. If the discovery of recoverable quantity of oil or gas on the Jan Mayen Ridge becomes a reality, it could have an enormous economic impact on the Icelandic economy with a rise in future oil prices as well as the plausible derivative employment it could generate. If all the know-how and expertise has been lost before
that time, are we forced to outsource all of the sub-sectors that otherwise would bring in high revenues into Iceland’s economy. In taking a passive disposition towards the Icelandic shipping industry, the Icelandic Government has possibly lost many potential opportunities during the past two decades. However, in evaluating the above information and speculation, the two main question we ask ourselves are, 1) has the Icelandic Government learned from its mistakes, and 2) if not, will the Icelandic nation miss out on future prospects as well?
15 Bibliography


