

Master Degree Project in Logistics and Transport Management

# Should the Swedish Merchant Fleet Fly the Swedish Flag?

Amelie Andersson and Jeanette Håkstad Enæs

Supervisor: Johan Woxenius Master Degree Project No. 2013:29 Graduate School

# **Abstract**

Sweden has a long tradition of being a strong shipping nation. However, the industry is currently experiencing a rapid trend of shipping companies flagging out from Sweden to other flag states, most often to other European countries. The study explores this trend and touches upon the factors influencing the decision to flag out, how it could be stopped, and what consequences it might have for the Swedish shipping industry.

From a transport perspective, the flag of the ship does not matter as the goods will leave/enter the country anyway. However, all respondents except one believe that the flagging out can have a substantial negative impact on the Swedish shipping industry regarding loss of competence, job opportunities, influence in international organizations, etc. All respondents agree that this trend is due to unfavourable competitive conditions associated with flying the Swedish flag. This can be summarized in three categories: economic factors, political decisions combined with lack of maritime strategy from the government, and problems with surveys of the ships.

Keywords: Swedish flagged merchant fleet, Swedish flag, flagging out, Swedish shipping industry.

# **Acknowledgements**

The researchers would like to acknowledge everyone who has contributed with knowledge and personal experiences in order for this thesis to be written. First of all, the researchers would like to thank our supervisor Johan Woxenius at School of Business, Economics and Law – Gothenburg University, for the feedback and help given throughout the process. Secondly, the researchers are grateful for the guidance and support by Per A. Sjöberger at the Swedish Shipowners' Association. Finally, the researchers would like to express gratitude to all respondents for participating and sharing their experiences, opinions and thoughts on the subject matter. Without all your help, this thesis would not have been possible to write.

Gothenburg, 7 <sup>th</sup> of June 2013	
Amelie Andersson	Jeanette Håkstad Enæs

# **TABLE OF CONTENTS**

1.	Introduction	1
	1.1. Background	1
	1.1.1. Flags	1
	1.1.2. Tonnage tax and the Swedish Net Wage Model	2
	1.1.3. Crew cost	3
	1.2. Problem area	4
	1.3. Purpose	4
	1.4. Research question	4
	1.5. Scope of the thesis	5
	1.6. Disposition	6
2	Theoretical framework	7
	2.1. The Swedish Shipping Industry	
	2.1.1. History after 1960	
	2.1.2. The Swedish merchant fleet	
	2.2. Shipping segments	
	2.2.1. Liner shipping	
	2.2.2. Bulk shipping	
	2.2.3. Specialized shipping	
	2.3. Cost structure	
	2.3.1. Charter parties	
	2.4. Flag- and Ship registers	
	2.4.1. Factors influencing choice of flag register	
	2.4.2. Ship and flag register in Sweden	
	2.4.3. Reasons for flagging out from Sweden	
	2.5. State Aid Guidelines for Maritime Transport (SAGL)	
	2.6. Tonnage Tax	
	2.6.1. European tonnage tax models	
	2.6.2. Benefits and drawbacks of a tonnage tax regime	
	2.7. The Swedish Net Wage model	
	2.8. TAP	
	2.8.1. Background	
	2.8.2. Specifics of the contracts	
	2.8.3. Wages and social security contributions	
	2.9. 183-days rule	
	2.10. Maritime Labour Convention (MLC)	
	2.11. Maritime education in Sweden	
3.	Methodology	
	3.1. Research strategy	
	3.2. Research design	
	3.3. Data collection	
	3.3.1. Primary data	
	3.3.2. Secondary data	40

3.4. Data analysis	40
3.5. Research quality	41
3.5.1. Reliability and Validity	41
3.5.2. Benefits and drawbacks	42
4. Empirical Findings	
4.1. Factors Influencing Choice of Flag State	43
4.1.1. Competitiveness and Costs	43
4.1.2. Company History	44
4.1.3. The Swedish Government's commitment to the shipping industry	44
4.2. Discussion of factors influencing the decision to flag out from Sweden	45
4.2.1. Economic factors	46
4.2.2. Lack of maritime strategy and support from the government	49
4.2.3. Surveys	51
4.3. Swedish shipping companies about flying the Swedish flag	51
4.4. Consequences for the Swedish maritime cluster	52
4.4.1. Education, job opportunities and competence	53
4.4.3. Subcontractors	54
4.4.4. Other aspects	54
4.5. How to stop the trend of flagging out	55
4.5.1. Crew cost and taxation	56
4.5.2. Investments and research and development in the industry	57
4.5.3. Final remarks	58
4.6. Should Sweden have a Swedish flagged merchant fleet?	59
4.7. Summary of empirical findings	60
5. Analysis and Discussion	61
5.1. Swedish shipping industry and the Swedish merchant fleet	61
5.2. Choice of flag state	61
5.2.1. Economic factors	
5.3. Consequences of flagging out	65
6. Conclusion	
6.1. Recommendations	67
6.2. Further research	69
List of References	70
A managed in	74

# **LIST OF FIGURES**

Figure 2.1. Swedish flagged ships ≥ 300 GT	11
Figure 2.2. Number of Swedish controlled ships in other flag registers	12
Figure 2.3. Annual costs of operating a fleet	15
LIST OF TABLES	
Table 2.1. The Swedish controlled merchant fleet in January 2013	11
Table 2.2. Cost categories	15
Table 2.3. Cost distribution of voyage charter, time charter and bareboat charter	17
Table 2.4. Factors that could possibly influence choice of flag state	20
Table 2.5. Calculation of revenue – The Dutch model	24
Table 2.6. Calculation of revenue – Finland, Denmark and Norway	25
Table 2.7. Definition of Fjärrfart	34
Table 3.1. Respondents	40
Table 4.1. Summary of Empirical Findings	60
Table 5.1. Comparison of theory and empirical findings	62

# **Terms and Abbreviations**

DAS – The Royal Danish Register of ShippingDIS – Danish International Ship Register

DWT — Dead weight ton

EEA – European Economic Area

EU – European Union

FAS – Faroe Islands International Ship Register

GT - Gross Tonnage

ILO – International Labour OrganizationIMO – International Maritime Organization

ITF – International Transport Workers' FederationMET – Maritime education and training institution

MLC – Maritime Labour Convention

NIS – Norwegian International Ship Register

NOR – Norsk Ordinært Skipsregister
 SAGL – State Aid Guidelines (By the EU)
 SIS – Swedish International Ship Register
 SSA – Swedish Shipowner's Association

TAP – Temporary employed personnel (TEP), Swedish: Tillfälligt Anställd Personal

# 1. Introduction

This chapter will present the background of the problem area investigated in this thesis, the purpose and the research question, as well as to the scope of the thesis.

# 1.1. Background

The shipping industry is one of the world's most global industries. The majority of the world's population is dependent on transportation in their everyday lives, both for consumption and transport services, and in some cases, sea transport is the only possible mode of transport. According to Stopford (2009), two of the factors that influence the demand for shipping are the world economy and seaborne commodity trades (Stopford, 2009). As international trade has been growing tremendously ever since the end of World War II (David & Stewart, 2010), the demand for transportation has increased (cf. David & Stewart, 2010; cf. Stopford, 2009). The society benefits from the shipping activities in the sense that it enables trade and economic activity between countries. This has enabled economic- and industry growth, job opportunities, increased wealth, purchasing behaviour, etc. (cf. David & Stewart, 2010; cf. Stopford, 2009). Consequently, it is beneficial for a state to have a successful and prosperous shipping industry.

# 1.1.1. Flags

All ships fly a certain flag, which "determines the legal jurisdiction under which it operates" (Stopford, 2009, p.71). Therefore, depending on the flag chosen, shipping companies can influence its financial and fiscal environment to some extent because of the rules and regulations dictated and signed by the flag state (Stopford, 2009). The Swedish shipping industry has been experiencing an increasing trend of Swedish shipping companies flagging out to other European countries, and especially to neighbouring countries such as Denmark and the Faroe Islands (Trafikanalys, 2013). Whilst the world merchant fleet has increased both in number and in size (Stopford, 2009; Copenhagen Economics, 2012), the Swedish merchant fleet has dramatically decreased over the past years (Näringsdepartementet, 2013; Copenhagen Economics, 2012, Trafikanalys, 2013). As an example, out of the 505 ships above 500 Gross Tonnage (GT) in the Swedish merchant fleet in January 2013, only 119 ships were Swedish flagged (SSA, 2013). This can be compared to 215 Swedish flagged merchant ships in 2009 (SSA, 2009), i.e. around 44 per cent decrease between 2009 and January 2013.

According to Näringsdepartementet (2013) and Copenhagen Economics (2012), the decision by Swedish shipping companies of which flag state to register in is first and foremost influenced by the following four factors (Näringsdepartementet, 2013; Copenhagen Economics, 2012):

- 1) The development of tax rules
- 2) Costs of work force
- 3) The possibility of financial support
- 4) The direction of research and development

Underlying Issues that often are discussed in relation to the current phenomenon of Swedish shipping companies flagging out are mainly: tonnage taxation, crew costs and lack of maritime

strategy and political decisions from the government. In comparison with other Nordic countries, as well as other European countries, the Swedish shipping companies face conditions that are less competitive (Sjöberger, 2013).

One of the reasons why it is considered important to preserve the Swedish flagged merchant fleet is because Sweden is one of the leading countries in Europe when it comes to recruiting young people to Maritime education and training institutions (MET). Without Swedish flagged merchant ships, the demand for Swedish seafarers will decrease, which could eventually lead to METs in Sweden (both on the high school- and university level) being terminated (Sjöberger, 2013). Moreover, the students have to go through on board training periods as a part of the education in order to graduate. As the merchant fleet is diminishing, so are the on board training positions available (Näringsdepartementet, 2013), which lead to Swedish students having to perform these periods on ships flagged in other countries (Sjöberger, 2013). This solution is expensive for the respective METs because they have to fund the travel expenses for the students to get to these training positions (Sjöberger, 2013), as the travel expenses to the Swedish flagged ships currently are covered by the respective shipping companies (Woxenius, 2013). However, the government has decided to give 2.250.000 SEK in financial aid to the METs to cover for the students' travel expenses (Näringsdepartementet, 2012). Furthermore, officers and ratings returning to land have a high level of competence and knowledge, and due to this, they are very attractive on the labour market. These seafarers are needed in the shipping industry, but if the Swedish merchant fleet continues to diminish, this competence might get lost (External actor Q, 2013). Another concern when the merchant fleet is flagging out is that the shipping companies may also need to move abroad when switching to another flag registry (Schoug, 2013). This, in turn, will generate less corporation tax income for the Swedish state, as the companies will no longer be registered in Sweden (cf. Schoug, 2013).

# 1.1.2. Tonnage tax and the Swedish Net Wage Model

The European Union's (EU) State Aid Guidelines for Maritime Transport (SAGL) allows the member states to provide aid in support of maritime transport (SAGL, 2004). Tonnage tax and the Swedish Net Wage Model are examples of this. According to SOU 2006:20, the tonnage tax system differs from the regular corporate tax system in the sense that you calculate the possible earning potential of the qualifying fleet. Thereafter, you pay normal corporate tax on the calculated earnings to the country the company is registered in, as well as regular corporation tax on profits from all other business activities (SOU 2006:20). This means that the more tonnage a shipping company has, the more tax it has to pay (Poulsen, Sjögren & Lennerfors, 2012, published in Tenold, Iversen & Lange, 2012). However, as a shipping company knows the exact tonnage in the existing fleet, the amount of tax payable is known in advance, which enables more accurate planning and prediction of future cash flows. It also means that the state will receive a steady flow of tax income from the shipping companies each year in comparison with the current system, as the tax payable is not dependent on profit/losses (cf. SOU 2006:20). In Sweden, Maritime aid through the Swedish Net Wage Model (Swedish: Nettomodellen) on the other hand, is associated with payable income tax and social security contributions for the officers and ratings. If a shipping company is covered by the Net Wage Model, the payable income tax and social security contributions is set aside by the employer, but is not actually paid to the state. This possibility makes the crew cost less expensive (Sjöberger, 2013).

Almost all European countries, including Sweden's neighbouring countries, have introduced the tonnage tax system. In Sweden, however, only the Net Wage Model has been introduced. This can be seen as a competitive disadvantage for Swedish shipping companies (Copenhagen Economics, 2012; Trafikanalys, 2013). In addition to this, other countries have implemented so-called International Ship registers, such as the Norwegian International ship register (NIS) and the Danish International ship register (DIS), which gives shipping companies with ships registered in these registers the possibility to reduce manning costs (Poulsen et al., 2012, published in Tenold et al., 2012). The differences in the rules concerning the officers and ratings are much more beneficial in other European countries than in Sweden. Shipping companies flying other European flags are allowed to have 100 per cent officers and ratings domiciled from countries outside the EU/EEA, of which the majority originates from the Philippines, which are less expensive than officers and ratings domiciled in EU/EEA (Sjöberger, 2013). Tonnage tax will be discussed in chapter 2.6, while the Swedish Net Wage Model will be discussed in chapter 2.7.

#### **1.1.3. Crew cost**

Since Sweden has not implemented a Swedish International ship Register (SIS), the so-called TAP-agreements (Swedish: Tillfälligt Anställd Personal, English: TEP = Temporarily Employed Personnel) were implemented in 1998 as an alternative to reduce manning costs for Swedish shipping companies (Poulsen et al., 2012 published in Tenold et al., 2012). These agreements give the shipping companies the possibility to hire international temporary employed personnel domiciled outside the EU/EEA on its Swedish flagged ships. Officers and ratings hired under a TAP-agreement in Sweden are employed on different conditions compared to Swedish officers and ratings. However, in Sweden, only 50 per cent of the positions on board can be employed on TAP-agreements (Näringsdepartementet, 2013). The other half of the officers and ratings has to be registered for census in EU/EEA (Sjöberger, 2013). However, from 2010, some shipping companies got the possibility to hire 75 per cent of the officers and ratings on TAP-agreements (Näringsdepartementet, 2013). As it is allowed to hire international officers and ratings under TAP-contracts, the labour costs will be reduced to an internationally competitive level (cf. Näringsdepartementet, 2013). However, the Master and Chief engineer have to be Swedish and these positions are not covered by the TAP-contracts (Sjöberger, 2013). TAP will be explained further in chapter 2.8.

Another aspect that is affecting the seafarers and the crew costs is the so-called 183-days rule in the Swedish income tax act. In Sweden, after an individual has worked abroad for at least 183 days, the person is not liable to pay taxes on the income earned abroad. This rule does not include seafarers on board ships. However, the seafarer is not liable of income taxation when working on a foreign ship that mainly operates in deep sea shipping (Swedish = oceanfart), if the stay on board is longer than 183-days during a one-year period and if the employer is domiciled within the EEA (Inkomstskattelag (1999:1229)). This has an impact on the competitiveness of the Swedish seafarers, and will be described in chapter 2.9.

Finally, the Swedish version of the Maritime Labour Convention (MLC), which Sweden has ratified and is supposed to enter into force in August 2013, is associated with a weakness that is connected to the 183-days rule. The social security contributions for the seafarers covered by the 183-days rule are private and not statutory, which has been agreed upon by the parties of the labour market. However, the Swedish version of the MLC states that these seafarers have to be part of the statutory

social security contributions in Sweden. This is more expensive and therefore also has an impact on the competitiveness of the Swedish seafarers (Sjöberger, 2013) (see chapter 2.10 for more information).

# 1.2. Problem area

The problem area of this thesis is rather extensive and is connected to the issues described in the previous background discussion. To sum up, there is currently a lot of discussion going on regarding the Swedish maritime industry's competitiveness, especially in comparison with other European countries. Moreover, Swedish shipping companies have had an increasing tendency to flag out to other European countries, mainly to the Nordic countries, in order to take advantage of the competitive conditions in these countries. These conditions are associated with specific rules and regulations in Sweden affecting cost and taxation of the Swedish flagged shipping companies.

The Swedish government states that it aims to increase the competitiveness of the Swedish shipping industry (Näringsdepartementet, 2013). Despite this, the Swedish government has not yet introduced any changes which could give the Swedish flagged merchant fleet equal competitive conditions, or even make the Swedish flag more attractive compared to the other Nordic countries (cf. Näringsdepartementet, 2013, cf. Tenold et al., 2012, cf. Copenhagen Economics, 2012). As elaborated on previously, having a strong and prosperous shipping industry is beneficial to the society and the entire maritime cluster. However, does a nation's merchant fleet have to sail under the nation's flag in order to benefit from the advantages of a strong shipping industry and maritime cluster, as well as for them to prosper and develop?

# 1.3. Purpose

In accordance with the background description above, the purpose of this thesis is twofold: to gain a deeper understanding of the underlying issues connected to the tendency of Swedish shipping companies to flag out from Sweden, and to investigate whether the Swedish merchant fleet should be registered under the national flag or not.

# 1.4. Research question

To fulfil the purpose and aim of this study, the following main research question (RQ) has been formulated:

#### RQ: Should the Swedish merchant fleet fly the Swedish flag?

In order to be able to answer the main research question, several aspects connected to the phenomenon of Swedish shipping companies flagging out from Sweden need to be identified, which is why two sub-questions have been formulated. First of all, factors relevant for shipping companies when making decisions regarding which flag register to choose had to be identified. This forms the basis of the first sub-question (RQ1):

## RQ1: What factors are relevant for shipping companies when choosing flag register?

With factors, the researchers are referring to conditions that are important to be fulfilled in the flag register in order to satisfy the shipping companies' requirements and preferences. These factors can

subsequently be compared to the current conditions of the Swedish flag register. Second, potential consequences of a further diminishing, or even non-existent, Swedish flagged merchant fleet need to be investigated in order to determine whether the Swedish merchant fleet should indeed fly the Swedish flag or not. Based on this, the second sub-question (RQ2) has been formulated as follows:

# RQ2: What are the potential consequences related to a further diminishing, or even a non-existent, Swedish flagged merchant fleet?

By consequences, the researchers refer to e.g. changes regarding job opportunities, education, competence and knowledge, etc.

# 1.5. Scope of the thesis

The complexity of the phenomenon forces the researchers to limit the research area. As the shipping industry in Europe is very dominant, and as the Swedish shipping industry faces competition from the neighbouring countries, some comparison has been made between these countries to further gain understanding of the problem area. In some cases, comparisons have been made with other European countries as well. Factors that are often brought up as contributors to the decision of choice of flag state has been identified and discussed. The main research question and RQ2 have been investigated from three points of view (Shipping company, politicians and external actors) as the researchers' intention and ambition was to gather information from different perspectives in order to define and map out the problem area. The researchers wanted to provide the reader with a wide, but not too deep, theoretical background as there are lots of factors influencing this trend that are interlinked, in order to provide a larger understanding of these issues.

As the shipping industry is heterogeneous, the different shipping segments had to be viewed individually. Since the theory regarding the different shipping segments is very extensive, focus have been put on shortly describing those segments in which most of the Swedish controlled merchant fleet operate in order to provide a broad picture for the reader. In terms of the cost chapter related to the different segments, the aim was to only provide a short general description of the differences in the cost structures, as this can vary greatly from company to company within the segments as well. However, the researchers still wanted to include it in the thesis, as the cost issues is one of the most important factors mentioned by the respondents and that has an impact on the competitive advantage of the Swedish flagged merchant fleet and the decision to flag out.

When describing tonnage tax, focus has only been put on the Dutch model as this model acts as a template for EU guidelines. However, the differences in the Nordic countries' tonnage tax systems have been described when they differ from the Dutch. Moreover, the description of tonnage tax regimes will not be deeply analysed and described, as the subject is very broad and not the main focus of this thesis. The descriptions are provided in order to indicate that different countries have different requirements in their respective tonnage tax models.

This phenomenon is rather multifaceted as it affects several different stakeholders in the Swedish maritime cluster, such as the society, the government, the shipping companies, the seafarers, etc. Regarding the term maritime cluster, the researchers refer to all Swedish companies, organizations and institutions working in, and in connection with, the Swedish shipping industry, as well as their

employees. Interviews with three groups of actors were made in order to facilitate the analysis of this trend: Swedish shipping companies from different segments, one representative from each party in the parliament, and external actors doing business within the shipping industry. All respondents are not referred to when presenting the empirical findings, as many of the answers were similar. Only a selection of answers that stood out, or grasped the general believes of the respondents, has been presented.

Lastly, when using the term officers, the researchers refer to all officer positions on board a ship except for Master and chief engineer.

# 1.6. Disposition

The thesis begins with a short introduction of the problem area followed by the purpose and the research question in *chapter one*.

In *chapter two*, the theoretical framework is presented. This chapter contains all necessary factors and information that is needed in order to get an understanding of the problem area and empirical analysis.

The methodology used for this research is described in *chapter three*. The research strategy, design and method are described, in addition to the entire data collection process. Moreover, the research analysis is presented as well as a discussion regarding validity and reliability of the findings and benefits and drawbacks associated with the chosen method.

*Chapter four* contains the empirical findings, which were gathered through interviews with Politicians, Shipping companies, and external actors within the shipping industry.

In *chapter five*, the answer to RQ1 and RQ2 is presented together with the researchers' analysis, which was conducted by connecting and comparing the theoretical framework with the empirical findings.

The conclusion is presented in *chapter six* in which the researchers answer the main research question and recapitulate the most important factors influencing the Swedish shipping companies to flag out. The researchers' recommendations and suggestions for further research are also presented.

Finally, in the end of this thesis, the list of references and the appendix can be found. The interview guides used during the interviews are presented in the appendix.

# 2. Theoretical framework

The aim of this chapter is to give the reader a brief presentation of the development of Swedish shipping industry from 1960 to present, in addition to a basic overview and understanding of the current situation, in order to be able to follow the discussion regarding the empirical findings and the analysis.

# 2.1. The Swedish Shipping Industry

# **2.1.1.** History after 1960

Shipping has always been important for Sweden, mainly due to its long cost-line (Horn Publishing, 2013). Sweden is a country dependent on international trade, and 90 per cent of Sweden's import/export is performed by sea transport. This means that there is high demand for workforce with great competence in the shipping industry (External actor Q, 2013). However, the structure of the shipping industry has had a negative change over the past five decades, and Sweden is unfortunately one of many countries that have experienced a declining industry. In 1960, Swedish shipping companies controlled 2,9 per cent of the world fleet (in tonnage), but in 2010 this number had been reduced to below one per cent and further decline of the Swedish merchant fleet has been predicted (Poulsen et al., 2012, published in Tenold et al., 2012). This development is unfortunate for Sweden as the country has been a strong shipping nation for a long time. In addition, the country has a lot of maritime knowledge, and was at one time one of the largest shipbuilding countries (External actor Q, 2013). As Sweden did not partake in the Second World War, the shipyards were preserved, and in 1974-75 the shipbuilding industry had its peak, something that lead to employment for 39,000 persons in Sweden. However, when China, South Korea, and Japan took over the shipbuilding industry, the shipbuilding in Sweden was closed down in the end of 1970s (European Commission, 2006). Today, there are no Swedish new-building shipyards left (External actor Q, 2013), and the main activities in the shipyards are now maintenance and repair (European Commission, 2006).

The Scandinavian countries were superior when it came to tonnage per capita. Norway was the leading nation followed by Sweden and Denmark. Swedish shipping activities were clustered around Stockholm and Gothenburg, and Sweden had more than 26 000 seafarers at sea (Poulsen et al., 2012 published in Tenold et al., 2012). However, the decline in the Swedish merchant fleet the past years has been remarkable and Sweden's global position in the shipping industry is now history. In addition, Swedish shipping companies were active in all the main shipping segments (liner and general cargo shipping, tanker and dry bulk shipping, passenger shipping and short-sea shipping) (Poulsen et al., 2012 published in Tenold et al., 2012). Today, the shipping companies are still active in these segments, but their presence is far from as big as it used to be (See table 2.1., chapter 2.1.2) (SSA, 2013). The declining merchant fleet has also contributed to a reduction in job opportunities in Sweden (External actor Q, 2013).

According Poulsen et al. (2012), the shipping industry in Sweden has experienced two decline periods; mid-1970s to the mid-1980s, and from the late 1990s to present. Sweden did not partake in the global shipping boom during 2002-2008, and it has been questioned why Swedish shipping industry weakened when the shipping industries in some of the other Nordic countries were growing.

Three events in the Swedish shipping industry have had a negative contribution to further development (Poulsen et al., 2012 published in Tenold et al., 2012):

- 1. The flag act of 1977, a law that restricted the use of low-cost flag unless the government permitted it,
- 2. The government rejected to introduce an international ship register in the late 1980s (like NIS and DIS), and
- 3. The government did not want to implement a tonnage tax regime in the mid-2000s.

The Swedish government has an impact on how the Swedish shipping companies perform as it regulates possible changes in the industry. However, the above-mentioned factors have hampered the development of the Swedish shipping industry and it has been argued that that the government keeps hindering the industry for further development. These negative policy conditions were major contributing factors to the poor Swedish performance from the mid-1970s and the diminishing Swedish shipping industry. Due to this, it has been questioned if Swedish politics have made Swedish shipping companies less competitive compared to shipping companies in other countries (Poulsen et al. 2012, published in Tenold et al., 2012).

#### The flag act of 1977

It is required that all ships are registered in a flag state, and due to flag-state policies, the cost of operating a ship varies with it. It has become more and more common to register ships in so-called Flags of convenience (FoC) with low-cost regulations (Stopford, 2009), such as cheap registration fees and low or no taxes. In addition, shipping companies get the opportunity to reduce manning costs by employing cheap workforce (ITF, 2012b), and Panama and Liberia have for a long time been the two most popular low-cost flag registries (cf. Stopford, 2009). New low-cost flag registries continue to emerge (Poulsen et al., 2012 published in Tenold et al., 2012) and in 2005, 49 per cent of the world tonnage was registered in these types of registers (Stopford, 2009). This rapid development has contributed to a lot of changes in the shipping industry's competitive structure, as it is cheaper for Swedish shipping companies to register its ships in Panama or Liberia than in Sweden. It was not until the 1970s that the cost issue was discussed in the Swedish government when Swedish shipping companies wanted to reduce costs by flagging out to flag registries in low-cost countries. This led to an introduction of the flag act of 1977. The Act stated that the Swedish government had to give Swedish shipping companies permission to register in low-cost countries, something that made it more difficult to transfer ships to a low-cost flag registers. The new flag act contributed to a decline in Swedish shipping after 1977, and it became more difficult for Swedish shipping companies to compete internationally as foreign competitors could more easily use low-cost alternatives (Poulsen et al., 2012 published in Tenold et al., 2012).

More and more European shipping companies saw the opportunity to reduce crew costs in low-cost flag registries, something that led to a growth in FoCs during the 1980s (Poulsen et al., 2012 published in Tenold et al., 2012). The flags of convenience registers gave shipping companies the opportunity to employ seafarers from anywhere in the world at local salaries, contributing to a more profitable operation of ships under e.g. the flags of Panama and Liberia than under a traditional flag of Norway or Denmark. When flying the Panama or Liberian flag, shipping companies have to pay registration and tonnage fees. However, shipping companies are paying little or no corporation tax on the shipping company, and little or no income tax on seafarers' salaries. This is also the reason

why the flag registries were called "convenient" (Carlisle, 2009). European Shipping companies and European policy-makers were put in a difficult situation because seafarers in Western Europe had higher salaries compared to the salaries of seafarers from these low-cost countries (Poulsen et al., 2012 published in Tenold et al., 2012). An internationalization agreement (Swedish: internationaliseringsavtalet) was introduced in Sweden in 1983 as a response to this. The agreement allows Swedish seafarers living in Sweden to work on Swedish-owned ships flying foreign flags and receiving substantial tax relief if they work for more than 183 days per year. This has contributed to a reduction in crew costs for Swedish owners compared to flying the Swedish flag (Sjöberger, 2013).

# International ship register

The second major event in the shipping industry was the introduction of the international ship registries. Over the period 1984-1998, eleven countries established these so-called second registers as a response to the rapid growth of FoCs. The aim was, and still is, to compete with flags of convenience registers like Panama and Liberia, and to hinder European shipping companies from flagging out to FoCs (Carlisle, 2009). Norway established NIS in 1987 (Skipsregistrene, 2005), followed by DIS in 1988 (The Government of Denmark, 2010) and the Faroe Islands international ship register (FAS) in 1992 (FAS, 2013). Norway and Denmark have had great success with their respective registers, and it improved their national flag in this way. These second registers intended to maintain the shipping industry under a national flag (i.e. the Norwegian, Danish, and Faroe Islands flag), and to provide better conditions for the respective merchant fleet in worldwide trade. Even though the second registers were a great success for Sweden's neighbouring countries, the Swedish government rejected to establish a Swedish international ship register (SIS), which led to Swedish shipping companies preferring to register new ships under foreign flags in the 1990s. The Swedish fleet has been declining since the 1970s in contrast to the foreign-flagged fleet controlled by Swedish shipping companies, which increased after 1987 (mostly crude-oil tankers established by shipping companies in Stockholm and Gothenburg) (Poulsen et al., 2012 published in Tenold et al., 2012).

In 1992, the Swedish government ended the Flag act of the 1977. The crew costs for shipping companies flying the Swedish flag were still high, which was a clear disadvantage compared to shipping companies in international ship registers or in FoCs. The crew costs when flying the Swedish flag were often 45 per cent higher than under NIS or DIS (Poulsen et al., 2012, published in Tenold et al., 2012). It was not until Sweden joined the European Union in 1995 that regular changes could be seen in Swedish shipping policy. The TAP-agreement, as mentioned in the introduction, was established in 1998 in order to prevent the Swedish merchant fleet from flagging out and to hinder Swedish shipping companies from moving their businesses abroad. The TAP-system has not improved Sweden's competitiveness and cost disadvantage compared to other EU countries. Swedish shipping companies with Swedish flagged ships still face higher costs than other European shipping companies (SOU 2010:73).

The Swedish Net Wage Model was introduced in 2001 with the aim of reducing manning costs by compensating shipping companies for taxes and general payroll taxes for every seafarer on board their Swedish flagged ships. The Net Wage Model was good news as it gave Swedish shipping companies similar conditions such as those under NIS and DIS (cf. Trafikanalys, 2013). Despite the introduction of the Net Wage Model, shipping companies with ships flying the Swedish flag still face poorer competitive conditions than foreign competitors (Sjöberger, 2012).

# Implementation of a tonnage tax system

The third major event in the shipping industry was the implementation of a tonnage tax regime. Greece implemented the system in 1957, and was the first European country to do so. Most of the other European countries implemented tonnage tax regimes around the year 2000, e.g. Norway and the Netherlands in 1996 (Batrinca, 2010), and Denmark in 2002. As mentioned previously, shipping companies using a tonnage tax system calculate its payable tax based on the net tonnage owned regardless of the yearly financial result. This means that companies that holds a big fleet has higher taxes than companies with a smaller fleet. Under a tonnage tax system shipping companies have no incentive to invest in ships in order to avoid taxation (something that could happen under an ordinary corporate tax regime) (cf. Trafikanalys, 2013).

In SOU (2006:20) it was concluded that an introduction of a tonnage tax system in Sweden would increase the competitive conditions for shipping companies registered in the Swedish flag registry. In addition, this would contribute to an increase in the Swedish flagged merchant fleet and the maritime knowledge in the country (SOU 2006:20). However, Sweden did not implement a tonnage tax regime (Poulsen et al., 2012 published in Tenold et al., 2012), even though the parliament had decided that it should be done (Politician J and K). This has led to criticisms towards the Swedish government, especially from Swedish shipping companies, which claims that the government does not give sufficient support to the Swedish shipping industry. The Swedish shipping companies argue that their competitive situation is a disadvantage compared to their foreign competitors, and that a tonnage tax system would diminish the differences between flying the Swedish flag or any other European flag. As the Swedish government has not decided to implement a tonnage tax system in Sweden, Swedish shipping companies are now looking at the possibility to reflag their ships to foreign flags with better competitive conditions (Poulsen et al., 2012 published in Tenold et al., 2012).

# 2.1.2. The Swedish merchant fleet

The size of a nations' merchant fleet can be defined by using various definitions. One possible way is to look at the flag states the ships are registered in, and then the dead weight tonnage (DWT) and gross tonnage (GT) of the registered ships. A broader definition is to look at Swedish shipping companies with ships registered in foreign countries. In addition, the size of a country's merchant fleet can also be defined by including the ships that are on time and/or voyage charter (Sjørtfartens bok, 2012). According to SSA (2013), the Swedish merchant fleet comprised of 119 Swedish flagged ships  $\geq$  500 GT, excluding miscellaneous ships, the 1st of January 2013. However, in the following section, the focus will be put on the Swedish flagged merchant fleet  $\geq$  300 GT, excluding miscellaneous ships. Miscellaneous ships are the definition used for ice-, inspection-, survey-, training-, and tug ships. This means that the different segments taken into consideration are: bulk, container, dry cargo, offshore, passenger/ferry, reefer, Ro-Ro and tanker. The reason why  $\geq$  300 GT was used is because the researchers found statistical data from several years covering the development of ships included in this definition, which made it possible to easier detect trends in the development of the Swedish flagged merchant fleet. All statistical data used in this section is from January 1st the respective years.

As previously mentioned, Swedish shipping industry is experiencing an increasing trend of shipping companies flagging out, leading to a decreasing Swedish flagged merchant fleet. The development from 1999 to 2011 can be seen in figure 2.1. below (SSA, 2013):

# 250 230 210 190 Swedish flagged ships ≥ 300 GT

Swedish flagged ships ≥ 300 GT

Figure 2.1 Swedish flagged ships ≥ 300 GT

Source: (SSA, 2013).

As can be seen from the figure above, the Swedish flagged merchant fleet experienced an increasing trend from 2007-2009, where the total amount of ships went from 203 in 2007 to 240 ships in 2009. However, in 2010 the fleet comprised of 210 ships, and in 2011 it can be seen that the Swedish flagged merchant fleet experienced a substantial decrease to only 174 ships, resulting in a reduction of 66 ships compared to only two years earlier. As of January 1<sup>st</sup> 2013, the Swedish flagged merchant fleet  $\geq$  300 GT showed a record small size and comprised of only 149 ships. This means that the fleet has diminished with 38 per cent in the period 2009-2013. The distribution of the Swedish controlled merchant fleet the 1<sup>st</sup> of January 2013 within each segment is shown in table 2.1. below (SSA, 2013):

Table 2.1 The Swedish controlled merchant fleet in January 2013

Segment	Swedish controlled	Swedish controlled	Total
	with Swedish flag	with foreign flag	
Bulk	1	3	4
Container	5	5	10
Dry Cargo	12	80	92
Offshore	2	5	7
Passenger/Ferry	66	30	96
Reefer	-	38	38
Ro-Ro	32	51	83
Tanker	31	177	208
Total	149	389	538

Source: (SSA, 2013)

As table 2.1. illustrates, the number of Swedish flagged ships the 1<sup>st</sup> of January 2013 comprised of 149 ships, and the number of Swedish controlled ships with foreign flag comprised of 389. This gives a total of 538 in the Swedish controlled merchant fleet, which means that only 27,7 per cent of the Swedish controlled merchant fleet that is flying the Swedish flag.

Figure 2.2. below displays the top 10 countries that Swedish shipping companies chose to register its ships in when flagging out from the Swedish flag register (SSA, 2013):

# Number of Swedish controlled ships in other flag registers 50 44 39 40 33 33 32 30 30 26 18 20 15 13 Number of Swedish controlled ships in other flag registers 10 United Kingdom NOTHON (NIS) Gibraltar

Figure 2.2. Number of Swedish controlled ships in other flag registers

Source (SSA, 2013).

As Figure 2.2. shows, the Danish international ship register is the register where most Swedish controlled ships are registered, followed by the Netherlands and the Flags of Convenience register Bahamas (SSA, 2013). Compared to the top ten open registers in the world, the age of the Swedish merchant fleet is much higher (cf. SSA, 2013; cf. UNCTAD, 2012).

# 2.2. Shipping segments

The shipping industry can be divided into three main segments: liner shipping, bulk shipping and specialized shipping, and within these segments, there are sub-segments. However, to some extent, the three segments do compete with each other for the same cargo i.e. minor bulk cargoes such as forest products, steel products and building materials. Depending on the segment, different types of ships are needed (Stopford, 2009). Since the shipping industry is all other than homogenous, the segments will be discussed separately in order to define the differences. As mentioned previously, the focus has been put on the segments in which most of the Swedish controlled merchant fleet operates in, which is tanker (208) and dry cargo (92) within the bulk segment, and, passenger/ferry (96) in the liner segment and Ro-Ro (83) in the specialized segment (see table 2.1. chapter 2.1.2).

# 2.2.1. Liner shipping

Liner shipping can be described as ships operating on regular pre-determined schedules with fixed routes (David & Stewart, 2010; Coyle et al., 2011) and published prices (Stopford, 2009). The type of cargo carried is small parcels of general cargo, which can be defined as "any individual parcel too small to fill a ship or hold" (Stopford, 2009, p.62), passengers, and vehicles (Paixão & Marlow, 2002). General cargo is usually of high value, and even though there are no fixed rules of what general cargo comprises of, it can be categorized into seven main groups: loose cargo, containerized cargo, heavy and awkward cargo, palletized cargo, pre-slung cargo, liquid cargo, and refrigerated cargo (Stopford, 2009), which "includes manufactured and semi-manufactured goods and many small quantities of bulk" (Stopford, 2009, p.63). The liner segment includes the following sub-segments: container, feeder (Stopford, 2009), passenger/ferry, and Ro-Pax segment (Paixão & Marlow, 2002) (Ro-Pax = Ro-Ro and passengers).

The cargo is most often carried in containers on container- or feeder vessels. However, the container vessels are larger and can therefore carry more containers than feeders. The smaller feeders are used for container distribution such as transhipments from large hubs, between large vessels and smaller ports, and transport between smaller ports. The passenger/ferry segment however, can carry cargo, vehicles and passengers, and includes various ship types such as cruise ships and small passenger ferries, which all vary in size. The design of the ships depends on the type of segment and how long the route is. The passenger accommodation for example, is better the longer the voyages are (Stopford, 2009). In general, as this segment carries many passengers, more seafarers are needed in addition to those operating the ship, in comparison with the other shipping segments (cf. Stopford, 2009).

Providing a liner service requires a lot of organization in order to efficiently manage the operations, since the operator handles many individual parcels (Stopford, 2009). Liner services are open to any company who wants their cargo to be transported (David & Stewart, 2010). This implies that there are many cargo-owners involved in each transport leg that demand different things of the transport services. Therefore, focus must be put not only on cost, but also on service level, speed and reliability, in order to satisfy the customers (Stopford, 2009). Many of the ships used are adjusted to the routes they travel, the ports they call and the cargo carried, such as the equipment on board, cargo-handling gear, size, capacity, etc. (David & Stewart, 2010).

# 2.2.2. Bulk shipping

Bulk shipping can be defined as the transportation of one single type of cargo per vessel (usually) for one exporter/importer (David & Stewart, 2010). Consignments of bulk cargo are large enough to fill an entire ship or cargo hold (Stopford, 2009). Therefore, the ships are generally designed to carry one category of cargo (David & Stewart, 2010) and each vessel only makes a few voyages per year and each voyage is negotiated with the cargo-owner (Stopford, 2009). Compared to liner shipping, a bulk ship can be chartered on routes between any ports and does not operate on a fixed schedule (David & Stewart, 2010). The cargo transported can be divided into three sub-segments: Liquid bulk, five major bulks (iron ore, grain, coal, phosphate rock and bauxite) and minor bulks. Liquid bulk includes e.g. crude oil, oil products and chemicals, and minor bulk consists of for example steel products, sugar, wood chips and cement. The liquid cargo is transported in tankers and dry bulk in dry bulk vessels (Stopford, 2009). The competition on the dry bulk market is mainly dependent on

prices and in the tanker segment nowadays, more focus is put on specialization and differentiation than previously (Copenhagen Economics, 2012).

# 2.2.3. Specialized shipping

Specialized shipping can be defined as sea transport in ships designed to carry a particular type of cargo, usually bulk cargo of higher value, for a specific customer group. The Specialized shipping segment share characteristics with both the liner- and bulk shipping segment, thus, it can sometimes be difficult to distinguish if a certain business or transport service should be categorized as specialized shipping or not (Stopford, 2009). The main risk associated with this segment is the high level of specialization (Stopford, 2009) and in a market downturn it might be hard to instead transport other products if ships are too specified (cf. Stopford, 2009). Within this segment, there are five main sectors: motor vehicles, forest products, refrigerated foods, liquid gas, chemical parcels (Stopford, 2009, p.63-67). As mentioned above, many of the Swedish controlled ships operate within the Ro-Ro segment (see Table 2.1. chapter 2.1.2.). Ro-Ro stands for roll on-roll off and are vessels designed to carry the type of cargo which can be rolled on and off the vessel on ramps, such as different types of vehicles, and there are both specially designed as well as general types of Ro-Ro ships (Trafikanalys, 2013).

# 2.3. Cost structure

As previously mentioned, the shipping industry is heterogeneous, thus, in terms of the cost structure of the various types of shipping companies, although similar in some aspects, they differ from one another (cf. Stopford, 2009; cf. Copenhagen Economics, 2012). Costs are very important in any industry, but especially in the shipping industry since it is a very capital-intensive industry. Further, according to shipping company H, it is an industry where a shipping company can make a lot of money during booms and lose a lot of money during recessions (Shipping company H). Buying a vessel is a huge capital investment as the purchase price is very high. Further, it is also expensive to run and maintain a vessel, which can be used for about 20-25 years and the older the vessel, the higher the cost of maintenance. Newer ships benefit from technical developments, new equipment, and modern design, which influence fuel efficiency and fuel consumption (cf. Stopford). More seafarers is usually needed to operate older ships because of the lower level of automation as well as less reliable monitoring systems compared with today (Stopford, 2009). In addition, the number of seafarers also depends on rules and regulations set by the different flag states as well as the crew's proficiency and the maintenance conducted on board (Stopford, 2009). The costs also vary with the type of ship in question, in terms of purchase price as well as running and maintenance/repair costs. In all segments, the ship's size, design, speed, age, fuel consumption etc., affects the costs. For obvious reasons, the necessity of maintenance and repair is determined by the state of the ship. In terms of the costs of running a ship, there is no standard classification of costs which has been internationally accepted, but according to Stopford (2009), the running costs are usually classified into five categories: operating costs, periodic maintenance cost, voyage cost, capital costs and cargohandling costs. The expenses are not only affected by the size, design, fuel efficiency and age of the ship, but it is also important to not forget that the costs are also influenced by how efficiently the shipping company is managed overall (Stopford, 2009). The following table lists the five costs categories:

**Table 2.2. Cost categories** 

Five cost categories	Description	
Operating costs	Costs associated with the day-to-day running of the ship such as wages,	
	provisions, administration, maintenance, repairs, stores & supplies, lube	
	oil, water, insurance and overheads.	
Periodic maintenance cost	Regular maintenance, surveys, major repairs, special surveys	
Voyage cost	Voyage costs are variable costs related to a specific voyage and include	
	costs such as fuel cost, port and canal expenses, fairway dues, etc.	
Capital costs	Capital costs can be comprised of interest payments, debt payments,	
	and optional dividends. This cost category is determined by how the	
	ship has been financed.	
Cargo-handling costs	The costs associated with the handling of the goods such as loading,	
	stowing and discharging cargo.	

(Source: Developed from Stopford, 2009.)

Figure 2.3. below by Stopford (2009) displays the annual costs of operating a fleet and how different factors and characteristics of the ship infulences the different cost categories:

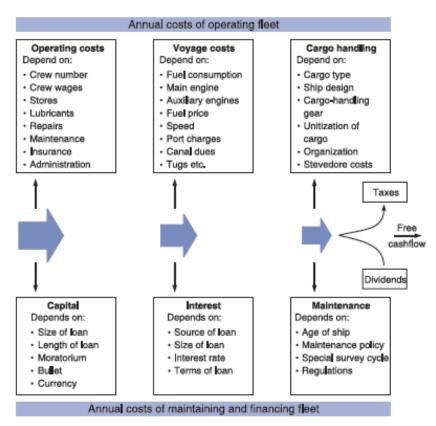


Figure 2.3. Annual costs of operating a fleet

(Stopford, 2009, p.220).

Therefore, as in any other business, costs are extremely important but especially within the shipping industry due to the large capital investments. According to Stopford (2009), because of the massive capital requirements to purchase and operate ships, it is essential to keep an eye on shipping cycles. Shipping companies should not overspend in market peaks but to cleverly invest in the business in

order to enable future growth as well as return on capital, and in market downturns, it is important to carefully monitor the business (Stopford, 2009).

A shipping company does not have to own the ships it operates, but can instead charter ships, which has an impact on the company's expenses and need of capital. The following sections will elaborate on the cost divisions under charter contracts.

# 2.3.1. Charter parties

A Charter party is a charter contract, and dictates the terms and conditions of the charter between the two parties, the shipowner and the charterer, or, the shipowner and the shipper. A charter party can cover either the transport of cargo, or the hire of a ship. There are three types of charter parties, namely bareboat charter, time charter, voyage charter (Stopford, 2009)

## Bareboat charter

A bareboat charter is a contract of hire of the ship only and does not include any technical maintenance or administration (Coyle et al., 2011, p.102). Under a bareboat charter, the charterer takes the shipping market risk and "full operational control of the ship" (Stopford, 2009, p.185) without owning it (Stopford, 2009). Since the charterer manages and has 100 per cent control of the ship, the charterer pays for all voyage and operating costs as well as costs related to the cargo. Further, the charter hire paid by the charterer covers the financing expenses of the shipowner. This way, the charterer avoids tying up capital, as it does not have to buy a vessel. The owner of the ship does not need any maritime expertise, as it is solely an investment for the owner, which is commonly a financial institution, and only pays for the financing of the ship. The contracted time period of this type of charter is quite long, generally 10-20 years (Stopford, 2009).

### Time charter

As the name indicates, a time charter is a contract of hire of a ship for a specific time period (Coyle et al., 2011, p.102). This particular time period can stretch from one voyage to months or years (Stopford, 2009). A time charter differs from the bareboat charter in the sense that the shipowner not only owns the ship, but is also in charge of the management of the ship as well as the operating costs. The charterer on the other hand, is responsible for the business activities of the ship and pays the daily charter rate, the voyage costs and cargo-handling costs (Stopford, 2009).

## Voyage charter

The voyage charter is the charter party in which the shipowner has the most responsibility (Stopford, 2009) as it concerns the hire of a ship and crew for a specific voyage (Coyle et al., 2011). The shipowner has the operational control of the ship and pays for all expenses. The charterer usually pays for all cargo-related expenses and, occasionally, the charterer pays for the cargo-handling cost as well. However, the division of these expenses is agreed upon in the charter party (Stopford, 2009, p.242). The charter rate is based on tonnage or on a lump-sum (Coyle et al., 2011).

Table 2.3. below presents the cost distribution between the shipowner and the charterer under a voyage charter, time charter and bareboat charter.

Table 2.3. Cost distribution of voyage charter, time charter and bareboat charter

Noyage Charter     Master instructed by:-     Owner	tructed by:- Master instructed by:-	
Revenue depends on: Quantity of cargo & rate per unit of cargo	Revenue depends on: Hire rate, duration and off-hire time	Revenue depends on: Hire rate & duration
Costs paid by owner:	Costs paid by owner:	Costs paid by owner:
Capital costs     Capital     Brokerage	<ol> <li>Capital costs</li> <li>Capital</li> <li>Brokerage</li> </ol>	<ol> <li>Capital costs</li> <li>Capital</li> <li>Brokerage</li> </ol>
2. Operating costs Wages Provisions Maintenance Repairs Stores & supplies Lube oil Water Insurance Overheads	2. Operating costs Wages Provisions Maintenance Repairs Stores & supplies Lube oil Water Insurance Overheads	Operating costs: note that under bare boat these are paid by the charterer
3. Port costs Port charges Stevadoring charges Cleaning holds Cargo claims 4. Bunkers, etc Canal transit dues Bunker fuel	Voyage costs: note that under charter and bare boat contract costs are pald by the charterer	s these

(Source: Stopford, 2009, p.182)

It is very difficult to generalize the cost distribution of each segment as it differs between each individual shipping company. The cost structure of each individual shipping company determines their ability to reduce costs. In general, the largest share of the costs is related to capital cost and fuel cost. However, this depends on the type of segment and shipping operations (Copenhagen Economics, 2012). According to Stopford (2009), the costs of operating a liner shipping company depends on eight categories: ship characteristics, service schedule, capacity utilization, ship costs per day, port and charges (excluding cargo handling), the deployment of containers, the cost of containers and container handling and administration costs (Stopford, 2009). According to Copenhagen Economics (2012), dry bulk ships, container ships and tankers are fuel intensive and the fuel cost is said to comprise approximately 40 per cent of the total costs. This means that fuel reduction and developments in this area is very important. The Ro-Ro segment is also said to have relatively high share of fuel costs (Copenhagen Economics, 2012). The capital costs are very high in the bulk segment (Stopford, 2009) and specifically in the tanker segment, it is important with research and development in order for the shipping companies to be able to differentiate themselves further through specialized services for the customers (Copenhagen Economics, 2012). Reductions in terms of crew costs is important for all segments but especially for Shipping companies within passenger/ferry and Ro-Pax segment (Copenhagen Economics, 2012) as these companies normally have higher share of crew costs as they have more seafarers employed on the vessel, both to operate the ship as well as providing various services for the passengers. According to Copenhagen Economics (2012), the rules regarding the Net Wage Model is essential for these two segments as not all of the officers and ratings can be exchanged to low cost officers and ratings since the service aspect is of great importance in this segment (Copenhagen Economics, 2012). Further, the costs in this segment are influenced by speed, service, and frequency, as well as marketing, since this segment is more dependent on marketing activities (Stopford, 2009). Also, the costs are more evenly distributed in the passenger/ferry segment. Moreover, in general, fiscal legislation is very important, especially for small-medium sized shipping companies as they are greatly affected by economic fluctuations. Due to the lack of a tonnage tax system, their flexibility is low which makes it even harder to deal with economic fluctuations (Copenhagen Economics, 2012).

# 2.4. Flag- and Ship registers

The flag of a ship "determines the legal jurisdiction under which it operates" (Stopford, 2009, p.71), which means that the shipping company must follow the maritime laws dictated by the nation of the chosen flag registry, as well as the international conventions the flag state has signed and ratified. Therefore, depending on the flag register chosen, shipping companies can somewhat influences their financial and fiscal environment, as this is set by the legal jurisdiction of the flag state (Stopford, 2009). According to Mansell (2009), there are several definitions of flag states (Mansell, 2009), but in short, a flag state can be defined as the nationality, or country of registry, of the ship (Mansell, 2009; OECD, 2003). There are various types of flag states, and the technical, administrative and social responsibilities differ amongst them (Mansell, 2009).

Flag states can be divided into four groups: National, Quasi-National, International, and Pseudo-National flag States (Mansell, 2009). National flag registers are so-called closed registers, which means that only national companies can register here (Mansell, 2009), such as the Swedish flag register or the Norwegian register (NOR). These registers also require that bareboat charterers of the registered ships are national companies and are doing business in the country. Open registers can be said to comprise all types of registers that are not national registers, such as second registers and flags of convenience. This means that open registers are available to any shipping company in the world. However, each of these registers has individual requirements and rules (Mansell, 2009). Flags of convenience, or so-called low cost flags or third country flags, have been used for several decades (Stopford, 2009). The International Transport Workers' Federation (ITF) introduced the concept of "flags of convenience" in 1948. There are also many definitions of flags of convenience, and if categorizing them under one of the four groups of flag states, it can be placed under international registers (cf. Mansell 2009). It can be defined as "The flag of any country allowing the registration of foreign-owned and foreign controlled vessels under conditions which, for whatever reasons, are convenient and opportune for the persons who are registering the vessels." (Bozcek, 1962, p.2). According to the ITF, shipping companies can avoid obeying national laws concerning wages, as well as working conditions and workers' rights when flying a FoC (ITF, 2012a).

Second registers and dependent territory registers can be described as quasi-national flag registers as they are not really national registers. Second registers, as mentioned in chapter 2.1.1, was created in response to the introduction of flags of convenience, to which their national fleets started to flag out to, in order to preserve the national shipping industry. These registers provide advantages and flexibility in terms of crewing and taxation and offer both national and foreign shipping companies the possibility to register their ships. NIS and DIS are examples of registers that are considered to be second registers. Dependent territory register are connected to the mother country through

maritime legislation. Both second registers and dependent territories do not have the possibilities to offer the same advantages as flags of conveniences due to their relationship with the mother national state (Mansell, 2009). Finally, pseudo national flag states are associated with "low costs, lack of transparency and ease of incorporation of companies in their territory" (Mansell, 2009, p.109). These flag states are not even situated in the flag state and are basically unregulated (Mansell, 2009).

Today, the top ten open registers in terms of the number of ships flying their flag are: Panama, Liberia, Marshall Islands, China Hong Kong SAR, Singapore, Greece, Malta, Bahamas, China, and Cyprus. Sweden is not in the top 35 flag registries. The fleet in the top open registers has become more modernized as many new built ships have been registered (UNCTAD, 2012).

# 2.4.1. Factors influencing choice of flag register

When looking at what flag state to register in, either in the national register or in an open register, several aspects need to be considered (Mansell, 2009). However, cost is the most important one as this greatly affects the business (cf. Mansell 2009). Another statement it that shipping companies have flagged out ships due to economic or political convenience (Mansell, 2009). For example, avoidance of taxation is one of the reasons often mentioned, which was one of the main reasons during the 1980's (Stopford, 2009). As will be explained further in chapter 2.5, the European Union developed their State Aid Guidelines for Maritime Transport as a response to this, which allows for certain fiscal- and aid measures to be implemented by the member states in order to decrease costs and to increase the competitiveness of the member states' national flag registers (Stopford, 2009; European Commission, 2004). Cost of crew is another important aspect. According to Stopford (2009), many flag registers have specific rules regarding the use of seafarers with other nationalities. The cost per seafarer when flying an open registry flag can be 50 per cent lower compared to flying under a European flag due to less strict legislation of employment in open registry countries. This means that shipping companies have the ability to impact on the labour costs to a much larger extent than land-based companies, through the choice of flag state. In addition, the opportunity to be able to benefit from investment incentives in another country is another factor (Stopford, 2009).

The factors mentioned above are related to the choice of flag states, independent of if the ship is reregistered, or a new ship is being registered for the first time. Table 2.4. below displays several underlying aspects that can affect the choice of flag state:

Table 2.4. Factors that could possibly influence choice of flag state

# Factors that could possibly influence choice of flag state

Crew costs

Quality and source of labour or the unavailability of on-going supply of skilled labour

Reduction in management costs

Minimization of taxes on profits

Fiscal rules and costs

Directives from financial institutions

Avoidance of bureaucratic control

Degree of control exercised by the flag state

Type, size and age of ships

Type of trade in which the ship is engaged and the geographical cover

Avoidance of costs of compliance with higher standards under the national flag

(Source: Bergantino and Marlow, 1998, referred to in Mansell, 2009).

Mansell (2009) also states that the trend of flagging out depends on the type of segments shipping companies are operating in as well as the type of ships used (Mansell, 2009). However, the author further claims that despite lack of competitive advantages in a flag registry, shipping companies may choose to remain due to factors such as "the type of ship and trade routes, reputational risk, the value of the national flag in promotion of services, and reasons of historical importance" (Mansell, 2009, p.93).

# 2.4.2. Ship and flag register in Sweden

When purchasing a ship, either a new built or one on the second-hand market, the buyer needs to register the ship in a ship register and a flag register. In Sweden, the Swedish Transport Agency is in charge of the ships' register, which covers registration of ships, shipbuilding, and boats, as well as information related to these (Transportstyrelsen, 2011). All purchased ships larger than 12 meters long and four meters wide, have to be registered according to chapter 2 in SFS (1994:1009) (Transportstyrelsen, 2010). This also includes boats used professionally and not for leisure, which are smaller than 12 meters long and four meters wide (Transportstyrelsen, 2011). If the ship is not registered, it is not allowed for use. According to Swedish law, the ship cannot be registered in another country simultaneously. Further, the ship needs to be more than half-owned by a national or someone within the EEA in order to be able to register. In addition, if a shipping company's ship is part of economic activity established in Sweden and if the operational aspects of the ship is directed and controlled from Sweden, registration in Sweden is also possible. If the owner does not fulfil these requirements, there is still a possibility to apply for exemption (Transportstyrelsen, 2013c). Further, the ship has to be measured for tonnage (Swedish =skeppsmätt) by the Swedish Transport Agency, which is governed by the law SFS (1994:1162), if wanting to register in the Swedish ship's registry (Transportstyrelsen, 2010). When registering the ship or registering change of ownership, several forms need to be filled out and handed in (Transportstyrelsen, 2013c). The shipping company has to pay a stamp duty of 0,4 per cent of the mortgage amount (Swedish= inteckningsbeloppet), which can be a large sum of money (Transportstyrelsen, 2013a). Otherwise, the highest cost connected with the ships' registration are set between 8 400 SEK and 16 100 SEK. The record keeping fee is currently set to 400 SEK/year (Transportstyrelsen, 2013b).

As mentioned previously, the ship also needs to be registered in a flag registry, i.e. fly a certain national flag. Sweden only has a national register and not an open register as many European countries have, e.g. DIS and NIS. There has been a discussion of introducing a "SIS" in Sweden as well, in order to be able to employ more international seafarers. The mentioned reason why Sweden has not introduced a SIS is that it has been stated that it would go against international conventions that Sweden has ratified (Sjöberger, 2013).

According to an article written by Nilsson (2010), the cost of registering a ship in the Swedish flag register can differ greatly from registration in for example FAS or DIS, and that the cost of registration in the Swedish register is much higher than that of the other two registers. The costs associated with the registration process are e.g.: survey for flagging in (Swedish = inflaggningsinspektion), office turnaround time (Swedish = handläggningstider), survey before issuing certificate (Swedish = certifikatsinspektion), etc. In e.g. Denmark, many of the actions carried out by the authorities in Sweden, are now allowed to be conducted by classification societies, and even though the costs vary between the classification societies, these are generally cheaper than in Sweden (Nilsson, 2010).

Mansell (2009) claims that "all national registers, regardless of their state of economic development, are clearly at a competitive disadvantage with other more open registers" (Mansell, 2009, p.103). Some national registers have eased up some registration requirements and/or introduced second registers as a way to increase the competitive advantage (Mansell, 2009). Since Sweden only has a national flag registry and no second registry, it can be said that the shipping companies flying the Swedish flag face less competitive conditions than those of other flag registers (cf. Mansell 2009). However, even though registers such as NIS and DIS have managed to create competitive advantages and attracted a lot of ships, it has been noted that due to the beneficial crewing rules of foreigners, job opportunities of national seafarers have decreased (Mansell, 2009).

# 2.4.3. Reasons for flagging out from Sweden

As discussed previously in this chapter, there are several reasons why a shipping company decides to flag out from a certain register. As mentioned in the previous chapter, the Swedish flagged merchant fleet keeps decreasing, and 72,3 per cent of the Swedish controlled merchant fleet is reported to sail under foreign flag (SSA, 2013). According to Copenhagen Economics (2012), two reasons for the decreasing Swedish flagged merchant fleet could be because less new builds are Swedish flagged, together with the fact that existing ships are flagging out (Copenhagen Economics, 2012). Several reports state that cost reduction is the main reason why shipping companies decide to flag out, and the following four factors have been said to influence the decision to flag out from Sweden (e.g. Näringsdepartementet, 2013; Copenhagen Economics, 2012):

- 1) The development of fiscal rules
- 2) Crew costs and crewing rules
- 3) The possibility of financial support
- 4) The direction of research and development

The importance of these factors differs somewhat between the different shipping segments (Copenhagen Economics, 2012), which was described in chapter 2.3. As an example, personnel

intensive shipping companies are more interested in tax relief of the staff as they have far more employees than a shipping company owning tankers (Copenhagen Economics, 2012).

# 2.5. State Aid Guidelines for Maritime Transport (SAGL)

The European Union's State Aid Guidelines for Maritime Transport (SAGL) was first developed in 1989, and has since been revised and updated twice, in 1997 and in 2004. The State Aid guidelines comprise all support in favour of sea transport, which has been granted by the member states or financed via state funds. The background to its establishment can be traced back to the 1970's, from which point and onwards, there has been competition between ships flying member state flags and ships flying flags of convenience. In order to increase their competitiveness vis-à-vis flags of convenience, the member states implemented various solutions as no community initiative was introduced. For example, second registers, with more relaxed crewing rules, were, as mentioned previously, introduced as an attempt to encourage re-registration of ships to their national registers. However, a large part of the member states fleet is still registered under open registries. Therefore, the guidelines are set up to e.g. encourage registration and re-registration in the member states flag registers, to maintain a fleet that is internationally competitive, to protect job opportunities, as well as expertise within the shipping industry (European Commission, 2004). The guidelines concerns "transport of goods and persons by sea'. They also, in specific parts, relate to towage and dredging" (European Commission, 2004, p.3).

Ever since the European Commission approved state aid to some of the measures that the member states have suggested, significant volume of tonnage has been re-registered in national registers in the member states, especially measures associated with tax relief. The European Commission claims that state aid might prevent shipping companies to flag out to third country registers. However, it is important that the guidelines do not affect the competition between the member states, nor the financial situation in the member states, negatively. The main rule is that state aid is only granted to ships in registers within the EU member states, but there are some exceptions. The guidelines provide the member states the possibility to implement fiscal and social measures as a way to improve their international competitiveness, as third country registers offers different kinds of tax relief, which reduces the costs for the shipping companies with ships in these registers (European Commission, 2004). These fiscal motives may also attract companies to move the entire company to these countries, which in turn lead to loss of income tax to the state of the former country (cf. European Commission, 2004). Implementing a tonnage tax regime is one way of providing tax relief (European Commission, 2004). Tonnage tax will be described further in Chapter 2.6.

The guidelines also support other measures in order to lower the costs for shipping companies and seafarers within the member states to reach similar cost levels as in other countries, and to support and stimulate employment within the EU. Measures related to employment costs that should be allowed for shipping within the EU are lower rates of social security contributions and of income tax for seafarers from the community working on ships registered in a member state. The seafarers covered are "Community/EEA citizens, in the case of seafarers working on board vessels (including Ro-Ro ferries) providing scheduled passenger services between ports of the Community, and all seafarers liable to taxation and/or social security contributions in a Member State, in all other cases" (European Commission, 2004, p.6). Some countries have decided to, instead of lowering taxes and

other costs, compensate the shipping companies partly or entirely for costs, which stem from taxes and other costs (European Commission, 2004).

There are also other examples of state aid that can be approved by the European Commission. In some specific cases, investment aid can be allowed in order to improve the environmental and safety standard of ships flagged in member states to higher standards than specified in international conventions. Further, as educational programs supported by the government are of general character, they are not regarded as being state aid. This is why no announcement to, or inspection by the commission is needed, unless in some particular cases where it can be viewed as state aid. However, support with the aim of updating and improving the competence of Community officers, such as financial aid to cover educational costs, can be approved during his/her entire career. Though it has to be designed so that the aid does not directly nor indirectly subsidies the wages of the officers (European Commission, 2004). State aid might also be granted for projects specifically concentrating on research and development within "quality, productivity, safety and environmental protection" (European Commission, 2004, p.7), in order to maintain and develop know how (European Commission, 2004). These are just some examples of state aid, which is allowed according to EU's State Aid Guidelines. In Sweden, a Net Wage Model has been introduced as a way to lower taxes and social security contributions for seafarers, but no tonnage tax system has been introduced. This will be elaborated on in the following chapters.

# 2.6. Tonnage Tax

The main principle of a tonnage tax system, as mentioned before, is that the payable tax is calculated based on the fleet's tonnage, instead of the actual profit, of the qualified shipping activities. The system only includes shipping companies involved in international seagoing transport and mainly ships carrying cargo or passengers. Not qualified activities are taxed the regular way (Statskontoret, 2010). The required qualifications will be elaborated on shortly. Almost 85 per cent of the world's merchant fleet is registered in countries with a tonnage tax system (sjöfartens bok, 2012). Moreover, it is voluntary to implement a tonnage tax system, but if a shipping company chose to use the system, every company within the group must join the system at the same time. Companies that have chosen the tonnage tax regime must remain subject to the system for 10 years. The untaxed reserves a company has when joining the system can be dissolved or depreciated against losses during the stipulated period. However, if the company during the 10 year period is no longer considered qualified to utilize the system, the untaxed reserves that the company had when joining the system is released (Statskontoret, 2010).

#### Example of the current situation in Sweden:

If you order a new vessel or buy one on the second-hand market with cash for 100 million SEK year 1, you can choose to apply depreciation according to plan with four per cent per year (during 25 years according to SSA's recommendations). According to the Swedish accounting legislation, you have the ability to write off your assets with up to 30 per cent, in which case you would put the remaining 26 per cent in the untaxed reserve on the balance sheet. In order to be able to do this, the company must have made profit as well as owning ships that have not yet been fully written off. The next year (year two), you are able to write off 30 per cent of what is left of the fiscal value. In year three you are able to write off with 4 per cent according to plan, in addition to 26 per cent. This pattern continues every year, and the value never really reaches zero. This way, the taxation of profit is

postponed. It is not until you dissolve the untaxed reserves that you pay the corporation tax, unless the untaxed reserve is used for loss coverage. When there is nothing left to perform accelerated depreciation on, a new ship is bought in order to avoid paying tax on the profit made. This way, you 'roll' the deferred taxes ahead. According to SSA's evaluation, Swedish shipping companies most likely have a relatively big aggregated untaxed reserve. For several years, there has been a political will in Sweden to steer businesses towards investments rather than paying dividends as investments are generally considered as leading to more job opportunities (Sjöberger, 2012).

# 2.6.1. European tonnage tax models

Two different tonnage tax models have been introduced in Europe:

- The Dutch model implemented in the Netherlands (1996), Norway (1996), Germany (1999), the UK (2000), Belgium (2002), Denmark (2002), Ireland (2009), Latvia (2002), Spain (2002), France (2004), Italy (2004), Lithuania (2007) Poland (2009). In addition, countries outside Europe have introduced the Dutch model such as the Netherlands Antilles (1987), USA (2004), South-Korea (2005), and South-Africa (2005).
- 2. *The Greek model in 1957*, implemented by Greece, Cyprus and Malta. (PwC, 2009; Trafikanalys, 2013).

Norway introduced its tonnage tax model in 1996. This model differed from the other EU-models, but after amendments in 2007 the model is now much more similar to the Dutch model (Statskontoret, 2010). Finland implemented a tonnage tax system in 2002, but the country did not get the model approved by the European Commission under 2012 after amendments in the tax regulations (The Swedish Parliament, 2011; Trafikanalys, 2013).

In the next section, the main focus will be put on the Dutch model, as it acts as a template for EU guidelines (Statskontoret, 2010). However, the differences in the Nordic countries' tonnage tax systems will be described briefly when they differ from the Dutch.

# The Dutch tonnage tax model

#### Method of calculating the tonnage tax

In the Dutch tonnage tax model, the companies' income generated from shipping activities is determined based on the tonnage instead of the actual earnings. The tonnage tax is based on a flat rate income, which is calculated from each qualifying ship's net tonnage and per day the ship is in operation (Statskontoret, 2010). The shipping company's qualified ships are taxed based on a flat rate income per 1000 NT/day:

Table 2.5. Calculation of revenue – The Dutch model

Net tonnage of ship Flat rate income per 1000 NT/day	
0-1000 NT	€ 9.08
> 1000 – 10 000 NT	€ 6.81
> 10 000 – 25 000 NT	€ 4.54
> 25 000 – 50 000 NT	€ 2.27
> 50 000 NT or more	€ 0.50

(Source: Tax consultants international, 2012)

The calculated income is then taxed with regular corporation tax (SOU 2006:20), which is 20 per cent on the first EUR 200 000 of taxable profit and then 25 per cent on the taxable profit above EUR 200 000 (Deloitte, 2013a).

The tonnage tax is also calculated on a flat rate income based on the net tonnage of the qualifying ships in both Finland and Denmark. In Finland the flat rate income is calculated per 1000 NT per day a company has the ship(s) in its possession, whilst in Denmark the flat rate income is calculated per 100 NT (SOU 2006:20). However, the method of calculating the tonnage tax in the Norwegian system is different. Shipping companies using this regime pay an excise tax on the net tonnage (Statskontoret, 2010). The net tonnage is rounded to the nearest thousand ton, and then the tonnage tax is calculated for each ship separately. In addition, companies using the Norwegian model are able to reduce the payable tax amount with up to 25 per cent if the qualified ships fulfil certain environmental requirements (SOU 2006:20). Table 2.6. displays the flat rate income per NT/day in the Finnish and Danish system, and the excise tax amount per 1000 NT/day in the Norwegian system:

Table 2.6. Calculation of revenue – Finland, Denmark and Norway

Net tonnage of ship	Flat rate income per 1000 NT/day (Finland)	Flat rate income per 100 NT/day (Denmark)	Excise tax amount/1000 NT/day (Norway)
0 – 1000 NT	€ 9,0	DKK 8,97	NOK 0
> 1 000 – 10 000 NT	€ 7,0	DKK 6,44	NOK 18
> 10 000 – 25 000 NT	€ 5,0	DKK 3,85	NOK 12
> 25 000	€ 2,0	DKK 2,53	NOK 6
	(Statskontoret, 2010)	(Statskontoret, 2010)	(Ernst & Young, 2013)

After the fleet's flat rate income and excise tax amount is calculated, the amount is taxed with regular corporate tax (SOU 2006:20), which is 24,5 per cent in Finland (Deloitte, 2013b), 25 per cent in Denmark (Deloitte, 2013c), and 28 per cent in Norway (Deloitte, 2013d). As the countries have different levels of corporation tax, the tonnage tax systems must be approved by the European Commission in order to avoid unequal competitive conditions (SAGL, 2004).

In order to qualify for the Dutch tonnage tax model, several requirements need to be fulfilled. These requirements will be elaborated on in the following sections.

# Qualified companies and activities

Companies that are qualified to apply for the Dutch Tonnage tax system are e.g. individual entrepreneurs, partnerships, permanent establishments, foundations and legal entities (Batrinca, 2010). Moreover, qualified companies need to gain profit from sea going ships that operates in international sea traffic (Tax consultants international, 2012). If more than 50 per cent of dredging and towing activities are performed at sea, these activities will also be qualified for most tonnage tax systems. Only legal entities are qualified for the Danish tonnage tax system (Batrinca, 2010), and in Norway, tonnage taxed activities must be exercised by companies that have been founded and registered as a private limited company according to Norwegian legislations. Moreover, companies qualified for the Finnish tonnage tax system have to be managed in Finland in addition to paying

corporate income tax to the country. Profit generated from sales activities is not covered by the Danish tonnage tax system. This means that the deferred tax liabilities still have to be paid (SOU 2006:20).

# Qualifying ships/ownership

Ships on time charter (Batrinca, 2010) and voyage charter may qualify for the Dutch tonnage tax system if the charterer is in charge of the commercial management of the ship. However, the charterer also needs to own a certain volume of net tonnage, either by owning the ships alone (self-owned) or together with another company (co-owned). Moreover, ships on bareboat charter are also considered as qualified. This can be a ship a company holds under a bareboat charter, or a ship that a company has chartered out on a bareboat charter (Tax consultants international, 2012). In Denmark, maximum 80 per cent of the fleet's tonnage is allowed to be on time charter, as long as it is not a purchase option (Batrinca, 2010). Ships on bareboat charter can use the Danish tonnage tax system without restrictions, but ships on time or voyage charter needs to follow specific restrictions. The chartered gross tonnage shall not exceed four times the company's own gross tonnage under the tonnage tax scheme during an income year. The excess tonnage will be taxed with regular corporation tax (Statskontoret, 2010). In Norway, a company that has implemented a tonnage tax system is required to:

- 1. Own at least one vessel or
- 2. Own at least 3 per cent of another company that has joined the tonnage tax system or
- 3. Have a partnership with at minimum one asset qualified for the Norwegian system (PWC, 2009).

Profit generated from operations from chartered ships (bareboat charter or time charter) is exempted from taxation in all cases if the company owns at least one asset that is qualified for the Norwegian tonnage tax system (PWC, 2009).

Shipping companies are required to have its strategic operations and the majority of its management in the Netherlands (SOU 2006:20). In Denmark, the qualified ships must have a tonnage of 20 tons or more, and have to be strategic and financially operated from Denmark. Only shipping activities can benefit from the Dutch tonnage tax system, and floating cranes, cable layers, drilling platforms and the like are therefore not included in the system (Statskontoret, 2010).

# Ship management activities

Ship management companies have the possibility to take advantage of the Dutch tonnage tax model (Batrinca, 2010). Technical and crew management activities a ship management company performs for another company may qualify in the Dutch and Danish tonnage tax system (PWC, 2009). Pure ship management companies cannot qualify for the Norwegian tonnage tax system (Statskontoret, 2010). In 2011, companies operating cable and pipe laying vessels, research vessels or crane vessels were also able to implement the Dutch tonnage tax system (Tax consultants international, 2012).

#### Flag or registration requirement

There are no requirements that a ship has to fly the Dutch flag in order to be a part of the Dutch tonnage tax system, which means that shipping companies can use the tonnage tax system for ships flying foreign flags (cf. SOU 2006:20). However, ships need to fly one of the EU/EEA state flags (Batrinca, 2010). Companies in Denmark can only benefit from the tonnage tax system if the vessel is registered in the Royal Danish Register of Shipping (DAS) or in DIS (Statskontoret, 2010). In Finland,

25 per cent of the shipping company's own or chartered ships should be registered under the Finnish flag. The shipping company is also required to own at least 20 per cent of the GT (Mondaq, 2012). Moreover, in accordance with the SAGL, the Norwegian system requires that companies must maintain or increase the EEA-registered tonnage compared to the proportion the company had July 1<sup>st</sup> 2005, or by the time the company entered the system. At least 60 per cent of the shipping company's ships have to be registered under an EU/EEA flag. Companies that want to benefit from the Danish or Finnish systems are also required to have a proportion of EU or EEA-registered gross tonnage over 60 per cent (Statskontoret, 2010). Since 2005, the Dutch tonnage tax system requires that the qualified ships should be registered in one of the EU member states, unless the ship currently fly under a third flag and will join the existing fleet (Tax consultants international, 2012).

#### Lock-up period

If a qualified company choses to implement the Dutch tonnage tax system, it has to use the system for 10 years and cannot go back to the regular corporation tax system before the lock-up period is over. After 10 years, the company can choose to leave the system without taxation consequences and go back to corporation tax, or to continue with the tonnage tax system for 10 more years (Tax consultants international, 2012). The company will in this case not be obligated to pay the deferred tax liabilities. When a company enters the tonnage tax system, the deferred taxes are calculated. This tax is then used if the company moves abroad or goes bankrupt (SOU 2006:20).

In order to apply for the Dutch tonnage tax regime, shipping companies have to send a request to the Dutch tax authorities for approval (Tax consultants international, 2012). Newly established shipping companies in the Netherlands have to decide whether or not they want to join the tonnage tax system during the first year they are engaged in shipping activities (PWC, 2009). This also applies for already existing foreign shipping companies that move its management operations to the Netherlands. It is also possible, and often recommended, that shipping companies attain a prior opinion if it has intentions to start with shipping operations in the Netherlands, i.e. before the shipping activities are actually conducted in the country (Tax consultants international, 2012). Shipping companies in the Norwegian tonnage tax system can chose to implement the system at any time, even though the company is newly established or a foreign owned company. However, the lock-up period is still 10 years. Moreover, the lock-up period is only formal, but a company that choses to leave the system during the first 10 year period cannot re-enter the system until the end of the lock-up period (PWC, 2009). The lock-up period in the Danish system is also 10 years. However, if a company decides to not join the system, it has to wait another 10 years before it can make a decision regarding the system again (SOU 2006:20).

If a company stops fulfilling the above mentioned requirements during the 10 year period, the Dutch tonnage tax regime, as well as the other systems, will stop to apply and the company has to go back to regular corporate tax (Tax consultants international, 2012).

#### Tonnage tax in Sweden

As of 2013, Sweden, together with Luxembourg<sup>1</sup> and Portugal<sup>2</sup>, are the only EU member states that have not implemented a tonnage tax system (Stares, 2013), which means that Swedish shipping

<sup>&</sup>lt;sup>1</sup> Luxembourg already has beneficial fiscal rules in general (Sjöberger, 2013).

<sup>&</sup>lt;sup>2</sup> Portugal has a second register in Madeira (Sjöberger, 2013).

companies are being taxed with normal corporation tax like all other Swedish companies (Sjöberger, 2013). This has contributed to poorer competitive conditions for Swedish shipping companies with Swedish flagged ships compared to shipping companies with ships registered in other flag registries. The lack of a tonnage tax system is one of the reasons why Swedish shipping companies have decided to flag out from Sweden (The Swedish Parliament, 2011). Swedish shipping companies have historically been able to reduce costs in other ways. However, these have been removed and the lack of the following two possibilities is important reasons why many shipping companies want to introduce a tonnage tax system in Sweden today (Sjöberger, 2013):

# 1. **Ship funds** (Swedish = Fartygsfonder).

In the shipping industry, it is common to make profits by buying ships as an investment and thereafter sell them with capital gain in market peaks. The possibility to "park" this untaxed profit for a certain amount of years in so-called ship funds was removed in 1991, something the shipping companies wanted to reintroduce at the time (Sjöberger, 2013).

#### 2. Accelerated depreciation on new-building contracts

Up until 1991, shipping companies in Sweden were able to order a new ship and thereafter utilise the method of accelerated depreciation on the new-building contract. This meant that the shipping industry experienced a large inflow of capital in terms of investments. Unfortunately, this led to abuse and to the development of trade with contracts, which is why this possibility was removed (Sjöberger, 2013).

The tonnage tax investigation SOU 2006:20 suggested to implement a tonnage tax system according to the Dutch model described above (SOU 2006:20), but no tonnage tax was implemented this year. The Swedish government has now decided to once again conduct a tonnage tax investigation (Finansdepartementet, 2013), which is expected to be finished in December 2014, right after the next government election in Sweden (Sjöberger, 2013). The investigation will take on a broader perspective where other maritime aid will be reviewed as well, and the aim is to increase the Swedish flagged merchant fleet (Finansdepartementet, 2013).

One of the big questions when it comes to implementing a tonnage tax in Sweden is how the deferred tax liabilities that have been built up through accelerated depreciation of ships should be dealt with (The Swedish Parliament, 2011). The untaxed reserves may cause problems associated with the transition between the two tax systems (Sjöberger, 2012). However, both Denmark and Finland have implemented models in order to handle these deferred tax liabilities (SOU 2006:20).

## 2.6.2. Benefits and drawbacks of a tonnage tax regime

# Benefits of a tonnage tax regime

The advantage with a tonnage tax regime is greatest during economic booms, because the shipping companies can build up capital and then use this capital during recessions (Näringsdepartementet, 2013). The aim is to create competitive advantages for the shipping companies joining the system, and the main principle of the system is to make tax calculations easier. Companies that enter the regime get an opportunity to e.g. minimize administrative costs, and in this way make it easier to do businesses. The tonnage tax system has lower and more efficient tax rate than the regular corporate tax system, which will make Swedish tonnage taxed shipping companies more competitive

internationally. An introduction of a tonnage tax system means that the yearly level of tax will be known for the shipping companies (cf. Batrinca, 2010). As mentioned in chapter 1.1.2, this also means that the Swedish state will receive a steady flow of tax income, as the tax payable is not dependent on profit/losses (cf. SOU 2006:20). Moreover, it will be easier for companies to plan their annual cash flows generated from ships operations, which in turn will decrease the need of making accelerated depreciations on the ships in order to avoid profit taxation. Investors and potential partnerships will also be attracted when yearly tax level is known, as tonnage taxed companies have more clarity and easier understanding concerning its tax position. Further, a tonnage tax system gives more flexibility in operations as companies will have more freedom to make decisions that are the most suitable for the business, and not just decisions based on taxation considerations. Shipping companies with Swedish flagged ships will become more competitive in the industry with an introduction of a Swedish tonnage tax system (cf. Batrinca, 2010).

# Drawbacks of a tonnage tax regime

According to Stopford (2009) the international shipping industry consists of business cycles (Stopford, 2009). In a cyclical downturn, a tonnage tax regime can give severe economic consequences for companies that have entered the system (Batrinca, 2010). The higher the tonnage of a fleet is, the higher the tax payable will be (Polusen et al., 2012, published in Tenold et al., 2012). As income and freight rates declines during economic recessions, the taxes may be difficult to pay (cf. Batrinca, 2010). In addition, high operation costs will occur if a company has a large fleet, despite ups and downs in the market. Regular corporate tax may be more interesting for newly established companies that have invested in new ships because of rules regarding accelerated tax depreciation (Batrinca, 2010).

As mentioned above, companies that chose to implement a tonnage tax system are locked in this system for 10 years. This is due to complex transition rules that are difficult to administer if a company constantly decide to switch back and forth between a regular corporate tax system and a tonnage tax system. The 10-year lock-up period may be a drawback during a cyclical downturn as companies that operate worldwide will experience an excessive tax burden, and would be forced to leave the tonnage tax system. When this happens, the shipping company cannot try to re-enter the system in a cyclical upturn. Moreover, a company still needs to pay nominal income tax even though operations result in a loss during downturns (Batrinca, 2010).

Shipping companies are often required to follow governmental requests concerning for example training for domestic cadet officers and ratings when joining a tonnage tax system, and shipping companies must therefore carefully evaluate its entire financial situation before it can choose to implement a tonnage tax regime (Batrinca, 2010). Another drawback could be that the regular corporate tax is unknown, as the European Commission has to approve the tonnage tax regime in order to create equal competitive conditions. However, as the current Swedish corporate tax level is in the same region as those approved in Denmark, Norway and Finland this might not be a problem in Sweden (SAGL, 2004).

# 2.7. The Swedish Net Wage model

As mentioned in chapter 1.1.2, the Swedish Net Wage Model is one type of maritime aid covered by the SAGL, which gives Swedish shipping companies the opportunity to be compensated for taxes and general payroll taxes for every officers and ratings on board its ships (Trafikanalys, 2013). This results in a reduction in manning costs with 35-40 per cent (Copenhagen Economics, 2012), and implies that the shipping companies pay less for their employees when receiving maritime aid compared to other Swedish companies (Sjöberger, 2012). The amount that shipping companies receive in maritime aid via the Net Wage Model for their officers and ratings correspond to the tax deduction, which they have made on income generated from shipping, social security contributions, and on general tax on wages according to the following three Swedish laws: skatteförfarandelagen (2011:1244), chapter 2 socialavgiftslagen (2000:980) and §1 in lagen om allmän löneavgift (1994:1920) (SFST 2001:770). The aim of the Net Wage Model is to give the Swedish flagged merchant fleet reasonable competitive conditions in relation to merchant fleets in other EU countries (Näringsdepartementet, 2013).

Before a ship is even considered to receive maritime aid, is has to be approved for income generated from shipping, performed by a committee within the National tax administration. After approval, the Delegationen för Sjöfartsstöd (the authority in charge of the Net Wage Model in Sweden) determines which ships that will receive maritime aid (Sjöberger, 2013). However, certain requirements need to be fulfilled in order to receive aid through the Swedish Net Wage Model (Delegationen för Sjöfartsstöd, 2012):

- The ship needs to transport goods or passengers in international traffic that are of importance of the Swedish foreign trade or in the Swedish export services.<sup>3</sup>
- The ship should only be registered in the Swedish flag register
- Swedish students should be able to have their on board training on board the ship
- The ship and its operations need to have sufficient insurance.

The Net Wage Model is very competitive, especially for personnel intensive shipping companies such as ferry shipping companies (Sjöberger, 2013). In 2010, most companies that received maritime aid through the Net Wage Model were companies in the tank-, bulk and container segment. Other shipping segments, e.g. hydrographic survey companies and other special ships, cannot benefit from model even though it was expanded in 2001 to also be applicable for passenger ships in international traffic and not only cargo vessels (Copenhagen Economics, 2012).

In terms of seafarers on passenger ships between EU ports, the Net Wage Model is only considered if the seafarers are citizens within the EU/EEA. The same applies for seafarers on Ro-Ro passenger ships. If a goods- or passenger ship is operating in domestic traffic, maritime aid through the Net Wage Model can also be given for seafarers if the traffic is tendered by the Swedish state. However, it can only be given to the ordinary seafarers on board the ship, which means that inspectors and other persons connected to the ship are not included. New built ships and ships that have flagged to Sweden are covered by the model from the first day the ship fly the Swedish flag (Delegationen för sjöfartsstöd, 2012).

30

<sup>&</sup>lt;sup>3</sup> Recently, the government presented a new proposal that more types of ships should be included than just the ones carrying goods and passengers (Sjöberger, 2013).

When it comes to the companies that are qualified for maritime aid, no differences are made between big and small shipping companies, and maritime aid does not depend on companies' financial results. This means that every shipping company operating cargo and passenger ships are entitled to it even if they have positive or negative results. Numerous Swedish shipping companies are dependent on the Net Wage Model in order to survive in the industry, and it plays a major role in Swedish shipping companies' financial results. Moreover, maritime aid has more influence on the smaller shipping companies' financial results, like the smaller ferry and Ro-Ro companies where manning costs is a big part of the total costs (Copenhagen Economics, 2012). Despite these positive aspects associated with the model, the Swedish government rejected the proposal to increase the amount of ship segments that can be covered by maritime aid in 2010 (Trafikanalys, 2013). This led to that the Gothenburg based company "Marin Mätteknik" (a marine survey company) flagged out its ships (SVT, 2013).

The distribution of maritime aid through the Net Wage Model has decreased in line with Swedish ships flagging out (Näringsdepartementet, 2013). 1,71 billion SEK were distributed in 2011, and in 2012 the budget was approximately 1,42 billion SEK. This was a reduction of approximately 400 million SEK compared to 2010 (Copenhagen economics, 2012). The amount of Swedish maritime aid through the Net Wage Model in 2013 is expected to be 1,6 billion SEK (SVT, 2013).

# 2.8. TAP

## 2.8.1. Background

One of the most discussed issues related to the flagging out trend is crew cost. As mentioned previously in chapter 2.3, crew costs are higher for shipping companies in segments that require more seafarers on their ships. All shipping companies strive to provide the best service for the least amount of costs. According to Sjöberger (2013), compared to other Nordic countries, Sweden has not introduced an international ship registry, a SIS, which makes the crew costs more expensive for Swedish shipping companies flying the Swedish flag (Sjöberger, 2013). This is because an international ship registry, such as NIS and DIS, gives shipping companies in these registries the possibility to hire more foreign officers and ratings than when having Swedish flag (cf. Mansell, 2009). However, in Sweden, it is possible to hire staff on so called TAP-contracts. TAP stands for "Tillfälligt Anställd Personal" in Swedish, which can be translated to "TEP = Temporary Employed Personnel" in English. According to SOU 2010:73, the Tap-contracts are collective labour agreements that allow the shipping companies to hire officers and ratings domiciled in countries outside the EU/EEA on a certain part of the positions on Swedish flagged ships operating in international traffic and transporting goods. These contracts are an alternative way to decrease the labour cost (SOU 2010:73).

In 1997, the Swedish union organizations and the Swedish Shipowners' Association agreed to strengthen the Swedish Merchant fleet's competitiveness. In the budget proposition for 1999, the Swedish government announced that it intended to increase the grants to the shipping industry if the different actors on the labour market agreed on measures that substantially would improve the competitiveness of the Swedish merchant fleet. The parties on the labour market managed to agree to lower the costs through the so-called TAP-agreement (SOU 2010:73).

### 2.8.2. Specifics of the contracts

The purpose of the TAP-contracts is that you are able to hire foreign officers and ratings on ships operating in "fjärrfart" (definition in chapter 2.9.). It is allowed to hire 50 per cent non-EEA officers and ratings per position on the ship and the other half of the officers and ratings has to be registered for census within the EEA. As it is allowed to hire international officers and ratings under TAP-contracts, the labour costs are reduced to an internationally competitive level. However, the TAP-contracts do not cover Captain and Chief Engineer. When TAP-contracts were introduced in 1998, the staff was mainly hired from Poland and the Philippines (Sjöberger, 2013). 20 years later, in 2009, about 680 seafarers where hired under TAP-contracts in Sweden, of which all came from the Philippines (SOU 2010:73, p.55). The Pilipino officers and ratings are generally perceived to have good reputation, education and quality (Sjöberger, 2013).

There are separate contracts for the different positions on board and for each ship. The employer and the concerned labour organizations draw up an implementation agreement for the ship in question, in which you determine the allocation of regular and TAP officers and ratings. These negotiations have usually resulted in an agreement of being able to use 50 per cent TAP employees (SOU 2010:73). As of 2010, some shipping companies are able to hire up to 75 per cent of the officers and ratings on TAP-agreements due to revised implementation agreements. However, because of uneven number of employees per position, it is not always possible to hire the exact agreed percentage of TAP-employees of the officers and ratings on board. This can have very large effects cost wise for smaller shipping companies with few officers and ratings on the ships in the company fleet (Trafikanalys, 2013). One of the limitations with TAP is that there are three contract areas on a ship: deck officers, engineer officers and ratings. If you have three positions for deck officers, you are only able to hire one of them on a TAP-contract because of the 50 per cent, as you are not able to divide three posts into two. However, if a shipping company owns several ships, it can create a fleet agreement, which means that the shipping company can merge the TAP-quota for the different ships and allocate the TAP-employees as the company sees fit (Sjöberger, 2013).

When hiring Swedish officers and ratings on Swedish flagged ships, two persons are hired per position, as one is working for e.g. six weeks whilst the other is at home during this period. On average, the shipping companies pay salary for 2,3 persons due to parental leave, sick leave, etc. (Sjöberger, 2013). The perk of hiring officers and ratings on TAP contracts is that they are usually set out for six months (sometimes up to nine months) and the employment is terminated at the end of the contract. This means that the shipping company only has to pay salary for one employee (SOU 2010:73). People might believe that the shipping companies only wish to use cheap labour from countries outside the EU/EEA and take advantage of them as has been seen in other industries. This is not the case when it comes to the officers and ratings of the ships. It is cheaper to hire officers and ratings from the Philippines on TAP-contracts as they are temporarily employed to be on board a ship for a specified amount of time for, in principal, the same salary as the Swedish officers and ratings, and with better social security than the Swedish ones (Sjöberger, 2013).

### 2.8.3. Wages and social security contributions

In terms of wages paid to the seafarers, the International Transport Worker's Federation (ITF) publishes minimum basic monthly pay rates for each rank. However, there are differences between the wages internationally as not all countries follow these rates. Since the flag of the ships

determines the allowed nationality of the officers and ratings, the choice of flag will have an impact on the crew costs. Of course, exchange rates will have an impact on the crew cost as well if the currency of the wages and that of company revenue differ (Stopford, 2009). Under a TAP-agreement, the officers and ratings are only paid for the time spent on board compared to the Swedish ones (Trafikanalys, 2013).

The social security protection for the TAP employees is governed by Socialförsäkringslagen (1999:799) (English translation = Law of Social Insurance). The TAP-employees are generally entitled to work-based benefits, as working as a seafarer on board a Swedish flagged ship is considered to be work performed in Sweden. These benefits include e.g. sickness allowance, employment injury benefit and earnings-related retirement pension (SOU 2010:73). As the TAP-employees was not supposed to be covered by the Swedish social security system, the shipping companies bought P&I insurances for them. This, however, was something that the authorities did not consider, and decided that TAP would be covered by the Swedish social security system. According to SSA's apprehension, this means that the TAP employees in Sweden currently have better social security than Swedish employees (Sjöberger, 2013).

# 2.9. 183-days rule

As previously described in chapter 2.7.1, the Swedish Net Wage Model has been introduced as a way to reduce crew costs for Swedish flagged shipping companies. However, the Net Wage Model does not cover Swedish seafarers working on foreign ships that are flagged in registers within the EU/EEA. This means that these seafarers are more expensive and thereby less competitive compared to seafarers from other countries (cf. Delegationen för Sjöfartsstöd, 2012). Nevertheless, as a way to increase the competitiveness of Swedish seafarers, and make them more attractive internationally, there are certain fiscal rules that can be applicable in order to reduce crew costs for the shipping companies. According to the Swedish Income Tax Act, Inkomstskattelag (1999:1229), you are fully liable of taxation, i.e. you have to pay taxes for all income received in Sweden and abroad, if you (Inkomstskattelag (1999:1229)):

- 1. Live in Sweden
- 2. Are a permanent resident
- 3. You have a substantial connection to Sweden and have previously been a resident in the country.

This thesis will not go into detail how these three categories are defined. Nevertheless, there are exceptions for Swedish people working abroad, which are specified in chapter 3 §9 in the Swedish Income Tax Act. The so-called "six-months rule" (Swedish = sexmånadersregeln) or "183-days rule", states that if a fully taxable individual has an employment, which entails that the person stays abroad for at least six months, the person is not liable to pay taxes on income of such employment to the extent that income is taxed in the country of the employment. If this period stretches to at least one year, the person is not liable to pay taxes even if the income is not taxed in the country of employment. This is called the "one year rule" (Swedish = ettårsregeln). These two rules do not apply to employment on board a ship. However, the employee is not liable of income taxation when working on a foreign ship, which mainly operates in "oceanfart", if the stay on board is longer than 183-days during a one-year period and the employer is domiciled within the EEA (Inkomstskattelag (1999:1229)). Loosely translated from chapter 3 §12 in the Inkomstskattelag (1999:1229),

"Oceanfart" refers to seagoing transport outside European waters with exceptions for districts in the Mediterranean Sea, the North African west coast north of 22 degrees north latitude, the Canary Islands, Madeira, European waters north or west of the line Trondheimsfjorden, and, west to 11 degrees west width along this longitude to 48 degrees north latitude from Shetland's northern tip (Inkomstskattelag (1999:1229)).

The term "oceanfart", and the definition of it, causes problems if there for example are delays in ports resulting in seafarers reaching less than 183 days in "oceanfart" during a year, meaning the person has to pay income tax in Sweden for the entire year (Sjöberger, 2013, cf. Inkomstskattelag (1999:1229)). In order to make Swedish seafarers, specifically on board Swedish controlled but foreign flagged ships, more competitive, the SSA has suggested minor amendments to chapter 3 §12 of the Swedish Income Tax Act, which specifically concerns the 183-days rule. The term "oceanfart" should be changed to "fjärrfart" which is defined by chapter 64 §6 in the Swedish Income Tax Act. Table 2.7 below defines and explains the concept of "fjärrfart".

Table 2.7. Definition of Fjärrfart

Närfart	Fjärrfart
- Liner traffic between Swedish ports outside open	- All seagoing transport that is not defined as "närfart" or
coast or outside the (belt of the) skerries by the	"inre fart".
coasts, and	
- Liner traffic between a Swedish and foreign port	(Inre Fart: Seagoing transport within the country,
or between foreign ports. This does not include	predominantly in ports, rivers, channels, inland lakes,
Liner traffic beyond the line Hanstholm-Lindesnäs	inside the (belt of the) skerries, or in Kalmarsund.)
or beyond Cuxhaven.	

(Source: Loosely translated from chapter 64 §6 Inkomstskattelagen (1999:1229)).

The ships that should be included in the 183-days rule are Swedish controlled foreign flagged passenger and cargo ships operating in "fjärrfart", as well as Swedish controlled foreign flagged ships (the distinction between a passenger ship and a cargo ship is that the maximum amount of passengers allowed on board a cargo ship is 12). SSA suggests that seafarers that are registered for census in Sweden should be able to work on these ships according to the 183-days rule, meaning that the seafarers will be exempted from income taxation after 183-days. This can be seen as a complement to the Swedish Net Wage Model. The effect of the proposed law amendments for the Swedish state is in principle the same as that of taxation of the employees for a shipping company when receiving maritime aid, that is, when the seafarers are regarded to pay income tax but the employer keeps the tax. In terms of the statutory social security contributions, the employer is regarded as paying these as well when receiving maritime aid. If the law would be amended, the employer will instead arrange social security and solutions for pension individually with each employee together with the unions. This would be much cheaper for the shipping company than if having to pay the statutory social security contributions to the state. The minor amendments have been suggested for the sole purpose of trying to increase the competitiveness of Swedish seafarers internationally, and to secure job opportunities for these seafarers on Swedish controlled ships flying foreign flags. This is because the job opportunities on Swedish flagged ships decreases with each ship flagging out from the Swedish flag registry (Sjöberger, 2013).

# 2.10. Maritime Labour Convention (MLC)

The Maritime Labour convention (MLC) by the International Labour Organization (ILO) from 2006 is a convention concerning working conditions for seafarers. It dictates the "seafarers' rights to decent conditions of work on a wide range of subjects" and strives to "secure economic interests in fair competition for quality shipowners" (ILO, 2013). Sweden, as well as 35 other countries, such as Denmark, Norway, France, Finland and Greece, has ratified the convention and it is supposed to enter into force into Swedish law in august 2013 (ILO, 2013). In Sweden, four different ministries are involved in this specific question (Sjöberger, 2013):

- Ministry of Enterprise, Energy and Communications (Swedish = Näringsdepartementet)
- Ministry of Finance (Swedish = Finansdepartementet)
- Ministry of Labour (Swedish = Arbetsmarknadsdepartementet)
- Ministry of Health and Social Affairs (Swedish = Socialdepartementet)

When the MLC first was reviewed, all parties affected by it approved of it. Later on, a great weakness for the Swedish shipping companies was discovered, which is connected to the internationalization agreement and chapter 3 §12 in the Swedish Income Tax Act. Connected to the tax relief after 183days on sea, there are also social security contributions that have to be paid for the employees by the employer. The shipping companies have together with these employees agreed upon private social security (such as solutions for pension and health insurance). The private social security protection is much cheaper than the system provided by the Swedish state, and ends up at a cost of about 18 per cent instead of approximately 32 per cent of the seafarers' wages, which is quite a difference for the shipping companies (Sjöberger, 2013). The weakness in the Swedish version of the MLC is that these employees have to be part of the statutory social security contributions in Sweden. Since these agreements already have been made, and if the law is introduced without the proposed amendments, the shipping companies have to pay for both the private contract and the statutory social security contributions (The Swedish Parliament, 2012). The reason for this formulation is that the state says that even if both parties have agreed on social security solutions, these contracts can be terminated, and in that case, the Swedish state is ultimately responsible for the employee. The unfortunate matter is that this formulation has an impact on Swedish crew members' international competitiveness and this is not the goal of the convention as it was set up to raise the working conditions in countries in e.g. Asia and Africa (Sjöberger, 2013).

When this was discovered, a discussion between the four Swedish ministries and the concerned actors on the labour market started, and they are working together to try to come up with a solution without breaking any conventions, or that is in disfavour of the employer (The Swedish Parliament, 2012). According to Sjöberger (2013), it is a struggle to get the four Swedish ministries to make the changes. The labour unions and shipping companies have come to an agreement in this question, and the latest law amendment suggestion is: a Swedish crew member should have Swedish social security from the state unless anything else has been agreed upon (Sjöberger, 2013). If the law is introduced as it is formulated today, the competitiveness of these employees will decrease as the shipping companies need to pay more for them than they do today, which can lead to these employees having a hard time finding employment. Therefore, this issue has to be resolved before August 2013 (The Swedish Parliament, 2012).

# 2.11. Maritime education in Sweden

The maritime education and training in Sweden can be divided into two STCW-levels: the support level (ratings) in high school, and operation and management level (officers) in college. STCW is an international convention on Standards of Training, Certification, and Watch keeping for seafarers. When talking about maritime education and training leading to rating and officer positions, the STCW convention is often referred to. The convention was implemented in 1978, and amended in 1995 (Lindholm, 2010).

Chalmers University of Technology in Gothenburg and Linné University in Kalmar, are two universities in Sweden that educates officers. The length of the education varies between two to four years, depending on previous maritime experience. In order to be able to call themselves officers, an education certificate is required, in addition to on board training of 36 months on board a ship (Sjöfartens bok, 2012). Due to the increased trend of flagging out, the demand for Swedish seafarers has diminished (Lindholm, 2010), something that have led to a reduction in on board training positions for students on board Swedish flagged ships. Swedish students must therefore have its on board training on foreign flagged ships in order to complete their education (Sjöberger, 2013). As mentioned in chapter 1.1, the Swedish government has decided to give SEK 2.250.000 in education grant to cover for travel expenses to foreign flagged ships (Näringsdepartementet, 2012). The financial aid was granted in 2013, and means that more on board training positions can be offered on board ships (Trafikanalys, 2013). As Swedish shipping companies are only allowed to hire 50-75 per cent foreign crew on TAP-agreements, Swedish crew are needed in some shipping segments, e.g. ferries. This means that Swedish shipping industry still needs maritime education in Sweden (Lindholm, 2010).

# 3. Methodology

This chapter presents the research methodology, including the choice of method and data collection, as well as a description of the steps carried out in the research process. The chapter also describes how the data have been gathered and analysed. In the end a discussion of reliability and validity of the collected data will be presented, as well as a discussion of benefits and drawbacks associated with the chosen research methodology.

# 3.1. Research strategy

After the research questions were identified, the research strategy and research methodology was discussed in order to be able to collect relevant data. Collis and Hussey (2009) present various methods that can be used in order to answer the research question at hand, and the chosen method depends on what kind of study the researchers intend to do. The methodology chosen for a study can either be associated with positivism, "where generalizations leads to predictions, explanation and understanding" (Collis & Hussey, 2009, p. 73), or with interpretivism, where different theories and/or patterns are analysed in order to understand the question you intend to answer (Collis & Hussey, 2009). Different methodologies have different approaches in terms of data collection (Crowther & Lancaster, 2012). A positivist study focuses on quantitative studies where statistical analysis is used to interpret the collected data. Statistical data can for example be used to see if there are any correlations between different variables (Collis & Hussey, 2009). An interpretivist study, on the other hand, focuses on the researchers' interaction with the world around them, trying to understand an observed phenomenon (Collis & Hussey, 2009). In this thesis, an interpretivist approach has been chosen, as the characteristics correspond with the subject at hand, and with the intention the researchers had with this thesis. Within the interpretivist paradigm, a qualitative study has been chosen as the data usually are expressed by using words, not numbers.

The research strategy chosen for a study can be difficult to define (Eriksson & Kovalainen, 2008) and the research strategy can either follow an inductive or deductive approach (Bryman & Bell, 2011). A deductive research strategy can be described as forming hypotheses and draw conclusions from existing theory. An inductive research strategy on the other hand, proposes new theory generated from empirical findings (Kovács & Spens, 2005). However, both approaches can be used during different stages of the research (Eriksson & Kovalainen, 2008). Eriksson and Kovalainen (2008) also present the abductive research strategy as an alternative to the above mentioned approaches. An abductive research strategy can be described as being situated between an inductive and a deductive approach, but is considered to be closer to the inductive (Ryen, 2002 cited by Moser, 2012). "Abductive reasoning starts from facts (examination of data), and then comes forward – through several plausible explanations or interpretations – to a most plausible one" (Eriksson & Kovalainen, 2008, p.302). Even though a qualitative study, associated with the interpretivist paradigm, usually follows an inductive strategy, in the process of writing this thesis, the researchers have used a combination of an inductive, deductive and abductive research strategy. First, a deductive approach was used during the initial phases of getting acquainted with the subject and collecting the secondary data to be used in the theoretical framework. Thereafter, during the empirical data collection, compilation and analysis, an inductive approach was taken. Moreover, abductive reasoning has been applied in the analysis and conclusion, where theory and empirical findings have been used to understand and give new insights to the phenomenon. In addition, both generalisations and particular features of this phenomenon have been identified, such as factors influencing choice of flag state (cf. Eriksson & Kovalainen, 2008; cf. Kovács & Spens, 2005).

# 3.2. Research design

The research design forms the structure of the data collection and analysis (Bryman & Bell, 2011). As this thesis has focused on qualitative aspects rather than quantitative, interpretivist methods have been looked into. Out of these, conducting a case study seemed to be the most suiting method of data collection as, according to Collis & Hussey (2009), "A case study is a methodology that is used to explore a single phenomenon (the case) in a natural setting using a variety of methods to obtain indepth knowledge" (Collis & Hussey, 2009, p.82). Another reason for choosing case study as the preferred method is because both qualitative and quantitative data could be collected, as well as primary and secondary data. Further, a case study enabled the researchers to investigate if the Swedish merchant fleet should fly the Swedish flag by using a variety of data collection methods (interviews, previous research and observation). Out of these, interviews and previous research has been chosen to obtain useful in-depth knowledge about the subject from different points of view, which is connected to the purpose of this study. Observation was not an option in this thesis because the researchers believed that the information needed to answer the research question at hand, could not be retrieved by only observing the phenomenon (cf. Collis & Hussey, 2009). Different types of case studies exists, but in this thesis, an explanatory case study approach was chosen as "existing theory is used to understand and explain what is happening" (Collis & Hussey, 2009, p.82) i.e. help the researchers to understand both why the Swedish flagged merchant fleet is flagging out, and if the Swedish merchant fleet should fly the Swedish flag. The case study is also somewhat exploratory since an investigation of if the Swedish merchant fleet should fly under the Swedish flag has been made, as the researchers feel that there is lack of previous research looking into this particular aspect (cf. Collis & Hussey, 2009).

# 3.3. Data collection

#### 3.3.1. Primary data

The primary data was gathered through semi-structured interviews with different types of actors in the Swedish shipping industry. According to Bryman & Bell (2011) a semi-structured interview is based on pre-determined questions. However, depending on how the interview develops, the interviewer is allowed to ask following-up questions (Bryman & Bell, 2011). This form of interview was chosen as it therefore allows for a more flexible interview whilst using a fixed set of questions (cf. Bryman & Bell, 2011). The respondents within each category were given the same questions, but some questions were modified depending on the type of actor that was interviewed (see interview guide in appendix). All interviews were conducted in Gothenburg during March, April and in the beginning of May 2013. Depending on the location and business trips of the respondents, either face-to-face or telephone interviews were conducted. The duration of the interviews lasted between 15 minutes and 1 hour depending on how long the respondents' answers were, and the amount of additional subjects they brought up. Moreover, the interview questions were sent to the respondents in advance in order to conduct the interviews in an effective manner and to allow the respondents to reflect on the questions and prepare themselves, as all respondents are very busy in

their respective everyday activities. An audio recorder was used during the interviews after permission from the respondents in order for the researchers to be able to participate more during the conversations, but also to make it easier to process and analyse the received information afterwards. The primary data collected have mostly been used in the empirical analysis. However, some of the information gathered through interviews has been used in the theoretical framework as well, where the respondents are referred to the letters A-S.

# Selection of respondents

Interviews were conducted with one representative from each party in the Swedish parliament, Swedish shipping companies, and external actors connected to the Swedish shipping industry (see full list of respondents in Table 8 below). Altogether, 23 different respondents were asked if they were willing to answer some questions regarding the trend of Swedish ships flagging out, of which 22 persons initially said yes. However, only 19 interviews were made in this study.

As the shipping industry is heterogeneous and not homogeneous, shipping companies from different segments, mostly from the segments in which the majority of the Swedish merchant fleet operates in (tanker, Ro-Ro and passenger/ferry), were interviewed. Different segments where chosen in order to get a wider perspective of the phenomenon, and to give us the opportunity to view it from different angles. The shipping companies were randomly selected from these segments and contacted via email, asking if they were interested in participating. The researchers wanted to interview at least 2-3 shipping companies from each of these segments, both flying Swedish and foreign flags. Unfortunately, only eight shipping companies were interviewed. Two of the approached shipping companies first said yes, but after several attempts to reach them again, no interview was conducted. This was very unfortunate, as the researchers believed that their answers would have strengthened the analysis due to the specific situation of the companies. Furthermore, in this thesis, one representative from each party in the Swedish parliament was interviewed in order to get a political view of the issues surrounding the current trend of shipping companies flagging out from Sweden. The politicians were chosen based on their knowledge of the shipping industry. The researchers only wanted to interview politicians that are familiar with the issues and understand the industry, at least to some extent. Otherwise, their answers would not be very relevant for this study.

Finally, three external actors within the shipping industry were interviewed in order to get a wider, and perhaps a more unbiased answer compared to the politicians and shipping companies, as the former focus on attracting the voters, and the latter usually strive towards profit maximization and fulfilling company goals. The external actors were chosen in the same way as the shipping companies. The researchers wanted to interview people from different companies and organisations within the industry in order to get as wide picture of the phenomenon as possible. Unfortunately, only three actors were interviewed. Besides wanting to interview more shipping companies, the researchers also wanted to interview more external parties in order to provide an even deeper analysis.

Despite the lower amount of respondents than initially wanted, the researchers are satisfied with the number of interviews received. The researchers are well aware that important actors with great knowledge in the field may have been overlooked. Nevertheless, the researchers are confident that a wide range of respondents within the industry has been interviewed in order to gather reliable

material. This statement is further confirmed by the similar answers provided by all three categories of respondents, and the researchers believes that if more interviews had been conducted, the answers would follow the same pattern and not differ significantly. Table 3.1. below displays the respondents interviewed in this thesis:

**Table 3.1. Respondents** 

Actor	Respondent	Segment/party/organization	Type of interview
Shipping company	Respondent A	Ferry	Face-to-face
	Respondent B	Ro-Ro	Face-to-face
	Respondent C	Tanker	Face-to-face
	Respondent D	Tanker	Face-to-face
	Respondent E	Container	Face-to-face
	Respondent F	Ferry and Ro-Ro	Telephone
	Respondent G	Ro-Ro	Telephone
	Respondent H	Container, Bulk, Ro-Ro	Telephone
Politician	Respondent I	Party A	Telephone
	Respondent J	Party B	Face-to-face
	Respondent K	Party C	Telephone
	Respondent L	Party D	Telephone
	Respondent M	Party E	Telephone
	Respondent N	Party F	Telephone
	Respondent O	Party G	Telephone
	Respondent P	Party H	Telephone
External	Respondent Q	Organization A	Face-to-face
	Respondent R	Organization B	Face-to-face
	Respondent S	Organization C	Face-to-face

## 3.3.2. Secondary data

In addition to gathering primary data through semi-structured interviews, secondary data was collected through books, scientific articles, legislation, industry reports, and websites. The secondary data has only been used in the theoretical framework. However, it has been referred back to in other chapters. The sources of information were retrieved from online databases and search engines by searching for keywords like tonnage tax, TAP, the Swedish shipping industry, flag registers/flag states, SIS, etc., and thereafter the researchers selected information believed to be relevant for the study. Further, the majority of the books used were found at the school library, except for the e-books, which were read online.

# 3.4. Data analysis

After primary data was collected through semi-structured interviews, the information retrieved was transcribed shortly after the interviews. The interview questions were formulated in connection with the theoretical framework in order to be able to compare the empirical findings with written theory on the subject. This made it easier to create a good connection between the empirical findings and the analysis. The aim was to create as strong coherence between the theoretical framework, the

empirical findings and the analysis as possible, in order to facilitate for the reader. However, the questions were not always posed in the same order as the respondents sometimes mentioned aspects that were related to another question other than the following one. In order to easily detect similarities and differences in the collected information, similar interview guides were created for the three groups of actors. This also made it easier to compare the data retrieved with each other. The reason why the categories of actors were given some specific questions, which differed from the others, was due to the different line of work. As an example, the shipping companies were asked about their fleet, which is something that the politicians do not have. The interview guides can be found in the appendix. As the interviews were of semi-structured character, the shipping companies did not receive the exact same questions because of the variations in the composition of flag states in their fleets.

After all interviews had been conducted, transcribed and translated to English, the answers for each question from each category (except for the specific questions regarding the fleet of the shipping companies) were put together. Thereafter, the researchers picked out features which were similar and those that differed among the replies of the respondents in order to be able to connect them to each other and to theory. This process was very time consuming and as the issues surrounding the subject are interlinked, so were the answers as well. Hence, some replies fitted better under certain questions than others, which resulted in a huge puzzle for the researchers to solve, and made it very challenging to achieve the sought after cohesiveness between the chapters of this thesis.

# 3.5. Research quality

Prior to conducting the interviews, the interview questions were evaluated in order to ensure the quality of the questions. First, the questions were tested on our supervisors and fellow students in order to formulate the questions in the best possible way. Thereafter, a test-interview was conducted with Carl Sjöberger (Chief Officer, MBA, and now PhD candidate at School of business, economics and law, University of Gothenburg) in order to see if some questions were unnecessary, if they gave the answers wanted, as well as to see how the researchers acted in an interview setting.

Sending the interview questions beforehand increased the respondents' ability to give well thoughtout answers. Moreover, the interviews were conducted in Swedish in order to decrease language barriers. Face-to-face interviews increased the quality of the conversation and minimized the risk of interference from noise or technical disturbance, which could occur during a telephone or Skype interview. Even though some interviews were conducted by telephone, the researchers were able to transcribe the answers without too many difficulties. All respondents interviewed have good insight and understanding of the phenomenon being investigated, which contributed to qualified and knowledgeable answers.

### 3.5.1. Reliability and Validity

Reliability means that the conducted research can be replicated in the future by other researchers and retrieve the same results. Validity, on the other hand, means that the findings reflect the phenomenon being studied. Validity tends to be higher in an interpretivist study, where the aim is to gain in-depth knowledge about the investigated phenomenon (Collis & Hussey, 2009).

Even though this case study contains quantitative data in form of statistical data regarding the Swedish merchant fleet, the majority of the research is based on the interpretivist paradigm with qualitative data collection. In the interpretivist paradigm it is said that the researchers' behaviour have an effect on the research, and it is therefore difficult to attain results with high reliability (Collis & Hussey, 2009). Therefore, the researchers have explained to the respondents how and why the study was conducted. By making the research purpose as clear as possible for the respondents, the answers obtained are hopefully more relevant for answering the research questions at hand, than if they had not been clearly explained. Moreover, as an audio recorder was used during the interviews, the researcher found it easier to analyse the data and helped avoiding possible misinterpretation. The questions were carefully constructed in order to avoid errors and misunderstandings, as well as making sure that the questions measured what they intend to measure. This was done in order to obtain relevant responses that could be used to answer the research questions (cf. Collis & Hussey, 2009). Moreover, the collection and use of relevant sources such as scientific articles, books, websites, etc., have been carefully considered and selected in order to increase the validity and reliability of the research. This, together with a mix of different sources, has hopefully strengthened the validity and reliability of the collected material. All preparatory steps before the interviews took place described in the section above, helped to increase the validity of the research.

#### 3.5.2. Benefits and drawbacks

The researchers found that there are some benefits associated with conducting a case study. Semistructured interviews enabled the researchers to pose follow-up questions, which made it easy to clear up misunderstandings, if any, during the interviews. Further, face-to-face and telephone interviews enabled the researchers to get more explanatory and in-depth answers than e.g. a survey would have provided.

The qualitative research conducted in this thesis can also be associated with different drawbacks. First of all, as the researchers have only interviewed 19 different actors within the entire shipping industry in Sweden, it might be difficult to know if their opinions represented the entire maritime cluster, i.e. it is difficult to know if the information retrieved can be generalized. When conducting a qualitative study it is also a possibility that the answers retrieved are from the respondent's point of view, i.e. too subjective. Thirdly, it could be difficult for future researchers to understand how the research process actually was conducted. Lastly, it might also be difficult to conduct the same study at another time by other researchers (cf. Bryman & Bell, 2011). Other drawbacks associated with the chosen method are that the information retrieved has to be transcribed and interpreted by the researchers, and it is therefore a risk that biases from the researchers occur. In addition, it took time to collect, process, and go through the large amount of information.

# 4. Empirical Findings

In this chapter, a compilation of the results retrieved from of the interviews is presented. The findings of this thesis have been divided into seven sub-chapters covering all aspects brought up by the respondents.

In the following sections, the respondents have been referred to by assigning them different letters. The shipping companies are referred to letters A-H, politicians between I-P and external actors between Q-S. In addition, the specific shipping segments, in which the shipping companies operate, have also been mentioned in brackets to facilitate for the reader.

# 4.1. Factors Influencing Choice of Flag State

Table 2.4. in chapter 2.4.1., displays factors that are usually mentioned when discussing choice of flag state and flagging out in general. In terms of Swedish ships flagging out, the four influencing factors often brought up in reports are: the development of fiscal rules, crew costs, the possibility of financial support, and the direction of research and development. The shipping companies participating in this study were asked questions specifically regarding their merchant fleets, what flags they are flying, and what factors they look at when making decisions regarding choice of flag state. Three reasons were mentioned as the most influential factors: competitive advantages and costs, long traditions within the companies of flying foreign flags, or the shipping policy in Sweden. Some of the other respondents also brought up some factor without the researchers asking them about this. Their comments are also included in this sub-chapter.

### 4.1.1. Competitiveness and Costs

Shipping company A (ferry) said that they look at three factors when making decisions regarding flag state: the fiscal environment, crew costs (the ability to get cheap and efficient seafarers), the efficient administration and service of the flag state. Moreover, the shipping company pointed out that the company has flagged both in and out from Sweden. Shipping company G (Ro-Ro) mentioned that they had more Swedish flagged ships previously but has now moved some ships to a FoC in order to reduce its costs. By having some ships registered in this country, it is possible for the company to have a few Swedish flagged ships with higher operating costs. However, if the operating costs are too high, it becomes too expensive. High profitable companies can manage higher costs, but because of the economic crisis in 2009, shipping company G experienced lower results, and had to reduce its exposure in Sweden. Shipping Company C (tanker) said that in addition to the total cost structure of the company, the flexibility in the flag state and how they work, as well as how the labour organisations' work, are also important factors. However, the level of costs is the most important factor for the company (Shipping company C, tanker). Shipping company F (ferry/Ro-Ro) has therefore chosen to have another Nordic flag on its ships because it provides a more beneficial cost situation. It came to the conclusion that it could not continue with flying the Swedish flag if they wanted to survive in the international competitive situation of the shipping industry (Shipping company F, ferry/Ro-Ro). Besides cost, shipping company B (Ro-Ro) mentioned that it is important with a clean and accepted flag so that it does not end up having problems with ports, port states and port authorities, because that is very expensive (shipping company B, Ro-Ro). Further, it is also important that the surveys of the ships are working in a good way from the classification society, Swedish Transport Agency, and authorities (shipping company C, tanker). External actor R also pointed out that the trading pattern of the shipping companies might influence the choice of flag. Shipping company A (ferry) added to this by saying that several ferry companies chose to fly local flags, which depends on the routes the ships are sailing (Shipping company A, ferry). Moreover, external actor S said that the requirements on how large the crew has to be, has varied among the different flag states, which can be a very influential factor. External actor Q pointed out that the shipping companies look at the whole package, what the flag states offer in terms of costs, tonnage tax, governmental support and maritime strategy, before making a decision regarding the flag of the fleet.

The factors influencing ferry companies in its choice of flag states differs a little bit from other segments. The Net Wage Model and the maritime aid are quite competitive for the ferry companies, which is why the companies try to have as many ferries with Swedish flag as possible. However, shipping company A mentioned that the Swedish flag still is not good enough. The company has two similar ferries on the same route, but with different flag and crew. The Swedish flagged ship with Swedish crew cost 20-25 million SEK/year more than the other ship in terms of crew cost. The company has several Swedish flagged ships, and if they had registered every ship in the foreign flag register, they would have saved over 100 million SEK each year. Despite this, the company has Swedish flags on almost all ferries because, according to them, the Swedish Net Wage Model is pretty good from a political point of view (Shipping company A, ferry).

# **4.1.2. Company History**

Several shipping companies in Sweden have long traditions with foreign flag registers and are therefore choosing foreign flags on their ships. The traditional reasons depended on e.g. acquiring an already existing fleet with that flag or having good relationships with certain flag states originating from conducting a lot of business activities in those counties before flagging out. Shipping company D (tanker) bought an existing fleet in the 1990s, and the old shipowner traditionally had a good relationship with a particular flag register. This register had a good reputation and great efficiency in addition to being comprehensible, which is why the current owner continued this tradition and has chosen this flag register for several of its other ships. The company wanted to have Swedish flags on its ships and they actually did for a few years, but it did not work. The company was not able to get sufficient amount of seafarers to its ships, especially on the machine side, but also on other officer positions. The company therefore decided to flag out in order to increase its competitiveness.

Long traditions and good relationships with authorities are also reasons why shipping company G (Ro-Ro) has registered most of its fleet in another country. However, the company has chosen to have a certain type of ships under the Swedish flag due to different reasons. First of all, the company wants to be present in Sweden when being a Swedish company. Second, the company has also chosen to have some Swedish flagged ships in order to have on board training positions for Swedish students. Moreover, the company is also satisfied with its foreign flag state. Shipping company B (Ro-Ro) has chosen a foreign flag because the beneficial owner is from the foreign country, or due to the routes the ships are operating (Shipping company B, Ro-Ro).

### 4.1.3. The Swedish Government's commitment to the shipping industry

All respondents agree that a government's commitment to the shipping industry is of great importance as the government sets the rules of the flag state. If the government provides a long-

term plan and a positive attitude towards the Swedish shipping industry, it will be more stable for shipping companies to register its ships in the Swedish flag register compared to a situation where the government changes rules and regulations more often. According to external actor R, small Swedish shipping companies prefer to have its ships registered in Sweden, so if the government shows that they focus on the Swedish shipping industry, companies might chose to flag back as the emotional dimension of having a connection with Sweden also is important for many shipping companies.

Shipping company A (ferry) mentioned that some countries see their Flags of Convenience registers as a business idea and are therefore managing these as service institutions for its customers (the shipping companies). In the FoCs, everything goes so much faster because the shipping companies are viewed as customers. This setting has made them very service-minded and they are always striving to do the best for their customers so that nobody wants to leave the register. Sweden, however, sees itself as an authority and everything is therefore more complicated. Every transaction takes longer time than in the FoCs, because the authority has to give permission, stamp and sign the transactions (Shipping company A, ferry).

Not only are factors that influence the choice of flag state important, but also factors influencing the shipping companies to flag out from Sweden. For obvious reasons, these factors are connected to each other. If one flag state lack conditions that are important to a certain shipping company, it may decide to choose another flag state. In the following sub-chapter, the respondents' thoughts and reflections regarding this matter, is presented.

# 4.2. Discussion of factors influencing the decision to flag out from Sweden

After speaking to various shipping companies, politicians and external actors, many of the respondents mention the same aspects when asking about which factors they believe most likely have influenced Swedish shipping companies to flag out their ships from Sweden to other flag states. The top reasons brought up by all groups of respondents can be classified into three categories:

- Economic factors
- Lack of maritime strategy from the government
- Surveys of the ships

The substance of these three categories can be summarized as lack of similar competitive conditions in Sweden compared to other Nordic and European countries. The flagging out does not depend on one single factor but because of an absent holistic approach regarding these issues. Shipping company B (Ro-Ro) pointed out that this trend has been going on for a while, but that it has escalated the past 3-4 years, and that many shipping companies are flagging out to neighbouring flag registers such as FAS, DIS, and NIS, and not particularly to flags of convenience. Another point made is that it is a sign of weakness that Sweden is not able to withhold the same conditions as within the EU. The economic factors affect the costs of running the shipping companies, and it is more expensive to fly the Swedish flag than other European flags. Factors that were mentioned are the labour costs, rules on the labour market (including TAP and lack of SIS) and absence of a tonnage tax system. Since a shipping company first and foremost is running a business, costs are important. If the

calculated costs of flying the Swedish flag are higher than that of flying another flag, the company will most likely change flag in order to survive. Furthermore, the respondents claimed that the lack of maritime strategy and political decisions from the Swedish government also have been influential. All external parties believe that this is the most important factor as it affects several variables. In addition, rules regarding surveys and classification by the Swedish Transport Agency, as well as the way the Swedish Transport Agency run their business, are mentioned as factors influencing the decision to flag out. In the following sections, these factors, and the issues associated with them, will be further elaborated on.

#### 4.2.1. Economic factors

All of the respondents mentioned economic factors and competitive disadvantages as the main contributors to the current trend, which makes it less attractive to fly the Swedish flag compared to neighbouring flags and other European flags. Each of the shipping companies stressed the fact that the disadvantageous competitive conditions of the Swedish flagged merchant fleet is connected to costs, more specifically that of crewing and taxation. In addition, shipping company E (container) pointed out that the competition a shipping company faces internationally does not only depend on the flag at the back of the ship, but also on the type of goods being transported and the ports called on the routes which they operate. Further, five of the eight politicians believe that the lack of a tonnage tax system is the most influential economic factor for the Swedish shipping companies, whereas the remaining three believes that several economic factors are important. The external actors brought up several different aspects related to costs and not just one. The following sections will elaborate on the respondents answers connected to tonnage tax, TAP, SIS, and the Swedish Net Wage Model.

#### Tonnage tax

In terms of tonnage tax, the respondents were asked how attractive it would be to introduce a tonnage tax system in Sweden. Politicians, external actors and shipping companies all agree that it would be attractive and interesting to implement a tonnage tax system, as the lack thereof is, in many cases, one of the reasons why Swedish shipping companies choose to flag out. Several benefits were mentioned in connection to a tonnage tax system. Politician M argued that a tonnage tax system would benefit the maritime cluster because it would provide the opportunity to maintain a larger share of the Swedish flagged merchant fleet. Together with other actions, it might result in shipping companies flagging back to Sweden, which in turn would contribute to a stronger maritime cluster in the country. Moreover, some politicians stress the fact that almost every other country in the EU has implemented a tonnage tax system, and even though it may not fit the Swedish fiscal system, Sweden has to adjust internationally. Politician I pointed out that it is not about paying less tax, but to pay taxes in another way. Because of the fixed payable tax amount, which is due to the flat rate, some shipping companies mentioned that a tonnage tax system would provide stable tax charges. As politician I put it, if this is an important factor for a shipping company, it is not difficult to flag out to countries that have implemented such a system.

According to external actor R, the government would send a positive signal that more focus will be put on the shipping industry in Sweden if tonnage tax was implemented. Two politicians mentioned that it has already been decided in the parliament to introduce a tonnage tax system (Politician K & J). However, it was mentioned by shipping company E (container) that the current government probably does not want to implement a tonnage tax system during this mandate period, as the new

investigation is supposed to be due in December 2014, that is, right after the next election. The process needs to speed up as more and more ships are flagging out from Sweden (Politician L). There are long lead times associated with political decisions in order to be able to make thorough background work and to come up with the best solutions. Still, it is important that the question is being investigated once more instead of doing nothing, and hopefully the investigation will come up with a good solution regarding the untaxed reserves (Politician P). However, several respondents mentioned that they feel that the Swedish minister of Finance does not want to introduce a tonnage tax regime in Sweden because he claims that the Swedish shipping industry already has received a lot of aid from the government.

As mentioned in chapter 2.6, it is optional to implement a tonnage tax system, and when Finland introduced a tonnage tax system in 2012, not every company in Finland decided to join it (Shipping company A, ferry). Three shipping companies mentioned that one might think that it is the large shipping companies that want to implement a tonnage tax system, but tonnage taxation is one of the most important factors for small shipping companies, such as one- and two ship companies and companies under development, since it will have greater impact on them (Shipping company B, C and F). Moreover, shipping company A (ferry) is not sure if it would join a tonnage tax system if it was implemented in Sweden, but further stated that such a system would benefit the Swedish maritime cluster (Shipping company A, ferry). It was also brought up that some shipping companies have already flagged out to e.g. Denmark and are therefore not interested in a tonnage tax system in Sweden. They have moved their businesses to Denmark and have chosen to invest in the Danish flag. The respondent further claimed that they will not return to the Swedish flag register because the conditions would still not be better than in the Danish register if solely a tonnage tax system was implemented. In addition, it would be too expensive to re-flag the ships (Shipping company F, ferry/Ro-Ro).

A Swedish tonnage tax regime has been discussed for many years, and according to shipping company E (container), it is a non-question today. Some shipping companies argue that it is too late to implement a tonnage tax system in Sweden, and that it should have been implemented at the same time as Norway and Denmark implemented their systems, and in 2006 at the latest (Shipping company E, container). All respondents highlighted the complications regarding the untaxed reserves and claimed that this is the only drawback associated with an introduction of a tonnage tax system. These taxation problems must be resolved before an introduction of tonnage tax in Sweden is possible. The shipping industry is an industry that has built up a lot of tax debt, and the previous tonnage tax investigation did not succeed to present a solution as to how these should be handled. However, the respondents are positive that this is something that can be solved. Other countries have handled this in various ways and politician P mentioned that Sweden has to find a model that both the Swedish industry and the politicians are comfortable with, simply in order to protect the Swedish taxpayers' money. It is an important but difficult unresolved question (Politician P). Countries that have implemented the tonnage tax system have solved this by e.g. erase the tax debt, set up a payment plan, or use it for environmental investments of the ships, etc (Politician O). The important thing is that the question regarding the untaxed reserves is being investigated again since the previous investigation did not cover all aspects, and because there is a risk that there is a very small, or even no Swedish flagged merchant fleet left when the new tonnage tax investigation is due (Politician P).

### TAP and SIS

Besides tonnage taxation, all respondents claimed that cost of crew is a very influential factor associated with the trend of flagging out. As explained in the theoretical framework, crew costs are connected to labour laws, TAP-agreements, lack of a SIS and the Net Wage Model. The respondents were asked if the design of the TAP-agreements in Sweden have affected the Swedish flagged merchant fleet's competitiveness, and all of them agree that it has had a positive impact as the crew costs have been reduced to a more competitive level. Politician I mentioned that the whole system is built on international rules and almost every TAP-employee in the Swedish merchant fleet is from the Philippines. The employees are hired under Swedish conditions and the Filipino crew has a government agency that looks after them so that they are not taken advantage of, which makes the TAP agreement work in a good way.

As described in chapter 2.8., the higher the percentage of TAP-employees, the lower the company's crew costs will be. According to a majority of the shipping companies interviewed, it is not competitive to sail with a high percentage of Swedish crew as other countries are allowed to hire 100 per cent foreign crew. Then, if wanting to reduce manning costs, the option is to flag out. External actor R pointed out that it is not allowed to fire a Swedish employee to hire a Filipino and the Swedes have to leave due to natural reasons, e.g. retirement, new job, etc. This is why a SIS is wanted in Sweden because then the shipping companies can hire any seafarer it wants. However, a SIS would never be implemented in Sweden because this will mean that Swedish employees would get fired. In order to avoid this, it is possible to come up with arrangements so that the Swedish employees do not get fired when implementing a SIS. An international register may attract Swedish shipping companies to flag their ships in Sweden again, and perhaps foreign companies would also consider choosing the Swedish register. If the government focused on creating a SIS equally competitive as international ships' registers in other countries, it would have an impact when choosing a flag state. It will take longer time to get an effect of an expanded TAP-agreement than if a SIS was implemented, and Swedish companies do not want to wait that long. If you fire one Swedish officer or rating and hire a foreign instead, you will get the same effect as a SIS, but this is not possible. However, if you buy a new ship you can of course hire 100 per cent foreign crew. Nevertheless, the question regarding the Swedish international ships register is all up to the Swedish government (External actor R).

As the government does not want to implement an international ships register in Sweden, the majority of the respondent's claim that the TAP-agreements are needed in the Swedish shipping industry in order to keep a Swedish flagged merchant fleet, and politician N added that this is probably the only reason why the Swedish flagged merchant fleet still exists. It was, however, mentioned by shipping company C (tanker) that the design of the TAP-system was wrong from the beginning, having to form agreements with three different unions, but at the time, the shipping companies were satisfied with it. As a shipping company is usually only allowed to have 50 per cent of the crew hired on TAP-contracts on each position on the ship, the shipping company "lose" when the positions are uneven in numbers. That is why TAP-contracts are not so beneficial for smaller companies that for example only have seven officers and ratings on board, as they can only hire three on TAP-contracts (Shipping company C, tanker). Shipping company A (ferry) pointed out that the TAP-contracts are individual and the total percentage of foreign crew is negotiated from case to case (Shipping company A, ferry). This makes it difficult for the shipping companies to map out its

future crew cost, as they do not know how many TAP-employees they are allowed to hire. Nevertheless, the idea of the TAP-system is very good because the current set-up of the TAP-agreements make sure that there are Swedish officers and ratings in the system. Politician I stated that it is only around 10 per cent of the total crew in Sweden employed on TAP-contracts today. This is because the ferries have the highest amount of Swedish crew, so it is not in every segment and on every ship that it is possible to fill the TAP-quota (Politician I).

# The Swedish Net Wage Model

All respondents describe the Net Wage Model as an easy model, and they all agree that it is a good contribution to Swedish shipping companies. Further, the Net Wage Model is described as part of the Swedish package. The shipping companies' points out that the model is necessary, especially for the Swedish flagged ferries, in order to get financial support due to the large differences in crew costs compared to other flag states. All respondents think that it is good that the government now wants to look at the possibility to extend the current model. Sweden has not included all ship types in the Net Wage Model as the EU regulations allow, and it has now been proposed to harmonise the Swedish Net Wage Model with EU's rules so that all type of ships included in the SAGL will also be subject to the Swedish Net Wage Model. This is important, as some shipping companies already have flagged out because the model did not cover their ships (shipping company C (tanker) and politicians I and P). It was pointed out by politician I and P that as all other countries take full advantage of EU's guidelines in order to support their respective shipping industries, these differences have to be removed.

### 4.2.2. Lack of maritime strategy and support from the government

The respondents were further asked if Swedish shipping politics have affected the Swedish shipping industry's competitiveness compared to the other Nordic Countries, and all respondents agree that it has had a negative impact. This is due to several reasons, which will be elaborated on in the following sections.

The government does not have a proper strategy for the Swedish shipping industry (Politician O), and it has not been a prioritized question (Shipping company E, container). Politician K stated that the industry needs political support from the government and the parliament, as well as better financial conditions when flying the Swedish flag. Some shipping companies and politicians mentioned that the lack of an active shipping policy and strategic decisions have contributed to the decrease in shipping industry in Sweden. Several actors within each category mentioned that the government has to present a long-term strategy in order to demonstrate that it wants to invest in the shipping industry. An action plan was presented in January 2013, where it was suggested to extend the Net Wage Model to include more types of ships, in addition to look into sea transport on inland waterways. According to politician P, this in turn, would open up a new market with new actors. Other suggestions in the action plan were to invest in maritime research, and increase the possibilities for on board training for students. The action plan indicated that the Swedish government is finally moving in the right direction and that it is important that it now implements the measures that were presented, in order for the plan to be significant (Politician P). Nevertheless, external actor R and politician J said that the presented actions are not as comprehensive as wanted, were presented too late, and that more is needed (external actor R and politician J). External actor R further pointed out that the actions presented in the action plan could have been satisfactory 5-10 years ago, but in 2013, the plan should have been a little bit more powerful. External actor Q emphasized that it is all about the attitude connected to this question and about what kind of signals the government sends. The government has at least presented the action plan, which is a good starting point to a comprehensive approach. In addition, the external actor does not think that it matters what colour the government has and the viewpoint has always been the same (External actor Q).

Politician J mentioned that before the 2006 election, the liberal parties stated that a tonnage tax system would be introduced, something that never happened. As the new investigation is supposed to be finished after the next election, it means that a tonnage tax system has not been implemented during the last two mandate periods. It is somewhat alarming that this is investigated once more, and that the deadline is set so far ahead. It is unrealistic that it should take so much time (Politician J). Politician K stated that the industry has to get support from the government in form of strategic political decisions. This is something that would only be beneficial for Sweden, and the above mentioned action plan is a starting point to really communicate its focus on the shipping industry.

Norway and Denmark have had another view of their respective shipping industries compared to Sweden, and shipping company A (ferry) mentioned that the Danes are businessmen and the Danish government has a goal to be a great shipping nation. The government has therefore put a lot of focus on its vision, the "Blue Denmark", and has been very good at protecting its shipping industry. Moreover, it was mentioned by both shipping companies and politicians that Norway has always been a large shipping nation and the government has therefore been working hard in order to continue to keep it that way. Moreover, the Danish Ministry of Economics and Business is handling all shipping related issues in Denmark, and the shipping industry has been viewed as a business. In Sweden, on the other hand, the Swedish Minister of infrastructure under the Ministry of Enterprise, Energy and Communications is handling the same issues. However, more focus should be put on the industry perspective of shipping, rather than solely as a transport mode (shipping company A, ferry and B, Ro-Ro).

Politician O pointed out that it is good that more focus has been put on the development of inland waterways, as Sweden has great possibilities within this segment, in order to transfer more goods transport from road and rail to sea transport (both short sea and inland waterways). Shipping in Sweden has often only been seen as a mode of transport that is a part of a larger transport network, and interlinked with the other transport modes (shipping company B, Ro-Ro). As most of the goods enter on the west coast, and the decision-making is located in Stockholm, this might be the reason why the Swedish government does not see shipping as an industry (Shipping company E, Container). Shipping company E (Container) stated that Swedish politics have taken a different direction than the Norwegian and Danish politics, as Sweden has not followed the development in shipping policy. Shipping company E (container) brought up the fact that because the politicians in Sweden have neither pursued the question regarding the shipping industry nor have made strategic decisions, Sweden has been lagging behind other European countries. Moreover, it was stated by a majority of the respondents that it seems like many of the politicians in the government does not realize that the Swedish shipping industry compete with shipping industries of other countries, not with other industries within Sweden. It is an international market with cross-border competition, and it is therefore important to have the same conditions and rules and regulations in Sweden as in other countries. Shipping company E (Container) mentioned that if Sweden does not have any shipping industry, it would also become dependent on import of transport services. According to politician J, Sweden's international trade is dependent on the shipping industry, and even though the industry is currently experiencing a crisis, the industry needs to be maintained and cannot be deleted. It is therefore difficult to understand why the liberal government does not want to realize this.

Politician K believes that it is frightening that it seems like the government is not aware of the problem the Swedish shipping industry is facing. In the next mandate period, there may not be any more ships left in the Swedish flag register, and if this is the case, Sweden can forget about the tonnage tax and everything else. It is important to always look at what other maritime nations do, and keep adjusting internationally. Politician K exemplified this with how the Finnish shipping industry has had a positive effect when the tonnage tax rules were changed due to political decisions. The Swedish shipping industry used to have a great position on the world chart some decades ago and received good support from the government. However, the current government sees the shipping industry as a "pain in the butt" and the support has decreased. Despite this, there are still many people that care for the industry and want it to grow again (Politician K).

#### **4.2.3. Surveys**

Many of the shipping companies are dissatisfied with the Swedish Transport Agency, which performs surveys of the ships. Some of the politicians stated that the rules are complicated and less flexible compared to other flag states, and the interpretation of the rules can differ between the Swedish surveyors. According to external actor R, there have been problems with the Swedish Transport Agency and that individual surveyors have different levels of assessment. One surveyor may approve of something and then another one might say that it is not acceptable, something that makes it very difficult for a shipping company to know what to do. The system is not working and it creates uncertainties (External actor R). This process can be complicated, troublesome and expensive (External actor Q). External actor R further exemplified the problems when it comes to ships that may be flagging back to Sweden. If several things have to be fixed in order for the ships to be approved, shipping companies have to spend several million SEK, something you do not do unless you get better competitive conditions when flying the Swedish flag. Further, Swedish surveyors might also require higher number of crew on board Swedish flagged ships than other flags require when operating in some regions. It was further pointed out that Sweden cannot have higher demands on number of seafarers on board a specific ship compared to the other flag registers, as this will be more expensive for Swedish shipping companies. Shipping company B (Ro-Ro) stated that nowadays, Sweden has come quite a long way with getting the Swedish Transport Agency to delegate some of the supervisory responsibility to classification societies, which is an important factor for the shipping companies. However, as the solution only facilitates to some extent, but not everything, it is therefore important that Sweden make sure to follow the same rules and regulations as the countries with which the Swedish shipping companies compete with (Politician O).

# 4.3. Swedish shipping companies about flying the Swedish flag

For shipping company A (ferry), it would not be interesting with a Swedish flag, rather, the tendency is leaning more towards flagging out. There are currently no plans to flag more ships to Sweden, but this is something that is re-evaluated continuously. As soon as the company buys or sells a ship, the question regarding what flag to fly emerges. The decision regarding flag state is taken once a deal is

signed instead of changing any current routes, so even if the company does not have any plans regarding a Swedish ship at the moment, it might happen. It is further explained that the company will not fly the Swedish flag unless they have to. If this is the case, it will be due to agreements within the labour unions. The company has several agreements with the labour unions, for example that a specific route should be operated by a Swedish flagged ship. This means that the ship is registered in the Swedish flag register due to an agreement and has nothing to do with shipping policy. The Swedish Net Wage Model is very competitive when looking at the cost of Swedish officers and ratings compared to foreign ones. However, since the company has many officers and ratings per position as a result of different labour agreements, it makes it more expensive to fly the Swedish flag compared to a foreign flag.

Shipping company D (tanker) mentioned that it cannot see why they should fly the Swedish flag again as the company does not have other connections to Sweden besides being registered in the country. In addition, the shipping industry is international and the company does not have many Swedish customers. There are several reasons why the company does not want to fly the Swedish flag. The competitive conditions are not good enough. Even though a tonnage tax system and a SIS were introduced in Sweden, it would not matter, as it is very efficient in the flag states where the company has registered its ships. However, the respondent mentioned that smaller and more local shipping companies perhaps would flag back to Sweden if these measures were implemented, as these companies have more of their business in Sweden. In addition, a fundamental change is needed in terms of Swedish shipping policy, as the politicians do not think that the shipping industry is important.

In order for shipping company G (Ro-Ro) to have more ships with Swedish flag, the entire picture should be similar to the other flag states. If it would be equally cost efficient to fly the Swedish flag, and if there are long term political initiatives no matter leading party, then the company would consider flying the Swedish flag as the company is Swedish. However, the company does not have any current plans to flag back to Sweden, but that does not mean that it would never happen. It would be an option if it were financially possible to fly the Swedish flag. The company follows the debate and the work that has been made within Swedish policy the last 12 months, and it hopes that the competitive conditions will increase in Sweden so that the distance between the Swedish flag and foreign flags would be shorter. The shipping company ascertained that it was not positively surprised by the government's action plan, and that it instead was a signal that nothing will change and that everything will continue as it is today (Shipping company G, Ro-Ro).

# 4.4. Consequences for the Swedish maritime cluster

After discussing the aforementioned issues, the respondents were asked about what consequences they believe that the flagging out could have for Sweden in the long run. The shipping companies were mostly on the same page except for shipping company D (tanker), which claimed that it would not have any effect on Sweden whatsoever. Basically, the majority of the respondents believe that the following factors will most likely be affected by this trend in the long run: education and on board training positions, job opportunities and competence, subcontractors, the defence aspect, and research and development. In addition, Sweden could lose its influence in international contexts. These factors go hand in hand and are affected by each other.

### 4.4.1. Education, job opportunities and competence

Respondents within each category have pointed out that if the Swedish merchant fleet disappears, Sweden will lose so much more than just a national merchant fleet. Politicians J and M pointed out that the maritime cluster is dependent on educating students to officers. Politician M mentioned that Sweden has high front-edge competence within the shipping industry and are therefore very attractive on the labour market. This would be hard to maintain without a Swedish flagged merchant fleet as competence is connected to education (Politician I). As it is difficult to find on board training positions for the students, external actor S mentioned that it also would affect the width of the educations. This might also lead to students not applying for the educational programs, and it is therefore important that future students get a positive attitude towards the industry (External actor R). If the flagging out goes so far that the maritime education and training institutions disappear, it might not be enough to only change the political decisions (External actor Q). Furthermore, the Swedish students are allowed to do their on board training on foreign flagged ships, the Swedish state does not own these spots. The respective flag states own the positions. In times where there is limited number of on board training positions on ships in the flag register, the flag state can at any time demand the ships to only accept students from the register's country (shipping company C, tanker). However, politician I mentioned that even though the students now have the possibility to do its on board training period on foreign flagged ships, in the end, the entire Swedish on bard training system is based on the Swedish flagged merchant fleet.

A seafarer is usually out at sea for five to eight years before coming back to work on land, and may then contribute with technical innovations, or establishment of new shipping companies (External actor R). However, it was stated by external actor S that the seafarers might be absorbed in other shipping industries abroad (External actor S), leading to lost competence in the land-based jobs in Sweden (Politician L). Moreover, the Swedish ports hire a lot of former officers, but this competence will disappear without a Swedish flagged fleet. In order to protect the maritime cluster, METs have to remain in Sweden and students need to be able to do on board training on Swedish flagged ships (External actor Q). In addition, when shipping companies also moves their entire business to the new flag state country, Sweden loses knowledge and land-based job opportunities. This will lead to decreasing knowledge, competence and education within the shipping industry. The whole chain of knowledge disappears which means that other countries will preserve this knowledge instead (Politician J).

Shipping company E stated that if the shipping companies in Sweden do not have the required knowledge, they cannot demand that the politicians should have it either. Furthermore, today only a few within the Committee of Transport and Communications have knowledge of the Swedish shipping industry, the rest of the Swedish politicians do not. It is important to find politicians that are interested in the industry. Without the interest, it is difficult to see the whole picture (Shipping company E, container).

Politician I stated that the industry in Sweden is not able to grow if there is no Swedish merchant fleet. It may potentially grow in the short-term as there currently are students in the educational programs in Sweden. However, without a Swedish flagged merchant fleet, Sweden will lose the first base in the pyramid in the long-run. The politician therefore believes that this development is like a downward spiral, and that there will be less land-based jobs and fewer officers in the future.

Moreover, shipping company C (tanker) highlighted the importance to invest in the maritime cluster due to the strong tradition in Swedish shipping industry. Sweden can provide the rest of the world with a good shipping industry just like Norway and Denmark, but this requires great knowledge (Politician M).

#### 4.4.3. Subcontractors

It was mentioned by some shipping companies that when a company flags out its ships, it might be that the company also follows after a certain time in order to be closer to the market. Sweden is dependent on having a good shipping industry, and this trend of also moving the entire companies is not fortunate for the Swedish maritime cluster. It is therefore important to have a good shipping policy in order to keep the companies in Sweden. Some countries, such as Denmark, also demand that the shipping company follows the ships after a certain time in order to create job opportunities for subcontractors in the country. According to shipping company A (ferry), subcontractors will face challenges, especially local suppliers, when Swedish shipping companies leave Sweden. Further, shipping company E (container) stated that when shipping companies move abroad, subcontractors could move as well, since it is necessary to be close to the customers in order to survive. Shipping companies that move abroad are sometimes required to use the subcontractors in the flag state, and according to external actor S, Denmark's ambition is that when a shipping company register its ships in DIS, it should also use the maritime cluster in Denmark, not in Sweden.

Even though there is no more shipbuilding industry in Sweden nowadays, there are still maintenance shipyards in Gothenburg and in other parts of the country. If something has to be repaired, a Swedish flagged ship would most likely turn to Swedish subcontractors in the surrounding regions from where the shipping companies operate to get it fixed. The probability that a shipping company turns to local subcontractors where its head office is located, is high (External actor Q). If the Swedish flagged merchant fleet continues to diminish, a consequence will be that the remaining shipyards will have less work to do, which means that Sweden loses the remaining jobs in the shipyards as well (Politician J). However, it can be said that the competence that was connected to the shipyards in Sweden succeeded in the transition from a production society to a service society. The companies had to go abroad and some have managed to find customers in the Far East and in other markets. It is therefore not impossible to go from a business based on the home market to an export based business, but there are not many companies that succeed in this transformation (External actor Q). According to external actor S, the maritime cluster with all subcontractors was much bigger 30 years ago than it is today, but it may not be completely impossible for the remaining to survive.

#### 4.4.4. Other aspects

According to politician L, a Swedish flagged merchant fleet is also important due to research and development. Politician O claimed that it is important that Sweden is in the forefront of refitting ships due to environmental- and emissions regulations because it is important to create environmentally friendly transportation. Different respondents within each category mentioned that Sweden becomes a weak actor when it comes to discussing shipping questions, both within the EU and internationally, without a large Swedish flagged merchant fleet. Sweden as a nation loses influence in international contexts such as in ILO, IMO and EU, where shipping is an important industry when looking at it from an environmental and safety point of view. As these issues are significant for Sweden, it is important to have a large Swedish flagged merchant fleet and a large maritime cluster in order to have a greater impact on international regulations and environmental

requirements like the new sulphur directive by IMO (External actor R). According to politician I, Sweden might not even be able to be part of the different international organizations if the shipping industry is too small. The politician also pointed out that without a Swedish flagged merchant fleet, it might be difficult for Sweden to assert itself in these types of questions. If losing influence, Sweden will become even less interesting, so in order to be able to have an impact in the international organizations, it is therefore important that Sweden invest in having a Swedish flagged merchant fleet.

Based on the potential consequences for the Swedish maritime cluster discussed above, all respondents, except shipping company D (tanker), therefore stated that it is necessary to protect the Swedish maritime cluster. Shipping company D (tanker) claimed that the maritime cluster is able to flourish by itself without any Swedish flagged ships, and cannot see the connection between flag and maritime cluster. Sweden has a thriving maritime cluster and it could therefore survive on its own. Even if the ships are not Swedish flagged, there are possibilities for training positions on board Swedish controlled ships and the possibility to support Swedish education anyway (Shipping company D, tanker).

# 4.5. How to stop the trend of flagging out

The previous discussion has brought up several factors that affect Swedish shipping companies' tendency to flag out, and the questions of how to stop this trend and additionally get shipping companies to flag back their ships, are very much linked to each other. In order to stop this trend, the respondents provided different opinions and suggestions. A majority of the respondents within each category have brought up the importance of looking at shipping as an important industry in Sweden. Shipping company B (Ro-Ro) further mentioned that it is important that the politicians understand that it is a big difference between infrastructure and industry, as the industry is so much more than just ships, containers and trailers. Politician P further claimed that too much focus has been put on specific questions such as tonnage tax, and it has been too little discussions about investments in the shipping industry. It is important to communicate the value of the shipping industry to the Swedish citizens before specified industry questions can be discussed. The politician further stated that it is important to look at the whole picture and get a holistic view of the shipping industry in general, and that the government has to communicate a will to really protect the Swedish shipping industry. Politician P stressed the importance that the government has to show the industry that it can be trusted. All respondents within each category stated that Swedish flagged shipping companies need to have the same competitive conditions as those offered by other European registers. Some believe that it will be enough if Sweden has equally competitive conditions as the neighbouring countries, whilst some claimed that implementation of better and more attractive conditions are needed.

Shipping company G (Ro-Ro) mentioned that in order for it to run the company under Swedish flag in Sweden, the conditions has to be on the same line as in other shipping nations within EU, e.g. Denmark, Finland and the Netherlands. Moreover, politician K specified that Sweden has to adapt internationally in order to compete with the same conditions as shipping is an international industry with tough competition (Politician K). It was also reasoned that companies could easily change to a flag state with better conditions. The trend of flagging out has accelerated the past years as Sweden has not followed and adapted to its competitors. Several respondents within each category stated

that similar competitive conditions would not contribute to a large re-flagging of Swedish controlled ships. A re-flagging would require much better conditions in Sweden, something that is not likely to happen. Moreover, the decision to not flag back to Sweden might also depend on the high costs, e.g. stamp duty, that would occur and the complexity around the process. In addition, many of the shipping companies that have flagged out claim that they have established a network of connections and good relationships with their flag states, which also have well-functioning systems in addition to giving high-standard service. Therefore, politician I believes that the shipping companies need some type of advantage in order to flag back and that this might be quite a high threshold. The conditions will be further elaborated on in the following sections.

#### 4.5.1. Crew cost and taxation

As mentioned previously, all respondents but politician M and J agree that the TAP-agreements have had a positive impact on the Swedish flagged merchant fleet's competitiveness and that the TAPquota should be expanded. Different actors within each category suggested that maybe 75 - 80 per cent would be a good percentage, and it was stated that a higher level is necessary in order to keep Swedish ships in the Swedish flag register. It is vital to have a system with Swedish crew on board in addition to a Swedish management. However, it is important to be consistent in terms of the TAPcontracts, and when deciding how big the percentage should be, it should not be based on rough estimates as it is done today. The agreement must allow long-term planning for the shipping companies, and it is therefore important to know how large the TAP-quota is going to be. Strict rules regarding the percentage of TAP allowed on board need to be introduced and not something that can be negotiated for each individual agreement (Shipping company F, ferry/Ro-Ro). Shipping company D (tanker) pointed out that the ability to have 100 per cent TAP-employees would give the same effects as a SIS. However, the respondent mentioned that not all companies are able to have 100 per cent TAP-employees on their ships depending on certain requirements, e.g. that the crew need to have been on board the vessel for a certain amount of time and have specific qualifications. It is therefore not always easy to change the crew (Shipping company D, tanker). In addition, shipping company E (container) and politician N argued that SEKO (one of the labour organisations) does not want a SIS, as SEKO and the other Swedish labour organisations want to protect its Swedish members. Unfortunately, if nothing happens, there will be no Swedish crew left. Politician K stated that in the short-term, it would be good to increase the TAP-quota, but it would not work in the long run. The politician would instead prefer that the discussion of a European International register was resumed and that the TAP-system in Sweden was abolished. Politician I mentioned that the government has given the impression that it supports the idea of increased TAP-quotas, and that it is now up to the parties of the labour market to further discuss this question. The politician is not sure if this is a good deal for all parties, but it is the best option at the moment considering the current conditions.

Furthermore, it was pointed out by several respondents within each category that an introduction of a SIS and a tonnage tax system corresponding to those that have been introduced in other EU-countries would be a good basis in order to stop the trend of flagging out, and in order to make Swedish flagged ships more competitive internationally. This could perhaps lead to that newly built and purchased ships would be registered in the Swedish flag register. It was stated by several politicians that an introduction of a tonnage tax system is the most important factor, and that it is unfortunate that Sweden does not have this kind of system. Furthermore, some politicians also

stated that it is important to implement the measures presented in the action plan in order to stop the flagging out. These, together with a tonnage tax system and a SIS, are said to provide a good basis for further development. Also, in order for the government to show the industry that it is taking a comprehensive approach, politician J mentioned that it is important to also review the fairway dues and the possibility to invest in research of new fuels, engines, scrubber techniques etc.

Finally, in terms of the Net Wage Model, even though all respondents agree that it is beneficial, it was mentioned that an expansion of the Net Wage Model solely (i.e. including more ship types), is not enough. The Net Wage Model together with a tonnage tax system and an expanded TAP-quota can, according to shipping company B (Ro-Ro), contribute to more equal conditions as Sweden's neighbouring countries. However, the respondent mentioned that this does not include the ferries in European traffic, as this segment cannot, according to SAGL, hire TAP-employees. In the ferry segment it is only allowed to hire crew on national conditions (Shipping company B, Ro-Ro).

### 4.5.2. Investments and research and development in the industry

Shipping company C mentioned that it has been too much focus on the uneducated ratings, and that Sweden instead should focus on highly educated staff such as officers. Of course some Swedish ratings are needed on "low educated positions" in order to understand the job and be able to continue to educate themselves to for example officers. If Sweden as a country should be able to compete in this industry, the competence has to increase. Sweden should not compete for the uneducated positions but for the positions that require high education. This is probably due to the long tradition of good labour legislation and social democratic governments in Sweden.

As Sweden is a country with great knowledge of maritime safety, politician J mentioned that Sweden as a country needs to be in the forefront of developing new engines and new techniques for reducing emissions. This has also become more important due to the new SECA rules, which enters into force in 2015. However, in order to make these investments, the shipping industry needs to be invested in. Norway made a restart of their shipping industry for about 6-7 years ago, and chose to focus more on offshore technology, something that has been a success. In addition, the shipping industry in both Denmark and Finland has experienced a growth during the last years. Sweden has the longest coastline in Europe, and is also the country with the largest export market in the Nordic region. Politician J therefore questions the fact that Sweden is on its way to become the smallest shipping industry out of these countries, and it is therefore important that the government put more focus on the shipping industry.

Politician P brought up the fact that roads and railways in Sweden are congested, and shipping as a transport mode has therefore a great potential. Sweden cannot lose shipping as a mode, and as it is free capacity at sea, it is important to protect the shipping industry. External actor R also pointed out that even though it might not be profitable to fly the Swedish flag today, it does not mean that the industry should not be focused on and invested in. Another reason to keep focusing on the Swedish shipping industry is because the Swedish merchant fleet is the centre of the country's maritime cluster. If there is no more Swedish merchant fleet, the maritime cluster will deteriorate. Politician N pointed out that the merchant fleet in Denmark has increased, which has contributed to a growth in the surrounding industries as well. If the current trend continues in Sweden, there might not be any shipping industry left in the country.

#### 4.5.3. Final remarks

It is important to mention that not every respondent were equally optimistic regarding the possibilities to get shipping companies to flag back its ships, and External actor S pointed out that the flagging out will soon experience a natural stop as there are not many ships left in the Swedish merchant fleet. It is too late and it would be too difficult and too complex to turn around the trend. A majority of the respondents from all categories stated that Swedish businesses in general wants to have as much connection to Sweden as possible, but some shipping companies might not feel that this is the most important factor. Some of the politicians mentioned that it is believed that the shipping companies want to have Swedish flags on their ships, but the costs and disadvantageous conditions has forced them to flag out as they seek higher profitability. External actor Q pointed out the fact that some shipping companies have been flying other nations' flags for many years in order to reduce costs, rather than looking at soft factors such as heritage and tradition.

Politician K stated that it is unfortunate that the Norwegian and Danish flag registers are absorbing the Swedish controlled ships one by one, and that their shipping industries are growing and flourishing whilst it is decreasing in Sweden. In terms of the Swedish flag register, shipping company E suggested that Sweden probably needs to find another model than the neighbouring flag states and other flag states have, something that would give the shipping companies other types of advantages. This, in turn, would perhaps make the Swedish registry more attractive. Sweden may not be able to compete with registers such as Bahamas, but those of the neighbouring countries, so that the Swedish shipping companies remain in Sweden. This could also result in that a greater proportion of Swedish shipping companies choose to flag back. However, politician I does not believe that Sweden can create conditions that are better than the other countries. Politician K states that the Swedish merchant fleet cannot compete with low cost flag states and is quite frustrated that Swedish shipping companies are flagging out to neighbouring countries that are then absorbing the Swedish shipping industry.

It is necessary to gradually evaluate and to have continuous discussions regarding the measures in the action plan, but there are also other questions the industry and the labour market parties should proceed with. It is therefore not believed that this process ends with the action plan, and the government has already said that there will be continuations of the action plan. A discussion between the politicians and the actors within the industry is desirable in order for the politicians to really understand what is needed. However, it is important that the issues are looked at from a wider point of view, and that the government realizes that it is a problem that Swedish shipping companies are flagging out. In order to preserve the Swedish shipping industry, long-term political decisions and clear and strong shipping policy is needed (Politician P). The government has highlighted the fact that it wants to focus on research, which is a good action. However, this does not mean that Sweden gets better competitiveness (External actor Q). It was further mentioned by politician P that something more than equally competitive conditions is needed, and that it is important that the discussion does not end no matter what the obstacles are and what rules that are hindering the shipping industry.

Even though many different factors have been brought up in this sub-chapter that the industry would like to change in order to stop the flagging out, many of the respondents agree that the most important thing is the holistic approach, and not one single factor.

# 4.6. Should Sweden have a Swedish flagged merchant fleet?

Shipping company A (ferry) stated that a Swedish flag is not needed in order to be engaged in shipping operations, as the ships can still transport the goods. It is possible to run a business from Sweden even though the company does not have any ships flying the Swedish flag. Further, shipping company C (tanker) stated that companies in the Swedish industry in general are not dependent on a Swedish shipping industry as the goods will go in and out of Sweden no matter what flag the ships are flying. Despite this, many of the respondents are convinced that a certain part of the Swedish controlled ships should have Swedish flag. This is important for the maritime cluster, otherwise there will be no industry left, as the flows of officers and ratings up to management positions and thereafter to land-based positions, can be said to be the motor in the maritime cluster. Shipping company F stated that this configuration generates jobs and if the motor disappears, the employment positions will also disappear. External actor R believes that the size of the Swedish merchant fleet should be around 220-240 at the smallest (now it is only around 100). In order to persuade students to the industry, it has to be a future and a certain security for it. In addition, the industry should be more visible (External actor R). Shipping company E (container) pointed out that it is also important to keep Swedish companies in Sweden, as the Swedish state will not receive any income in form of property taxes if the companies move abroad.

Politician J mentioned that if the different actions discussed above, are implemented, the merchant fleet would grow to be bigger than it is today. How much bigger is uncertain. Import and export to and from the Swedish ports will also be present in the future. New industries are growing very strongly, particularly in the mining industry, which has an expansive period ahead. This will create more mines and therefore more jobs in Sweden. In addition, export opportunities through the lakes are needed for other industries in Sweden, and it is therefore important to protect the shipping industry. Further, it was stated that Sweden will continue to be a major producer of commodities in terms of timber and paper, so a lot of Swedish basic industry will expand in the future, something that means that the trade will continue to be of great importance (Politician J).

# 4.7. Summary of empirical findings

**Table 4.1. Summary of Empirical Findings** 

Table 4.1. Summary of Empirica	Table 4.1. Summary of Empirical Findings				
Summary of the respondents' answers					
4.1. Factors influencing choice of flag state	- Competitiveness and costs  ○ Crew cost ○ Fiscal rules ○ Important with a clean and accepted flag ○ Important that the surveys of the ships are working in a good way ○ Total cost structure ○ The flexibility, administration, efficiency and service of the flag state ○ Type of goods, trading patterns and routes operated ○ Specifically important for ferry companies: The Swedish Net Wage Model and maritime aid  - Company history ○ Acquiring a foreign flagged fleet ○ Good relationships with a certain flag state ○ Tradition of flying a foreign fleet  - Shipping policy in Sweden				
4.2. Discussion of factors	Lack of similar competitive conditions in Sweden compared to other Nordic and				
influencing the decision to flag out from Sweden	European countries, such as lack of a tonnage tax system, SIS, maritime strategy from the government, as well as complications regarding surveys of ships.				
4.3.Swedish companies about	- The various shipping companies had different views, which depends on the				
flying the Swedish flag 4.4. Consequences for the	segments and routes they operate, i.e. this question is very individual.  - Factors that will most likely be negatively affected in the long run:				
Swedish maritime cluster	Pactors that will most likely be negatively affected in the long run.      Education and on board training positions				
Swedish martime cluster	o Job opportunities and competence				
	o Subcontractors				
	o Research and development				
	o Loss of international voice				
	→ The factors go hand in hand and are affected by each other.				
4.5. How to stop the trend of	The government has to look at shipping as an industry and not just a mode of				
flagging out	transport.				
	- Look at the whole picture and get a holistic view of the shipping industry in general.				
	- The government has to communicate a will to really protect the Swedish shipping				
	industry. Need Long-term political decisions and a clear and strong shipping policy.				
	<ul> <li>Sweden has to adopt internationally.</li> <li>Shipping companies in the Swedish register should be able to compete with the</li> </ul>				
	same conditions as those offered by other European registers.				
	- A re-flagging would require much better conditions in Sweden.				
	- Make the Swedish register more attractive (for example with other types of				
	advantages than the Nordic countries).				
	- Crew cost and taxation				
	<ul> <li>Expand the TAP-quota, as the Swedish government does not want to implement a SIS, introduce a Swedish tonnage tax system and an expansion of</li> </ul>				
	the Net Wage Model.				
	the Net Wage Model Implement those measures presented in the action plan, in addition to				
	- Implement those measures presented in the action plan, in addition to continuations of the plan.				
	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> </ul>				
4.6. Should Sweden have a	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> </ul>				
	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> <li>A Swedish flagged merchant fleet is important for the maritime cluster, as</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> <li>A Swedish flagged merchant fleet is important for the maritime cluster, as competence, knowledge, job opportunities and educational institutions might be</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> <li>A Swedish flagged merchant fleet is important for the maritime cluster, as competence, knowledge, job opportunities and educational institutions might be lost otherwise.</li> <li>The Swedish state will not receive any income in the form of property taxes if the companies move abroad.</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> <li>A Swedish flagged merchant fleet is important for the maritime cluster, as competence, knowledge, job opportunities and educational institutions might be lost otherwise.</li> <li>The Swedish state will not receive any income in the form of property taxes if the companies move abroad.</li> <li>Export opportunities through the lakes are needed for other industries in Sweden.</li> </ul>				
Swedish flagged merchant	<ul> <li>Implement those measures presented in the action plan, in addition to continuations of the plan.</li> <li>Investments and research and development in the industry.</li> <li>Not needed in order to be engaged in shipping operations. The goods will go in and out of Sweden no matter what flag the ships are flying.</li> <li>A Swedish flagged merchant fleet is important for the maritime cluster, as competence, knowledge, job opportunities and educational institutions might be lost otherwise.</li> <li>The Swedish state will not receive any income in the form of property taxes if the companies move abroad.</li> </ul>				

# 5. Analysis and Discussion

This chapter contains an analysis of the empirical data gathered in relation to the theoretical framework. The answers to the two sub research questions are also presented in this chapter.

# 5.1. Swedish shipping industry and the Swedish merchant fleet

As described in chapter 2.1.1., Sweden has a long history of having a strong shipping industry and maritime cluster. The country has a reputation of having great knowledge and competence within several areas within the shipping industry, highly competent seafarers, environmental- and safety thinking, as well as good research and development. However, during recent years, the Swedish merchant fleet has been decreasing, especially during the period from 2009 to present. Sweden has the longest coastline in Europe and can be seen as an island from a transport perspective. The country is very dependent on import, and has the largest export market of the Nordic countries, and 90 per cent of the country's import/export is transported by sea. From a transport point of view, the flag at the back of the vessel does not matter to a country, as the goods will still enter the ports. However, from an industry point of view, the lack of a Swedish merchant fleet may have an impact on various aspects connected to the maritime cluster. Therefore, the purpose of this thesis is to figure out if the Swedish merchant fleet should be registered in the National flag register or not, and the main research question (RQ) is:

# RQ: "Should the Swedish merchant fleet fly the Swedish flag?"

In order to be able to answer the main research question, the researchers had to answer subquestion one (RQ1) and two (RQ2) first:

RQ1: What factors are relevant for shipping companies when choosing flag register?

# RQ2: What are the potential consequences related to a further diminishing, or even a non-existent, Swedish flagged merchant fleet?

The answers to RQ1 and RQ2 are presented in chapter 5.2. and 5.3. respectively. The subsequent sections present the reasons on which the researchers have based their conclusion.

# 5.2. Choice of flag state

From the researchers' point of view, it is obvious that there is a combination of disadvantageous factors that most likely have influenced the decision of many Swedish shipping companies to register their ships in other European flag registers rather than in Sweden. Existing theory presents several factors that influence the choice of flag state, which was discussed in chapter 2.4.1. A comparison of theory and the empirical findings is presented below in table 5.1:

Table 5.1. Comparison of theory and empirical findings

Factors that could possibly influence choice of flag state	Factors brought up by the shipping companies
Crew costs	V
Quality and source of labour or the unavailability of on-going supply of skilled labour	Х
Reduction in management costs	X
Minimization of taxes on profits	V
Fiscal rules and costs	V
Directives from financial institutions	X
Avoidance of bureaucratic control	X
Degree of control exercised by the flag state	X
Type, size and age of ships	X
Type of trade in which the ship is engaged and the geographical cover	٧
Avoidance of costs of compliance with higher standards under the national flag	Х
(Source: Bergantino and Marlow, 1998, referred to in Mansell, 2009).	(Source: Information retrieved from the interviews)

Only four factors corresponded with the answers of the shipping companies. However, this does not mean that the other factors do not influence the choice of flag state, only that these were not brought up by the interviewed Swedish shipping companies. All factors in chapter 2.4.3., (the development of fiscal rules, crew costs and crewing rules, the possibility of financial support, and the direction of research and development), was however mentioned by the respondents as reasons for flagging out from Sweden. A running theme in the interviews is the fact that Swedish shipping companies should have the same competitive conditions as the other shipping nations within Europe. The lack of political decisions, as well as a maritime strategy, has severely influenced the competitiveness of the Swedish flagged merchant fleet, as well as the differences in terms of surveys compared to other flag states. In addition, other flag states view the registered shipping companies as clients and their business idea is to provide good and efficient service. In Sweden, on the other hand, the shipping companies have to deal with different authorities, which is more complicated and time consuming. Furthermore, the surveys conducted by the Swedish Transport Agency have been mentioned as an influential factor as well. It has been said that it is not consistent in Sweden, and that it is more complicated than in other flag states, which are allowing classification societies to perform many of the surveys compared to only a few in Sweden. If the individual surveyors from the Swedish Transport Agency have different opinions regarding certain aspects, it is difficult for the shipping companies to know what to do. Also, it is very costly and time consuming if a company decides to refit parts of one ship due to the information received by one surveyor in order to be approved, and then another says that it is wrong.

After interviewing the respondents and comparing the results with what has been written previously on the subject, the researchers found that costs are the single most important aspect. As described in chapter 2.3., the costs associated with a shipping company depend on different segments, but crew costs were brought up as the most significant factor. However, several factors are interlinked and it is therefore, according to the researchers and many of the respondents, not enough to only implement one measure in order to create equal competitive conditions. It is important to focus on a holistic approach.

#### **5.2.1. Economic factors**

The discussion in chapter 2.3., pointed out that the cost structure of a shipping company is dependent on if the company owns or charters the ships used, as well as the type of shipping segment in question. The different segments share some features and the costs depends the type and volume of cargo transported, the characteristics of the ships, amount of crew needed, route operated, etc. Because of these cost differences, Swedish shipping companies from different segments would like the government to introduce measures that would lead to cost reductions within their specific segments in order to make them competitive internationally. From the interviews, the researchers got the impression that companies operating in the passenger/ferry segment in general are very content with the Swedish Net Wage Model as they require a lot of service staff in addition to officers and ratings, and it allows them to lower the labour costs of these employees. However, it has been pointed out that a ship flying a foreign flag can have approximately 50 per cent lower crew cost than a sister ship operating the same route, but under the Swedish flag. Further, it was mentioned in the interviews that smaller to medium sized tanker companies would like the government to implement a tonnage tax system in order for them to be able to lower their costs, as these ships do not require as much employees as a ferry, meaning, they cannot benefit from the Net Wage Model to the same extent. Also, it can be difficult for these companies to hire TAPemployees due to specific requirements such as certain competence and the amount of time spent on board the ship.

## Tonnage tax

Several politicians stated that a tonnage tax system is wanted in Sweden, and that this is one measure that would contribute to increased competitive conditions. However, not all shipping companies indicated that a tonnage tax system was the most important factor influencing flagging out, and that they would probably not implement a tonnage tax system if the system was introduced in Sweden. This depends on different segments, cost structure, the size of the company, composition of fleet, etc., and as mentioned in chapter four, it is probably most likely that small shipping companies would take advantage of the system. This is also why it is positive that the implementation of the system is optional. Nevertheless, all shipping companies agree that a tonnage tax system would be important for the Swedish shipping industry in general.

In chapter 2.6 it was explained that Denmark, Finland and Norway have all implemented different versions of the Dutch tonnage tax model, and Denmark and Finland have also come up with solutions of how to deal with the deferred tax liabilities in the untaxed reserves. Therefore, it should not be too difficult for Sweden to implement a version where the untaxed reserves can be solved in a way that is comfortable for all parties involved. With an introduction of a tonnage tax system in Sweden, the shipping companies' actions will not be based on tax reasons to the same extent as currently, but by commercial purposes instead. Furthermore, the tonnage tax system will be somewhat different than the current corporation tax system in Sweden. Further, as discussed in chapter four, the new tonnage tax investigation will not be finished until after the next election in 2014. This in not fortunate for Swedish shipping industry as it might not be any ships left in the Swedish flagged merchant fleet. This is also why it is important to accelerate this process. Strategic decisions regarding a tonnage tax and a SIS is something only the government can implement, so it is clear that Swedish shipping policy has an impact on the competitive conditions when flying the Swedish flag.

It is interesting to see that five of the eight politicians interviewed seem to think that the Swedish shipping companies believe that an introduction of a tonnage tax regime is the most important factor that influences the decision to flag out from Sweden, and that they claim that this is what they have heard from the industry. However, the answers from the shipping companies interviewed in this thesis, points more towards increasing the competitiveness of the Swedish flagged merchant fleet through various measures. This might be an example of the debate getting stuck on a single matter, which politician P pointed out, and that a broader picture and implementation of several measures is important in order to increase the competitiveness of the Swedish flag merchant fleet. For many shipping companies, the general competitive conditions are the most important thing as there are several factors that differ from other countries. The tonnage tax system is only one action that can be taken, but it can definitely be beneficial and it is therefore important to implement the system in Sweden.

#### Crew cost

As described in chapter 2.5., SAGL was introduced in order to lower crew costs for shipping companies within the member states in order to create equal cost levels as in other countries. In addition, the idea behind the guidelines is to stimulate employment within the EU. In Sweden, a Net Wage Model has been introduced in order to lower taxes and social security contributions for Swedish seafarers as well as the possibility to hire officers and ratings on TAP-contracts.

Due to the higher crew costs compared to other flag states, maritime aid is needed, and it is especially important in the passenger/ferry segment that has many employees on board. As described in chapter 2.7., different requirements need to be fulfilled in order to receive maritime aid. Moreover, as only restricted types of ships are able to receive maritime aid from the Swedish Net Wage Model, several ships have flagged out. As described in chapter 2.7., the budget for the aid through the Net Wage Model in 2013 is 1,6 billion SEK, and as the budget was approximately 1,42 billion SEK in 2012, it can be argued that the government now have opened up for an expanded model.

Regarding the 183-days rule in the Swedish income tax act (Inkomstskattelagen (1999:1229)) discussed in chapter 2.9., the current law makes Swedish seafarers employed by Swedish companies on board foreign flagged ships, liable of taxation if the time spent on board in "fjärrfart" exceeds 183-days in a one year period. This rule makes these seafarers less competitive internationally, which can lead to difficulties of finding employment. In addition, if the Swedish version of the MLC is implemented in its current state in august 2013, this will incur large consequence on the competitiveness of the Swedish seafarers covered by the 183-days rule, as the shipping companies have to pay twice as much social security contributions for the seafarers than today. The researchers believe that the proposed amendments of the income tax act and the Swedish version of the MLC are necessary in order to prevent loss of competence and job opportunities, as the competitiveness of Swedish seafarers as well as Swedish shipping companies, will diminish.

TAP-contracts in Sweden are not competitive enough compared to the other EU-countries, as shipping companies from those countries are able to employ 100 per cent foreign officers and ratings on board their ships. As described in chapter 2.8., the current TAP-quota is 50 per cent. The majority of the respondents in this study agree that the TAP-quota should be expanded, and it has been

suggested that a percentage between 75 and 80 is needed in order to preserve the Swedish flagged merchant fleet. The percentage of TAP-employees allowed on board is currently being negotiated between each individual shipping company and labour organisations. A higher and less variable percentage has been suggested in order for shipping companies to more easily plan its costs. As the government has decided not to implement a SIS, increasing percentage of TAP-employees is needed in order to decrease the crew costs.

In summary, even though each of the above mentioned factors are important in order to increase the competitiveness, an implementation of only one or two actions is not enough. Several different measures need to be initiated. It is strange that Sweden only has implemented a few of the measures allowed by the EU, and not everything, whilst almost all competitors are fully utilizing the system. In the following chapter, the potential consequences of flagging out are discussed.

# 5.3. Consequences of flagging out

As discussed in chapter 4, there are several potential consequences associated with the flagging out trend. A diminishing Swedish merchant fleet affects the Swedish education and training institutions in Gothenburg and Kalmar, competence within the Swedish shipping industry, and future research and development. Sweden is well known for its high quality of officers and ratings. It is important to focus on education in order to prevent the Swedish education and training institutions in Gothenburg and Kalmar from being closed down. It is quite interesting that many reports and studies points out the value of, and the job opportunities within the Swedish shipping industry, but Swedish politicians have clearly not realized this when looking back at their actions, or lack thereof. There are several opportunities and benefits associated with the shipping industry in Sweden with the long tradition of high quality, competence and technological innovation. The researchers believe that the maritime cluster in Sweden would greatly benefit from stopping the flagging out, as this would "secure" some job opportunities, competence and possibilities for new students to find jobs, and to educate themselves in this country. In addition, it would also be more difficult for Swedish students to find on board training positions if there is no Swedish merchant fleet left, as well as finding employment on Swedish flagged ships after graduation. This might lead to less young people applying for the educational programs, which in turn can lead to the METs having to shut down. Further, as mentioned previously, some flag states require the entire company is moved to the country of the flag register. If there are no Swedish shipping companies registered in the country, Sweden also loses income in the form of corporation taxation.

If Sweden really wants a competitive maritime industry, more has to be done and discussed than previously. Greater maritime support in Sweden is needed if a Swedish flagged merchant fleet is desired. Moreover, it is important to highlight the issues and the fact that the industry is not homogenous but heterogeneous. The different segments face different cost related challenges to overcome, depending on the amount of staff, bunker, maintenance etc. The Swedish state will send signals to shipping companies and to the entire maritime cluster that it wants to focus on the shipping industry by spending time, money and energy on it, and if that is the case, it is important that the industry knows that it has the government's support. This, in turn, might have a positive effect on the tendency to flag out from Sweden. In addition, it might also contribute to a larger "flagging in" to Sweden. Compared to Denmark, Sweden sees shipping more as infrastructure and transport, than as an industry. Shipping companies need to feel that they can trust the government

of the flag state, and not suddenly or continuously face new game changing rules and regulations, as this might lead to uneasiness and higher and unexpected costs for the shipping companies. Together with Denmark and Norway, Sweden has been one of the leading countries in terms of the shipping industry in Northern Europe, and one of the respondents says that it is also important to maintain this knowledge in Scandinavia.

In the political discussion it is often mentioned that the shipping industry has been given a lot of financial support. This might be true in comparison with other industries in Sweden, but not compared to the support given by the governments in the other Nordic countries. Compared to the other Nordic countries, the Swedish shipping industry is less competitive. Therefore, the government has to decide whether the country needs a strong shipping industry or not, and make comparison regarding the competitiveness abroad and financial support, and not just focus on comparison with industries within the Swedish borders. The impression the researchers have gotten is that there are some politicians that have good knowledge of the Swedish shipping industry, but that the general knowledge in the government is very low. Within other industries, Sweden has coped with increasing internationalization and competition from low cost countries, but not within the shipping industry.

Measures need to be taken to make the Swedish flag state equally competitive as the Nordic countries in order to stop the current flagging out trend. To attract shipping companies back to Sweden, the conditions have to be more competitive as it can be tricky and somewhat expensive to flag back. The shipping companies must feel that it is worth flagging back. Further, it is important that the government see shipping as an industry, and not just a mode of transport. In addition, it is important to realize that the Swedish shipping industry does not compete with other industries in Sweden. It is a global industry, which means that the Swedish shipping companies compete with shipping industries from other countries in the world. During the interviews, it was brought up that the government probably does not want to give the shipping industry more financial support, as it claims that the industry has already received a lot, and if one industry gets a lot of support, the pressure from other important industries might increase. Even though the government published its action plan for the Swedish shipping industry in January 2013, many respondents claimed that more focus was put on short-term solutions rather than long-term solution. However, there will be a continuation of the action plan, which hopefully provides more positive signals from the government that this is an industry which it considers to be important for Sweden, and which it wants to invest it.

# 6. Conclusion

In this final chapter, the thesis is concluded by answering the main research question followed by the researchers' recommendations concerning the issues. At the end, ideas for further research are suggested.

When comparing and interlinking the information from the interviews with the different respondents and previously written theory, the researchers have drawn the conclusion that Sweden should have a Swedish flagged merchant fleet in order to preserve the Swedish shipping industry and maritime cluster in the long run. This is the answer to the main research question. However, how large it should be, or has to be, is too difficult to determine. Swedish ships flagging out are a disadvantage for Sweden due to loss of income and job opportunities. As Sweden is a leading country in Europe when it comes to recruiting young students to the shipping industry, it will be important to keep the Swedish merchant fleet. In order to prevent Swedish ships from flagging out (and to get ships to return to sail under the Swedish flag again), it will be essential to make the Swedish flag more attractive. This means that Sweden has to offer the same advantages as the other European countries.

Even though the researchers believe that the Swedish merchant fleet should fly the Swedish flag, it does not mean that Sweden should concentrate on trying to become the best flag state. Perhaps Sweden needs to focus on other aspects such as research and development, technical and environmental improvements. In addition, Sweden could also focus on becoming a short sea shipping expert as a way to differentiate itself because as the situation is today, it will be too expensive and demanding to compete as a flag register. However, actions need to be taken to make the Swedish flag more competitive than it is today in order to make the shipping companies stay, and perhaps attract some of the new built ships to fly the Swedish flag. It is very important to keep in mind that the shipping industry in Sweden does not compete with industries in Sweden, but in an international context. If the government decides that it wants to invest in, and maintain, the Swedish shipping industry, it really does not matter how much support or financial aid the industry has received previously from the government. Several of jobs can be saved, even though the state has to compromise with e.g. providing tax relief and/or more beneficial rules for seafarers, than land based jobs in Sweden. It might be better to sacrifice this than have unemployed people as unemployed citizens cost the state money. Finally, it is also important not to forget the soft factors. It has been brought up in several interviews that many shipping companies want to maintain a close connection to Sweden and fly the Swedish flag if possible. In order to preserve the Swedish flagged merchant fleet, the maritime cluster, and the high level of knowledge, the researchers present their recommendations in the following section.

# 6.1. Recommendations

The researchers have come to the conclusion that Sweden should not focus on becoming the most attractive flag state in the world and compete with flags of conveniences, but the Swedish flag registry should have the same competitive conditions as European countries in order to even out its current disadvantages. Sweden should instead focus on other segments, in which the country already

have built up great knowledge and competence, such as education, research and development, short sea shipping, and inland shipping, and becoming the best as possible in these areas instead. Sweden has been a strong shipping nation in the past, which means there is a long shipping tradition in the country. As one of the respondents mentioned, Norway made a restart of their shipping industry about 6-7 years ago, which has been beneficial to Norway. The researchers have not identified a single factor that indicates that this could not be made in Sweden as well. In order for the Swedish maritime industry to survive in the long term, it is essential that Sweden has a merchant fleet. Measures need to be taken to make Sweden as a flag state equally competitive as the Nordic countries in order to stop the current flagging out trend. To attract shipping companies back to Sweden, the conditions have to be more competitive, as it can be tricky and somewhat expensive to flag back. The shipping companies must feel that it is worth flagging back. It has to be attractive. Another tricky thing is the problems with the Swedish Transport Agency associated with surveys of the ships. It is important that the individual surveyors have equal levels of assessment and it should be investigated to delegate more responsibility to classification societies, as has been done in many other flag states.

The researchers recommend an implementation of a tonnage tax system in Sweden. It is voluntary to join the system, and every respondent that has been interviewed are sure that the problems regarding the deferred tax liabilities can be solved. As the system is voluntary, it can be predicted that only the smaller shipping companies that cannot fully take advantage of the maritime aid, would take advantage of it. A Swedish tonnage tax system will give the Swedish state steady flow of incomes, and it will be easier for shipping companies to plan its cash flows, as the tax payable each year is fixed (unless the composition of the fleet changes). This will also create more stability for the companies in terms of tax payments. Even though a new investigation will be finished in December 2014, it may be too late. First of all, a new government might be in charge, and second of all, the Swedish flagged merchant fleet may not exist anymore. It would be wise of the government to speed up this process in order to prevent the merchant fleet to become even smaller.

There has also been a discussion whether or not to implement a Swedish International Register. At the moment, the government states that it does not want to implement a SIS, as it claims that it would go against conventions that Sweden have ratified. Because of the non-implementation of a SIS, the allowed TAP-quota needs to be increased and more consistent regarding the percentage. In terms of the Swedish version of the MLC, the researchers hope that the four ministries, together with the labour market parties, solve this issue before the law enters into force. Otherwise, the competitiveness of some Swedish seafarers will be even worse.

Furthermore, the Swedish government has to realize that the shipping industry is much more than just a mode of transport; it is an important national industry, which is worth preserving. It is also essential that the government recognize that that the Swedish shipping industry does not compete with other industries in Sweden. It is a global industry, which means that the Swedish shipping companies compete with shipping industries from other countries in the world. It also has to communicate its plans and strategy for the shipping industry better. Denmark, for example, has put a lot of effort in the national shipping industry and even has a shipping minister, whereas the minister for infrastructure deals with the shipping industry in Sweden. Perhaps Sweden does not need a minister of shipping, but it is important that shipping is seen as part of the transport network and

interlinked with the other modes of transport, as well as an important Swedish industry. Communication and cooperation are also important concepts, which should be embraced by the government, as it needs to work more closely and listen to the actors of this industry. Moreover, focus should be put on information, as not many people outside the industry know what shipping is, what the current issues are, what job opportunities the industry can provide, etc. The government needs to promote the shipping industry more towards young people, as not a lot of them are aware of the different possibilities within logistics, transport and shipping industry in Sweden.

The Swedish flagged merchant fleet's survival depends on immediate political decisions in order to make it equally beneficial to sail under Swedish flag as under other European flags. If the current trend continues in the same pace as the past years, there will be no Swedish flagged merchant fleet in just a few years, which can have severe implications on the Swedish shipping industry and maritime cluster. The above-mentioned recommendations are steps on the way towards maintaining maritime know-how and competence within this country.

# 6.2. Further research

The researchers find this subject very fascinating and there are many fields within the shipping industry that would be interesting to further look into. As this study only scratch on the surface regarding some of the aspects brought up, a deeper analysis of e.g. cost distribution of the different segments, fiscal rules and how to solve the problem with the untaxed reserves would be interesting. Further, more shipping companies can be interviewed in order to try to distinguish a clearer pattern in terms of differences in actions and thoughts between the different shipping segments. Also, a wider comparison of the reasons behind the decision to flag out, and of competitive conditions of different flag states in Europe and/or the rest of the world could provide interesting input to this subject.

# List of References

- Batrinca, G., 2010, "Considerations on Introduction of Tonnage Tax Systems in the European Union", *Maritime Transport & Navigation Journal*, Vol. 2 (2010), No. 2, Constanta Maritime University.
- Bergantino and Marlow, 1998, "Factors affecting the choice of flag: empirical evidence", *Maritime Policy and Management*. Vol. 25, Issue 2.
- Boczek, B. A., 1962, Flags of convenience: an international legal study, Cambridge, Mass.
- Bryman & Bell, 2011, Business Research Methods, 3<sup>rd</sup> ed, New York, Oxford University Press.
- Carlisle, R., 2009, "Second Registers: Maritime Nations Respond to Flags of Convenience, 1984-1998", Northern Mariner / Le Marin du Nord; Vol. 19, Issue 3, p.319.
- Collis, J., & Hussey, R., 2009, *Business Research A practical guide for undergraduate & postgraduate students*, 3<sup>rd</sup> ed, Gordonsville, Palgrave Macmillian.
- Copenhagen Economics, 2012, Svensk sjöfarts konkurrenssituation, Published in November 2012.
- Crowther, D., & Lancaster, G., 2012, Research Methods, 2<sup>nd</sup> ed, Butterworth-Heinemann Ltd.
- David, P. & Stewart, R., 2010, International Logistics The management of international trade operations, 3<sup>rd</sup> edition, Mason, Cenage Learning.
- Delegationen för Sjöfartsstöd, 2012, "Villkor för Sjöfartsstöd", available at: <a href="http://www.trafikverket.se/Delegationen-for-sjofartsstod/Sjofartsstod/Villkor-for-sjofartsstod/">http://www.trafikverket.se/Delegationen-for-sjofartsstod/Sjofartsstod/Villkor-for-sjofartsstod/</a>, accessed: 2013-04-18.
- Deloitte, 2013a, "International tax Netherlands Highlights 2013", available at: <a href="http://www.deloitte.com/assets/Dcom-Global/Local">http://www.deloitte.com/assets/Dcom-Global/Local</a> Assets/Documents/Tax/Taxation and Investment Guides/2013/dttl\_tax\_highlight\_2013\_Netherlands.pdf>, accessed: 2013-05-05.
- Deloitte, 2013b, "International tax Finland Highlights 2013", available at: <a href="http://www.deloitte.com/assets/Dcom-Global/Local">http://www.deloitte.com/assets/Dcom-Global/Local</a> Assets/Documents/Tax/Taxation and Investment Guides/2013/dttl\_tax\_highlight\_2013\_Finland.pdf>, accessed: 2013-05-05.
- Deloitte, 2013c, "International tax Denmark Highlights 2013", available at: <a href="http://www.deloitte.com/assets/Dcom-Global/Local">http://www.deloitte.com/assets/Dcom-Global/Local</a> Assets/Documents/Tax/Taxation and Investment Guides/2013/dttl\_tax\_highlight\_2013\_Denmark.pdf> accessed: 2013-05-05.
- Deloitte, 2013d, "International tax Norway Highlights 2013", available at: <a href="http://www.deloitte.com/assets/Dcom-Global/Local">http://www.deloitte.com/assets/Dcom-Global/Local</a> Assets/Documents/Tax/Taxation and Investment Guides/2013/dttl\_tax\_highlight\_2013\_Norway.pdf>, accessed: 2013-05-05.
- Eriksson, P., & Kovalaine, A., 2008, Qualitative Methods in Business Research, SAGE Publications.

- Ernst & Young, 2013, "Kap 2.2. Inntektssatser", available at: http://www.ey.com/NO/no/Newsroom/PR-activities/Articles/SA-satser---Kap-2-2-Inntektssatser, accessed: 2013-04-11.
- European Commission, 2004, "Commission communication C(2004) 43 Community guidelines on State aid to maritime transport", Official Journal of the European Union, Volume 47.
- European Commission, 2006, "Employment trends in all sectors related to the sea or using sea resourses", available at:

  http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/sweden\_employment\_trends\_e
  n.pdf, accessed 2013-05-14.
- FAS, 2013, "About FAS", available at: <a href="http://www.fas.fo/Default.aspx?pageid=6746">http://www.fas.fo/Default.aspx?pageid=6746</a>, accessed: 2013-05-14.
- Finansdepartementet, 2013, "Utredning om tonnageskatt", available at. <a href="http://www.regeringen.se/sb/d/16878/a/207834">http://www.regeringen.se/sb/d/16878/a/207834</a>, accessed: 2013-04-04.
- Horn Publishing, 2013, "Swedish Shipping", available at: <a href="http://hornonline.com/books/swedish\_shipping/HTML/index.html#/16/zoomed">http://hornonline.com/books/swedish\_shipping/HTML/index.html#/16/zoomed</a>, accessed 2013-05-10.
- ITF, 2012a, "FOC Leaflet 2012", available at: <a href="https://www.itfglobal.org/files/publications/36477/FOC">https://www.itfglobal.org/files/publications/36477/FOC</a> leaflet 2012.pdf>, accessed, 2013-03-02.
- ITF, 2012b, "What are flags of convenience?", available at: <a href="http://www.itfglobal.org/flags-convenience/sub-page.cfm">http://www.itfglobal.org/flags-convenience/sub-page.cfm</a>, accessed 2013-03-16.
- ILO, 2013, "Maritime Labour Convention", available at: <a href="http://www.ilo.org/global/standards/maritime-labour-convention/lang--en/index.htm">http://www.ilo.org/global/standards/maritime-labour-convention/lang--en/index.htm</a>, accessed 2013-05-03.
- Kovács, G, & Spens, K. M., 2005, "Abductive reasoning in logistics Research", *International Journal of Physical Distribution & Logistics Management*, Vol. 35 Issue: 2, pp.132 144.
- Lewis-Beck, M. S., Bryman, A., & Futing Liao, T., 2004, *Encyclopedia of Social Science Research Methods*, SAGE Publications, Inc.
- Lindholm, G, 2010, "Svensk Sjöfartsutbildning i förändring en fråga om formering av framtida sjöfartsutbildningar", written on behalf of SSA.
- Mansell, J. N. K., 2009, Flag state Responsibility-Historical Development and Contemporary Issues, Springer Berlin Heidelberg.
- Mondaq, 2012, "Finland: Finnish Tonnage Tax Reform Enacted", available at: <a href="http://www.mondaq.com/x/171274/Corporate+Tax/Finnish+tonnage+tax+reform+enacted">http://www.mondaq.com/x/171274/Corporate+Tax/Finnish+tonnage+tax+reform+enacted</a>, accessed 2013-05-14.
- Moser, T., 2012, Kvalitativ og kvantitativ forskning i lærerutdanningene Hvilken rolle kan multimetode (mixedmethods) spille?, available at: <a href="http://www.nafol.net/uploads/Vedlegg/F%C3%B8rstelektor/Multimetode14112012.pdf">http://www.nafol.net/uploads/Vedlegg/F%C3%B8rstelektor/Multimetode14112012.pdf</a>, accessed 2012-05-18.
- Nilsson, R. P., 2010, "Dyrt att registrera svenskt", Svensk Sjöfartstidning, 29 January

Näringsdepartementet, 2012, "Regeringen möjliggör för fler praktikplatser till sjöfartsutbildningarna", available at: <a href="http://www.regeringen.se/sb/d/4902/a/198965">http://www.regeringen.se/sb/d/4902/a/198965</a>>, accessed 2013-03-05.

Näringsdepartementet, 2013, Svensk sjöfartsnäring - Handlingsplan för förbättrad konkurrenskraft.

OECD, 2003, "Glossary of Statistical Terms – Flag State", available at: <a href="http://stats.oecd.org/glossary/detail.asp?ID=4236">http://stats.oecd.org/glossary/detail.asp?ID=4236</a>, Accessed 2013-03-18.

Paixão, A. C., & Marlow, P. B., 2002, "Strengths and weaknesses of short sea shipping", *Marine Policy*, Volume 26, Issue 3, pp.167-178.

Poulsen, R., T., Sjögren, H., Lennersfors, T., T., 2012, "The Two Declines of Swedish Shipping", *Global Shipping in Small Nations, Palgrave Macmillan*.

PWC, 2009, "Choosing a profitable course around the globe – Corporate taxation of the global shipping industry", available at: <a href="http://www.pwc.com/en\_GX/gx/transportation-logistics/assets/choosing-profitable-course.pdf">http://www.pwc.com/en\_GX/gx/transportation-logistics/assets/choosing-profitable-course.pdf</a>, accessed 2013-03-03.

Ryen, Anne (2002): Det kvalitative intervjuet: Fra vitenskapsteori til feltarbeid. Bergen, Fagbokforlaget.

Schoug, C., 2013, Presentation, Gothenburg 2013-01-24.

SFST 2001:770, "Förordning (2001:770) om sjöfartsstöd", available at: <a href="http://62.95.69.15/cgibin/thw?%24%7BHTML%7D=sfst\_lst&%24%7BOOHTML%7D=sfst\_dok&%24%7BSNHTML%7D=sfst\_err&%24%7BBASE%7D=SFST&%24%7BTRIPSHOW%7D=format%3DTHW&BET=2001%3A770%24>, accessed 2013-05-01.

Sjöberger, P.A., 2012, Manager Shipping Policy, Swedish Shipowners' Association, Gothenburg 2012-12-06

Sjöberger, P. A., 2013, Manager Shipping Policy, Swedish Shipowners' Association, Gothenburg 2013-02-04.

Sjöfartens bok, 2012, Svensk sjöfarts tidning, September issue

Skipsregistrene, 2005, "NIS", available at: < http://www.nis-nor.no/NIS.aspx>, accessed 2013-03-16.

SOU, 2006:20, "Betänkande av Tonnageskatteutredningen 20". Stockholm, Sveriges Offentliga Utredningar

SOU, 2010:73, "Betänkande av Utredningen om sjöfartens konkurrensförutsättningar 73". Stockholm, Sveriges Offentliga Utredningar

SSA, 2009, Den svenska handelsflottan Januari 2009.

SSA, 2013, Den svenska handelsflottan Januari 2013.

Stares, J., 2013, "Tonnage tax Review", available at: <a href="http://www.maritimewatch.eu/articles/1">http://www.maritimewatch.eu/articles/1</a>, accessed: 2013-04-14

Statskontoret, 2010, "Stadig eller flexibel kurs? Om sjöfartspolitik i sex länder",

- Stopford, M., 2009, Maritime Economics, 3<sup>rd</sup> ed, Oxon, Routledge.
- SVT, 2013, "Bredare sjöfartsstöd", availble at: <a href="http://www.svt.se/nyheter/regionalt/vastnytt/sjofartsstodet-blir-bredare">http://www.svt.se/nyheter/regionalt/vastnytt/sjofartsstodet-blir-bredare</a>, accessed: 2013-04-11
- Tax consultants international, 2012, "The Dutch tax regime and incentives for shipping companies", available at: <a href="http://tax-consultants-international.com/read/The\_Dutch\_tonnage\_tax\_regime">http://tax-consultants-international.com/read/The\_Dutch\_tonnage\_tax\_regime</a>, accessed: 2013-02-11.
- Tenold, S., Iversen, M. J., & Lange, E., 2012, Global Shipping in Small Nations, Palgrave Macmillan.
- The government of Denmark, 2010, "European social charter", available at: <a href="http://www.coe.int/t/dghl/monitoring/socialcharter/reporting/statereports/Denmark29\_en.pdf">http://www.coe.int/t/dghl/monitoring/socialcharter/reporting/statereports/Denmark29\_en.pdf</a>, accessed 2013-03-16.
- The Swedish Parliament, 2011, "Interpellation 2011/12:445 -Tonnageskatt eller utflaggning", available at: <a href="http://www.riksdagen.se/sv/Dokument-Lagar/Fragor-och-anmalningar/Interpellationer/Tonnageskatt-eller-utflaggning\_GZ10445/">http://www.riksdagen.se/sv/Dokument-Lagar/Fragor-och-anmalningar/Interpellationer/Tonnageskatt-eller-utflaggning\_GZ10445/</a>, accessed 2013-04-20.
- The Swedish Parliament, 2012, "Interpellation 2012/13:44 Riksdagens protokoll 17 § Svar på interpellation 2012/13:70 om sociala avgifter för sjömän Fredagen den 14 december", available at: www.riksdagen.se/sv/Dokument-Lagar/Kammaren/Protokoll/Riksdagens-protokoll-2012134 H00944/#{62F046C4-AFF7-4ED6-A480-D2ADD12EDD8D}, accessed, 2013-04-20.
- Trafikanalys, 2013, Svensk sjöfarts internationella Rapport konkurrenssituation 2013.
- Transportstyrelsen, 2010, "Registrering och mätningsplikt", available at: <a href="http://www.transportstyrelsen.se/Sjofart/Fartyg/Registrering--matningsplikt/">http://www.transportstyrelsen.se/Sjofart/Fartyg/Registrering--matningsplikt/</a>, accessed 2013-01-28.
- Transportstyrelsen, 2011, "Fartygsregistret", available at: <a href="http://www.transportstyrelsen.se/sv/Sjofart/Fartygsregistret-sjofartsregistret/">http://www.transportstyrelsen.se/sv/Sjofart/Fartygsregistret-sjofartsregistret/</a>, Accessed 2013-01-28.
- Transportstyrelsen, 2013a, "Avgifter och Stämpelskatt", available at: https://www.transportstyrelsen.se/sv/Sjofart/Fartygsregistret-sjofartsregistret/Avgifter--stampelskatt/, accessed 2013-01-28.
- Transportstyrelsen, 2013b, "Registerhållningsavgift", available at: <a href="https://www.transportstyrelsen.se/sv/Omoss/Finansiering/Avgifter/Sjofart/Avgifter-for-fartyg/Avgifter-for-registerhallning-mm/Registerhallningsavgift/">https://www.transportstyrelsen.se/sv/Omoss/Finansiering/Avgifter-for-fartyg/Avgifter-for-registerhallning-mm/Registerhallningsavgift/</a>, accessed 2013-01-28.
- Transportstyrelsen, 2013c, "Skepp", available at: <a href="https://www.transportstyrelsen.se/sv/Sjofart/Fartygsregistret-sjofartsregistret/Skepp/">https://www.transportstyrelsen.se/sv/Sjofart/Fartygsregistret-sjofartsregistret/Skepp/</a>, accessed 2013-01-28.
- UNCTAD, 2012, "Review of Maritime Transport".
- Woxenius, J., 2013, Professor at School of Business, Economics and Law University of Gothenburg, Meeting, Gothenburg 2013-05-03.

# **Appendix**

#### Interview guide politicians/external actors:

- 1. Which factors do you think the Swedish flagging out can depend on?
- 2. What do you believe is needed in order to stop the Swedish flagging out?
- 3. What do you believe is needed in order for Swedish shipowners to flag back to Sweden?
- 4. Which consequences do you believe the Swedish flagging out can have for Sweden in the long run?
- 5. Do you believe that the Swedish merchant fleet should fly the Swedish flag, and how important is it for the Swedish maritime cluster? Why?
- 6. Regarding the choice of flag state, do you believe that a government's commitment to shipping is significant?
- 7. Have Swedish politics affected the Swedish shipping industry's competitiveness compared to the other Nordic countries?
- 8. How attractive is it to implement a tonnage tax system in Sweden? Benefits/drawbacks?
- 9. What is your opinion of the Swedish Net Wage Model?
- 10. Do you believe that the current formation of TAP-agreements affects the Swedish flagged merchant fleet's competitiveness?

#### Interview guide shipping companies:

- 1. Which factors do you think the Swedish flagging out can depend on?
- 2. Have Swedish politics affected the Swedish shipping industry's competitiveness compared to the other Nordic countries?
- 3. What do you believe are needed in order to stop the Swedish flagging out?
- 4. Which factors are crucial when making decisions regarding which flag register the ships should be registered in?
- 5. Do you believe that the Swedish merchant fleet should fly the Swedish flag, and how important is it for the Swedish maritime cluster? Why?
- 6. Which consequences do you believe the Swedish flagging out can have for Sweden in the long run?
- 7. How attractive is it to implement a tonnage tax system in Sweden? Benefits/drawbacks?
- 8. What is your opinion of the Swedish Net Wage Model?
- 9. How important is the TAP-agreement for your company? (only asked if the shipping company had Swedish flagged ships)
- 10. Do you believe that the current formation of TAP-agreements affects the Swedish flagged merchant fleet's competitiveness?

### Specific questions regarding the fleet:

- 11. Regarding the choice of flag state, do you believe that a government's commitment to the shipping industry is of importance?
- 12. What flags do you have on your ships?

Follow-up questions depending on the answer to question 12:

- a. Why did you choose these flag states?
- b. Have any of the ships had Swedish flag before?
- c. Would you be interested in flying the Swedish flag and what would it take for you to flag out/back to Sweden?
- d. Are you planning to flag out more ships from Sweden?