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SCHOOL OF BUSINESS, ECONOMICS AND LAW

Master Degree Project in Logistics and Transport Management

The Maritime Labour Market

A study of the Swedish Maritime Labour Market and the Competitive Situation for
Swedish Maritime Officers

Mathias Havedal and Stefan Väre

Supervisor: Johan Woxenius and Carl Sjöberger
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Abstract

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Department of Business Administration

Authors: Mathias Havedal
Stefan Väre

Supervisor: Johan Woxenius
Carl Sjöberger

Title The Maritime Labour Market
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The transition towards a global maritime labour market has led to a reduction in the number of ships flying the Swedish flag, and with it a decreasing number of employment opportunities on the national maritime labour market. As a consequence, the competitive situation for Swedish maritime officers has therefore become of prime concern. The main purpose of the present study is to explore, and empirically assess, the factors affecting the competitive situation for Swedish maritime officers. Theoretical results indicate a trade-off between price and efficiency, where employment opportunities are set in the relationship between national and international regulatory frameworks. The empirical results indicate that while Swedish maritime officers hold a high degree of competence, their competitive situation on the international maritime labour market is threatened by an increased cost awareness and contingent upcoming legislation. Suitable conditions need to be realised, in order to support the competitiveness of Swedish maritime officers. Suggestions for an appropriate course of action are provided.

Keywords: maritime labour market; labour market; Swedish maritime labour market; Swedish maritime officers; maritime officers; competitive situation

Sammanfattning

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Författare: Mathias Havedal
Stefan Väre

Handledare: Johan Woxenius
Carl Sjöberger

Titel The Maritime Labour Market
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Övergången till en global sjöarbetsmarknad har lett till en minskning av antalet fartyg under svensk flagg, och med det ett minskande antal arbetstillfällen på den nationella sjöarbetsmarknaden. Till följd har konkurrenssituationen för svenska sjöbefäl blivit av allra största intresse. Huvudsyftet med denna studie är att undersöka vilka faktorer som påverkar konkurrenskraften för svenska sjöbefäl samt utvärdera deras konkurrenssituation på marknaden. Teoretiska resultat visar en avvägning mellan pris och effektivitet, där arbetstillfällen skapas i förhållandet mellan det nationella och internationella regelverket. De empiriska resultaten visar att medan svenska sjöbefäl håller en hög kompetensnivå, hotas deras konkurrenssituation på den internationella sjöarbetsmarknaden av en ökad kostnadsmedvetenhet och eventuell kommande lagstiftning. För att främja konkurrenskraften hos svenska sjöbefäl måste således lämpliga villkor förverkligas. Förslag på tillvägagångssätt tillhandahålls i studien.

Nyckelord: sjöarbetsmarknad; arbetsmarknad; Svensk sjöarbetsmarknad; Svenska sjöbefäl, sjöbefäl, konkurrenssituation

Preface

This thesis marks the end to an academic journey that has made its way through kindergarten, pre-school, primary school, junior high school, senior high school and university, over a period of nearly 22 years. The journey has been paved with joy and excitement as well as hardships and unrest, but the path towards bigger and better things has merely just begun.

Were it not for the help and support from friends and family, this thesis would not have seen the light of day. The same can be said about the assistance provided from the many people that took an active interest in the realisation of this thesis. We would like to express our outmost gratitude to all of you. Special recognition goes out to Johan Woxenius, who steered us in the right direction at times of uncertainty, Per Sjöberger, whose encouragement and knowledge was of great importance, and last but not least Carl Sjöberger, who stood by our side through thick and thin and whose support we so utterly appreciate.

Gothenburg, 3rd of June 2013



Mathias Havedal



Stefan Väre

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Abbreviations

BIMCO	The Baltic and International Maritime Council
EEA	European Economic Area
EMSA	The European Maritime Safety Agency
ILO	The International Labour Organization
IMO	The International Maritime Organization
ISF	The International Shipping Federation
ITF	The International Transport Workers' Federation
MBL	Medbestämmandelagen (<i>English: Co-determination Act</i>)
MET	Maritime Education and Training Institution
MLC	Maritime Labour Convention
MOA	The Swedish Maritime Officers' Association
OECD	Organisation for Economic Cooperation and Development
PSC	Port State Control
SEA	The Swedish Shipowners' Employer Association
SOLAS	The International Convention for the Safety of Life at Sea
SWESHIP	The Swedish Shipowners' Association
STCW	The International Convention for the Standards of Training, Certification and Watchkeeping
TAP	Tillfälligt Anställd Personal (<i>English: Temporary Employed Personnel</i>)
UNCLOS	United Nations Conventions on the Law of the Seas

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1. Introduction

The Swedish maritime industry has during the recent years been in a state of turmoil, where the various market representatives have urged for less stringent regulation and more support for the industry. Leading up to the release of the Swedish governmental action plan for 2013 (Näringsdepartementet, 2013), representatives from the industry joined forces by submitting a letter to the Ministry of Finance and the Ministry of Enterprise, Energy and Communications, comprising the foremost issues for creating a competitive framework for the Swedish maritime industry (SWESHIP, 2013a). The action plan, released on the 21st of January 2013, addressed some of the issues to varying degree, but so far the reaction from the industry has been modest.

While to some extent addressing the demise of the Swedish merchant fleet, the governmental action plan failed to address the reoccurring discussion pertaining to Swedish maritime officers' competitive situation on the international maritime labour market. In the present situation where the Swedish merchant fleet and its accompanying employments are diminishing (SWESHIP/Lighthouse, 2013), it therefore appears important to further examine the competitive situation for Swedish seafarers on the international maritime labour market.

In order to fully grasp the on-going debate, one first needs to be aware of the prevailing situation of the Swedish maritime industry, whereby a short background will be presented, followed by a brief discussion of the research problem.

1.1 Background

The history of the Swedish maritime industry dates back to the early merchant trips during the Viking Age and has progressed through centuries of trade with both adjacent as well as far-off nations (Lindström & Malmberg, 2010). Given the country's geographical location, not to mention the dominant position of the forestry and mining industry, commerce with other nations has largely been dependent on the maritime industry (Lindström & Malmberg, 2010). It is estimated that roughly 90 % of Swedish international trade make its way on board a ship before reaching its final destination (Tillväxtanalys, 2010). The magnitude of the maritime industry is also made evident by considering the approximate revenues of 40 billion SEK, generated by Swedish shipping companies in 2010 (SWESHIP/Lighthouse, 2013). Furthermore, the industry is thought to employ close to 16,000 people signed on board ships flying the Swedish flag (SWESHIP/Lighthouse, 2013), in addition to the Swedish officers employed on the international maritime labour market.

Despite its significance, the industry has for quite some time been losing ground compared to other maritime nations. Over the last decade, Sweden has gone from 200 ships ($\geq 1,000$ gross tonnes) flying the Swedish flag, to a mere 105 (SWESHIP/Lighthouse, 2013).

While the Swedish merchant fleet has lost a large portion of its former glory, the 170-year-old tradition of educating officers in Sweden is a separate, but very much connected,

chapter in the nation's maritime history. The two maritime education and training institutions in Kalmar and Gothenburg have seen an impressive growth in the number of enrolled students (SWESHIP/Lighthouse, 2013), and despite a diminishing Swedish merchant fleet, been kept on the education and training of tomorrow's Swedish maritime officers.

1.2 Research Problem

Due to the diminishing number of ships flying the Swedish flag, much attention has been directed towards trying to amend the situation. A recent report commissioned by the Swedish government has however indicated doubt concerning the endeavour of trying to regain the lost tonnage (Trafikanalys, 2013). Given the many years of losing ground to other nations, it would require substantial measures in order to attain a situation where flying the Swedish flag would once again become desirable, and there is an inherent risk that even then such a scenario might prove out of reach. All the while, the Swedish dependence on shipping poses extensive requirements to uphold a certain level of maritime know-how and expertise.

At a time of declining employment opportunities on the domestic maritime labour market, the industry is also faced with a situation where the maritime education and training institutions continue to produce large numbers of highly educated maritime officers. Officers that by any account need to be able to compete on the international maritime labour market. Together, this begs the question of whether the necessary conditions for Swedish officers to compete on the international labour market exist.

With this in mind, there is a value in exploring the maritime labour market and investigating the competitive situation for Swedish maritime officers.

1.3 Purpose

In line with the aforementioned description, the purpose of this thesis is threefold; to gain a deeper understanding of the Swedish maritime labour market and the forces at play, to determine the competitive situation of Swedish maritime officers on the international maritime labour market, and lastly to identify a general set of competitive grounds on which Swedish maritime officers compete. The aim is to clarify and enlighten the subject field, a field of vital importance both in itself, but in a situation of a diminishing Swedish merchant fleet, also in regards to the future for the Swedish maritime industry. Furthermore, the hope is to shed some light on related research areas worth further examination, but that for some reasons are beyond the scope of this paper.

1.4 Research Questions

In order to meet the purpose of this paper, there is a need to explore which factors that play a decisive role for the way demand for maritime officers is set on the market. Therefore the first research question is:

RQ1: *What factors affect the demand for maritime officers on the maritime labour market?*

After identifying said factors, they have to be related to the situation for Swedish maritime officers on the international labour market. The second research question is therefore:

RQ2: *On what grounds do Swedish maritime officers compete?*

Lastly, in order to drive the on-going debate forward, and provide the industry with a proposal for an appropriate course of action in the future, the study attempts to answer the third, and final, research question:

RQ3: *What would be an appropriate course of action in order to support the competitive situation of Swedish Maritime officers?*

1.5 Scope and Delimitations

There are essentially three categories of personnel signed on board a ship: officers, ratings and remaining personnel (Glen, 2008). The scope of this thesis lies on the competitiveness of Swedish maritime officers as they, compared to Swedish ratings, are competing on both the international and domestic labour market. Furthermore, the remaining personnel signed on board a ship consist primarily of commissariat services, and as such are quite detached from what can normally be considered seafarers.

In order to keep a narrow focus and give a comprehensive view of the subject matter at hand, this thesis is subject to a couple of limitations. First of all, the thesis is directed towards the competitive situation of Swedish maritime officers living in Sweden, whereby they as such are subject to the Swedish regulatory framework of working conditions, taxation, national maritime policies etc. Secondly, due to the mobile nature of the industry, a study into each possible combination of employment would, while certainly be of interest, also be of a magnitude and timeframe not feasible for a thesis of this nature. Therefore a general overview of the competitive situation for Swedish maritime officers will be given, rather than a detailed analysis into each individual combination.

1.6 Disposition

- Chapter 1:
Introduction** *Provides the reader with a basic background and research problem, which is the basis for the afterwards stated purpose and research question.*
- Chapter 2:
Methodology** *Emanates from a general discussion about the concept of knowledge and how it relates to the scope of this thesis. The various adopted research methods are then described, after which a presentation of the data collection methods that were used is given. Lastly a discussion concerning the reliability and validity of the thesis is presented in order to account for any possible biased findings.*
- Chapter 3:
Theoretical
Framework** *Provides a basis for understanding the previously stated research questions by showcasing the maritime labour market and bringing forward key features significant of the industry. It furthermore presents events of historical significance to the present situation, as well as highlighting the close connection to globalisation and the roles played by maritime regulation, policy creation and education, both internationally and domestically.*
- Chapter 4:
Quantitative
Empirical
Findings** *The chapter provides a description of the Swedish maritime labour market by presenting various statistics. The quantitative empirical findings are derived from a variety of secondary sources, particularly figures and statistics originally gathered and presented by the authors in the market report "Svensk Sjöfart - Nyckeltal januari 2013".*
- Chapter 5:
Qualitative
Empirical
Findings** *The chapter displays the qualitative empirical findings gathered from interviews conducted with various actors within the maritime industry. The responses are divided into a number of sections, intended to complement the quantitative statistics in chapter 4.*
- Chapter 6:
Analysis** *This chapter presents the authors' analysis of the subject field by relating the empirical findings found in chapter 4 and 5 with the theoretical framework displayed in chapter 3. Reflections upon the credibility of the study and its findings are also given.*
- Chapter 7:
Conclusion** *By summarising the findings of the study, the chapter answers the research questions stated in chapter 1 and submits the authors' conclusions in order to fulfil the purpose of the thesis.*
- Chapter 8:
Suggestions
for Further
Research** *The final chapter lists the authors' suggestions for further research on the subject field.*

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2. Methodology

2.1 Research Approach

The research approach one adopts can be thought of as the basis for the thesis as a whole. It lays a foundation that explains why a certain research method is later chosen and also demonstrates the researcher's take on science and knowledge (Alvesson & Sköldbberg, 1994).

The research approach adopted throughout this thesis is closely aligned to the concept of systematic combining. Developed by Gadde & Dubois (2002), systematic combining has its roots within the concept of abduction, which can be seen to be somewhere on the line between the two fundamental research approaches of deduction and induction. The former views knowledge as derived from empirical evidence which is then used in the formulation of theories, while the latter instead makes use of empirical evidence as a way of proving or disproving a beforehand established theory or concept (John & Johnson, 2010). In comparison, an abductive research approach uses a general idea or theory to create a theoretical framework that explains a particular case or event, after which empirical evidence help shape and modify the stipulated theoretical framework (Alvesson & Sköldbberg, 1994).

In regards to the present study, an extensive literature review has been undertaken in order to identify a set of themes, after which the empirical findings assisted in steering the theoretical framework in the appropriate direction, thereby aligning them to each other. According to Gadde & Dubois (2002), this way of going "back and forth" corresponds well to how research is most often conducted, which allows for a better fit between the theoretical framework and the empirical findings.

2.2 Research Design

Empirical research is conducted as a way of addressing a research problem and answering research questions, whereby the two must guide the research design from the very beginning. According to Ghauri and Grønhaug (2002, p. 47) *"The choice of research design can be conceived as the overall strategy to get the information wanted"*.

A common division of different types of research designs is one between exploratory, explanatory and causal studies. The former is considered to have an unstructured view to what the research problem really is, whereas the latter two are structured and have a research problem well understood and defined in advance (Ghauri & Grønhaug, 2002). The research design of this thesis can be said to correspond primarily to that of an exploratory research design while also sharing elements of explanatory research. As the thesis in question takes focus mainly on "what"-questions, the research is particularly suited for the description of a certain case or phenomenon as well as exploring reasons behind certain issues and problems (Collis & Hussey, 2009). At the same time the research design is also flexible enough to adjust the scope of the study as new information becomes available (Yin, 2003).

As part of an exploratory research design, literature studies as well as interviews and case studies are at your disposal (Churchill & Iacobucci, 2005). Yin (2003) subscribes that it is possible to utilize any range of tools to observe the case in question, whether it be quantitative or qualitative methods. Furthermore, the research makes no subjective judgments as to the scope of the study but in essence incorporates everything and anything that is of value. As the collection of data linked to this paper combines the use of both qualitative and quantitative data it is thus able to describe the area of study through qualitative responses derived from interviews, while also being able to define and measure the same through the use of various quantitative data sources (Yin, 2003). According to Yin (2003), there is a common misconception that researchers must forsake one for the other, but by instead incorporating elements from the two it enables for a much broader and deeper understanding of the subject field

2.3 Data Collection

The collection of data can be through a variety of techniques, where one often used distinction is that between techniques used to capture primary and secondary data. Primary data is data collected with a specific purpose in mind, collected directly from the original source, while secondary data has already been retrieved by someone else and with a different purpose in mind (Ghauri & Grønhaug, 2002).

2.3.1 Primary Data

In regards to this thesis, primary data has been collected mostly through the use of interviews undertaken with several actors within the maritime industry. The respondents were thought to possess extensive knowledge into the different areas of the maritime labour market, whereby the interviews sought to generate findings able to create a broad insight into both the Swedish maritime labour market and the competitive situation for Swedish maritime officers.

2.3.1.1 Interviews

All interviews took place between the 9th and 29th of April in 2013. They were preceded by an extensive literature study that resulted in the identification of a number of themes, of interest to the thesis. The themes identified later provided the foundation for creating an interview questionnaire that was used for all of the interviews. The interviews thereby took a semi-structured form, where the beforehand identified themes in the questionnaire was introduced to the respondents for them to explore upon. Such an approach allows for the respondents to engage the conversation more freely, as well as allowing the authors to pursue areas of interest that are brought to their attention during the interviews (Collis & Hussey, 2009). Further generic advantages pertaining to the use of interviews include a better fit between the responses and research problem, while a primary disadvantage lies in the reliance on the respondents to provide accurate, unbiased data (Ghauri & Grønhaug, 2002).

The aforementioned actors identified as possible respondents of the study, included respondents from shipping companies, labour unions, employer representatives, governmental agencies and maritime education and training institutions (METs). Inquiries to participate in the study were sent to a handful of actors within each of these segments, and the final number of interviews conducted totalled at eleven. Three shipping companies, two labour unions, one employer representative, one MET and four governmental agencies make up the respondents of the study. Contact was also made with the Swedish government, which did however not respond, whereby a potentially important input to the thesis was lost.

All of the interviews conducted lasted for between 30-60 minutes and were, whenever possible, conducted face-to-face. However, due to geographical restrictions, one shipping company was interviewed by e-mail, and one governmental agency was interviewed via telephone.

All of the interviews were conducted in Swedish, and recordings were used for each and every one of them. Transcripts of every recording was then rendered as a way of mitigating any possible translation difficulties, and in order to secure that the interpretation of the data was consistent with what had actually been articulated. In cases of doubt, the respondents were also given the chance to clarify upon any previous statements. Despite the use of both recordings and transcripts, there is still a possibility that certain nuances related to the Swedish language have been lost in the authors' translation. Upon request, the semi-structured questionnaire was also provided to the respondents beforehand. The questionnaire can be found in the Appendix.

Each of the respondents are divided into appropriate segments and presented below. Due to requests to remain anonymous, the respondents are not divulged. This does however not apply to the two labour unions and the employer representative, which did not request to remain anonymous.

Shipping Companies The shipping companies were all Swedish-owned or had a strong Swedish connection, as well as being active within various different segments of the maritime industry. The ships under their control flew both Swedish and foreign flags, and had both Swedish and foreign maritime officers employed on their vessels and in their organisation. These qualities were seen as essential to the credibility and quality of the respondents. The personnel interviewed at these companies were the heads of human resources, together with crewing and fleet managers, and the interviews were conducted at the site of the shipping companies (except for the previously mentioned interview by e-mail).

Labour Unions and Employer Representatives The three labour market actors were the two labour unions the Maritime Officers' Association (MOA) and SEKO Seafarers, and the employer representative was the Swedish Shipowners' Employer

Association (SEA). These three are involved in setting the collective labour agreements on the market, and are well versed into the situation on the Swedish maritime labour market and the competitive situation of Swedish maritime officers. The respondents were Hans-Dieter Grahl, managing director at MOA, Kenny Reinhold, department president at SEKO Seafarers, and Fredrik Holmberg, negotiator at SEA.

MET

There are today two METs in Sweden, both of which were asked to contribute to the study, of which one was able to do so within the required time frame. The respondent was the head of the respective department.

Governmental Agencies

The governmental agencies interviewed are all situated close to the Swedish maritime labour market and the respondents provided the official standpoint of these organisations. The agencies possess knowledge into the taxation of seafarers in Sweden, the employment situation on the domestic labour market and the competitive situation for Swedish maritime officers in a domestic and international context.

2.3.2 Secondary Data

As secondary data is concerned, this thesis makes use of a variety of published data sources. The theoretical framework previously mentioned is composed primarily of books and scientific articles related to the maritime labour market and the maritime officers employed on the market. Frequently cited industry reports have also been consulted, although to a much lesser degree. In contrast, the empirical framework is, apart from the aforementioned interview responses, also composed of secondary quantitative data retrieved from the market report "*Svensk Sjöfart – Nyckeltal januari 2013*".

The use of secondary data entails a number of advantages such as savings in time and cost as well as being readily available from a variety of sources. However, disadvantages include often not knowing the quality of the source along with a lack of fit between empirical findings and secondary data used in the theoretical framework (Ghuri & Grønhaug, 2002). As a way of mitigating these issues, the study has followed the advice by Gadde & Dubois (2002) of going back and forth between the empirical findings observed throughout the research process and the theoretical framework.

2.3.2.1 Quantitative data

The quantitative data was as mentioned primarily derived from the market report "*Svensk Sjöfart – Nyckeltal januari 2013*", henceforth referenced "*SWESHIP/Lighthouse, 2013*". The report contains statistics on the Swedish maritime industry, gathered and compiled by the authors in question, and commissioned and funded by the Swedish Shipowners' Association (SWESHIP) in January of 2013. The statistics was gathered by consulting the databases of HIS Fairplay and the Civil Aviation and Maritime Department in Sweden. For certain datasets it

was also necessary to establish contact with several actors within the industry that possessed data and information not otherwise available. The study has to the greatest extent possible refrained from presenting data compiled by other intermediate sources. A more detailed description of how the data was collected and presented can be provided by SWESHIP upon request.

2.4 Validity and Reliability

The basis for evaluating the quality of a particular research study is usually conducted in relation to the concept of validity and reliability. The former is defined as *“the extent to which the research findings accurately reflect the phenomena under study”* while the latter *“refers to the absence of differences in the results if the research were repeated”* (Collis & Hussey, 2009, pp. 64-65).

In order to put confidence in the findings, a sufficient degree of validity has to be ensured, where the validity of a study can be threatened by the researcher himself as well as the respondents. The mere presence of the researcher can potentially influence and affect the findings of the study, as can bias and pre-existing beliefs of the researcher (Franklin, Cody, & Ballan, 2010). Similarly, bias of the respondents may prevent objective information to be gathered by the researcher, which puts high demand on the researcher’s ability to interpret the responses (Franklin, Cody, & Ballan, 2010). Related to this study, a method of cross-checking data known as triangulation has been adopted in order to increase the validity of the study. By utilizing several different types of data collection methods and sources of information, any findings can be questioned or corroborated by the use of another source, and any gaps provided by one method may be filled through the use of another (Collis & Hussey, 2009). By furthermore letting the respondent clarify or amend any previous statements, the confidence of the same can be heightened. However, given that a number of the respondents, primarily the labour unions and employer representatives, are likely to share an interest in the findings of the study, a certain degree of caution needs to be employed when interpreting the responses gathered.

Many of the aforementioned problems affecting the validity of the study can also affect the reliability of the same. The findings of the study are likely affected by the researcher, whereby a replicating study would probably reach somewhat different results. Furthermore, the context in which the study takes place will most likely also affect its outcome (Collis & Hussey, 2009), whereby an ever-changing area of study, such as the maritime industry, is likely to produce somewhat different findings depending on the time of the study. One way of increasing the reliability of a qualitative study is to document the research process and the various methods elected (Franklin, Cody, & Ballan, 2010). With this in mind, the use of recordings and transcripts of each interview will help to ensure some degree of reliability.

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3. Theoretical Framework

3.1 Introduction

The world renowned economist Martin Stopford is, already on page three of his blockbuster *Maritime Economics*, ready to declare the shipping industry the most eventful and fascinating business of them all, stating “*No business is more exciting*” (Stopford, 2009, p. 3). Whether true or not, shipping is arguably an industry of great interest and concern to us all. It is often stated that the close connection between economic growth and demand for maritime transport advertises the importance of the shipping industry (Stopford, 2009 Hoffmann & Kumar, 2008). At the heart for such claims lies of course world trade, which is dominated by the moving of goods by sea. The shipping industry has thus commonly been labelled one of the pillars of globalisation, and is perhaps the most globalised industry of them all (Stopford, 2009 Bloor & Sampson, 2009 Hoffmann & Kumar, 2008). The industry’s high degree of mobility has to a large extent contributed to this development. Roe (2010) divides this mobility into two parts, one physical and one immaterial, where both the physical mobility of ships and labour, and the immaterial movement of capital, ownership and the like, has had major consequences, not just for the shipping industry in itself but also for the people employed on the global maritime labour market (Roe, 2010).

With this in mind, it should come as no surprise that the industry has been the subject of much research and debate over the years. At the same time, the many seafarers residing at the heart of the industry, and signed on board the ships of the world merchant fleet, has not enjoyed the same degree of attention.

3.2 Towards a Global Labour Market for Seafarers

In order to put the maritime labour market into a discernible context and be able to understand its traits and characteristics, one must first look upon how it came to be. Up until the latter part of the 20th century the labour market for seafarers was predominantly divided, far from the globalised market of today. Ships of a certain flag employed nationals of said flag to man their vessels, and crewing practices were largely determined based on the legal national framework surrounding the employment of seafarers, along with the added costs and impracticalities that employing foreign workers often entailed (Alderton, 2004). The shipping industry was heavily regulated from a national perspective, especially so in terms of the labour market, where terms and conditions practically were decided after negotiations between the many domestic labour market parties. Characteristic for almost all maritime nations at the time was the fact that employers’ organisations, trade unions, governmental agencies and voluntary organisations set the scene for the maritime labour industry without much international involvement (Lane, 2000). Interestingly enough, much of this, both formal and informal framework of each flag state, corresponded well with other nations, at least within the traditional maritime countries of the shipping industry (Couper, 2000).

However, entering the 1970s the situation rapidly changed. After decades of prosperous growth following the Second World War, the industry was faced with declining demand and falling freight rates. As a way of cutting down on costs, many ship owners opted to remove themselves from the often very constricting national regulations that followed with the registration of a ship in that country (Lillie, 2004). Up until now there had been a close connection between seafarers and ship owners of the same nationality. While open registries (ship registries that allow ship owners from other nations) had existed for decades, the incentives for ship owners to resign from the highly organised and functional national registries and seek registration in unknown territory were not considered sufficient enough to spark a move towards registration in countries such as Panama and Liberia (Alderton, 2004). However, following the hardships suffered by the industry in the beginning of the 1970s, the scale had tipped over into the favour of registration of one's ships in open registries. As a consequence, many registries belonging to nations without their own commercial fleet went from having a minimal influence on the international maritime community, to all of a sudden be responsible for a large part of the world's merchant fleet. The previous laws and regulations affecting the crewing and manning conditions on the maritime labour market could now be circumvented, seeing as many of the open registries entitled less, or close to no restrictions in terms of wages and conditions of employment (Bloor & Sampson, 2009 Couper, 2000). These nations were simply not in the business of regulating vessels flying their flag, and while some nations had in fact ratified international conventions, they often lacked the resources to enforce them (Bloor & Sampson, 2009).

The trend of flagging out, and the crew substitution it entailed, sparked the emergence of a truly global labour market for seafarers and the geographical shift of the labour force seen today.

3.2.1 Characteristics of the Maritime Labour Market

The transition towards a global labour market for seafarers had quite the impact on the industry. The consequences were especially dire for the traditional maritime countries of Europe, which previously had constituted the mainstay of labour supply, but now instead were faced with abundance in the supply of seafarers (Alderton, 2004). According to Lane (2000), this approach of decoupling the regulatory systems in place, while leading to immediate short-term reductions in costs, also inferred breaking the chain between competence and flag state, as well as the decoupling of ship owners and seafarers of the same nationality.

Apart from the loss of employment opportunities, Mitroussi (2008) argues that the geographical shift in the sourcing of seafarers experienced by the shipping nations of Europe also has the potential of leading to a detrimental loss of maritime know-how and expertise. The consequences of such a loss can be far less evident, but nevertheless have severe implications, not just for the shipping industry in itself, but also for the entire maritime

cluster which, to a high degree relies on the expertise provided by the employment of former seafarers.

This development has according to Lane (2000, p. 14) helped shape a global maritime labour market for seafarers so that it presently holds the following characteristics:

- Seafarers of any nationality are potential employees
- Efficient transnational linkages between crew managers, manning agents and national labour markets
- No formal barriers to entry beyond certification compliance
- Widespread multinational crewing
- Stability depends upon the extent and timing of fluctuations in world trade
- Low and diminishing correspondence between flag of ship and crew nationality
- Absence of system-wide regulation

In conformity with the aforementioned characteristics by Lane, the most distinct feature of the labour market for seafarers today is according to Alderton (2004) the complete freedom for manning agents in the assembly of a ship's crew. Where the demand for seafarers was previously set on the national stage, the issue of nationality is long gone and the demand for seafarers is now predominantly set in the trade-off between price and quality. This trade-off has opened up the market so that international ship-management companies are now in charge of manning a large part of the world's merchant fleet, in order for ship owners to quickly alter the composition of their fleet, as the conditions on the market change. Therefore, with the exception of shipping companies operating on a rather small scale in developing countries, multinational crews are today the norm rather than the exception (Alderton, 2004).

Despite the transition towards the global maritime labour market put forth by Lane, there is according to Lillie (2004) still a difference that has to be made between the three following discernible submarkets for maritime labour, each coupled to the flag under which the seafarer is employed:

- I. Industrialised country flags
- II. International flags
- III. Developing country flags

The first submarket is characterised by a high degree of regulation and high standards in competence and training, as well as high wages and good working conditions ensured by the relatively strong bargaining position of national unions (Lillie, 2004). The relatively high cost structure for shipping companies in this market has, however, led to a declining number of ships registered under these flags, with an accompanying reduction in the number of seafarers employed. As the unions are representing a decreasing number of members,

unions for ratings and officers have increasingly joined forces as a way of maintaining their influence on the labour market (Alderton, 2004).

Seafarers working under international flags however often originate from low-wage countries as a way for ship owners to circumvent unions and regulatory systems. By allowing for a much lower cost structure, their appeal is kept high. The aforementioned problems of trying to govern the flag states responsibilities, and the stated issues of compliance with international conventions and framework agreements, have made conditions for seafarers under these flags difficult to uphold.

Lastly, the final submarket is characterised by seafarers working under wages and conditions far below that of the other two segments. With less transparency and scrutiny in these nations, the conditions often fail to abide even to the very minimum international levels set forth by the International Maritime Organisation (IMO) and the International Labour Organisation (ILO) (Lillie, 2004).

3.2.2 The Demand for Seafarers

The transition towards a global maritime labour market has significantly affected the interaction between supply and demand for seafarers. Whereas demand for seafarers was previously set on the national market, there is now a relationship between the individual nation and the international stage, and it is in said relationship that the competitive situation for seafarers on the labour market is set (Wu & Winchester, 2005). A seafarer's employment opportunities is therefore, to a large extent, determined by the rules and market conditions on the national stage, which must support and advocate the importance of seafarers, while still be in compliance with international regulations.

Ultimately, the demand for seafarers is, however, always dependent upon the demand for shipping services. As shipping services is essentially derived from the demand of the transportation of goods (Branch, 2007 Stopford, 2009) the demand for seafarers is as much decided by the economic activity of the world as the shipping services themselves (Glen, 2008).

When in demand, the choice of which nationalities to choose for what on board positions has been addressed by Lane (2000, p. 13) who, much like the prior statement from Alderton, contends that it *"involves a trade off between price and efficiency"*, where the general consensus being that as price goes up, so does the efficiency of labour, and vice versa. The efficiency of labour is furthermore determined by *"prior investment in training, education and productive experience"*, as well as, *"current investment in conditions of employment"* (Lane, 2000, p. 13).

Lane (2000) goes on by indicating the existence of a shared common view throughout the industry as to which nationalities that is well and ill-suited for what positions on board. While only a few nationalities are deemed suitable for the senior rankings of officers, the further down you go, all the way down to rankings, the more nations are added to the list.

As long as demand for senior officers is kept at a level exceeding supply, the demand for said seafarers originating from countries with a high standard of education, training and certification can be kept high, at least as long as the industry is kept from falling freight rates and demand for shipping services, which will inevitably fuel a trend towards the sourcing of even the highest ranking officers from low-wage countries.

3.3 The Regulatory Framework of the Industry

After a discussion pertaining to how the global maritime labour market came to be, the regulatory framework in place today shines the light on some of the effects of a globalised maritime industry. Given the importance of the shipping industry to its many stakeholders on the international stage, shipping policy and regulation has developed on many levels and through many organisational bodies. As exemplified by Selkou & Roe (2004), the objectives of such are manifold, amongst other, aimed at meeting the needs of the industry and its stakeholders, but also to regulate against unwanted side effects and externalities like that of unfair competition or environmental hazards. Due to its unique characteristics of mobility, the way of regulating the maritime industry has, while proven necessary, also showed to be an extremely difficult endeavour (Bloor & Sampson, 2009). The governance of the globalised shipping industry has often been forced to take a reactive approach, with sometimes limited results to show for it (Bloor & Sampson, 2009). As indicated by Roe (2010), regulatory frameworks and shipping policies are existent on five spatial levels: the international, supra-national, national, regional and local level. While technically separate, the different levels often intersect and share common ground on many issues.

3.3.1 Regulation and Policy on the International Level

On the international level the maritime labour market has first and foremost been regulated through two UN agencies, namely the IMO and the ILO.

The IMO

The responsibilities of the IMO revolve around ensuring a safe and secure shipping industry while also limiting environmental externalities and preventing marine pollution (International Maritime Organization, 2013a). In relation to the maritime labour market, the IMO is responsible for making sure that seafarers signed on board the world's merchant fleet have attained the minimum level of competence and training required for the safe and secure operation of said vessels. The IMO stands behind a series of conventions, and pertaining to the scope of this paper, there are two of outmost importance: the Convention on Safety of Lives at Sea (SOLAS) and the Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), both of which are dealt with in upcoming sections.

The ILO

The responsibilities of the ILO are instead to a much larger degree labour oriented, where the main focus is towards securing adequate working and living conditions for the world's seafarers (International Labour Organization, 2013a). Like that of the IMO, they stand behind a large number of conventions, so many in fact that the international seafarers' and ship

owners' organisations urged for a single convention, comprising all the legally binding requirements, as well as any guidelines of the organisation (Stopford, 2009). This was realised in the Maritime Labour Convention (MLC) of 2006, briefly described in Box 1.

Box 1: MLC, 2006

By creating a single convention that gathers all pre-existing rules and regulations, the hope was to provide the industry with a unified legal instrument to facilitate the governance of seafarers' working and living conditions on the global level (The International Transport Workers' Federation, 2006). On the 20th of August in 2012 it had been ratified by the required 30 states, among them Sweden, which by far exceeded the required 33 % of the total world gross tonnage. As such the convention will come into force on the 20th of August 2013 (International Labour Organization, 2013b).

There are five titles in the MLC, each concerned with different labour aspects and requirements (International Labour Organization, 2013c):

- I. Minimum requirements for seafarers to work on a ship
- II. Conditions of employment
- III. Accommodation, recreational facilities, food and catering
- IV. Health protection, medical care, welfare and social security protection
- V. Compliance and enforcement

The MLC imposes flag states to abide to the rules of the convention, albeit with a certain degree of flexibility as flag states are allowed to provide alternate renderings as long as they are equivalent to the principles set forth in the MLC. This does however not apply to the requirements set forth in title V of the convention (The International Transport Workers' Federation, 2006).

3.3.2 Regulation and Policy on the Supra-national Level

On the supra-national level, the policies and regulations produced are generally derived, or at least most often not in conflict, with those on the international level. Whilst the previous identified organisations do not have any legal jurisdiction per se, the influence of said organisations is often enforced by the many nations ratifying and adhering to their conventions and regulatory framework (Roe, 2010). While the means of setting an extensive regulatory framework for the global maritime labour market has been accomplished through the use of the IMO and ILO, the enforcement of these agencies' conventions has proven much more difficult. The governance and implementation have not been objectives of the two agencies, but instead been regulated on the supra-national and national level. On the supra-national level, the unified approach of the EU directs the member states' national

shipping policies. A brief description to the EU state aid guidelines for maritime aid is given in Box 2.

Box 2: EU State Aid Guidelines

The European fleet has been subject to increasing competition from a number of third-country flag states over the last few decades. As a way of counteracting the diminishing fleet of the European Union, a number of member states have issued maritime aid to their respective fleets since the 1980s. A lack of a harmonization of the nationally provided aid and support led to the introduction of the European state aid guidelines for maritime aid in 1989 (European Commission, 2004).

From a labour perspective, the state aid guidelines allows for the individual state to reduce the labour costs for ship-owners by permitting aid in the following ways (European Commission, 2004, p. 6):

- *“Reduced rates of contributions for the social protection of Community seafarers employed on board ships registered in a Member State.”*
- *“Reduced rates of income tax for Community seafarers on board ships registered in a Member State.”*

The European Commission has further recognised the importance of maintaining the skill and expertise of seafarers and in order to support education of seafarers originating from within the EU whereby the guidelines also allow for financial support for the training and education of seafarers. The recipient of this aid can either be the seafarer, the ship owner or the education and training institution. In order to be eligible for maritime aid, the general rule is that the vessel is registered in the specific member state although special circumstances can allow for exceptions (European Commission, 2004).

3.3.3 Regulation and Policy on the National Level

While shipping policy and regulation to a large extent have been driven on the international and supra-national level, the primary responsibility for governance and implementation has fallen upon the maritime states, which can be divided into their two respective roles as flag state and coastal state (Stopford, 2009).

The Role of a Flag State

The UN Convention on the Law of the Seas (UNCLOS) deems the state, whose flag the ship is flying, responsible for its activity, regardless of where the ship may be operating. The flag state is thus the governing authority for the legal framework surrounding the operation of vessels under their flag, and as such the flag state has a responsibility to enforce the laws and requirements set forth by their domestic legal framework, as well as ensuring compliance with any international standards and regulations that may exist (Goodman, 2009).

The Role of a Coastal State

The governing role of coastal states is much like the role of the flag state dictated by the framework set forth by UNCLOS. In comparison however, the coastal state's rights and responsibilities are much more limited. It does however offer exceptions where the coastal state can exert the right of adopting laws and regulations provided they are conformant to "*generally accepted international rules or standards*" (United Nations, 1982, p. 32). As a consequence, the concept of Port State Controls (PSCs) has emerged where a large number of maritime nations engage in the inspection of ships entering their ports, in order to ensure compliance with international rules and standards (Stopford, 2009). The Paris Memorandum of Understanding is perhaps the most renowned PSC alliance, where no less than 27 European maritime authorities ensure compliance with a large number of conventions pertaining to the manning and operation of ships (Paris MoU, 2012).

3.3.4 Collective Bargaining on the Maritime Labour Market

While an international regulatory policy framework has emerged through the use of umbrella organisations such as the IMO and ILO and the European Union, trade unions have played, and are continuing to play a decisive role for seafarers on the global maritime labour market. As described by Alderton (2004, p. 88):

"The existence of well-organized trade unions and national collective bargaining institutions lay at the heart of the labour market regulatory systems of the embedded maritime nations".

Prior to the expansion of the maritime labour market in the early 1970s, described in more detail in upcoming sections, the national regulatory systems in place were a mix of formal and informal agreements between the various labour market parties (Lane, 2000). The role of the various unions representing seafarers were strong, and while still of utter importance in many maritime nations, the advent of a global maritime labour market has changed the conditions of the market place and caved the influence of national labour unions (Alderton, 2004). Employment conditions for seafarers working under the now so common open registries and international registries, has instead for many decades been the target of the International Transport Workers' Federation (ITF), a global union association composed by affiliated national transport workers' unions (International Transport Workers' Federation Seafarers, 2013). Its foremost counterpart, The International Maritime Employers' Council, represent shipping companies worldwide, and together with governments they take part in the tripartite process within the IMO and ILO of setting an international framework regarding the many questions surrounding the conditions of employment for seafarers on the international stage.

The success of transnational bargaining has varied over the years. The collective strength of the ITF to limit ship owners taking advantage of the wage disparities available on the global maritime labour market has, to a large extent, been negated by a lack of efficient governance on the international level. According to Stopford (2009) there are still great

disparities in wages earned and the related benefits that follow, despite the many attempts from the ITF to harmonize wages and working conditions on board seagoing vessels for all types of crews and nationalities.

Collective bargaining has therefore perhaps been most successful on the national level. Most notably, strong national labour unions throughout Europe have continued to enjoy prominent positions, where negotiation rights for seafarers of all nationalities is quite often granted to the unions, and where ways of circumventing national labour agreements are often limited (Alderton, 2004).

3.3.5 Training and Education of Seafarers

In light of recent development Alderton (2004, p. 81) maintains that the *“training, education and certification of seafarers have become increasingly prominent issues”*. Tales told from within the industry has painted the picture of a lacking degree of adequate education and training, leading to a number of reoccurring incidents and accidents throughout the maritime industry each year. As a consequence of the increasing crew substitution a situation of regulatory deficit has therefore been observed (Obando-Rojas et al., 2004). The lacking monitoring and enforcement of regulations in open registries has led to a large gap in the competencies between seafarers originating from the traditional maritime countries and the more recent low-wage alternative (Alderton, 2004). As a result of the exertion of financial pressure, the employment of more and more of these crews of convenience has led to a situation where the training standards have fallen, relative that of the situation before the entry to a global maritime labour market.

As a source of great concern to the industry, the maritime community has responded by trying to regulate the issue. As previously stated there are in particular two conventions that affect the area of seafarers' competencies: SOLAS and STCW. The former contains the International Management Code, which stipulate that the ships must be properly manned with qualified and certified personnel according to national and international standards, and forces the shipping companies to provide evidence as to the qualifications of its personnel (International Maritime Organization, 2010). The STCW convention is however more precise, and was introduced in 1978 as a means of setting an international standard in regards to the absolute minimum level of training and certification required for ratings and officers signed on board the world's merchant fleet (Stopford, 2009). Previously, each state was free to set their own standards as they saw fit, and as such a situation with wide disparities between ratings and officers from different countries arose, which created adverse problems throughout the industry.

The convention has undergone several revisions in order to adapt to the increasing need for adequately trained and educated seafarers, and now hold both mandatory requirements, as well as additional recommendations (Branch, 2007). The latest revision, commonly known as the Manila Amendments, entered into force on the 1st of January 2012. This revision saw a change in the required rest time and medical status of seafarers, as well as the introduction

of new education, training and certification requirements. It furthermore posed requirements for leadership and teamwork training, and revisions of safety training every five years, as well as posing a demand for the renewal of qualifications (International Maritime Organization, 2013b).

While the convention requires that the training and certification be approved, it is still the responsibility of the individual state to see to it that any institution offering training and education to seafarers adhere to the requirements set forth (Bloor & Sampson, 2009). While the competence gap between the traditional maritime countries and open registries has lessened somewhat over the years (Alderton, 2004), the aim of removing the many subpar maritime education and training institutions (METs), supplying the labour market with unqualified seafarers, has been hard to fulfil. Instead this type of self-regulation has had limited impact on the standards of seafarers emanating from countries lacking the skills, resources or will to amend the situation (Bloor & Sampson, 2009). As pointed out by Obando-Rojas et al. (2004), the reliance on the individual nation and the PSCs as means of monitoring seafarers qualifications, has facilitated the hiring of inadequately trained seafarers, making such personnel desirable on the labour market as the risk of getting caught is limited, while the reduction in labour costs are often quite significant.

3.4 The Swedish Maritime Labour Market

3.4.1 Regulation and Shipping Policy

Maritime Aid

The system of maritime aid in Sweden is based on the latest revision of the European state aid guidelines for maritime aid, set forth by the European commission in 1997. Sweden have currently applied and been authorised for reduction of social security contributions and tax allowance as part of its maritime aid to ships registered in the member state (European Commission, 2012).

As a measure of increasing the level of competitiveness of the Swedish flagged fleet, maritime aid for cargo ships was introduced in 1998 and further extended in 2001 to also include passenger ships (Statens offentliga utredningar 2010:73, 2010). The maritime aid in question, also known as the net-wage model, allows for ships operating under the Swedish flag to receive tax benefits, and was introduced in an attempt to reduce the labour costs for Swedish ship owners. In theory, the shipper is reimbursed to the full amount that he is obligated to pay for any employment tax or social security contributions for any seafarers that the company employs, although in practice the transaction from the shipper to the government and then back again is never actually made (Näringsdepartementet, 2013).

The first step towards the introduction of the maritime aid in Sweden was made in 1996 when the Swedish government passed a bill stating the future support for the shipping industry, and the work towards achieving more competitive conditions for the Swedish flagged fleet (SWESHIP, 2013b). With the introduction of the maritime aid in 1998, the

extent of the aid only applied to ships transporting goods in "fjärrfart" thus excluding passenger ships and different special purpose ships (Copenhagen Economics A/S & Trafikanalys, 2012). In 2000 the government passed a new bill (2000/01:127), taken into effect late 2001, that allowed for passenger ships in "fjärrfart" to be included in the net-wage model in addition to formerly included cargo ships (SWESHIP, 2013b).

The requirements for receiving maritime aid under the net-wage model are as follows (Delegationen för sjöfartsstöd, 2012, Förordning 2001:770, 2001):

- The ship must conduct transport of goods or passengers.
- The ship is exclusively registered in the Swedish ship registry.
- The main area of operation is in "fjärrfart" of importance for the Swedish foreign trade or export of services.
- The ship must accommodate a number of students enrolled in the Swedish METs in accordance to directions from the Swedish Maritime Administration.
- Have sufficient insurance, including both the ship itself and its operations.

The eligibility of maritime aid is not dependent on the size of the fleet of the ship owner, and neither the financial status of the ship owner, i.e. a ship owner making a profit is still as eligible as a ship owner making a loss (Copenhagen Economics A/S & Trafikanalys, 2012).

Taxation of Seafarers

Taxation right can emanate from three fundamental principles, namely "hemvistprincipen", "källstatsprincipen" and "nationalitetsprincipen". "Hemvistprincipen" refer to a system where income is to be taxed in the country of where the person has his or her domicile. Thus, regardless of where the income was generated, the person is to be taxed where he or she resides. "Källstatsprincipen" on the other hand expresses that a person is to be taxed in the country where the income was generated, whereas "nationalitetsprincipen" connects to the citizenship, whereby a country's citizens are to be taxed regardless of where they reside or where the income was generated (The Swedish Tax Agency, 2012).

In line with the aforementioned taxation rules, one quickly realises the problematic position a person might find himself, where the country where he resides and the country where he generates his income were to apply different tax regulations. This is of particular importance for seafarers as this is generally more often than not the case, as the ship's flag corresponds to which country's jurisdiction that is to be applied (Stopford, 2009). In a situation where one state applies "källstatsprincipen" and another "hemvistprincipen", the seafarer will be subject to double taxation, first taxed in the flag state and secondly in his or her country of domicile.

There are a variety of different approaches to avoid or limit the effects of double taxation, which means either adapting the internal tax framework of the country in question or entering into an agreement with other countries (The Swedish Tax Agency, 2008).

Furthermore, while being subject to the general taxation rules as per the income tax law, a seafarer is also subject to certain special regulation. The taxation rules for seafarers are dependent upon several, often mutually dependent factors, as according to chapter 3:3, 3:8 and 3:12 "Inkomstskattelag" (1999:1229) (Rättsnätet, 2013):

- 1) The country where the seafarer is settled or is continuously residing
- 2) The country where the seafarer generates his or her income (which correspond to what flag the ship is sailing under)
- 3) The ship's area of operation
- 4) The nationality of the seafarer's employer

Box 3: Ship Operating Areas	
Inre fart	Movement within the country, mainly in ports, or on rivers, canals, lakes, inshore coastal areas or in Kalmar Strait.
Närfart <i>(English: short sea shipping)</i>	Liner traffic between Swedish ports outside the open coast or offshore along the coasts, and: - Scheduled between Swedish and foreign ports or between foreign ports, but not in liner traffic beyond the line Hanstholm Lindesnäs or beyond Cuxhaven.
Fjärrfart	Refers to traffic other than "Inre fart" or "Närfart".
Oceanfart <i>(English: deep sea shipping)</i>	Referring to traffic in non-European waters with the exception of traffic at locations in the Mediterranean and the Black Sea, on the north east coast of Africa (North of 22 degrees North latitude), in the Canary Islands and Madeira Island, and: - Traffic in European waters north or west of the line Trondheimsfjorden - Shetland's northernmost point (11 degrees west along this longitude to 48 degrees north latitude).
Source: Chapter 3:12 & 64:6 "Inkomstskattelag (1999:1229)" (Rättsnätet, 2013)	

While this give rise to a large number of possible combinations, each with its distinct outcome and effect for the individual seafarer, one can make the distinction between seafarers signed on board merchant ships with an employer within the European Economic Area (EEA) which operates primarily in short sea shipping or "fjärrfart", seafarers signed on board non-Swedish flagged ships within the EEA which operates primarily in deep sea shipping, and seafarers signed on board non-Swedish flagged ships with an employer outside the EEA.

For seafarers signed on board merchant ships within the EEA (including Sweden) which are engaged primarily in short sea shipping or "fjärrfart", the special regulation of the income tax law concerning seafarers comprises the right to make certain tax deductions and allowances.

For seafarers signed on board non-Swedish flagged ships within the EEA, engaged in deep sea shipping, there is however a full relief from taxation liability. This relief of taxation is tied to an actual ship and thus provides that the seafarer on board the specific ship stays on board for at least 183 days over a 12-month period, and that the ship carries out its operation primarily in deep sea shipping, as according to chapter 3:12 "Inkomstskattelag" (Rättsnätet, 2013). This paragraph came to be after SWESHIP and the labour unions in 1983 reached an agreement regulating the transfer of ships to foreign flags. As a part of this agreement, rules concerning the Swedish seafarers employed on such vessels were agreed upon, in order to ensure their competitive situation and see to their conditions of employment. These agreements required a change in the income tax law, which saw the introduction of relief from taxation for the seafarers in question. In relation to the agreement in 1983, the SEA and The Council for Negotiation and Cooperation came to a consensus in 1985 as regards to the social safety net of Swedish personnel working abroad, which also incorporated seafarers. In brief the agreement inferred the same basic social security for seafarers abroad as for those employed in Sweden, whilst the cost for providing this by the employer was cut in half. This agreement is known as the INT-agreement.

When it comes to seafarers signed on board non-Swedish flagged ships, with an employer outside the EEA, there are no special regulations. Seafarers working under these conditions are therefore not subject to relief from taxation liability or eligible for tax deductions at all.

Social Insurance

The statute for social insurance (*Swedish: Socialförsäkringsbalken*) regulates the social security by the use of social insurances which are to be paid by the employer on behalf of the employee (Socialdepartementet, 2010). Before the end of the year 2000, different rules applied for Swedish ratings and officers which meant lower costs for the employer. Since then, revisions have been made and as of 2010 the employer pays equal social insurances for the ratings and officers as for any other person working in Sweden (Finansdepartementet, 2007). As of current the cost of social insurance is approximately 31% of the salary of the employee (The Swedish Tax Agency, 2013).

The rule for being eligible for social securities in Sweden normally applies to any person working in Sweden. When working at sea the crew does however not have to technically be in Sweden for be eligible for social securities as the statute for social insurance 2010:110, chapter 6 §3 states that any person working on-board a Swedish flagged ship is to be considered to be working in Sweden. This applies regardless of nationality or country of residence and thereby the TAP-employees, covered in the following section, are included as well (Statens offentliga utredningar 2010:73, 2010).

As the employee employed under the TAP-agreement is considered working in Sweden for 9 months as the longest, additional rules of social security does not apply as such requires the employee to be living in Sweden for at least a year before going into effect (Socialdepartementet, 2010, Statens offentliga utredningar 2010:73, 2010).

In addition to be considered working in Sweden, when working on a ship flying the Swedish flag, the statute for social insurance 2010:110 chapter 6 §3, states than an employee will also be considered to be working in Sweden if any of the conditions below are met. The amendment are as of today not in force but stated to enter into force on the day the government so decides.

- A foreign ship which is chartered on bareboat by a Swedish ship operator and the employee is either directly employed by the Swedish ship operator or a subcontractor to the Swedish ship operator.
- A Swedish ship chartered on bareboat to a foreign operator and employed by the Swedish ship owner or a subcontractor to the Swedish ship owner.
- Work as a sailor on a merchant ship from a third country should also be considered as working in Sweden, if the sailor is resident in Sweden and if the ship is not sailing exclusively in “inre fart” as referred to in § 3 Seamen's Act (1973:282).

(Socialdepartementet, 2010)

The inclusion of sailors working on merchant ships from a third country, i.e. registered outside the EEA, while residing in Sweden, will have an effect on Swedish officers working on the aforementioned INT-agreement. When entered into force, the employer will be required to pay social security contributions to the Swedish state in addition to the already social insurance included in the collective agreements. This is a consequence of the introduction of the MLC, which rules Sweden has incorporated into national legislation (The Swedish Tax Agency, 2012).

3.4.2 Collective Bargaining

The rules and regulations on the Swedish maritime labour market has traditionally been left to settle between the various labour market parties, and the negotiation power of the labour unions' ability to represent their members is regulated in Swedish law (MBL 1976:580). The labour force in the maritime sector is represented by SEKO Seafarers, which represent the ratings, and MOA, which represent the officers. Representing the employer organisations is the Swedish Shipowners' Employer Association.

As the Swedish government has been conservative about regulating the sector, the vast majority of the agreements formed on the Swedish maritime labour market are collective labour agreements, which are in effect on a national level for all employees and employer within the specific sector (The Confederation of Swedish Enterprise, 2012). The collective labour agreements are formed between the unions and the employers, which regulate salary, vacations and other rights and responsibilities of both the employee and the

employer. Due to the absence of Swedish laws regulating minimum wage, collective labour agreements often forms the only basis for regulating the minimum wage for seafarers in Sweden. There are several different types of agreements that can come into effect, depending on the ship's area of operation, the type of employment and so on (SEKO, 2013a). It is important to note that the negotiated agreement does not only apply to the members of the union but that the terms are also in effect for non-union members, which in most cases refers to foreign employees (Trafikanalys, 2013).

TAP-agreement

The temporary employed personnel-agreement (TAP) was developed in an attempt to increase the competitiveness of the Swedish flagged fleet. Tasked by the Swedish Government, SWESHIP and the labour unions presented the agreement as an alternative on how to lower the cost of labour on Swedish ships, which in 1997 resulted in the introduction of TAP, or temporary employed personnel (Statens offentliga utredningar 2010:73, 2010).

The agreement allows for the use of temporary employed personnel originating from countries outside the EEA, and as such Swedish ship owners are able to lower their manning costs significantly (Statens offentliga utredningar 2010:73, 2010). Most other nations within EEA and Europe has in contrast instead chosen to adopt international ship registries, one example being the Norwegian International Ship Registry, which, compared to the Swedish TAP-agreement, also allow for personnel to be employed on a salary based on a wage level consistent within the home country of the employee, thereby also lowering the wages. An employee from the Philippines employed on a Swedish flagged ship under the TAP-agreement however receives a salary that corresponds to the earnings of a Swedish seafarer with the same rank and position (Trafikanalys, 2013). The savings attributed to the TAP-agreement is thus not generated by a difference in the salary level, but is instead a question of the costs incurred by a ship owner for seafarers during the time when they are not signed on board their ships. While employees from within the EEA receives salary also during their leave, i.e. the time when they are not signed on board the ship, employees working under the TAP-agreements reaches the end of their employment, thereby significantly reducing the amount of salary paid (Copenhagen Economics A/S & Trafikanalys, 2012).

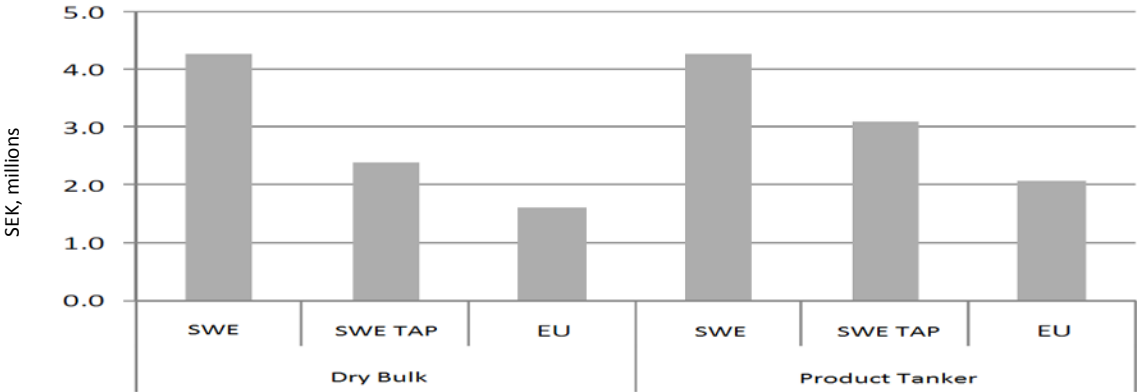
As indicated by the use of temporary employed personnel the contract of employment states the specific length of the employment, normally a period of six months but in cases sometimes extended to a period of up to nine months (Näringsdepartementet, 2013).

In order for ship owners to be eligible to employ personnel under the TAP-agreement there is a list of conditions that have to be met. The conditions have been set in order to ensure so that the ships able to employ personnel under TAP are operating under the Swedish flag and thereby supporting the Swedish maritime industry. In addition to operating under the Swedish flag, the ship must also operate between Sweden and another nation (SEKO Sjöfolk, 2013).

As mentioned, the TAP-agreement does not infer the same liberties in terms of salaries for ship owners registering their ships under an international registry. Furthermore the conditions under the TAP-agreement are more restrictive compared to other countries within the EEA when it comes to the actual size of the personnel that are eligible for employment under the TAP-agreement. The initial agreement, still in force for most ship owners, limits the amount of employees under TAP to a maximum 50% of the total crew, while a revision in 2010 allows for 75 % in a limited number of cases (Copenhagen Economics A/S & Trafikanalys, 2012).

The below presented diagram from Tillväxtanalys (2010) presents the cost difference for Swedish ships using employees under TAP compared to the standard agreements. The bar marked “SWE” in each segment represents Swedish flagged ships with a crew consisting solely of Swedish officers and ratings, while “SWE TAP” represents a ship where 50% of the total crew is Swedish while the other half is from the Philippines. The bar marked “EU” in turn represents the common costs incurred for any other ship sailing an EU-flag other than the Swedish one, where 50 % of the officers are from Sweden, and the remaining 50 % of the officers, as well as the entire personnel of ratings are from the Philippines. The crew costs are measured for the full year, and the Swedish flagged ships receive maritime aid. As seen, the TAP-agreement has helped lower the costs while still being higher than any other EU-flagged ship (Tillväxtanalys, 2010).

Figure 1: Differences in Crewing Costs



Source: Tillväxtanalys (2010, p. 54)

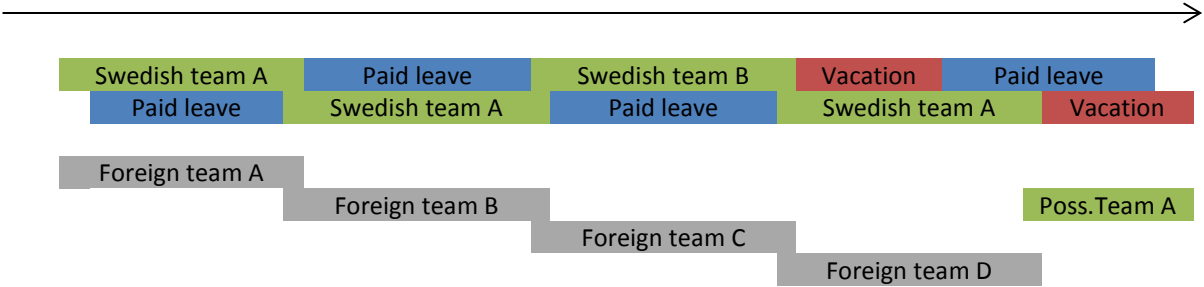
Employment Security

A law of much significance to the Swedish maritime labour market is the law of employment security (Swedish: lag om anställningsskydd, 1982:80) which regulates the employer’s ability to give notice of dismissal to employees. The law makes a difference between the different types of employment: permanent post, probationary employment and employment for a limited period of time (SEKO, 2013b). If employed on a permanent post, the employer is not allowed to terminate the contract without specific reasons and the last employed seafarer’s contract is also the first one to be terminated (Swedish Maritime Officers' Association, 2013). Per an agreement with the labour unions, a reduction of the number of employees is

first and foremost made by terminating personnel under the TAP-agreement, as remaining seafarers from Sweden and other nations within the EEA are most often employed on a permanent post.

The market parties have been known to differ in opinion regarding the law of employment security where the employers and The Confederation of Swedish Enterprise considers the law to limit the ability to reduce personnel costs in times of low economic activity, and running the risk of losing competent personnel recently employed (The Confederation of Swedish Enterprise, 2011).

Figure 2: Cost Differences Between Domestic and Foreign Personnel



Source: Copenhagen Economics A/S & Trafikanalys (2012, p. 34)

The above representation clearly illustrates the different situations for a ship operating under the Swedish flag. The above situation representing the rotation system for a crew of Swedish officers, which utilises two employees for each employment position, both receiving full pay regardless of whether the officer is signed on board the ship or on leave. In contrast a position on board the ship carried out by employees working under the TAP-agreement receives no pay while being on leave, and as such the actual number of people utilised may be higher, but the employment positions are reduced to one. The employee/employment position ratio is therefore 2:1 for Swedish personnel, while 1:1 for foreign personnel working under the TAP-agreement (Copenhagen Economics A/S & Trafikanalys, 2012).

3.4.3 Training and Education of Seafarers

The governmental regulated education of seafarers in Sweden has a long and proud tradition, initiated as early as 1841 (The Swedish National Agency for Higher Education, 1998). The government considered an education govern on a state level would ensure a higher degree of standardisation and a higher overall level of the educated seafarers. During the years the education have seen a number of changes in order to better serve the demand and requirements for modern ships, including the education for maritime engineers in the latter half of the 19th century (Lindström & Malmberg, 2010).

Due to a declining fleet and demand for Swedish seafarers, a number of schools for higher education of seafarers were closed during the 1980s, and as of 2013 there remain only two METs that offers higher education: the Maritime Naval Academy in Kalmar and Chalmers in

Gothenburg (The Swedish National Agency for Higher Education, 1998). Secondary education is offered through a number of schools which focus is on a supportive level, while the focus of the METs lies on the managerial and operational level (SWESHIP, 2010). Located in Malmö, Sweden, is also the World Maritime University, an international university governed by the United Nations/IMO, thus out of the control of the Swedish government (International Maritime Organization, 2013c).

As of today, the education of seafarers in Sweden is regulated by the Swedish Transport Agency in cooperation with the Swedish National Agency for Higher Education. The Swedish Transport Agency certifies educational institutes in secondary and higher education, as well as private educational actors and additionally also certifies the different seafarers in accordance to the level of education and experience acquired (The Swedish Transport Agency, 2013).

The regulations for the education and certification of both schools and seafarers are composed in statute 2011:1533 and rules in TSFS 2011:116 by The Swedish Transport Agency. Both rules and statutes, and any other regulation, are based on STCW and require the seafarer to be in compliance with the minimum requirements stated in the applicable STCW section for the type of education and specific position (The Swedish Transport Agency, 2013). Due to STCW regulations, the basic format of the education is regulated on an international level and must be complied with, in order to retain the STCW certification. The STCW requirements are considered to be minimum standards and thereby each educational institute in Sweden are free to add additional requirements that have to be met in order to pass the education (The Swedish National Agency for Higher Education, 2012). Thus in many aspects of the STCW education and certification the Swedish legislation may differ. The more strict interpretation and application of the international regulations is a consequence of the Swedish ambition of being leading in the area of education of seafarers and safety (The Swedish Maritime Agency, 2010).

A report by Göran Lindholm (SWESHIP, 2010), done on behalf of SWESHIP in 2010, summarised the differences between Sweden and STCW in regards to the experience of the seafarers, in order to obtain certification for specific positions. The report shows that Sweden in general requires more experience of the seafarers of being on-board and working on ships before being eligible for a certification. This is however only a generalisation, and for some certifications the requirements does not differ between Sweden and STCW (SWESHIP, 2010).

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4. Quantitative Empirical Findings

4.1 The Supply of Seafarers

4.1.1 Worldwide

Measuring the worldwide supply and demand for seafarers is associated with great uncertainty. The Baltic and International Maritime Council (BIMCO)/ The International Shipping Federation (ISF) 2010 Manpower Update on The Worldwide Demand for and Supply of Seafarers is arguably the most comprehensive study to date, a study which is updated every five years. The worldwide supply for seafarers is estimated based upon a comprehensive survey issued to national governmental agencies and various labour market parties and experts (BIMCO/ISF, 2010). According to the study the total amount of seafarers in 2010 was estimated at 1,371,000 of which ratings constituted 747,000 and officers 624,000. The figures, while not perfectly comparable to previous studies, show a considerable growth in the supply of seafarers compared to previous years.

The geographical distribution of the supply of seafarers worldwide is displayed in Table 1. There is a distinct difference between the number of officers and ratings, where the former shows a dominating and equal supply between officers originating from the Organisation for Economic Cooperation and Development (OECD) countries and the Far East, after which officers originating out of Eastern Europe constitute a large supply. As ratings are concerned however, the estimate shows a more dominating position of seafarers from the Far East, while the remaining individual geographical areas have a much smaller amount of ratings.

Table 1: Supply of Seafarers by Geographical Area

Area	Current Supply			
	Officers (1000's)	%	Ratings (1000's)	%
OECD Countries	184	29.4	143	19.2
Eastern Europe	127	20.3	109	14.6
Africa / Latin America	50	8.0	112	15.0
Far East	184	29.5	275	36.7
Indian Sub-Continent	80	12.8	108	14.5
All National Groups	624	100.0	747	100.0

Source: BIMCO/ISF, 2010

As the OECD countries are concerned, the development of the supply of officers and ratings at deck and engine positions is highlighted in Table 2. The numbers shows a significant decline of supply across the board where most of the officers and ratings originating out of the OECD countries have been replaced in favour of seafarers originating from countries in the Far East, and to some extent by seafarers from Eastern Europe (BIMCO/ISF, 2010).

Table 2: OECD Officer Development

	Deck		Engine		Remaining Personnel
	Management	Operational	Management	Operational	
	%	%	%	%	
1995	54.4	32.4	51.4	33.0	35.6
2000	48.8	26.9	44.2	26.0	30.3
2005	27.5	15.3	25.6	15.2	35.3
2010	12.2	7.7	10.1	7.4	6.6

Source: BIMCO/ISF, 2010

4.1.2 Sweden

When studying the supply of seafarers in Sweden there's a few notes worthy of some extra attention. The upcoming figures display the number of unique persons with at least one signing on board a ship sailing under the Swedish flag during the years in question. As today there is no discernible way of measuring the number of Swedish seafarers signed on board foreign flagged ships, whereby the figures will underestimate the total actual number of active Swedish seafarers, although not on board the Swedish flagged fleet. Furthermore, insufficient data preclude knowing the actual time signed on board the ship and questions can thus be raised as to whether a person signed on board a ship for a couple of weeks is equivalent to a person signed on board for many months. This is particularly true when it comes to personnel working in commissariat services. Lastly the numbers include Swedish, as well as foreign personnel, signed on board Swedish flagged vessels, figures which nevertheless are segregated in upcoming sections.

Figure 3: Seafarers Signed on Board the Swedish Flagged Fleet

	Officers	Ratings	Remaining personnel	Total
Deck	2,431	3,714	-	6,145
Engine	1,339	1,302	-	2,641
Total	3,770	5,016	6,876	15,662

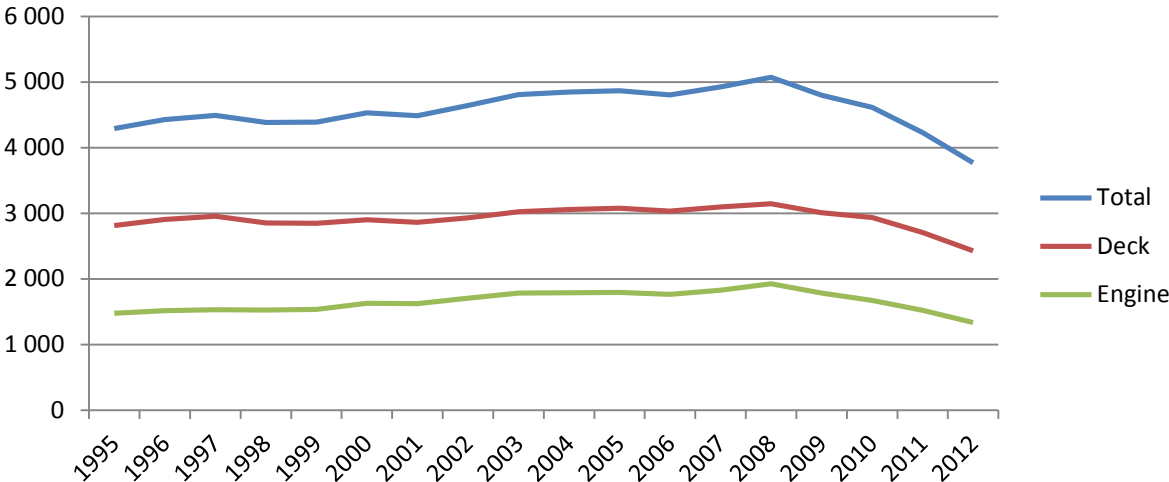
Source: SWESHIP/Lighthouse, 2013

In 2012, the number of seafarers signed on board the Swedish flagged fleet amounted to 15,662. A large number of the total supply was constituted by people commonly working in commissariat services such as restaurants, whereby the actual number of officers and ratings was significantly lower. There were 3,770 officers and 5,016 ratings of which the majority was officers and ratings with a deck position, as displayed by Figure 3.

Segregating the seafarers further, the development in the number of officers from the years 1995 to 2012 is displayed in Figure 4 which also show the officers divided into deck and engine positions. An adjoining geographical representation in the total number of officers at deck and engine positions is also displayed. As provided by the figures, the number of officers at deck and engine positions has remained at a stable position up until the year 2009. After several years of minimal variations in the supply of officers signed on board Swedish flagged ships, the number of officers at both positions followed a downward trend

with a beginning between the year of 2008 and 2009. Compared to 5,073 deck officers in 2008, 2012 figures show a supply of 3,770, a loss of 1,303 officers over a four year period or a reduction of more than 25 %. The same trend is visible for engine officers which in 2008 amounted to 3,146 but which in 2012 only amounted to 2,431, a loss of 715 officers, or 23 %.

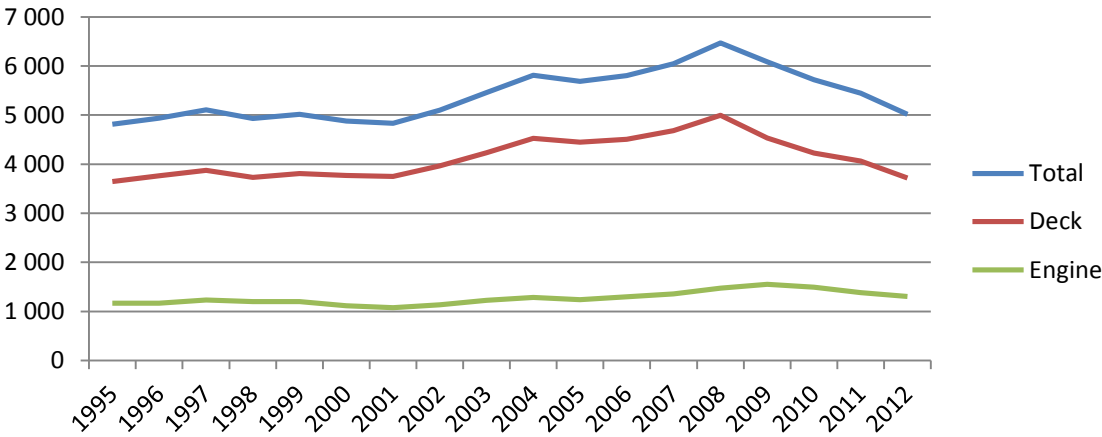
Figure 4: Development of Swedish Officers



Source: SWESHIP/Lighthouse, 2013

As ratings are concerned, the development between 1995 and 2012 is displayed in Figure 4, with an adjoining chart displaying a geographical representation of the total number of ratings on deck and engine positions. Up until year 2002, the number of ratings remained fairly stable, after which they increased, reaching an all-time high in 2008. Between the years of 2008 and 2012 however, the ratings diminished in numbers. Ratings on deck went from 4,995 in 2008 to 3,714 in 2012, a fall of 1,281 or 26 %. While the downward trend was visible also for ratings on engine positions, the fall was not as severe, falling from 1,551 in 2009 to 1,302 in 2012, a fall of 249 or 16 % over a three year period.

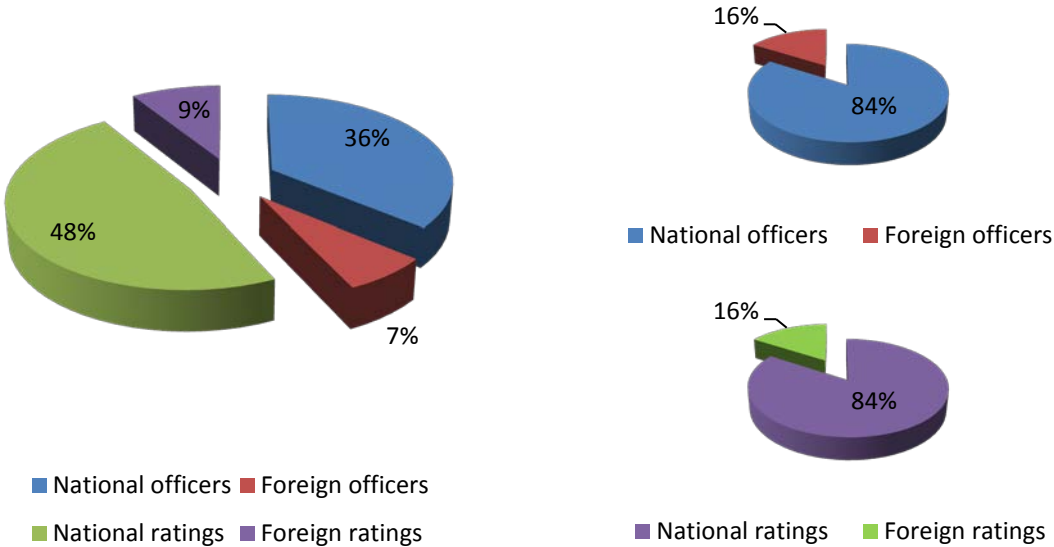
Figure 5: Development of Swedish Ratings



Source: SWESHIP/Lighthouse, 2013

As initially conveyed, the supply of seafarers signed on board the Swedish flagged fleet consists of both Swedish nationals, as well as foreign employees. Figure 6 displays the distribution for the year 2012, revealing a high majority of Swedish seafarers signed on board the Swedish flagged fleet. Swedish officers and ratings combined constitute 84 % of the total, where almost half of the crew is made up by Swedish ratings, and a little over a third constitutes Swedish officers. 16 % of the total crew is made up by foreign officers and ratings with a comparatively similar share. Pie charts segregated between officers and ratings furthermore show identical percentages in the distribution between Swedish and foreign seafarers.

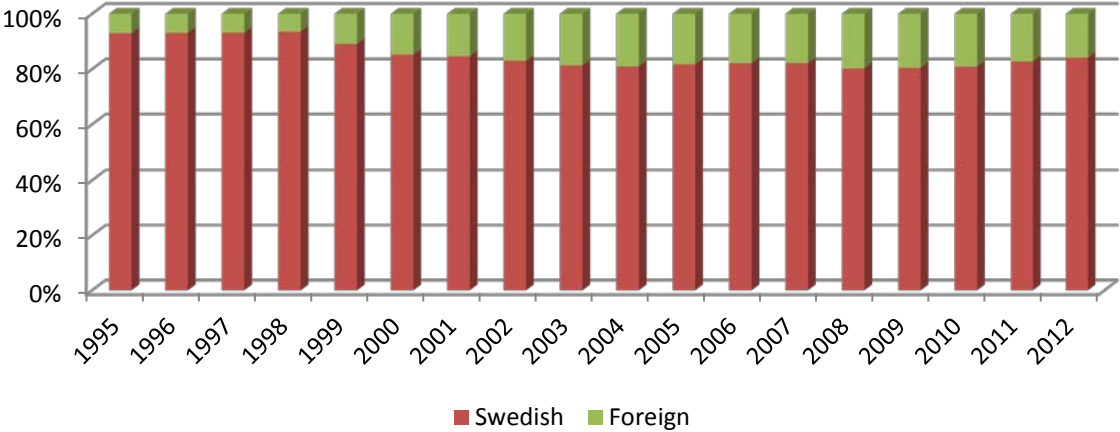
Figure 6: Distribution Between Swedish and Foreign Seafarers



Source: SWESHIP/Lighthouse, 2013

In order to determine whether or not the aforementioned distribution from 2013 accurately reflects the employment of Swedish vis-à-vis foreign seafarers, the development between 1995 and 2012 of said distribution is depicted in Figure 7. The figures reveal a development where the mid and late 1990s was characterized by a Swedish flagged fleet that to a larger extent was manned by Swedish nationals. Entering into the 21st century the trend towards a larger diversification had begun a trend that stabilized shortly thereafter and has remained fairly stable ever since.

Figure 7: Development of Seafarers' Nationality Distribution



Source: SWESHIP/Lighthouse, 2013

Table 3: Top Nationalities

Country	Seafarers
Sweden	7391
Philippines	694
Finland	360
Remaining	341
Total	8786

The top ten nations represented on board the Swedish flagged fleet is after Sweden most notably the Philippines but also Finland. This is hardly surprising given that the TAP-agreement is exclusively directed towards the employment of temporary personnel originating from the Philippines. Furthermore, the fairly high degree of Finnish seafarers signed on board Swedish flagged ships is not all that surprising considering the important and prominent passenger transport between the two countries.

Source: SWESHIP/Lighthouse, 2013

4.2 The Demand for Seafarers

4.2.1 Worldwide

When estimating the present and future worldwide demand for seafarers, the BIMCO/ISF study in 2010 took into account a range of statistics, including the size of the world fleet, manning requirements, age structure, scrapping and newbuildings, seafarer demographics, statistics on seafarers in training and education, and so on (BIMCO/ISF, 2010). The estimates for the demand of seafarers in 2010, along with the prediction for 2015 and 2020, are displayed in Table 3. According to the report, demand and supply for 2010 was in a fairly balanced state. Ratings showed a match between demand and supply, while there was a slight shortage in the supply of officers. According to BIMCO/ISF (2010), the overall balance is the result of a substantial increase in the supply of seafarers, while demand has been kept down as a result of the financial crisis effect on the demand for transportation of goods. Furthermore the overall balance between supply and demand should not be taken as an indication that all areas of the industry is in perfect balance. Various segments of the industry is having a harder time than others recruiting personnel with the required certifications and training. Furthermore, shortages in supply tend to be directed towards senior officers and engine positions (BIMCO/ISF, 2010).

Table 4: Supply and Demand Balance

	2010		2015		2020	
	Officers	Ratings	Officers	Ratings	Officers	Ratings
Supply	624,000	747,000	690,199	720,440	764,281	N/A
Demand	636,543	747,000	764,000	803,000	772,198	N/A
Difference	-12,481	0	-30,241	-39,000	-7,917	N/A

Source: BIMCO/ISF, 2010

4.2.2 Sweden

Demand for seafarers on the Swedish maritime labour market is of course affected by the extent of the Swedish maritime labour market itself. According to a recently published report by Trafikanalys the Swedish flagged fleet’s share of the world fleet has, despite some decrement, up until 2008/2009 remained at a stable level. The share has since then decreased significantly and is now at a level of approximately 0.2 % (Trafikanalys, 2013).

The development of the Swedish flagged fleet for all ships above 1,000 gross tonnes, is in Figure 8 compared to the number of officers signed on board the Swedish flagged fleet. As displayed, the number of Swedish flagged ships has seen a significant downward trend over the last few years. From a position of 201 ships in 2009, the Swedish flagged fleet had by the end of 2012 shrunk to a mere 105 ships. Thus over a period of the last three years, the Swedish flagged fleet has lost 96 ships, or 48 %. In comparison the number of officers signed on board Swedish flagged ships has from a stable position in the 1990s, seen an upward trend between the years of 2001 and 2008. Following 2008 however the number of officers has seen a sharp decline and over a course of four years the amount of seafarers has declined by 2,757, or 24 %.

Figure 8: Swedish Officer and Fleet Development

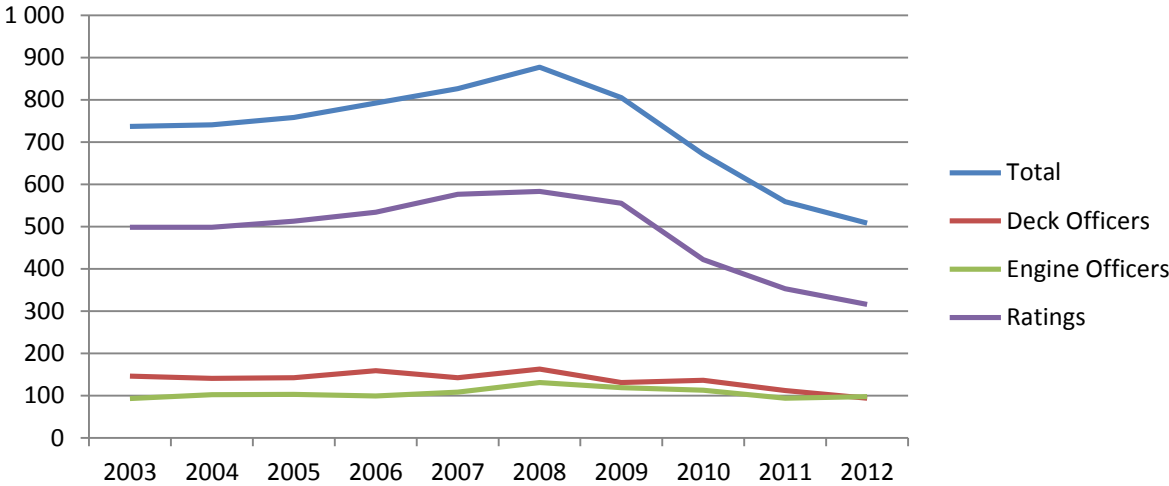


Source: SWESHIP/Lighthouse, 2013

When instead looking into the number of personnel signed on board ships receiving maritime aid and working under the TAP-agreement, one sees a similar development. Figure 10 shows a peak for all types of personnel working under the TAP-agreement in 2008, reaching a total of 877 employees. Four years later, the total is no more than 508, a reduction of 369, or 42 %. This heavy downfall also implies a reduction of total personnel

under the TAP-agreement relative to the number of Swedish seafarers. It is important to note that Figure 9 represents the number of employees employed per calendar year, thus the number of actual individuals employed under the TAP-agreement is somewhat higher. In addition, TAP-employees working on ships not eligible for maritime aid are not included.

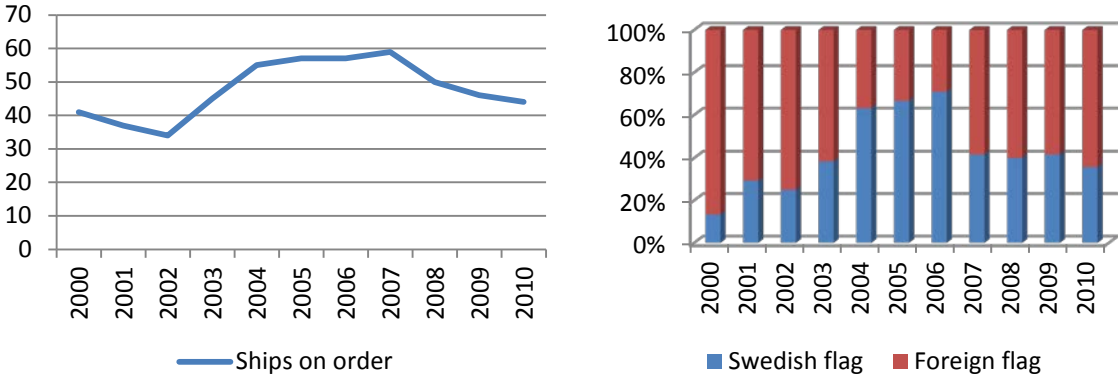
Figure 9: Development of TAP-employees on Swedish Flagged Ships



Source: SWESHIP/Lighthouse, 2013

The precarious situation of the Swedish flagged fleet is further accentuated in Figure 10, which displays the number of ships on order by Swedish shippers between the year 2000 and 2010 compared to how many of the ships delivered during those years that were assigned Swedish vis-à-vis foreign flag.

Figure 10: Ships on Order and Delivered in 2000-2010

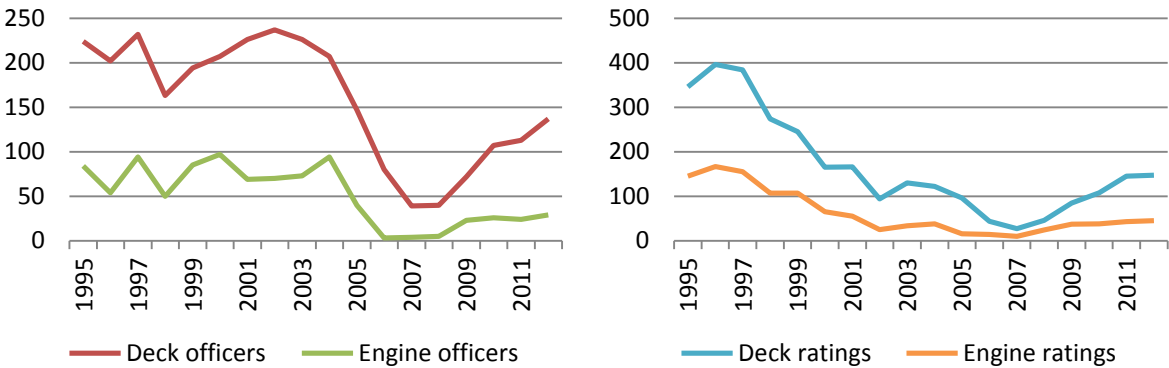


Source: SWESHIP/Lighthouse, 2013

The development can moreover be seen when looking at the unemployment rate of seafarers. The figures displayed in Figure 11 show the number of job seeker enlisted at the Swedish employment agency’s department for seafarers between 1996 and 2012. It is important to note that seafarers can also be enlisted outside the department for seafarers,

as well as characterised as something other than seafarers, whereby the figures tend to underestimate the actual number of unemployed seafarers. As displayed, the number of seafarers unemployed has increased for all positions of officers and ratings since 2007. While increasing, the number unemployed still remain at fairly modest levels.

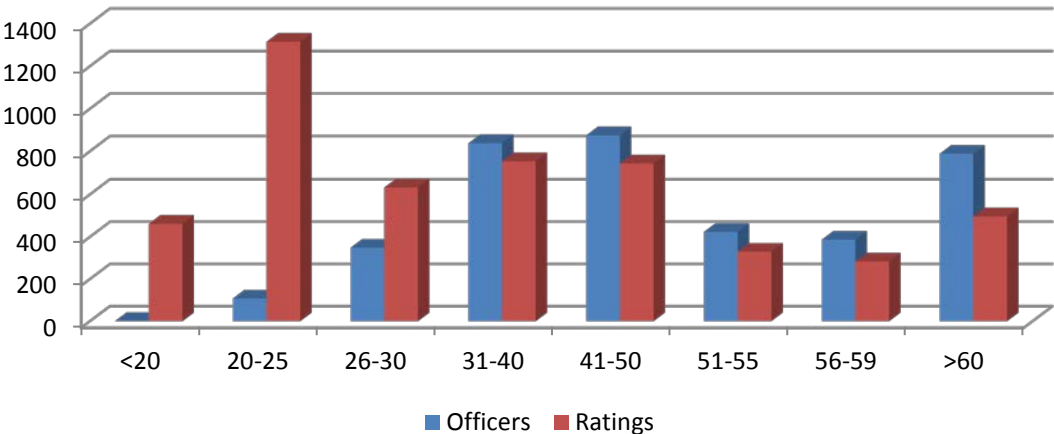
Figure 11: Unemployment Rate for Seafarers



Source: SWESHIP/Lighthouse, 2013

Lastly, the age structure for the officers and ratings signed on board Swedish flagged ships is shown in Figure 12. The average age in total was 39 years for 2012, and while age distribution for ratings is skewed towards the left hand side of the chart, the age distribution for officers is more evenly distributed. Slightly over 40 % are older than 50 years and roughly 20 % are 60 years or older. The tendency towards an ageing crew from the OECD countries is further supported by BIMCO/ISF (2010), and as a large part of the seafarers face retirement over the coming years, it is important to create the right conditions to make the seafaring occupation an attractive career path in the future.

Figure 12: Age Distribution for Seafarers



Source: SWESHIP/Lighthouse, 2013

4.3 The Education and Training of Seafarers

4.3.1 Worldwide

There is a clear absence of information regarding the many seafarers enrolled at the various METs and seafaring schools and training facilities around the world. The data available is often insufficient, partly due to the many different approaches utilized around the world when it comes to the education and training of seafarers. According to Ćorović et al. (2012), there are three different types of systems in use when it comes to seafarers' education: the traditional system which focuses mainly on learning by doing over a period of between five to seven years, the gradient system which involves the seafarer receiving a B.Sc. at a university or naval academy after three or four years, and the university system which on top of offering bachelor programmes also involves postgraduate studies, thus opening the door towards attaining an M.Sc. Regardless of the system in place, they are all obliged to comply with the minimum standards set forth in the STCW, and any additional requirements as set by the individual nation.

In regards to the European Union, the task of assessing the standards of the member countries METs has fallen upon the European Maritime Safety Agency (EMSA), which does inspections and assessments on a five year cycle in order to ensure compliance with the rules set forth in STCW. The data available for the number of diplomas issued from the METs tied to the EMSA is however scarce and insufficient, whereby an important indicator for the future supply of seafarers is lacking.

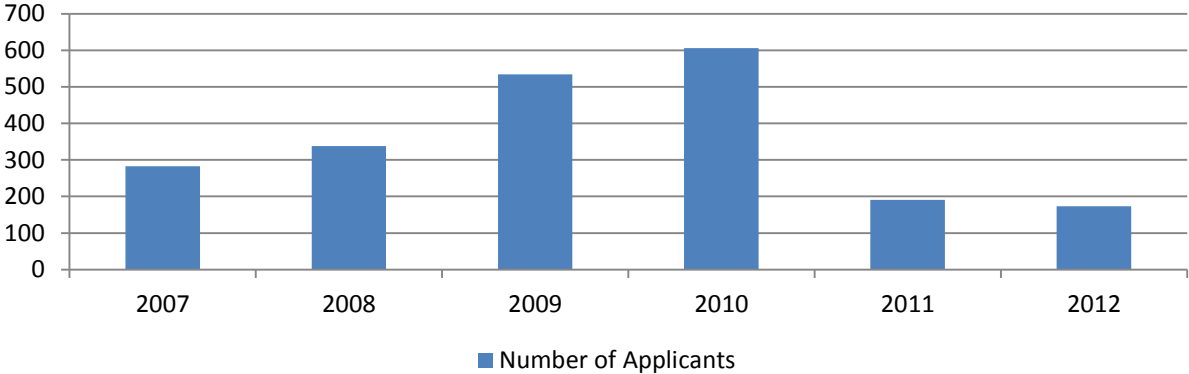
4.3.2 Sweden

Secondary Education

The career path of a seafarer can start already after completing primary education, after which one can enroll in a three year long education which, when completed, leads to the student holding a title of ordinary seaman or motorman, depending on the direction taken during the education (Sjöfartens utbildningsinstitut, 2013). As of fall 2013, seven schools will be offering secondary maritime education, either with a complete focus on seafarers or that include maritime programmes as a part of their educational program (SWESHIP/Lighthouse, 2013). Since 2011, three schools have discontinued their maritime programmes due to a declining trend of applicants which amounts to reduction of 30 % in the number of schools offering secondary education for seafarers.

Figure 13 displays the number of students, the capacity per year and the number of applicants for each of the seven schools in question as well as the three schools that have or will as of fall 2013 discontinue their maritime programme. The adjoining chart portrays the development of the number of applicants in the fall from the year 2007 to 2012. It is blatantly visible that the number of applicants has fallen significantly, despite a positive trend from 2007 to 2010.

Figure 13: Number of Applicants to Secondary Educational Programmes



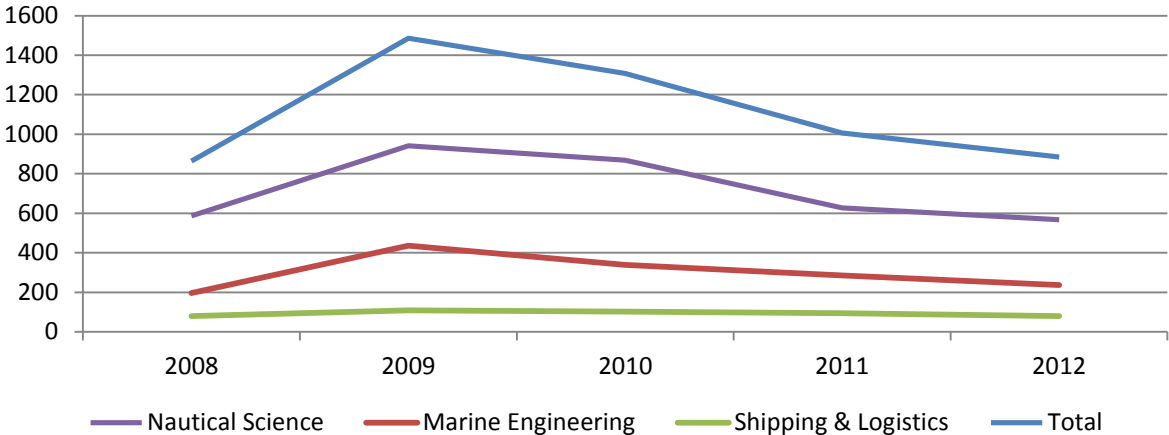
Source: SWESHIP/Lighthouse, 2013

Higher Education

Higher education of seafarers in Sweden is either three or four years at one of the two METs in Kalmar and Gothenburg. The former offers four-year educational programmes to become deck and engine officers, as well as a three-year programme dedicated for those interested in working within the shipping industry but on an onshore position. Chalmers in Gothenburg instead offer a three-year and a four-year programme for both tracks towards becoming deck and engine officers.

The number of first-hand applicants at fall between the years of 2008 and 2012 to the two METs is displayed in Figure 14, with the adjoining chart providing a graphical representation of the development in aggregated numbers. Following 2009 a decline has been prominent across the board, with the only exception being the two programmes offered by Kalmar, which in 2010 showed a modest increase of 2 %. While on a downward trend since 2010, the number of applicants still constitutes a demand exceeding the available supply at the two METs.

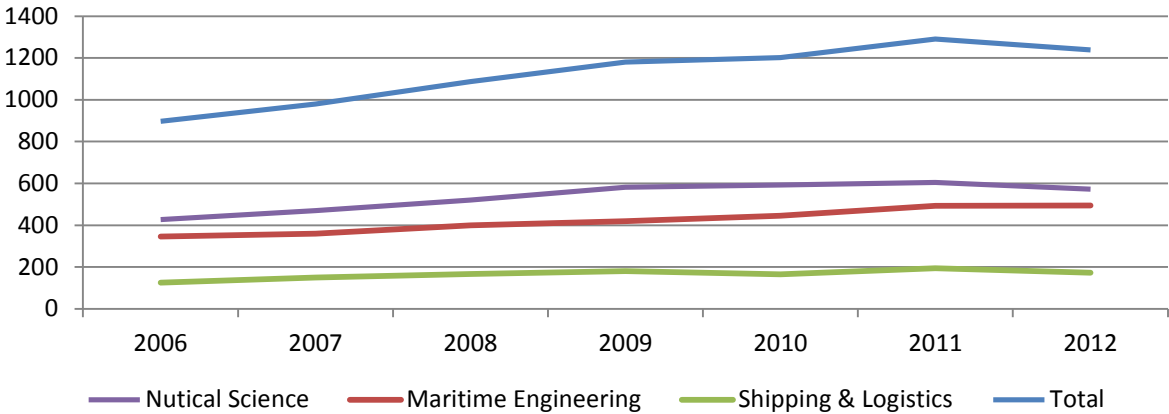
Figure 14: Number of Applicants to Higher Maritime Educational Programmes



Source: SWESHIP/Lighthouse, 2013

Figure 15 displays the total number of students that were enrolled at either of the two METs in fall from 2006 to 2012. Despite the downward trend in the number of applicants, the total amount of students studying at the two METs have continued to increase, yet again indicating a situation where demand still exceed available supply. As of 2012 the total number of students has however lessened somewhat due to a decrease of students at the programme for deck officers and Shipping and Logistics.

Figure 15: Number of Students Enrolled at Higher Maritime Education



Source: SWESHIP/Lighthouse, 2013

Mandatory on-board training

Regardless of being enrolled in secondary or higher education, the students are required to accumulate a certain amount of mandatory on-board training during the education in order to receive certification from the Swedish Transport Agency. As stated previously the required time when studying at either of the two METs is then dependent upon the amount of previously accumulated on-board training. Students with no previous experience are required to undertake 12 months of on-board training during the course of the 4 year education, while students with sufficient prior experience enrolled at the 3 year programme focuses on the theoretical aspects of the education, i.e. no additional experience during the education is required (Arbetsförmedlingen, 2012).

Due to the limited number of ships available for on-board training, the number of students enrolled in the 4 year programmes are limited. This does however not apply to the students in any of the 3 year programmes as the required on-board training time has already been achieved. There is however exceptions as students enrolled in the shorter programme may still require additional on-board training, training which is however not included in the curriculum and does thereby require the student to gain the missing time in his own spare time (The Swedish Maritime Agency, 2010)

The requirement of on-board training does provide a problem due to the diminishing Swedish fleet. The ships receiving Swedish maritime aid are required to take on-board students but as the number of ships has decreased, there are more students than positions

available. As a consequence, the Swedish government have indicated that the maritime aid will be extended to include additional types of ships (Trafikanalys, 2013). As a further attempt to mitigate the imbalance of supply and demand, the Swedish government has announced a 2.2 million SEK support, to compensate for the increasing costs incurred by the METs for sending students to ships flying a foreign flag (Näringsdepartementet, 2013). The Swedish government is currently discussing additional solutions to the problem, amongst which an increased cooperation within the Nordic countries is a possible solution (Näringsdepartementet, 2013).

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5. Qualitative Empirical Findings

5.1 Swedish Maritime Officers

When looked as a group, Swedish maritime officers were across the board considered to be in many ways synonymous with quality. While the governmental agencies had little response other than that, the following responses could be distinguished.

Shipping Companies

The interviewed shipping companies, whether still operating ships flying the Swedish flag or not, responded the same when it came to their views and opinions on Swedish maritime officers. They are well liked, autonomous, well-educated, easy-going and well versed in almost all aspects imaginable. A prominent feature of particular importance was their ability to deal with cultural differences which, in a multicultural crew, is key to the safe and secure operation of a ship. Despite recommendations from the finance department, one shipping company had a policy of employing Swedish officers for the majority of their fleet. Despite incurring larger costs, they felt that the quality obtained with this approached thus far weighed up for the added expenses. However, all shipping companies stated that these qualities only go so far, as it is still the bottom line that is of foremost importance.

MET

The MET highlighted two primary aspects to the desirability and attractiveness of Swedish maritime officers. First of all, the education and training of seafarers in Sweden are well known to produce officers that are highly skilled at their trade due to an extensive educational background, tried and true through many generations. Secondly, maritime officers from Sweden are generally considered to be good leaders, taught to be autonomous and to take on responsibility. The Swedish culture was also highlighted, where communication was said to be a particular feature. In this aspect, good language proficiency in English facilitates a good communication with others on the international maritime labour market and makes them more sought after.

Yet again, responses point out that without the maritime competence accumulated by the officers while working at sea, Sweden would not be able to efficiently operate ports, offer safe pilotage, conduct inspections of ships and a number of other functions related to the Swedish maritime cluster.

Labour Market Parties

As the labour market parties are concerned, they conform to each and every already aforementioned response. Scandinavians in general are well thought of and while other nations often follow a highly hierarchical structure, officers from Scandinavia treats everyone the same, and encourages own initiatives to be taken, thereby creating a working place where everyone takes responsibility and pride in what they do. As stated by SEA: *“the Swedish way of managing a ship is one of the reasons why Swedish officers are so popular amongst foreign ship owners”*.

5.2 The Swedish Maritime Labour Market

Shipping Companies

The Swedish maritime officers employed on the market today are expensive. However, according to the shipping companies interviewed, the cost difference to other nationalities is thus far within a limit that justifies the added costs due to the added quality they perceive to gain from employing Swedish officers. For those flying the Swedish flag, they saw no immediate concerns in the future, while those flying foreign flag expressed concerns in regards to the upcoming MLC implementation. One company had calculated the effects it would have on the cost of employing a Swedish officer and simply come to the conclusion that, while Swedish maritime officers are on the right side of the line today, such an implementation would lead to the replacement of Swedish officers.

The shipping companies had furthermore seen an increasing competition for junior officers, especially from the offshore sector, which had made it hard to attain the number of junior officers required to create the regrowth of Swedish senior officers that was needed.

Labour Market Parties

The responses from the labour market parties advanced a number of aspects, key to maintain and support the employment of Swedish maritime officers. SEKO emphasized the Swedish maritime aid as the single most important aspect as of today for retaining a Swedish flagged fleet, not to mention Swedish maritime officers on the domestic labour market. On the international maritime labour market, the importance of the INT-agreement is however portrayed as essential in order to reduce the cost for Swedish maritime officers on the international labour market. MOA did however indicate a desire towards simplifying the sometimes diffuse and complicated rules on the labour market, which quite often are hard even for the governmental agencies in charge to interpret. These present obstacles for Swedish maritime officers to enter the international maritime labour market, and incur unnecessary hardships for the many seafarers from Sweden. The complexity of, first and foremost taxation rules, has according to MOA also lead to a large grey market of Swedish maritime officer working abroad.

In response to the TAP-agreement, SEKO states that while the introduction of TAP had an immediate impact on the employment opportunities of Swedish maritime officers on the national market, the recent revision to allow for a higher proportion of temporary employed personnel will not have any immediate impact as ship owners of today rarely meet the stipulated limits. According to SEA, the extension of the TAP-agreement is not intended to reduce the number of Swedish maritime officers, but instead directed towards the ratings employed on Swedish ships, as a way of reducing the disparities to other countries. However, SEKO questions the employers' view of increasing the number of temporary employed foreign ratings as independent calculations have shown that the savings are modest at best.

The upcoming implementation of the MLC was by the parties seen as mostly positive, while its implementation in Sweden has been forcefully questioned. MOA states that if there is to be a labour market for Swedish officers outside of Sweden, the way the Swedish government chooses to implement the MLC is imperative. One cannot motivate the employment of Swedish maritime officers if the costs for the same continue to increase. According to MOA, they have already received indications that the hiring on the international labour market of officers from Sweden has stopped, and that an introduction of the rules would result in discontinued employment for a large amount of the approximate 1000 officers working on the INT-agreement. The fact that Swedish collective agreements already offers better conditions is, according to MOA, something that has been lost in the on-going discussion.

Furthermore neither SEKO or MOA, nor SEA are willing to contend to a statement that Swedish maritime officers are expensive. According to SEKO there is not one Swedish ship owner that that complains about the cost of Swedish personnel. Ship owners in Sweden are instead content with the level of quality attained by Swedish seafarers, as no one would contest to employing low cost and poorly trained seafarers. The MOA's and SEA's responses further corroborate this statement, saying that the problem is not the cost level of Swedish maritime officers, but rather the cost of ratings, which are far above the cost structure on the international level. SEA portrays the industry as one where ship owners are fighting over cents when bidding on cargo, and accumulated added expenses in the manning of the ships are what make the difference. According to SEKO however, this view of manning costs as the base for competition, is not true. Were the industry instead devoted to lowering the costs by operational measures, the savings would be much greater, than any number of foreign personnel could manifest.

Governmental Agencies

According to one respondent the willingness to employ Swedish maritime officers is tied to the competence and experience attained by said seafarer. If there is any doubt about this, they stand the chance of missing out on employment opportunities, as lesser qualified foreign officers will be employed for a much lower cost. As portrayed by the shipping companies, there have been signs of increased demand, especially from the offshore sector in Norway, but a demand contingent on the right qualifications. Furthermore, responses indicate that the demand for seafarers are experienced to be significantly lower on the domestic market than what's been portrayed by other parties. This demand is moreover perceived to be unevenly distributed between the many sectors within the industry, as well as between the deck and engine officers.

While the rules affecting the cost level of Swedish maritime officers were considered to obstruct the employment opportunities of Swedish maritime officers, the overall opinion was one where the implications for the seafarers themselves where of equal concern. The regulatory framework was seen as particularly difficult, where one example mentioned was the taxation rules for seafarers employed on ships with an employer within the EU,

operating in deep sea shipping. As the tax exemption is tied to the ship, the seafarer has no way of knowing the operational patterns of the ship in advance, which meant that many either ignore employment opportunities in the international labour market, or take a chance that might affect them negatively in the future. One response was that such rigid regulation was perhaps more of a restriction for the employment of Swedish maritime officers than anything else.

5.3 Governmental Support

Shipping Companies

While the shipping companies operating foreign flagged ships had little to say about the specific governmental support in Sweden, they did express an opinion that the recently released governmental action plan was a step in the right direction, although more is needed in order to forcefully deal with the current diminishing Swedish merchant fleet, and to support the rest of the industry. A view of “*being too late*” came up from the ship owners with a Swedish flagged fleet, although they were not surprised by the development.

The responses however revealed a high deal of anguish with regards to the coming MLC implementation, where the shipping company operating foreign flagged ships flat out stated that its consequences on the cost level for Swedish maritime officers would be the end of the company’s willingness to employ them.

One of the shipping companies was cautiously awaiting any changes made by the Swedish government, and was hesitant to express any expectations in the future. Their response was that the state of not knowing was perhaps worse than anything other. With a clear position taken by the legislators and policy makers, one could sketch scenarios and make decisions for the future, while in the current state of uncertainty you are clueless as to how to proceed.

MET

While the MET expressed pleasure over the fact that the government has awarded additional money in the support of obtaining training space on foreign flagged ships, they declines to enter into a further discussion regarding any governmental regulations or policy making.

Labour Market Parties

The various labour market parties expressed concerns into the government’s view on shipping and common responses stated that the lack of interest how goods were moved to and from Sweden was one main issue why ship owners have chosen to change the flag of their ships. The general consensus being that the state support for the maritime industry has failed to excite and inspire hope for the future. However, as indicated by SEKO, this is not entirely the fault of state. During the good years for Swedish shipping in the first decade of the 21st century, all of the labour market parties, them included, chose to take a reactive stance and the previously successful collaboration between them was put on hold. Had they,

according to SEKO, instead continued to stress the importance of the industry and worked together, the outcome of the industry today would perhaps been different.

The proposals of the governmental action plan for Swedish shipping were consistently met with responses portraying indifference for the future. All three parties responded that while positive to the realisation of an action plan that they felt had been missing for so long, they did not see any proposals that would have any real difference for Swedish shipping or the support of Swedish seafarers. And while the potential expansion of the maritime aid to also include other types of vessels was generally considered a good approach, they failed to see how the extension of the same would help Swedish shipping in the larger sense.

Due to the seriousness of the situation, the labour market parties have increasingly joined forces in order to try to increase their combined influence on the market.

Governmental Agencies

Without expressing any direct opinions as to the policies and regulations for Swedish seafarers, the gist of the matter is that seafarers today are forced to take on more and more responsibility. Responses indicate that the rules to abide to has been made increasingly difficult and some gave answers that a much larger part of their workload than before is directed towards answering questions from individual seafarers. Some also portrayed purely personal opinions that while something finally is happening through the new governmental action plan, the measures are a bit too small and a bit too late. The inertia experienced was also perceived to be of concern.

5.4 Education & Training of Seafarers

Regarding the training and education of seafarers in Sweden, the interviews provided quite similar responses across the board of respondents. The general view was one of overall good quality where the METs manages to educate Swedish maritime officers well suited for the labour market, both nationally as well as internationally, and where the knowledge and experience of maritime officers are important for the entire maritime cluster. There were however some discrepancies between the respondents' answers, of which a selection is presented below.

Shipping Companies

The shipping companies asked, equally addressed the fact that while the theoretical education of maritime officers in Sweden were beyond satisfactory, the more important aspect of hands on experience were in some aspects lacking behind. The level of previous experience was considered of far more importance and while many were thought to have all the requirements necessary on paper, their skill level while working at sea was in some cases not satisfactory. One shipping company furthermore expressed a concern as to the attitude of graduates over the recent couple of years, which seemed to be expecting somewhat more glamorous lives at sea than the ones handed to them, whereby they were perceived as unwilling to do the prerequisites necessary to move up the ranks.

There were furthermore some criticism towards the Swedish way of interpreting the international regulations and requirements set forth in the STCW convention. One shipping company put forth the aspiration to always be the best, as both the best and worst quality of the Swedish view on education and certification. As a consequence, shipping companies operating ships of smaller sizes and tonnage, experienced a hard time attracting graduates as Swedish application of the rules did not allow for the officer to count the time served on board towards his time at sea required to be eligible for higher ranks.

Altogether however, the Swedish maritime officers emanating from the Swedish educational system were highly esteemed. While they were considered far more expensive than most foreign counterparts, the hiring of recently graduated officers was recognised as important in order to maintain a sufficient flow of higher ranking Swedish officers.

MET

Not surprising the responses obtained from the MET was positively skewed in favour of the educational practices applied in Sweden, where the extensive education was seen as the largest competitive advantage of Swedish maritime officers. The fact that the education in Sweden, apart from the professional degree, also leads to an academic degree, were seen as particularly important. The key to maintaining a higher quality of education, and thus being able to produce competitive officers, was to a large degree ascribed to the large amount of applicants each year. It was seen as imperative to maintain a high level of interest for the seafaring profession, in order to ensure that only the most motivated and suitable students are enrolled into the programmes. Therefore, an issue of concern had been the declining number of applicants over the last couple of years, but more importantly the sudden influx of drop-outs that could be observed from time to time, the reasons for which are still unknown.

Another issue of concern were also raised as particularly important. It was stressed that in order for Sweden to produce highly qualified officers in the long run, the existence of a national merchant fleet is imperative. This was related to the often discussed shortage of positions on board the Swedish fleet dedicated to satisfy the students need for mandatory on-board training. It is perceived as increasingly difficult to fulfil the schools responsibility of providing hands on experience, to the extent that Chalmers for example, has one person dedicated solely on this task. Thus while the government, as a part of their action plan for 2013, earmarked 2.2 million SEK to be used for on-board training on foreign flagged ships, the shortage of on-board training positions was a growing concern.

Lastly, one of the larger bottlenecks for Swedish maritime officers were considered to be the entryway to the labour market. After graduating, the former students require more experience in order to be eligible for higher certificates and thus move up the ranks. However the lower officer positions that they apply for are often manned with foreign personnel due to their low cost relative that of a Swedish maritime officer but, as of today any extensive information regarding where the graduates are employed does not exist.

Labour Market Parties

The responses from the various labour market parties were in many respects, quite similar. SEKO pointed to the importance of keeping the high standards for training and education evident today in Sweden, while at the same time not diverting too far from the course taken by other nations. The advantage of supplying highly competent officers runs the risk of becoming a disadvantage, as too extensive education on top of the minimum requirements set forth by the STCW convention can lead to cost of employment not economically viable in today's cost driven reality. In comparison, the MOA has been very clear on that the higher requirements in Sweden shall remain. Keeping a distance to the minimum STCW requirements adopted by so many other nations creates a competitive advantage, an advantage still desired on the international market. If Sweden instead were to apply the basic requirements of the STCW, they are of the opinion that it would not take long before Swedish maritime officers are outrivaled by competitors with the same amount of education under their belt, but at much lower wage levels. SEA falls somewhere in between, where there is an on-going discussion amongst their members as to what level the education and training in Sweden should be at. Some are pro lowering the requirements, while others want to maintain the higher standards.

All parties are, however, consistently pressing the importance for maritime officers and seafarers due to their influence within the maritime cluster. For a nation so dependent upon shipping they all see a value in retaining the education and training of maritime officers in Sweden, despite the situation where the Swedish merchant fleet is heavily decimated. SEA goes so far as to see a point in educating maritime officers solely for other markets, as the seafarers, despite in many cases not paying taxes in Sweden, still spend their disposable income in Sweden. As put forth by MOA:

“We have the longest coastline in Europe. We will continue to need maritime knowledge. You need that knowledge for ports, pilots, maritime authorities. There is still a business that is dependent of the sea and the knowledge you gain from training is important for Sweden”.

A further issue that resurfaces is the shortage of on-board training positions on board the Swedish flagged fleet. MOA considers this to be a real challenge and threat to sustaining the quality and reputation of the Swedish maritime officers, and states that anyone that misses out on training during the school system, has practically an impossible task of acquiring the needed experience ahead of him. When asked about the governmental support to send students to foreign flagged ships for their mandatory on-board training, they differed somewhat in their responses. MOA were optimistic about the initiative, and while SEA on the one hand were positive for the increased possibilities for students to acquire their mandatory training, they believed it might create an unfair situation on the market. It could

essentially be seen as supporting ship owners which decide to leave flying the Swedish flag, while ship owners struggling to stay are not entitled to the same subsidy.

Governmental Agencies

The agencies interviewed hold the officers emanating from the METs in high esteem and point out that the METs reputation for producing quality maritime officers is internationally well-known. As previously indicated, there were concerns raised from the agencies in regards to both the lack of on-board training positions, as well as the diminishing Swedish fleet in general. It was generally considered that the Swedish system should not really be in the business of educating maritime officers for other nations, although in the absence of a Swedish fleet it is short of required to try and adapt to where demand is.

An issue raised on numerous occasions was the notion that education in Sweden had not kept up with the demand of the market. There is a sense that other countries have been better at adapting their education and training to create a better fit between the officers' competencies and the requirements posed on the market. Norwegian offshore was taken as an example where demand exceeds national supply, but Swedish officers seeking employment are turned down due to not having attained the minimum safety requirements. Requirements they have to seek, and pay for, on their own.

It was furthermore perceived as the difficult entry to the labour market varied between engine and deck officers, where the former had a much larger employment base, especially on land where demand for engineers are constantly kept at high levels. The difficult task of getting a first job was seen as increasingly troubling considering the many options, especially for deck engineers, to seek employment elsewhere.

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6. Analysis

As a way of analysing the findings presented in this thesis it is imperative to reconnect said findings to, not just the theoretical framework at display, but also in relation to the initially laid down purpose of the study. To reconnect, the purpose of the study was to gain a deeper understanding of the Swedish maritime labour market and the forces at play, to determine the competitive situation of Swedish maritime officers on the international maritime labour market, and lastly to identify a general set of competitive grounds on which Swedish maritime officers compete.

6.1 The Swedish Maritime Labour Market

The authors' analysis is that the Swedish maritime labour market can generally be thought to correspond well to the theoretical framework presented. Lillie's (2004) take on what characteristics that are to be expected in the maritime labour market of an industrialised country flag, fit well with the responses gathered from the interviews. A market composed by an intricate grid of rules and regulations, where the various labour market parties are granted a high degree of autonomy and influence on the market is to be expected. Also, a focus into the education of adequately trained and certified officers is well established. The higher cost structure which, according to Alderton (2004), is tied to industrialised flags is evident also on the Swedish maritime labour market. The somewhat higher cost structure for officers are however not thought to be of major concern, whereas the cost for Swedish ratings are keeping the overall manning costs in Sweden at comparably high levels. Despite actions taken in order to reduce the costs associated with the employment of ratings, mainly through the TAP-agreement, the costs are maintained at a level where the Swedish shipping industry is at a competitive disadvantage. As the responses indicate a desire from the industry to employ well educated officers, it is hardly surprising that the demand for officers on the Swedish market is high, and that an overwhelming majority are Swedish nationals. However more surprising is the fact that despite the extension of the TAP-agreement, the percentage of Swedish ratings employed on the Swedish market are still comparable to the level of the Swedish officers. This is most likely due to the employment security as regulated by Swedish law, which as a consequence means that it will take a significant amount of time before the crew substitution will reach the limit set forth in the collective bargaining agreements. As indicated by the demographics presented in Figure 13 however, the number of aged officers might open up for an increase in the number of officers under TAP-agreement, as many are prone to retirement within the next coming years.

Despite being in high demand on the national maritime labour market, the increasing financial pressure has taken its toll on the employment opportunities for Swedish maritime officers, especially considering the last few years. This can be related to a number of reasons. First and foremost is of course the affect that the financial crisis has had upon the Swedish shipping industry. All respondents shared a common view of stability within the industry prior to the outburst of the financial crisis, where the national labour market were able to satisfy the needs for employment for a large number of officers emanating from the

two maritime education and training institutions in Kalmar and Gothenburg. This view is also corroborated by the statistics presented in Figure 9, which despite a slow decrease in the number of ships flying the Swedish flag, saw a slight increase in the number of officers and ratings employed on said ships. Since 2009 however, a decimated fleet has been the result of increasing financial pressure on the shipping companies. As the size of the domestic labour market and the employment opportunities on the same is directly connected to the number of ships flying the Swedish flag, the number of officers as well as ratings has declined. The reduction of officers and ratings has not been as severe as the demise of the Swedish flagged fleet, most likely as the types of ships being flagged out are merchant ships with considerably less seafarers employed compared to for example passenger ships. Responses from the interviews do however indicate a rising concern as to whether the Swedish maritime aid can continue to balance the scale in the favour of maintaining also passenger ships in the future. If not, the employment opportunities on the labour market for Swedish seafarers run the risk of falling drastically.

An aspect of reoccurring nature in the responses gathered is the belief that the future of the Swedish maritime labour market lies in the hands of the support by state. It was deemed unlikely that Sweden would have any ships left were it not for the maritime aid provided today. The governmental action plan was supposed to meet the needs of the industry but judging by the responses it was in total merely seen as a step in the right direction, providing the industry with little, if any, remedies. Considered a step in the right direction was however the financial support to send students to foreign flagged ships to receive their on board training. From the education and training institutions this was seen as crucial in order to secure the future supply of highly skilled Swedish officers.

Lastly, the collective bargaining by the unions and employee organisations on the Swedish market correspond well to the situation of many maritime nations of Europe as described by Alderton (2004). Traditionally strong labour unions have despite losing influence still been able to keep extensive negotiation rights for both Swedish and foreign seafarers. While the market parties have commonly been in conflict with one another, they have rallied as a response to the precarious situation of the industry, and concessions have been given in order to keep a Swedish flagged fleet and retain as much national employments as possible. By being united, the labour market parties stand a larger chance of affecting the outcome for Swedish shipping in the future.

6.2 The International Maritime Labour Market

While demand for Swedish officers is still kept high on the domestic labour market, the diminishing number of employments has increased the surplus of officers domestically, forcing them to seek employment abroad, or in interrelated fields. The statistics show that as the Swedish flagged fleet went in a downward spiral in 2009, the unemployment rate for Swedish maritime officers also increased (Figure 12). While still being low in absolute numbers, the statistics likely underestimate the increase, as the responses of the interviews

indicate an increasing number of seafarers seeking employment in neighbouring countries or changing their line of work completely. Furthermore the rate of unemployment is thought to vary within different segments. As demand is far from homogenous between the various segments, it is increasingly important for Swedish officers to receive education and training corresponding to the needs of the market. Responses from both the shipping companies and the governmental agencies interviewed does however indicate increasing difficulties in finding officers with the right certificates, especially for them to be desired on the international stage.

On the global maritime labour market, statements by Lane (2000) advanced the existence of a shared view amongst shipping companies in regards to what nationalities are suitable for the positions on board a ship. In conformity with this, it is safe to say that the responses gathered puts Swedish officers in the group of preferred nationalities for even the most senior rankings on board a ship. Officers originating from Scandinavia are considered to have a high standing within the shipping community and that Swedish officers in terms of education and training are amongst the best in the business. However there seems to be somewhat of a missing link between that of senior and junior officers. While the former is well thought of and in high demand on the international stage, the latter is generally considered too expensive to justify the added quality. As the lower ranking officers and rating positions are increasingly being manned by low-wage alternatives, findings suggest an increasing period during which newly graduated officers are unemployed, a situation which could potentially spell difficulties for the continued growth of senior Swedish officers in the future. The difficulties for recently graduated officers to receive their first employment is besides cost also connected to an apparent mismatch between demand from the labour market and the supply provided by the METs. Difficulties finding employment can thus also be contributed to the diminishing Swedish fleet as well as the increased number of seafarers competing for the same positions due to the TAP-agreement. There is however differences between deck and engine officers, where the engine officers seem to be better matched with the market demand.

The shipping companies interviewed seem however to be aware of the issue and taken it upon themselves to ensure a continuing stream of officers moving through the ranks. Despite rendering the companies at a cost disadvantage, it was perceived as a way of ensuring the right competence for the company in the future. The trade-off between cost and efficiency advocated by Lane (2000) has thus far been a cost that the shipping companies have been willing to bear, but the responses do however indicate that the figures on the bottom line are closing in on the amount that the shipping companies are willing to pay for the inherent quality of Swedish officers. The labour unions also show concerns whether or not Swedish officers will be able to withstand an increase in the cost difference to officers from other nations.

The concerns raised by the interviews are mostly related to the coming regulations set forth by the MLC. Depending on how the Swedish government chooses to implement the convention, it may result in changes to the Swedish statute for social insurance, which will affect the cost of employment for the approximately 1,000 Swedish officers currently signed under the previously mentioned INT-agreement. According to MOA this could potentially lead to the dismissal of nearly all of the Swedish officers working under the INT-agreement, something further corroborated by the responses from the shipping companies, which are following the development closely. As the cost level of Swedish officers are already closing in on what is though feasible, a possible further increase is sure to have lasting effects on the employment opportunities for Swedish officers on the international market.

The current rules of taxation is furthermore of main issue from a supply side point of view. The interviewed governmental agencies receive a great deal of inquiries from seafarers in regards to the possible results of a future possible employment. Due to the many factors involved the outcome is rarely certain, whereby officers seeking employment on the international market are either forced to risk the potentially unfavourable consequences of seeking employment abroad, or hold off and wait for something to open up on either the Swedish labour market, or any on the adjacent countries covered by the various tax treaties.

In short, the competitive situation of Swedish maritime officers on the international maritime labour market is, as of today, fairly good. Although a subdued world economy has reduced the demand for officers and seafarers alike, and as more and more are being supplied from low-wage countries, there is still a shortage in the supply of officers on the global labour market (BIMCO/ISF, 2010), a shortage though to increase over the coming years as the economy of the world picks up again (BIMCO/ISF, 2010). Responses across the board of interviews do however indicate hesitancy as to whether Swedish maritime officers will continue to be in demand in the future. As the MLC enters into force, a lot hangs in the balance on whether the Swedish government chooses to go through with the planned changes of the statute of social insurance. It seems as necessary to at the very least maintain the conditions for Swedish officers, especially in light of the diminishing domestic labour market which can be assumed to increase the number of Swedish officers seeking employment abroad.

6.3 Swedish Maritime Officers

The trade-off between cost and efficiency, as advocated by Lane (2000), corresponds well to the picture painted by the interviews, where the findings indicate that Swedish maritime officers compete with a high degree of efficiency and quality. As the overall level of competence has decreased in the transition towards a global maritime market (Alderton, 2004), an opportunity can be thought to have presented itself for Sweden to supply the market with officers that possess a high level of competence. The aforementioned trade-off is however in need of continuous assessment as if the marginal efficiency gained by

employing Swedish officers is no longer deemed worth the additional cost, the demand for Swedish officers will eventually decline.

In regards to the current situation, responses from the interviews suggest that the high competence level of Swedish officers is made up of both tangible as well as intangible assets. In regards to the former, Swedish officers have an extensive educational background, one which requires a large amount of theoretical knowledge, but one that also demands that the officers receive an adequate amount of hands on training before being allowed to graduate and receive their certification. As a consequence of the stance taken to educate above the minimum provisions of the STCW, Swedish officers maintain a high degree of expertise and knowledge demanded on both the domestic and international labour market.

While the tangible assets of education and training could possibly be mimicked, the immaterial or intangible resources possessed by Swedish officers are far more difficult for others to achieve. Swedish officers, like that of Scandinavian officers in general, are thought to possess leadership skills that make them highly suitable for the most senior rankings on board a ship. They are considered to be self-reliable and capable of taking own initiatives whenever warranted by a situation. They fit well within the multinational crews portrayed by Alderton (2004) as they possess the language proficiency and the communicative skills needed in an international setting. Furthermore Swedish officer working on the international maritime labour market are encouraging the crews to take own initiatives by promoting a less authoritarian leadership style which, on the basis of the interviews, are appreciated in the field. A telling tale as to how appreciated Swedish officers really are comes from one of the shipping companies interviewed in the study, which were set on the employment of a certain amount of Swedish junior officers, despite their opportunity to employ persons from the Far East with the same exact certifications but at one third of the cost.

If the Swedish maritime officers are indeed to compete on the basis of competence and quality, a discussion of the required prerequisites must be held. Besides of course being determined by the requirements of the STCW, the Swedish Transport Agency and the programmes offered by the METs, the quality is also affected by the degree of interest in the seafaring profession. Responses from the METs emphasized the need to maintain a sufficient number of applicants to the various programmes, as one then can make sure that only the very best and most motivated are accepted. Therefore the recent years decline in the number of applicants, as seen in Figure 15, can be seen as somewhat worrying. However the demand is still superior to supply, something confirmed by responses from the METs. A more alarming matter is the periodically large number of drop outs, which the METs as of today fail to see any reasons to. Moreover, the aforementioned support for on board training is arguably of utmost importance to realise a continued regrowth of highly trained and competent Swedish maritime officers. The shipping companies of the study did raise concerns in regards to the practical experience of the Swedish graduating officers, whereby

the measures now taken to ensure that each and every one receives an adequate amount of on board training will hopefully mitigate any such issues.

Lastly the responses seem to point to an educational system preparing and supplying officers to the domestic market. It could be argued that the educational system should take on a wider stance and look beyond the borders of Sweden, as the alternative of unemployed Swedish officers might be less intrusive. However supplying seafarers to work on markets other than the Swedish does not come without criticism, as money spent on the education of said seafarers can be thought unnecessary, along with the fact that Sweden misses out on taxing the income that's being generated. However, as the Swedish officers are most likely to continue to reside within Sweden, their disposable income will also be spent there. Furthermore, in line with Mitroussi's (2008) claim that a geographical shift of labour sourcing may lead to a detrimental loss of maritime know-how and expertise, responses from the interviews point to a maritime sector dependent upon the regrowth of Swedish officers. With Sweden having the longest coast line in Europe, it is important to continue to employ experienced and competent seafarers as they most often will pursue a land based career after ending their life at sea.

6.4 Discussion of the Findings

As stated by Ghauri & Grønhaug (2002), the adopted method of triangulation can help in to achieve a higher degree of validity in the findings of a study. By arranging face-to-face interviews with a number of different actors involved in, and affected by, the maritime labour market, and coupling this to statistics about the Swedish maritime labour market, the findings can be considered to have a sufficient degree of validity.

However, the likelihood of bias in a qualitative study is generally present, especially as organisations affected by the topic of focus is interviewed, something which must be taken into account when evaluating the findings. Compared to what could be expected prior to the completion of the study, the results show a surprising amount of consensus amongst the parties interviewed, and as such the bias from the interviews can be considered limited. However as it have been indicated that the labour unions and the organisation representing the ship owners in Sweden are taking a unified stance in order to exert influence on the government, the possibility of collective bias do still exist. Contact has been made with the government in order to get their views on the issue at hand, but as the authors have received no response, the findings lack one part that could have proven useful for the thesis.

Furthermore, the interviewees of the governmental agencies were quick to point out that any opinions given are likely to be a mixture of both the agencies stance on the issue as well as any personal opinions of the respondent. Due to conflicting schedules, unwillingness to participate and geographical unavailability not all anticipated respondents have been able to participate, and thereby allowing for the possibility of additional opinions to be in disagreement from the ones stated in the thesis. The authors do however consider the general findings of the thesis to be credible.

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7. Conclusions

The reduced number of ships flying the Swedish flag has given rise to what constitutes the underlying research problem to this thesis, namely the declining number of employments on the Swedish maritime labour market. As the employment opportunities on the domestic labour market are in decline, the competitive situation for Swedish maritime officers on the international labour market becomes an area of considerable interest. The purpose of this study has therefore been to determine the level of competitiveness of Swedish maritime officers by the compilation and analysis of market statistics, in association with responses gathered from interviews with various participants on the market.

RQ1: *What factors affect the demand for maritime officers on the maritime labour market?*

The findings indicate that the overall demand of maritime officers is derived from the economic activity on the market. Whereas previously set on the domestic labour market, the demand is now increasingly determined internationally, while still of course affected by the conditions of the former. As demand varies between the many shipping sectors so do the demand for officers, where engine officers can be considered to be in a more favourable position compared their deck counterparts, as they are also coveted for onshore employment. Moreover, the demand for seafarers appears to be determined in a trade-off between price and quality, where the former increases in importance when the market is low, and vice versa. With reference to Swedish maritime officers, the findings seem to indicate a situation where the officers' employment opportunities are determined in the interplay between the national and international market. What level of competitiveness that can be attributed to said officers is thus largely dependent upon how domestic regulations affect employment opportunities in the international labour market.

RQ2: *On what grounds do Swedish maritime officers compete?*

The findings suggest that Swedish maritime officers compete on the basis of a high level of both tangible as well as intangible qualities, qualities that more than compensates for the slight cost disadvantage of hiring a Swedish maritime officer. Swedish officers holds a great deal of knowledge derived from an extensive amount of education and training, as well as also possessing leadership qualities, good language proficiencies and the communication skills needed to work in the multinational crews on the international labour market. Furthermore, they are thought to be dedicated and efficient, as well as thorough and self-sufficient.

RQ3: *What would be an appropriate course of action in order to support the competitive situation of Swedish Maritime officers?*

Lastly, the results point to a few possible measures in order to further support the competitive position of Swedish maritime officers on the labour market. A continued emphasis on quality in the education and training of officers will ensure their desirability although it is important that the added quality correspond to a cost level that is kept within the limits of what shipping companies are willing to bear. Furthermore, due to the diminishing employments domestically, an adaptation of the certifications offered to what is demanded internationally would also strengthen their position. Leaving the implementation of upcoming international regulations of the MLC to the domestic labour market parties, would also keep the cost of employing Swedish maritime officers at current levels, while at the same time mitigating the risk of Swedish officers being shut out from certain areas of the labour market. Moreover, a simplification of the tax regulation for seafarers could prove beneficial, as it would reduce the entry barriers to the international labour market.

In conclusion, the diminishing employments on the domestic labour market, coupled with anxiety as to how upcoming international regulation will affect the cost level of Swedish maritime officers, poses as threats to their employment security and level of competitiveness on the labour market. However, the prospects for strengthening Swedish maritime officers' competitiveness on the international maritime labour market are good, provided that the policy-makers and the various labour market parties take a unified approach and work together for the sake of the industry.

8. Suggestions for Further Research

It is important to be aware that the scope of this thesis renders the findings unable to cover all aspects of the competitive situation of Swedish maritime officers. A further study into the domestic and international maritime labour market is therefore recommended in order to gain a better understanding of the role played by Swedish maritime officers. As no definitive statistics exist for the amount of Swedish officers on the international labour market, a future study would be wise to focus upon exploring that particular issue as a complement to the present study and the statistics compiled by the authors on behalf of SWESHIP.

Additionally, further research is also suggested to focus upon the future for Swedish maritime officers in the event of a continued contraction of the domestic labour market. A further reduction of the Swedish merchant fleet would raise the question of whether or not Sweden is to train and educate maritime officers primarily destined for employment on the international labour market.

Lastly, a study into the existence of entry barriers to the international labour market could prove beneficial, as the findings of this thesis suggest that Swedish officers, due to complex domestic regulations, are often kept from entering certain areas of the market.

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Appendix

Appendix 1 – Semi-structured interview questionnaire

Question	
1	What is your profession, and can you describe you work tasks in more detail?
2	What threats and opportunities can be seen in regards to the employment and competitive situation for Swedish maritime officers?
3	In what way do the manning costs for Swedish maritime officers affect their competitive situation?
4	In what way are Swedish maritime officers affected by the Swedish taxation rules for seafarers?
5	How are the collective bargaining agreements on the Swedish maritime labour market affecting Swedish maritime officers?
6	Are Swedish maritime officers cut off from any parts of the global maritime labour market?
7	Which factors are in your opinion the most vital for maintaining the employment of Swedish maritime officers, both on the domestic and global labour market?
8	Which factors, if any, restrict the competitive situation for Swedish maritime officers on both the domestic and global labour market?
9	What advantages/disadvantages are incurred by shipping companies in general when choosing to employ Swedish maritime officers in lieu of foreign maritime officers?
10	What characterises Swedish maritime officers in terms of the competencies they possess?
11	What is your opinion in regards to the quality of education, training and certification of Swedish maritime officers in Sweden?
12	What importance can be attributed to Swedish maritime officers for the Swedish maritime cluster?
13	Is the Swedish flagged fleet a prerequisite for a continued regrowth of Swedish maritime officers?
14	What bottlenecks are present on the Swedish maritime labour market, and what problems do these entail?
15	What effect, if any, will the measures presented in the governmental action plan of 2013 have for the situation of Swedish maritime officers?
16	Is there sufficient commitment shown from the political side to strengthen the competitive situation for Swedish maritime officers on the global labour market?