



**MS thesis**  
**Strategic Management**

**Structure of Icelandic seafood exporting sector**  
And main characteristics of the export companies

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School of Business

May 2013



**HÁSKÓLI ÍSLANDS**

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Thesis for the degree of Master of Science in Business Administration

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The Faculty of Business Administration

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Ritgerð þessi er 30 eininga lokaverkefni til MS prófs við  
Viðskiptafræðideild, Félagsvísindasvið Háskóla Íslands.

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Prentun: Háskólafjölritun

Reykjavík, 2013

## **Preface**

This thesis was submitted in 2013 at the University of Iceland within the Strategic Management M.Sc. program at the Faculty of Business administration. The research and writing of the thesis has taken longer than originally expected, or two years. The study was much more complex than anticipated in the beginning.

The guidance of this study and thesis was in the supervision of Dr. Ingjaldur Hannibalsson professor from the University of Iceland and Dr. Arnar Bjarnason.

I would like to thank the supervisors, the participating companies and my co-researcher. And additionally I would like to thank my family and everyone that helped in any way.

Reykjavík 03.05.2013

Nína Björg Sæmundsdóttir

## Summary

The seafood industry has played an important role for the Icelandic nation and in its economic development. It has been one of its most valuable export sectors.

The main object of this research is to describe the current structure of the Icelandic seafood exporting sector and the main characteristics of the export companies. A secondary object is to compare it to findings made by Dr. Arnar Bjarnason from 1994. To reach the aims of the study both qualitative and quantitative methods were used.

The principal findings were firstly that year end 2012 only 26 out of the 60 firms in Arnar Bjarnasons study were still operating the same way as in 1992.

Secondly most of the firms in this study were located in or around the capital area of Iceland and between 10 and 29 years of age. Most would be considered to be small or medium sized and had less than 5 employees involved in direct marketing. Further most of them had initiated their exporting activities within the first year of operations. The majority of these firms were owned by 3 owners or less. Most of the participating companies had had an ongoing relationship with their longest lasting customer for between 11-20 years. As to how firms were reaching customers, most used various methods though intriguingly enough 73% claimed that the customer reached out for them and not vice versa. Vast majority further stated that they could receive new clients. Less than half of the participating firms were only in the business of exporting or 22 out of 57.

Some of the firms were self sufficient in acquiring raw material. Those that were not used various ways in obtaining raw material. Interestingly enough only a slight majority claimed producing (either themselves or by the use of a contractor) as well as exporting.

Most of the firms were exporting to relatively few markets, mostly to N/W-Europe with the United Kingdom as the principal market. Despite the ending of the monopoly conditions most firms had, since then, not changed how they exported. And finally a vast majority exported their products to seafood wholesales abroad.

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# **1 Introduction**

Icelanders have always relied on fishing even though they have been considered to be a farmer's nation. Fishing has been amongst the most important factors permitting the existence of settlement in this rural north Atlantic island. It has not only been an important source of food for the natives but also an important driving force behind the economical development of the island, permitting it's development from a poor nation to being one of the world's richest countries. Most inhabited areas are directly connected to fishing and positioned in close proximity to the sea (Jón Þ Þór, 2002).

In 2009 FAO (the Food and Agricultural Organization) ranked Iceland the 18<sup>th</sup> largest exporter of fishing commodities out of 194 countries with a total export of USD 1.739 million (FAO, 2011).

When the idea of this research thesis first came to the attention of the author, in the spring of 2011, it seemed appealing. Dr. Arnar Bjarnason in collaboration with other entities was interested in having a follow up on parts of Arnar Bjarnason's study from 1994. It had been the most extensive and comprehensive research that had been conducted within the exporting sector of the fishing industry. Arnar Bjarnason studied the exporting companies and both interviewed their managing directors and followed up the interviews by a questionnaire. The findings gave an overview of the sector, detailed results on specific topics as well as describing its nature.

There had been little researched done since then so the undertake of such a project was appealing. One part of the planned project was to identify the current structure of the seafood exporting sector. This was a good opportunity for using theoretical tools and expanding them while contributing to the researched topic. This study began in the summer of 2011.

## **1.1 The object of the research**

The main object of this research is to describe the current structure of the Icelandic seafood exporting sector and the main characteristics of the export companies. A secondary object is to identify how it has changed since 1992.

Firstly Icelandic seafood exporting firms had to be identified and that was done by the usage of public and private databases. That yielded a large quantity of data used by the

author to localize and contact all companies involved in seafood exporting from Iceland. A managing director or an owner of each company was contacted for two reasons; firstly to get an overview of the structure and environment of the industry from the companies point of view, and secondly to gain as accurate information as possible about the structure of each company.

The research included two research questions:

1. *What is the current structure of Icelandic seafood exporting sector?*
2. *What are the main characteristics of the export companies?*

## **1.2 The structure of the thesis**

This thesis includes six chapters. First chapter 1 gives an introduction to the research and the motives behind it. The aim and objectives of the research are laid out and introduces the research questions that the thesis is aimed to answer. Chapter 2 includes an overview of Iceland and its fishing industry. Relevant key numbers are presented as well as important historical developments of the industry. In chapter 3 relevant literatures are reviewed. Chapter 4 outlines the research methods for the study explaining how and why the research methods used were chosen to answer the research questions of the study. Chapter 5 presents the research findings. The current status of firms from the 1992 study are be described. The results from the survey are then presented and linked to relevant findings from the interviews. Chapter 6 compares relevant finding from this study to finding made in 1992. And finally chapter 7 includes the conclusion and final remarks from the study. It also gives suggestion to further research.

## **2 Iceland and its fishing industry**

Iceland is the second largest island in Europe, and the 18<sup>th</sup> largest in the world situated in the North Atlantic Ocean. It is 103,000 sq. Km. large with a 4,970 km coastline. Iceland's fisheries limit is 200 nautical-miles. It is situated in the Northeast Atlantic area, which is one of the most prolific fishing areas in the world and was the fourth biggest marine fishing area by world capture production in 2008 (FAO, 2010).

Iceland's climate is affected by the Gulf Stream and by the East Greenland polar current curving south-eastwards. There is a submarine ridge between Iceland and Scotland which causes the Gulf Stream to deflect westwards around Iceland and as a result the harbours on the south and west of Iceland stay ice free all year round. In the north and the east the sea condition variate more than in other areas due to two factors. Sometimes warm Atlantic water comes up the north coast and secondly drift-ice can vary greatly from year to year. With the drift-ice comes increased vertical circulation which in turn can result in increased fishing along its border (Arnar Bjarnason, 1996).

Iceland's coastline is mostly characterized by fjords and inlets though in the south there are beaches made of volcanic black sand and without natural harbours (Arnar Bjarnason, 1996).

The population of Iceland is little under 320 thousand. It has steadily grown since 1889, with only the exception of 2010, when the population decreased (Statistics Iceland, 2011).

### **2.1.1 Fish as a natural resource**

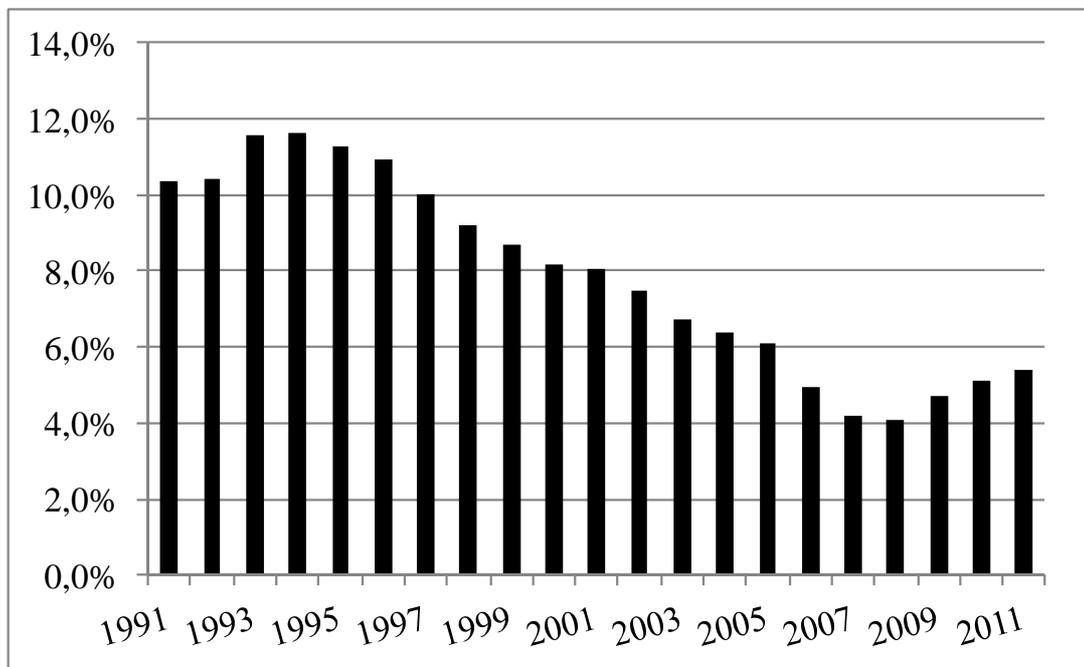
The fishing industry has for a long time been an important factor for the Icelandic economy. It constitutes 40% of the country's export revenues (Íslandsstofa).

Fish has not only been economically important but also played a key role in supplying food for the nation. Fishing was operated seasonally as an addition to traditional farming until the 19<sup>th</sup> century. Fishing camps were based near to the fishing grounds and until the latter part of the 19<sup>th</sup> century farmers were stationed there during the spawning migrations of cod. In the beginning of the 19<sup>th</sup> century Icelanders began operating, in numbers, their own decked boats which marked the beginning of an independent fishing industry operated all year round (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011).

### 2.1.2 Labour market

Labour participation rate has, for a long time, been high in Iceland (Arnar Bjarnason, 1996). In 2011 there was an 80,4% labour participation in Iceland over all (Hagstofa Íslands, 2012c).

There has been a tendency towards rising employment in the service sectors and diminishing within the primary and manufacturing sectors (Hagstofa Íslands, 2012d). In 1990 the fishing industry employed more than 11% of the work force, with over 5% in the fishery sector and around 6,5% in the fish processing sector (Arnar Bjarnason, 1996). In 2011 the fishing industry only employed 5,3%, almost equally distributed between the fishery sector and the fish processing (Hagstofa Íslands, 2012d). The diminishing part of fishing employment as a ratio of total workforce is graphically evident in figure 1.



**Figure 1. Fishing industry employment as a ratio of total workforce.**

The decline in labour force numbers employed by the processing sector can partly be explained by technological advances and large increase in the processing capacity of each vessel in the fishery sector. Vessels are constantly being improved and modernized (Ögmundur Knúttsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011).

## **2.2 History and development of the Icelandic fishing industry**

Through the ages Icelanders have been considered mainly to be a farmer's nation but that is not an accurate description. They have always relied on fishing and it has been one of the most important factors permitting the existence of settlement in this rural island. Fish has been important both as a source of food and as an export product. And during the last two hundred years fish was the foundation of nation's development from a poor country to one of the world's richest countries (Jón Þ Þór, 2002).

For a seafood exporting country such as Iceland, fish processing is of great importance to the economy (Jón Þ Þór, 2002). Fish processing was used, in the past, mostly to prolong the lifetime of the fish products. At first salting and drying of the fish was mainly used. Salt was expensive and the right weather was critical for drying (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011).

For a long time the export of Icelandic fish was mainly controlled by foreign merchants. Until the protestant reformation in the mid sixteenth century stockfish was the main fish export. The Icelanders exported it to Bjørgvin in Norway and sold it mainly to Norwegians and Germans. The English also came in abundance to Iceland, both to buy stockfish and to fish themselves. Prices were high as well as the demand for the Icelandic stockfish. This changed in the late sixteenth century. Prices went down, competition went away and foreign sales of the Icelandic fish were controlled by foreign merchants. This led to most exports going to Hamburg and the Rhineland's. From there the fish got distributed throughout the middle of Europe and as far as the Balkans. The profits from the trade did not make their way back to Iceland but halted in Copenhagen. It seems that the main recipients of the fish were Catholics and among those were some wealthy catholic convents (Jón Þ Þór, 2002).

In the late eighteenth century Danish merchants started to export Icelandic stockfish to the Mediterranean with good results. Because of government interference with the official exchange rate, the industry went in a downward spiral from the sixteenth century and it was not until the late eighteenth century that efforts were made to increase profits or to conquer new markets (Jón Þ Þór, 2002).

The fishing sector became motorized in the beginning of the 20<sup>th</sup> century. In 1907 Icelanders got their first trawler and a trawler fleet became a reality. The results were a huge difference in fishing capacity. With the passing of time more and more experience

accumulated as well as the knowhow of managing such a fleet. War times came and resulted in difficulties in acquiring necessary product for the trawlers such as oil and coal (Jón Þ Þór, 2005). By the year end 1916 Icelanders had 21 trawlers. In 1917 ten of those were sold to France. Countries were in need of new vessels to substitute the once that got damaged or lost in the war and Icelanders seized the opportunity and sold close to half of their fleet. In that way they could get rid of aging vessels in need of repair. In 1920 Icelanders had already started to rebuild their fleet and had 28 trawlers. Within only five years that number had risen to 47 (Jón Þ Þór, 2003).

The reality of motorboats in Iceland did not only lead to a better fleet and more experience, but also increased exporting possibility. There had for a long time been some market for fresh fish. This market grew considerably with better railway connections in Britain. Seafood companies started experimenting and some tried to export the fish alive in fish ponds, which were saltwater containers. That yielded both good and bad results although in the end this way of exporting was halted for it was too expensive and difficult in comparison with other possible methods (Jón Þ Þór, 2003).

Around the time that boats got motorized in Iceland it became possible to create little gravels of ice that did not melt even if a fishing trip took up to three weeks. This led to fish being exported fresh-on-ice. Soon ships were being equipped with cargo holds for the ice. The exportation of fish fresh-on-ice from Iceland started around the same time as trawlers became part of the Icelandic fishing fleet (Jón Þ Þór, 2003).

There are two main factors that have coloured fish processing history; one is demand of the market and the other one technology and the know-how of the industry. For a long time it was mainly stock fish but after the Danish-Icelandic trade monopoly ended in the 18<sup>th</sup> century it begun to change to salted fish. It became one of Iceland's most valuable export products (Jón Þ Þór, 2005). Salting remained the main processing methods until the 1930s. Even so, drying fish gained new life in the 1950's and increased for about a decade (Arnar Bjarnason, 1996).

Processing methods developed alongside the general fishing sector. The catch was processed by the boat owners themselves. With time, boat owners began fishing all year round. Bigger boats emerged as time progressed and a significant fishing industry came forth. The emergent of individual processing firms, unlinked to fishing operations, begun in 1930. That, some consider, marked the starting point of an individual fish processing industry in Iceland. Even so there has always been a clear link between fishing and

processing. In present times, processing companies secure their supplies by owning and operating their own boats (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011).

### **2.2.1 Icelandic fishing industry development from 1900-1950**

In 1928 the state monopolized the export of herring with the establishment of the State monopoly of herring exports (Síldareinkasala ríkisins) and soon after the government established the State herring plants (Síldarverksmiðjur ríkisins, S.R.) that became dominant (Jón Þ Þór, 2003). These factories became the most important tool that the government had in guiding the economy at that time (Jón Þ Þór, 2005).

In 1916 Iceland was forced, by the British, to make a trade agreement. Britain was to buy most of Iceland's exports and Iceland was forbidden to sell to Germany or any of its allied nations. This agreement secured exports from Iceland (Jón Þ Þór, 2003). The state run its herring plants and sold most to the British and the Americans. These sales stir up problems for the Icelandic farmers since they were not able to pay as much as the British or the Americans (Jón Þ Þór, 2005).

The Icelandic Herring Board (Síldarútvegsnefnd) was founded in 1934. Its purpose was to have an overall control on catching, processing herring in Iceland and its exportation from the country. Eleven years later the board was granted monopoly of the exportation of salted herring from Iceland. During the 1930s the Fish affairs committee (Fiskimálanefnd) was established, and before long it was given a monopoly of frozen fish exporting from Iceland. The committee was given an unofficial role of overseeing all matters regarding that industry in Iceland and granting freezing plants export licences. The board forced plants to sell their products through them by otherwise denying licenses to export (Ögmundur Knútsson, 2001).

In 1910 Icelanders first tried freezing fish for export but the method did not gain foothold until two decades later (Jón Þ Þór, 2003). During the 1930s the freezing industry emerged and within a few years freezing became the principal method in the industry (Arnar Bjarnason, 1996). In the beginning most of the frozen products were exported to Britain (Jón Þ Þór, 2003).

Value of the export grew considerably and new and more lucrative markets were conquered. At that time the fish was being processed mainly into frozen fillets which meant more offal than before. This led to parallel expansion of the fish meal plants.

During the Second World War and the following years there was an explosion in the number of freezing plants around the country. During only a ten years time, from 1939 until 1949, the number went from a little over 20 to close to 80. Consequently frozen fish products grew as a ratio of total exports. Since the 1930s the main processing methods have been chilling on ice, freezing, salting, drying, canning and reduction into fish meal and oil. As technology progressed two new methods came forth in the beginning of the 1980s. One was the process and freeze on board of fishing vessels, an important addition, and the other was unprocessed fish that was exported chilled-on-ice directly in containers (Arnar Bjarnason, 1996).

With new and more efficient trawlers, as time passed, it soon became obvious that further development of freezing plants was necessary. In 1950 Icelanders started to build better fish processing plants attempting to add more value than before to seafood products. They were successful and new processing plants started to rise all around the country as well as the old processing plants getting modernized. Prosperity grew around the freezing plants as did the production and exportation of frozen products. The plants mostly produced frozen demercial fish fillets and for a long time they were over 90% of all frozen products. Frozen fish roe were also an important product. During the 1970's exportation of whole frozen fish increased as well as fish offal and gamete that were sent to the fish meal plants (Jón Þ Þór, 2005).

There were mainly two companies that exported frozen unsalted fish products from Iceland. One was Sölumiðstöð Hraðfrystihúsanna (S.H., later Icelandic Group), a company owned collectively by many freezing plants around Iceland. The other one was Samband Íslenskra Samvinnufélaga, later Sjávarafurðadeild S.Í.S (S.Í.S.) which exported products from freezing plants owned by the Cooperative Society of Iceland (Samvinnuhreyfing Íslands). Most products were sold to countries in Europe; in part to the Eastern Block while in Western Europe, England was the largest buyer. S.H. had established an office and a factory in the United States and sold quite amount of their products there (Jón Þ Þór, 2005).

S.H (hereafter Icelandic) was established in 1942. In 1945 it opened a sales office in the US and changed its form into a subsidiary, Coldwater Seafood Corp., in 1947. Coldwater then set up a secondary processing plant in 1954 in Maryland US. This plant made breaded fish sticks from Icelandic fish. This strategic move was the pillar of what was to follow strategic wise for Icelandic; it established subsidiaries in local markets in

order to get as close as possible to its customers. Icelandic then used its own brand name and tried to gain consumers loyalty to that brand. The company's activities, pre 1980s aimed at benefits for its members, it acquired a sea transportation company, a boxing production, an insurance company as well as being a potent and active interest group for its members in a highly regulated environment. It aimed at participating in all activities beneficial for its members (Ögmundur Knútsson and Ólafur Klemensson, 2006).

Around 1980 Icelandic started changing its strategy, the US market was declining and the firm started to expand otherwise and more systematically than before. The company decided to establish a secondary processing plant in the United Kingdom and opened a subsidiary in Germany. In 1985 the board and management team of Icelandic changed. Soon after 1990 Icelandic started to change its strategy from doing everything for all members to excelling in what they knew how to do, international marketing of fish products though it still defined itself as a servicing company. It wasn't until 1999 that it stopped defining themselves as such. In 1995 more strategic changes began, the first one having the goal of making a profit and being able to integrate vertically into producers. The firm soon underwent changes that aimed at diminishing centralisation and gaining more network efficiency. In 2002 Icelandic started a policy of external growth by acquiring seafood companies and its horizontal diversification became a reality. The firms focus shifted from primary processed seafood and traditional breaded and battered products to include chilled seafood products (Ögmundur Knútsson and Ólafur Klemensson, 2006). In 2011 Icelandic Group U.S. and Asian operations were overtaken by the Canadian group High Liner Foods (Demone, 2012).

S.Í.S. started to export frozen fish during the 1930s and 1940s though it formally established its seafood exporting division in 1957. It established a sales company in the US, Iceland Products in 1951. The name of the sales company was changed in 1975 to Iceland Seafood Corporation. S.Í.S operations were much alike the operations of Icelandic, selling members products for commission. In 1990 S.Í.S (complete operations) liabilities had grown substantially and two years later it had grown to such a point that its main creditor decided to collect. S.Í.S. as a whole got shuffled. In late 1990 the seafood part of the company had been transformed to a limited company. The name was changed to Íslenskar sjávarafurðir hf (Iceland Seafood Ltd., hereafter IS). It overtook S.Í.S. part in Iceland Seafood Corporation, the US sales and manufacturing company and bought S.Í.S. part in Iceland Seafood Ltd. in Hull in the UK (Ívar Jónsson, 2003).

In the years to come IS grew, sales offices were set up in Japan and Spain, its sales offices in Germany and France were made independent and IS reached eastern Europe. IS acquired a part in a fresh fish production company, Tros Ltd. It built a new processing plant in the US as well as buying a French seafood company. In 1999 IS agreed to merge with S.Í.F (Sölusamband Íslenskra Fiskframleiðenda, addressed later) creating Iceland's largest exporting entity (Ívar Jónsson, 2003).

In 1925 the Icelandic government decided to increase the rate of the national currency which was good for imported goods but not for the exportation of good such as fish. In 1939 the currency was devaluated and even though it came late it was not without benefits. Until 1939 salted cod was mainly exported to the same foreign markets. The Spanish market was by far the largest one and the most important, Italy and Portugal were of importance too. A good example of how important the Spanish market was is that around 80% of all exported salted cod was sold to Spain in the beginning of the twentieth century the rest mostly went to Italy. Icelandic salted cod was exported on occasion to other markets especially to Brazil and other Latin American countries. This all changed with the 1916 British trade agreement when the British overtook most fish export from Iceland. Some Icelandic merchants started direct trade with Spanish and Italian buyers but most of the merchants lacked knowledge in foreign trade and did not have easy access to international transportation (Jón Þ Þór, 2003).

The end of the First World War brought changes and during the nineteen twenties Icelanders overtook most export of salted cod. Agreements were made and export increased steadily to Spain, Italy and Portugal. During the late nineteen twenties it became clear that markets for salted cod had become unstable. There was overproduction across the north Atlantic countries which resulted in too much supply within the markets. In Iceland there was chaos among those who exported salted cod, there were far too many merchants exporting far too many and far too big shipments. This lead to underbidding and low price, it became very difficult when the civil war broke out in Spain in 1936 resulting in total shut down of the Spanish salted cod market (Jón Þ Þór, 2003).

This era was quite difficult for exporters of Icelandic salted cod and unsuccessful efforts were made to create some kind of alliance between exporters. Such an alliance became a reality in 1932 with the formation of the Sales Union of Icelandic Fish Producers "Sölusamband Íslenskra Fiskframleiðenda" (S.Í.F.). They managed to bring

about some organizing of the exporting sector. When the Second World War broke out the benefits of S.Í.F.'s organizing efforts were neutralized (Jón Þ Þór, 2003).

S.Í.F. was created as a result of a merger between three large salt fish merchants in Iceland and amongst its objectives was to reduce internal marketing competition and to enhance and improve Icelandic exportation of salted fish. It was a non-profit, co-operative company supposed to sell its members products. In the years from 1957 until 1990 there was a growing discontent within S.Í.F.'s members. The reasons were threefold; firstly they felt that there was a growing stagnation within the organization, secondly they felt that S.Í.F. was losing focus of the common interest of its' members, and thirdly they felt distanced from the governance of S.Í.F. (Ögmundur Knútsson and Ólafur Klemensson, 2006). This sales union was never formally given a monopoly licence by law but did never the less enjoy monopoly conditions in exporting salted groundfish from Iceland until year end 1992. In 1993 these monopoly conditions were abolished and the Ministry of Foreign Affairs granted limited number of export licenses to other companies to export salted groundfish (Arnar Bjarnason, 1996).

In 1990 S.Í.F. started to undergo radical strategic changes. In 1999 S.Í.F. was merged with two important Icelandic exporting companies, first with Íslandssíld hf., (formally the Icelandic Herring Board) and then with its biggest Icelandic competitor IS (S.Í.S.). By series of mergers and acquisitions mainly in Iceland, France and the United Kingdom (UK), S.Í.F. was transformed from being mostly a seafood trader to being a high value added producer, both in high quality seafood but increasingly in upmarket festive food products. Its focus moved to acquiring strong brand names, nurture them and expanding. It moved its home base closer to the market, to France and the UK and in 2005 S.Í.F. Group was renamed Alfesca Group (Ögmundur Knútsson and Ólafur Klemensson, 2006).

In January 2012 majority hold of Alfesca group was overtaken by a French company Lur Berri Group and with it ended the 80 year old Icelandic ownership. The name of Alfesca was changed to Labeyrie Fine Foods (Lur Berri Group, 2012).

The three marketing and sales organisations exported products for most of the processing firms in Iceland. These were bound by contracts to sell their products through those organizations. This system was uplifted step-by-step from 1987 to 1993 (Ögmundur Knútsson and Helgi Gestsson, 2006).

The Second World War had similar results for exported fish from Iceland as the First one. Due to man power and vessels being called in to war there was much need for food in war affected zones. The Icelandic export sector bloomed like never before. As earlier majority, roughly 80-90%, went to Britain though some, 10-15%, went to the United States of America. Never before had Icelanders exported so much to the United States (Jón Þ Þór, 2005).

During this war time there were very special conditions in traditional markets for Icelandic fish. Salted cod markets were almost entirely closed and this led to majority of exported fish being exported fresh-on-ice. In 1947 a trade agreement was reached with German authorities, which opened up new markets for Icelandic redfish. There was higher supply than demand so in the beginning a lot went to creating fishmeal, mostly sold to the Netherlands and Czechoslovakia, though exporters soon started freezing the red fish. This made it more valuable as an export product. As with the First World War, war affected countries rebuilt their fleet and fishing capacity after the Second World War and demand for fish from Iceland diminished. This resulted in lower prices and harder times for Icelandic fish exporters. Fortunately the government, learning from previous mistakes, had passed laws and regulations during the war time forcing fishing companies to retain some of the war and post-war profits to be used when demand declined. Even though these profits helped hard times came for fishing companies and fish exporters that lasted until 1970 (Jón Þ Þór, 2005).

Just like the traditional salted cod markets the traditional markets for Icelandic herring closed up during the Second World War. Those were the same as during the years prior to the war; Nordic countries, Germany and the Balkans. With Britain controlling exports from Iceland the exporting of herring suffered during the war. Mostly herring was sold as fishmeal and fish oil to the British during this time. Sweden remained open for salted herring importation but it became very difficult to actually export to the market due to strict British regime. Herring exporters were in trouble since open markets did not have a tradition of consuming herring (Jón Þ Þór, 2005).

After 1940 most of the herring went to the United States until traditional European herring markets started to reopen post-war. Exportation of herring did not gain the same foothold as it had before mainly due to failure in the herring stock, overfishing and environmental change. Within 20 years catching herring was forbidden but within that

time trade agreements had been reached with former Soviet Union and some other Eastern European countries (Jón Þ Þór, 2005).

The Icelandic Fishery Industry Board (Fiskimálanefnd) was very active in supporting industrial development of the freezing plants as well as in gaining markets for Icelandic seafood abroad. In 1936 the board made a contract with the British for the sales of frozen fish (Jón Þ Þór, 2005).

With most markets closed for traditional salted cod during war time, its production got minimized while more and more was sold fresh-on-ice or frozen. As soon as the war ended production picked up again though this time production methods got modernized. Exportation was mostly in the hands of S.Í.F. and markets mainly in south of Europe, in Spain, Italy and Portugal. Some attempts were made to gain a market foothold in Latin America though they were not successful. In the 1950's production of stock fish recommenced and was mostly sold to Nigeria, though some was also sold to other markets such as Italy (Jón Þ Þór, 2005).

### **2.2.2 Icelandic fishing industry development from 1950-1990**

In 1949 the Icelandic government decided to cancel the contract of fishery jurisdiction that had been in place between the nation, the Danish and the British. It was legally cancelled, effectively with the passing of two years. During that same time period Iceland became part of the International Convention for the Northwest Atlantic Fisheries, a contract made to protect fishing waters in the northwest Atlantic Ocean. Internationally there were debates of fishery jurisdiction expansions. Norway expanded theirs to 4 miles and that decision was brought for the International Court of Justice in Haag. The court deemed it not to be contrary to any international laws. With this passing, a window of opportunity had been open (Jón Þ Þór, 2005).

In 1952 Iceland expanded most of the jurisdiction to 4 miles. Most countries protested while respecting Iceland's decision, though that was not true for England or Germany. They passed landing bans on Icelandic vessels in the U.K., Iceland's biggest fresh-on-ice market. Iceland responded in shifting production from fresh-on-ice to freezing, stockfish and salted fish while simultaneously increasing the importance of other markets. Within 4 years the landing ban was lifted with strict limitations (Jón Þ Þór, 2005).

In 1958 there was again a discussion on fishery jurisdiction and this time it was on the 12 mile limit. That year Iceland moved its jurisdiction to 12 miles. Again the British and the Germans would not recognize this. This time the British navy came to the scene defending their trawlers from the Icelandic coast guard and the first Cod war had begun. The fact that this "war" was not war within the traditional meaning of the word, the British navy could not operate its weapons. It ended without any hard conflict with 6 months adjustment time for the foreign trawlers (Jón Þ Þór, 2005).

For a long time Iceland made due with its 12 mile radius since most of the fleet only needed to fish within those boundaries. This all changed with the collapse of the herring stock and a herring fishing ban. There was a need of renovation of the fleet and a new and more efficient fleet would need more space. Around 1970 there was international debate once again on fishery jurisdiction and the need for expanding it. With those things in mind the Icelandic government passed a regulation expanding the jurisdiction to 50 miles. As before the British and the Germans did not recognize this expansion and continued to fish within the newly expanded jurisdiction. This time around the Icelandic coast guard had a secret weapon: trawlwire cutters. They were used to cut the trawling wires of the trawlers costing them their nets. Soon the British navy came to the trawlers

defence and as before, they could not use their traditional weapons so they chose to crash the vessels of the Icelandic coast guard instead. Although many dangerous situations arose there was no casualty (Jón Þ Þór, 2005).

The British and the Germans had an economic sanction on Iceland as before though this time it was slightly different. Iceland had a trade agreement with the European Economic Community (EEC) and within that agreement was Protocol 6. That stipulated that until a satisfactory solution would be found between Iceland and the EEC countries, Iceland would not have the benefit of reduced import duties on fish into the EEC countries, while still being able to export to those countries (Arnar Bjarnason, 1996).

In 1973, with the help of the North Atlantic Treaty Organisation (NATO), peace was stored between Iceland and Britain and soon also between Iceland and Germany. Like before the foreign nations were granted time to adjust with strict limitations. Again there was an international debate, now for the need of a 200 mile expansion for countries and in 1975 Iceland did just that, expanded its fishery jurisdiction to 200 nautical miles. History repeated itself, once more, and Britain and Germany did not recognize the expansion. The third Cod war had started. Conflicts were harder than ever before and NATO intervened forcing the nations to negotiate. The countries reached an agreement allowing adjustment time once again. One of Iceland's main reasons for these expansions was the preservation of fish stocks. The results were good and it became the foundation of modern day fishery management in Iceland (Jón Þ Þór, 2005).

In 1970 the Icelandic government took a formal step and established the Ministry of Fisheries (Sjávarútvegsráðuneytið), even if the fishing industry in Iceland had had a place within the political landscape for a long time (Jón Þ Þór, 2005). In 2007 it was discontinued alongside the Ministry of Agriculture (Landbúnaðarráðuneytið) and a new ministry, the Ministry of Fisheries and Agriculture (Sjávarútvegs- og Landbúnaðarráðuneytið), was formed that took over their obligations (Sjávarútvegs- og Landbúnaðarráðuneytið, 2007). In September 2012 it merged with two other ministries, the Ministry of Commerce and the Ministry of Industry, Energy and Tourism, creating the Ministry of Industries and Innovation (Atvinnuvega- og Nýsköpunarráðuneytið) (Atvinnuvega- og Nýsköpunarráðuneytið, 2012).

In 1961 the government formed the Fish Industry Price Determination Board, (Verðlagsráð Sjávarútvegsins) it was comprised by equal numbers of sellers and buyers. The Board set prices for all species and types of quality of fish that was significant in

Iceland. After harsh criticism during the 1980's an act of law was passed allowing wetfish auction markets in 1987, as to allow market forces to determine the final price. From 1987 and until 1991 market forces were not completely free to determine the prices as the Board still set the minimum price on wetfish. After 1991 that came to an end and price determination was left to the market forces. With time passing in the industry vertical integration became a reality and due to that price determination was not solely dependent upon the market. This was because most of the catch was not being sold in wetfish markets but between units in vertically integrated firms (Ayse, 1999).

In 1986 a complicated system of different fishing industry funds, that had been in the building since 1930's, was rationalized with many taxes and levies abolished. Amongst the abolished taxes was the export tax, a special fee that exporters had to pay in order to be permitted to export (Arnar Bjarnason, 1996).

### **2.2.2.1 Fisheries Management**

For a long time the general view of fishing was that fish was free and to be used at will for that it was a god given natural resource for all. With more knowledge and more and more seeking to exploit these natural resources came the necessity of fisheries management (Jón Þ Þór, 2005).

The Fisheries Management act (Lög um stjórn fiskveiða) is the most influential legislation for the industry. It has been in force since 1990 (act nr. 38) though it has undergone several changes through the years and the one now in place is nr. 116, from 2006. It is based on the 1984 fisheries policy, were, for the first time in Iceland, the comprehensive quota system for cod fisheries was implemented. The main aim of the act is put forth in article nr. 1:

*“Exploitable marine stock in Icelandic waters is a joint property of the Icelandic nation. The aim of this act is to ensure their preservation and their feasible utilization and thereby ensuring secure employment and stable settlement of the country. ...”*

(Alþingi Íslands, 2006).

In 1984 the Individual Transferable Quota system (ITQ) was introduced and since then there has been an active trading market for quotas. This has led to fewer hands holding more and more quota. For the quota year 1991/1992 the six largest quota holders controlled 18 percent of the given quota (Arnar Bjarnason, 1996). For the quota year of 2009/2010 the three largest held almost 22 percent of the given quota (Þorvaldur Helgi

Auðunsson, 2011). For the quota year of 2011/2012 the three largest quota holders were given over 22 percent and the six largest got well over 35 percent (Fiskistofa, 2011).

There has for a long time been much debate on the current quota system. The current government has reviled their desire to revolutionize the system, reaping heavy protesting by many. How the matter will finally go is not clear today and even if the current system will undergo radical changes the “when” of the matter is obscure. Until that time it likely that the concentration in quota holding will continue to some extent.

Regardless of personal opinions on the current quota system, most agree that the system has increased efficiency in fishery and that it has in fact helped in creating sustainable fish stock (Arnar Bjarnason, 1996).

During the latter part of last century exporting, for the most parts became free. Where it did not permits were issued by the Ministry of Foreign Affairs (Utanríkisráðuneytið), this applied for example to fresh fish and salted lump-fish roe. Before the 1980 the exportation of fresh fish was mostly by directly landing it abroad. The control of such exportation was mainly in the hands of the Federation of Icelandic Fish Vessel Owners (Landssamband íslenskra útgerðamanna, L.Í.Ú.) who issued individual permits, to vessels or their owners, to land and sell abroad. In 1984 there came a change to that system when exportation of fresh fish in containers started. This export was without control and increased greatly in the years to follow. The results were often excess supply in the main markets accompanied and lower prices. Concerning parties soon saw that this could not continue for long and a special entity was created, The Fresh Fish Allocation Board (Útflutningsráð). Its purpose was to issue permits to fresh fish exporters and by this restriction had been placed up on the exportation of fresh fish, processed or not (Arnar Bjarnason, 1996).

Since the beginning of the 20<sup>th</sup> century Qualities of marine products have been given a special attention in Iceland. In 1910 there was a special grading system for exported salted fish. As time progressed and Icelanders started to export other marine products the system was extended to those products. This went on for the majority of the century (Arnar Bjarnason, 1996).

With an aim of increasing capacity, upgrading production conditions and improving hygiene standards the freezing industry went through radical transformation in the early 1970s. This was called for because there was a potential threat of the U.S. market

closing, the most important market for frozen fish from Iceland at the time. The spirit of the seventies and the eighties in Iceland called for steadier supply of fish and better quality of raw material which led to big investments being made in deep-sea trawlers. The quota system did not only limit the fishing vessels but also the raw material supply to the processing plants. So its introduction as well as increased prices for fish in foreign markets sent the industry towards better utilization of the raw material at hand (Arnar Bjarnason, 1996).

From the year 2002, investment in Iceland rose steadily until reaching its peak in 2006 when investments share was more than 35 % (Hagstofa Íslands, 2012e), due partly to huge investments in hydroelectric power plant in the east of Iceland and housing investment (Hagstofa Íslands, 2005). This was quite a change from 1971-1990 when investments accounted for over 24% of the nation's gross domestic production (GDP) due partly to great investments in stern-trawlers (Arnar Bjarnason, 1996). Gross fixed capital formation for that period, 1971-1990 was 7,6% in fishing and around 4% for fish processing. Respectively those numbers were 3,1% and 2,0% for the following next two decades (Hagstofa Íslands, 2012b). This difference in percentage can rather be attributed to high investment in hydroelectricity and housing rather than little investment being made in the fishing industry.

### **2.2.3 Icelandic fishing industry development from 1990-Modern day**

Since World War II there has been a continued modernization within the fleet and it has grown significantly in tonnage size (Arnar Bjarnason, 1996). Since 1999 the fleet has slowly been losing numbers though gaining in tonnage size. According to Statistics Iceland in 1999 there were 1134 open fishing vessels, 751 motorboats and 91 trawlers registered. Their average gross tonnage was 4,6 for the fishing vessels, 117,4 for the motorboats and 962 for trawlers (Hagstofa Íslands, 2012a).

In year end 2011 matters had changed a bit. There were a total of 833 open fishing vessels of an average gross tonnage of 4,8 , motorboats were 764 of an average gross tonnage of 108,3 and trawlers were 58 of a gross tonnage of 1261. From those numbers it is clear that the total number of vessels has decreased substantially during this time. It is also clear that motorboats have been getting smaller. The most astonishing fact though, is that the number of trawlers in 2012 is only 64% of what it was in 1999 but overall the average capacity of a vessel has increased substantially from 962 gross tonnages in 1999 to 1261 gross tonnage in 2011. What is of some concern is that the fleet seems to be getting older than before. The average age of a trawler in 1999 was 20 years while in 2011 it was 27 years. Overall the fleets average age was 19,3 years in 1999 but was 24,7 in 2011 (Hagstofa Íslands, 2012a).

### **2.3 Foreign Investment Regulations regarding the fishing industry**

In 1991 an act of law (nr. 34) was passed in Iceland, regulating foreign investments. It was deemed necessary to pass an act that addressed the matter directly since laws and regulations on the matter were inconsistent and it was very hard to keep track of foreign investment due to this (Alþingi Íslands, 1990). There have been some adjustments made since it was passed and one of particular interest, for the fishing industry, was passed in 2001. In light of deregulating trend regarding foreign investment it was thought only fair to include the fishing industry to some extent. Before foreign investors could only indirectly invest within the industry but with this modification direct investment, with strict limitations, was permitted (Alþingi Íslands, 2001).

Currently it is forbidden, according to article 4.1, for vessels to fish that have more than 25% foreign ownership and when both fishing and processing is put together the ownership cannot exceed 33%. Further foreign investment is only permitted to EEC residents. There are some exceptions to the rule such as if ownership is acquired as a

payment in other trade agreement, ownership can exceed the limit for up to 12 months (Alþingi Íslands, 1991). General foreign investment rules and regulations can apply regarding the fishing industry. According to a ruling made by a committee of foreign investment within the Ministry of economic affairs a foreign entity could invest collectively up to 49% within a company as long as certain requirements were met. Firstly an entity cannot hold more than a 25% share in any one company, secondly the Chief executive officer has to have a permanent residence in Iceland and thirdly the majority of its board members have to have a permanent residence in Iceland (Nefnd um erlenda fjárfestingu, 2010).

## **2.4 Fish Auction Markets**

Currently a wetfish auction market is defined in act no. 79/2005, Law on fish catch auction markets, as a market where fish catch is sold in a free auction. The auction markets can also offer related services. In 1989 the Icelandic congress passed the first act of law on wetfish auction markets (no. 123). One point of view behind opening up such auction markets was that it would permit processing plants to specialize and becoming more efficient by doing so (Ágúst Einarsson, 2008a).

The common thought of how the auction markets would take off was that they would get to a slow start and slowly build up. This was not the case and within 6 months the Icelandic auction markets put together, were larger than any wetfish auction market in Europe. There was more demand than supply which led somewhat to higher prices and better quality. Processors had grown in numbers and processed the fish more rapidly than before, in other words there was a shorter amount of time that passed from the point the fish came to the plants and until it was processed (Ágúst Einarsson, 2008c).

Within three years the factoring point of view that plants would become more specialized, with the realization of auction markets, became a reality. High market prices had also led to the need of better usage of what was bought in the auction markets (Ágúst Einarsson, 2008b).

Today there are close to 30 auction markets country wide run by 14 auctioning companies. The auction is held online and most of the catch is sold before it is landed. In the year 2011 91.000 tons of roundfish were sold for 26 billion ISK (Páll Ingólfsson Ragnar Kristjánsson and Eyjólfur Þór Guðlaugsson, 2012).

Icelandic Statistics hold numbers for both value and weight of fish sold in auction markets since 1992. As can be seen in figure 5 the value of fish sold in auction markets as a ratio of total value sold is generally higher than that of weight. Thus fish sold in a free auction market in Iceland has generally been more valuable than fish not sold in such markets (Iceland Statistics, 2012).

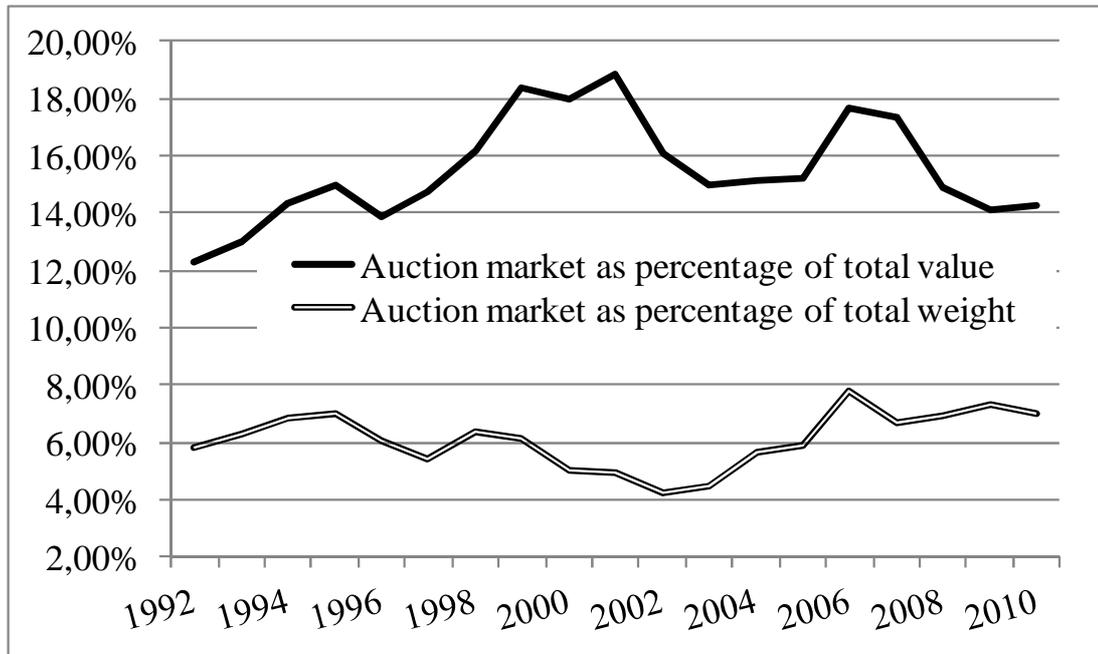


Figure 2. Value and weight of auction market fish.

## 2.5 Quality of seafood products

It was not until 1984 that a special organ of quality control was established. This was the Iceland Fish Quality Institution (IFQI) (Ríkismat sjávarafurða). Its purpose was to ensure predetermined quality in exported fish products from Iceland. Companies, both manufacturers and exporters were obligated to have, on their staff, an authorised inspectorate that was to guaranty this or they could buy this service from the IFQI. The IFQI only operated in this form for about 3 years and in 1987 the institution stopped performing quality inspections. Instead the market was made responsible of this task. This brought transformation upon the IFQI and its task, instead of laying heavily upon the quality of the product itself more stress was put on hygiene standards and production conditions in the processing plants. The IFQI was brought to an end by law in 1992 leaving producers and exporters responsible for IFQI's previous roles. In 1993 all Icelandic producers of marine products were to have formal contracts with state qualified

Inspection Companies as to ensure and regulate quality within the industry (Arnar Bjarnason, 1996).

In modern day international certifications of quality are important, purity, sustainable usage of renewable resources, green thinking and so on are getting more and more attention. Iceland Responsible Fisheries (IRF) (Ábyrgar fiskveiðar) aims in this direction. It is based on national law and international agreements. In 2007 the Statement of Responsible Fisheries in Iceland (Yfirlýsing um ábyrgar fiskveiðar Íslendinga) was released by several responsible parties in the fishing industry. Amongst those were the Ministry of Fisheries and the Marine Research Institute (Hafrannsóknarstofnun). It was, in part, a statement that the Government would endorse relative international law and agreements that they had signed. Exporters have been able to apply for the usage of an IRF label that certifies product origin and declares responsible fisheries since 2009. In 2011 IRF was overtaken by a new entity the Iceland Responsible Fisheries Foundation (IRFF) (Sjálfseignarstofnunin Ábyrgar fiskveiðar ses.). It is a non-profit organization that makes and maintains contracts for the certification programme as well as promoting it in foreign markets. The certification programme is conformant with directions from the Food and Agriculture Organization of the United Nations (FAO) (Iceland Responsible Fisheries, 2012).

International certifications for quality are also a possibility used by companies in Iceland. These are for instance, the International Food Standards (IFS); the Hazard analysis and critical control points (HACCP) and the Feed Material Assurance Scheme (FEMAS). The IFS is an international non-profit company that audits according to IFS standards. The HACCP refers to internal auditing to ensure quality. It was launched in the USA in the 1960s and has gained worldwide recognition (FAO Fisheries and Aquaculture Department, 2012). The FEMAS standard refers to standards created and owned by the PAI group (Product Authentication Inspectorate). It certifies feed ingredients and is applicable where they are produced (PAI authentications, 2012).

## 2.6 Currency of Iceland and its linkage to seafood export

There has been an official currency in Iceland for more than two hundred years. The currency is called Króna. The Central Bank of Iceland is in charge of issuing the currency (Birgir Ísleifur Gunnarsson, 2002).

The real exchange rate of the Icelandic Krona is significant for the import and export sector of the nation. The Icelandic fishing industry is not excluded since majority of its products are being exported. High exchange rate means that foreign counterparties get the product for fewer currency units, in other words the product costs less. When the last two decades are analyzed (see figure 2) it is evident that the Icelandic Krona has been losing value when compared to some major foreign currencies (Seðlanbanki Íslands, 2012), (Hagstofa Íslands, 2011a).

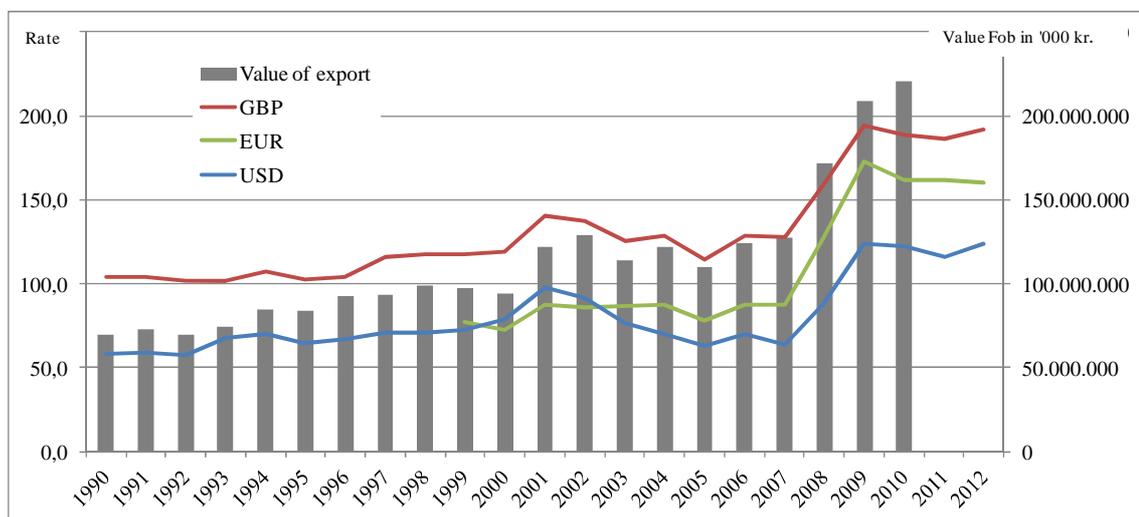


Figure 3. The exchange rate development and export value.

## 2.7 Gross domestic Production of Iceland

The Icelandic Economy went through radical development in the twentieth century. From the end of World War II the Icelandic economy was characterized with restrictions and centralization. Continuous changes lead up to a significant economic growth in the latter part of the century. Conscious efforts were taken to move towards privatization and deregulation (The Ministry of Economic Affairs, 2011).

Up to 1988 there had been a growth in the economy that had been driven on, partly, by expansion of the fisheries limit. In 1988 a short era of stagnation started and lasted until 1995 (Rannsóknarnefnd Alþingis, 2008).

In 1992 gross domestic production of Iceland was little over 15% lower than that of the U.S. although higher than the U.K., Norway and the average of the EU 15 countries (Belgium, France, Germany, Italy, Luxembourg, Netherlands, Denmark, Ireland, U.K., Greece, Portugal, Spain, Austria, Finland and Sweden). As can be seen from figure 3 in that year Iceland exceeded the U.K. by 19,3%, Norway by 5,7% and the EU 15 by 13,9%. During the following 20 years the gross domestic production of those countries grew more than that of Iceland. In 2011 the U.S. produced 31,2% more than Iceland, the U.K. was only 2,3% behind Iceland, Norway produced 66,8% more than Iceland which was only 2,0% ahead of the EU 15 (Hagstofa Íslands, 2013b).

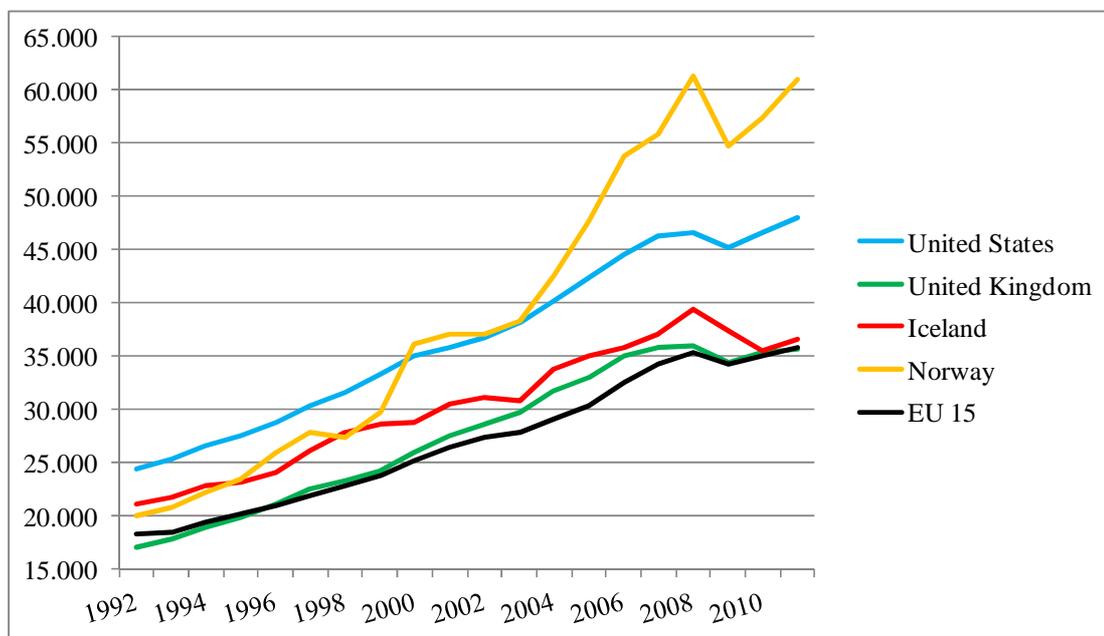
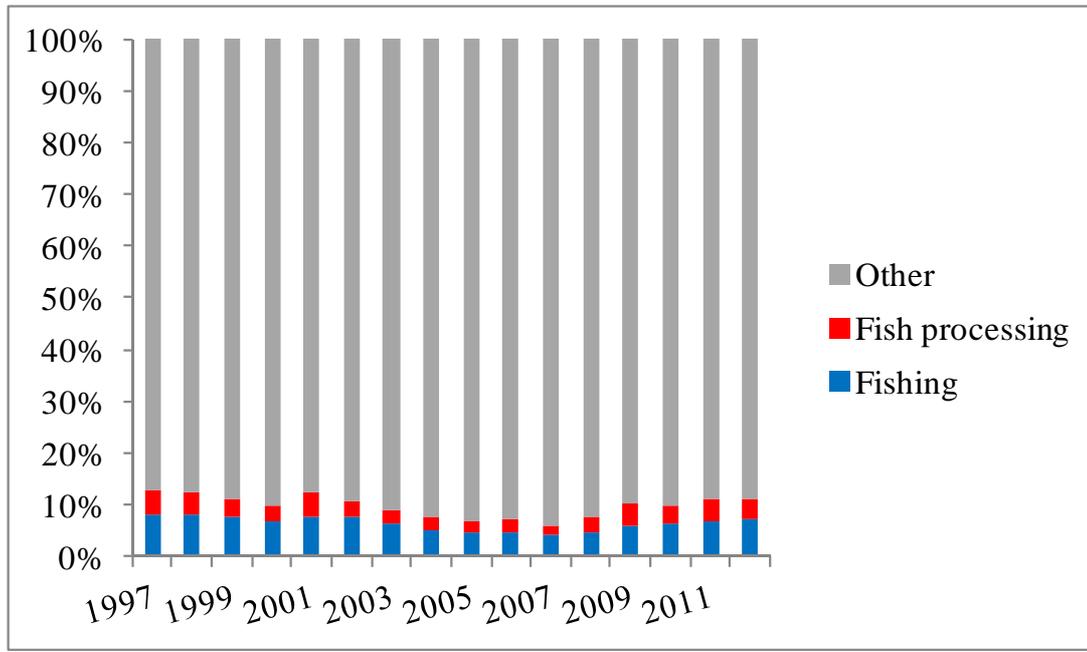


Figure 4. Comparison of the USD Purchasing Power Parity.

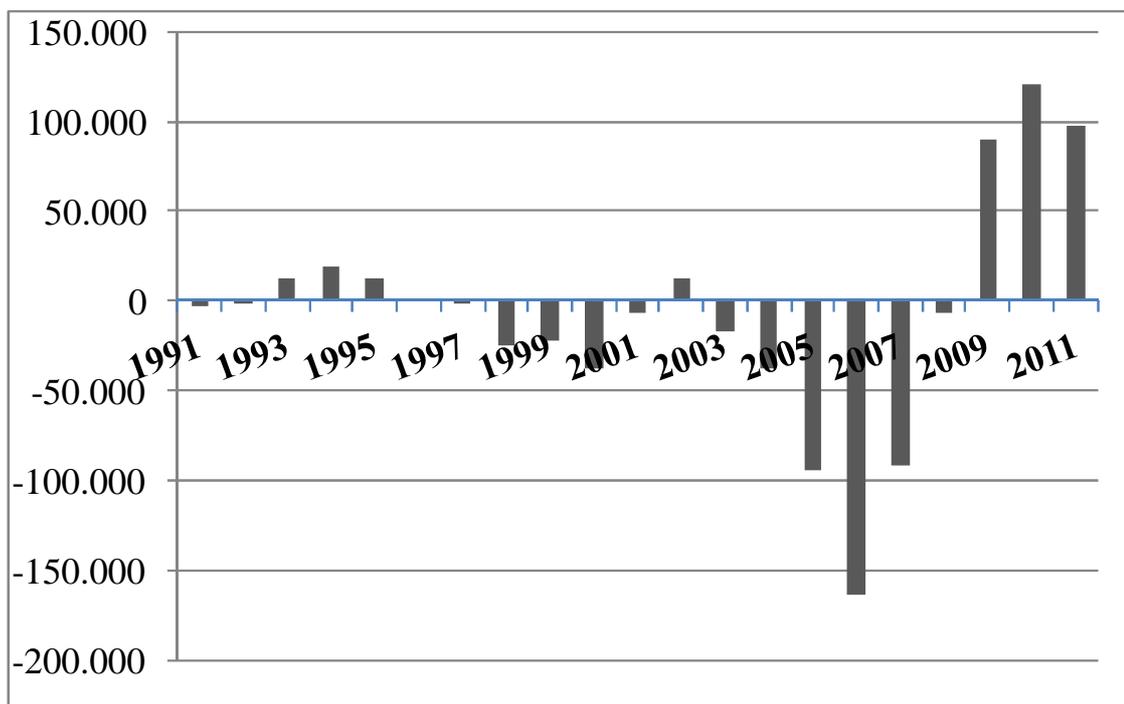
The fishing industry is an important part of Iceland's GDP. Statistics Iceland holds numbers, from 1997, for how large a part of the GDP the fishing industry is. As can be seen in figure 4 the fishing industry was 13% of the nations GDP in 1997. It reached a low point of 6% in 2007 when it started to grow again reaching 11,3% in 2012 (Hagstofa Íslands, 2013a).



**Figure 5. The fishing industry as a ratio of Iceland's GDP.**

## 2.8 Foreign Trade from Iceland

Foreign trade is important to Iceland. Exports as share of GDP have been fluctuating from 30% to 40% for the last three decades. Compared to other small European countries this ratio has been lower than most. When compared to small states worldwide this ratio has also been relatively low. In a comparison to the OECD countries, Iceland ranked among the bottom half (Francis Breedon and Thórarinn G Pétursson, 2004). Due to fluctuations foreign balance of trade varies greatly. As can be seen in figure 6 in the period 1991-2011 balance of trade resulted negative in thirteen of those years (Statistics Iceland, 2012b).



**Figure 6. Balance of trade in Iceland.**

In 2010 there was a trade surplus in Iceland. Exported goods were 561.000 million ISK fob whilst imported were 440.800 million ISK fob. This translates to a surplus in trade for 120.200 million ISK which is a growth in surplus from the year before when it was 90.300 million ISK. There was a 12% increase in export of goods and 7% in imports (Hagstofa Íslands, 2011b).

## 2.9 Comparison of Seafood exporters world wide

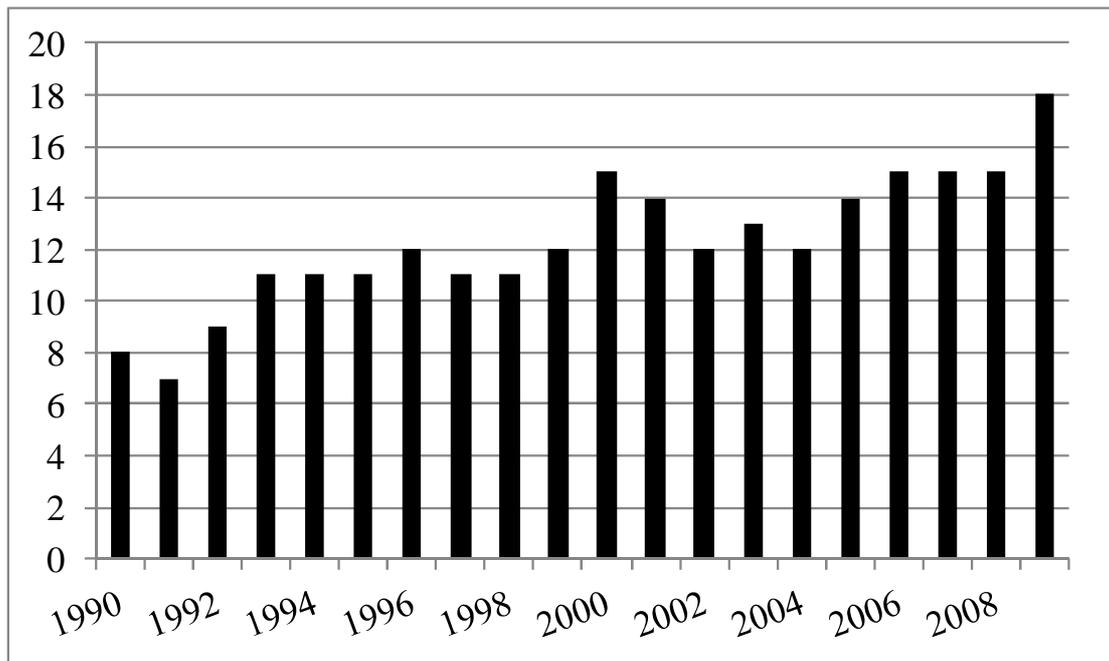
Icelandic seafood products are exported worldwide. The Food and Agricultural Organization (FAO) ranked Iceland the 18<sup>th</sup> largest exporter in fishery commodities in

2009, out of 194 countries as can be seen in table 1. Iceland had fallen two places since a year earlier, when it was ahead of Sweden and India (FAO, 2011).

**Table 1 FAO's list of twenty largest fishery commodity exporters, 2009**

<b>Export of marine products in 2009</b>		
<b>Value (USD 000)</b>		
	<b>Country</b>	<b>Total Export</b>
1	China	10.473.062
2	Norway	7.107.237
3	Thailand	6.248.891
4	Viet Nam	4.311.738
5	United States of America	4.225.019
6	Denmark	4.002.236
7	Chile	3.702.645
8	Canada	3.262.738
9	Spain	3.178.574
10	Netherlands	3.162.079
11	Germany	2.391.462
12	Indonesia	2.349.397
13	Russian Federation	2.325.334
14	Peru	2.218.406
15	United Kingdom	2.141.207
16	Sweden	2.045.913
17	India	2.029.284
<b>18</b>	<b>Iceland</b>	<b>1.738.750</b>
19	Japan	1.629.408
20	France	1.623.536

China is the largest, with more than six times Iceland's export value and Norway is second with over four times the value. If seafood exports of these 20 countries are compared since 1990, Iceland is in an all time low. In figure 7 Iceland's position as an exporter in fishery commodities amongst FAO's 194 countries can be seen. It seems to be slowly but steadily falling down the list.



**Figure 7. Iceland's ranking amongst the twenty largest fish exporters.**

Bear in mind though that FAO keeps score of 194 countries, so even if Iceland ranks low, compared to the other 20, it is still high compared to all the countries. This variation of Iceland's performance can in part be traced to the fluctuations of the national currency (Hagstofa Íslands, 2011d).

## **2.10 Seafood exports from Iceland**

Seafood exports from Iceland in volume and worth have varied throughout the years. In recent years they have steadily declined both in value and volume as percentage of total exports from Iceland. In 1991 export of seafood products were close to 80% of the total export value and just over 64% in volume. In 2010 those numbers had dramatically changed, to 39,3% of the total export value and 31,3% of the total volume exported (Hagstofa Íslands, 2011a). Despite this diminishing share of total exports, total worth of marine products exported grew from the year before, to over 220 million ISK while its volume decreased 5,5% (Hagstofa Íslands, 2011c).

### **2.10.1 Import Tariffs at the Export Markets**

Iceland has made 26 bilateral trade agreements with over 50 countries. Mostly they have been made via EFTA though Iceland has also made bilateral agreements separately with Greenland and the Faroe Islands. Trade agreements have not been made with several important trading countries such as the USA, Russia and Japan (Íslandsstofa,

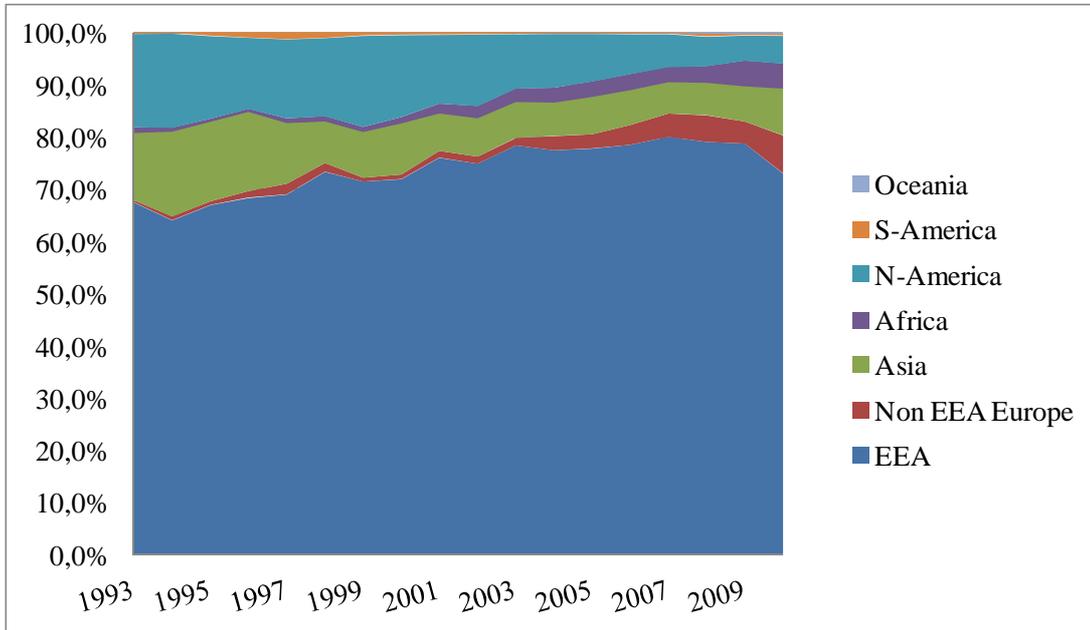
2012a). Most recently an agreement was reached with China which will be signed in 2013.

According to the agreements different customs duty can apply depending on the ingredients of a product, like if certain content in a product, such as bread, is more than a certain percentage, the product can pass from one category to another and higher or lower duty may apply. This can lead to producers having to adjust their product according to trade agreements with the foreign market it is intended for as to be more competitive (Íslandsstofa, 2012b).

Even without a specific trade agreement, exportation of the main frozen, fresh or chilled marine products to the USA from Iceland is free. Preparation of the product such as drying, smoking or adding flour may add custom duties (United States International Trade Commission, 2012). Exports to Japan carry higher duties. When fresh, frozen or chilled but otherwise not further processed it is usually between 5-10% but can reach 15% if further processed such as dried, smoked or if it has added flour (Japan Customs, 2012).

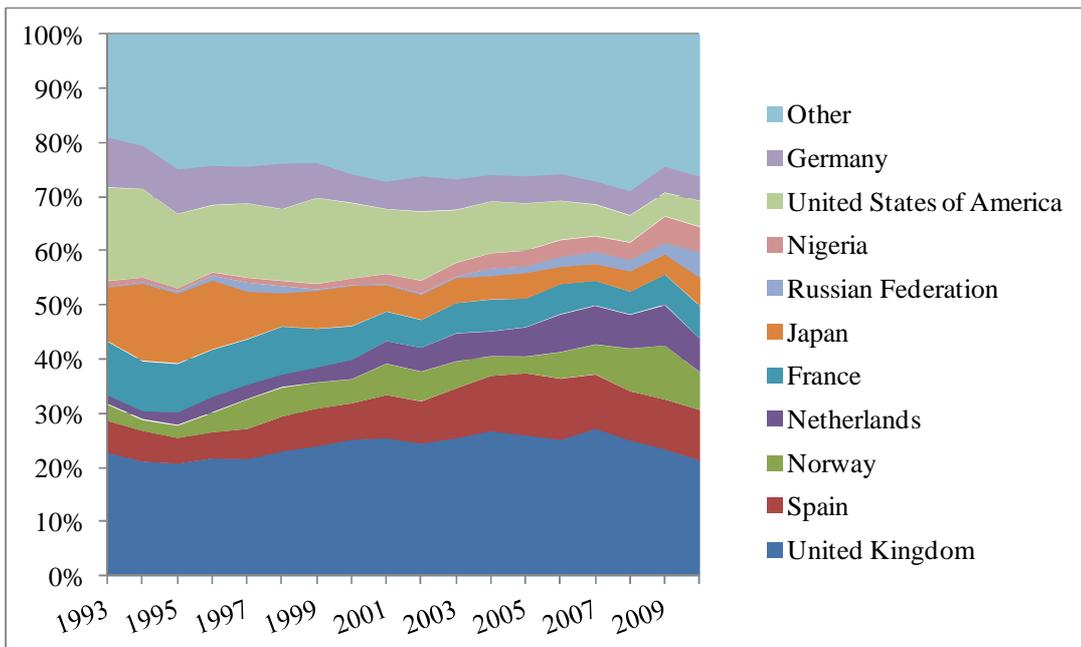
## 2.11 Market Areas for Icelandic seafood products

By market areas the European Economic Area (EEA) has by far been the most important for Icelandic export of seafood products. In figure 8 shows the total market distribution by continents.



**Figure 8. Export of seafood products from Iceland.**

For the last two decades more than two thirds of all marine export has been exported to the EEA (Hagstofa Íslands, 2011d). See figure 9.



**Figure 9. The market area for Icelandic marine export.**

### 2.11.1 Europe

In 2010 more than 173 billion ISK worth of seafood products were exported to Europe. Within the continent the largest part went to the European Economic Area (EEA) and much less to non EEA countries. The United Kingdom (UK) was, by far, the most important with close to 47 billion ISK. Spain was the second most important player with close to 21 billion ISK. less than half what was imported to the United Kingdom. In figure 10 it is evident that the UK market has been by far the largest market within Europe.

The total share of seafood exports to Europe has been increasing over the recent past. It has risen from less than 68% of total seafood export in early 1990 to more than 80% in 2010 (Hagstofa Íslands, 2011d).

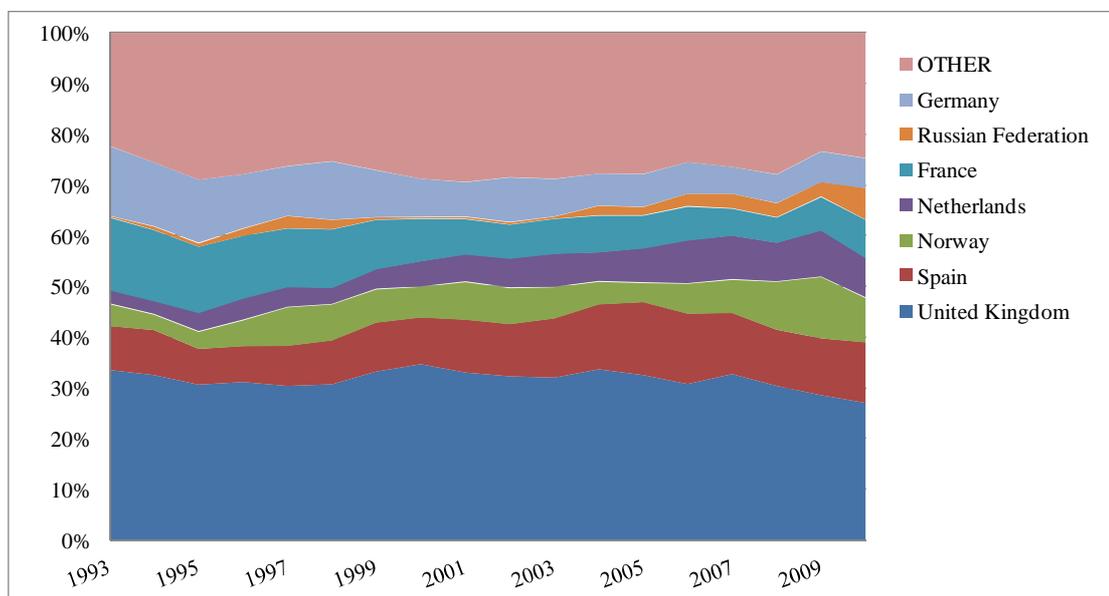


Figure 10. European market distribution.

### 2.11.2 America

America has, in the past, been an important market for seafood exports from Iceland, ever since the end of the Second World War (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011).

It has, though, been diminishing and its total value in 2010 was close to 12.500 billion ISK. Within the continent the United States are, by far, largest with around 83% of total export value in 2010 and Canada the second largest with close to 11% that same year. Other American countries have been of far less importance (Hagstofa Íslands, 2011d).

### **2.11.3 Asia**

Asian market went through a growing phase, during the 1990's, as part of total seafood export. Then it reached a more stable phase (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011). In 2010 close to 20 billion ISK was exported in terms of value, placing Asia as the second largest export market for Icelandic seafood products. Within Asia Japan is largest with over half of all exports in 2010. Japan has been steadily losing importance over the last two decades while China has been slowly gaining share and had close to 15% in 2010 (Hagstofa Íslands, 2011d).

### **2.11.4 Africa**

There is a tradition of exports of seafood products from Iceland to Africa (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011). In 2010 just over 10 and a half billion ISK were exported to Africa. Largest country, by far, is Nigeria, which is one of 10 largest markets for seafood products from Iceland in terms of value. For the last two decades close to all exports to Africa have gone to Nigeria, with other African countries getting between 0,1% and 2,3%. The year 1995 was an exception when just over 6% of total marine products were exported to Africa (Hagstofa Íslands, 2011d).

### **2.11.5 Oceania**

Even if Iceland exports seafood to Oceania it has not been a major market through the years. The reason is threefold; small markets, distant markets and a strong local fishing tradition of their own (Ögmundur Knútsson Hreiðar Þór Valtýsson Hörður Sævaldsson Helgi Gestsson and Bjarni Eiríksson, 2011). In 2010 close to 670 million ISK was exported in terms of value. Though small, it has been growing as a market. In 2004 only 60 million were exported to Oceania. For the last two decades close to 100% of all Oceania exports have gone to Australia, in 2005 the scenario started changing and in 2010 close to 30%, of what was exported to Oceania, went to other Oceania markets (Hagstofa Íslands, 2011d).

## 2.12 Export value of Icelandic seafood by processing methods

Statistics Iceland categorizes processing methods for fish that is exported in seven different categories; frozen, salted, fresh and chilled, dried, meal/fish oil, canned goods and other.

Frozen products have for a long time been close to and over 50% of all fish products exported. Fresh and chilled products come second as the most valuable and are followed by salted and meal/fish oil both at little over 11% for 2011. In figure 11 the development of processing methods can be seen for a twenty year period, from 1991 to 2011 as a ratio of total exported value (Statistics Iceland, 2012a).

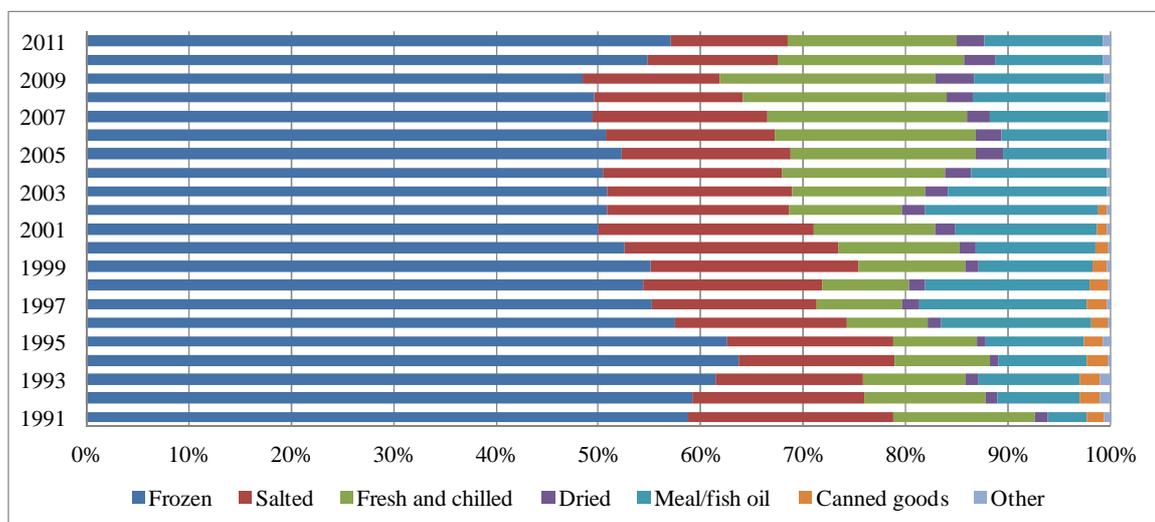


Figure 11. Development of processing methods.

### 3 Literature review

Regarding the Icelandic fishing industry there has especially been a great debate on the nation's fisheries management system, the ownership of quota and concentration within the industry. Áslaug Ásgeirsdóttir published, in 2007, findings on countries cooperation in deciding how to exploit joint fish stocks and the bargaining power of interest groups. The study showed that in the case of Norway and Iceland, interest groups could and did influence the outcome of negotiations by restricting alternatives available to the negotiators. Highly constrained negotiators have a bargaining advantage. This was found to be the case with Iceland and Norway. Iceland had, in its negotiations gotten more share of the Iceland-Norway joint fish stocks than strict application of geography should indicate (Áslaug Ásgeirsdóttir, 2007).

Some attention has also been given to the high level of debt within the industry. This has been amongst studies conducted by researchers at one of Iceland's main banks, Íslandsbanki. In a report published by the banks seafood Industry research team in September 2011. The ratio of net indebtedness to EBITDA had declined, although still being relatively high, in the year 2009, and that this was mainly due to greater profits (Íslandsbanki Seafood Industry Team, 2011). This is in line with findings made by Þorvaldur Helgi Auðunsson. According to the study the high debt ratio was unsustainable within the fishing industry. There had been increase profitability within the fishing industry however that profit had been lost in quota buying's and national capital markets (Þorvaldur Helgi Auðunsson, 2011).

Further the development of the sector has gotten attention especially in regards to the areas of fishery and its history. Scientific research as to better utilization of fish and by-products and better transportation methods, especially packaging, have been conducted. With ever growing green thinking the sustainability and ecological effects of fishing has gotten a well deserved attention. An interesting research on the subject was a Life Cycle Assessment on Icelandic Seafood products based on two different fishing methods. One kilo of frozen Icelandic cod fished by two different fishing gears, a long liner and a bottom trawler was assessed with the conclusion that bottom trawled cod had higher environmental impact (Aðalbjörg Birna Guttormsdóttir, 2009).

A little less attention has been given to the business part of the industry though important work has been conducted. Significant work in the business area of the fishing

industry has been made by Ögmundur Knútsson, Helgi Gestsson and Ólafur Klementsson in analysing value chains and structural changes within. Ögmundur Knútsson conducted his PhD thesis: *Strategic Alliances; The Role of Central Firm in Governing Strategic Alliances Between Small and Medium Size Companies; The Case in the Icelandic Fish Industry* at the University of Edinburgh. The structural changes in the Icelandic fish industry value chain from 1990 to 2007 were studied and there seemed to have been quite a bit of concentration, the companies were getting fewer and bigger. Amongst the things pointed out were four main factors that had influenced the fishing industry in the 10-15 previous years; implementation of the quota system, more export freedom, more overall economic freedom in Iceland and more fish industry companies in the public stock market. Ögmundur Knútsson further noted a conflict of interest in the creation of value within the value chain and that it caused a lack of trust between concerned parties (Ögmundur Knútsson, 2001).

In 2006 Ögmundur Knútsson along with Ólafur Klemensson analyzed, documented and described changes in three of the most important fish producer's organizations in Iceland, going into how these changed from being non-profit producers-organisations to being publicly listed global corporations competing both domestically and globally. Several factors were found that had been the driving forces behind these changes. Most importantly retailers and supermarket chains got more powerful; a trend of consolidation in Europe; changes in consumer demand; financial difficulties of the organizations; growing competition and strategic drift due to lack of clear company vision (Ögmundur Knútsson and Ólafur Klemensson, 2006).

Ögmundur Knútsson, Helgi Gestsson and Ólafur Klementsson conducted a pilot study published in the 2008 IIFET Vietnam Proceedings. The structural changes from 1990 to 2008 in the Icelandic fishery sector were mapped. The export structure was categorized in a three-tier structure. Firstly two large exporting and marketing companies, with 30-45% market share in frozen and salted products. Secondly the processing companies with in-house marketing divisions and thirdly, the independent marketing companies. Only one processing company owned an importing and distributing company in the UK and that this was unique and different from the other processing companies. There was a large scale concentration of quota holdings and that there was a high degree of vertical integration of the industry. Ten of the biggest quota holders in 2007/2008 were vertically integrated companies, with activities ranging from fishing to marketing. Interestingly

enough they found as well that the fish industry in Iceland was getting more and more competitive and profitable but that the former large marketing and sales organizations were not finding their place in the new order of the value chain (Ögmundur Knútsson Ólafur Klemensson and Helgi Gestsson, 2008).

In 2009 the trio of Ögmundur Knútsson, Helgi Gestsson and Ólafur Klementsson published another paper that was a part of an ongoing study on the structure, organizational and productivity changes in the sector. Changes in the strategic positioning in the sectors value chain were studied. They found that a shift in power was starting to take place within the industry, going from the holders of the quota to the marketing agents. More value had to be generated due to high priced raw material. In addition it was identified that since the ending of the former MSOs no one was longer working towards a better global image of the industries products. There was a need for synchronized cooperation between companies. Ögmundur Knútsson, Helgi Gestsson and Ólafur Klementsson further identified six main operational strategies; Quota-yield based optimisation, Value based optimisation, Globalized commission/sales and marketing (CSM) company with processing, Local CSM company, Specialized producer and finally the Harvester and specialised producer (Ögmundur Knútsson Helgi Gestsson and Ólafur Klemensson, 2009a).

Yet another study conducted, by the trio of Ögmundur Knútsson, Helgi Gestsson and Ólafur Klementsson, took a close look at the importance of small and medium size enterprises (SME) in the Icelandic fishing industry global value chain. The main competition in the fishing industry was the international markets where the products were marketed and sold. The conclusion was that most Icelandic exporting firms were SME's and that only a handful could be described as Multinational enterprises. The SME's overcame some of their internal and external barriers with possibilities available in the global value chain, often supported by use of ITC and emerging logistics possibilities (Ögmundur Knútsson Helgi Gestsson and Ólafur Klemensson, 2009b).

In 1994 Dr. Arnar Bjarnason analysed the nature and behaviour of the Icelandic fishing industry giving special attention to its exporting part. There were 60 firms included in the study that were categorised into subgroups according to their principal activity and the main products they were exporting. The two main categories were export management companies (EMCs) and partially integrated exporters (PIEs). See table 2. A total of 34 firms were categorized as EMCs and a total of 26 as PIEs. The EMC's were

then subcategorised into two categories and the PIE's into 5 different categories (Arnar Bjarnason, 1996).

**Table 2. Arnar Bjarnason's firm categorization.**

Category	Number of firms
Principal EMCs	4
Other EMCs	30
PIE-1	6
PIE-2	5
PIE-3	3
PIE-4	7
PIE-5	5
TOTAL EMCs	34
TOTAL PIEs	26

The EMS's main base of income was a calculated commission based on export product value. The principal EMC's were domestic firms specialised in exporting and servicing as agents. They were owned by their respective processors and had central functions such as sales and export marketing organisations. They were product specialised and served both as marketing agents and as strategic advisors for processing firms on matters such as quality, production, planning, R&D services, packaging and product standards. The principal EMC's had quite formal relationship with their members and producers. They operated a relatively strict regime and discipline. Further they imported various production supplies for their processors (Arnar Bjarnason, 1996).

The other EMC's were national domiciled firms specialised as exporting as distributors operating, on their own account, internationally. These firms were mostly young and small both in terms of export value and employees with 5-6 people on average including the owner (Arnar Bjarnason, 1996).

Partially integrated Exporters were the second main type of exporters defined in the study. These were exporters that were partially backward integrated. The PIE - 1 exporter's were principal owners and key members of at least two of the Principal EMC's, selling all salted and frozen products through the Principal EMC's. All the PIE - 1 firm's operated big fleets of fishing vessels that served as their main raw material suppliers. Most of them were diversified producers and mostly in primary processing although in some secondary processing as well. Their direct exporting was chiefly of

whole fresh fish on ice though they exported sometimes their own fish meal and fish oil (Arnar Bjarnason, 1996).

The PIE – 2 firm's were mainly in harvesting but also in direct exporting. The main products exported were either whole fresh fish on ice or primary processed products that were frozen on board their trawlers. Further some sold their catch at the domestic auction markets. The PIE – 3 firms were exporters mainly producing fish meal and fish oil. Many of them were closely connected to and had majority shares in PIE – 1 firm's (Arnar Bjarnason, 1996).

The PIE -4 category were primary processing firms, mostly of groundfish species exporting directly to foreign markets. These mostly acquired their raw material from auction markets though some bought directly from other primary processing firms or from fishing vessels (especially small vessels). The PIE -4 firms were usually small (average of 20 employees), family owned and their managing director was typically their principal owner. Finally the PIE -5 companies were firms only exporting their own production. The majority of their products were exported fully processed either by their own brand or by a foreign buyer's brand. They also traded their products in the domestic market. Amongst the products exported were canned seafood goods. Some PIE – 5 firms also exported primary processed products (Arnar Bjarnason, 1996).

For most seafood exporters in Iceland it was crucial, for survival, that there was no time lag between the establishment of the company and the point that they initiated their export. The reason for this he found to be twofold. Firstly, the nature of the products themselves called for immediate export and secondly, the importance of the domestic market for these firms. By the latter Arnar Bjarnason meant that more time lags could exist for companies with important home markets. Table 3 shows the average age and average direct export experience of the participating firms and it is evident that the longest time lag between founding the firm and initiating export was with the PIE companies (Arnar Bjarnason, 1996).

**Table 3. Average age and direct exporting experience in 1992.**

<b>Age and Export Experience of Icelandic Marine Product Exporters</b> ( in 1992 )		
	Average age in years	Average direct export Experience in years
Principal EMCs	55,7	52,3
Other EMCs	9,7	9,2
PIE	27,3	20

When analysing the establishment of each of these companies Arnar Bjarnason realised that there was an increase in the number of exporting companies in the 1980s. Due to that increase the number of exporting companies outside of the capital area grew. Previously it had been that almost all seafood exporting firms had been located within the capital area (or close by). This, Arnar Bjarnason thought, had been a consequence of the lack of sufficient infrastructure in other parts of Iceland. As to why the numbers grew outside of the capital area there were two important technological inventions, the emergence of new communication technology (the telefax) and new transportation technology (containers) (Arnar Bjarnason, 1996).

Of the 60 companies included in the study only 15 were domiciled outside the capital area. Most of the companies that were exporting fish fresh by containers were located outside the capital area (Arnar Bjarnason, 1996).

Arnar Bjarnason found an interesting characteristic in the export of most of the participating firms, especially the smaller ones. There was great concentration in terms of markets and/or buyers. Most of them exported most of their exportation to only two markets or fewer. Furthermore there seemed to be a general lack of strategic segmentation of export markets by the firms, with all except the three existing big MSO. Most of the smaller firm's managers expressed that they felt the company to be too small and lacking financial power to be able to segment exporting markets strategically. Thus they needed to find every possible buyer to obtain security in payment. The bigger firms did not segment the export markets strategically either. A possible explanation, according

to Arnar Bjarnason, was that they sold their products directly to foreign importing firms whom then sold and distributed the product forward, within the distribution chain. Only the three big MSOs were found to apply, to any extent, export market segmentation strategically. They operated a diversified sales network consisting of sales subsidiaries and processing units abroad while also directly exporting, to some extent, to foreign end users (Arnar Bjarnason, 1996).

Arnar Bjarnason found that there seemed to be a market shift in to what markets seafood was being exported (like frozen products going to Europe instead of the U.S. market) (Arnar Bjarnason, 1996).

When the research came out extensive deregulation within the fishing industry had taken place though its business environment was still largely dominated by laws, regulations and government policy decisions. There was also, due to over-investments and debt burdens, poor profitability within the fishing and the processing sector. The study revealed that the export sector was still largely dominated by relatively few firms despite the extensive structural changes within the industry. It further revealed that, even if their export share had reduced substantially, the Principal EMCs (MSOs) still had the largest share of the exportation of seafood products. It was also noted that newly entered exporting firms were significantly product specialised in their exporting activity (Arnar Bjarnason, 1996).

The analysis extended also to how the ownership of the participating companies could best be described. The general form was found to be shareholding though many of the Other EMCs and the PIEs were operated on a family basis. Distinct, from the rest, were the Principal EMCs (MSOs) as being operated either on a cooperative basis or primarily owned by their producers (Arnar Bjarnason, 1996).

According to the study the Icelandic fishing industry was a do or die situation when it came to the process of internationalisation. Firms usually jumped right into exporting without developing a home market first. The big MSOs were the furthest along the process of internationalisation, with sales subsidiaries and processing plants abroad, while other firms sold (generally) directly to foreign buyers without an intermediary. The export planning by the Principal EMCs was rather extensive and strategic. In contrast export planning was either very limited or non-existent, with the other firms (Arnar Bjarnason, 1996).

When it came to research and development the general view among exporters was that more had to be done. Despite that point of view, very few of the participating firms were strategically committed laying out money for the purpose (Arnar Bjarnason, 1996).

The most used promotional methods were personal contact with customers and visits to foreign buyers though company brochures and participating in trade exhibitions were also important (Arnar Bjarnason, 1996).

Since Arnar Bjarnason published his book little researched had been made, thus it was intriguing to follow up on parts of Arnar Bjarnason's previous research and further it.

## 4 Research Methods

In this research, two of the basic research methods were used, qualitative and quantitative method.

The main aim of this research is to explore the current structure of the Icelandic seafood sector and describe the main characteristics of the export companies. A secondary aim is to compare the findings of the current study to findings from Arnar Bjarnason's study. This will be done in order to give an answer to the following questions.

**What is the current structure of the Icelandic seafood sector?**

**What are the main characteristics of the export companies?**

### 4.1.1 The qualitative method

In this research the qualitative method used was individual semi-opened interviews to gain insight into the industry. This is an interaction between one single interviewer and the interviewee. They are usually recorded and then transcribed (Cooper & Schindler, 2008).

For the purpose of the study, the participants had to have experience in exporting seafood products. For that reason managing directors were chosen. Thus, a purposive sampling was used (Esterberg, 2001). These interviews were to be used in more than one study, made by two researchers. The purposive sampling was made by both with the other researcher and Arnar Bjarnason, an adviser of the research. The interviews were then conducted in cooperation of the two researchers.

There was no existing published or accurate list of Iceland seafood exporters and getting a complete list of exporting companies, in order to contact them and their managing directors was not an easy task. Several offices were contacted, like RSK (Ríkisskattstjóri), the Customs, the Association of fish producers and exporter (Samtök fiskframleiðanda og útflytjenda), Promote Iceland, the Federation of Icelandic Industries (Samtök Iðnaðarins), Credit-Info, Iceland Trade Directory and the Ministry of Foreign Affairs, with little results. If they had the information or could generate it they denied releasing a complete list based upon privacy laws.

Firstly a list of 122 companies was obtained from the Iceland Trade Directory and secondly a list of 215 companies registered with RSK with (NACE codes 46381, 46171

or other codes related to marine export). The two lists were then merged creating a new one with 312 possible seafood export companies. Those were then further researched, firm by firm, to see if they were still operating, through searches as the yellow/white pages, the internet, and many companies were contacted by phone. The reason for these individual inquiries was to find out if the firms were truly operational or if there had been mergers, bankruptcy, takeovers, or similar. Firms that were truly closed, not listed in the yellow/white pages, did not have a web site, no e-mails nor had a history of merging, takeovers or bankruptcies were taken off the list.

The result was a list of 119 companies, including information like a phone number or an e-mail. Still unsure that all of those companies were operational an e-mail was sent out to those companies asking them to participate in a survey if they were actively exporting seafood.

From these 119 companies 15 were selected for the purposive sampling. The criteria were size, age, exported products, geographical location and if there was any known integration in other aspects of the fishing industry in Iceland. This was done in order to get a viewpoint from as many different types of firms as possible, selecting together all different sizes and shapes. A letter was sent out to them (see appendix A) where they were asked to participate in an interview about the Icelandic fish industry. As the participants were promised anonymity, their names will not be shared. A total of nine companies were willing to participate.

The interviews took place between the 5<sup>th</sup> of August and the 12<sup>th</sup> of August 2011, and the duration was between one and two hours. These interviews were used to gather information about the Icelandic fishing industry and the nature of seafood export from Iceland as well as the internal and external environment of the firms. Since the interviews were half-open the interviewees could bring up what they considered relevant. The researchers, though, had specific written questions on paper, that needed to be answered but not in any particular order (see appendix B).

The specific written questions were constructed by gathering information about the fishing industry and its environment, from books, articles and news services, and matching them with some of the questions used in the previous study by Arnar Bjarnason. All the interviews were recorded, with the permission of the participants, and then transcribed.

With the analysed interview data and questions used in Arnar Bjarnason's previous study, a questionnaire was created and put forth on the internet.

Other qualitative methods do exist such as a case study or an action research though neither fitted the purpose of the study.

Case study is when multiple perspectives are obtained, through different information resources as to research a single organization, event or process at a point in time or a period of time. This method is very detailed and descriptive. It suits well where the object of the research is to analyze single or few entities (Cooper & Schindler, 2008). A case study that would have sufficiently given the author the inside information needed would have been very time consuming as well as difficult.

Action research is when a scenario is studied and analyzed and correction is generated, planned and implemented. The process then goes into a loop until the researcher is satisfied with the corrective results. This method is particularly relevant where improvements are the end goal of a research. This method gives deep insight into particular organization, however in order to use it successfully one first needs understanding of what is to be corrected (Cooper & Schindler, 2008). Sufficient insight into the fishing industry by such a method would have been extremely difficult and time consuming.

#### **4.1.2 The quantitative method**

Because the goal of this study was to compare the results with the questionnaire from Arnar Bjarnason's study from 1992, it was necessary to include the questions from his study in this questionnaire and to have a similar structure. Additionally, this questionnaire was meant to create a statistical base for more than one Ms theses. The questionnaire created ended up quite lengthy.

The questionnaire took between 10-15 minutes to complete. There were 31 questions, divided over 6 pages (see appendix C) and many of the questions had sub-questions. For example, question number 19 had 45 sub-questions or elements were the participant had to rate each one of these elements on a scale from one to five.

Given the quantity of questions and the time length needed to complete the questionnaire, the researchers were concerned about participation rate and efforts needed for the validity of the survey. The nature of the research called for a purposely selected sample. Other sampling methods exist but did not fit the nature of the research.

The questionnaire was created on a webpage, [www.createsurvey.com](http://www.createsurvey.com). A questionnaire could have been sent out by regular post or the author could have brought it in person, to whoever was expected to answer. That would have been time consuming and expensive and for those reasons a web based questionnaire was chosen. A letter of invitation (see appendix D) was sent out directly from the webpage, on the 12<sup>th</sup> of September 2011, to the e-mail addresses of the 119 companies on the list. The recipient was asked if he was or had been exporting seafood products, to take part in the survey, and to participate by directly clicking on the link to the survey instead of copying it and pasting in a browser. This was done in order to monitor who had already participated so that follow-ups or reminders would only be sent out to whom had ignored the original invitation. Full anonymity was promised.

If the participant had quit the export business or never started, he was directly diverted to a one page questionnaire with 45 elements concerning barriers to export. In this case the participant had only to mark three in order of importance by giving them a score of 1 to 3. If, on the other hand, the participant was in export, he was diverted to the main questionnaire.

The researcher's fear of poor participation seemed to have been legitimate. Four days after the first invitation had been sent out only seventeen had participated, of whom 4 were not actively exporting. This was less participation than expected. A firm that had been sent an invitation contacted the researchers telling them he had encountered a problem, the invitation text had been scrambled up. That error was fixed, and on the 16<sup>th</sup> of September, the first reminder (see appendix E), with explanations and apologies was sent out from the webpage.

Over the next four days, six more completed the survey. Still far from the researcher's expectation, they thought that the invitation could have been considered spam by the e-mail clients, resulting in many not receiving the invitation. So a second reminder (see appendix F) was sent out the 22<sup>nd</sup> of September, this time from a personal e-mail client and not the webpage. This text was included: "*it seems that certain recipient's mail-servers are preventing the receipt of a previous invitation by blocking it as spam. Therefore, allow us to send this request again; this time from a local mail server, and as a "plain text", in hope that everyone will receive it this time.*" This time the participants e-mail did not follow the responses, it was an anonymous participation but the

participants were encouraged to write their e-mail addresses in a special box in the survey. Over the next 6 days, six more completed the survey.

The third reminder was sent out on the 28<sup>th</sup> of September (see appendix G) and the firms on the list were contacted by telephone. One week later, eight more had participated in the survey and the total number had grown to thirty three. Being far from satisfactory and threatening the significance of the research more had to be done. Three reminders had already been sent out, many recipients were getting irritated by reminders, and as it is not recommended to send more than two reminders, the researchers decided to wait to act again. Finally, a fourth reminder accompanied with phone calls were made on the 28<sup>th</sup> of November (see appendix H). The researchers had managed to obtain personal e-mails to most of the firms managers of the companies left on the list, and these personal e-mails were used for the fourth reminder. Only four responded.

One invitation and four reminders had been sent out without it yielding sufficient responses to render the survey significant, so more had to be done. The researchers sent out yet another e-mail reminder (see appendix D), again to the recipients personal e-mail addresses, and contact them by phone. Participation was pleaded for, and the reminder explained that without greater participation a completion of the planned theses would be difficult if even possible. This time was different and twenty additional managers completed the survey, adding to a total number of participating exporting companies of fifty seven.

Of the 119 e-mails originally sent out in September 2011, 28 were immediately rejected by the mail server with the message that those e-mails did not exist or that they were not possible to deliver. That leaves only 91 companies that should have been on the list, since those 28 were presumably not operating. By few phone calls this was confirmed. Additionally, it is clear that of the final 119 companies there was no guarantee that all of them were actively operational. With a few more phone calls that was also confirmed. Thus, it is possible to conclude that less than 90 Icelandic companies are operating in the regular export of seafood from Iceland, and after consulting with people intimately connected with the fishing industry at large, the more accurate count would be closer to 80 companies actively involved in marine exports. With 57 participants having completed the survey, it is possible to come to the conclusion that the results yielded from the survey-data can be considered significant and that realistic conclusions can be made from them.

The research of Arnar Bjarnasons firms and their current status was obtained from the Iceland Trade Directory.

## **4.2 The analysis of the data**

The data was analysed by using excel. The nature and purpose of this thesis did not call for the usage of a specialized statistical program like SPSS. All graphs and tables were made in excel.

## **4.3 Limitations**

There were only 9 interviews conducted with nine interviewees. Ideally it would have been better to interview all of the managers from the list. No interview was conducted with managers from Western Iceland, the Westfjords, North-East Iceland, North-West Iceland or Eastern Iceland. That reality, makes generalizing the findings, from the interviews across Iceland, not possible. The research, though, suggests that similar trends may be found country wide.

## 5 Research findings

As the research aimed not only at analysing current seafood exporting companies but also to compare it to findings from Arnar Bjarnasons study the fate of his participating firms will firstly be described and secondly the findings from this current study.

### 5.1 The fate of Arnar Bjarnasons firms

The fate of the companies that participated in Arnar Bjarnasons study varies according to the company registration of the Icelandic directorate of internal revenue (RSK). A total of 62 firms were researched at the time. Year end 2012 only 20 firms, or 32%, were operating unchanged. Six more, or 10%, had the same operations as before but had changed their social security number meaning that in a way they had become new entities. Thus only 26 firms were still operating the same way or a total of 42%. Eight companies (13%) had merged with others making the total of 34 operational firms (55%), in any similar form as when the study was undertaken. A little over 16%, or 10 firms, had discontinued their operations, 12, or little over 19%, had been declared bankrupt and two (3%) had changed the nature of their operations. The fate of 4 firms could not be revealed and are uncertain (RSK Directorate of Internal Revenue, 2012)

Thus 55% of the firms are still operational in seafood exportation, 35,5% have discontinued their operations, 3% are operating have changed their operational nature and 6,5% are uncertain. This can be graphically seen in figure 12.

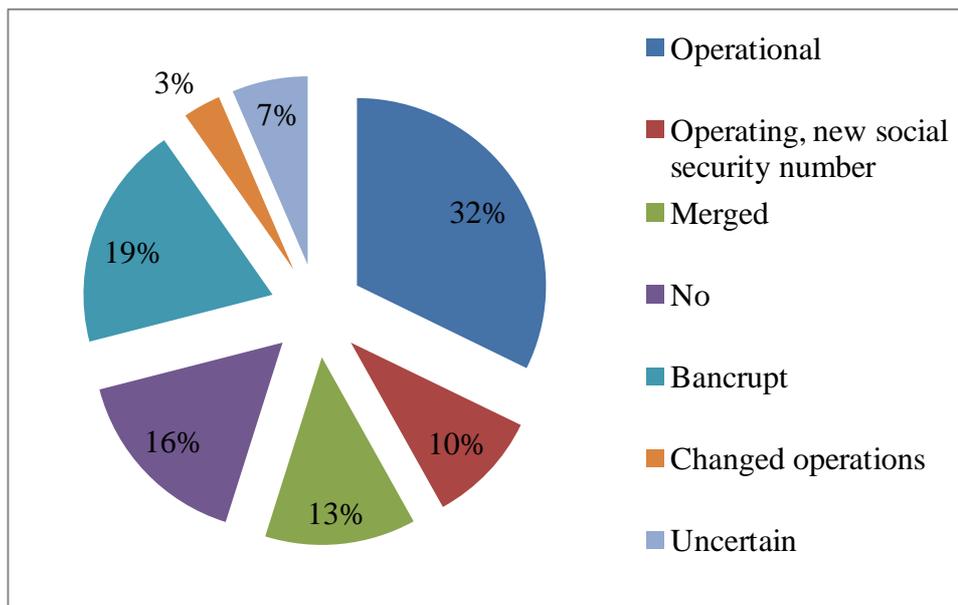
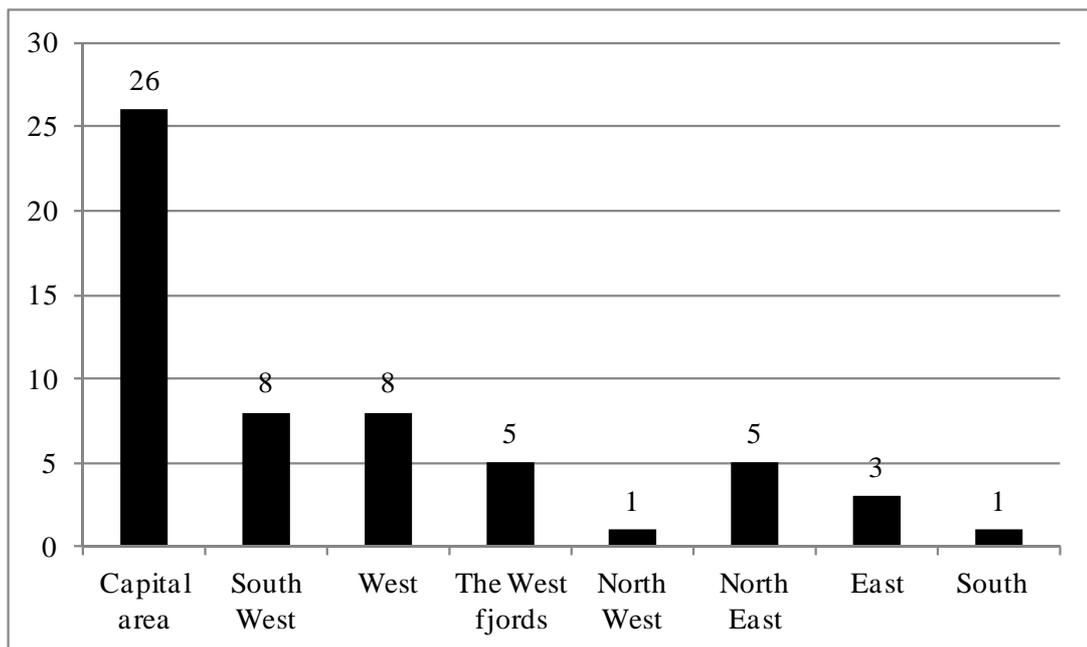


Figure 12. The status of Arnar Bjarnason's firms in 2013.

## 5.2 Location of the participating firms

As previously mentioned 61 companies participated in the study of which 57 were active exporters of seafood products, three of the participants hadn't initiated their export and one had discontinued.

As can be seen in figure 13 these companies are scattered all around Iceland though majority is located in the capital area or within a one hour drive from it. This is significant for the export loading sites are within the capital area.



**Figure 13. Geographical location of exporting firms.**

Companies located in the capital area, the south west of Iceland and in the west are a total of 42 and can be categorized as close to the exporting loading sites or a total of 74% of the seafood exporting companies.

The importance of close proximity to the export loading sites was stressed by one of the interviewees.

*“We are close to Reykjavík and thus we do not have to depend up on transportation. [...] There might not be a truck every day and it has gotten to the point that it is just as expensive to transport a container across Iceland as to Iceland from Europe. It is very expensive.”*

(Owner and Managing director of an SME)

### 5.3 Year of foundation of the participating firms

Interestingly enough no participating company has been founded since 2005. Two other periods arose, in this research, in which no currently exporting company was established, during the period from 1948-1952 and the period 1958-1962.

### 5.4 Age of the participating firms

These companies have different roots and formation. In figure 14 the age of the participating firms can be seen. The oldest one was founded in 1901 and the youngest in 2005. Most of them, though, are between 10 and 29 years of age and the average is little over 32 years.

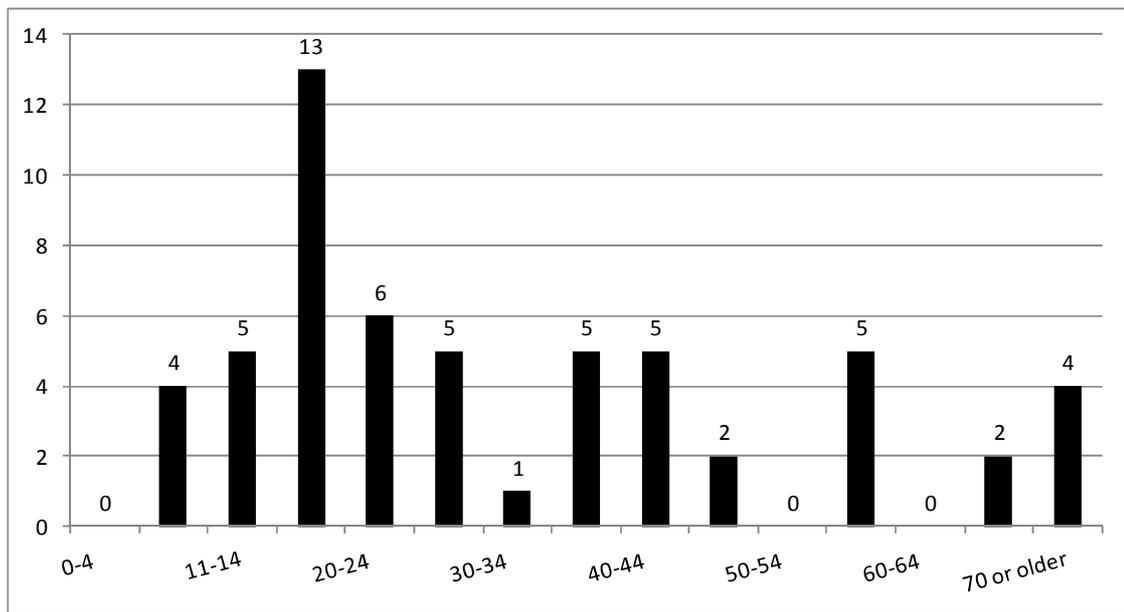


Figure 14. The age of the participating firms.

## 5.5 Number of employees of the participating firms

Most of the participating firms would be considered to be small or medium sized (SME). Twenty one exporting companies have 10 or less employees and further 18 have 50 or less employees. Thus a total of 68,4% of the participants had 50 or less employees. Few participants had a lot more employees which skewed the average number of employees that was close to 84 per company, this is evident from figure 15.

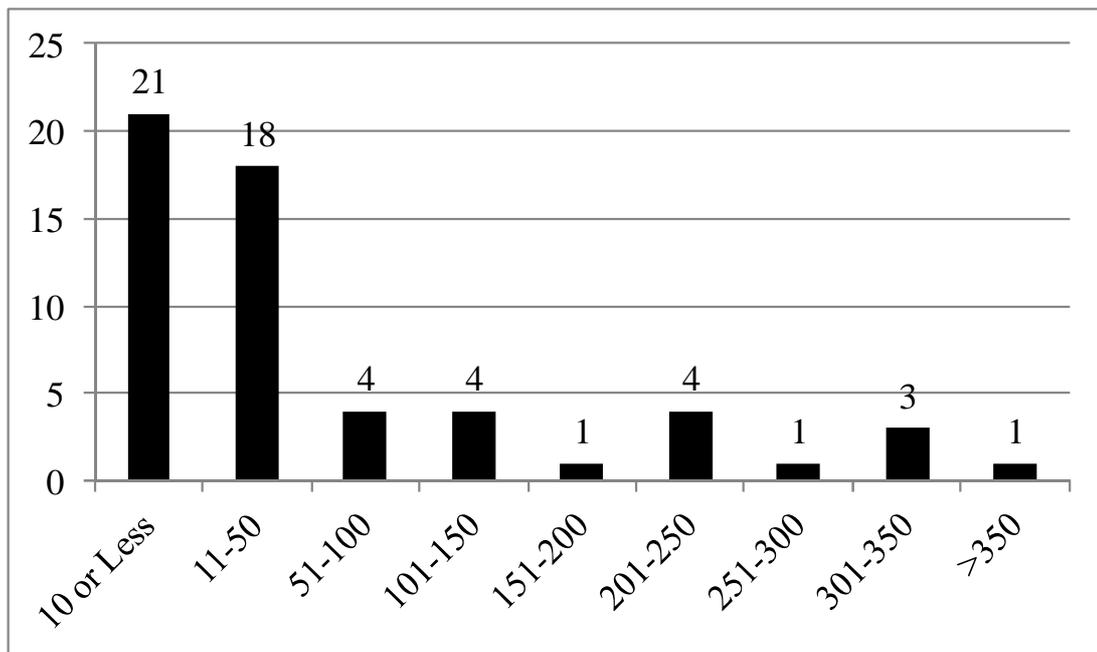


Figure 15. Number of employees.

Most of the participating companies had less than 5 employees that were involved in marketing, a total of 91,2%. This means an average of 3,6 marketing employees per company.

Not all of the companies, though, had employees only in marketing. There might be lack of understanding the importance and nature of marketing. Some firms considered themselves to be much too small to have marketing as a part of their operations.

*“We are much too small to do marketing. [Though you have 100 employees?] Yes, that is much too small.”*

(Managing director of one of the larger companies)

## 5.6 Export initiation of the participating firms

Most of the participating companies, 37, initiated their exporting within the first year, or close to 65% of participants. Seven more companies initiated within the first 5 years and four more in the first 10. A total of 48 companies, or little over 84%, initiated their exporting within the first 10 years of establishing the company. The average time lag was 5,8 years.

It may be so that the time lag can be, partly at least, attributed to the firms finding the market in Iceland to small and tightly regulated as one interviewee indicated.

*“We used to sell lobster in the Icelandic market. We considered it a service to Icelanders. We gave it up. [...] there has been a growing bureaucracy. The cost of selling in the Icelandic market was getting so great that we couldn’t risk more losses by selling in the Icelandic market.”*

(Managing director of one of the larger exporting companies)

When it came to how long each company had been actively exporting there was a difference to be found as well. Most companies, twenty in total, had been exporting for 11-20 years and fourteen more had been exportating for 21-30 years. Thus the bulk of the participating companies had been exporting for 11-30 years, a total of 34 companies or 60% of total participants.

## **5.7 Ownership of the participating firms**

Many of the firms are family owned and some are being passed on through generations.

*“The company was founded in 1970 in Great Britain. My father was working there selling shrimp. One thing led to another and he ended up producing shrimp. Soon he moved the company to Iceland.”*

(Managing director of an SME)

The participating companies seem to be mostly owned by relatively few, 32 of the total had 3 owners or less. 14 more were owned by 10 owners or less. Thus 81% had 10 owners or less. Only 2 companies had more than 100 share holders. Some firms had been openly exchanging ownership, in a free stock market exchange, for a while though they had withdrawn, partly because of too much strategic conflicts owner wise.

*“Many companies went on the market from ‘92/’93 until ‘97/’98. [...] in 2001 they started to withdraw from the market and we were the last one to go in 2007. [...] We had good experience from it but there was too much conflict, parties wanted to overtake the company and run it in a different way.”*

(Managing director of one of the larger companies)

## **5.8 Longest current business relation of the participating firms**

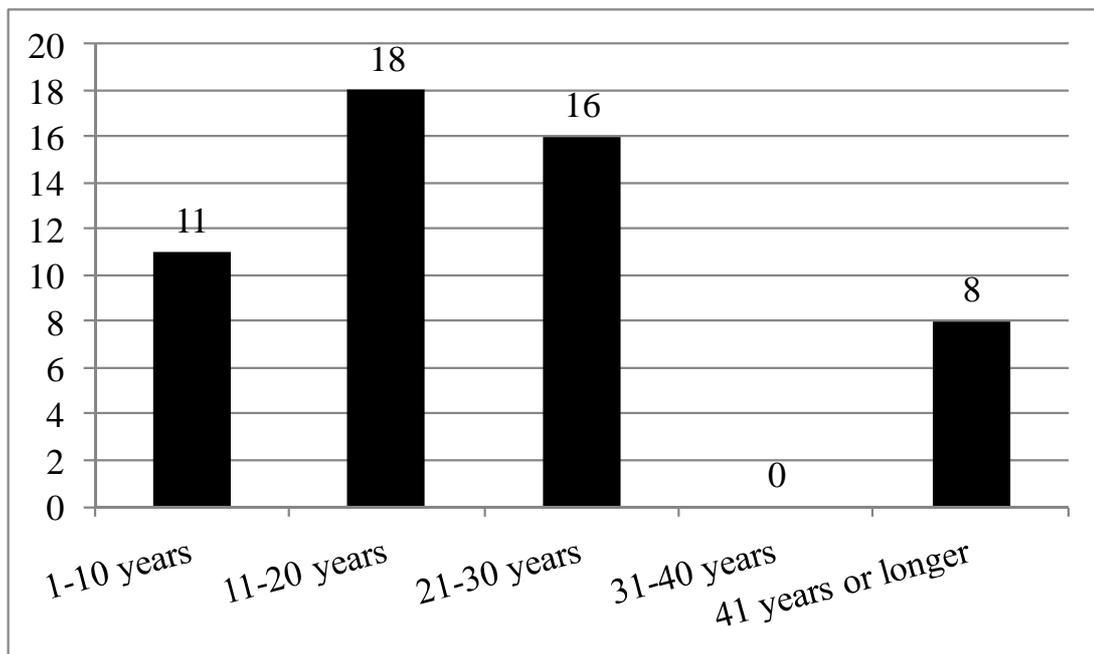
From the interviews, conducted it seemed clear that some exporters had a long lasting relationship with their foreign customers and some built mainly on trust.

A managing director of one of the larger companies stated that most of their fresh products were going to one big bulk buyer though they did not have a formal written contract with that buyer or anyone else. The buyer knew what the firm stood for, had been with it for a long time and that they mutually conducted their business built on trust.

*“When they started buying from us in ‘99 they bought only about 2 tons a day. [...] Now we sell them 7-8 tons a day, [...] We have a gentleman’s agreement and started from scratch with them.[...] It has progressed, they grow and we grow with them. In the beginning they had 87 supermarkets but have about 220 today. They plan on having 500 supermarkets in a three years time. So we are content and it is enough for us just to grow with them.”*

(Managing director of an SME)

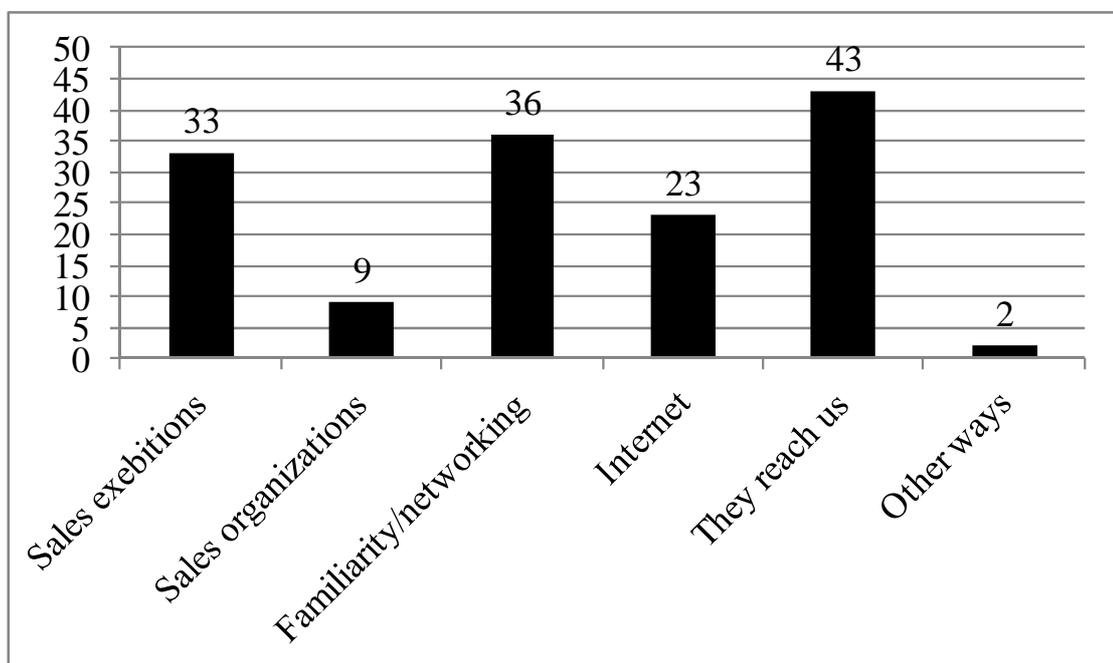
So it was intriguing to see for how long participating firms had been in continuous relationship with their longest lasting customer. Most, or 34%, had an ongoing relationship for between 11 and 20 years. This rimes well with the end of the MSO's monopoly. 30% more had an ongoing relation for between 21 and 30 years witch still can be, in part attributed to the MSO's monopoly ending. Eleven companies, or 21%, had 10 or fewer years of an ongoing relation and astonishing enough a total of 8 companies, or 15%, had been exporting to the same recipient for 41 years or longer. No participant seemed to have started an exporting relationship, which was still ongoing, during the years from 1971 to 1982 so there is a ten year gap as can be seen in figure 16.



**Figure 16. Longest unbroken business relation.**

## 5.9 How the participating firms reach their customers

The participants gave answers also to how they reached new clients and most, 73%, said that new clients reached out to them. This could be an indicator that whatever marketing methods the companies use are effective. As to other questions the participants could give multiple answers since it seemed likely from the interviews that more than one method was being used to connect with customers. Figure 17 shows a total of 63%, or 36 companies, claimed to reach new clients through familiarity or networking and 58% claimed to reach them through sales exhibitions. Further 40% used the internet to reach new clients and 16% through sales organizations. Most participants used a variety of ways to reach new clients.



**Figure 17. How firms reach customers.**

A managing director of an SME noted, in an interview, that the sales methods were changing. The reality of internet and computers had changed the scenery and that it was much easier to stay in contact with buyers now than before. The world had gotten smaller in that sense and totally different from when they only had fax-machines. Now they just sent pictures of the product.

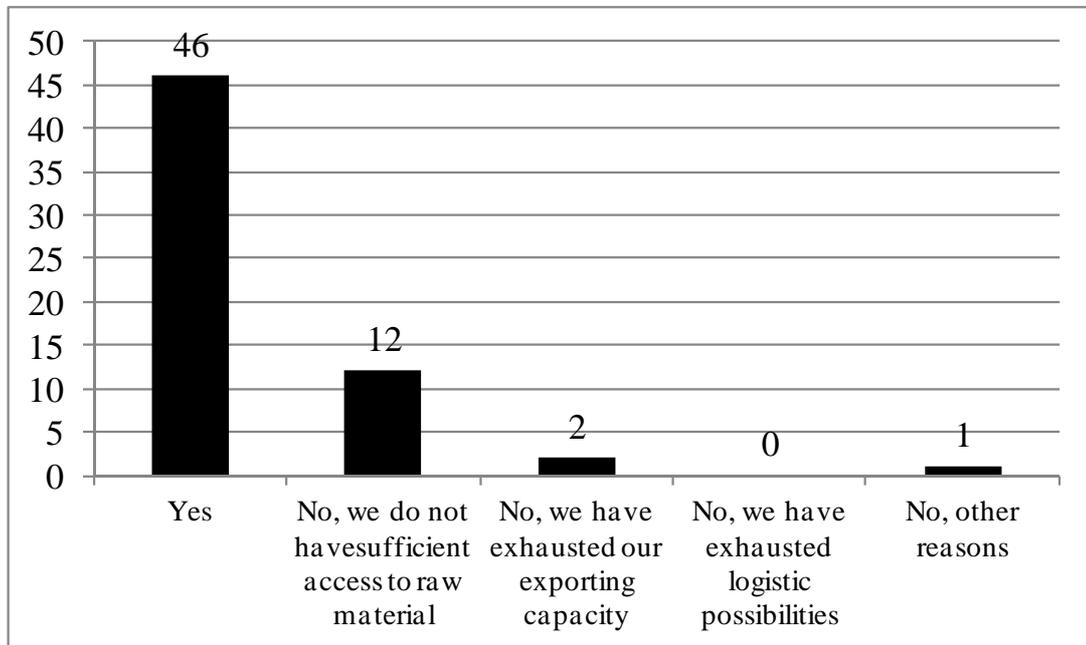
Another managing director of an SME noted that they were getting clients through family relations, that they got their latest buyer through his brother.

*“Sales exhibitions do some good. For me it is mostly about letting people know that I am still here. I do not get a lot of product orders from them but it is about maintaining and creating business relationships.”*

(Managing director of an SME)

### **5.10 Can the participating firms receive new customers**

The participants were asked if they could receive new clients and if not why that was and the results can be seen in figure 18. A little over 75% claimed that they could indeed receive new clients. Those that could not claimed that the main reason for their inability was that they did not have sufficient access to raw material. Only two companies told that they had exhausted their exporting capabilities.



**Figure 18. Can firms receive new customers?**

## 5.11 Vertical integration of the participating firms

Exporting entities in Iceland have different forms of ownership over their operations. In the survey the participating companies were asked how their ownership was structured. Thirteen, or 23%, did not give an answer. Vast majority (67% of total participants or 86% of responses) of the ones that did give an answer said that the company itself had ownership over their operations. A total of 6 companies had their ownership structured in other ways; they were owned by subsidiaries, parent companies or a mixture of the three.

Operational wise 40 of the participating companies operated only within Iceland, one only abroad and seven operated both within Iceland and abroad, nine participants did not give an answer.

The majority of participating companies, 79%, do not own, directly or indirectly foreign companies. Only 7 have direct ownership, 2 have indirect ownership and 3 have both.

In terms of integration the majority of the participating firms seem to be, to some extent, vertically integrated. A total of 35 companies out of the 57 were integrated or 61,4%. Of those 14 participated in processing as well as exporting as can be seen in table 4. And 21 were in fishing and processing as well as exporting. Only 22 companies, or 38,6%, were only exporting. None of the exporters were only exporting and fishing.

**Table 4. Vertical integration.**

Vertical Integration		
Only Export	22	38,6%
Export and fishing	0	0,0%
Export and processins	14	24,6%
Export, processing and fishing	21	36,8%

Thirty two percent of the participating companies gave positive answers to the question if they were also connected to fishing. The majority of those operated within Icelandic waters though interestingly enough two operated in other waters.

Given the fact that not nearly all of the exporting companies were independent in regards to acquiring raw material they were asked how they obtained it and multiple answers could be given. Twenty one answered that they fished themselves and twelve got other to fish for them. Twenty two, or 23%, bought raw material from auction markets

and seven exporters bought fish abroad. Twenty answered that they exported for commission. Some obtained their raw material also by other methods such as buying farmed fish or buying fully processed products from producers and then exporting them.

*“We really have to fight for the raw material, we could sell two or three times the amount that we can get. [...] in some occasions we have had to buy raw material from Norway.”*

(Managing director of a company processing by-products)

Thirty percent of the participants had allocated quota and 9% more had rented quota. Multiple answers could be given and all the ones that had rented quota had allocated quota as well. Only 21% make do with just the allocated quota.

Over half of the participating companies (54%) gave positive answers to operating processing plants as well as exporting. Twenty eight, or 49%, operated within Iceland and 6% operated plants abroad.

This means that majority of Icelandic exporting companies do not operate processing plants outside of Iceland. Those that do claim to do so partly because of difficulties getting raw material in Iceland, though some manage to go around it.

A managing director of an SME noted, in an interview, that acquiring raw material was constantly getting more difficult. Before it had been easier to buy the raw material and when it started to change they started to move their business more and more abroad now having it almost only outside of Iceland. Many of the bigger fishing companies would not sell to smaller parties and some did not sell to anyone with an Icelandic social security number and even had such a formal procedure approved by their board of directors.

*“It is no secret that certain companies do not sell raw material to Icelandic social security numbers. And it makes no difference if we offer them higher prices. But they are very happy selling our foreign subsidiary directly and so our foreign subsidiary just buys directly from them.”*

(Managing director of an SME)

Only thirty two companies of the total gave positive answers to being producers themselves. Multiple answers could be given for some exporters do more than just produce themselves. Seven had contractors producing for them. Fourteen had joint ventures for producing and eleven made one contract at a time having no ongoing

production contract. This means that less than half (43%) of the participating companies actually produced the products they have been exporting. 39% processed their products in Iceland within their own plants and 6% processed their products abroad in their own plants. Thirty four bought their products fully processed and sold it directly and 11% had contractors abroad. From the interviews conducted there was evidence that companies that only had contractors working for them did so to minimize risk and maximize flexibility product wise.

*“We had to defend ourselves. We had to do something. This way we are very flexible. Because maybe we get knowledge of an unfulfilled demand for some product and this way we can just go and buy the raw material, have a contractor process it the right way and sell the product abroad.”*

(Managing director of an SME)

When asked why those that did only take part in exporting and did not include other operations within their company the majority, or 21%, said that it was not part of their core competence. Further 24% gave answers such as; too much financial risk, too much fuss, that the company was too small or that there was insecure access to raw material.

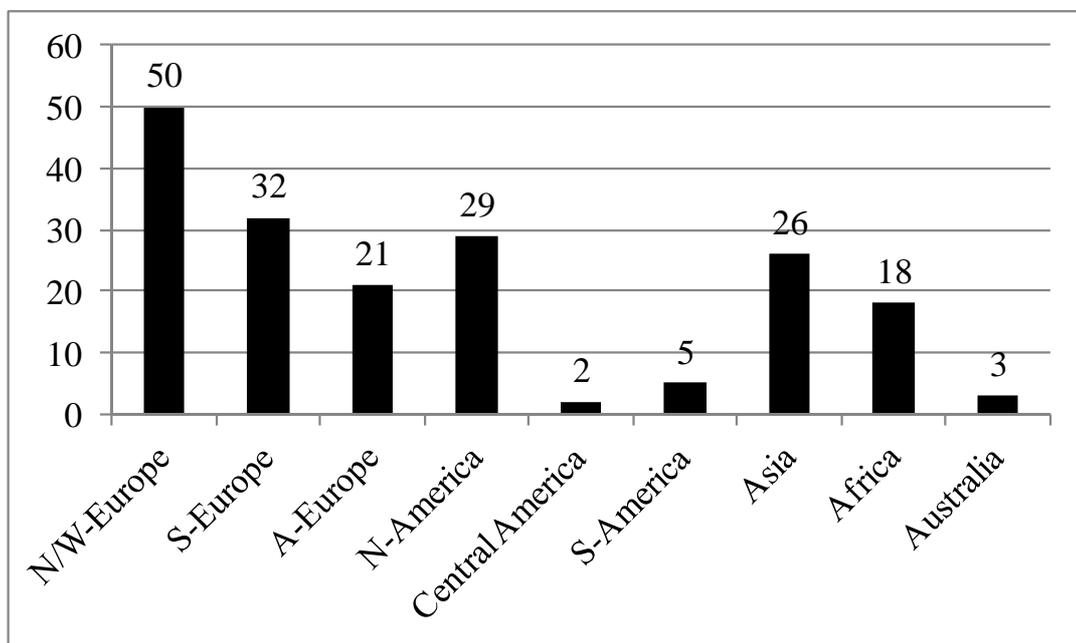
*“We decided not to operate a trawler. We know how to process fish, but we do not know how to operate a trawler. So we chose, a while back, to keep our operations in what we believed we did well and we have stuck to that decision.”*

(Managing director of one of the larger companies)

## 5.12 Seafood export of the participating firms

Close to 40% of the participants exported themselves directly and without an intermediary. Slight majority of the firms exported both directly themselves as well as with the help of others, or 43,5% of total responses given. Less than 18% of total responses claimed to export mostly through others.

In figure 19 it is evident that most participants export to North West Europe, a total of 50 or 88%. South and East Europe, North America and Asia also seem to be big recipients of exported Icelandic seafood. Participants could give multiple answers to this question since many participants export to more than one location. These results rhyme with public statistics.



**Figure 19. Export markets of participating firms.**

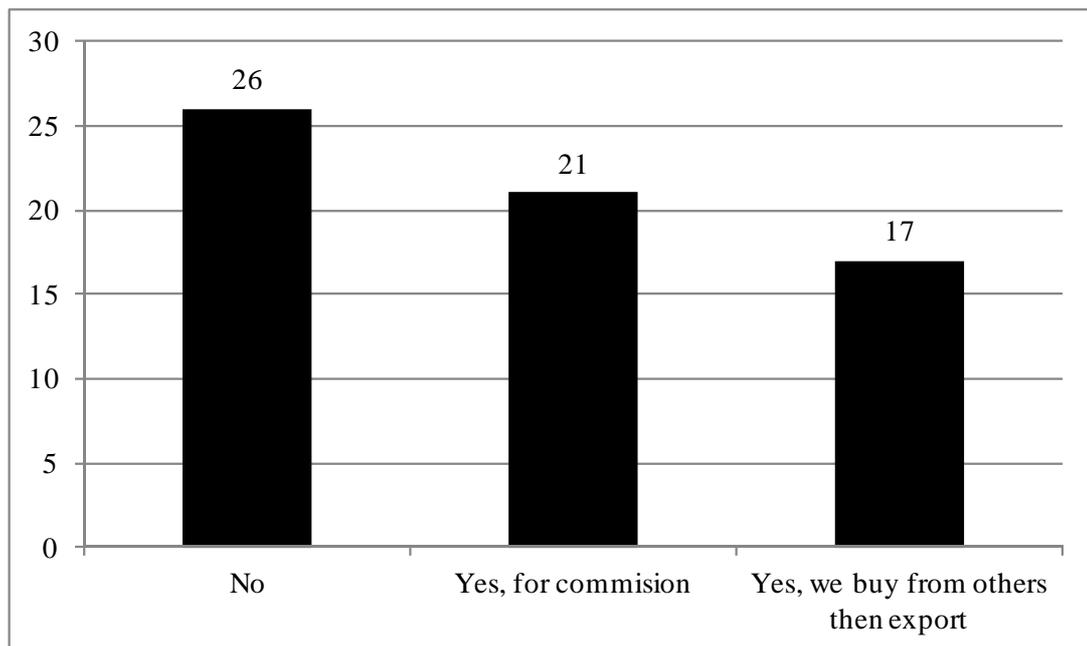
Most companies seem to export to relatively few markets as can be seen in table 5. Majority responded that they were exporting to two markets, the second most to only one market and in third place were companies exporting to three markets. A combined ratio of firms exporting to two markets or fewer was little over 45% and firms exporting to three markets or fewer were little over 62%.

**Table 5. Number of export markets per company.**

How many export markets		
No.Market	No.Companies	Ratio
1	10	18,9%
2	14	26,4%
3	9	17,0%
4	6	11,3%
5	2	3,8%
6	8	15,1%
7	2	3,8%
8	0	0,0%
9	2	3,8%

When asked what country was their principal export market, the United Kingdom was largest. These findings are in line with public statistics.

Close to half of the participating companies only export for themselves, or 46%. The rest, however, export for others either for commission or by buying the products and then exporting them, seven participants did both, see figure 20.



**Figure 20. For whom do firms export?**

### 5.13 Change in the participating firms exportation

Given the fact that twenty years ago there was a huge change to the three big MSO's, partly as a result of a lingering discontent of their members.

*“When we were selling through the MSO our product was not really traceable. They seemed to mix products from multiple producers together. So sometimes we got complains that was not really ours to get.”*

(Managing director of one of the larger companies)

*“We were very discontent with the service we got from our MSO. When we finally took the step to export ourselves we thought that we were just saving our selves the commission and that would be our gain. The reality was that we started to export much more than previously possible through the MSO.”*

(Managing director of one of the larger companies)

It was, for that reason, interesting to see if the participating companies had changed how they exported. Out of the total participators 53% had not made any change since they started exporting, see figure 21. Only 25% of the companies resulted to have changed how they exported and gave a positive response to being formerly members of a MSO.

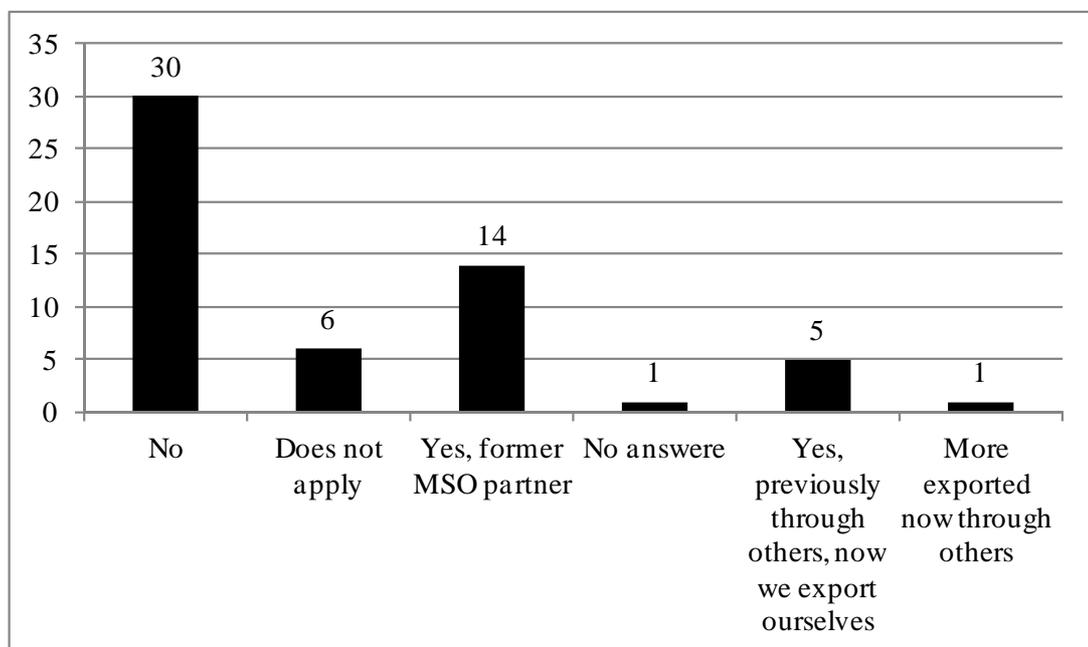


Figure 21. Have companies changed how they export?

If we take a closer look at the companies that gave positive answers to having changed how they exported it seems that only a total of 28% of the participating companies that were exporting before the MSO change have since altered how they exported. This is interesting given the fact that 54% of the participants initiated their exporting before the MSO change so only half of participating exporters that existed in the MSO's golden years have since their change, altered their exporting ways.

### 5.14 Foreign customers of the participating firms

A total of 86% of the participating companies export their products to seafood wholesales abroad. Almost as many, or 77%, export to seafood importers abroad and 30% export directly to foreign retailers. Fewer exported directly to hotels or restaurants. This can be seen in figure 22. As to many other questions respondents could give more than one answer to the question since it seemed likely that many of them export to more than one buyer.

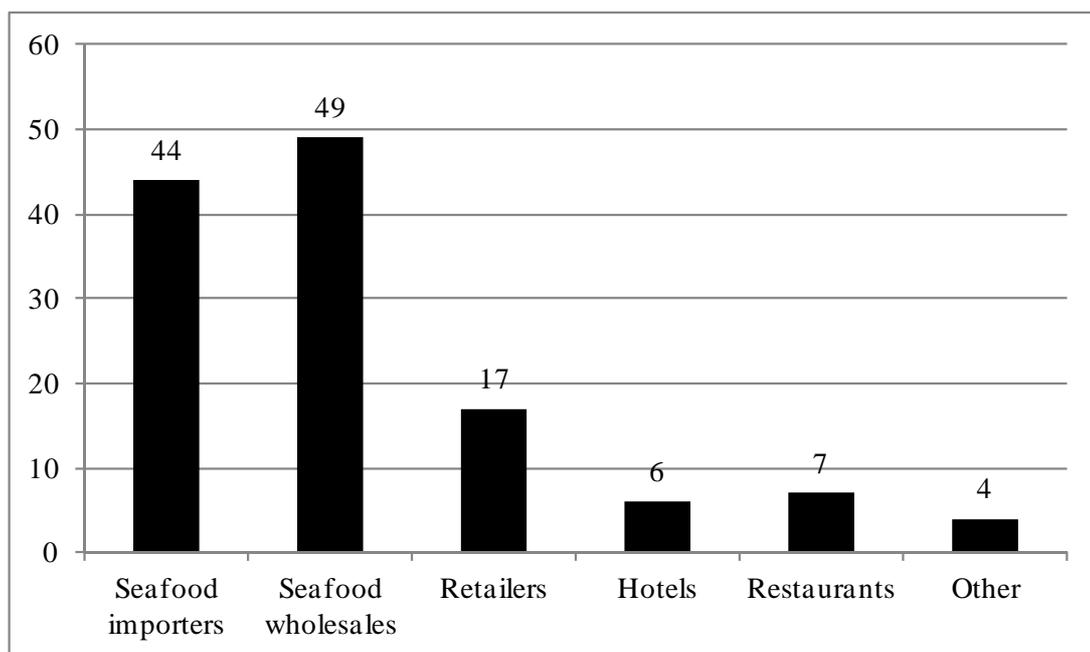


Figure 22. Who are the buyers?

As to why so few export more deeply into the markets, to hotels or restaurants there was an indication given in the conducted interviews. It seems to require more effort and managing than other exporting ways while still being seen as an opportunity in a competitive world.

*“When there is much competition then you have to go as deep into the market as possible. Go where the fish is being consumed. But it requires more micromanaging because we are not selling to bulk buyers. [...] There is a risk involved. When you go so deep into a foreign market you might not understand that particular market well enough and that is a risk while competing with locals. So you have to be careful.”*

(Managing director of an SME)

## **6 Comparison with Arnar Bjarnason's findings**

One goal of this research was to identify how the current structure of the Icelandic seafood exporting sector was different from findings made by Arnar Bjarnason and to do so the two are compared in the following chapter.

### **6.1 Age of firms**

This research found that the average age of the firms participating was 32 years though most of them were between 10 and 29 years of age.

Arnar Bjarnason's finding indicated that the average firm age in years was 30,9 years. The average age of the MSO's was more than of other participating firms.

Thus it seems that even with the passing of 20 years the average seafood exporting firm is 1,1 year older an average exporting firm in 1992. Both studies showed that these types of companies are over 30 years old which can be considered quite old. The reason might be that this is a traditional Icelandic industry with firms often family operated and in some cases these are a backbone of fishing villages around Iceland. Further some of the participating firms have existed for more than 40 years, with the oldest one founded in 1901. Older companies can indicate that there is accumulative knowledge within each company.

### **6.2 Time lag between firms foundation and initiating exporting**

The result of this research showed that the average time lag from foundation to exportation for the firms participating in this study was 5,8 years.

Arnar Bjarnason found that the average time lag from the firm's establishment until the time they initiated export was 3,7 years and that it seemed crucial for firms existence that little time lag existed from establishment to initiating export.

The reason for this increase in time lag might be attributed to the time periods in which these two researches were conducted. When the first study was undertaken the monopoly conditions of seafood exporting were coming to an end. That might have forced some of the firms to go at it alone and therefore longer time had passed from the point of their establishment until the point that they initiated their own exporting creating the longer time lag in the second study.

### **6.3 Geographical location of the participating firms**

Geographical location of an export company can be important. In this research 42 of the participating firms were domiciled within the capital area and only 15, or 26%, were domiciled outside of the capital area.

Arnar Bjarnason found that the biggest part of firms participating were domiciled within the capital area or a total of 45 companies out of 60, that translates to only 25% being domiciled outside the capital area. His findings showed that there had been an increase in firms domiciled outside of the capital area during the time period he analysed, from 1971 until yearend 1991. As to why the numbers grew outside of the capital area there were two important technological inventions, the emergence of new communication technology (the telefax) and new transportation technology (containers).

These two studies showed similar results so it seems that even with the passing of 20 years and rapid knowledge and technological changes in the world there are still similar ratio of seafood exporting firms domiciled outside of the capital area. In the time that has passed between the two studies there has been a migration of people from the areas outside of the capital area to the capital area, even so it seems that there are similar numbers of seafood exporters outside the capital area. This might be a direct result of a changing world and technological advances permitting those companies to use tools such as the internet to conduct their business.

### **6.4 Firms Categorization**

One of the aims of this research was to categorize the participating firms based upon their size and vertical integration. Most of the companies were small or medium sized with 37% having ten employees or less. A further total of 18 firms had 50 employees or less translating into 68% of the participating firms having 50 or less employees.

In terms of integration the majority of the participating firms seem to be, to some extent, vertically integrated. A total of 35 companies out of the 57 were integrated or 61,4%. Of those 14 participated in processing as well as exporting. And 21 were in fishing and processing as well as exporting. Only 22 companies, or 38,6%, were only exporting. None of the exporters were only exporting and fishing.

Arnar Bjarnason categorized is participating firms into 7 different categories, a categorization that does not quite fit the purpose of this current study though still important. See table 6. The two main categories were export management companies

(EMCs) and partially integrated exporters (PIEs). The EMCs were then subcategorized into Principal EMCs (the large Marketing and Sales Organisations: MSOs) and Other EMCs (other exporting management firms in the sector). The PIEs were subcategorized into five categories ranging from PIE-1 to PIE-5 depending on what kind of products these firms were producing and exporting. A total of 34 firms were categorized as EMCs and a total of 26 as PIEs.

**Table 6. Categorisation of Arnar Bjarnason's firms .**

Category	Number of firms
Principal EMCs	4
Other EMCs	30
PIE-1	6
PIE-2	5
PIE-3	3
PIE-4	7
PIE-5	5
TOTAL EMCs	34
TOTAL PIEs	26

In this study a total of 22 firms were found to be EMC's whilst 35 were PIE's, see table 7. Thus it can be seen that tables have turned resulting in more than 60% of the participating firms being PIE companies and less than 40% EMC firms.

**Table 7. Categorisation of current firms into EMC's and PIE's.**

Categorisation	
EMC	22
PIE	35

One reason for this is likely to be access to raw material for that lack of access to raw material was a complaint frequently heard from EMC company owners during this study. The growing numbers and success of PIE companies can most likely be traced to them accumulating exporting knowledge and experience since the end of the monopoly conditions. These firms also have a steady supply of raw material. They thought that they would mainly be saving themselves commission paid to the former Principal EMC's only to then realize to having gained much more.

Both studies showed that most companies were small or medium sized which is not surprising given their Icelandic business environment. The latter study showed that some firms were getting more vertically integrated than before. Technological changes has

made it so that less manpower is needed in some areas of the processing part and firms have laid more emphasis on the marketing aspect of their business though not to a great extent. With the end of the monopoly conditions that were in place in the beginning of the 1990's firms seem to have gotten more control over their own operations and some have begun to specialise more in regards to products and operations.

## **6.5 Few large buyers**

It is a well known fact that buyer power can be an obstacle and dangerous to the autonomy of a company. In this research it was evident that many of the participating firms had a long lasting business relation with relatively few big buyers.

Arnar Bjarnason found that there was great concentration when it came to buyers of the participating firms products.

In many cases the firms participating had, in the beginning, one (or few) clients that bought their product and with the passing of time both the seafood exporting firm and the client have grown hand in hand. For instance some are exporting to foreign store chains. Such a relation can be good as long as both parties strive successfully for the success of the value chain. It can though be dangerous for the exporter in many different occasions such as if there would be a shift in power within the business relation and/or if clients would go through harsh economical times. Another dangerous occasion would be if the client would by any means risk the reputation of the exporter's product compromising the future reputation of his product.

## **6.6 Participating firms export markets**

If exporting companies have relatively few exporting markets there can be an additional risk involved if those particular markets suffer in any way. Many of this research participating firms, or a total of 24 firms, were in fact exporting to two markets or fewer and if the firms that were exporting to three markets were included the ratio was 62% or a total of 33 firms.

Arnar Bjarnasons researched the quantity of markets each participating firm was exporting to and reaped similar results, that most of them exported most of their exportation to only two markets or fewer.

It is not surprising to find that most firms export to relatively few markets given the fact that many have few large buyers as stated in chapter 5.6. This can be attributed to a

lack of strategic thinking within the exporting firms. They might not have the necessary capital or their operations might not allow for them to produce products for more than relatively few markets.

## **6.7 Market segmentation by participating firms**

Segmenting the market can be an important tool for increasing the value of one's product. The participating firms of this study seemed to some extent to make efforts in the direction of strategic export markets segmentation though they seemed not far along. Some had seen the need of going deeper in to some markets and had started doing so.

In Arnar Bjarnasons research he found a general lack of strategic segmentation of export markets by the firm, with the exception of the Principal EMCs.

Thus firms seem to have gotten more advanced in strategically segmenting markets though there is still much work to be done. After the end of the monopoly conditions there was a void to be filled in this aspect. The large MSO's were, to some extent, segmenting markets strategically and when firms started to export more on their own they might have lacked the proper know how of strategically segmenting markets. Since then some seem to have seen the need of doing just that and have started such tasks. It is likely that there is still a general lack of knowledge of such tasks and that some time will still pass before they will gain general knowledge of doing so.

## **6.8 Market shift**

The world is getting better connected as time passes and markets are ever closer though still culturally far. Thus shifting markets might be seen as an easy task by many and attempts in doing so might have become more frequent than before. This current study revealed what seems to be a tendency in a market shift from the U.S. market to the European market as well as to the Asian market.

Arnar Bjarnasson, study in 1992, found what seemed to be a market shift from the U.S. market to Europe.

It seems that firms have somewhat abandoned the U.S. market and are shifting to Europe and Asia. The reason why might be found both in the ending of the monopoly conditions as well as the world being better connected. The U.S. market is large and it is difficult, expensive and very time consuming to enter it. Markets in Europe are small in comparison to the U.S. market and thus it might be easier to enter for small and medium

sized companies. Asian markets are known for their love of seafood and as such firms might deem those markets to be very lucrative and as a result seafood exporters might be more willing to try to enter Asian markets than the U.S. The former large MSO's had brands in the U.S. markets that have since been lost to foreign entities. This means that an Icelandic seafood exporter could, in the past, use Icelandic brands existing in the U.S. market but cannot do so any more.

## **6.9 Domination of the Export sector**

If an industry is dominated by few large entities it can be a barrier for new entrants to that industry. The same applies if a certain sector of an industry is dominated.

This study did not show that tendency in the export sector though it seemed obvious when it came to acquiring raw material.

Arnar Bjarnasons study, on the other hand, revealed that the export sector was then largely dominated by relatively few firms despite the extensive structural changes within the industry.

Thus entry barriers to seafood exporting have been broken down to some extent making it easier for new entities to enter. It seems that almost anyone export seafood in modern day though acquiring the raw material to do so and maintain the product flow can be harder. This is a direct result of the monopoly conditions of exporting ending in Iceland. The knowledge of processing, the acquirement of raw material and the business relations in place are still a powerful barrier for anyone who wants to dominate the fishery sector.

## **6.10 Ownership of participating firms**

How the ownership of a company is structured can be important to how they operate. A general thought is that large shareholder owned firms are more vicious than small family owned firms.

The author of this research found that many of the participating firms were family owned and that some were being passed on through generations. Most were owned by relatively few. More than half, or 32 firms, had 3 owners or less and 14 more had 10 owners or less. Adding up to a total of 81% of the participating firms having 10 owners or less. No firm was currently openly exchanging ownership in a free stock market and only 2 firms had more than 100 shareholders.

In Arnar Bjarnason's study the general form of ownership seemed to be shareholding though many were also operated on a family basis. Distinct from the rest were the Principal EMCs (MSOs) as being operated either on a cooperative basis or primarily owned by their producers.

It still seems that the fishing industry in Iceland is largely a family owned industry though few seem to be operating on a larger scale than they did in 1992. One reason of why that is might be that these companies are mostly small or medium sized. Another reason might be the current quota system in place and the recent debate on the matter. Quota can be hard to acquire and since it is important for acquiring raw material firms might be trying to keep it "as close to home" as possible. Future change of the current quota system might thus change how the ownership of such firms will be structured.

### **6.11 Internationalisation of participating firms**

Internationalisation can be important to firms and greater internationalization can ease their exporting process as well conquering new markets.

This research found that the majority of the participating firms were not far along with internationalisation even if exporting, by itself, is a certain level of internationalization. Only one company operated only outside of Iceland and 9 firms had sales subsidiaries and processing plants abroad.

Arnar Bjarnason found that the Principal EMCs were the farthest along with internationalisation, with sales subsidiaries and processing plants abroad, while other firms sold (generally) directly to foreign buyers without an intermediary.

Even if exporting is internationalisation per se since the ending of the monopoly conditions within the seafood exporting sector of Iceland firms have either not pursued further internationalisation or they have not been successful in doing so. It is likely that they have neither had sufficient capital do to so nor have they had the proper knowledge. It is also a possibility that they either have not had the urge nor the need of internationalisation despite knowing how to do so and such a task might be important.

## **6.12 Export planning by the participating firms**

Strategic export planning can be a powerful tool if done and used properly.

This study showed that the larger companies were likely to have special employees undertaking such a task though majority seemed not to. Some of the firms even believed that they were much too small to do so.

In Arnar Bjarnasons research only the Principal EMCs conducted extensive and strategic export planning while other firms had very limited or non-existing strategic export planning.

With the ending of the monopoly conditions and firms going at it alone there has been created a void in strategic exporting knowledge within the firms currently exporting. It is likely that there is a lack of understanding of the importance of such a task within the existing exporting firms. Further it is very much possible that they do not possess the knowledge of performing strategic export planning and it is also likely that some time will still pass before they do so.

## **6.13 How do firms reach new clients?**

How firms reach and connect with current and future clients is important. Various ways' demand various efforts and bear different costs.

The author of this study found that most of the participating firms did in fact not reach new clients, rather new clients reached them. A total of 63%, or 36 firms, claimed to reach new clients through familiarity or networking and 58% claimed to reach them through sales exhibitions. Further 40% used the internet to reach new clients and 16% through sales organizations. Most participants used a variety of ways to reach new clients.

The firms in Arnar Bjarnason's study mostly used personal contact with customers and visits to foreign buyers though company brochures and participating in trade exhibitions were also important.

There is a clear indication that technological advances have made an impact on the seafood exporting sector. Many firms seem to have incorporated the internet in their ways of reaching clients. Much less effort has been put into creating company brochures and such marketing material. It is likely that this trend will continue in the near future.

## **7 Conclusion and final remarks**

Throughout the history of Iceland the sea has played an important role. It has been both a friend and a foe. The fishing industry has been important in creating a sustainable economical development for the nation. Since Arnar Bjarnason undertook his study the Icelandic seafood exporting sector, along with the rest of the world, has undergone great changes. The internet for one has shortened distances within the world and created platforms for interactions that otherwise would have been much harder. There has been a deregulating and free market trend within western civilisation and the seafood export sector in Iceland has not been excluded. Some things are, though, still the same as they were in the early 1990's and probably will never change. Iceland is still physically far from other markets and the fishing industry will probably always be a subject to hard scrutiny.

This thesis was to study the current structure of the Icelandic seafood export sector and describe the main characteristics of the exporting companies. Some things have indeed changed from how they were and some have not and yet others have started to change.

It seems that seafood exporting firms are still mainly small or medium sized companies sustaining themselves for more than 30 years on average. That can be considered quite old in regards to the average age of small or medium sized companies in Iceland. Despite that the exporting firms still seem to lack knowledge, capital and/or drive in some important aspects of exporting. They still generally do not strategically plan their exporting nor do they segment markets though a trend can be seen in regards to the latter.

Seafood exporting firms seem to still be subject to a risk that rises from having few large buyers. This is of concern to the author of this thesis for that this might indicate less autonomy of each firm. For the last few years there has been a financial crisis in the western world, to were large part of seafood from Iceland is exported to. If a firm has one or two large clients in as many or fewer markets and those clients or markets suffer greatly from a crisis it could affect that exporting firm greatly, just as history has shown. Do these companies lack knowledge of such a potential crisis, can the fact of the matter be that they lack sufficient capital to divide the risk between different buyers and/or markets, or do they just not care?

Many of the exporting firms are concerned with the upcoming changes of the current quota system, they fear what will become. There has been expressed a will to change the system in a way that current quota holders will continue to have their quota shares for at least 20 years. There is a will to create a new allocation share of quota that will gradually be reallocated. Organized interested groups have promoted heavily to have all caught fish auctioned in markets.

Being vertically integrated is not necessarily a good or a bad thing as long as all vertically integrated aspects are properly managed. A concern to the matter can be that firms should concentrate on their core competence and when a firm participates in all aspects of the value chain it might not excel in any aspect of it.

The monopoly conditions of the seafood exporting from Iceland ended in part because of exporters discontent. Since then more than 20 years have passed but even so only the minority of exporting firms have actually change their exporting methods. Why? Might it be that it is easier to criticize than to act so when the monopoly conditions were abolished firms found it easier to continue operations as before instead of gaining new knowledge?

Most of the exporting firms export to direct importers or seafood wholesales. A large part exports directly to retailers. Interestingly enough some export directly to restaurants and/or hotels. Such exportation requires more micromanaging than the other exporting ways and is likely to result in more knowledge growth within the firms that do so.

Only a handful of firms export to the U.S. market while in the past many more did so. It is a very important market within the world economy and there seem to be much to gain if Icelandic seafood exporters could regain a foothold in that market. The US used to be a market for highly processed Icelandic fish products, like breaded fish sticks. Today the Icelandic fishing industry does not excel in producing such products. This is probably in part a result of the market shift from the U.S. and to European markets. What the Icelandic fishing industry does well are traceable sustainable products that have no or little added extra ingredients, something that might be desirable for a nation such as the U.S.

It was interesting to see how many exporting companies still existed outside of the capital are and how many firms seemed to have incorporated the use of the internet in reaching their clients. Some firms, though, apparently were less successful in the usage

of interactive web based technology which, if used correctly, can be a powerful tool. Today there are even some that base their operations almost solely upon the usage of the internet, like for example a small company based in Hong Kong but operated by an Icelandic boy from a high school dormitory outside the capital area. It uses a company homepage and a social media page to buy directly from producers all around the world and then uses courier services to ship orders directly to people's homes. While this might not be an ideal business plan for Icelandic exporters it is a powerful reminder of how much many exporters still have to learn when it comes to connecting with customers through the internet.

Icelandic seafood exporting firms have come a long way since the beginning of such exportation from Iceland. There is still much to be done and it seems evident that the most pressing matter is to strategically export and segment exporting markets.

It would be interesting to have this research repeated in 10 or twenty years time to see if and then how exporting firms will have changed. It would also be interesting to see more research efforts been put into export markets especially based upon different seafood products.

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## Appendix A - Þáttökubeiðni fyrir viðtal

**Til:** Nafn Fyrirtækis

Framkvæmdarstjóra - - - - -

**Frá:** Nína Björg Sæmundsdóttir og Eyjólfur B. Eyjólfsson

**Efni:** Viðtalsbeiðni vegna rannsóknarverkefnis

Ágæti ..... nafn framkvæmdarstjórans

Undirrituð hafa í samstarfi við Matís, undir leiðsögn Dr. Arnars Bjarnasonar og Dr. Ingjalds Hannibalssonar, hafið umfangsmikið rannsóknarverkefni á markaðssetningu og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja, og er ætlunin að vinnu þessarri, ljúki í maí 2012. Markmið verkefnisins er að greina íslenska útflytjendur á sjávarafurðum, markaðssetningu þeirra á vörum sínum og hvað einkenni hegðun þeirra íslensku fyrirtækja sem flytja út sjávarafurðir. Sérstaklega verður skoðuð þróun síðastliðinna tveggja áratuga en verkefninu er ætlað að fylgja eftir rannsóknarvinnu Dr. Arnars Bjarnasonar, sem hann vann í byrjun tíunda áratugarins og var grunnur að doktorsritgerð hans við Edinborgarháskóla árið 1994.

Sjávarútvegur og útflutningur sjávarafurða skiptir íslensku þjóðina gríðarlega miklu hvað efnahagslega afkomu varðar. Mikil þróun og breyting hefur átt sér stað á undanförunum áratugum í umhverfi fyrirtækja sem flytja út sjávarafurðir. Verkefni þessu er ætlað að varpa skýru ljósi á þessa þróun og breytingar, sérstaklega s.l. tvo áratugi. Til að við getum með góðu móti unnið þetta verkefni þörfnumst við þinnar hjálpar. Þátttaka þín í rannsókninni yrði ómetanlegt framlag í því að kanna hvernig fyrirtæki sem flytja út íslenskar sjávarafurðir haga málum sínum á ýmsum sviðum útflutningsstarfseminnar og hvert viðhorf stjórnenda sé til ýmissa mikilvægra þátta henni tengdri.

**Hér með óskum við eftir því að fá að taka persónulegt viðtal við þig eða annan samstarfsmann þinn sem þú tilnefnir, í því skyni að varpa ljósi á mikilvæg atriði í útflutningshegðun íslenskra fyrirtækja sem flytja út sjávarafurðir.**

Heildarúrtak fyrirtækja í rannsókninni eru 122 fyrirtæki sem fengin eru úr skrá Íslandsstofu: „Iceland Trade Directory“ og voru þau borin saman við 215 fyrirtæki, sem hafa ISAT númer 46381, 46171 eða önnur númer sem tengjast útflutningi á fiskafurðum, skv. skráningu í fyrirtækjaskrá Ríkisskattstjóra. Síðan voru flokkuð út öll fyrirtæki sem

voru sannarlega hætt, eða virtust ekki vera með eiginlega útflutningsstarfsemi og einnig þau sem ekki fundust upplýsingar um, t.d. á ja.is eða voru ekki með skráða heimasíðu né aðrar upplýsingar á netinu. Eftir stóðu 119 fyrirtæki. Til þess að undirbyggja megindelega hluta rannsóknar okkar, sem felst í að senda út spurningarlista á þessi 119 fyrirtæki, hyggjumst við fyrst taka viðtöl eigendur eða stjórnendur 12 útflutningsfyrirtækja. Áætlun okkar gerir ráð fyrir að viðtölum þessum verði lokið fyrir 22. ágúst. Við gerum ráð fyrir að hvert viðtal taki 30-45 mínútur. Við munum óska eftir því að fá að taka viðtölin upp á segulband til að auðvelda okkur úrvinnslu þeirra. Við viljum líka taka skýrt fram að að allar upplýsingar sem fengnar verða frá þér, hvort heldur sem eru skriflega eða munnlegar, munum við fara með sem algjört trúnaðarmál og algerrar nafnleyndar verður gætt. Við munum á næstu dögum setja okkur í samband við þig í þeim tilgangi að óska eftir viðtali við þig og ákveða stað og stund.

Með fyrirfram þökkum og bestu kveðju,

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## Appendix B - Spurningar fyrir viðtöl

Fyrirtæki: \_\_\_\_\_

Viðtal tekið þann: \_\_\_\_\_

### ALMENNAR UPPLÝSINGAR

1. Hvað heitir viðkomandi, starfstíll, aldur og kyn
2. Hvað heitir fyrirtækið, hvar er það staðsett, hvenær var fyrirtækið stofnað og hve margir starfmenn starfa hjá fyrirtækinu
3. Er fyrirtækið nátengt einhverju öðru fyrirtæki
4. Hvernig varð fyrirtækið til (ástæður)
5. Stundar fyrirtækið veiðar (og þá hvaða, selur fyrirtækið einhvern gámafisk) eða vinnslu (og þá hvar og hvernig)
6. Hvaðan fær ft. hráefnið
7. Gerir fyrirtækið formlega samninga um kaup á aðföngum
8. Hvernig skilgreinir viðkomandi rekstur fyrirtækisins, er það einungis á erlendum mörkuðum eða selur það einnig innanlands (hættir útflutningi ?)
9. Stefnumótun: hefur slík vinna farið fram eða stendur til að hún fari fram (og hvernig)
10. Hvort er lögð áhersla á vöruna eða viðskiptavininn (nema hvort tveggja sé)
11. Hver er framtíðarsýn fyrirtækisins

### ÚTFLUTNINGUR

12. Hversu lengi hefur fyrirtækið verið í útflutningi og hvernig hóf það útflutning (hver var hvatinn á bak við það) Hefur fyrirtækið stóra markaðshlutdeild í útflutningi.

13. Hvað flytur fyrirtækið út (þar með talið hversu unna vöru og hver er uppruni hennar t.d. íslenskur, er fyrirtækið einungis að flytja út eigin vöru)
14. Er (eða hefur verið) vöruþróun innan fyrirtækisins
15. Hvernig er verðmyndun vörunnar
16. Hvernig er gæðamálum háttað (eftirlit og framkvæmd)
17. Hvernig er markaðsmálum háttað innan fyrirtækisins (rannsóknir, stefna, auglýsingar) eru gerðar kröfur til starfmannanna sem koma að útflutningi (tungumál og menntun)
18. Hvaða ímynd telur viðkomandi að varan hafi erlendis sem og ímynd ísl. sjávarafurða.
19. Með ofveiði og hruni margra fiskstofna úti í heimi, hafa þá möguleikar opnast fyrir ísl. „sjálfbærar“ fiskafurðir.
20. Flytur fyrirtækið eingöngu sjálf út eða notast það við einhverjar aðrar leiðir svo sem sölusamtök, umboðsaðila osrfv.
  - a. af hverju núverandi form útflutnings (hefur núverandi fyrirkomulag alltaf gillt eða voru hlutirnir öðruvísi og þá hvers vegna)
  - b. hafa komið upp einhver sérstök vandamál
21. Hvernig er birgðarhald og aðgangur að hráefni (árstíðir og fjármögnun, framboð og eftirspurn)
22. Flytur fyrirtækið út undir eigin vörumerkum, í eigin pakkningum (skiptir það máli)
23. Hvert flytur fyrirtækið út og hvaða flutningsleiðir notar það (skip/ flug etc.)
24. Hafa komið upp vandamál með að uppfylla óskir kaupenda, t.a.m. vegna magns, gæða eða tímasetningar ?

## **UMHVERFI, HVATI OG HINDRANIR**

25. Hvaðan kemur hráefnið ykkar
26. Hvað ræður vali á mörkuðum erlendis.
27. Er munur á mörkuðum (gæðakröfur, vinnslan á fisknum osrfv.), - eru einhverjir markaðir auðveldari/erfiðari en aðrir.

28. Er áhersla á að halda og þjóna mörkuðum eða er bara leitað að hæsta verði á heildarmarkaðnum
29. Komu upp einhver vandamál á ákveðnum mörkuðum ?
30. Hefur fyrirtækið notast við stuðning opinberra aðila s.s. útflutningsráðs (sölusýningar etc.)
31. Hvernig er erlend samkeppni og hafa erlendir aðilar forskot á einhvern hátt (s.s. styrkir eða landfræðileg staðsetning)
32. Eru tollar og kvótar að hafa áhrif og þá hvernig, er munur á þeim eftir vinnslustigi vörunnar
33. Hvernig er ytra umhverfi rekstursins hér á landi (reglugerðir, skriffinska etc.)
  - a. Helstu hindranir í útflutningi (Pólitík, kvótaálagið, osfrv. osfrv.)
34. hver eru helstu vandamál íslenskra fiskútflytjenda
35. Hver er helsti hvatinn til útflutnings á sjávarafurðum.
  - a. Geta allir farið í útflutning (hvað þarf til)
36. Hvað einkennir farsæl útflutningsfyrirtæki
37. Hverjar eru stærstu breytingarnar, síðustu 20-25 árin
38. Hefur opnun markaða (EES ofl.) haft neikvæð eða jákvæð áhrif
39. Hefur kvótakerfið haft neikvæð eða jákvæð áhrif
40. Hefur ísl. krónan haft neikvæð eða jákvæð áhrif
41. Hafði Hrúnið neikvæð eða jákvæð áhrif
42. Er erfiðara/auðveldara að standa í útflutningi nú síðustu ár:
  - a. samkeppni,
    - i. Hvað með gámaútflutning (yfir sumarmánuðina)
  - b. aðgangur að hráefni,
  - c. efnahagsumhverfi,
  - d. gjaldeyrishöft,
  - e. flutningsleiðir
  - f. annað: \_\_\_\_\_

43. Hverjir eru helstu styrkleikar fyrirtækisins í útfluttningi
44. Hverjir eru helstu veikleikar fyrirtækisins í útfluttningi
45. Ef fyrirtækið væri að hefja útfluttning nú, með þá vitnesku sem þið búið nú yfir er eitthvað sem þið mynduð gera öðruvísi
46. Eitthvað að lokum ?

## **Appendix C - Netkönnunin**

**(please notice that only the survey questions, used in this study, are shown in this appendix. Other questions used for one other current and one future studies, are excluded)**

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### **Könnun á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja**

Könnun þessi er hluti af umfangsmiklu rannsóknarverkefni á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja sem 2 meistaranemar í HÍ eru að vinna í samstarfi við Matís, undir leiðsögn Dr. Arnars Bjarnasonar og Dr. Ingjalds Hannibalssonar.

Standi fyrirtækið í útflutningi, tekur við ca. 8-12 mínútna könnun sem skiptist á 7 blaðsíður en sé fyrirtækið hætt eða byrjaði ekki að fullu, þá tekur við 1 - 2 mínútna könnun, á einni blaðsíðu.

Verða pósthöfundur þátttakenda á engan hátt tengd við svörin í úrvinnslu könnunarinnar og munum við fara hvívetna að ákvæðum laga um persónuvernd og meðferð persónuupplýsinga nr. 77/2000. Farið verður með allar niðurstöður sem algjört trúnaðarmál og algerrar nafnleyndar verður gætt.

Vinsamlegast svarið eftir bestu getu þ.e. því sem best á við, í hverri spurningu.

Við þökkum fyrirfram kærlega fyrir þátttöku þína.

**Stendur fyrirtæki þitt í útflutningi á sjávarafurðum?**

- Já
- Nei, ekki lengur.
- Nei, fyrirtækið hóf aldrei útflutning

**Hver er starfsemi fyrirtækisins og í eigu hvers er hún (fyrirtækisins sjálfs, dótturfélags, móðurfélags, systurfélags)**

	Starfsemi	Eignatengsl				Staðsetning		Aths.
		Fyrirt.	Dótturf.	Móðurf.	Systurf.	Innanlands	Erlendis	
Útflutningur	<input type="checkbox"/>							
Útgerð	<input type="checkbox"/>							
Fiskvinnsla	<input type="checkbox"/>							

**Sé fyrirtækið einungis í útflutningi, af hverju er það hvorki í vinnslu né veiðum? Hægt er að velja fleiri en einn möguleika.**

- Ekki hluti kjarnastarfsseminnar
- Fjárhagsáhætta
- Of mikil fyrirhöfn
- Smæð fyrirtækisins
- Óöruggur aðgangur að hráefni
- Annað. Hvað? \_\_\_\_\_

**Hafa orðið breytingar á söluleiðum frá upphafi? Hægt er að velja fleiri en einn möguleika.**

- Nei
- Já, fyrirtækið var áður í sölusamtökum
- Já, fyrirtækið var áður að selja sjálft en er núna að selja í gegnum aðra
- Já, fyrirtækið var áður að selja í gegnum aðra en er núna að selja sjálfs
- Já, annað. Hvað? \_\_\_\_\_

**Hvernig flytur fyrirtækið vörur út?**

- Flytjum sjálf út allar vörur
- Flytjum út sjálf að hluta til og að hluta til í gegnum aðra
- Flytjum út að megninu til í gegnum aðra

**Hvert flytur fyrirtækið út vörur sínar? Ath. að hægt er að velja fleiri en einn möguleika.**

- N/V-Evrópu
  - S-Evrópu
  - A-Evrópu
  - N-Ameríku
  - Mið-Ameríku
  - S-Ameríku
  - Asíu
  - Afríku
  - Ástralíu
  - Hvert er helsta útflutningslandið? (vinsamlegast hakið við þennan möguleika)
- \_\_\_\_\_

**Ef fyrirtækið flytur sjálft út, þá hvers vegna? Hægt er að velja fleiri en einn möguleika.**

- Það er betra
- Við seljum meira
- Það er minna vesen
- Þannig höfum við meiri stjórn á útflutningnum
- Það var ósk viðskiptavinar okkar
- Það var eini möguleikinn
- Annað. Hvað? \_\_\_\_\_

**Flytur fyrirtækið út vörur fyrir aðra aðila? Hægt er að velja fleiri en einn möguleika.**

- Nei
- Já, gegn þóknun
- Já, fyrirtækið kaupir af öðrum og flytur svo út

Já, annað. Hvað? \_\_\_\_\_

**Hvernig er kvótamálum fyrirtækisins háttað?**

	Kvótatengsl	Hver veiðir kvótann		Athugasemdir
		Veiðum sjálf	Aðrir veiða	
Úthlutaður kvóti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Leigður kvóti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hvorki leigður né úthlutaður	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Hvaðan fær fyrirtæki hráefni sitt. Hægt er að velja fleiri en einn möguleika.**

- Við veiðum sjálf
- Við fáum aðra til að veiða fyrir okkur
- Við fáum hráefni á fiskmörkuðum innanlands
- Við fáum hráefni erlendis frá
- Erum í umboðssölu
- Annað. Hvað? \_\_\_\_\_

**Hvernig er vinnslu vörunnar háttað? Hægt er að velja fleiri en einn möguleika.**

- Vinnum innanlands í eigin vinnslu
- Vinnum utanlands í eigin vinnslu
- Kaupum fullunnið utanlands
- Kaupum fullunnið innanlands
- Erum með verktaka innanlands
- Erum með verktaka utanlands
- Annað. Hvað? \_\_\_\_\_

**Hvernig eru tengls við framleiðendur? Hægt er að velja fleiri en einn möguleika.**

- Við erum sjálf framleiðendur
- Við höfum verktaka
- Við erum með samvinnuaðila (joint venture)

Við höfum ekki neinn ákveðinn framleiðanda.

Á ekki við

Annað. Hvað? \_\_\_\_\_

**Hverjir eru viðskiptavinir fyrirtækisins erlendis? Hægt er að velja fleiri en einn möguleika.**

Innflytjendur sjávarafurða

Heildsalar sjávarafurða

Verslanir

Hótel

Veitingahús

Aðrir. Hverjir? \_\_\_\_\_

**Hafa orðið breytingar á söluleiðum frá upphafi? Hægt er að velja fleiri en einn möguleika.**

Nei

Á ekki við

Já, fyrirtækið var áður í sölusamtökum,

Já, fyrirtækið var áður að selja sjálft en er núna að selja í gegnum aðra

Já, fyrirtækið var áður að selja í gegnum aðra en er núna selja sjálft

Já, annað. Hvað? \_\_\_\_\_

**Hversu lengi hafa sömu viðskiptavinirnir, verið í viðskiptum við fyrirtækið?**

0-5 ár

6-10 ár

11-15 ár

16-20 ár

21 ár eða lengur (hversu lengi?) \_\_\_\_\_

**Hvernig kemst fyrirtækið í samband við nýja viðskiptavini? Hægt er að velja fleiri en einn möguleika.**

- Á sölusýningum
- Í gegnum sölusamtök
- Með kunningsskap/tengslaneti
- Með internetinu
- Þeir koma til okkar
- Með öðrum leiðum (Hverjum?) \_\_\_\_\_

**Getur fyrirtækið tekið við nýjum kúnum? Hægt er að velja fleiri en einn möguleika.**

- Já
- Nei, við höfum ekki aðgang að nægu hráefni
- Nei, við fullnýtum útflutningsgetu fyrirtækisins
- Nei, flutningsleiðir eru fullnýttar
- Nei, vegna annarra þátta. Hverja? \_\_\_\_\_

**Hvaða ár var fyrirtækið stofnað? Vinsamlegast notið eingöngu tölustafi.**

\_\_\_\_\_

**Hvaða ár hóf fyrirtækið útflutning á sjávarafurðum? Vinsamlegast notið eingöngu tölustafi.**

\_\_\_\_\_

**Hversu margir starfsmenn eru starfandi hjá fyrirtækinu í dag? Vinsamlegast notið eingöngu tölustafi.**

\_\_\_\_\_

**Hversu margir starfsmenn sinna beinu markaðsstarfi hjá fyrirtækinu? Vinsamlegast notið eingöngu tölustafi.**

\_\_\_\_\_

**Hversu margir aðilar eiga hlut í fyrirtækinu? Vinsamlegast notið eingöngu tölustafi.**

\_\_\_\_\_

**Rekur fyrirtækið verksmiðjur erlendis?**

Nei

Já. Hvar? \_\_\_\_\_

**Hvar eru höfuðstöðvar fyrirtækisins staðsettar (í hvaða póstnúmeri)?**

\_\_\_\_\_

Þá er þessari könnun og ef þú telur að þú þurfir ekki að lagfæra neitt í þínum svörum, þarftu bara að ýta á "senda inn".

Við þökkum þér kærlega fyrir þátttöku þína.

## Appendix D - Þáttökubeiðni fyrir könnun

**Efni: Þáttökubeiðni fyrir netkönnun vegna rannsóknarverkefnis á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja**

Ágæti viðtakandi

Undirrituð hafa í samstarfi við Matís, undir leiðsögn Dr. Arnars Bjarnasonar og Dr. Ingjalds Hannibalssonar, hafið umfangsmikið rannsóknarverkefni á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja. Markmið verkefnisins er að greina íslenska útflytjendur á sjávarafurðum, hvað einkenni hegðun þeirra íslensku fyrirtækja sem flytja út sjávarafurðir og þá einnig að greina þær hindranir sem útflutningsfyrirtæki hafa við að glíma. Sérstaklega verður skoðuð þróun síðastliðinna tveggja áratuga en verkefninu er ætlað að fylgja eftir rannsóknarvinnu Dr. Arnars Bjarnasonar, sem hann vann í byrjun tíunda áratugarins og var grunnur að doktorsritgerð hans við Edinborgarháskóla árið 1994, og bera niðurstöður þessarra tveggja rannsókna saman.

Sjávarútvegur og útflutningur sjávarafurða skiptir íslensku þjóðina gríðarlega miklu hvað efnahagslega afkomu varðar. Mikil þróun og breyting hefur átt sér stað á undanförunum áratugum í umhverfi fyrirtækja sem flytja út sjávarafurðir. Verkefni þessu er ætlað að varpa skýru ljósi á þessa þróun og breytingar, sérstaklega s.l. tvo áratugi. Til að við getum með góðu móti unnið þetta verkefni þörfnumst við þinnar hjálpar. Þátttaka þín í rannsókninni yrði ómetanlegt framlag í því að kanna hvernig fyrirtæki sem flytja út íslenskar sjávarafurðir, haga málum sínum á ýmsum sviðum útflutningsstarfseminnar og hvert viðhorf stjórnenda sé til ýmissa mikilvægra þátta henni tengdri.

**Hér með óskum við eftir því að þú (eða annar samstarfsmaður þinn sem þú tilnefnir) gefir þér ca. 8 – 12 mínútur til að taka þátt í öflugri netkönnun, í því skyni að varpa ljósi á mikilvæg atriði íútflutningshegðun íslenskra fyrirtækja sem flytja út sjávarafurðir.**

Við efumst ekki um að niðurstöður rannsóknar þessarrar, sem er sú fyrsta sinnar tegundar hér á landi í áratugi, muni nýtast vel öllum íslenskum fyrirtækjum sem standa í útflutningi á sjávarafurðum og því vonum við að sem flestir taki þátt til að byggja upp öflugra rannsókn.

Beiðni þessi er send út á nöfn fyrirtækja, sem fengin eru úr skrá Íslandsstofu: „Iceland Trade Directory“ og fyrirtækja sem hafa ISAT númer 46381, 46171 eða önnur númer sem

tengjast útflutningi á fiskafurðum, skv. skráningu í fyrirtækjaskrá Ríkisskattstjóra. Við gerum okkur grein fyrir því að einhver þessarra fyrirtækja eru hætt útflutningi eða hófu hann aldrei að fullu, en þar sem það er okkur gríðarlega mikilvægt að fá sjónarmið þeirra einnig fram þ.e. hverjar voru ástæður þess að útflutningurinn gekk ekki upp, þá biðjum við þau fyrirtæki sem þetta á við, einnig að taka þátt í könnuninni; ætti það ekki að taka lengri tíma en 1 ½ mínútu.

Til að taka þátt í könnuninni, vinsamlega smellið á tengilinn:

<http://cs.createsurvey.com/publish/survey?a=j9p2wL>

**Vinsamlegast athugið að smella á tengilinn héðan úr póstforritinu; ekki afrita hann og líma í netvafra!**

Við viljum taka skýrt fram að með því að tengillinn sé opnaður í póstforriti þínu, sjáum við hverjir taka þátt í könnuninn, þ.e. úr hvaða póstfangi var ýtt á tengilinn en er það nauðsynlegt til að ganga úr skugga um að einungis þeir sem eru skráðir á lista okkar, svari könnuninni. Munum við fara með allar niðurstöður sem algjört trúnaðarmál og algerrar nafnleyndar verður gætt.

Með von um góð viðbrögð, fyrirfram þökk og bestu kveðju,

Nína Björg Sæmundsdóttir, meistaranemi, sími: 847-6740, netfang [nbs4@hi.is](mailto:nbs4@hi.is)

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## Appendix E - Ítrekun 1

### Efni: Þáttökubeiðni fyrir netkönnun vegna rannsóknarverkefnis á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja

Kæru stjórnandi/fyrirtækjaeigandi.

Þann 12. september síðastliðinn var sendur út vefpóstur til eiganda og stjórnenda íslenskra útflutningsfyrirtækja á sjávarafurðum, og þeir beðnir um að taka þátt í könnun, sem er hluti rannsóknar okkar, í því skyni að varpa ljósi á mikilvæg atriði í útflutningshegðun fyrirtækjanna. Því miður virðist sem ákveðnir pósthjónar móttakanda hafi brenslað texta beiðninnar eða hún alls ekki komist til skila og því leyfum við okkur að fá að senda þessa beiðni aftur út. Þessi tæknilegu mistök skýra kannski að einhverju leyti nokkuð dræma þátttöku í þessari könnun en til þess að hún verði marktæk þurfum við að fá að lágmarki 50 % svörun. Því förum við nú aftur fram á aðstoð þína og vonum að þú sjáir þér nú fært að taka þátt í könnuninni.

Niðurstöður könnunarinnar verða notaðar í 2 meistararitgerðum okkar en áætluð skil þeirra er nú í október næstkomandi. Einnig er stefnt ákveðið að því að niðurstöður úr meistararitgerðunum tveimur, svo og niðurstöður úr fyrri rannsóknum dr. Arnars Bjarnasonar, verði grunnur að þremur greinum hans sem birtar verði í alþjóðlegum, ritrýndum, tímaritum. Efumst við því ekki um að rannsókn þessi geti nýst vel flutningsfyrirtækjum sjávarafurða, til að fá yfirsýn yfir íslenska útflutningsumhverfið, þær hindranir sem eru til staðar, hvernig markaðssetningu á sjávarafurðum sé háttáð og hvað það sé sem einkennir hegðun fyrirtækja sem flytja út sjávarafurðir.

Til að fá sem marktækastar niðurstöður, þurfa sem flestir að taka þátt í þessari könnun og er það von okkar að við náum yfir 90 % svörun. Því biðjum við þig eða annan samstarfsmann þinn sem þú tilnefnir, vinsamlegast að eyða 8 – 10 mínútum til að svara nokkrum spurningum og aðstoða okkur þannig að byggja upp öflugna könnun; þá fyrstu sinnar tegundar í 20 ár.

Til að taka þátt í könnuninni, vinsamlega smellið á tengilinn:

<http://cs.createsurvey.com/publish/survey?a=j9p2wL>

Munum við fara hvívetna að ákvæðum laga um persónuvernd og meðferð persónuupplýsinga nr. 77/2000 og munum við fara allar með niðurstöður sem algjört trúnaðarmál og algerrar nafnleyndar verður gætt.

Með von um góð viðbrögð, fyrirfram þökk og bestu kveðju,

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## Appendix F - Ítrekun 2

Kæru stjórnandi/fyrirtækjaeigandi.

Við viljum byrja á að þakka þeim kærlega sem nú þegar hafa tekið þátt í könnuninni og jafnframt hvetum við þá sem ekki hafa lokið könnuninni, að halda áfram með hana og senda inn. Um leið afsökum við fyrir það ónæði sem svona ítrekanir hafa.

Þann 12. og 16. september síðastliðin var sendur út vefpóstur til eiganda og stjórnenda íslenskra útflutningsfyrirtækja á sjávarafurðum, og þeir beðnir um að taka þátt í könnun, sem er hluti rannsóknar okkar, í því skyni að varpa ljósi á mikilvæg atriði í útflutningshegðun fyrirtækjanna. Því miður virðist sem ákveðnir pósthjónar móttakanda hafi hindrað móttöku þessara pósta, flokki hann sem ruslpóst og því kemst hann ekki til skila. Því leyfum við okkur að fá að senda þessa beiðni aftur út; nú frá íslenskum pósthjóni, sem "hreinan texta", í þeirri von að póstur þessi komist til skila til allra.

Hér er tengillinn á könnunina: <http://www.createsurvey.com/s/j9p2wL/>

Í sumum póstforritum er hægt að smella beint á tengilinn en í öðrum, þarf að afrita hann, líma í netvafra (t.d. Internet Explorer) og ýta svo á "Enter". Ef seinni leiðin er farin, sést ekki póstfang þess sem tekur þátt og nafnleyndin er alger. Þáttakandi getur þó valið að skrifa það í lok könnunarinnar.

Ath. að hægt er að gera hlé á könnuninni og halda áfram síðar, þegar betri tími gefst til.

Þar sem það skiptir okkur gríðarlegu máli í meistaraverkefni okkar að þú, móttakandi góður, takir þátt í þessarri könnun, biðjum við þig eða annan samstarfsmann þinn sem þú tilnefnir, vinsamlegast að eyða 8 – 10 mínútum til að svara nokkrum spurningum og aðstoða okkur þannig að byggja upp öfluga marktæka könnun; þá fyrstu sinnar tegundar hér á landi í 20 ár. Er það von okkar að niðurstöður rannsóknarverkefnisins geti nýst vel til að bæta rekstarumhverfi íslenskra útflutningsfyrirtækja á sjávarafurðum og koma auga á nýja möguleika fyrir starfsemi þeirra.

Verða póstföng þáttakenda á engan hátt tengd við svörin í úrvinnslu könnunarinnar og munum við fara hvívetna að ákvæðum laga um persónuvernd og meðferð persónuupplýsinga

nr. 77/2000. Farið verður með allar niðurstöður sem algjört trúnaðarmál og algerrar nafnleyndar verður gætt.

Með von um góð viðbrögð, fyrirfram þökk og bestu kveðju,

Nína Björg Sæmundsdóttir, meistaranemi, sími: 847-6740, netfang nbs4@hi.is

Eyjólfur B. Eyjólfsson, meistaranemi, sími: 770-4030, netfang ebe5@hi.is

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Fyrir þá sem ekki hafa séð fyrri pósta um þessa könnun, kemur smá lýsing á henni hér fyrir neðan:

Undirrituð hafa í samstarfi við Matís, undir leiðsögn Dr. Arnars Bjarnasonar og Dr. Ingjalds Hannibalssonar, hafið umfangsmikið rannsóknarverkefni á útflutningi og alþjóðavæðingu íslenskra sjávarútvegsfyrirtækja. Markmið verkefnisins er að greina íslenska útflytjendur á sjávarafurðum, hvað einkenni hegðun þeirra íslensku fyrirtækja sem flytja út sjávarafurðir og þá einnig að greina þær hindranir sem útflutningsfyrirtæki hafa við að glíma. Sérstaklega verður skoðuð þróun síðastliðinna tveggja áratuga en verkefninu er ætlað að fylgja eftir rannsóknarvinnu Dr. Arnars Bjarnasonar, sem hann vann í byrjun tíunda áratugarins og var grunnur að doktorsritgerð hans við Edinborgarháskóla árið 1994, og bera niðurstöður þessarra tveggja rannsókna saman.

Niðurstöður könnunarinnar verða notaðar í 2 masters ritgerðum okkar en áætluð skil þeirra er nú í október næstkomandi. Einnig er stefnt ákveðið að því að niðurstöður úr meistara-ritgerðunum tveimur, svo og niðurstöður úr

fyrri rannsóknum dr. Arnars Bjarnasonar, verði grunnur að þremur greinum hans sem birtar verði í alþjóðlegum, ritrýndum, tímaritum. Efumst við því ekki um að rannsókn þessi geti nýst vel flutningsfyrirtækjum sjávarafurða, til að fá yfirsýn yfir íslenska útflutningsumhverfið, þær hindranir sem eru til staðar, hvernig markaðssetningu á sjávarafurðum sé háttáð og hvað það sé sem einkennir hegðun fyrirtækja sem flytja út sjávarafurðir. Við efumst ekki um að niðurstöður rannsóknar þessarrar, sem er sú fyrsta sinnar tegundar hér á landi í áratugi, muni

nýtast vel öllum íslenskum fyrirtækjum sem standa í útflutningi á sjávarafurðum og því vonum við að sem flestir taki þátt til að byggja upp öfluga rannsókn.

Beiðni þessi er send út á nöfn fyrirtækja, sem fengin eru úr skrá Íslandsstofu: „Iceland Trade Directory“ og fyrirtækja sem hafa ISAT númer 46381, 46171 eða önnur númer sem tengjast útflutningi á fiskafurðum, skv. skráningu í fyrirtækjaskrá Ríkisskattstjóra. Við gerum okkur grein fyrir því að einhver þessarra fyrirtækja eru hætt útflutningi eða hófu hann aldrei að fullu, en þar sem það er okkur gríðarlega mikilvægt að fá sjónarmið þeirra einnig fram þ.e. hverjar voru ástæður þess að útflutningurinn gekk ekki upp, þá biðjum við þau fyrirtæki sem þetta á við, einnig að taka þátt í könnuninni; ætti það ekki að taka lengri tíma en 1 ½ mínútu.

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## Appendix G - Ítrekun 3

Kæru stjórnandi/fyrirtækjaeigandi.

Við viljum aftur byrja á því að þakka þeim kærlega sem nú þegar hafa tekið þátt í könnuninni og jafnframt hvetum við þá sem hafa byrjað á henni, að alda áfram með hana og senda inn. Um leið afsökum við fyrir það hugsanlega ónæði sem þessar ítrekanir geta haft.

Ágætis þáttaka hefur verið í þessarri könnun en betur má ef duga skal og því vonumst við að fá virkilega góð viðbrögð við þessari seinni ítrekun og sem flestir taki þátt og aðstoði okkur þannig við ritgerðarsmíði okkar; enn vantar all mörg svör uppá svo við getum unnið greiningarvinnuna úr könnuninni.

Hér er tengillinn á könnunina: <http://www.createsurvey.com/s/j9p2wL/>

Með innilegri von um jákvæð viðbrögð, fyrirfram þökk fyrir veitta aðstoð og bestu kveðjur,

Nína Björg Sæmundsdóttir, meistaranemi, sími: 847-6740, netfang nbs4@hi.is

Eyjólfur B. Eyjólfsson, meistaranemi, sími: 770-4030, netfang ebe5@hi.is

## Appendix H - Ítrekun 4

Góðan dag.

Eyjólfur heiti ég. Ég er að vinna, með öðrum samnemanda mínum, að Meistaraverkefni okkar við HÍ, í samstarfi við Dr. Arnar Bjarnarson og Matís. Liður í verkefninu er netkönnun sem sett var út á neti í september, í því skyni að varpa ljósi á mikilvæg atriði í útflutningshegðun íslenskra fyrirtækja sem flytja út sjávarafurðir.

Ég er nú að vinna úr niðurstöðum könnunarinnar en þó að viðtökur hafi verið með ágætum, sakna ég nokkurra fyrirtækja sem ekki enn hafa tekið þátt og eruð þið þar á meðal. Sökin er þó kannski öll mín þar sem ég sé nú, að ég hef bara sent þetta á pósthfang fyrirtækisins svo líklegast hefur þetta ekki komist til skila. Því prófa ég nú aftur en sendi í þetta skiptið á persónulega pósthfangið þitt.

Það væri ofboðslega vel þegið ef þú gætir séð þér fært að taka þátt í könnuninni, þar sem að við teljum nauðsynlegt, til að geta klárað verkefni okkar, að hafa fyrirtæki ykkar og sjónarmið, með.

Hér er linkurinn á könnunina:

<http://cs.createsurvey.com/publish/survey?a=j9p2wL>

Hafir þú einhverjar spurningar er þér meira en velkomið að hafa samband.

Fyrirfram þakkir og bestu kveðjur,

Eyjólfur B. Eyjólfsson

Meistaránemi við HÍ

Fornhagi 22

107 Rvk.

Gsm: 770 4030

## Appendix I - Ítrekun 5

Kæri stjórnandi/fyrirtækjaeigandi.

Ég vil byrja á því að þakka þeim kærlega sem nú þegar hafa tekið þátt í könnuninni og jafnframt hvetjum við þá sem hafa byrjað á henni, að halda áfram með hana og senda inn. Um leið afsaka ég innilega fyrir það ónæði sem þessar ítrekanir hafa. Fín þáttaka hefur verið í þessari könnun en betur má ef duga skal og því vonast ég að fá virkilega góð viðbrögð við þessari seinustu ítrekun minni og sem flestir taki þátt og aðstoði mig þannig við ritgerðarsmíði mína; enn vantar nokkur svör uppá svo ég geti unnið greiningarvinnuna úr könnuninni : (

Hér er tengillinn á könnunina: <http://www.createsurvey.com/s/j9p2wL/>

Ég geri mér fullkomlega grein fyrir ónæðinu sem svona kannanir og ítrekanir hafa og sjálfur væri ég persónulega alls ekkert sáttur við að fá endalausar ítrekanir frá "einhverjum vitleysing út í bæ" um að taka þátt í einhverri bölvaðri könnun. Það er því einungis nauðsyn sem rekur mig út í að senda þetta mail, þar sem enn vantar nokkur svör, svo ég geti skilað af mér marktækum niðurstöðum og klárað þessa ritgerð mína. Því sendi ég af illri nauðsyn aftur þessa ítrekun (þetta er nú einn sá erfiðasti og leiðinlegasti hlutur sem ég hef gert í langan tíma) og um leið bið ég aftur innilegrar afsökunar á þessu leiðinda ónæði.

Með innilegri von um jákvæð viðbrögð, fyrirfram þökk fyrir veitta aðstoð og bestu kveðjur,

Eyjólfur B. Eyjólfsson

Meistaranevi við HÍ

Fornhagi 22

107 Rvk.

Gsm: 770 4030