

## **The importance of SMEs in the Icelandic fisheries global value chain**

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### **Abstract**

Due to the abolishment of export licensing the role and power of the producers' organisation in Iceland dwindled gradually in the later years of the 1990s. A number of new marketing and exporting SMEs and market divisions emerged as important actors in the Icelandic fisheries industry's value chain, as the larger vertically integrated fisheries companies in Iceland started exporting their own products. At the same time the smaller SMEs entered into both formal and non-formal cooperation with the larger independent producers.

The aim of this paper is to explore the evolution and the importance of these market- and exporting SME's and integrated market divisions of fisheries companies in the Icelandic fisheries sector's global value chain, and to explore their relations with the Icelandic fish producers.

The research focuses is mainly on the global demersal value chain and is based on semi-structured interviews with managers of eight Icelandic SMEs in the Icelandic fisheries sector. These include vertically and non-integrated fisheries companies, independent marketing companies, and former managers of the producers' sales organization. It will be attempted to explore and analyse different business models in regard to global value chain governance, in-sourcing/outsourcing, integration and type and degree of coordination along the value chain. Furthermore, attempts will be made to evaluate changes in efficiency, innovation, product development and profitability.

This study is a follow up of the authors' study on structural changes on the fisheries value chain in Iceland from 1990 to 2007 and is a part of an ongoing study on the structure, organisational- and productivity changes in the Icelandic fisheries sector.

**Keywords:** Icelandic fish industry, structural changes, value-chain analysis, macro-environmental changes strategic group mapping

## **INTRODUCTION**

As in many resource based industries where the resources are in abundance but the home market is small, the only way is to export goods processed from these resources. Consequently, domestic activities must be linked with international activities. The Icelandic fisheries have for a long time claimed a considerable competitive advantage over counterparts in other nations. This rested to a certain degree in easily accessible, rich natural resources and free to entry until the introduction of the ITC system. But when the present FMS (or ITQ system) was introduced in the early 1980s, the fishing rights were allocated free of charge to all active fishermen according to their catch volume in the three years prior to the introduction of the ITQ system. In other words, the fishermen got a exclusive rights to the fishing grounds which was a very valuable asset. Other reasons for their competitive advantage have been the strong clusters of fisheries and processing activities along the coastline; strong commitment to technical know-how; effectiveness of the sea transport and strong and dedicated export and sales management. One form of these clusters was limited export license given to producers marketing and sales organisations (MSO) that was abolished in the 90's.

In this context, the notion of the global value chain comes into the picture. The Icelandic fishery sector is exactly such an industry that can benefit greatly from the global value chain. The international part through export and marketing is inherently an integrated function in the activities of the Icelandic fishery industry. At the national level, the domestic competition is not in selling the fish products but in sourcing inputs such as raw material and manpower. Sourcing fishing quotas and sourcing wet fish at the fish auctions is on the other hand the exposure of domestic competition within the fishery sector. The main competition is on the international markets where the products are marketed and sold. In many ways competitive status was gained through cooperation in the producer's marketing organisation (MSO's) that forced producers to be member to able to sell their products. It is therefore interesting to study how this freedom of export has affected the Icelandic fish industry and its competitive status.

## **LITERATURE**

Value chain analyses have gained lot of attention in the last two decades after for example influence writings of Michael Porters. Porter (1985) defines the role of the value chain as *“a template, which allows managers to examine in a systematic way all the activities a firm, performs and how they interact, which is necessary for analyzing the source of competitive advantage”*. According to Kaplinsky, (2000) *“the value chain describes full range of activities which are required to bring a product or service from conception, through the intermediary phase of production, delivery to final consumers, and final disposal after use”*. In similar way Kought, (1986) talks about the value-added chain and describes it as the *“Value added chain is process by which technology is combined with material and labour inputs, and then processed inputs are assembled, marketed, and distributed. A single firm may consist of only one link in this process; or it may extensively vertical*

*integrated...*”. In similar way Porter (1980) put great emphasis on the strategic position of companies in what he calls the value system, which is the embedded value chain from suppliers to buyers. Furthermore he claims that strategy is about coping with competition and that companies’ competitive strength depends on five major forces: threat of new entrants, threat of substitute products or service, bargaining power of suppliers, bargaining power of buyers and rivalry among existing competitors. In similar way Kogut (1986) claim the “*concept of the value added chain is developed in order to analyse the competitive position of firm in the global industry*”. He also claims that value added chain is important to understand the critical success factors of strategy.

When studying the relationship and governance of value chain it is helpful to start looking at economic theories about business-to-business marketing or suppliers’ and customers’ relationships. These theories have been called transaction theories and can be traced originally to R.H. Coases (1937) and more recently Williamson (1975). They aim to explain that the economic system is coordinated by factors other than pure price mechanisms of the free market (Larson, 1993). The essence of Williamson transaction cost theory is that on the one end is the hierarchy, which is a fully vertical integrated firm, and on the other end is the free market where the price of the transaction is the ruling force. This means that if the transaction cost is lower in the free market, where companies can buy their subcomponents rather than making themselves, then the market will be used; then in the same way, if and when the company can make the subcomponents itself it will integrate the production in its own company (Jarillo, 1998). Hence, it is given that there are only two stable forms of organising the relationship between suppliers and buyers that is the free market and the vertical integrated firm.

It has been pointed out that viewing companies relationship this way dismisses the third dimension of coordination, and cooperation that can lower the transaction cost and make companies quicker to respond to changes and more flexible than in the case of hierarchy or the market (Jarillo, 1998). Ouchi (1980) approached this problem of using the two dimension scale by splitting hierarchy into two parts, the “*bureaucracy*” which reflects the traditional hierarchy and the “*clan*” which describes long term relationships, carried out through non-specific contracts within the formal environment of an organisation. In the same way the market is split into two parts the “*classic market*” where the relationship is built on a spot basis and another part which Jarillo (1998) calls “*strategic network*”. In accordance with this, Ouchi (1980) has put in a new dimension into the discussion about companies’ relationships built on “*fairness*” or win-win (cooperative) relationships instead of the “*opportunism*” of Williamson’s transaction cost theories, which build on win-lose (competitive) relationships between suppliers and customers. Hence, the economy of the close companies’ relationship is not just built on lowering the transaction cost but rather on increasing the value in the relationship by working together in the value chain to improve the value adding

process by synergising their activities and resources. Larson (1993) maintains that the strategic trend has moved from the *“transactional perspective”*, where the transactional cost decides the form of the relationship, towards an *“interaction approach”* with various kinds of socio-economic alliances. Hence it is important to take more holistic view of industry analysis and the whole process the value system instead of competitive status of individual companies in the value system.

Increased global competitions have brought out the importance of not just study strategic status or competitive status of firms in the value chain but rather study the competitive status of the whole value system. Due to the increase importance of globalisation the concept global value chain (GVCs) has got increase attention. Sturgen et al. (2008) argues that the concept of GVCs highlights three features of any industry. *“(i) the geography and character of linkages between tasks, or stages in the value added activities; (ii) how power is distributed and exerted among firms and other actors in the chain and (iii) the role that institutions plays in structuring business relationships and industry location”*. Furthermore they claim that these three factors are important on explaining status of industry and insight how it might develop in the future.

Doz, (1988) claims that the *“operating interface between the two partners cannot be left to change and to ad hoc adjustment.”* To do so it is necessary to analysis what factors determine what kind of governance mechanism is needed to govern the relationship. Gereffi et.al (2005) categorise networks into three main types that is: modular, relational and captive networks. They also put forward five typology of value chain governance that is: markets, modular value chains, relational value chain, captive value chains and hierarchy. In this they acknowledge as most frameworks that are meant to explain industry organisation that on the extreme of this scale is the free markets and other extremes is the vertical integrated companies or hierarchy. Furthermore they claim (Gereffi, et.al. 2005) that the key factors in determining the global value chain governance are the complexity of transactions, ability to codify transaction, capabilities in the supply –base and degree of explicit coordination and power asymmetry. Hence they claim that those factors are the most important in determine the form of governance needed and the type of relationship between companies and by that form bases for framework to analysis value chains.

Gereffi et al (2005) put emphasise in their framework on lead firm in the value chain usually on the end user of the chain. By lead firm Gereffi et.al. (2005) mean firm that is in leading position in the value system. This leading position can emerge from vertical intergration in the value chain as well as access to information and knowledge. One of the central issue in the value system is power and power balance and in many cases important element in determine governance form in the value chain. Pfeffer’s (1992) points out that power can arise from centralisation of control and activities that could be connected to lead firm that Gereffi et.al., talks about in their framework. In similar way Johnston and Lawrence (1988) points out that large vertically integrated companies tend to

share as little knowledge as possible as well as, in many cases, viewing their external relationship in accordance with the dominant competitive perspective, concentrating on maintaining bargaining power over their divisions and subsidiaries. In addition to this, the bureaucratic structure results in the managers' lack of knowledge about activities along the value adding chain (Johnston & Lawrence, 1988) that could be connected to what Gereffi et al (2005) claims as capability in the supply base. This brings out that it is important in studying relationship between companies in the value system to study the governance mechanism of the value system and its elements as for example degree of vertical integration, power, knowledge, information sharing, capability of firms in the chain etc.

## **METHODOLOGY**

This study is a follow up of authors' study on structural changes on the fisheries value chain in Iceland from 1990 to 2007 and is a part of an ongoing study on the structure, organisational- and productivity changes in the Icelandic fisheries sector. The research focuses mainly on the demersal fish species in the global value chain.

In this research first hand data was collected through semi-structured interviews with managers of 8 companies in the Icelandic fish industry. These companies cover the broad spectrum of companies in the Icelandic value chain. That is 3 vertical integrated companies with high share in the total fish quota; 3 companies that are almost exclusively in processing and source big share of their raw material through fish markets or contracts with fishing boats; one international marketing company that builds on two of the prior producers marketing and sales organisations (MSO's); and one small marketing company. The aim of the interviews was to explore the different business models in regard to global value chain governance, in-sourcing/outsourcing, integration and type and degree of coordination along the value chain. Interviews were conducted in May, June and August 2009 and all the interviews were recorded and typed.

As has been pointed out this study follows up on previous studies of the authors. These studies are for example Knútsson (2001) study on *The Role of the Central Firm in Governing Strategic Alliances Between Small and Medium Size Companies; The Case of the Icelandic Fish Industry*, Knútsson & Klemensson, (2006) in study on development of the producers' sale organisation and Knútsson, Klemensson, & Gestsson (2008) structural changes in the Icelandic fish sector 1990 – 2007 a value chain analysis.

## **THE VALUE CHAIN IN THE ICELANDIC FISH INDUSTRY**

The value chain in the Icelandic fish industry until 1990's was heavily influenced by limited export licences. Export licences were granted to producer's marketing and sales organisations (MSO's) that were historical cooperative of producers until 1987 (Knútsson & Gestsson, 2006) when Icelandic Seafood (IS) changed into limited liability company and other followed in the next

ten years. Example of those export licences were monopoly on export of salted fish from Iceland that Union of Icelandic fish producers (SIF) had until 1993, duopoly on export to USA that Icelandic Freezing Plant Corporation (IFPC) and Icelandic Seafood had until 1987 during time that USA market was the single most important market for frozen fish products from Iceland (Knútsson & Gestsson, 2006). Until 1997 the value chain can be described as a product driven with the three major Icelandic marketing organizations (MSOs) in the strategic position as a central firm that controls the physical flow of products and the flow of knowledge and information in the whole value chain (Knútsson, 2001). In Knútsson (2001) study on the IFPC and SIF network until 2001 it is clear that the high number of producers and the small size of them influenced the network and made the ability of the companies at the supply end less qualified to take on more activities in the value chain than if the producers were larger. This could be examined in the light of Gereffi's et.al. (2005) framework, when the ability of the supply end is low and the lead firm is strong reflecting in "Captive" network with the supplier highly depended on the lead firm and the network. This form of network was typical in Icelandic fish industry until in the late '90s. One of main conclusions of Knútsson (2001) research was that conflict of interest in value creation in the value chain caused lack of trust between actors in the value chain. This emerges with larger companies due to consolidation in the industry and more demand for further value creation. The research findings indicate that "*the informal mechanism with decentralisation and direct communication was much more likely to create value for the participants' companies*" (Knútsson, 2001). On the other hand, it can be concluded that the processing stage of the products determines the needs for direct communication and the degree of flexibility required by the network or in other words, "*standardised products and/or low value added products demands little flexibility meanwhile special products and/or high value added products call for much more flexible environment with direct communication and overview of all the value chain*". Hence it is concluded in Knútsson's (2001) research that one of the "*major roles of the central firm is to create an environment that is value creating for the participants' companies. The precondition for value creation is to avoid a conflict of interests between actors in the value chain and to establish the uninterrupted transfer of information and knowledge between actors and levels in the value chain*". This means direct communication that will support and stimulate producers to become value creative where they will have an overview of the whole value chain. Direct communication supports both better marketing knowledge by producers and better knowledge and understanding by the marketing sector of the needs and aims of the producers. This supports emphasis in the literature about learning and the importance of knowledge transfer in the network (Badaracco, 1991) and that such inter-company relationships have moved from formal product-driven alliances towards more informal ones (Axelsson 1992, Shaughnessy, 1994).

## CHANGES AND DYNAMICS IN THE VALUE CHAIN

The basic links in the value chain for Cod is described in figure 1. One of the biggest changes in the value chain was establishment of fish markets in Iceland 1987. Before that, independent boat owner had to be in more or less fixed business relationship with producers’.

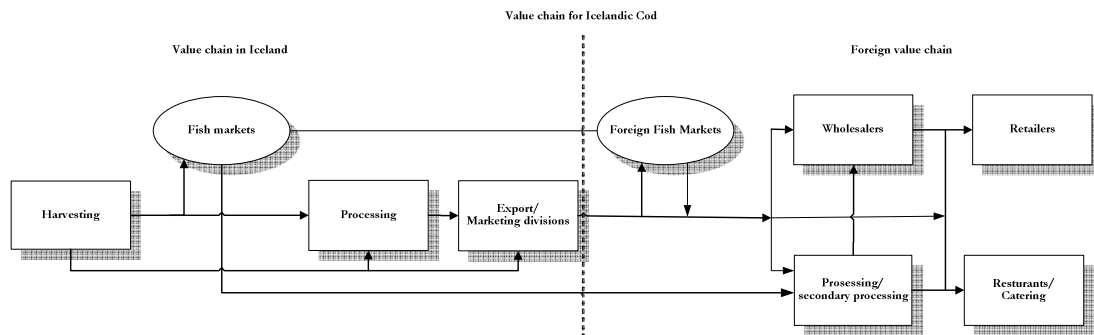


Figure 1 Value chain for Icelandic Cod

According to the interlocutors in this research, there was a fundamental change in the relationship between agents in the value chain after the export restrictions were abolished. Or as one of the interlocutor phrased it: *“This (e.g. abolishing of their exclusive right to export) weakening of the marketing organizations (MSOs) are the biggest change in general (domestically), now there are more actors selling and this marketing knowledge is inside the producers companies...”*. In the following years after the upholding of the export license system, the larger producers started their own marketing divisions taking care of most of own marketing activities. These activities can range from collecting general marketing information (as demand indicators, prices and price development) to taking completely care of all export activities of the company. The diminishing role of the big MSOs also created space and opportunity for smaller and medium size exporting companies to enter into the exporting business. According to the interviewees this caused that companies went probably more into ad-hoc and opportunistic marketing at the beginning but in the last 10 years or so, they are building more and more on long term relationship and contracts with their customers or as one interlocutor claimed *“... in the beginning we naturally were in the spot sales, that was the way of business during that time but today we... are more in fixed contracts and make plans that we can almost stick to”*. These relationships are either build on bi-lateral relationship contracts, e.g. between producers and retailer or tri-lateral contracts or cooperation between the retailer, producers and the exporting company (or distributor) which are usually small independent companies. In the case of tri-lateral contracts, the producer outsource the exporting activities and related functions to the exporting company which function as an agent in that sense.

Simplification of functions, relationships and flow of information through the value chain seems to be the policy goal of the actors/agent in the value chain. This is mainly done in two ways either by

vertical integrated company taking care of harvesting, production, export and in one case operating sale office abroad. In other cases this simplification is done through outsourcing of activities and using of the fish markets for sourcing raw material. In most cases the emphasis of the interlocutors' is to access the necessary market information as directly as possible. According to the interviewees, control and management of market information seems to be vital. Increased weight on production of fresh fillets and fillet cuts have made it more and more important for producers to be in direct contacts with the markets and as well as being able to control the supply of raw material. In the vertical intergraded companies this is done through direct control of landing days, what species is to be targeted and length of the fishing trips, as can be seen from quotation of one of the interlocutors *"Our strength is based on that we can regulate our fishing activities, what we catch, when we catch the fish, where he is caught and according to sizes as much as possible"*. Furthermore, this manager claims that this ability to control the harvesting and therefore the supply to own processing is a great competitive advantage for his companies as the Icelandic fishermen are not bound to sell all landed fish through the fish markets as for example in Norway. *"...we can make a plan for the next 12 months by synchronising catching and processing and it is our own decision if we want to sell fish on the market."* By that the managers maintain that they can much better manage their marketing effort, reacting to the markets signals and fulfil customer's requirements. In the case of the none-vertically intergraded producers, this coordination or synchronisation of catching and production is more or less done through the fish markets. It is though interesting to conclude that in no cases this coordination is done exclusively through the auction markets. In all cases, producers are also relying on contract relationships with boats owner, supplying fish of certain sizes, quality and freshness. In this case the fish markets are used as clearing houses, taking care of the physical transactions and paperwork although this is a contract based selling. Sourcing wet fish from fish markets have greatly facilitated the specialisation effort of the producers. All interviewees but one specialise in fish species in their processing activities. The vertical integrated producers use the fish markets to channel off the species they are not specialising and augment their own supply with fish from the fish markets, they needed for their production. In one case the producer is processing from most of the species brought to harbour from own trawlers. This producer is also using fish markets to get extra raw material to guaranty stability and flexibility. The fish markets have therefore supported more specialisation in the fish industry as well as created stability that was lacking before the fish markets emerge.

The foundation for the changes in the value chain is the capability of the producers or as one interlocutor claimed *"... there is much more knowledge and more language skills and other things as for example the ITC technique (and development and new possibilities in transport) worked with people as computers.....flying connection etc..."*. This, with the concentration in the production sector have made

the producers much better qualified than in the times of the old marketing organisations (MSOs) to go deeper into the markets and take over increasing activities between the stages of production and the end-buyer in the value chain. Other precondition for this is the access to and use of market information that were severely limited in the time of the MSO's as one interlocutor phrased it: *"But they (the MSOs) did never allow the producers to go direct to the market, it was not as easy to travel as much as is done today."* (BSB) And then the same interlocutor carried on and said: *"Today we work all this in much more cooperation with the customers and producers if there is trust on both sides and even these actors have direct connection without us"*. This interlocutor worked in a small marketing company. Other example of how this direct connection and cooperation works is that one producer has live web-cams in the production facilities that selected customers can use and observe the production activities from their business sites abroad. Direct connection and cooperation between producers and the markets is considered to be one of the cornerstones in increasing value creation in the Icelandic fish industry. According to all the interlocutors this has made it possible to go deeper into the markets with their products. This is especially true for fresh fillets, special cuts of fillets and other speciality products in some cases that are custom made.

The implementation of quota system in Icelandic fisheries and abolishment of the export licences changed the power balance in the value chain. Before 1990 the power in the value chain was in the hands of the MSOs that were the prime movers in the value chain, controlling the information flow from the markets as well as physical flow of products. During the period when the market power of the MSOs began to dwindle due to the abolishing of the exclusive export licences, the power went more and more to the quota holding fishermen. A demonstration of this can be seen in the contest between the MSOs for doing client agreements with the producers (Knútsson, 2001). In recent years this has started to change again as can be seen from quoting one of the interviewees where he claims that: *"The power structure in the value chain has changes in that way that the power has moved from the quota owner to the marketing agents. This lies in the fact that the importance is no longer in the supply of raw material or buying of raw material but in marketing and the relationship with the customers"*. In other words, he is claiming that the fish markets have made it possible for producers who operate without fishing quotas or own fishing vessels to operate in an effective and successful manner. One of the critics of the fish markets is that the prices there are higher than the producers can pay. This has induced these producers to simulate more efficiency, better yield out of raw material input and in general more value creation. Or as one producer claimed: *"Historically when the prices at the fish markets have gone up, we need to find ways to get more for our products. This has called for product development as well as to find customers that can pay higher price"*. This producer claims that to be able to operate in this fish markets environment, producers must be much better connected to the markets than ever before. This especially case with the companies operating in the fresh fillets

markets that pay higher price for wet fish (due to higher quality and freshness) at the fish markets than the companies operating in the traditional frozen fish markets. Hence, marketing connection becomes more and more important to be able to support this different price structure stemming from the fish markets. Although this, it is concluded here that the formal power in the value chain lies now mostly with the quota holders and the foreign retailers.

The fishery industry, both the harvesting and the processing sectors in Iceland, has for a long time been in the international forefront in technological matters. New high technology intensive production methods were introduced in late 1980' and 1990' which facilitated a high rise in productivity, efficiency and production flexibility. These new production methods were based on state of the art processing flow lines backed up by powerful ITC technology. Simultaneously the handling of wet fish was much improved by better cooling systems, shorter fishing trips and improvements in logistics. Efforts in innovations, diversification and differentiation were strengthened. Innovation was used to increase the level of knowledge, skills in production and export; in short to develop different intangible assets in services and sourcing (know-how, goodwill, business relations, brands etc.). In general this has been done to increase creativity in the value chain, to improve productivity and thereby increasing the competitive edge of the industry. But these steps were also necessary to meet changing demands and a broader scope of varieties. Just to mention some of these steps taken in product innovation, was shifting the traditional and relatively low value added land frozen products<sup>1</sup> to fresh products, frozen custom made products and frozen at sea products. In the salted products, increased emphasis has been given to light-salted (frozen or chilled) fillets substituting the traditional flat-salted products. Many other steps in differentiation and diversification have been taken. Part of this process has also been the steadily increasing utilisation level of raw material in order to gain maximum yield rate out of the wet fish input. New products have been generated from what formerly had been discarded as waste or was put in low value by-products. High-technology intensive manufacturing methods are the prerequisite for these changes.

Although interlocutors seems to be unanimous about that the time of the MSO's is long over and the new business model (as described above) is here to stay, there were few remarks in the interviews on the image and marketing of Icelandic fish. The MSOs did not only sell the products but worked on creating the image that the Icelandic fish was the best in the world. This is over now and no one working on maintaining or creating generic image of Icelandic fish products as can seen from this quotation: *"...in the last years actors in the industry are starting to realise as one manger claimed after a visit to Italy that there were 12-15 years old image posters'? There was no on-going marketing effort*

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<sup>1</sup> Block frozen products, interleaved skin on/bone in fillets, standardised 5 lbs. units etc.

*now and, individual companies are not putting money into this. This is something that the big MSOs did do in their time.* The interviewees were univocally stressing that it is necessary to work better together in the field of generic marketing and image-building issues for the industry in general.

From the interviews it is evident that the value chain has changes a lot since in the 1990s. The main changes got visible after 1997 when the bigger companies in the Icelandic fish industry took more or less over responsibilities of the marketing activities from the MSOs. This changed the power structure in the value chain by limiting the power of the MSOs and shifted more responsibility and power to the producers. Hence, the strategy of the producers moved to be more marketing focused and market driven than had been before. It can be claimed that during this stages the positioning of the producers in the value chain was moving from being “*captive*” to become more “*relational*” value chain (Gereffi et.al., 2005). It is interesting to analyses the main business models that are coming evident from this research as well as discuss what has triggered the changes in the value change. From the interviews with the managers of the fisheries companies, five main business models have been indicated and will be analysed. These models are;

**Quota-yield based optimisation** – Exporting in cooperation with foreign wholesalers and retailers. These integrated fisheries companies produce and market products from selected main fish species. The rest is mainly sold on domestic and foreign fish markets. The companies have few but steady business partners abroad with long term contracts and little or no reprocessing facilities there. Secondary processing can in some instances be outsourced.

**Value based optimisation** – Exporting both through own marketing department and foreign wholesalers/distributors or directly to retailers. Harvesting and producing to orders in Iceland and abroad. Long term bilateral or trilateral relationship with retailers

**Globalized commission/sales and marketing companies (csm) and processing** – With three main lines of business 1) straight csm both in Iceland and internationally selling both Icelandic and foreign products 2) value adding subsidiary or connected company abroad with reprocessing facilities at chosen locations and 3) a processing company abroad. Marketing information is seen as of high strategic value and usually kept within the company.

**Local csm company** – Mostly operating locally focusing on quality and stability selling Icelandic products to foreign markets – Seeking value added through strong ties with retailers and key customers in chosen markets and with stability on the supply side through long term contracts and active sharing of marketing information

**Specialised producer** – specialising in cod and haddock from chosen vessels through long –term exclusive contracts and fish markets (also from selected vessels). Almost all products are sold to the UK directly to major retailers and in cooperation with an UK agent. The flow of market

information between the actors in the value chain is of great importance as is the contact to the vessels owners.

**Harvester and specialised producer** Specialising in processing selected species as cod. Harvesting cod and selling all other species on fish markets were additional cod is bought exclusively from chosen contracted vessels. Selling most products to central Europe to a Belgian buyer that resells to retail chains and hotels. The rest is sold through an Icelandic csm company. Long term cooperation between the producer and the customers is of high importance.

It is to be maintained here that the main elements in these business models are to look for greater efficiency in lower cost (per unit operating costs and per unit overhead cost), high stability in sourcing and more reliability in the production and distribution processes. This includes enhancing the strategy to source the selected inputs at lowest cost and to support more efficient production.

It is noticeable how variable the approached each company has take in its strategic position in the value change. These covers the spectrum of company specials in production entirely and outsource all other activities to company that cover all step in the value chain in Iceland as well as operate their own marketing company abroad. This identifies the variation of the business model and flexibility of the Icelandic fish industry. All steps to facilitate entry into foreign markets and gaining market position are of great importance. In this aspect, the location of each of the production, sourcing or distribution steps is not the most important issue. One of the most important issues is to take the global approach so efficiency can be obtained domestically or internationally, inside the company or outside. In the seafood production in Iceland, exporting is a necessity. Therefore, the internationalisation in the form of off-shoring or outsourcing is an inherent part of the value chain. Off-shoring in this context is understood as international sourcing of vital inputs which can be support services, production or material sourcing. In the case of fish processing companies there can be a definite gain to outsource the supply of wet fish to the vessel owners and fishermen as the fishing activity requires , high level of special skills, technologies and the access to quota rights which is exclusively in the hands of the fishing companies. Doing that, the processing companies can keep their focus on the processing activities as its core competence.

## **CONCLUSION**

The value chain in the Icelandic fish industry has changed fundamentally in the last 20 years. , the main changes being the vertical integrated companies are controlling more levels in the value chain than before by overtaking part of the marketing activities. The concentration in the fish industry indicates that ever fewer actors are controlling even more of the value creation than before. After the demise of the three sales organisations in the late 1990s, a temporary trend towards spot market sales of products emerged. In recent years this has changed so that today the spot market sales are avoided when possible. Instead cooperation flourishes with emphasis on trust and long

term relationships, where direct contacts between producers and retailers in the global value chain seem to have created additional value. This is in accordance with the results of a previous study on the cooperation and coordination in the value chain. Two key factors for an efficient/effective market driven value chain are analyses. Firstly coordination of harvesting, production and marketing of a vertically integrated company is done through a pull from its international buyers and secondly the possibility of specialisation and stability is gained through the operations of fish markets. Before 1997 the Icelandic fishing companies' value chain was product driven with the quota holders and the three big oligopoly marketing organisation in power. The formal power of the IFi's value chain now rests mostly with the quota holders and the foreign retailers. Access to markets is getting increasingly important in the power structure. This becomes especially evident in the case of the producers not holding any fish quotas, which have built up their competitive status by gaining access to fresh fillets markets in the US, UK and Continental Europe by specialisation and value added products.

Value adding in the value chain is derived through the specialisation of small companies' products from species that can easily and steadily be sourced from fish markets and custom-made to the retailers' stringent wishes. The main value added activities seems to be precipitated in the policy to meet the customers' wishes a facilitated by the robust technical development in the Icelandic fish industry. Part of this development has been introducing new techniques in cutting and grade fillets parts according to customers' demand. Another part has been great improvements in yield out of input material and high output capacity in the production. The main foundation for those changes has been the direct ties between producers, foreign wholesalers and secondary processors or retailers through bilateral or trilateral connections and by cutting out (simplify) expendable links in the value chain. For the Icelandic fisheries value chain the key success factors are reliability in quality and delivery, stability and efficiency, where companies are able to bring the right quality raw material through high tech processing with high material yield, delivering top products up to buyers' fullest wishes in the right markets. Most of the Icelandic firms engaged in export activities are SMEs but only relatively few can be described as MNEs (ISI, Icelandic, Alfesca, Samherji etc.) It has for long been assumed that entry into foreign markets is problematic for SMEs. This is due to internal or external barriers of many kinds, such as lack of confidence, difficulties in assessing and identifying opportunities on foreign markets, difficulties to gain control and access to distribution channels. The possibilities in the global values chain, usually supported by the use of ITC and new possibilities in transport have widely been used to overcome these barriers. The Icelandic SMEs in fish processing have been using these new possibilities to good measure, which have undoubtedly benefitted these companies in extending their market network and in creating the very important vertical coordination along the value chain.

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