NORFISH:

Iceland - A Special Case

Seafish Report No. 399

November 1991

SEA FISH INDUSTRY AUTHORITY
Seafish Technology

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PREFACE

The previous Working Paper, Imported Fish Supplies and the UK Industry, highlighted the extent of the 'special relationship' that exists between Iceland and the UK in terms of the international trade in fresh wholefish and which translates into a potentially dangerous level of dependency. It was always intended that the Norfish study should include visits to key areas within the Nordic alliance to explore in greater detail the specific relationships between resources, production, development policy and international trade. The decision by Seafish for a small group of people intimately connected with Humberside's fresh fish trade to visit Iceland provided the ideal opportunity. Although the initial purpose of the mission was other than an investigation of the underlying determinants of present and future patterns of trade in fish and fish products, the very presence of industry representatives gave a much sharper and more relevant focus to discussions on the management of Iceland's fisheries economy. And with the agreement in Luxembourg over the relaxation of tariffs on imports of fish and fish products into the EC from EFTA countries taking place at the start of the programme, the discussions were given even greater relevance.

The programme included visits to auction markets in Hafnarfjordur and Reykjavik, to one of Iceland's largest and most modern processing plants, together with round table discussions with representatives of the fishing vessel owners and the processing industries, as well as, meetings with members of the various fisheries research institutes. The programme concluded with a discussion with the Secretary General at the Ministry of Fisheries, thus giving a very thorough and well balanced perspective on the current state of Iceland's fishing industry. Independent meetings were also arranged with fisheries economists in the University of Iceland and in the National Economic Institute.

The ensuing report will hopefully throw new light on the issues facing the Icelandic fishing and fish processing industries at a time of increasing uncertainty, declining resources but new opportunities for international trade.

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1. INTRODUCTION

Iceland, a country almost entirely dependent upon its fishing industry, faces a period of great uncertainty. Competition for resources between Iceland's domestic processing industries and markets for fresh wholefish has greatly increased as demersal stocks in Icelandic waters have weakened and the TACs for major commercial species have been sharply reduced.

An urgent political dialogue is now taking place in Iceland as to the future strategies for coping with the crisis posed by shortages of raw material supplies. Certain interests within the industry clearly favour the implementation of policies which would exert more direct control over the disposal of the catch and thus, in theory, ensure that a higher proportion of the catch is processed within Iceland and exported with much higher added values. Others would strongly resist moves to intervene further in the restructuring of existing trade patterns, arguing that the market is the best determinant of sound trading practice and,

if left to itself, will secure the best financial returns to the industry.

But the debate is not simply about the economics of the fishing industry. It is also concerned with national economic growth, employment opportunities, social conditions and regional development. The issues are thus further complicated by the changing emphasis within regional policy which, in the past, has sought to maintain the existing settlement structure in Iceland by underwriting the financial viability of the widely dispersed and greatly fragmented fish processing industry.

An important new twist has been provided by the agreement in Luxembourg on October 21, 1991 to dismantle the existing system of tariffs on fish and fish products imported into the EC from EFTA countries such as Iceland. To an extent, as yet not precisely known, this agreement alters the terms of trade for different sectors of the fish related industry. Among the major beneficiaries should be the processors and exporters of fresh fillets, previously heavily penalised by the tariff system. But there are several unanswered questions concerning the feasibility of substituting fresh fillets for either fresh wholefish or frozen fillets in established markets.

None of these issues can be properly understood without some appreciation of the nature of the Icelandic economy and the special position occupied by the fishing industry.

2. ICELAND'S DEPENDENCE UPON ITS FISHERIES

Iceland is a small, independent, mid-Atlantic island state with a land area of 103,000km^2 and a population of 256,000. Much of the interior is barren: only 1% of the land is under cultivation and a further 20% is classed as grazing land supporting relatively low densities of grazing animals, principally sheep. With a high rate of natural increase (10.7 per thousand - one of the highest rates in the developed world) and a very high life expectancy (women 79.9, men 74.6), Iceland's population is expanding rapidly - at something over 1% per annum, it is the fastest growing population in Europe today.

The scarcity of landward resources means that Iceland must still look to the relatively abundant fisheries in the surrounding coastal waters for the basis of its economy. In 1988, fishing employed around 6,500 persons (5.8% of the total labour force) with fish processing providing jobs for a further 8,500 (or 6.7%). Together, therefore, the fisheries give direct employment to c 15,000 people (12%). Many of the other manufacturing and service industries are closely linked to the fishing industry so that, in total, the fisheries may generate as many as 40,000 jobs or roughly one third of the total labour force.

The industry accounts for around 21% of GNP but the true value of the industry to the Iceland economy lies in the fact that it contributes c 75% of all visible export earnings. In 1990 exports of fish and fish products were valued at approximately 70 billion kronur. The only other major export commodity, aluminium, earned a mere 10 billion kronur (10%).

One of the problems facing the Icelandic economy is the recent decline in the real value of the catch as total landings fall and the share held by the more highly valued species, such as cod, declines. The rapid growth of Iceland's economy during the mid-80s, has come to a halt and overall domestic production has fallen. To date, however, Iceland has managed to retain virtual full employment, although the unemployment rates have been rising

from 0.4% in 1987 to 1.7% in 1990. Substantial annual wage rises have been offset by the continuing depreciation of the Icelandic Kronur and steadily rising consumer prices. In real terms, therefore, income levels have been falling. Although the strong inflationary tendencies of the late 80s have been reined in, the inflation rates in Iceland estimated at c 14% in 1990, remain well above those prevailing in Western Europe and North America.

The extent of dependence on the fishing industry varies regionally. Not surprisingly the 'metropolitan area' of Reykjavik has the lowest proportion of its labour force employed in fishing and processing. Elsewhere the levels vary from around 40% in the North West to as low as 20% in the northern and southern coasts. It is the overall high level of dependence upon fishing which profoundly influences the attitudes adopted within Iceland to maintaining and developing the industry. But beyond a recognition of the importance of the fishery resource and the fishing and processing industries, there is no unanimity of opinion on the optimal development strategy.

TABLE 1

Cod Abundance, TACs and Catches 1984-91

	1984	1985	1986	1987	1988	1989	1990	1991/92
Spawning Stock (million tonnes)	311.4	367.7	345.3	279.8	283.8	423.8	460.8	434.1
Fishable Stock (million tonnes)	901.3	921.3	861.4	1047.8	1259.3	1018.2	942.8	852.8
Recommended TAC (thousand tonnes)	200	200	300	300	300	300	250	250
Actual TAC (thousand tonnes)	242	263	300	330	350	325	300	265
Final Catch (thousand tonnes)	283	326	369	392	378	356	335	n/a

Source: Marine Laboratory, 1991

TABLE 2

Haddock Abundance, TACs and Catches 1984-1991

	1984	1985	1986	1987	1988	1989	1990	1991/92
Spawning stock (million tonnes)	108.2	101.3	64.5	72.3	90.3	114.1	101.3	90.7
Fishable stock (million tonnes)	174.5	150.1	124.5	160.8	238.2	231.5	182.1	146.8
Recommended TAC (thousand tonnes)	55	45	50	50	60	60	60	50
Actual TAC (thousand tonnes)	60	60	60	60	65	65	65	50
Final catch (thousand tonnes)	48	51	48	41	54	63	67	n/a

Source : MRI, 1991

TABLE 3

Saithe Abundance, TACs and Catches 1984-1991

	1984	1985	1986	1987	1988	1989	1990	1991/92
Spawning stock (million tonnes)	202.2	159.4	178.7	181.3	142.0	144.3	183.7	190.0
Fishable stock (million tonnes)	298.3	284.1	302.9	330.5	380.9	359.4	328.2	304.0
Recommended TAC (thousand tonnes)	65	60	60	65	75	80	90	70
Actual TAC (thousand tonnes)	70	70	70	70	80	80	90	75
Final catch (thousand tonnes)	63	57	66	80	77	82	98	n/a

Source : MRI, 1991

3. STOCKS, TACs AND QUOTAS

3.1 Stock Assessment and TACs

Although generally acknowledged as one of the most prolific fishing areas in the North Atlantic, stocks of certain major demersal species in Icelandic waters have been declining at a disturbing rate. Most crucial for the Icelandic fishing industry is the COD - the single most important species accounting for over 40% of the total export value of the fishery. Since 1980 the estimated size of the spawning stock has fallen from 730 million tonnes to 460m t in 1990 (-37%) and is expected to decline further to around 407m t in 1992. Fishable stocks of cod have likewise fallen from 1594m t to 1018m t with an expected stock level of only 853m t in 1992. The underlying reason for the present poor state of the cod stock is the failure, for the sixth year running, to produce an above average year class. The prospects for the next few years, therefore, remain bleak. Accordingly TACs recommended by the scientists and those adopted by the Ministry of Fisheries have been significantly reduced, with little or no expectation of improvement in the foreseeable future (Table 1). For other major roundfish species (haddock and saithe) which find their way onto the UK markets, the trends have been more buoyant and the outlook is more promising. Although the size of the spawning stocks of HADDOCK have fallen from 117,000t in 1980 to 101,000t in 1990 (-14%), the presence of a strong 1985 year class has helped to maintain the fishery at a relatively high level and the prospects for the near future are sustained by a good 1989 year class. Accordingly there has been no strong downward pressure on TACs and catch levels have risen throughout the second half of the 1980s (Table 2). For SAITHE, recent performances have been even better, with increasing TACs and rising catches but the weakness of the 1986 year class has undermined the state of the stocks and the MRI has recommended a reduction in the TAC for 1991/92 (Table 3). Nominal catches for PLAICE have remained around 11,000t for the last few years (double the levels in the late 1970s); falling catches per unit of effort (CPUE) suggest that fishing effort should not be increased, so that catches are expected to remain at existing

levels.

Thus, with the exception of the all-important cod fishery and to a lesser extent the haddock fishery, the Icelandic fisheries remain fairly buoyant. Stocks of other major demersal species - redfish, Greenland halibut, are relatively stable and there has also been a marked recovery of the herring stocks from their threatened extinction in the early 1970s.

3.2 Conservation Measures

The management regime adopted by Iceland is one of the most comprehensive and conservation minded to be found anywhere in the world, though it has so far failed to contain fishing effort and, in the case of cod and haddock, to maintain stocks at optimal levels. For all demersal species, other than redfish (135mm), the minimum permitted mesh size is 155mm and MRI is engaged in research into square mesh panels to facilitate the escape of small fish from the trawl nets. A sophisticated system of seasonal closures and trawling exclusion zones help to regulate the fishery on a regional and local basis and the Ministry is able to respond very rapidly to any deterioration in the size structure of catches on specific grounds. For example, where the proportion of small cod (under 55cm) goes above 25%, the Ministry can secure a temporary closure of the local fishery within 24 hours. Longer term closures can also be confirmed after more detailed scientific investigation. In an attempt to minimise the problem of discards at sea, fishermen are required to land all their catches with only one third of the small fish being set against the vessel quota.

3.3 Quota Management

The fishing effort of individual vessels has also come under much closer regulation in recent years. For each vessel of over 10t effort has been controlled by a system of individual vessel

quotas or effort limitation for almost a decade. The system originally introduced in 1983 allowed vessel owners to opt either for individual quotas on certain major species based on historic track records or for a given number of days fishing a year. The detailed conditions of the system were reviewed annually. From January 1st 1991 the system has been harmonised so that all vessels over 6t are allocated individual transferable quotas (ITQs) for each of the major species on the basis of historic performance. Each vessel is given a fixed percentage share of the TAC: the percentage share is intended to remain sine die though the value of the share in tonnage terms will vary annually according to the level of the TAC. A certain leeway is permitted with vessels allowed to overfish upto 5% of their quota to be set against next year's allocation or to roll upto 10% of their quota into the following year's allocation.

The underlying principle of ITQs - transferable on the open market either though permanent sale or annual leasing - is intended to devolve some of the responsibility for management to the level of the individual firm, to provide some flexibility in fleet operation and to remove excess capacity through a market related rationalisation of the fleet structure. Transferable vessel quotas have been in place since 1983 during which time the market value of the quota has risen to an average of 200kr/kilo (August 1991). So far most of the 'market' in quotas has involved the annual exchange of specific species quotas from one vessel to another in order to allow for greater specialisation of participation within the fishery. The majority of permanent sales have involved the transfer to larger vessels of quotas allocated to the newly quota-credited boats from 6 to 10t in size: these had grown substantially in number during the 1980s when they were exempt from quota regulation. Because of the lingering doubts in the minds of vessel owners as to whether the present system represents the permanent and final solution and also because the current market value is thought to be below the maximum, there has been a reluctance to buy and sell quotas among the larger vessels. As a result there have been only marginal

changes to the structure of the fleet: there is, therefore, still a significant surplus fishing capacity.

Nevertheless at current market values, quotas represent a significant increase in the capital assets of the fishing industry. For example, a large company owned trawler with an annual quota in cod equivalence of 2,500t would have a capital asset of five hundred milliard kronur (£5m) several times greater than the replacement value of the vessel to which the quotas are attached. It is estimated that quotas valued at somewhere in the region of 4 milliard kronur (£40m) have permanently changed hands and a further 2 million kronur £20m) have been leased on an annual basis.

4. DISPOSAL OF THE CATCH

4.1 Quota Ownership and Community Ties

At present patterns of production are determined largely by the economic and spatial distribution of quota ownership, combined with the effects of settlement structure and geographical inertia: in the future, quota ownership may well become the single overriding factor.

In the past the normal pattern has been for the catch to be landed at the home port for delivery to the local freezing plant, irrespective of whether the landing vessels were tied by ownership to the processing plant or not. Local monopoly conditions prevailed throughout most of Iceland, helping to restrain landing prices for fish. With the growth of exports of fresh wholefish to the EC (and especially the containerised ice fish trade) alternative markets have opened up for the independent vessels owners, with opportunities to capture some of the benefits of higher world prices for fresh fish.

Roughly 40% of the quotas are held by the processing sector and a further 40% are in some form of mixed ownership (including private, company and municipality shares). Thus only 20% of the quotas are in the hands of independent, skipper-owned vessels with freedom to dispose of their catches to the most attractive markets. Indeed, this freedom is limited by the powers of the Export Allocation Board to license export of fresh wholefish.

4.2 Auction Markets

In a few areas of Iceland, landings from unattached vessels and especially from the inshore fleet of day boats, involved in longlining and less commonly gill netting, may be sold through the recently established daily auction markets. Local auction markets are intended to intercept supplies of good quality fresh fish which might otherwise be diverted into fresh wholefish exports and to provide a strong floor for domestic fish prices. In effect they break the local monopoly held by the processing

firms. Buyers on these markets are mainly saltfish producers, owners of small freezing plants with no catching capacity of their own and fresh fish export agencies. At present the marketsare limited mainly to south west Iceland though the system is expected to diffuse more widely in the near future. For example, the Westman Islands off the south coast - the largest single landing port, the final port of call for the fresh fish container vessels and, therefore, a major supplier of fresh fish to the UK market - plans to open an auction market within the next 12 months.

4.3 Disposition of the Catch

The decline in landings of demersal foodfish, notably cod, has put increased pressure on the domestic processing industry already burdened by excess capacity and has sharpened competition for supplies between the domestic processors (freezing plants and saltfish producers) and the exporters of fresh wholefish.

Only a very small proportion of demersal landings (4%) disappears into domestic consumption. Disposition of the remainder varies according to species (Table 4) and availability of supplies. The largest proportion of the catch moves into the freezing plants to be processed mainly as frozen fillets and less commonly as frozen blocks, though in the case of redfish, halibut and plaice larger amounts are processed as whole frozen. The freezing plants are also the least vulnerable to changes in the volume of fish landed, reflecting their direct control over the disposition of the catch from their own vessels. Indeed, in the case of cod, the freezing plants actually increase their shares of supplies at times of raw material scarcity, whereas both saltfish production and exports of fresh wholefish are quite severely squeezed.

Not surprisingly cod is the mainstay of all three production sectors. It dominates saltfish production (83%), accounts for 45% of demersal raw materials entering the freezing industry and

holds roughly a third of fresh fish sales (Table 5). No other species comes remotely close to challenging the commanding position held by cod. The reduction in cod landings and the prospect of low TACs for several years to come reverberates throughout all sectors of the industry and adds considerable fuel to the debate over the future strategy for management of the industry.

TABLE 4

Disposition of the Catches of Principal Demersal Food Fish, 1990

Thousand Tonnes						
	Freezing	Salting	Fresh	Other	Total	%
Cod	170	105	41	15	331	50.6
Saithe	62	19	13	1	95	14.5
Redfish	62	-	27	2	91	13.9
Haddock	34	-	24	8	66	10.1
Gr. Halibut	31	-	5	0	36	5.5
Catfish	11	-	3	-	14	2.1
Plaice	2	-	9	0	11	1.7
Ling	1	2	2	0	5	0.7
Blue Ling	0.6	0.4	1	-	2	0.3
White Halibut	0.7	-	0.6	0.3	1.6	0.2
Monkfish	0.3	-	0.3	-	0.6	0.1
TOTAL	375	127	125	27	654	100
%	57.4	19.4	19.2	4.1	100	

Source : Icelandic Seafood International Limited 1991

TABLE 5

Species Composition of Different Sectors of Production (11 Main Species), 1990

Freezing			Salting			Fresh		
Species	%	Cum	Species	%	Cum	Species	%	Cum
Cod	45.4		Cod	83.0		Cod	32.7	
Saithe	16.5	61.9	Saithe	15.0	98.0	Redfish	21.5	54.2
Redfish	16.5	78.4	Ling	1.6	99.6	Haddock	19.1	73.3
Haddock	9.1	87.5				Saithe	10.6	83.9
Gr. Halibut	8.3	95.8				Plaice	6.9	90.8

Source : ISI Limited 1991

5. POLICY ISSUES

5.1 Regulation of the Fisheries

Fisheries policy embraces both the regulation of the fisheries themselves and the selection of a strategy for securing the maximum benefits from the prolific and vitally important fishing industry for Icelandic society as a whole. It is bound to be contentious.

There is a large degree of consensus among the different sectors of the industry over the need to regulate the catching sector more closely in order to prevent overfishing which would undermine the resource base of the industry and thus Iceland's economy. Some lingering doubts remain about the morality of ITQs - not so much with regard to the apportionment of a common property resource among a finite number of individual fishermen, but more concerned with the possibility of huge windfall profits accruing to such individuals from the sale of quotas and with the possible threat to employment in the fishing community. Discussion continues over the possibility of auctioning vessel licences or of a levy on the value of the quota held to help finance research and development within the industry.

5.2 Regulation of the Markets

Much more problematic is the question of regulating the market for fish - especially for a coalition government formed around an Independence Party which espouses the free market philosophy.

In one sense, the battle lines for the debate on market regulation are quite clear though they may not divide along precise sectoral lines. There are those who favour intervention to control (i.e. severely curtail) exports of fresh wholefish in order to protect supplies to the domestic processing industry and so secure employment in the processing sector. This is a view held principally by the powerful processing industry lobby and by the labour unions. As an initial step, they welcome the development and diffusion of local auction markets to intercept

supplies of fresh fish which might otherwise enter the export trade. They would, for the most part, wish to see the system extended so as to require, in law, all fresh, demersal foodfish landings to be auctioned before export - except, of course, for those catches already committed to the domestic processing industry by company held quotas. Some would wish to go further and insist on a ban on all fresh wholefish exports.

Opposition to such proposals comes mainly from the independent section of the fishing vessel owners who would resist any attempt to compel the sale of catches through the auction markets, preferring instead to capitalise on the higher prices available on the UK and European markets.

The Icelandic government - a coalition of largely right-of-centre political interests - is likely to be embarrassed by any attempt to force the issue of imposing further controls on the markets for fish and fish products. Iceland claims to embrace the principles of free trade (though these may be seen to be compromised by high import duties on certain goods originating outside the EFTA and EC groups of countries). It has only very recently celebrated a victory in the phasing out of tariffs on imports of fish and fish products entering the EC, agreed at the Luxembourg negotiations on the European Economic Area. This is seen as a major step in establishing 'a level playing field' in free trade and fair competition for the fish related sector. It seems reasonable to suppose that the government would not wish to stand accused of tilting the playing field by introducing new measures to disrupt free trade and disturb free market forces.

5.3 Policy Goals

Policy towards the fishing industry has changed over the years from a situation at the start of the 1980s when the goal was to secure the maximum gross revenues and social benefits from the fisheries. Today the aim is to win the highest net returns for the industry and to achieve high added value in production. In

1990, the 'protectionists' were alarmed by a report from the National Economic Institute which argued that the highest net returns were to be gained from fresh fish exports and that real increases in value from processing were offset by procurement expenses. The gain in value failed to cover labour costs, depreciation and interest. To a degree the situation will have altered in favour of the processing industry as a result of the narrowing of the difference between Icelandic and UK fresh fish prices.

5.4 Restrictive Practices

Despite the government's alleged reluctance to intervene, it has nevertheless engineered a series of measure which have the effect of restraining the free market in fish and fish products. These include the advance notification of fishing vessel landings at ports outside Iceland, the system of export licences controlled through the Export Allocation Board and, perhaps most crucially, the decision to impose a quota 'surcharge' on fresh fish exported to overseas markets. In the case of cod, 100t of fresh fish exported in containers is counted as 120t against the vessel owners annual quota.

The government is unhappy to see this interpreted as a 'quota penalty' arguing, somewhat tortuously, that the surcharge was originally intended to compensate those vessel owners who lost fishing time when delivering their catches to overseas markets by direct vessel landings. There are many plausible explanations for the quota surcharge, including the allegation that exporters are in fact supplying more fish to the overseas markets than is declared by overfilling the skips - another argument which is difficult to credit as it would penalise the fishermen through the income they receive.

Whatever the reason, the result is the same : a reduction in the volume of supplies to overseas markets caused by the imposition of a restrictive practice, the severity of which has been increased by upward adjustment of the surcharge.

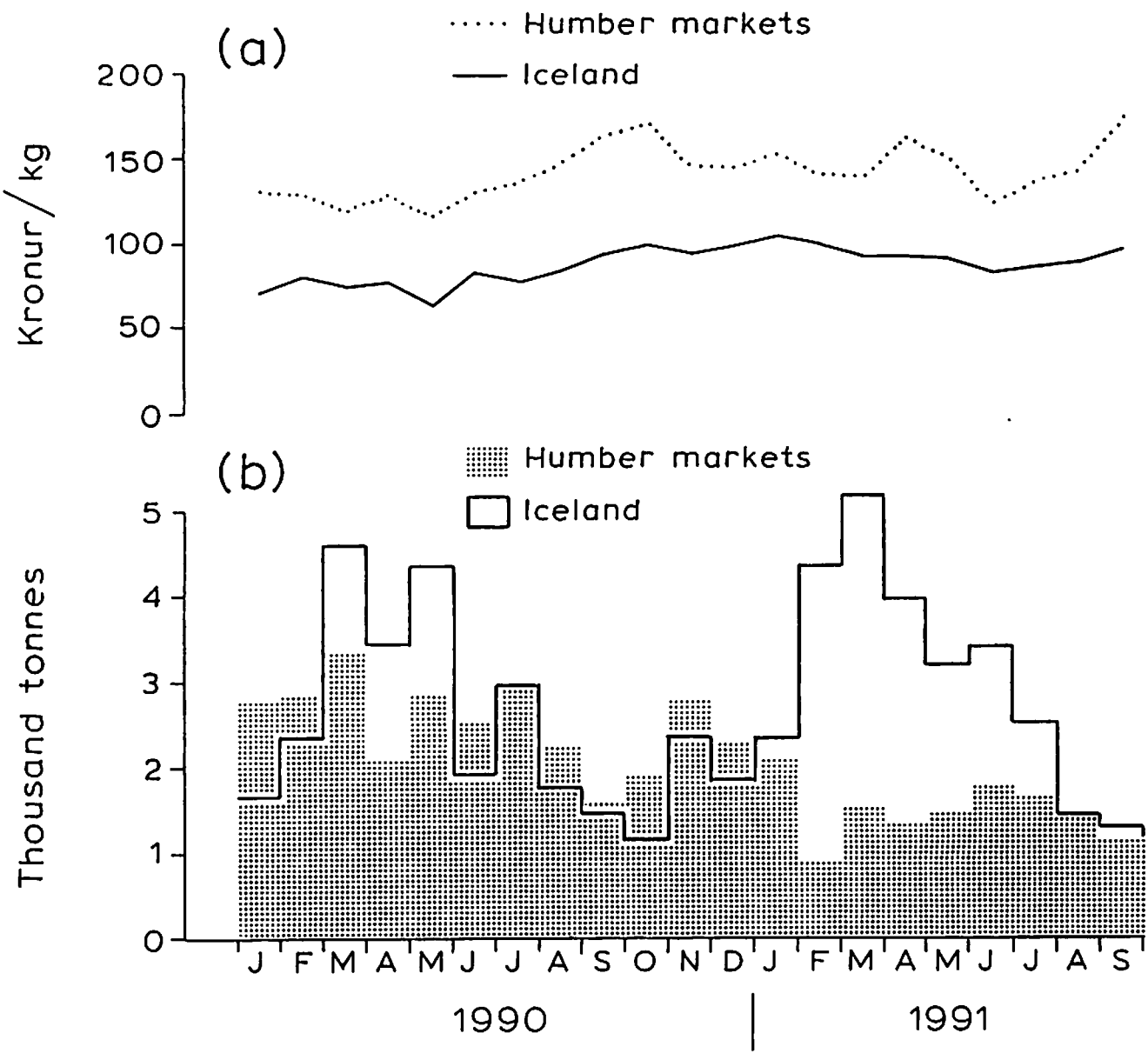

Fig.1 : Monthly Cod sales on fresh fish markets 1990 - 1991
(a) Prices (b) Volume

(Source : Icelandic Fishing Vessel Owners Association)

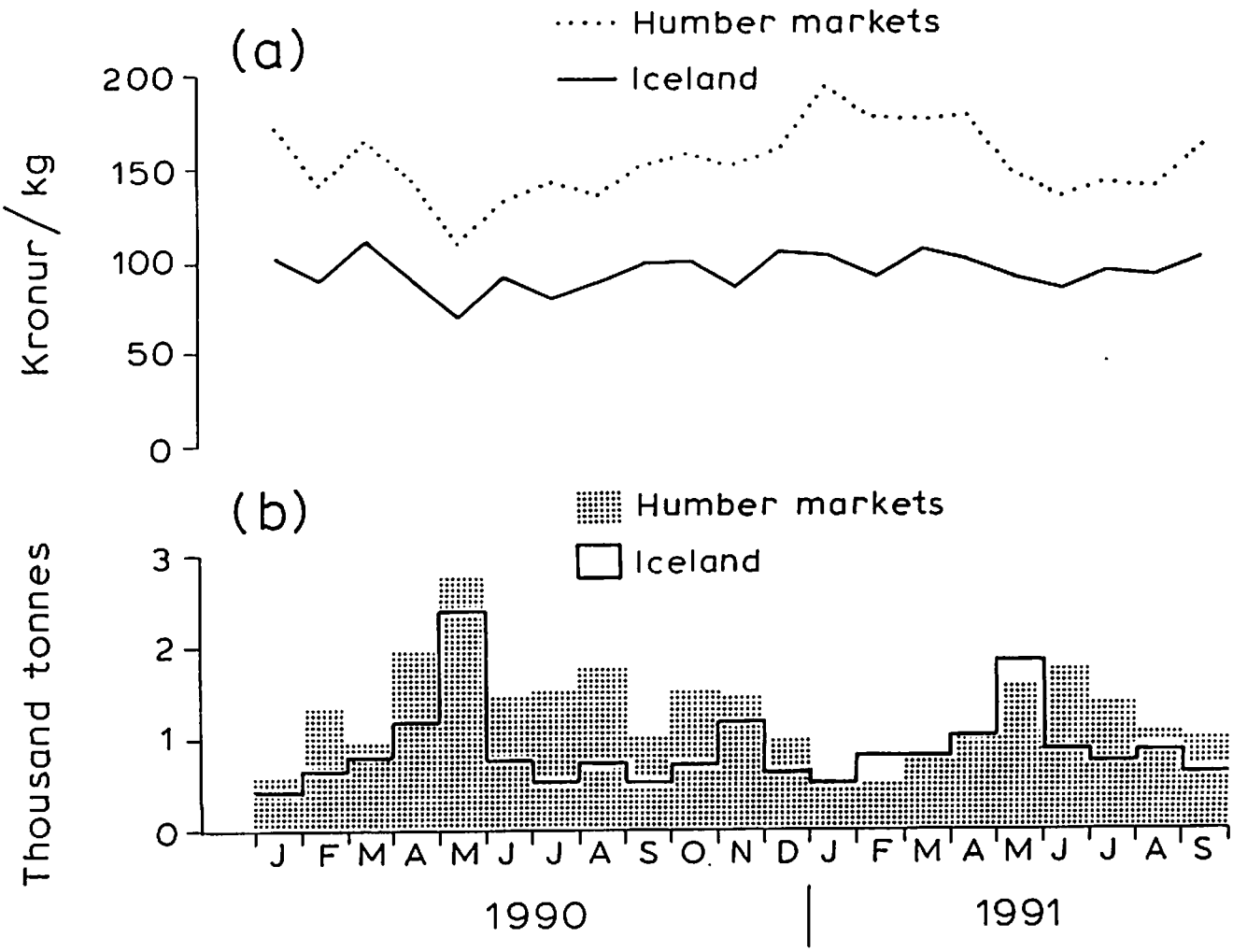

Fig. 2 : Monthly Haddock sales 1990-1991
(a) Prices (b) Volume

(Source : Icelandic Fishing Vessel Owners Association)

Data provided by the Icelandic Vessel Owners Association indicates a clear, sharp downward trend in the volume of fish supplied to the Hull and Grimsby markets (see Figures 1 and 2). Supplies of cod to the Humber markets have fallen by 43% in the first 9 months of 1991 compared with the same period in 1990; for haddock the reduction has been 28%. Part of the explanation may lie in the reduction in total landings brought about by lower TACs (though this cannot explain the situation for haddock) and the growth of Iceland's own fresh fish auctions as a countervailing force in the market place, narrowing the price differential between the Humberside and Icelandic markets. But the main reason would seem to be the effect of the quota surcharge which will bite more deeply as quotas are reduced.

There is little expectation that the surcharge will be removed even in response to the dismantling of the EC tariff system. Its removal is probably conditional on the introduction of a system to compel all fresh demersal foodfish to be sold through an auction market in Iceland prior to export - a price with even more damaging consequences for the volume and quality of fresh fish exports to Europe. The government also faces a similar dilemma over the future development of frozen-at-sea fish which achieves the highest quality produce with the most efficient use of both labour and capital, but at the cost of denying jobs in shore based processing and exemption from local community taxation.

5.5 Regional Policy

In the past, protection of the processing industry had been buttressed by a vigorous regional development policy which sought to maintain the existing settlement structure and to enhance opportunities for employment outside the metropolitan area of Reykjavik. Although the government claims that it cannot subsidise an industry upon which the entire national economy depends, hidden subsidies were made through the underwriting of loans to the fishing and processing industries which in effect

sheltered them from the harsh realities of financial survival. Similarly the local municipality often bought shares in the processing plant further helping to secure its continued existence.

The position is changing: there are signs that the present government is preparing to abandon its support for regional policy and institutions, including the important Regional Development Institute. There is even talk of providing 'mobility subsidies' by offering grants to assist the relocation of families living in disadvantaged communities. Such a sea change in policy clearly opens the way for a dramatic restructuring of the processing industry including the closure or amalgamation of small, non-viable plants. This would be a major step towards establishing a new equilibrium between resource potential and processing capacity, increasing plant efficiency and enabling Icelandic processors to compete for supplies of raw material without the help of restrictive practices. But the short term social costs of such a strategy would be very high, perhaps dangerously so for political expediency.

6. A FUTURE FOR ICELAND'S FISHING INDUSTRY

6.1 Economic Returns

Iceland's fishing industry faces a difficult and uncertain future in a rapidly changing decision-making environment. The most serious problem is that posed by the reduction in TACs for cod. It will have a depressing effect upon levels of activity and profitability in the industry and on the level of export earnings for the economy as a whole.

A recent analysis of performance in the fishing and processing sectors highlights the weak financial position of Iceland's principal industry. According to the National Economic Institute, the maritime sector faces a severe cutback in revenue in the near future. Overall, it had reported a 1% profit on operations in the first 9 months of 1991 compared to a figure of 2.7% in the previous 12 months. There was, in fact, a marked disparity in performance between the fishing and processing sectors with the former recording a 8.1% surplus and the latter a 7.5% deficit in trading. The reduction in cod TACs is expected to reduce seafood export revenues by 10%. The NEI predicts an overall loss in the maritime sector of 5.4% for 1991. Translated into individual fishing enterprises and processing firms, it forecasts increasing bankruptcies and community hardship, especially at a time when the government is committed to reducing public expenditure by 6%. One of Iceland's largest freezing companies (Grandi Hf) predicts a fall in revenue of more than US$ 4 million as a direct result of the 2200t cut in the firm's trawler quota. Such cuts have led to the sale of one of Grandi's 7 trawlers and the transfer of its quota to other vessels, while the company expects both its fishing operations and processing plants to be inactive for at least a month in the summer of 1991 when quotas are exhausted.

Further rationalisation of the catching and processing industry seems inevitable in order to bring resources and production capacity into a sustainable equilibrium and so improve the financial viability of the processing sector.

In such a scenario it is likely that increasing pressures will be brought to bear by certain influential sectors of the industry to reduce exports of unprocessed fresh fish but without putting in jeopardy the newly won accord between the EC and EFTA countries based upon the principles of free trade.

Fresh wholefish exports are a sensitive issue, particularly at a time of increasing raw material scarcity. When, as in the late 80s, total cod supplies were running at 350-400,000t it was not unreasonable for exports of unprocessed fish to absorb up to 100,000t each year. But with a decline in catches to an expected level of around 250,000 t that 'surplus production' can easily be taken up by the domestic processing industry. At a time of downward movement of total raw material supplies, exports of unprocessed fish are expected to be among the first to suffer.

6.2 Auction Markets

Great hopes are being pinned on the development and diffusion of the auction market system to help raise landing prices for the catching industry and so regulate the flow of supplies into the fresh wholefish export trade. At present the markets are few in number, handle only a small proportion of total catches, are largely concentrated in the south west and are poorly co-ordinated. They are essentially local markets providing processors with the opportunity to secure additional supplies and so supplement landings from tied vessels. To date there is little scope for a regional redeployment of catches to balance supply and demand at local plants around the coastline.

The system seems likely to work well only at a regional level and where relatively large quota shares are held by independent vessel owners and where, therefore, there is a large regular volume of fish arriving on the market each day. These conditions are best satisfied only in the south west region. The effectiveness of the system could be greatly enhanced with the introduction of a computerised hook-up linking several markets

within the region to allow buyers to take fish from different markets simultaneously, with the further possibility of on-line links to vessels at sea to permit the auctioning of catches prior to landing. Were significant volumes of fish to pass through the major auction markets in future, then it is possible to see the presence on those markets of UK and European buyers (or their committed agents). Their impact would certainly be to increase local quayside prices, possibly beyond the reach of many Icelandic processors. In that way the development of the auction market system may eventually frustrate its original aims of containing the level of fresh wholefish exports.

6.3 Supplies, ITQs and Quality Issues

Quality has become a major determinant of the patterns of trade, especially in the search for the most valuable end markets. If, as seems likely, Icelandic processors will be looking to develop closer direct links with major retail outlets in the UK and Europe, then quality becomes of crucial importance.

There is widespread recognition of the need to sustain improvements in the quality of materials at all stages of the production chain. Considerable investment has been made in the refurbishing of many of the larger processing plants with the intention of improving efficiency and creating a high standard of processing environment.

A particular concern is for the handling of fresh wholefish throughout the distribution system. This topic is not dealt with in detail in this report but one of the problems highlighted by several individuals is the handling of fish on board the fishing vessel in the first few hours after capture. Inadequate gutting, bleeding and washing of the fish seriously prejudices the quality of the raw material at the outset. The licence for line-caught fish to be landed ungutted during the winter months (15th October - 15th May) exacerbates the problem.

It was hoped that the introduction of ITQs would lead to a significant change in attitude on the part of the individual vessel owner. Previously he was intent on capturing the greatest possible share of the unallocated TACs : he pursued quantity orientated goals. With the introduction of ITQs the opportunity was created to readjust the basic strategy and to seek to maximise returns from falling quotas by closer attention to the quality of the fish landed. But, in fact, the catching industry has been slow to adjust to the new conditions. It appears that 'quantity rather than quality' attitudes still persist and the vessel owners remain indifferent to the price differences according to quality. (Some might argue that the indifference is a problem also linked to the Humber markets).

Rescheduling of the quota year from 1st September 1991 could have a direct bearing on the quality of the fish landed. Maximum landings are expected to occur in winter when the fish are in relatively abundant supply, in good physical condition and likely to command the best prices, especially on the European markets.

6.4 The European Economic Area

A significant new development in the already unstable decision-making environment affecting Iceland's fishing industry is the result of the recent accord, made in Luxembourg, to establish greater free trade between the two major European trading groups - EC and EFTA. One of the conditions for establishing the European Economic Area is the agreement to dismantle the existing tariffs on fish and fish products entering the EC by 1996. At present frozen fish products are zero rated and fresh wholefish exports, in Iceland's case, subjected to a preferential tariff of 3.7% for cod, haddock and saithe, 8% for halibut and 15% for other species. Exports of fresh fillets and saltfish products are, however, subject to high tariff duties of 18% and 20% respectively. In the case of saltfish products, tariffs are responsible for adding around £1m to 'production costs' for export.

The dismantling of the tariff barriers is seen as a major opportunity for Iceland to restructure its fish-related export trade away from both fresh wholefish and frozen fish and towards the newly liberated fresh fillet products which fit better the consumer market's increasing preference for chilled rather than frozen fish products. At the same time, Iceland's processors and export organisations are said to be gearing up to attack the high value added markets in Europe and to establish direct selling links with major retail organisations. Thus Iceland would move into the more sophisticated food lines with product differentiation according to the specific requirements of different European markets. It is expected that processing firms with their own catching capacity will attempt to maximise the value of their own raw materials through conversion into value added production or into profit maximising fresh fillet production within their existing plants. Fresh fillet exports would be channelled either through existing distribution networks or through direct sales to end users or consumers. The combined effect is expected to raise wholefish prices on the Icelandic markets and to further narrow the gap with European prices.

Such a strategy, if successful, would inevitably have serious impacts on fresh wholefish supplies to the UK coastal markets. Saltfish production is also likely to suffer despite the relief on export tariffs into the EC. So too will the traditional freezing industry in Iceland, now largely outmoded by consumer preference for chilled fish and by their inability to compete for raw materials at prevailing high prices.

However, there are several questions to be answered before the switch as production and export markets is secured - including issues of processing ability, market specifications, transportation and quality control.

No problems are anticipated in terms of the physical capacity of the Icelandic processing industry to handle fresh fillet production : capital equipment is at present grossly unused. The

industry is also confident that it can overcome the more formidable problems of labour scarcity. There is already underemployment of labour induced by shortages of raw material supplies. Rationalisation and the closure of non-viable plants will release underemployed labour for deployment elsewhere. Technical developments have already led to a doubling of labour productivity in the larger plants over the past 5 years. And, as a last resort, Iceland is willing to import more labour. Whether, however, Icelandic processing plants can produce fresh fillets at the same price as those currently obtained in the UK, with lower production costs and higher fillet yields, due to the retention of hand filleting skills, remains doubtful.

Few technical difficulties are expected in switching fresh fillet production from the requirements of the US markets to those in the UK and Europe. But there may be some problems if the idea of product specification to match the differentiated European markets is pushed too far. Direct selling to the UK and European supermarket chains will impose a very strict discipline on the Icelandic industry in terms of quality control, product prices and delivery schedules within relatively narrow profit margins.

A major problem concerns the transportation of fresh fillets between the point of processing in Iceland and the end markets in the UK and Europe and the implications for quality control. Fish off the bone deteriorates more rapidly than properly gutted and cleaned wholefish. Higher quality controls and greater risks of rejection are part of the higher production costs to be borne in fresh fillet production. Speed of transit between processing and final sale will become more critical in the case of fresh fillet exports than has so far been the case with wholefish sales. Air freighting is one possibility but one which would add significantly to costs. It is difficult to envisage the equivalent of the 100,000 t of fresh wholefish trade being handled by air freight. Regular schedules of 2 or 3 flights per week to several market centres would be needed with the problem of securing return loads to reduce costs and providing adequate

temperature controlled storage facilities at the airports in the event of disruptions to flight schedules.

If air freight were to become the norm for handling fresh fillet exports, it would tend to limit production opportunities in Iceland to the south west region and proximity to airfields capable of handling large air freighters. On the other hand, air transport would widen the markets for Icelandic fresh fish sales at marginal cost. Whereas the UK, as nearest neighbour, has dominated seaborne traffic in fresh wholefish, air freighting would open up direct access to several urban markets across western Europe.

Air freight is not the only solution to the need to pay greater attention to quality in transit. Fresh fillets could be transported by sea in properly insulated chilled compartments or 'frozen' with the use of carbon dioxide to maintain their freshness on the longer sea trips.

Even if technically and economically feasible, much would ultimately depend on the response of the major overseas markets for fresh fillets in either the retail and catering sectors or in the secondary processing industries which have made increasing use of imported fresh and frozen fish as raw materials. Most major secondary processing firms are likely to continue sourcing good quality fresh wholefish and frozen fish in preference to the less reliable and more expensive fillets. It is perhaps important to realise that very little fish is imported into the UK in fresh fillet form even from neighbouring EC countries where tariff barriers have been absent. Thus new markets will have to be created in Britain and Europe and new distribution networks developed. It is also significant that in contemplating the development of fresh fillet production Icelandic firms are moving into areas recently abandoned by several UK processors as unprofitable.

The transformation of the Icelandic processing and export industries is thus far from guaranteed. It is unlikely that there will be any dramatic change in the overall pattern in the immediate future. In the longer term, exports of fresh fish will expand, with an increasing emphasis upon fresh fillets at the expense of both frozen and fresh wholefish - always providing that the questions referred to above can be satisfactorily answered and secure markets developed.

7. THE 'SPECIAL RELATIONSHIP' : IS IT OVER?

7.1 The Basis of the 'Special Relationship'

Geography has largely decreed Iceland's economic dependence on the fishing industry and partly dictated the close, though not always harmonious, relationships with the UK. A large but mainly barren island situated in the middle of the North Atlantic and surrounded by some of the richest fishing grounds in the world, it was inevitable that Iceland's economic development should be based upon fishing. As Iceland's closest geographical neighbour - at least among the industrialised nations - Britain shared in the exploitation of the fisheries off Iceland upto the mid-1970s and then, after a hiatus lasting no more than a few years, became Iceland's most important customer for both fresh and frozen fish. The relationship climaxed in the late 80s when the trade in fish reached a dangerously high level of mutual dependency.

7.2 Existing Threats

In recent years that 'special relationship' has been put at risk. At a time of declining resources available to the Icelandic fishing industry there has been increasing pressure from the powerful processors' associations, abetted by the labour unions, to curtail exports of unprocessed fish intended mainly for UK markets. Over a period of 18 months average monthly exports of fresh whole cod and haddock have fallen by 37%. Further reductions are likely as the effects of reductions in TACs (and quota surcharges) bite deeper and as the system of local auction markets diffuses throughout Iceland to intercept all or part of existing flows of fresh wholefish to Britain (and Germany). A ban on fresh wholefish exports could be introduced - but only as a last resort.

7.3 New Opportunities

The opportunity to diversify production into fresh fillets, created under the EEA agreement, is a further threat to existing trade relations with Britain. The geographical imperative of

fresh fish trade with Britain is undermined by the possibility of air-freighting fresh fish products to destinations throughout Europe and North America. At present this remains only a theoretical possibility with a number of obstacles to its fulfilment in reality still to be removed. In making such a move, however, Iceland must sacrifice some of the security of the special relationship with Britain for the higher stakes and greater risks implicit in a more open and diversified international market.

Clearly Iceland must protect its fishery resources and seek out profitable ways of maximising the economic and social benefits from its fisheries. It must, therefore, develop new markets in products closest to the demands of the sophisticated consumer markets in Europe and North America, though as a small nation it must be careful not to overextend its production and marketing skills.

7.4 Putting the Relationship at Risk

But the question remains of whether or not Iceland can now afford to dispense with existing and well established markets for fresh wholefish in the UK. Those markets on Humberside have served the Icelandic fishing industry well in recent years, removing large but fluctuating surpluses and paying consistently high prices to the Icelandic fishermen for what, at times, has been fish of indifferent quality. The role of the Humber markets in providing a reliable clearing house for Icelandic fish and establishing a solid reference price for fresh fish sales throughout Europe will be prejudiced by a drastic reduction in supplies of fresh wholefish from Iceland. The strength of the Humber markets lies in its very considerable buying power reflected in the numbers of merchants trading on the Hull and Grimsby markets. That presence is determined largely by the large volume of fish available on a daily basis. At present Icelandic fish accounts for 70% of supplies. Without those large volumes the strength

of the Humber markets will be undermined and the buying power will gradually melt away.

7.5 Possible Outcomes

It is worth considering briefly some of the possible outcomes of the dismantling of existing trading patterns between Iceland and Britain. The collapse of bulk wholefish markets in the UK could lead to a weakening of prices for cod and haddock throughout Europe with serious implications for 'landing prices' in Iceland. Buying power displaced from the UK coastal markets could transfer to the Icelandic auction markets, driving up quayside prices and thus increasing raw material costs to the domestic processing industry whose sole advantage in the world market is the relatively low cost of its raw material inputs. Finally there could be a similar transfer of primary and secondary processing capacity from near-market locations in the UK and Europe to the point of raw material supplies. This is made easier by a decision in 1987 to permit majority ownership by foreign companies in the Icelandic processing industry, under special exemption by the Ministry of Industry.

The fishing industry survives on the basis of short term pessimism and long term optimism. While Iceland must now plan for several years at least of reduced groundfish catches, it must also look forward to the hope of greater abundance in the future. Rationalisation of the processing industry may be geared to a new equilibrium between resources and production capacity which, in the short term, allows for little or no surplus raw material supplies. In the longer term catching may once again exceed domestic processing capacity by a substantial margin - as it did as recently as the late 80s. Then Iceland will once again need access to strong fresh wholefish markets overseas. If they no longer exist, Iceland's fishing economy will no longer be in a position to maximise the returns from its fishing industry.

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APPENDIX A
List of Consultees

Federation of Icelandic Fish-Processing Plants

Agust H. Eliasson, Managing Director
Gudbrandur Sigurdsson, Icelandic Seafood International Limited
Halldor Thorsteinsson, Icelandic Seafood International Limited
Jon S. Fridjonsson, Union of Icelandic Fish Producers

Grandi HF

Jon Runar Kristjonsson

Union of Icelandic Fish Producers

Jon S Fridjonsson

Icelandic Fisheries Laboratories

Gimur Valdimarsson, Director

Icelandic Fish Quality Institute

Gisli Jon Kristjansson, Director

Marine Research Institute

Jakob Jakobsson, Director
Gunnar Thorsteinsson

Ministry of Fisheries

Arni Kolbeinsson, Secretary-General
Jon. B. Jonasson, Deputy Secretary-General

National Economic Institute

Asgeir Danielsson

University of Iceland

Ragnar Arnason, Department of Economics