

Outlook for supplies of Icelandic cod and haddock to the UK

Spring 2010



Recent events, future challenges and implications for UK and Icelandic seafood processors

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The UK and Iceland enjoy an important seafood trading relationship. In the light of recent and ongoing economic developments, the Humber Seafood Institute asked Seafish to lead an examination of cod and haddock supplies to the UK and developments in Icelandic fish supply. This paper is the considered response, and is based on analysis of trade data, business trends, and the views of many stakeholders in the UK and Iceland.

This document combines data, opinions and conjecture and is a position paper at the time of press. It is important to bear in mind that evidence today might suggest trends that may turn out to be very different in the longer term.

This document has been produced in partnership with the Humber Seafood Institute. It is based on research undertaken over the period 2009 and 2010 by Angus Garrett, Bill Lart and Julie Snowden of Seafish, Jonas Vidarsson and Sveinn Margeirsson of Matis (Iceland). Comments and contributions have been gratefully received from Adam Brown, Lorna Jack, Hazel Curtis, Phil MacMullen and Jon Harman of Seafish and researchers at Grimsby Institute of Further & Higher Education. Input from the seafood industry includes Coldwater Seafoods, Cumbrian Seafoods, The Seafood Company, Atlantic Fresh, Fishgate, Grimsby Fish Merchants Association, and Grimsby Fishdock Enterprises Ltd.

Readers' comments on the content of this discussion document are welcomed, please contact Angus Garrett by phone on **0131 524 8697**, email a_garrett@seafish.co.uk or feed back over the web [here](#).

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1. Introduction

- The UK is dependent on international sources for seafood supply.
- For key trading hubs, such as Hull/Grimsby, supply is a key forward issue.
- Securing supply is affected by industry performance in Hull/Grimsby but also by a range of third party developments over which there is little control eg the credit crunch & Icelandic crash 2008.
- Cod and haddock are key whitefish species for the UK market.
- Iceland represents a key source of supply for cod and haddock into the UK.
- Developments in Iceland and in the UK are creating uncertainties over future supplies for cod and haddock. With potentially serious implications for UK processors, these developments are worth monitoring.

What are the implications for UK and Icelandic processors of recent events and future challenges in the Icelandic economy and the supply of cod and haddock?

This discussion document explores this question. All references to volumes are based on estimated liveweight volumes.

2. Hull/Grimsby

Hull/Grimsby is a key trading hub for UK seafood supply in general, and cod and haddock in particular. A description of the key cod and haddock supply routes for Hull/Grimsby is shown in figure 2.1.

The supply of cod and haddock to Hull/Grimsby follows two key supply chains. The fresh/chilled chain involves air freighted fillets (cod), and containerised head-on gutted fish (largely haddock). The frozen chain is largely composed of containerised fillets (largely cod).

The shapes of the supply chains are influenced by (among other factors) the preferences of end markets and available supplies. Large processors supply national outlets in retail and food service with sizeable volumes of cod and haddock often sourced through direct contract. Mid-sized processors source material for regional outlets by direct contract, by supplies from Hull and Grimsby fish markets or both contract and market supply. Small processing firms cut material for local outlets and are almost entirely reliant on the fish markets.

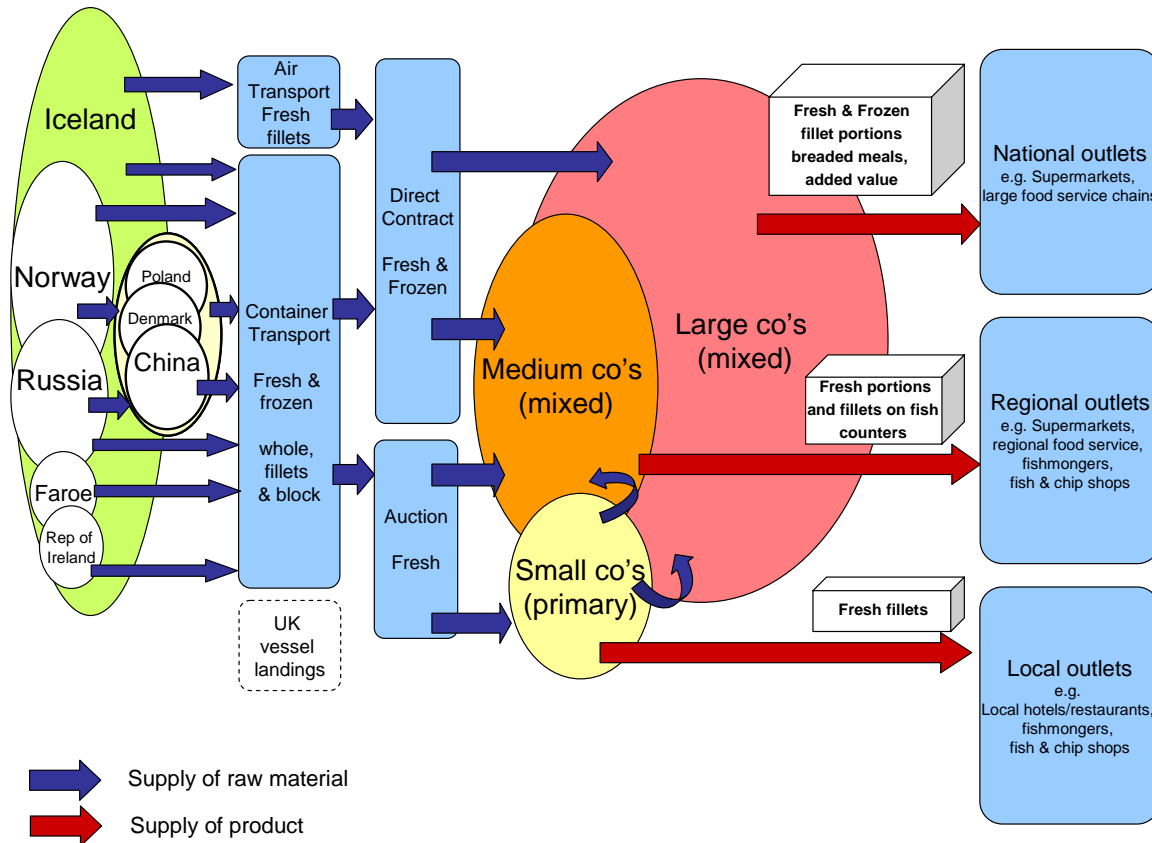


Figure 2.1. Hull/Grimsby region – import supply routes and UK markets for cod & haddock

The largest volume of fresh material is sourced from Iceland. These supplies are transported either by air-freight (directly for processing) or container ship (for sale through auction markets). Fresh supplies are dominated by head-on gutted haddock by container, and a not insignificant share of this fresh volume is of fresh cod fillets transported by air.

Processors tend to obtain frozen supplies from further afield. In the main, these are fillets of cod and haddock transported by container. Cod fillets tend to come from Norway and Russia. An increasing amount of this material is channelled via China or Eastern Europe. Haddock fillets are similarly sourced but Iceland is responsible for a much larger share of frozen haddock imports.

Hull/Grimsby has a number of strengths in its favour. The region benefits from a “special trading relationship” with Iceland, a number of globally significant processing companies, and good logistics to UK retailers. Fishgate is a modern, well equipped market which is

chilled, covered, has auto grading and BRC accreditation. Operators in the region can also pay suppliers, for example Grimsby Fish Market Association offers a 10 day payment scheme. As well as handling other species, the two fish markets in the region are important suppliers of head-on gutted cod and haddock to small processors. Having skilled filleting capability, these small processors can channel material to local retail and food service outlets.

2.1. Developments in the UK

Recent years have seen:

- Significant growth in fresh/chilled market in the UK.
- A growing dependency on material from third countries outside the EU.
- Volume growth in cod and haddock supplies from Iceland, particularly fresh.
- Volume growth in frozen cod and haddock material from China and Eastern Europe.
- Broadening of species being handled in Hull/Grimsby eg Alaska Pollock and, more recently, Pangasius.
- Larger processors moving towards direct contract supplies (to smooth fluctuations in volumes, prices and quality for large customer orders).
- Polarisation in the UK processing sector, with increasing consolidation in volume processing.
- An integrated supply route for unprocessed Icelandic material to Hull/Grimsby through Atlantic Fresh.

3. Description of Icelandic supply routes and situation in Iceland

Icelandic cod and haddock exports to the UK can be divided into four main product categories:

1. Whole (head-on gutted) fresh fish, which is primarily transported in containers to Humberside auction markets.
2. Fresh fillets or specially cut portions, such as cod loins, which are either transported by air or by container vessel directly to retail or foodservice customers; sometimes though with a short stop for repacking in the UK.

3. Frozen products. These include frozen at sea products, primarily fillets that either are used for further processing in the UK (breaded, battered, ready meals etc.) or go directly to retail and foodservice. Frozen products also include frozen products from land-based processing, which closely resemble frozen at sea products regarding supply routes, utilisation and markets.
4. Other processing, which are mainly salted, dried and otherwise prepared products; many of which are made from by-products.

These product categories originate from different suppliers, have different supply routes and variable market share from one year to another.

3.1 Description of fresh/chilled whole (head-on gutted) fish

There are large volumes of whole (head-on gutted) fresh cod and haddock exported to the UK each year, of which haddock has the larger share. Almost the entire export supply is transported in containers to Hull/Grimsby and sold at the fish auction markets in Grimsby and Hull (see figure 3.1). Competing customers for unprocessed material are the Icelandic seafood industry and Boulogne.

The volume of whole (head-on gutted) fresh cod exported to the UK has been relatively stable over the last 10 years. Exports of whole (head-on gutted) fresh cod accounted for around six percent of the total Icelandic cod catch in 2008. Such a small share of the material suggests that any changes in the stock would have a limited impact on Hull/Grimsby. However, as the total volumes of these supplies are so small, a change in supply from a single company or vessel could have a considerable impact on the Hull/Grimsby.

The volume of whole fresh haddock exported to the UK has increased dramatically since 2002. Exports of whole fresh haddock accounted for a third of the total Icelandic haddock catch in 2008. As exports to the UK represent a much higher share of haddock catch compared to cod, changes in stock or TAC could have an important impact on Hull/Grimsby. The main drivers for the increase in supply over the past few years have been increasing quotas, reliable prices at Hull/Grimsby markets, and favourable legislation (removing quota limit on unprocessed exports).

In 2008 there were around 140 Icelandic vessels supplying the UK market with cod and haddock by container, but the mainstay of the supply came from a relatively small number of vessels. The chain is comprised of:

- Seafood export companies without vessels. These are small companies, often one or two people, buying fish at domestic auction markets and exporting it directly to the Hull/Grimsby markets.
- Fishing companies without processing. These focus primarily on the UK market, and usually plan their fishing trips to fit in with container schedules in order to land the freshest catch possible.
- Vessels owned by processing companies. The primary aim here is to supply the processing operation but export the remainder in containers to the UK.
- Vessels focussing on domestic markets. These are mostly small, day trip vessels that land to domestic auctions.

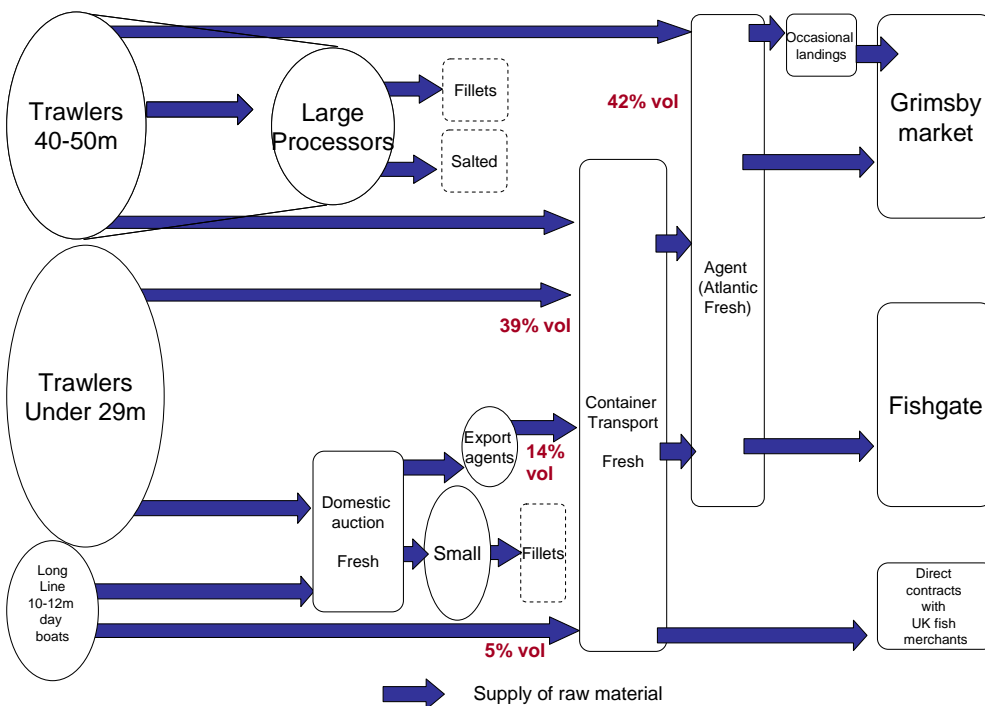


Figure 3.1. Iceland-UK supply routes of cod & haddock: fresh/chilled whole (head-on gutted)

3.2 Description of fresh/chilled (fillets)

The majority of Icelandic fresh/chilled exports go to the UK. Almost 9,000 tonnes of fresh cod and haddock fillets were exported from Iceland to the UK in 2008, representing 55% of Iceland's total cod and haddock exports in this product category. Due to the short shelf life of these products, deliveries need to be quick and the supply chain as short as possible. Air freight has therefore been the typical solution for transportation (see figure 3.2).

The volume of fresh cod fillets and portions exported to the UK almost tripled from 1999 to 2004. UK export volumes of fresh haddock fillets and portions quadrupled from 2003 to 2008. Volume increases have been helped by relatively stable average prices (Icelandic currency Free on Board) over that period.

Fresh deliveries have seen growth, firstly because of competition in the frozen sector from low cost products and secondly growing demand for less expensive alternatives to cod. Iceland has around 50 companies producing fresh seafood and most are exporting cod and/or haddock to the UK. The chain includes:

- Seafood companies supplying UK value-added processing operations. These are mostly large seafood companies that supply processing companies in the UK with part-processed raw material. They usually ship fresh fillets in bulk shipments to their UK subsidiaries or business partners.
- Large and medium sized exporters supplying directly into retail and food service. These are companies that supply retail chains and the food service sector in the UK directly, largely focusing on bulk packages.
- Small or medium sized companies supplying smaller clients in the UK. These are typically rather small scale processing companies, which supply a limited number of UK clients with highly specific products.

The exact route of fresh fillets and portions depends on numerous factors, such as raw material sourcing of individual companies, location of processing facilities, transportation method etc.

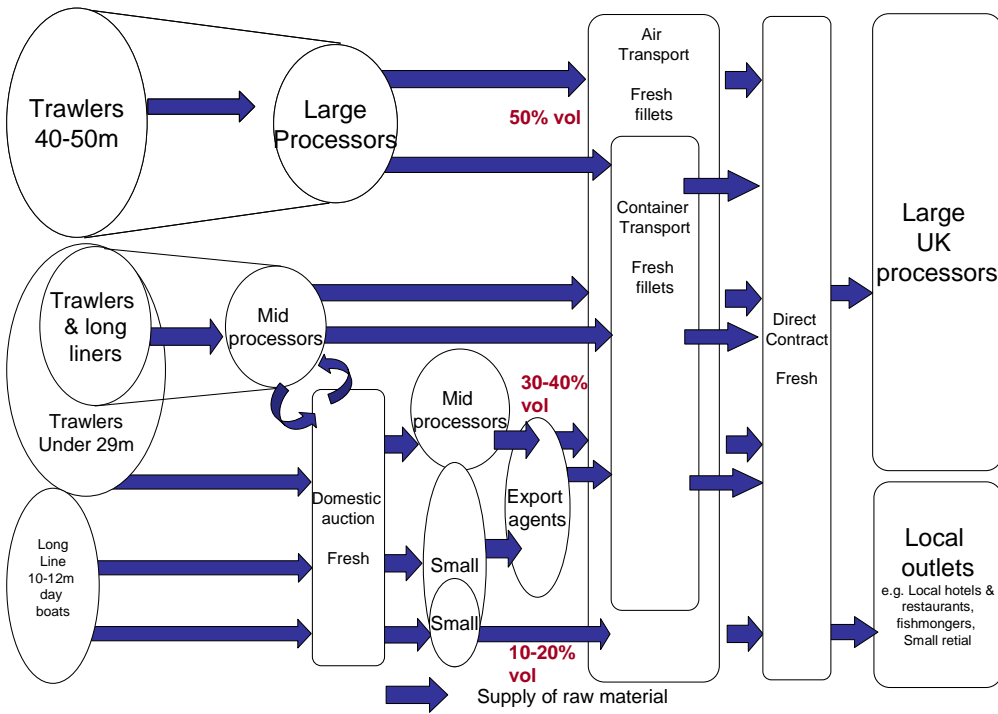


Figure 3.2. Iceland-UK supply routes of cod & haddock: fresh/chilled fillets

3.3 Description of frozen (fillets)

Supplies of cod and haddock frozen fillets follow either frozen at sea or frozen on land processing in Iceland. This material is exported to UK processors by container transport mainly through Hull/Grimsby (see fig 3.1). Material frozen on land represents the larger share (60%) of exported volume of cod and haddock fillets.

Over 12,000 tonnes of frozen at sea cod and haddock products were exported from Iceland to the UK in 2008. This represented 71% of Iceland’s total cod and haddock exports in this product category. More than 92% of the exported volumes were fillets.

The total volume of cod frozen at sea by Icelandic vessels has severely decreased in the past decade. Freezer trawlers have reduced in numbers by almost one third. Reducing quotas, increasing emphasis on fresh deliveries and strong markets in southern Europe for salted cod (competing for the same material) have been the main drivers for this development.

The total volume of haddock frozen at sea by Icelandic vessels has increased considerably since 2002. Quota allocations in haddock have almost tripled, and freezer trawlers have therefore targeted haddock and attempted to avoid catching cod. The UK market has remained the primary market for Icelandic haddock frozen at sea and in 2008 more than 80% of haddock fillets frozen at sea were exported to the UK.

There are currently only 14 companies that produce frozen at sea cod and haddock, and six of these companies account for 75% of the production. The supply routes of frozen at sea products are similar as with fresh whole fish.

The total volume of Icelandic exports of frozen cod from land-based processing has been decreasing for the past few years and the same trend applies for export to the UK. On the other hand, the haddock export volume in this product category has increased. Despite this increase, the haddock export volume has not matched the increase in catch, suggesting decreasing proportions of the total catch being frozen in land-based processing.

The majority of frozen export volume comes from large diversified seafood companies that own several vessels, have sizeable portion of the allocated quota and produce a wide range of seafood products. A small number of large processors in this category rely primarily on auction markets for their supply. There are numerous small processors with a narrow production range and smaller volumes, relying on their own vessels or the domestic auction.

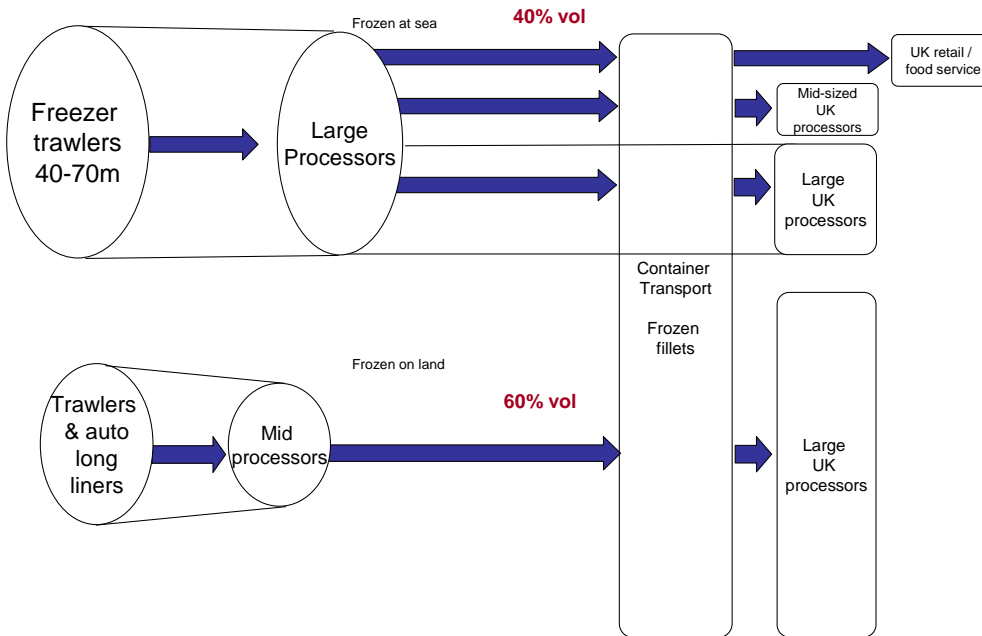


Figure 3.3. Iceland-UK supply routes of cod & haddock: frozen fillets

3.4 Developments in Iceland

Recent years have seen:

- A stable Icelandic cod stock and a very healthy haddock stock with dramatically increased Total Allowable Catch (TAC).
- Iceland enjoying a reputation for sustainable, well managed fisheries.
- Buoyant export markets for cod and haddock such as the Spanish salt fish market and UK market (resulting in a five-fold increase in haddock exports over the last 10 years).
- Seafood companies enthusiastically investing in quota, vessels, processing equipment, facilities and in other economic sectors.
- Consolidation in the industry with larger companies taking over smaller companies and vertical integration.
- The Individual Transferable Quota (ITQ) system promote consolidation (the top ten quota holders increased their share of cod TAC from 24% to 52% 1992-2009) and generate controversy amongst the general public.
- An increase in long line and decrease in trawl and gillnet as a share of total cod and haddock catch.
- Increased competition from far eastern countries in some product chains eg frozen fillet.

- Transport of fresh fillets in container vessels; technical developments have made container transport a feasible option for fillets, not just whole.

The Icelandic economic crash and developments over the last 15 months include:

- The collapse of the banks and the Icelandic currency increased debt and reduced asset values.
- Principle players in seafood supply (vessel owners, processors, logistics companies and sales consortiums) increasingly burdened with debt.
- An estimated 27% of the Icelandic seafood industry finding themselves in serious financial difficulty, 27% struggling, and 46% performing reasonably.
- Uncertainty in the financial situation of transportation companies – Eimskip's future has been recently secured (creditors converted debt into shares).
- Unemployment increasing from 1% to over 8%, prompting a higher interest in, and demands for more, domestic processing.
- Icelandic currency depreciation increasing the value of unprocessed fish but also potentially making domestic processing more lucrative (currency depreciation has made the domestic workforce newly competitive compared to the UK and the rest of Europe).
- A new fisheries policy from the Icelandic government to recall quota from the ITQ holders, potentially weakening the value of these assets for current quota holders.
- An application for Icelandic membership of the EU being submitted, and a two-to-four year negotiating period which will result in an agreement to be put to a referendum.
- The Icelandic government indebted to the UK and Netherlands for money they used to compensate savers in the collapse of Icesave when Icelandic parent Landsbanki failed.
- A deterioration in Iceland-UK relations, after the UK government invoked terror laws to freeze assets of Icelandic companies in the UK.

4. Cod and haddock stocks in Iceland and elsewhere

Fisheries on the Icelandic cod stock have been well managed using a harvest control rule to create the TAC; a pre set formula which takes a consistent proportion of the available stock¹. This has controlled fishing mortality over the past 15 years with the result that the current status of the stock is just inside the proposed ICES precautionary safe biological limits. The stock level is expected to improve due to the recruitment of the relatively large 2008 year class. The Icelandic haddock stock has increased in recent years however, according to ICES, the rate of harvest is now considered too high.

Looking forward, Icelandic cod catch is unlikely to increase markedly, despite pressure to increase the TAC, and a reduction in haddock catch appears likely (see table 4.1).

	TAC ² 2008/09 (tonnes)	Recommendations of the MRI ³ for 2009/10	TAC 2009/10	Difference 08/09 - 09/10
Cod	162,500	150,000	150,000	-7.7%
Haddock	93,000	57,000	63,000	-32.3%

¹ Total Allowable Catch = (20% of Fishable catch + last year's TAC)/2

² TAC - Total Allowable Catch

³ MRI - Icelandic Marine Research Institute recommendations (in line with management plan for cod)

Beyond Iceland, according to ICES, cod stocks in the Arctic and Greenland are growing but in the Faroes, stocks are showing decline (see table 4.2). The north east Arctic cod and haddock stocks are in very good condition.

For Norway and Russia, improving Arctic cod and haddock stocks are likely to return increasing catches in the near term. In Norway there has been an emphasis on domestic added value (eg fresh fillets) and consolidation in factories. The strategic plan for the Russian seafood industry is to modernize; this is likely to ensure domestic processing capability.

Wage competition has seen primary processing outsourced to far eastern countries. Norwegian and Russian material is increasingly imported as frozen fillets via China and East European countries.



Species	Approx catch in 2008 (tonnes)	Stock status
Cod	Arctic 575,000	Inside precautionary levels with a >90% probability of staying inside safe biological limits. Stock is harvested for optimum growth
	Iceland 160,000	Currently Spawning Stock Biomass is close to suggested safe biological limits. Stocks and catches set to improve over 2010-2015. However stock remains less productive than in the past. May benefit from improvements in Greenland
	Greenland Offshore stocks 10,000	Improving, but still lower than in previous years.
	Faroe 10,700	The stock is outside safe biological limits with the spawning stock at its historically lowest level. ICES recommend closure of the fishery.
	West Baltic 20,000	The stock is at risk of being outside safe biological limits. However the relatively strong year class of 2008 improves medium term prospects. There is a management plan in place and this years' TAC is consistent with this plan.
	East Baltic 42,000	The Baltic environment has changed substantially in recent years resulting in reduced long term productivity of this stock. However, current rates of harvest are considered sustainable. A management plan was agreed for this stock in September 2007. The recommended TAC is consistent with the precautionary approach.
	North Sea, Skagerrak and E. Channel 26,900	This stock has suffered a long period of over exploitation. However, there is an agreed management plan that has been evaluated by ICES to be in accordance with the precautionary approach, which is resulting in some recovery. It will be some time before this stock recovers its former productivity
	West of Scotland 400	The stock is suffering impaired recruitment of young fish and is at very low levels.
	Celtic Sea 3,600	ICES have recommended substantial catch reduction, although they were unable to quantify by how much.
	Irish Sea 1,200	The stock remains depleted, with poor recruitment of young fish for the past 7 years.
Haddock	Arctic 194,000	Stock in good condition; Inside precautionary levels. Stock is harvested for optimum growth. However catches are likely to decrease after 2010
	Iceland 93,000	Stock is classified as being at risk of overfishing although the stock size is relatively high. Reductions in TAC to 57,000 t are likely during the next years
	Faroe 7,600	Stock is classified as being at risk of reduced reproductive capacity, but the rate of harvest is currently sustainable. ICES recommend a rebuilding plan for this stock
	North Sea 30,000	Stock in good condition; inside precautionary levels and harvested for optimum growth.
	Celtic Sea 7,000	Status uncertain, but very dependent on incoming year classes

Source: ICES 2009 (www.ices.dk)

5. Possible developments, short, medium and long term

A number of potential developments arise in relation to key aspects of the Icelandic seafood industry.

5.1 Icelandic cod and haddock stocks and reputation for sustainable, well managed fisheries

- Icelandic haddock stock is not expected to increase and the industry is now experiencing quota cuts (expected haddock TAC to be 45-60,000 tonnes per annum in the next few years).
- Pressure to increase the TAC as a result of the financial situation – already strong pressure for increasing the cod TAC (high end customers in the UK are complaining about this pressure).
- Icelanders have started whaling with a quota issue for 150 finback whales and 200 minke whales. This has resulted in heavy criticism from UK consumers and retailers eg. Waitrose.

- Continuation of whaling or pressure on increasing supply through higher total allowable catch could affect UK demand for cod and haddock from Iceland, particularly high end markets and customers sensitive to sustainability issues.

5.2 Icelandic export markets for cod and haddock

- The UK market for fresh and frozen cod is competing with Spain and other parts of the European mainland for supplies.
- The Spanish economy has been hit hard by the credit crunch (unemployment is currently at 20%) and therefore demand for expensive Icelandic salt cod has declined.
- The UK economy continues to successfully compete on price with Boulogne to secure Icelandic exports of unprocessed cod and haddock.

- Increasing volumes of cod on world markets (eg through Barents sea) may reduce cod prices. This may drive down the price the UK is prepared to pay for cod, reducing the price differential between UK and Boulogne.
- Further depreciation of the currency and deterioration in UK-Iceland relationships as a result of the Icesave disagreement could affect all product chains.

5.3 Performance of Icelandic seafood companies

- Indebted seafood companies are now at the mercy of creditors (primarily Icelandic and foreign banks); whilst this should not affect total amount of supply it may change who has access to it.
- Supply routes may be at risk where there is a combination of financial difficulty and relatively few companies.
- The current Icelandic government wants to encourage domestic added value processing to counter the effects of declining overseas markets.
- Measures that have been suggested in government discussions include a quota premium on export of unprocessed fish, rewarding added value processors with quota or other incentives, and allocating regional quotas.
- Opportunities to move from exporting whole unprocessed fish towards exporting fresh or frozen fillets and potentially breaded, battered and ready-meals.

- The break up of indebted seafood companies and asset sales would certainly affect supply of fish by container, given the few large suppliers involved.
- A quota premium on exports are most likely to affect the supply of container transported fish in the short run but may affect supply of frozen fillets in the long run if there is more domestic processing.
- Rewarding domestic added value is likely to result in decreased supply of whole fresh fish and frozen fillets but increase the supply of fresh fillets and other added value products.

5.4 The Individual Transferable Quota (ITQ) system

- The government has stated its intention to change the allocation of quota, gradually recalling the quota from current quota holders “returning it back to the people”. If continued, this policy will result in current quota holders losing possession of the entire quota over the next 20 years.
- This represents a key risk for current quota holders who feel this would bankrupt the industry within a few years.

- ITQ changes are unlikely to affect how much cod and haddock is caught by Icelandic vessels. The changes will, however, affect who does the catching, and may fragment the ownership and hence sourcing of the fish.

5.5 Fishing practices for cod and haddock catch in Iceland

- The government is in favour of allocating quota based on vessel size and gear type.
- There is political pressure to favour environmentally friendly, labour intensive fishing practices eg long lining and jigging. This may result in increased fishing costs if quota is allocated to small vessels and larger vessels are excluded from some of the best fishing grounds in Iceland.

- Emphasis on longlining and jigging may affect container transported fish to the UK as the majority of this supply comes from large bottom trawlers currently allowed to fish up to three miles from shore.
- Environmentally friendly fishing may alternatively stimulate demand with UK markets that are increasingly looking at these issues in sourcing policies.

5.6 Icelandic economy

- In discussing EU membership, the emphasis of the Icelandic negotiating committee will be on keeping Icelandic control over the fish stocks and other natural resources, based on the rule of relative stability.
- All political parties have declared that Iceland will not join the EU if there is any question of reducing Iceland's control over its national resources.
- The Icesave payments situation between Iceland, UK and the Netherlands has potential to escalate. The Icelandic President rejected the proposed repayment arrangement and has put this to a referendum. Rejection of the agreement may weaken Iceland's economic position, and may further depreciate the Icelandic currency.

- It is unlikely that EU membership will affect the availability of cod and haddock supplies, but may open up new competing markets in the EU.
- Escalation of the Icesave disagreement may hinder Iceland's application for membership of the EU, and weaken the financial position of the country.

5.7 Possible developments and scenarios

The above developments are likely to occur, and interact, across different timescales. Possible developments may occur within the following timeframes, for example:

Short term (up to 1 year)

- Further economic decline.
- Political developments e.g. Icesave, more value adding activity in Iceland
- Financial difficulties of suppliers.

Medium term (1-3 years)

- Changes in quota ownership.
- Fisheries management indiscipline?

Long term (3-5 years)

- Changes in cod and haddock stocks.

It is important to note that developments relating to Iceland and the UK are not isolated but take place within a wider set of dynamics. Related dynamics include developments in the supply of cod and haddock from elsewhere (the role of Norway and Russia in supply, China and other countries of the Far East in processing for example) as well as developments concerning alternative whitefish species.

Given the range of factors influencing the supply of cod and haddock from Iceland, there is a great deal of uncertainty surrounding the future. Scenarios are a useful way of exploring possible future pathways. They show how important developments might combine to produce different outcomes. On the basis of these developments, UK and Icelandic seafood companies were invited to discuss key developments and explore potential future scenarios for supplies of Icelandic seafood to the UK in order to inform forward actions.

Appendix 1

Trends in cod and haddock stocks and exports (product weight volume)

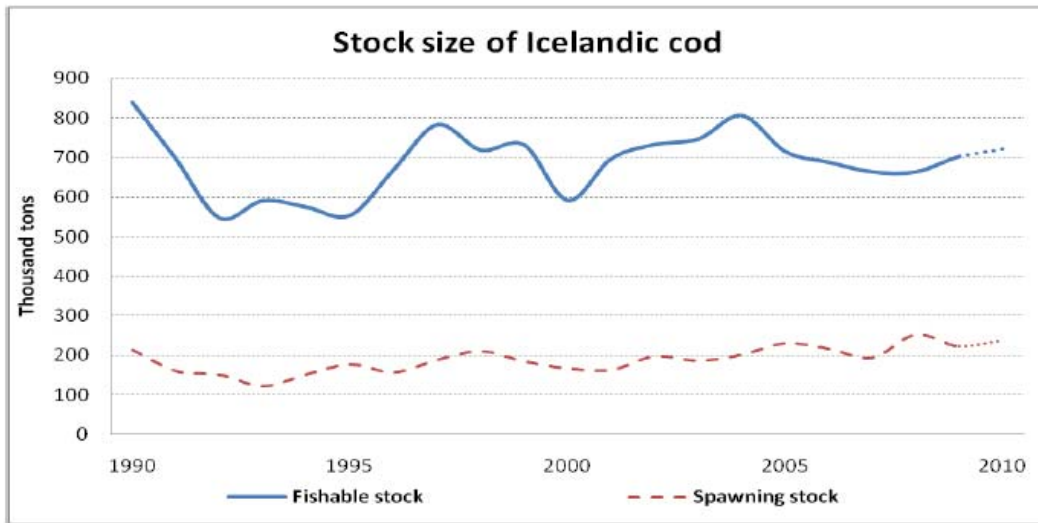


Figure 24: Stock size of the Icelandic cod stock 1990-2010
Fishable stock (4+) and spawning stock biomass at spawning time

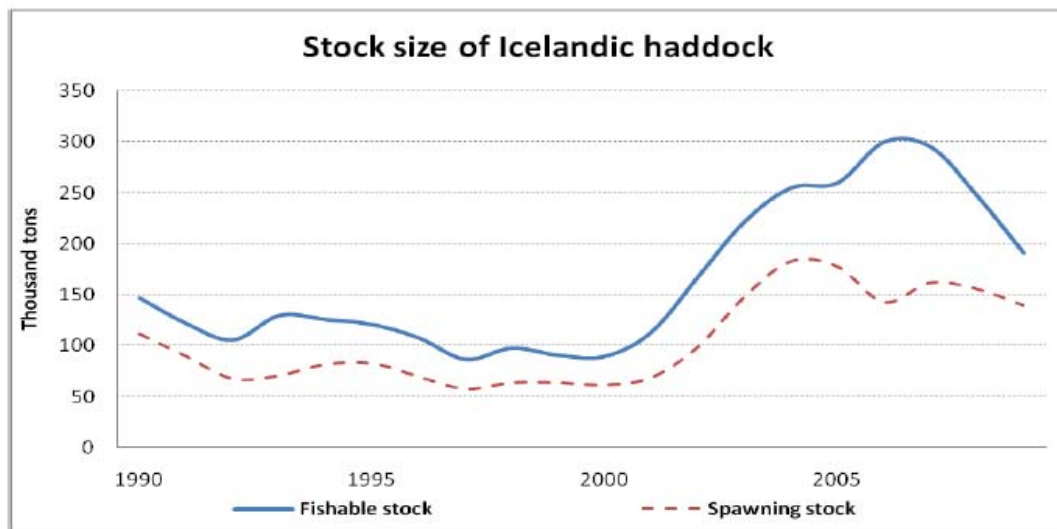


Figure 25: Stock size of the Icelandic haddock stock 1990-2009
Fishable stock (3+) and spawning stock biomass

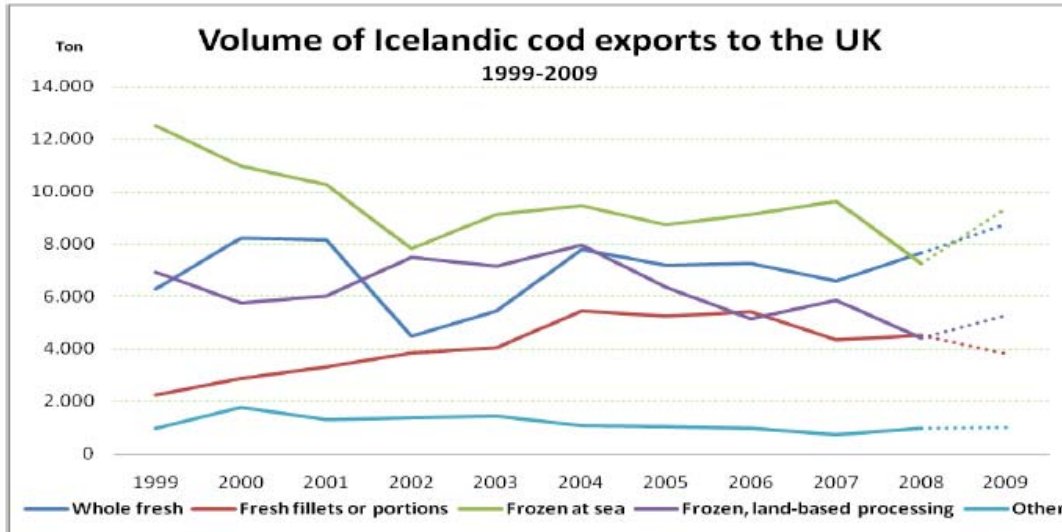


Figure 2: Volumes of Icelandic cod exports to the UK 1999-2009 depending on processing type⁺

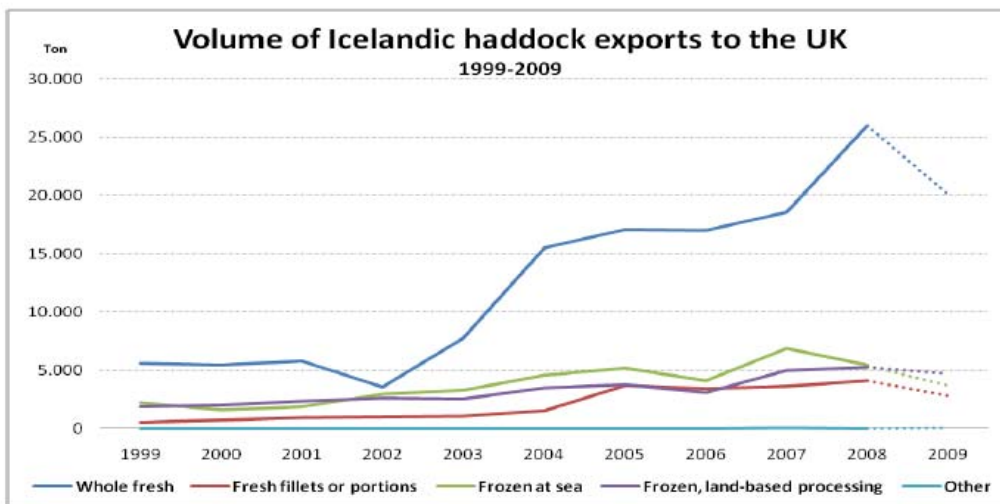


Figure 4: Volumes of Icelandic haddock exports to the UK 1999-2009 depending on processing type⁺

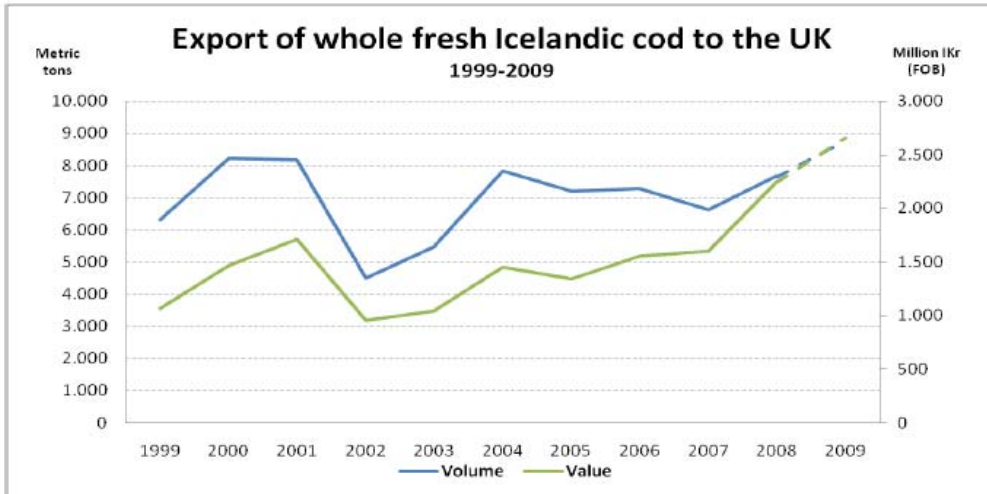


Figure 7: Volume and value of Icelandic exports of whole fresh cod that went to the UK in 1999-2009⁺

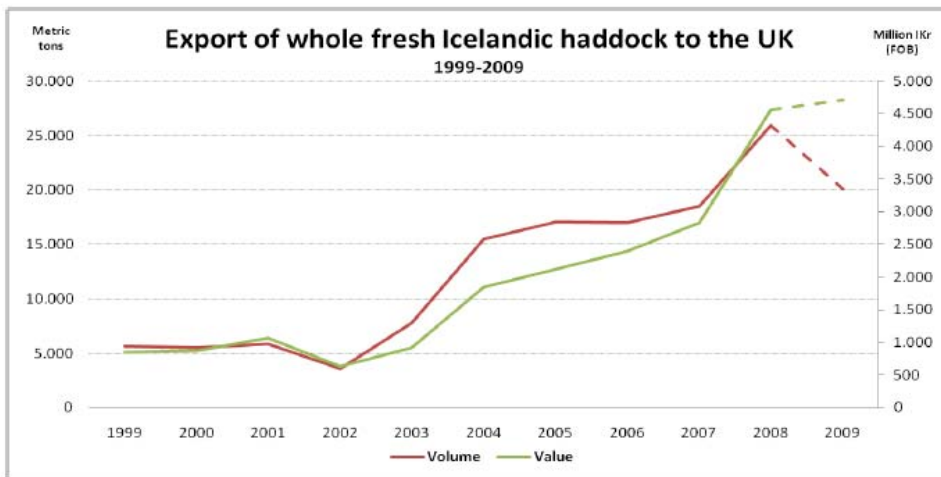


Figure 8: Volume and value of Icelandic exports of whole fresh haddock that went to the UK in 1999-2009⁺

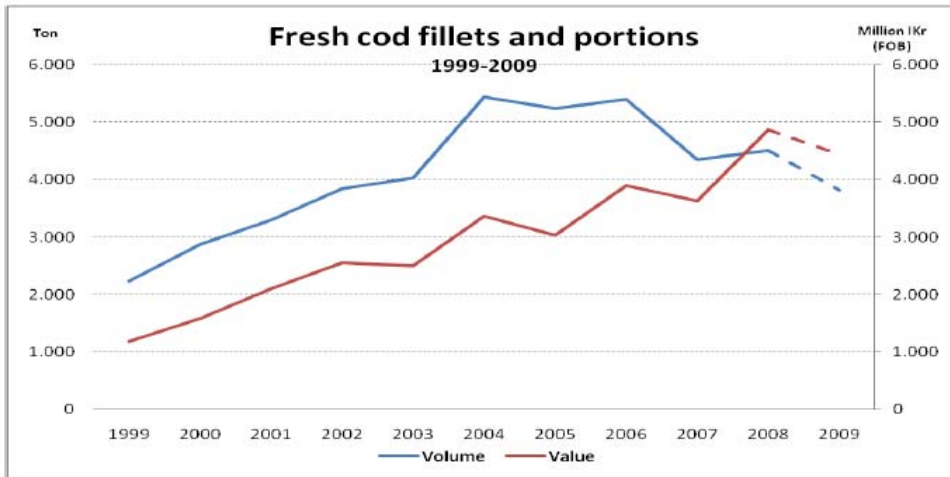


Figure 13: Volume and value of fresh cod fillets and portions exported from Iceland to the UK 1999-2009*

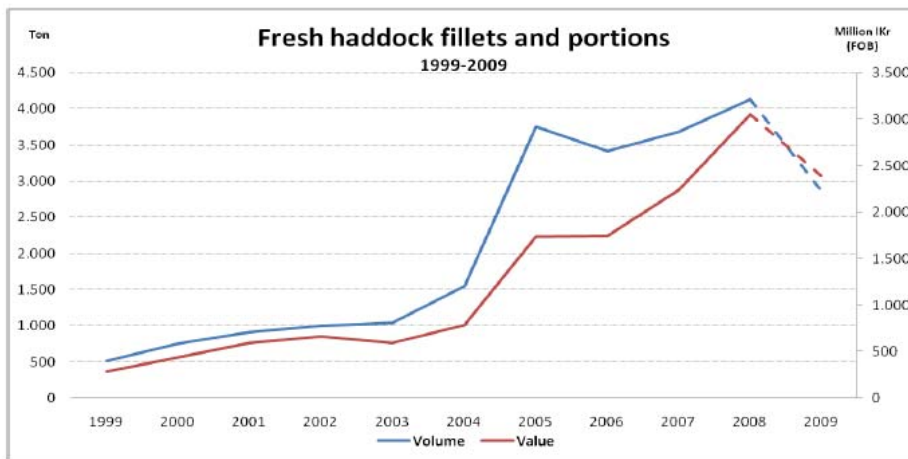


Figure 14: Volume and value of fresh haddock fillets and portions exported from Iceland to the UK 1999-2009*

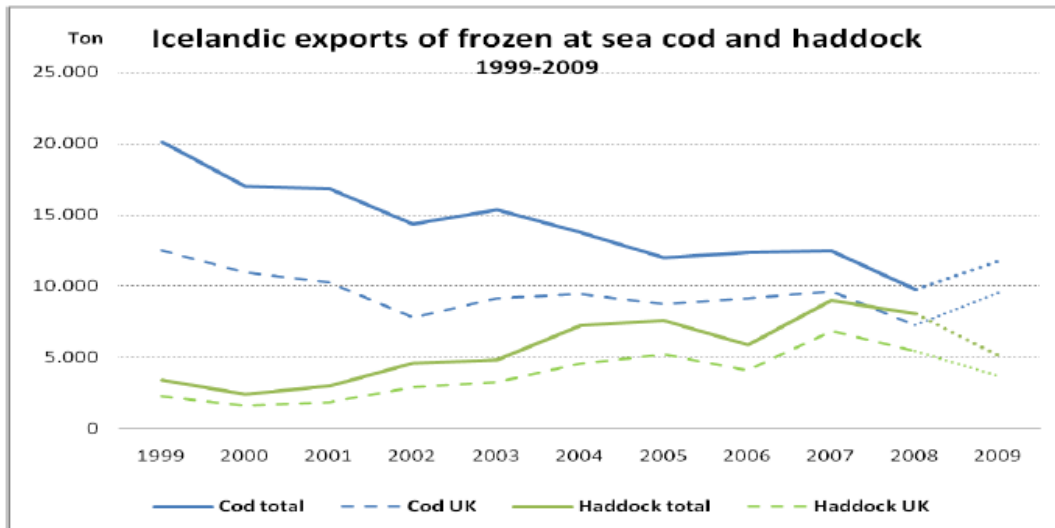


Figure 19: Icelandic exports of frozen-at-sea cod and haddock 1999-2009

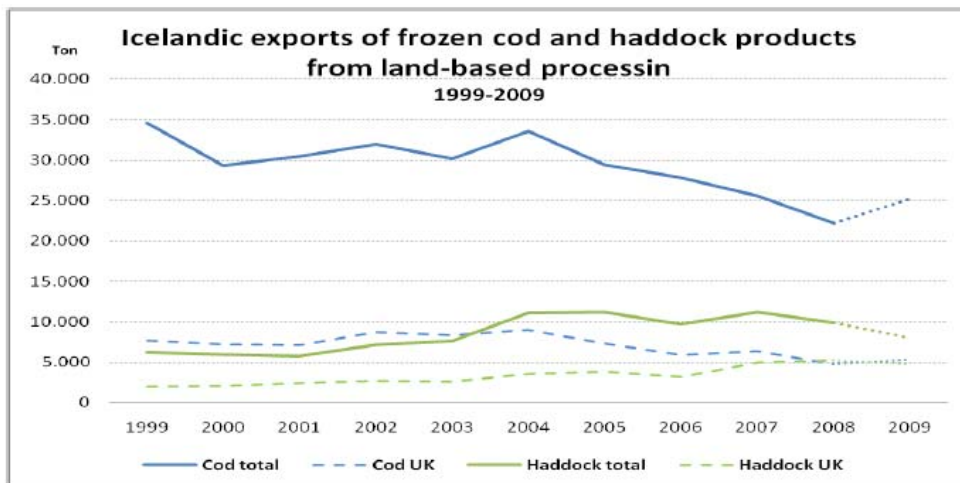


Figure 21: Icelandic exports of frozen cod and haddock products from land-based processing 1999-2008*