



Economic Overview of the Groundfish Industry / Portrait économique de l'industrie du Poissons de fond

Fisheries Resource Conservation Council Meeting / Le Conseil pour la
conservation des ressources halieutiques – February 17, 2010



Economic Analysis and Statistics, Policy Sector /
Analyses économiques et statistiques, Secteur des Politiques



Background



History of Canadian Groundfish Stocks

- The major stock collapses observed in the 1990's was the result of a series of events from the 1970's and 1980's:
 - In the early 1970s, stocks were jeopardized with the introduction of foreign factory trawlers which could process fish non-stop. This changed with the establishment of the Exclusive Economic Zone.
 - During the 1980's the fishery saw an increase in landings and in harvesting capacity. In particular, the inshore groundfish fleet developed overcapacity. On-shore processing capacity expanded as well, and companies took on heavy debt loads.
- The 1990s saw the collapse of cod/groundfish stocks, caused in part by intensive over fishing. A moratorium on groundfish stocks was then put in place.
- As a result of the moratorium on groundfish stocks, the Federal Government implemented a series of programs designed at mitigating the lasting negative financial effects that the closure created.
- With the closure, the character of the Atlantic fishery significantly changed with harvesting now shifting to shellfish.



The Government's Response to the Collapse

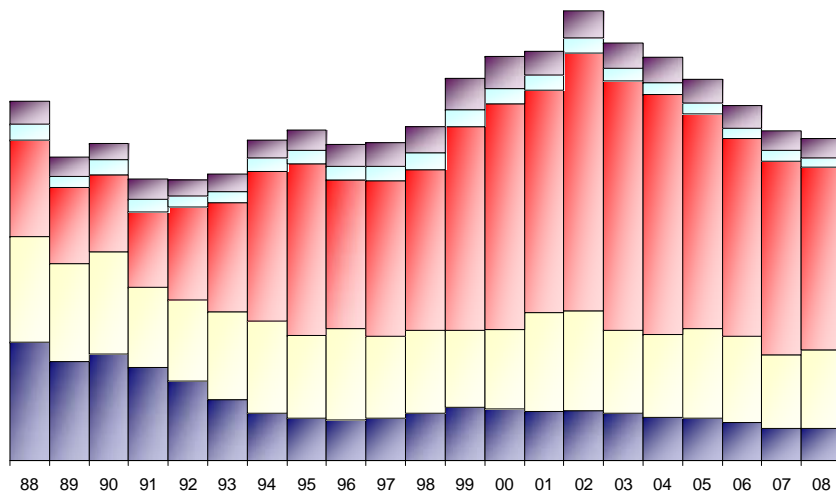
- In response to the groundfish stocks collapse in Atlantic Canada, the Government of Canada delivered \$4.1 billion over a period of a decade to assist the fishing sector:
 - Most of the money was directed towards providing income replacement (over \$2.5 billion) and training and counselling (over \$600 million);
 - The remaining was spent on licence retirement, economic diversification, stock rebuilding, and early retirement.
- In addition to these programs, the Atlantic Fisheries Policy Review led to formalizing the co-management of the fisheries, which initiated a shift from the existing top-down approach.
 - Resulting in a more transparent system of fisheries management in Canada.



Regime Shift from Groundfish to Shellfish

**Trend in Value of Canadian Seafood Exports
1988-2008**

■ Groundfish ■ Pelagic fish ■ Shellfish ■ Freshwater fish ■ Other



- A dramatic shift in the value of Canada's wild fisheries has been observed since the late 1990's, as a result of many factors including:

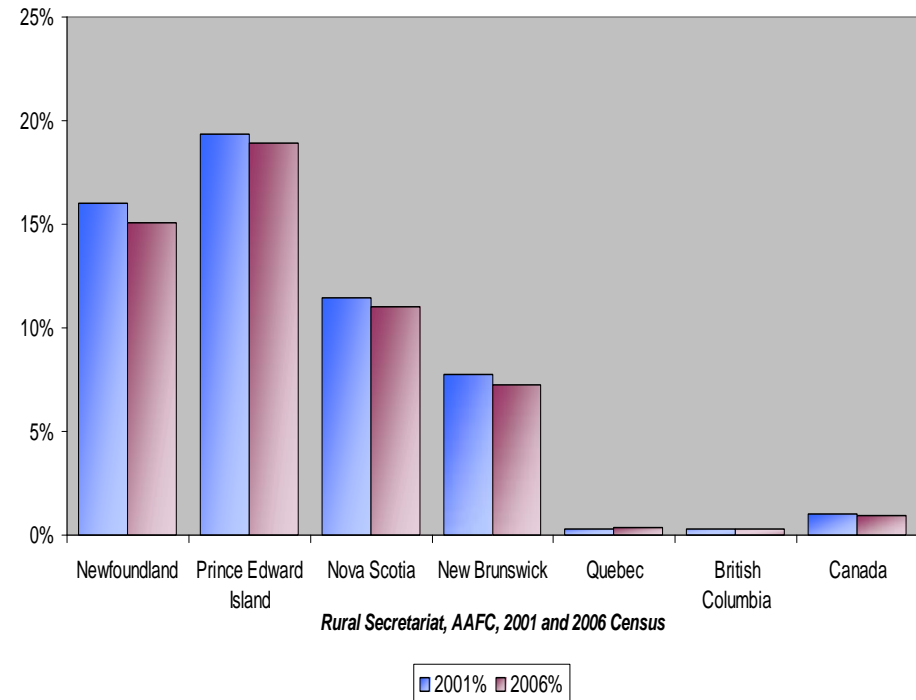
- Closure of the groundfish stocks:
- Ecosystem changes (groundfish prey on shellfish, their collapse eased predator pressure on shellfish);
- Need for a new income source for those affected by groundfish collapse accelerated the development of the shellfish fisheries;
- Market value of shellfish has increased (lobster).



Socio-demographics of Fishery Dependent Communities

- Rural and remote communities that depend on single industries, such as fishing are very vulnerable to economic and demographic shifts.
- There are 206 fishery dependent communities in Canada
 - Almost half are in Newfoundland (99)
- Fishery dependant communities account for 8-20% of the provincial populations in Newfoundland, PEI, Nova Scotia and New Brunswick,
 - The fishery dependent communities in these provinces had a population decline of 4% between 2001 and 2006 Census
- Fishery dependent communities had population loss of 6% between 1996 and 2001 and 4% between 2001 and 2006.
- Oil rich provinces in Western Canada have benefited from outmigration in fishery dependent communities.

Percentage of Provincial Population Living in Fishery Dependent Communities, 2001 and 2006

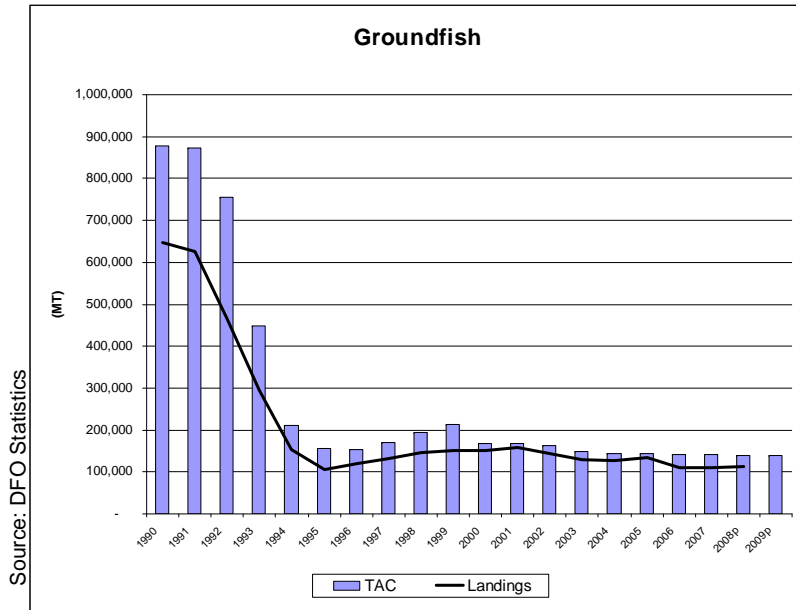




Trends

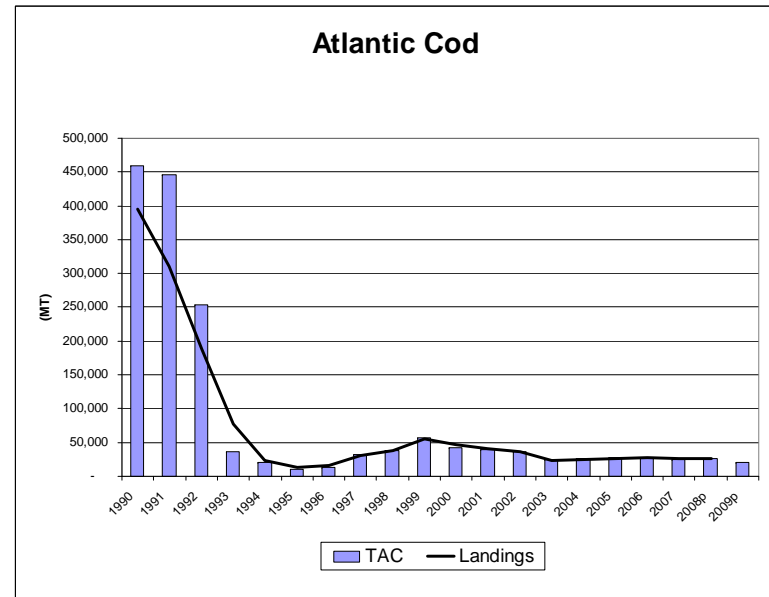


Canadian Landings and the Total Allowable Catch (TAC)



- Prior to the closure of the groundfish stocks, both landings and TAC were significant and provided the economy of Atlantic Canada with ample opportunities.

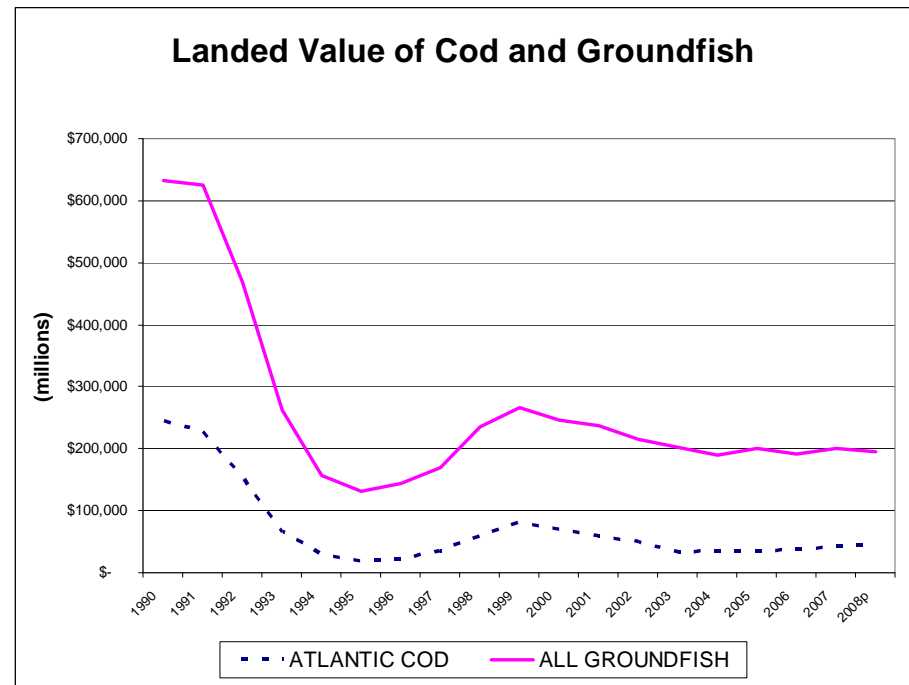
- The closure of the groundfish fishery caused a significant reduction in landings and income generated from the fishery.





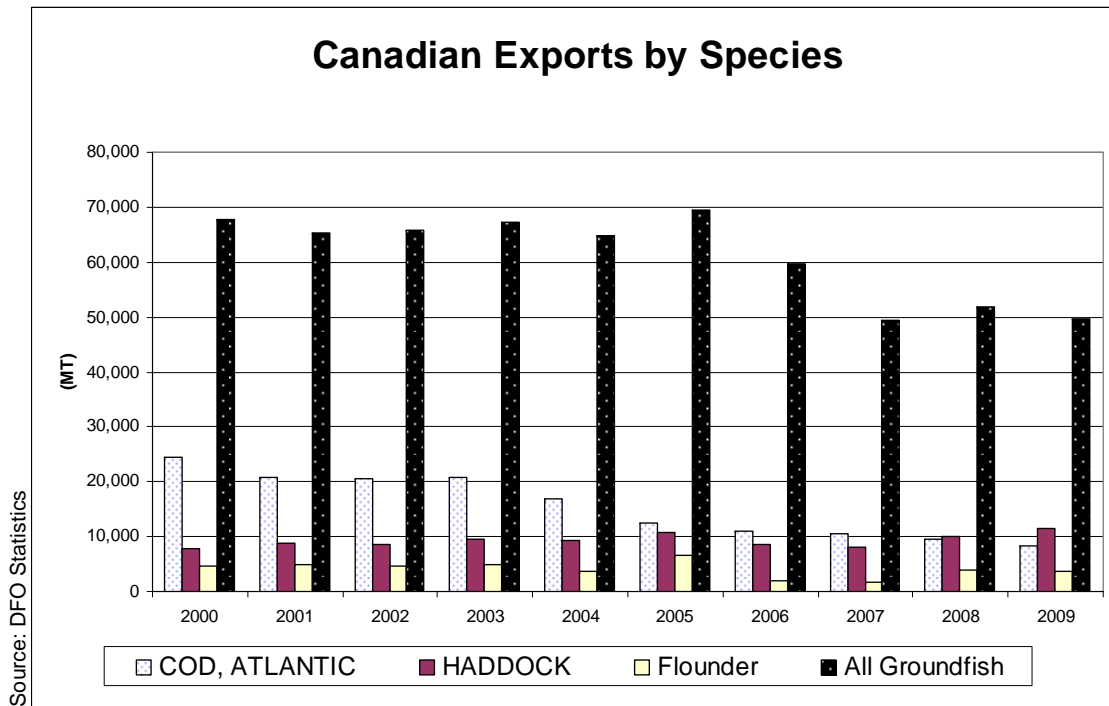
The Landed Value of Cod and Groundfish

- The landed value of groundfish and Atlantic cod have followed a similar trend since 1990.
- Since 1998 the value in groundfish has trended downward. However, there has been an increase in value for cod since 2003.





Canadian Exports of Selected Species to All Countries

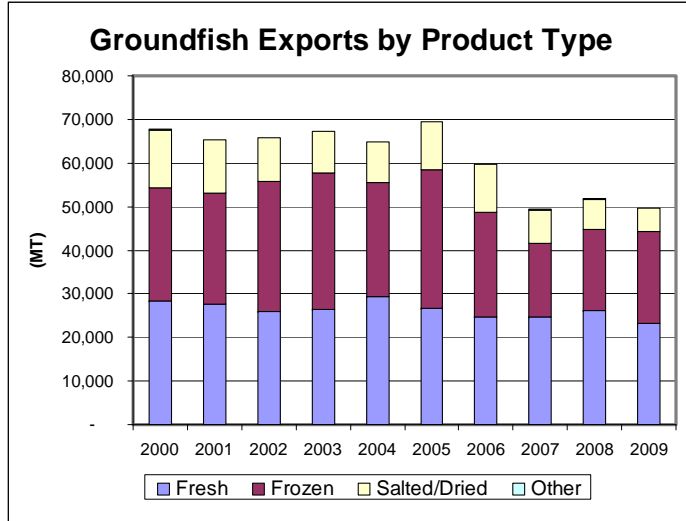


- From 2000 until 2005 the total export volume for all groundfish stocks was stable. However since 2005, there has been a noticeable decline in the volume of groundfish exports.

- Although other groundfish species remain reasonably stable, the export volume of Atlantic Cod has continued to decline. In 2000, cod exports were about 25,000 tonnes compared to just over 8,000 tonnes in 2009.



Canadian Exports by Product Type

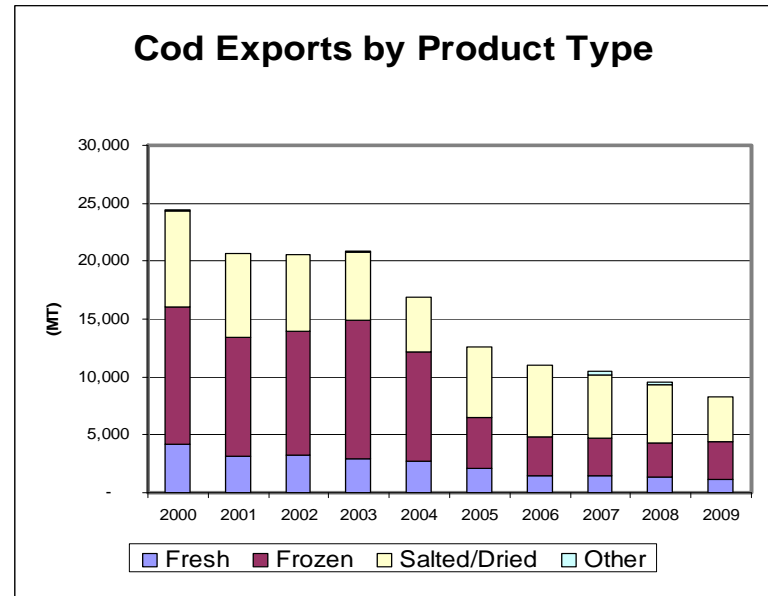


Source: DFO Statistics

- Exports for both fresh and frozen groundfish were almost identical from 2000 until 2005. However since then, the quantity of fresh product has remained the same while the frozen amounts declined.

•Cod was exported primarily in frozen form (blocks and fillets) until 2004 when all forms of cod exports started to decline.

•It is interesting to note that the export price of frozen groundfish fell while the price of frozen cod remained constant from 2000 until 2008.

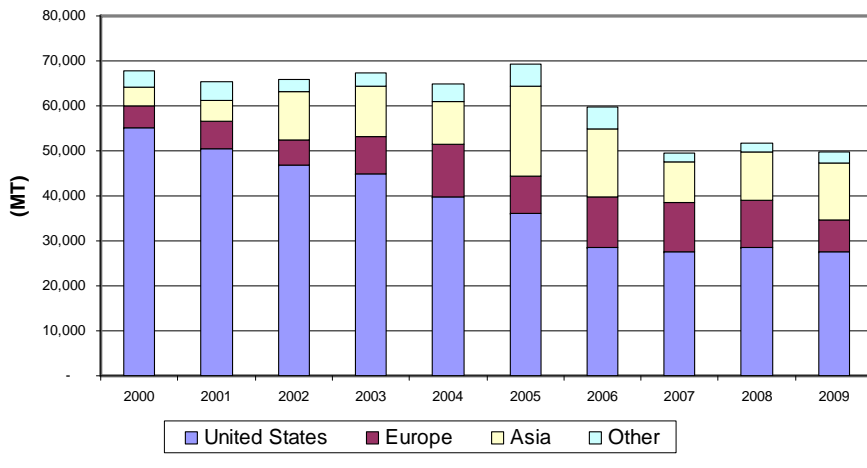


Source: DFO Statistics



Canadian Exports by Countries of Destination

Groundfish Exports by Country of Destination



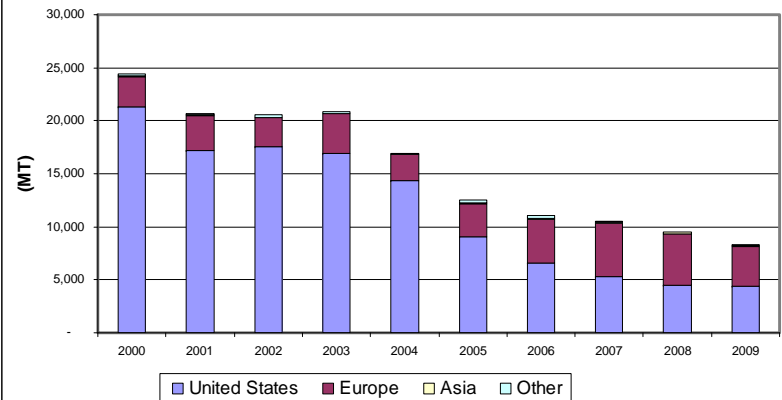
Source: DFO Statistics

- The United States continues to play a significant role in importing Canadian groundfish products. It accounted for over 80% of total exports from 2000 until 2004.
- Even with the recent decrease in total exports, 50% is still exported to the United States.

•Canadian groundfish exports are generally destined for the United States and Asia.

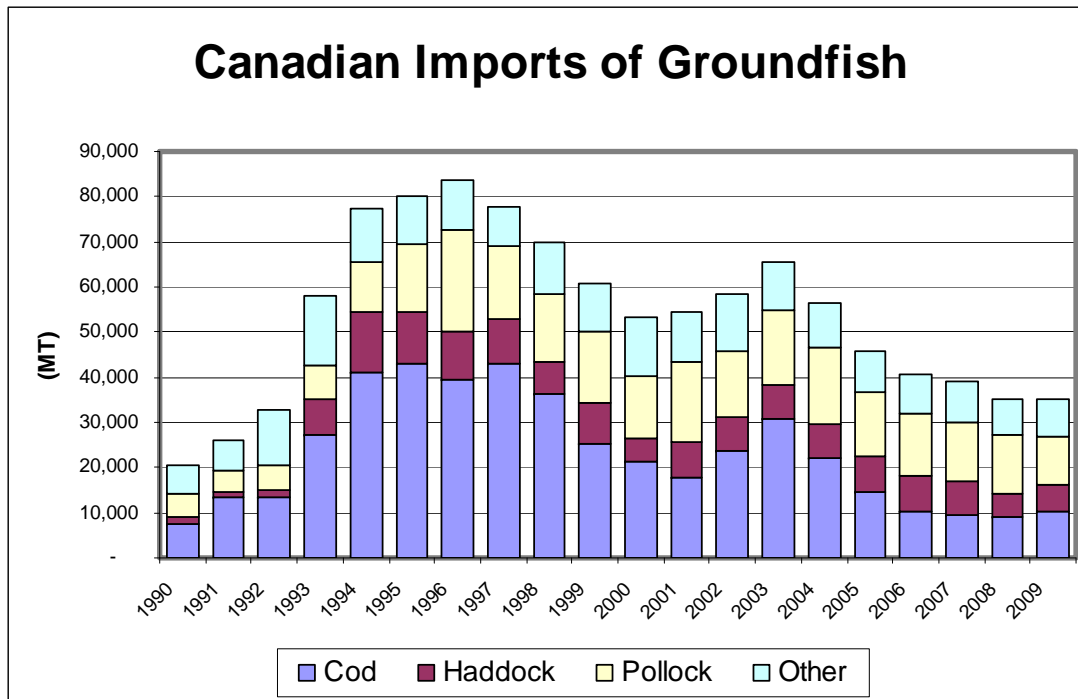
•However, Europe is currently a major destination for cod.

Cod Exports by Country of Destination



Source: DFO Statistics

Canadian Imports of Groundfish and Cod



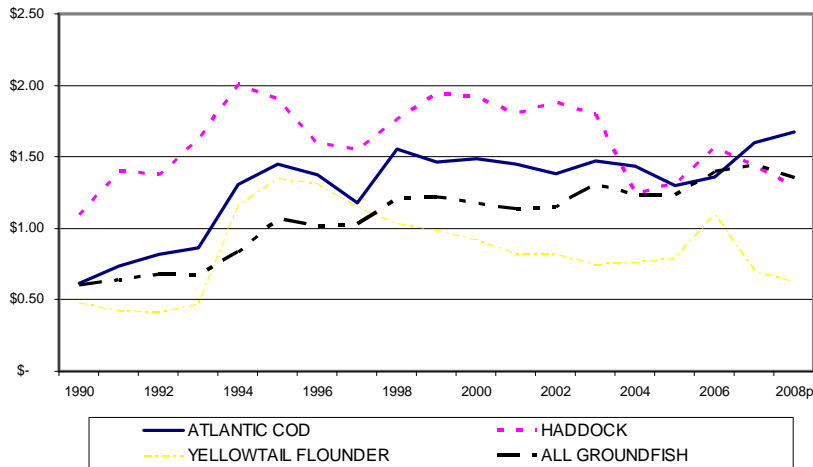
Source: DFO Statistics

- The groundfish moratorium, created a significant shortage in the supply groundfish in Canada.
- In an attempt to address this shortage companies started to import groundfish, namely cod, in order to keep many processing facilities operating.
- These groundfish imports remained elevated from 1994 until 1999. Since then imports have started to decline.



Price of Canadian Cod

Price of Groundfish by Species

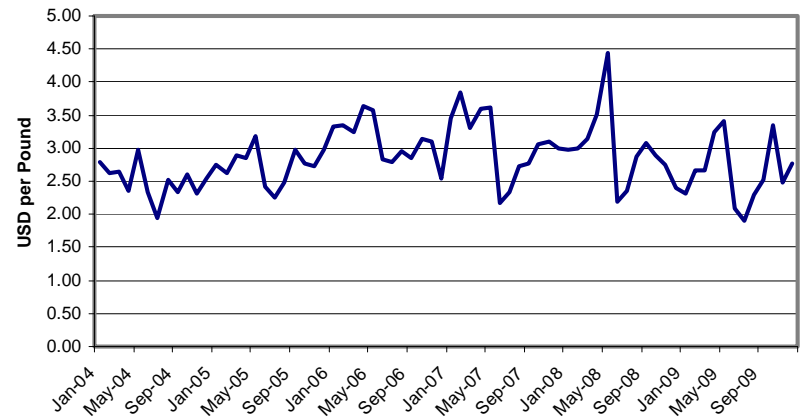


Source: DFO Statistics

• In the United States, the price of cod has remained constant at \$3 USD since 2005. However, there have been annual seasonal spikes in prices every April, around Lent.

- After the announcement of the groundfish moratorium the unit price of all species of groundfish spiked upward, almost doubling in some cases.
- Since the 1995 spike, prices have followed their own distinct paths.
- Atlantic cod, has been trending upwards since 2005.

US Price of Fresh Whole Atlantic Cod

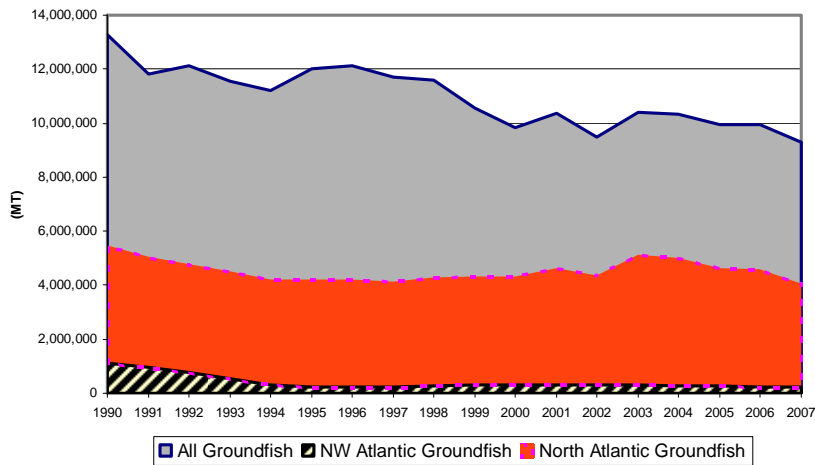


Source: Urner Barry



World Landings of Groundfish

Worldwide Groundfish Landings

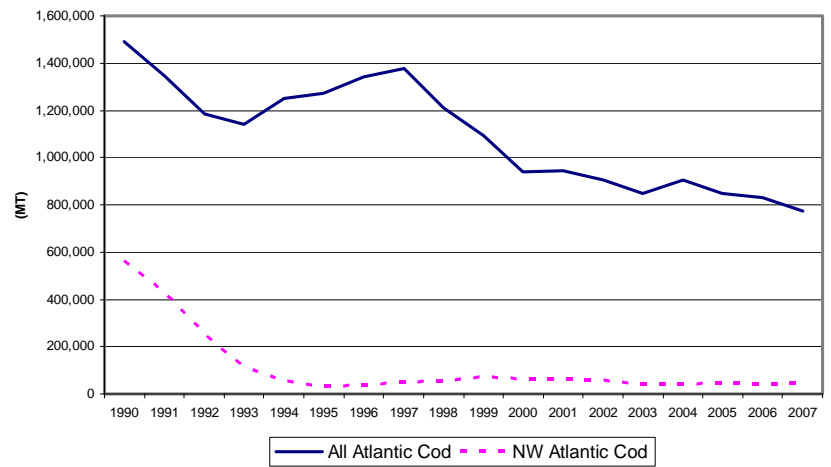


Source: FAO

- The world Atlantic Cod landings were affected by the Canadian groundfish moratorium. The Canadian landings fell in 1990 to their current low level which has remained since 1994.
- The sudden increase in Atlantic cod landings from 1994 to 1998 was likely due to heavy harvesting of other cod stocks to fill the supply gap.
- The decline from 1998 onwards indicate that the additional harvest effort was not sustainable.

- The worldwide groundfish landings have been steadily falling since 1990, whereas the total Atlantic landings have remained constant.
- The effects of the groundfish moratorium is noticeable with the Northwest Atlantic landings.

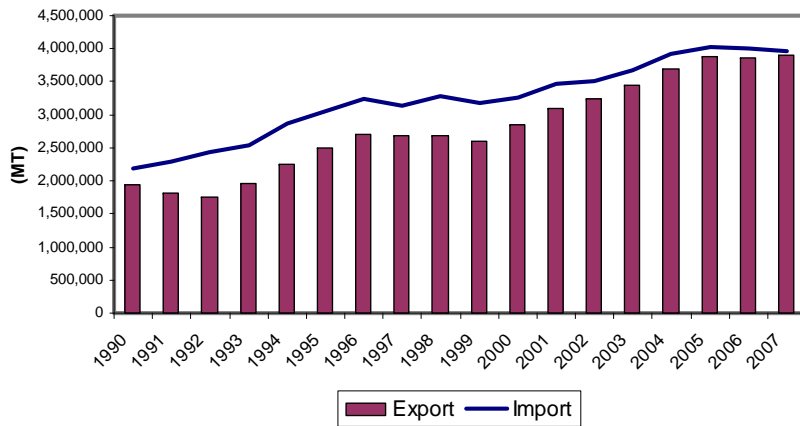
Worldwide Atlantic Cod Landings



Source: FAO

World Trade Flow of Groundfish

World Trade Flow of all Groundfish



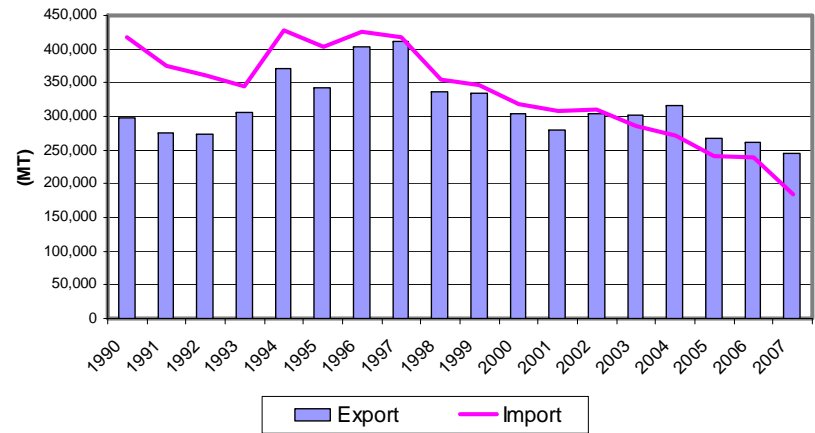
Source: FAO

•The opposite is true in regards to Atlantic cod. Both exports and imports have been on a downward trend since 1996.

•Groundfish is experiencing an increase in the amount of trade taking place on the world market.

•This is occurring even with a decrease in total landings, this trend may be due to the globalization of the fishing sector, groundfish maybe caught anywhere, processed anywhere and sold anywhere.

World Trade Flow of Atlantic Cod



Source: FAO



The Outlook

- The future of the Canadian groundfish fishery is uncertain.
- Signs of improvement have been seen with the steady increase in the price of cod and slowly strengthening national economy.
- However other groundfish species are not experiencing the same positive price effects.
- Groundfish trawl operations are energy intensive. Therefore, their operating costs remain uncertain, due to the continued volatility of energy prices.
- The groundfish fishery exports most of its product to the United States. The strengthening and constant volatility of the Canadian dollar leads to uncertainty and is a challenge for groundfish operations to anticipate and manage.
- Amongst all of these challenges that the groundfish sector continually face there always remains opportunities.