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The Icelandic pelagic sector and its development under an ITQ management system

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Presentation layout

Four sections

- 1. Species and catch value
- 2. The fishing fleet
- 3. The Processing industry
- 4. Industry structure

- **Further reading:** The Icelandic pelagic sector and its development under an ITQ management system
[doi:10.1016/j.marpol.2015.08.016](https://doi.org/10.1016/j.marpol.2015.08.016)

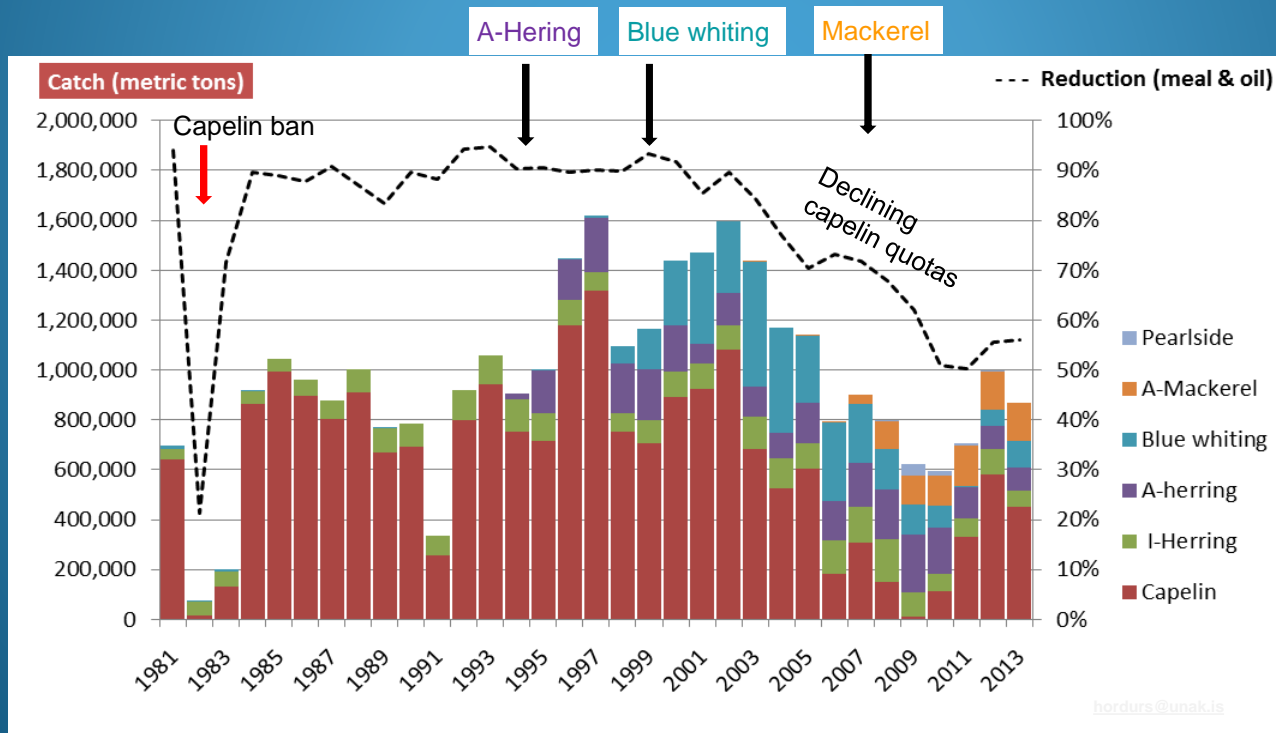
1. Species and catch value since 1981

Increased catch and additional species in the EEZ



Pelagic species

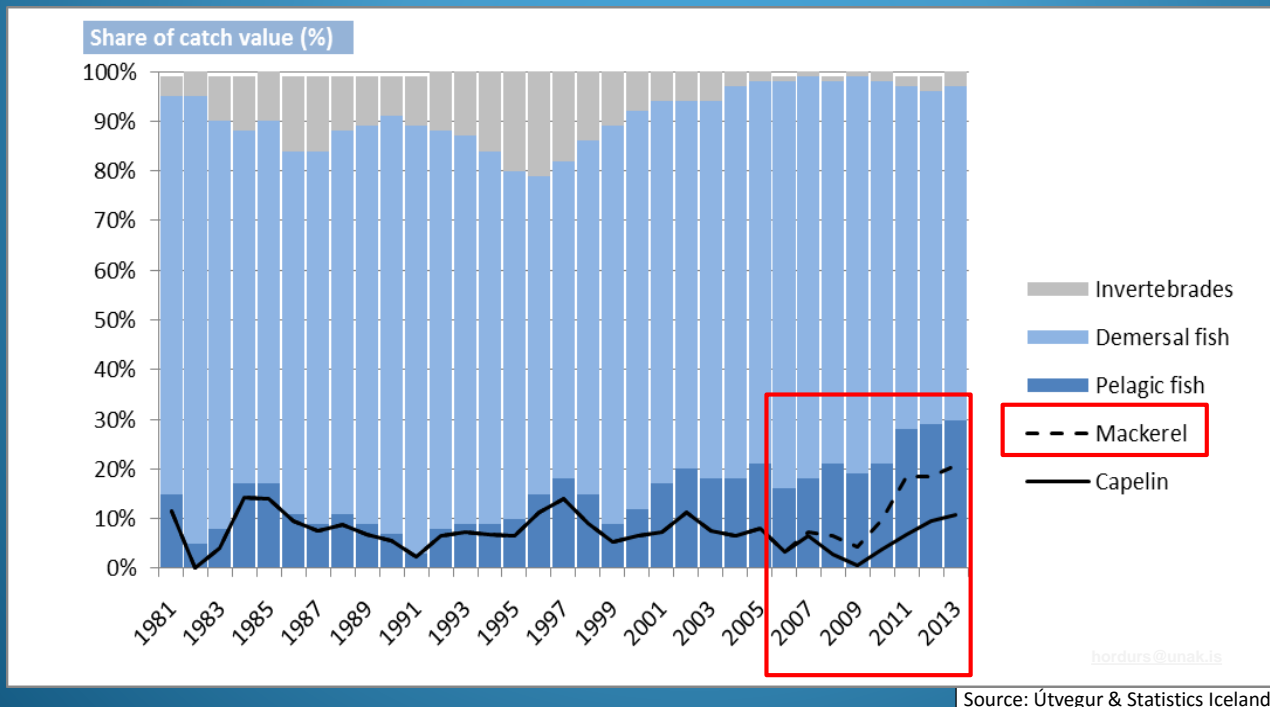
- Until 1994 only two species utilized; capelin and Icelandic summer spawning herring
- Majority of the catch during this period produced as fishmeal and oil
- 3 additional pelagic species have entered the EEZ since 1994



Source: Hagskinna / Útvegur / Statistics Iceland

Catch value of the pelagic sector

- 20-30% of catch value the past years and 60-70% of total catch in Iceland
- Fluctuated with the capelin stock until late 1990s,
- Entrance of valuable pelagic species Atlantic herring and mackerel
- Increased production toward human consumption (frozen products)



2. The fishing fleet

Large vessels with RSW chilling and powerful engines

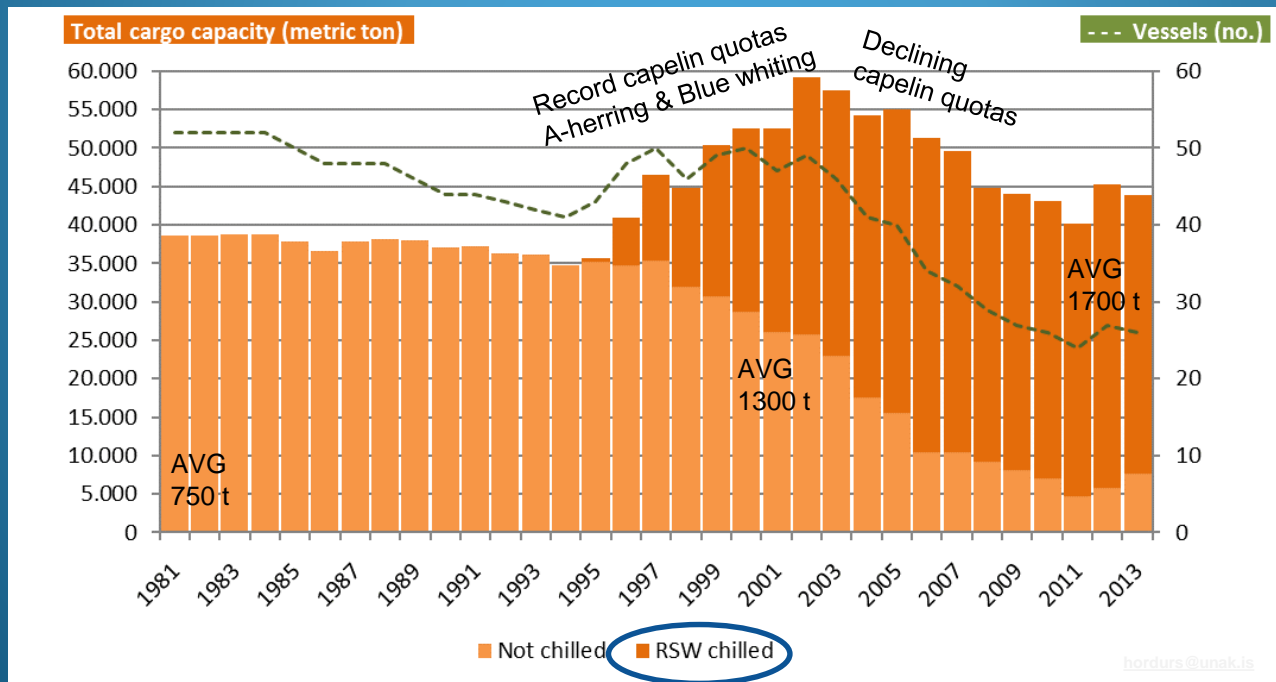


Photo: Tryggvi Sigurðsson

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Fleets cargo capacity

- Total cargo capacity increased in mid 1990s: record capelin quotas and additional species
- The bulk of the pelagic fleet was reconstructed after 1995
- Import of vessels with **RSW holds** increased from 1996 and especially past 1999
- Until 1999 decommission scheme was active; possible to extend size with limitations



Source: Emil Ragnarsson / Hörður Sævaldsson

Limited renovation of the fleet



Source: Dunni



Source: Sigurgeir Sævaldsson



Source: Tryggvi Sigurðsson

3. The Processing industry

Increased processing toward human consumption



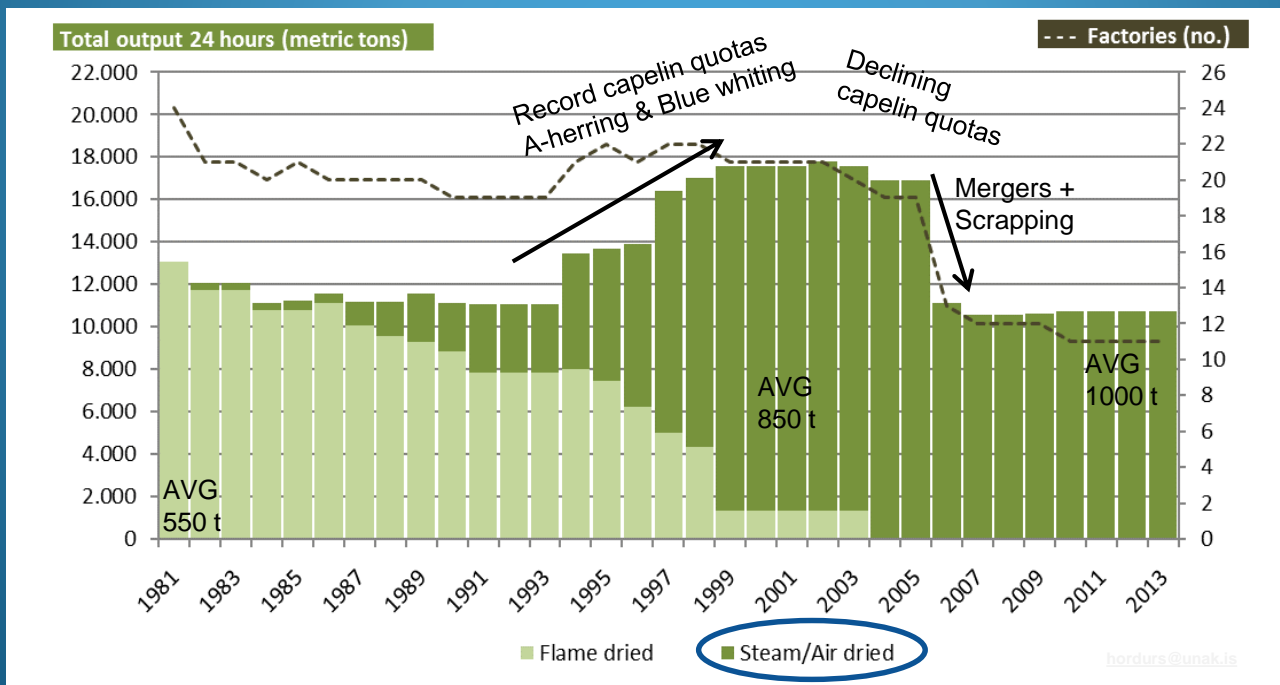
Photo: Síldarvinnslan



Photo: Síldarvinnslan

Upgraded fishmeal factories

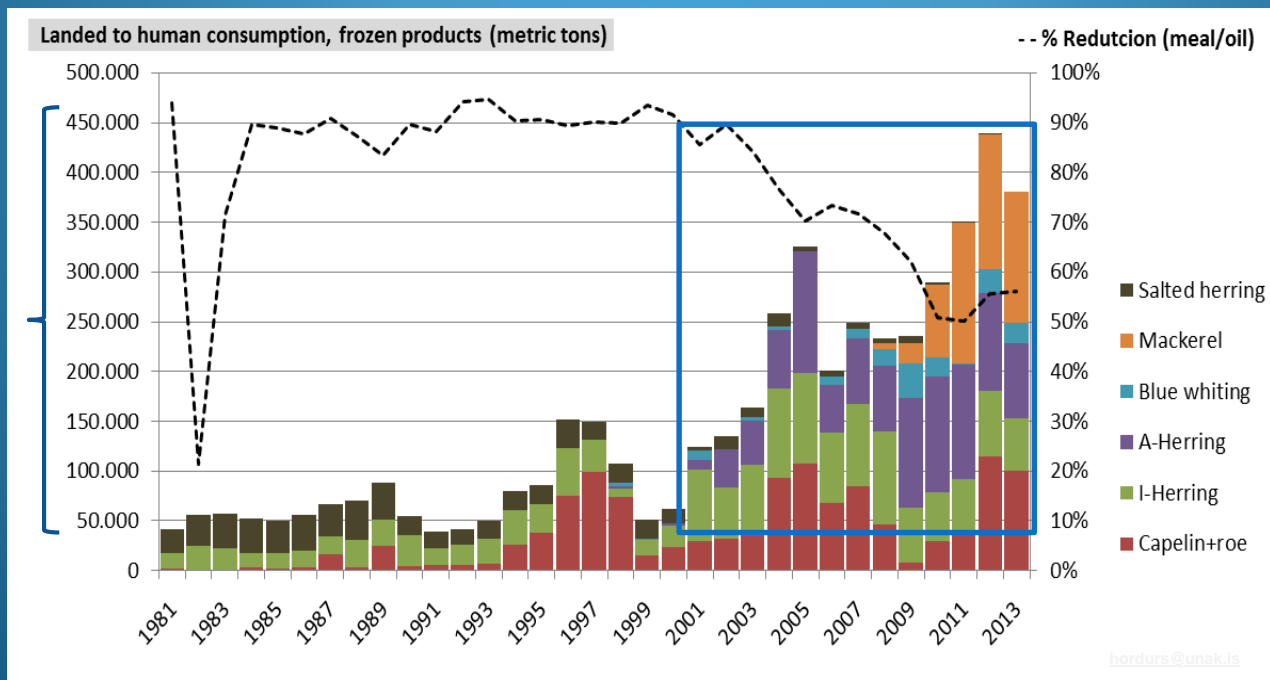
- Total and daily output increased 1994-1997 following record capelin quotas
- Factories have changed dramatically in terms of efficiency and processing technology
- Daily output rising and steam dried products increased with RSW chilling (quality)
- Total production fell sharply in 2005 following mergers and scrapping of factories



Source: Loðnunefnd & Hörður Sævaldsson

Processing toward human consumption

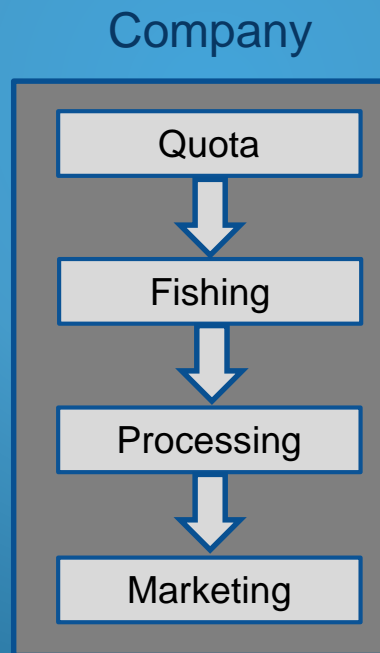
- Automated processing facilities initiate 1997/1998
- Today's factories produce up to 650 metric tons per 24 hours of frozen products
- In 1996 maximum output was 350 metric tons with twice as many employees.
- Freezing capacity of the 8 automated pelagic factories nearly 3,300 metric tons / 24 h



Source: Útvegur / Statistics Iceland

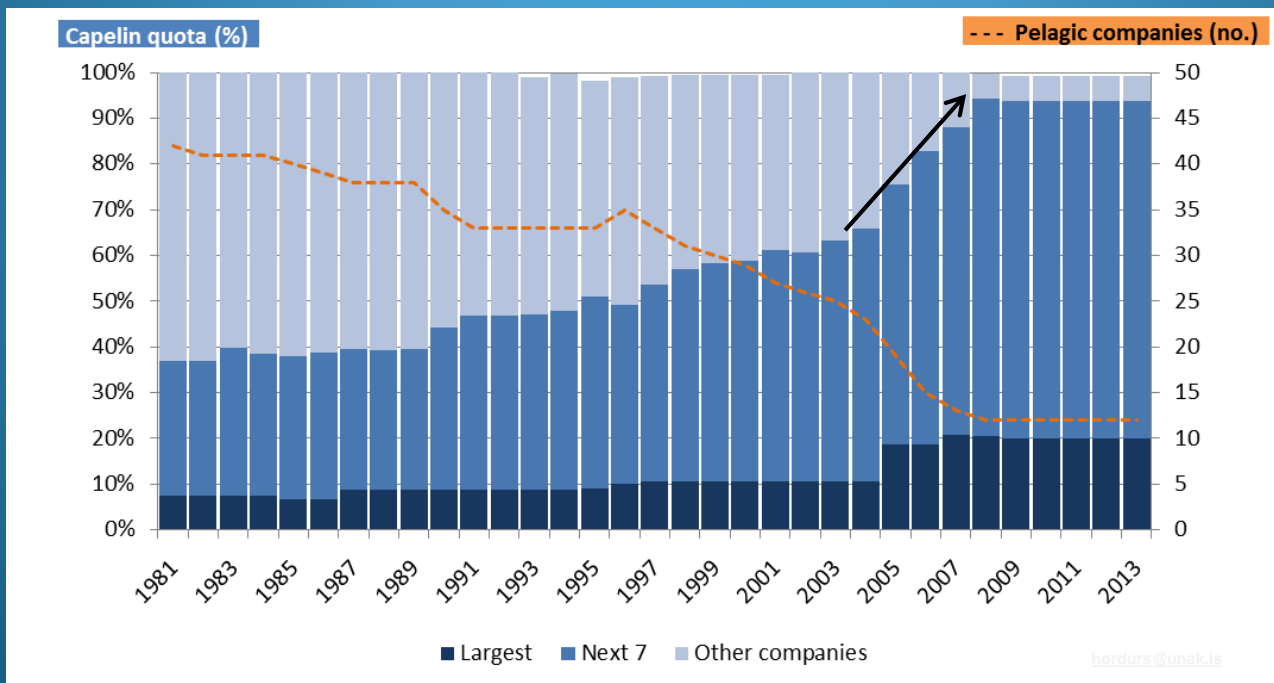
4. Industry structure

Vertically integrated companies



Concentration of pelagic quotas (Capelin)

- Largest company 8-11% until 2004 / 20% from 2005 (Reached maximum limit)
- Eight major companies: 35-65% until 2004 / +90% from 2008
- Number of companies decreased 1996-2008 (Private companies bought / mergers)
- A-herring and Blue whiting quotas issued 2002 / Decline in capelin quotas past 2005



Pelagic consolidation

- Highly concentrated industry with only 11 pelagic oriented companies left, as well they manage in excess of 1/3 of all demersal fishing rights

Year	Companies	Capelin	I-herring	A-herring	Blue Whiting	Mackerel	Catch Iceland
1992	33	100%	18%	-	-	-	920.000
2002	26	100%	88%	97%	99,7%	-	1.590.000
2012	11	99%	99%	100%	100%	82%	990.000
2012	8 Major	94%	93%	92%	86%	68%	-
2012	5 Major	74%	71%	63%	62%	53%	-
2012	3 Major	55%	53%	40%	51%	34%	-
2012	Largest	20%	20%	13%	25%	13%	-

Source: Loðnunefnd / Directorate of Fisheries / Hörður Sævaldsson

- A maximum quota ceiling is valid for capelin and I-herring (20%).
- Foreign investment in fisheries restricted
- Who are the possible buyers in Iceland?

The end