Poor rich-country industries: Fish-processing industries out-competed by low-labour-cost countries?

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Background

- ”Rich-country industries” loose competiveness compared to producers in low-cost countries
- Most visible in labour-intensive production
- We have studied producers of fresh or frozen fillets of whitefish (cod, haddock, saithe), with production in the Nordic countries, The Baltic and the Far East
- In Norway this industry has been reduced from about 100 firms 20 years ago, to seven today
- Processing has to a large degree been moved to the Baltic countries or the Far East

Research questions

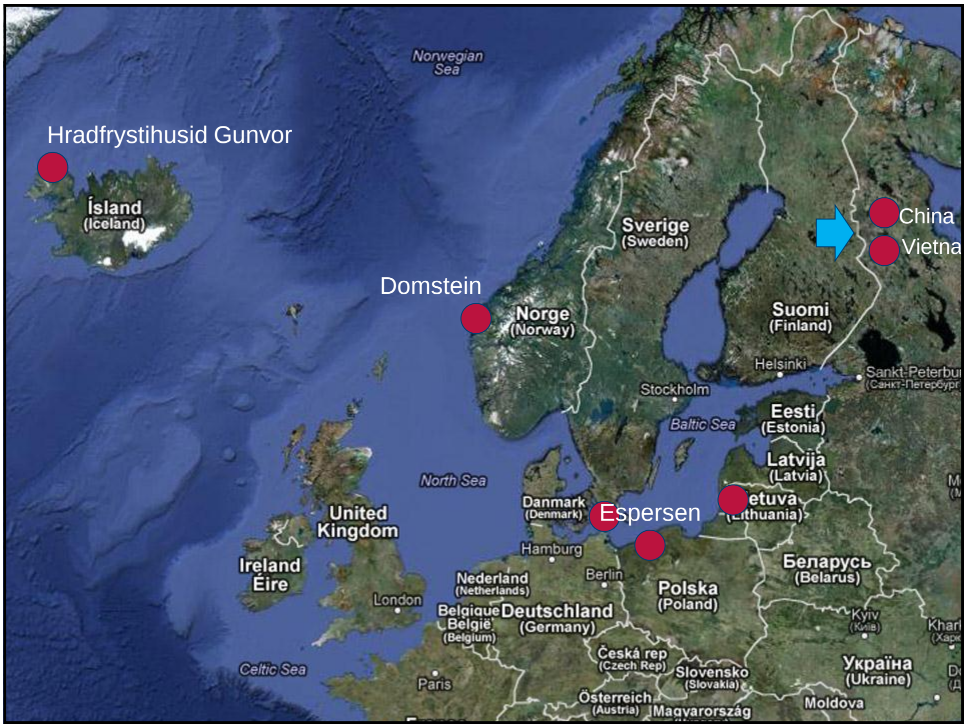
- **Is it possible for the remaining fish-processing industry in Norway to survive in the future?**
  - **What are the locational advantages of the Norwegian fish-processing industry?**
  - **How can locational advantages be exploited?**
  - **What strategies might the firms pursue?**
  - **How can the government strenghten the possibilities of succesful strategies?**
- To answer this, we discuss the relative advantages of doing processing in these countries

Methodology

- Desk-top studies for some issues, field studies for others
  - Case studies
  - Interviews
- Levels of analysis
  - Country/region level
  - Firm level

Empirical setting

- Fish-processing industry in Norway, Iceland, Poland, Lithuania, China and Vietnam
- Case study of five firms with different and/or multiple locations



Competitive advantage through location?

	Advantages	Disadvantages
Norway	Proximity to raw material Time to market Price of raw material Price for bi-products Able to supply genuinely fresh fish	High level of costs Seasonal profile of landings Scale/structure Quality challenges Trade barriers
Iceland	Proximity to raw material Control of raw material Seasonal profile of landings Price of raw material Quality Price for bi-products Able to supply genuinely fresh fish	Transportation costs Limited supply of raw material
Poland/Lithuania	Time to market Cost level Yield (in % of raw material) Scale	Price of raw material Price of technology Capital costs - Price risk -
China/Vietnam	Cost level Yield (in % of raw material) Scale Varieties, abilities to produce tailored products	Time to market Duoble-frozen products Price of raw material Capital costs -- Price risk -- Traceability difficult

Case firms

- Espersen, Denmark
- HG (Hradfrystihusid Gunnvor), Iceland
- Tobø-fisk, Norway
- Domstein, Norway
- Aker Seafoods/Norway Seafoods, Norway

Espersen, Denmark

Exploits the possibilities of globalisation

- Production in Polen, Lithuania, China and Vietnam
- Frozen blocks, lightly salted fillet
- Value Added-products still produced in Denmark
- Take over production of refreshed fillet from Domstein

HG (Hradfrystihusid Gunnvor), Iceland

- Owns trawlers and quotas
- Value-chain coordination give
  - Predictable supply
  - Control of fish quality
- export of fresh fillets with longer shelf-life (on-board gutting, ice-slurry cooling and pre-rigor filleting)

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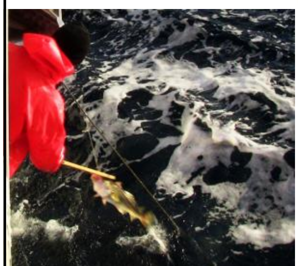


- Strong focus on quality, no landings from trawl, net or large ”snurrevad”
- Close cooperation with boats give
  - good predictability
  - Good quality
- Simple/few products with minimum labour keep costs low

Domstein

- No 1 i the Nordic market for Private Label
- Also sell under the Domstein brand
- Strong focus on sustainability
- Produced refreshed fillet (”fresh” fish based on frozen raw material)

Aker Seafood/Norway Seafoods

- Norway's largest producer of fresh whitefish fillet
- Integration into important markets (Denmark, France)
- Has their own fleet of trawlers
- Still rely on coastal fleet for supply of fresh fish

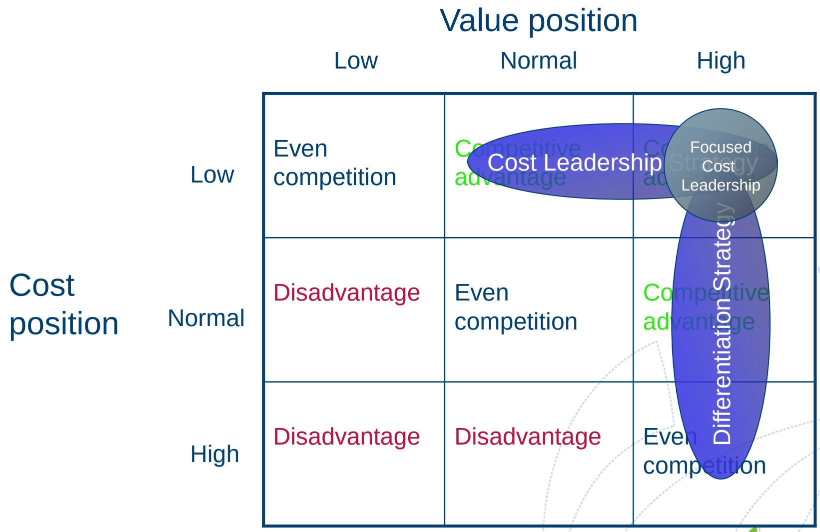
Norwegian firms: Competitive advantage through strategy?

	Advantages	**Disadvantages**
Norway	Proximity to raw material Time to market Price of raw material Price for bi-products Able to supply genuinely fresh fish	High level of costs Seasonal profile of landings Scale/structure Quality challenges Trade barriers

The search for competitive advantage:

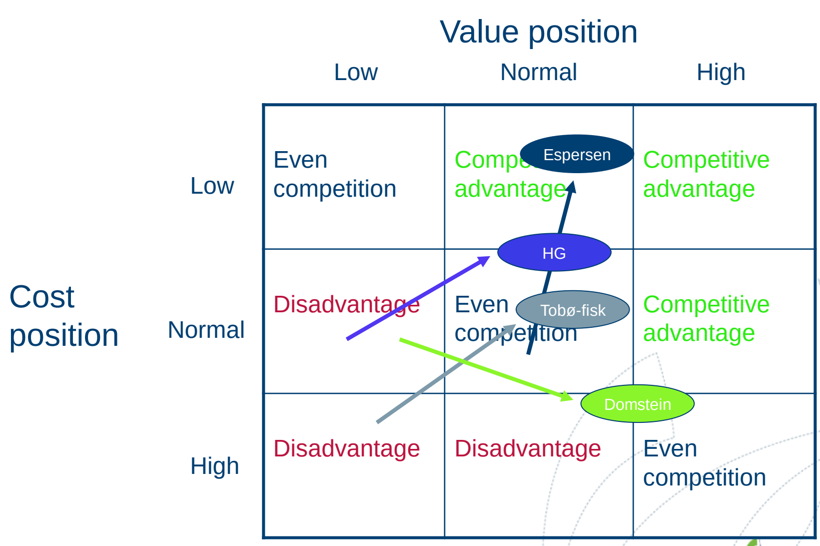
- Technology development, rationalisation, automation
- From block-freezing to IQFs
- Production of fresh filet
- Boat cooperation/ownership
- Production of refreshed fish

Generic Strategies and Cost/Value position



(Hunt & Morgan, 1995)

Strategic developments for our cases



Findings

- There are still some locational advantages for the Norwegian fish-processing industry
  - But they are hard to exploit
    - Differentiation/premium necessary
    - Logistics are difficult
    - Raw material supply must be optimised
  - Competitive advantage a result of both location and strategy
    - Institutional arrangements limit strategic options and value propositions for customers

- Fresh-fish opportunities
  - Fresh fish available at prices below world market prices
  - Gains premium prices in the market
    - if you can supply high/predictable volumes of even quality

Findings, cont.

- Technological innovations work when they support other advantages
  - Technology in itself does not lead to competitive advantage
    - Easily transferred to other locations
    - Technology the same in the Baltic as in Norway and Iceland (Marel)
  - Simple technological innovations that are not easily transferred:
    - Chilling with ice-slurry and direct gutting
    - Filleting based on thawed fish requires optimised thawing facilities

Implications

- Policy implications
  – If government wants more value creation based on Norwegian stocks, the **input issue** for the processing industry most be solved (through for instance industry qoutas, boat-land cooperation models et.c)

- Implications for theory
  – The search for competitiveness must be understood from a
    - Country/region level
    - Firm level
    - Institutional level

Cod is king!

Thank you for your attention!

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