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

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Background

• “Rich-country industries” loose competitiveness 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 strengthen the possibilities of successful 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?

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

## 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)
• 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 in 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?

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<td>Able to supply genuinely fresh fish</td>
<td>Trade barriers</td>
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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
Norske bedrifters strategivalg

Domstein: Refreshed
Domstein miljøgaranti, linefanget, MSC

Tobø-fisk: Fersk filet, samarbeid med kystflåte,

Aker/Norway S.: Fersk filet, egen flåte
Integrasjon mot markedet

Generic Strategies and Cost/Value position

Cost position
Low
Normal
High

Value position
Low
Even competition
Cost Leadership
Cost Leadership
Focused Cost Leadership

Normal
Cost Leadership
Even competition
Focused Cost Leadership

High
Disadvantage
Disadvantage
Even competition

(Hunt & Morgan, 1995)
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 must be solved (through for instance industry quotas, 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
Thank you for your attention!

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