The role of China in the whitefish market

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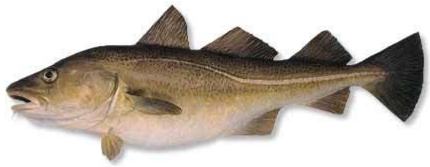
Background

Ongoing own research

- The European whitefish market focusing on Norwegian and Icelandic marketing competition of salted cod to Spain
  - Project organized by University of Bergen with participants from three Spanish Universities, University of Tromso, Seafood Norway, The fishermen’s sales organization and three Norwegian export companies
- China’s role in the International seafood trade
  - Cooperation between scientists in University of Tromso, University of Bergen, Ocean University of China, Shanghai Ocean University, Yunnan University, Kunming

What is a whitefish?

Atlantic cod: *Gadus morhua (800 MT/year)*



•Pacific Cod: *Gadus macrocephalus*

Pollock and haddock

Alaska Pollock:*Theragra Chalcogramma (2 mill MT/year)*

•Atlantic saithe (pollock): *Pollachius virens*

•Atlantic haddock:

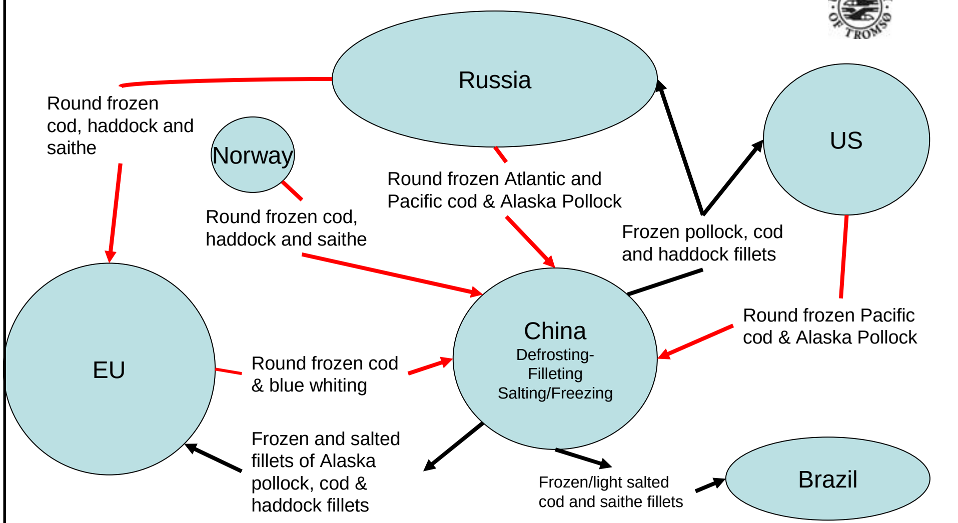
•*Melanogrammus aeglefinus*

Blue whitings

Southern Blue whiting: Micromesistius australis

•Northern Blue whiting: *Micromesistius poutassou*

China: A processing center in the global whitefish market



Research design

Main research question

- How is the international whitefish value chains through China linked together?

Data collection

- Official national import and export statistics from China, US, EU (Eurostat), Norway and Iceland
  - supplied by Norwegian statistics/Seafood Norway
- Cooperation with Ocean University of China, Qingdao
- Interview with selected industry participants in China and Norway

Methodology.

- Empirical -inductive study of trade flow
  - What is the actual figures in MT and unit values?
  - Can import/export figures of MT and average values from one national statistical source be confirmed export/import figures from other statistical sources?
  - How can differences in national figures be understood?
  - Can international trade statistics be harmonized and developed more reliable?

China's comparative advantage

Low cost huge labor force

- About 10-11 RMB (1,1€) /h (increasing)
  - (Average industrial worker in Norway: 18-20€/h)
- 3,5 RMB (0,35€)/kg raw material
  - about 15-20% of the final product value

Manual filleting and processing=>Increase yield

- Bone free frozen or light salted frozen fillet from H&G
  - 55% (machine filleting) =>70% (hand filleting)
- Migas: salted and dried fish pieces from small fish/ fish parts.
  - Cod, Alaska pollock and blue whiting for the EU markets (Portugal, Spain, Italy) and Brazil (Yield 40%- dried from 80=>48% water)

Competitive labor advantage

	Fillet processing at Pacific Andes	
	Alaska pollock	Cod
EU average import values 2008 from China €/kg	1,88	4,63
Fillet yield increase per MT H & G	150	150
Value increase from yield €/MT	282	695
Extra freight US_CN_EU €/MT	250	
Extra freight EU_CN_EU €/MT		500
Labour cost €/MT raw material	344	344
Net value increase €/MT	32	195
Yield value gain in pct of labour costs	9 %	57 %
Increased yield	15 %	
Productivity Kg/h/worker	3,14	
Labour cost RMB/h	10,68	
Labour cost €/h	1,08	

Company examples

Pacific Andes (HK) dominating actor North pacific=> China:

- New factories in Qingdao on 80 hectare land (1 billion $ investment 2008)
- 4500 workers, freezing storage 61000MT

Ocean trawler (Russia/HK)+Espersen (DK)= Scandian Seafood

- Outsourced production to Qingdao 10000 MT/year

Profish (NO) outsourcing salt fillet production for Spanish market

Trends

Norway exports to China 30.000 MT frozen H&G cod, haddock and saithe for filleting and salting

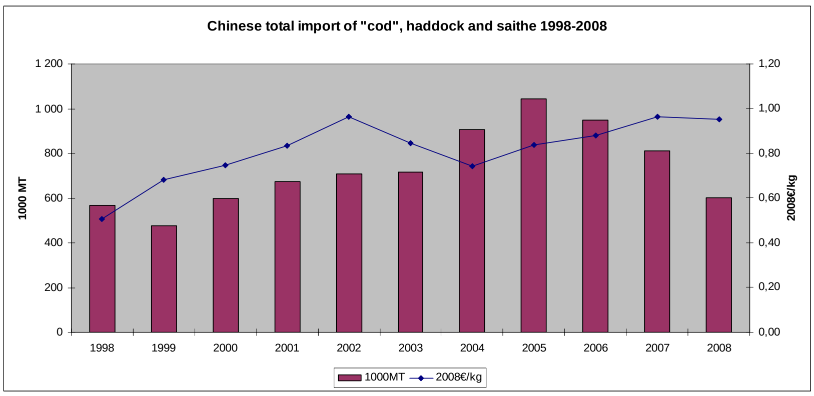
- Klipfish bone in, is competitive processed in Norway by machine

Iceland, next to nothing

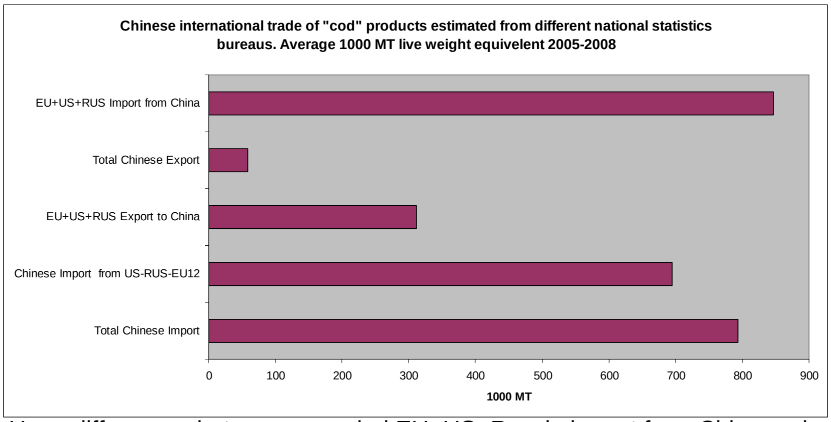
- No H&G freezing: all landings processed from fresh onboard factory vessels or land
- Exports of fresh or light salted whitefish increases

Russian regulation. Landings and reexport of whitefish to China moved from EU to Russian ports

Chinese import of codfish according to Chinese statistics

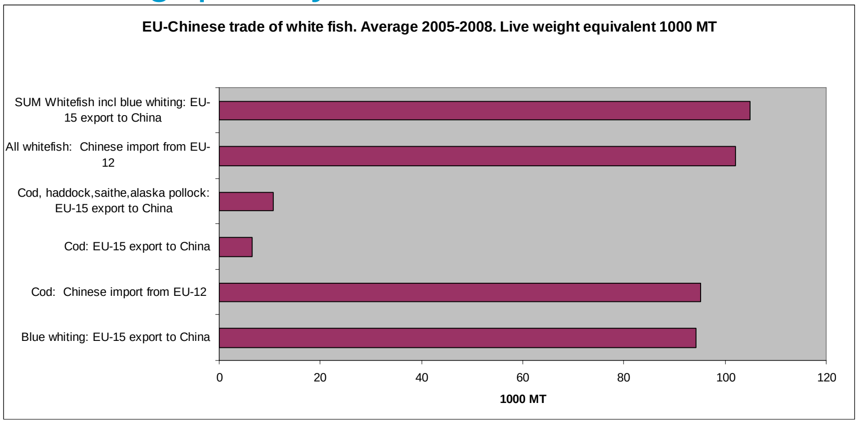


Chinese trade of Whitefish "Cod and Alaska pollock"



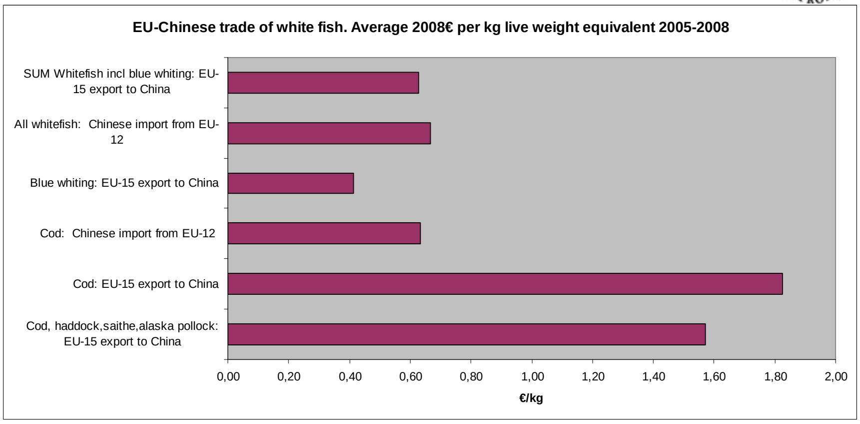
Huge differences between recorded EU+US+Russia import from China and Chinese recorded export to the same countries

EU<=>Chinese trade Testing quantity match



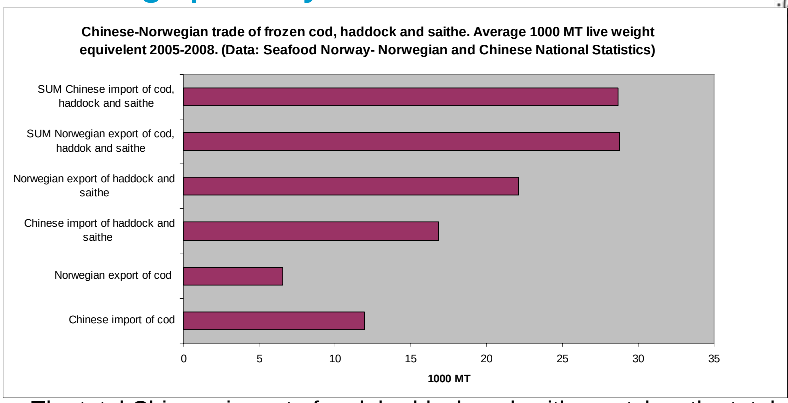
The quantity of cod, haddock and blue whiting exported from in the EU15 to China matches the Chinese recorded import of "cod" from EU12

EU<=>Chinese trade
Testing average unit value match



The average value of the Chinese import of “cod” matches the average value of the EU export of all whitefish including blue whiting

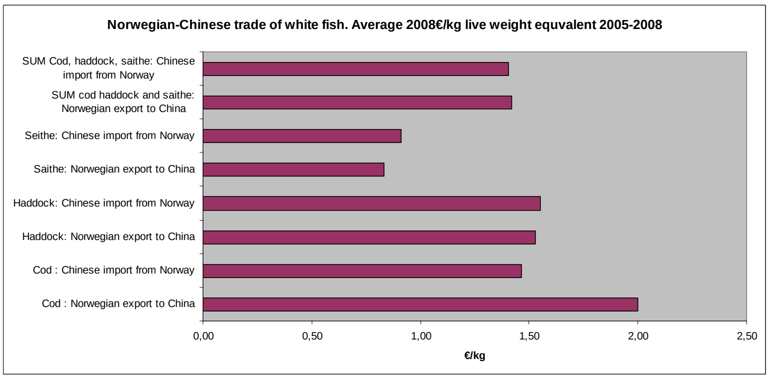
Norwegian=> Chinese trade
Testing quantity match



The total Chinese import of cod, haddock and saithe matches the total Norwegian export of the same species

But, the Norwegian figures for export of cod and haddock and saithe do not match the Chinese import figures for the same species, separately!

Norway=>Chinese trade. Testing unit value match



The average value of cod, haddock and saithe exported from Norway matches the average value imported in China.

The exported unit value of cod from Norway is much higher compared to import unit values while unit values for haddock and saithe are lower. Relabeling?

Summary and discussion

- Chinese fish processing has its competitive advantage in a huge labor force which make hand filleting of imported round frozen fish profitable
  - Hand filleting increases fillet yield by 15% from H&G
  - The product value of the increased yield covers extra roundtrip logistic costs Europe/US-China and partly labor costs.
- EU+US+RUS total import from China of whitefish fillets recorded to 800 000 MT (live weight equivalent)
- EU exports of H&G whitefish to China is mainly Blue whiting (about 100.000 MT) from the Netherlands
  - Processing to frozen fillets and Migas
- Chinese import statistics does not separate blue whiting and Alaska pollock as species, but are included in the category “cod” in the import statistics
- Russia and US export H&G 300.000 MT cod and Alaska pollock to China

Summary and discussion

- China has recorded import of 700.000 MT from Russia and US
  - Unrecorded fish? Offshore trade of catches? Statistical errors?
- Norway exports annually about 30.000 MT H&G (small) cod, haddock and saithe
- The Norwegian export of whitefish matches in average the Chinese imports
- The exported cod quantity from Norway is lower to a higher unit value compared to the Chinese export, while the opposite happens with haddock and saithe
  - Cod redefined to haddock and saithe in the export papers?

Conclusions

- China takes a main global position for whitefish in the value chain between global harvest and consumption
  - Built on the advantage in a huge and low cost workforce for manual processing of imported round/H&G frozen whitefish for reexport as bone free fillets/pieces
  - => increases yield +15%
- Significant and unexplained differences in the import and export statistical figures for fish between China and the major trading partners
  - May lead to big errors in modeling the white fish markets
- We need more research in valuating the trade data to understand the differences
  - Especially the procedures for recording export and import figures

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EU Certificate of catch origin

- May improve the transparently of the seafood trade related to fish quotas
- But still a strong need to overhaul and validate the international statistical recording system