The Nordic flatfish project:
The role of Denmark in the flatfish value chain

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This presentation

1. Raw materials

Catches of Danish fishermen in DEN

Flatfish (2016)	Tons	€ Mio.	€/kg
Plaice	24777	42	1.70
Sole	612	7	10.97
Lemon sole	1219	6	5.20
Turbot	660	6	9.22
Witch Flounder	1358	3	2.41
Other flatfish	2560	5	1.80
Total/avgerage	31186	69	2.22

- Direct landings in foreign ports <5 % of total landings
- Plaice with 80 % of catches and 60 % of value by far most important
- Sole with high price make up 10/2 % of catches/value
- Sole, lemon sole and turbot of equal importance in value terms
- Witch flounder is the 5th in terms of value
- Other flatfish make up 6 % of total catch value

1. Raw materials

Import (GR halibut included)

(2016)	Total Import		
	Tons	€ Mio	€/Kg
Fresh	4,303	325	10.06
Frozen	47,343	1,602	4.51
Plaice fillets	289	11	5.07
Halibut smoked	7	1	19.05
Total	51,942	1,938	4.98

All quantities in traded weight

Source: Fiskeristatistik Årsbog 2016

- ❑ Frozen products accounts by far for the largest imports, but with lowest price
- ❑ Fresh products make up around 9 % of total imports, but account for 17 % of the import value
- ❑ Smoked products has the highest price, but represent a small part of import value.

1. Raw materials

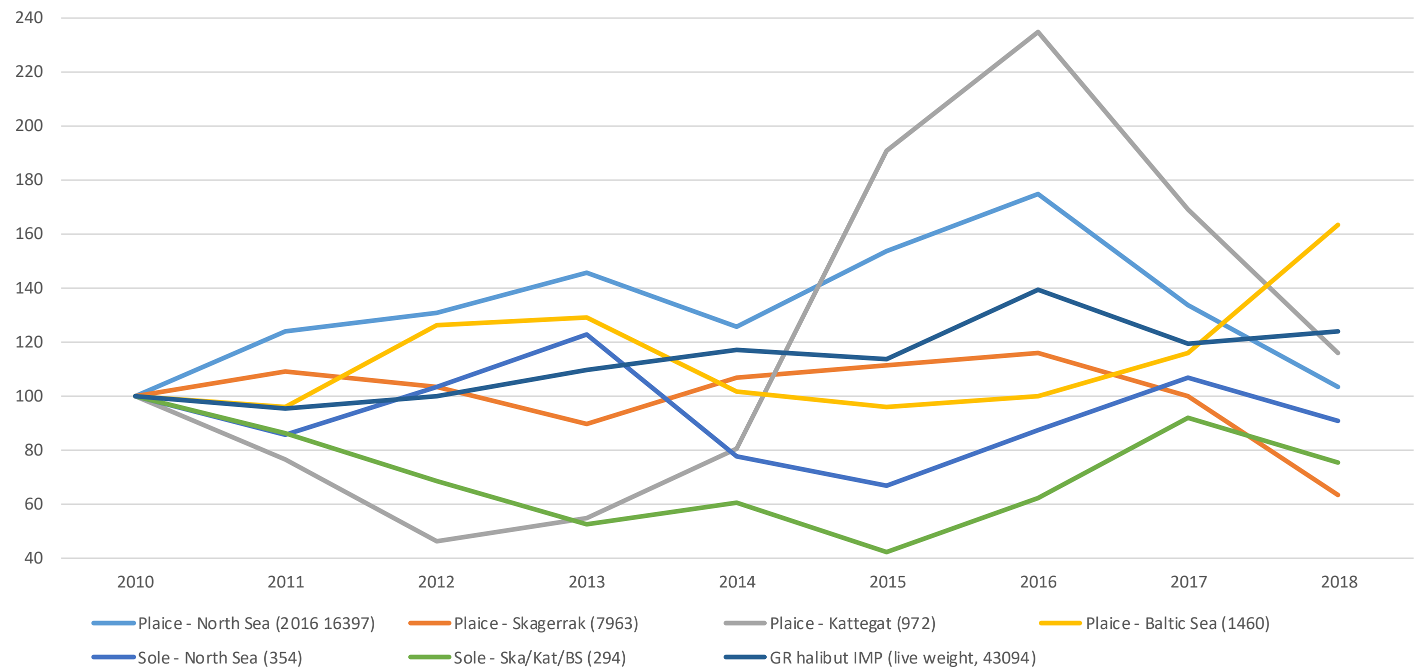
Import of three main flatfish species

Import by species (2016)	Tons	€ Mio.
Plaice, Fresh	1,709	3.6
Plaice, Frozen	85	0.3
Plaice, Fillet	289	1.5
Halibut, Fresh	620	2.9
Halibut, Frozen	42,454	170.9
Halibut, Smoked	7	0.1
Sole, Fresh	56	0.4
Sole, Frozen	18	0.2
Plaice, Total	2,083	5.4
Halibut, Total	43,112	174.4
Sole, Total	74	0.6

Source: Statistikbanken.dk

- ❑ GR halibut by far most important, but almost all directly out again
- ❑ Import of other flatfish species of little importance.

2. Fluctuations in supply



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- Plaice catches increasing to 2016, reduced afterwards
- Sole reduced to 2015, increased afterwards
- Greenland halibut import increasing.

3. Stock status

2016	Area	Stock status	Fishing mortality
Plaice	NS/S	Good B>Bmsy	Low F<Fpa
-	K/Ø/B (21-23)	Good B>Bmsy	Medium Fmsy>F> Fpa.
-	Baltic Sea	Good B>Bmsy	Low f<Fpa
Sole	North Sea	Good B>Bmsy	Medium Fmsy>F> Fpa.
-	S/K/BS (20-24)	Good B>Bmsy	Low F<Fpa

ICES Advise 2018.

- ❑ Stocks are in a sustainable state in all cases
- ❑ Fishing pressure below corresponding to MSY in 3/5 cases
- ❑ Fishing pressure below corresponding to the precautionary approach in all cases.

4. Quotas

2016	Area	Quota	Catch	Utilization
Plaice	North Sea	27,010	16,397	61
-	Skagerrak	9,234	7,963	86
-	Kattegat	2,089	972	47
-	Baltic Sea	2,777	1,460	53
Sole	North Sea	400	354	89
-	S/K/BS	352	294	84

- ❑ Sole quotas well utilized, plaice quotas under utilized
- ❑ Plaice 2018 – larger quotas, less utilization, except NS both falls
- ❑ There are growth opportunities of better utilization of plaice quotas
- ❑ Why are plaice quotas not fully utilized?

➡ No fish? Not economically viable? Other reasons?

5. Processing

- Flatfish processing registered separately

2016	Quantity (tons)	Value (€ Mio)	Price (€/kg)
Plaice fillets frozen	37	0.4	10.67
Flatfish fillets, fresh/frozen	194	1.7	9.07
GR halibut smoked	407	6.8	16.93

  - Flatfish part of broader products – e.g. breaded fish/minced meat
  - Processing is with € 6.8 Million very limited.

- Technology status of national processors – not checked

6. Companies

Active fleet	No.	Turnover (€ mio.)	FT-em-ployment	% of group turnover	% of Den flatfish	Rate of return
Netters <18 m	130	21	124	32	14	-0.9
Trawlers <18 m	124	47	185	12	11	3.1
Kombi <18 m	84	16	77	30	10	0.0
Netters 18-24 m	8	7	30	53	8	2.8
Trawlers 18-24 m	36	40	106	13	11	4.0
Danish seines 12-24 m	21	13	41	57	15	5.6

- Plaice and sole 10 % of total turnover of active Danish vessels
- Most important for Danish seines (57% of turnover) and netters 18-24 m (53%)
- Danish seines and netters <18 m contributes most to total catch value of Danish vessels on € 49 Million (15% and 14%)
- Rate of return highest for Danish seines (5.6 %)

7. Markets

Export (including GR halibut)

(2016)	Total Export		
	Tons	€ Mio.	€/Kg
Fresh	23,412	75	3.21
Frozen	41,125	232	5.65
Plaice fillets	144	1	5.70
Halibut smoked	306	6	19.26
Total	64,987	314	4.83

Source: Fiskeristatistik Årsbog 2016

- Danish consumption not yet identified - we check GFK data
- Frozen products accounts for ¾ of export value
- Fresh products make up 23% of export value
- Smoked products has high price, export is small but larger than import

7. Markets

Export of three main species

Export by species (2016)	Tons	€ Mio.
Plaice, Fresh	15,489	26
Plaice, Frozen	1,039	2
Plaice, Fillet	144	1
Halibut, Fresh	703	4
Halibut, Frozen	37,343	210
Halibut, Smoked	306	6
Sole, Fresh	1,092	10
Sole, Frozen	18	0
Plaice, Total	16,672	28
Halibut, Total	38,352	220
Sole, Total	1,110	10

Sole export includes solea species and also lemon sole. *Source: Statistikbanken.dk*

- ❑ 15,489 tons plaice exported fresh, 62 % of Danish catches, 52 % of Danish catches to the Netherlands
- ❑ GR halibut - very minor Danish processing and consumption
- ❑ Almost all import directly exported, mainly to China dir/ind, smoked to EU

8. Outlook

Market outlook

- Plaice core - landed fresh, sold frozen by Dutch processors/traders
- Plaice part of the large international frozen whitefish market

  → with cod, hake, Alaska pollack, pangasius, etc.
- Prices of plaice determined by supply/demand of whitefish
- Supply driven by catches of 1) Barents Sea cod, 2) North Pacific Alaska pollack, 3) and farmed pangasius
- Demand driven by income, preferences and population growth

  → fish demand growing
- Exchange rates important

Outlook other

- Brexit - Danish flatfish catches in British zone small
- Coastal fishery arrangement revised 2020.

9. Conclusions

- Plaice of economic importance in Denmark
- Other flatfish species of minor importance
- The value chain for Danish caught plaice goes through the Netherlands
- What happens from there, where the plaice is finally sold, in what product form and how the value chain function is not revealed - would be interesting.