



# Can voluntary arrangements secure coastal fishery survival under ITQs? The case of Denmark

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# **Outline**

- 1. The issue
- 2. ITQs in Danish fisheries
- 3. The coastal fishery arrangement
- 4. Effects
- 5. Conclusions.



# 1. The issue

# Background

- ☐ ITQ regulated fisheries often protect small-scale fisheries
  - Since large vessels earn more
- Denmark introduced ITQs 2003-07 No protection
- Later protection politically prioritized
  - But post-ITQ protection maybe expropriation 

    Liability of compensation
  - A voluntary arrangement chosen
- ☐ The coastal fishery arrangement
  - Voluntary
  - Allocate extra quotas on specific stocks from pools based on shares
  - Claim staying in arrangement 3 years/forever
  - Ban sale of shares/quotas to outside vessels.



# 1. The issue

# Purpose

□ To assess whether the Danish coastal fishery arrangement have protected vessels under the ITQ regulation?

# Why relevant?

- □ Relevant in debating ITQ introduction in other countries.
- ☐ Protection a priority <u>after</u> introduction of ITQs, where many countries protect <u>before</u>
- ☐ Can a voluntary protection system work?



# 2. ITQs in Danish fisheries

Avoid that there are too many fishers to fish too fish

- ☐ Why ITQs? To improve the economy
- ☐ ITQ trial period on herring from 2003.
- ☐ ITQ/VQS rules from agreement 3 November 2005, start 2007

## TACs and fixed quota shares, 8 now 16 years notice period

Free transferability of quota shares/quotas, except concentration.

#### Fodevareministeriet

Aftale om Ny Regulering af dansk fiskeri

Regeringen har den 3 november 2005 indgået nedenstående aftale vedrorende Ny Reguleri

I Coundle

Formålet med aftalen er inden for rammerne af den fælles fiskeripolitik at skabe grundlag for en ny segulering af det danske demersale fiskeri m.h.p. at,

- den enkelte fisker får bedre mulighed for at drive et fiskeri, der passer til hans farte og fangstuctoder.
- cibre Scheriets combade inditioning grounding
- iværksætte og udvikle et reguleringssystem, der fremmer en mere bæredygtig udnyttels af fiskebestandene, forst og fremmes ved at begrænse udsmid af fisk.

Endvidere skal aftalen skabe langsigtede rammer for det pelagiske fiskeri og industrifiskeriet.

II Ny Regulering for det demersale fiskeri

r genaemføres en ny regulering for torsk, tunge, rodspætter, jontfrulnammer, markese, la og dybvandsegjer i alle dande feravnade, for kalmine og ngjårar i Noedseen, for havde rik farvand, samt for brisling for fartøjer i det demersale fiskeri og for tald og laks i Onto. In. Andre bestande kan blive aktuelle på et særre teluputet. Reguleringen gridder for a jösterede erhrevrikskerfattoge, der fisker på et kommerciell grundlag.

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gries minighed for at sammenlangge britojer og kvoteandele. Ved sammenlanging skal in n følge tonnagen. Der fastlangges en overste grænse for det antal fartojer, som den enkelaker må have betydende interesse i. Parterne er enige om, at grænsen fastlangges efter oere droftelse med erhvervet.

n, hvor de udnyttes efter indiputés stalle mellem fartosjeme.

Invor de udnyttes efter indiputés stalle mellem fartosjeme.

Irtojer, der ikke onsker at udnytte mulighederne for sammenhegning eller puljefiskeri,

nions and video mulished for

 en "oprydningsrunde" for etablering af den ny regulering, hvor fartojerne kan by kvoteandele primert m hp. at samle fartojets fisiker i færre farvande.
 en bytteordning, hvor fisikerne inden for det enkelle kvotefe kan bytte fangstmængs mellem frenderen. Bismoordningen en enemenform, after faste huntstefehold enten.

Der etableres en fiskefond til at gennemføre kvotebytter med andre EU lande og til udvik ngsonenterede formål fit hjælp til yngre fiskere. Fonden tildeles kvoteandele for de vigsigste sestande, for fastlæggelsen af kvoteandelene til de enbelte fartøjer. Ufordelte mængder kin abet af kvotehret tildeles forholdstamessigt til FKA systemat.

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# 3. The coastal fishery arrangement

### ☐ Timeline

- 2010-2012 A voluntary coastal arrangement in force:
  - Vessels < 17 m , < 80% of travels less than 3 days</li>
  - Binding for 3 years
  - Extra quotas 1.5-3.9% of cod/sole TACs
  - Aim: To maintain the coastal fishery share of total Danish fishery
- 2012 Coastal Fishery Committee recommend to make arrangement permanent and incentivize net fishery. Keep voluntary.
- 2013-2015 Arrangement runs one year renewed. Plaice included.
- 2016 Binding again 3 years.
  - Two groups; Larger extra quotas to nets than trawl.



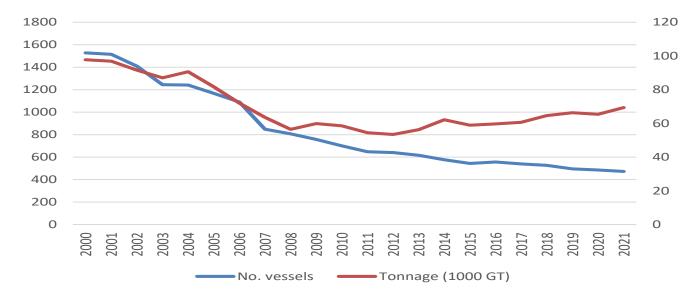
# 3. The coastal fishery arrangement

## ☐ Timeline

- 2017 Same coastal fishery supplement to all. Quota diligence award different:
  - Nets < 15 m bound forever largest (closed nets)</li>
  - Trawl < 15 m bound forever smaller (closed trawl)</li>
  - Trawl < 17 m bound for 3 years smallest (open trawl)</li>
- o 2018 A fourth group
  - Nets < 17 m bound for 3 years introduced (open nets)</li>
- 2020 Quota diligence award abolished, allocated as coastal fishery supplement in 3 rates after application
  - Group allocation key revised to 15-5-2-1 for closed net/closed trawl/open net/open trawl
- 2023 Fisheries Commission to recommend.



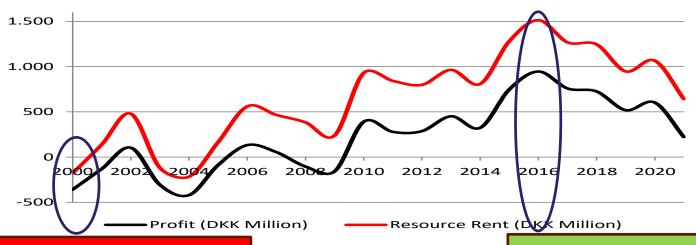
# Danish fleet development



- Continuous reduction in vessels 70% in period
- Tonnage reduction only 30% Reduced until 2012 increase after
- ITQs drive, but so do technological development, stock changes, prices, Baltic Sea cod collapse, Brexit, etc.



☐ Economic development Danish fleet



Profit -359 DKK Million Resource Rent -181 DKK Million Profit +946 DKK Million Resource Rent +1513 DKK Million

#### Turnover

- Costs (excluding labor and capital)
- Costs of labor and capital in alternative use
- = Resource Rent

- Bad economy ☐ ITQs
- ITQs 

  Profit/Resource Rent 26/41% of turnover 2016
- Economy worsen from 2016 but for all vessels.



- □ Registered vessels 2258 in 2016 ~ 1600 less/inactive of little importance
- ☐ Commercial active vessels:

Development Group	2016	2017	2018	2019	2020	2021	Change 2016-21
Closed net fishing < 15 m	0	35	35	33	29	33	
Closed other < 15 m	0	8	5	3	8	7	
Open net fishing < 17 m	104	0	49	44	28	29	
Open other < 17 m	58	118	95	90	71	70	
Coastal fishery total	162	161	184	170	136	139	-14%
Other vessels <17 m	226	206	178	171	181	180	-20%
Vessels > 17m	158	150	148	143	144	144	-9%
Total	546	517	510	484	461	463	-15%

<sup>\* &</sup>lt; 18 m.

Coastal fleet reduced as total – but less than other vessels < 17 m</li>

■ Earnings – commercial active vessels

Rate of return % total assets Group	2016	2017	2019	2020
Closed net fishing < 15 m		8.0	-0.7	-3.2
Closed other < 15 m		0.5		-0.8
Open net fishing < 17 m	1.1		-1.1	-1.2
Open other < 17 m	1.4	2.4	1.7	-0.5
Coastal fishery total	1.2	2.5	1.2	-1.0
Other vessels <17 m	*1.9	*1.7	-1.7	1.1
Vessels > 17m	6.9	4.5	3.5	4.1
Total	6.6	4.4	3.3	3.4

<sup>\* &</sup>lt; 18 m.

- No pattern in economy of vessels < 17 m inside/outside arrangement</li>
- Positive effect of arrangement counterbalanced by other developments.



# 5. Conclusions

- □ Lack of coastal fishery protection at ITQ start induced
  - Later demands for stronger protection
  - A sophisticated voluntary arrangement continuously changed
- Have the arrangement worked?
  - Fleet reduction a bit higher outside than inside arrangement the arrangement ceteris paribus have an effect
  - Coastal fleet economy worsen but the case for the whole fleet
  - All other things not equal exact effect uncertain.
- ☐ Administratively a quota sale ban from ITQ start easier
- ☐ Small flexibility to revise ITQ system but earnings remain high.

