



UNIVERSITY OF THE FAROE ISLANDS

”Umsiting av pelagiskum fiskastovnum í Landnyrðings-Atlantshavi eftir Brexit”*

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*Bjørndal, T., Arnason, R., Nielsen, M., Mrdalo, Z.P. Đ. “Post-Brexit Management of Pelagic Fisheries in the North-East Atlantic: Norwegian Spawning – Atlanto Scandian Herring, Mackerel, and Blue Whiting”, 02/22, Report, SNF, Centre for Applied Research at NHH

Post-Brexit Management of Pelagic Fisheries in the North-East Atlantic: Norwegian Spring Spawning - Atlanto Scandian Herring, Mackerel, and Blue Whiting

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Overview

- Legal Aspects
- Degree of Cooperation
- Cooperative vs Non-Cooperative Game

- Mackerel, Herring and Blue Whiting fisheries in the Norwegian Sea

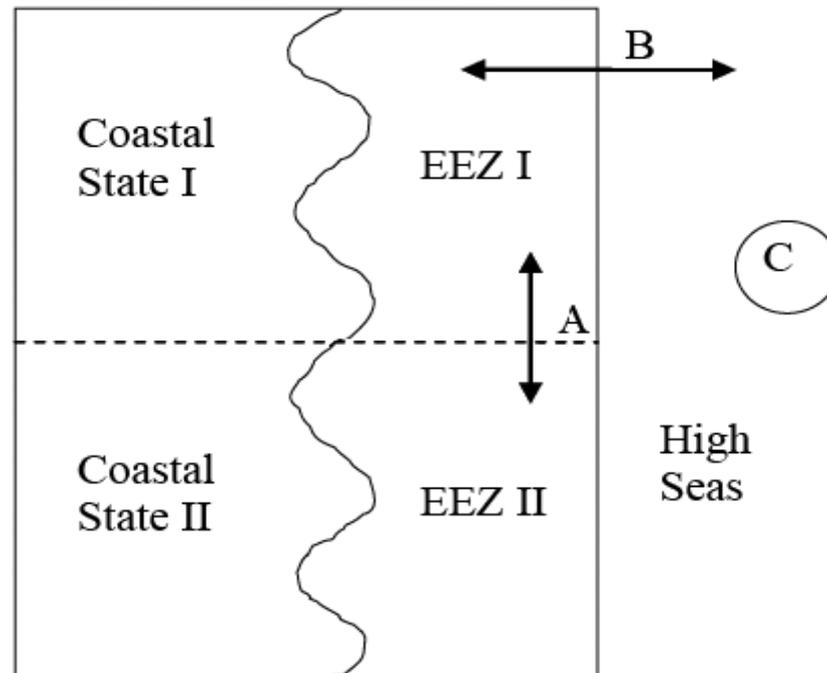
- Conclusion with Implications

The Legal Framework

- The Fish stock that fully reside in the waters of one fishing state will be under the sole ownership of that nation. UN 1982, Article 56, 1.a
- Demersal fishery in FO EEZ managed by the FO authorities.
- Transboundary Fish Stock – ownership and management more challenging

The Transboundary Fish Stocks

1. Shared stocks crossing the EEZ boundaries into the EEZs of one or more coastal states
2. Straddling fish stocks crossing EEZ boundaries into the adjacent high seas (as well other EEZs)
3. Highly migratory stocks as defined in a special annex to Convection



The Transboundary Fish Stocks, A=SHARED STOCK. B=STRADDLING STOCKS. C=DISCRETE HIGH SEAS FISH STOCK

Source: Bjørndal & Munro (2012)

Degree of Cooperation

1. Primary – Cooperation in Scientific Research, Technical Regulations, Habitat Protection
2. Secondary – Cooperation in Management

Primary Cooperation – strong form that works relatively well

Secondary Cooperation – weak form, Country agree on the overall TAC but no agreement on quota sharing or the principles underlying quota sharing

Cooperative Game vs Non-Cooperative Game

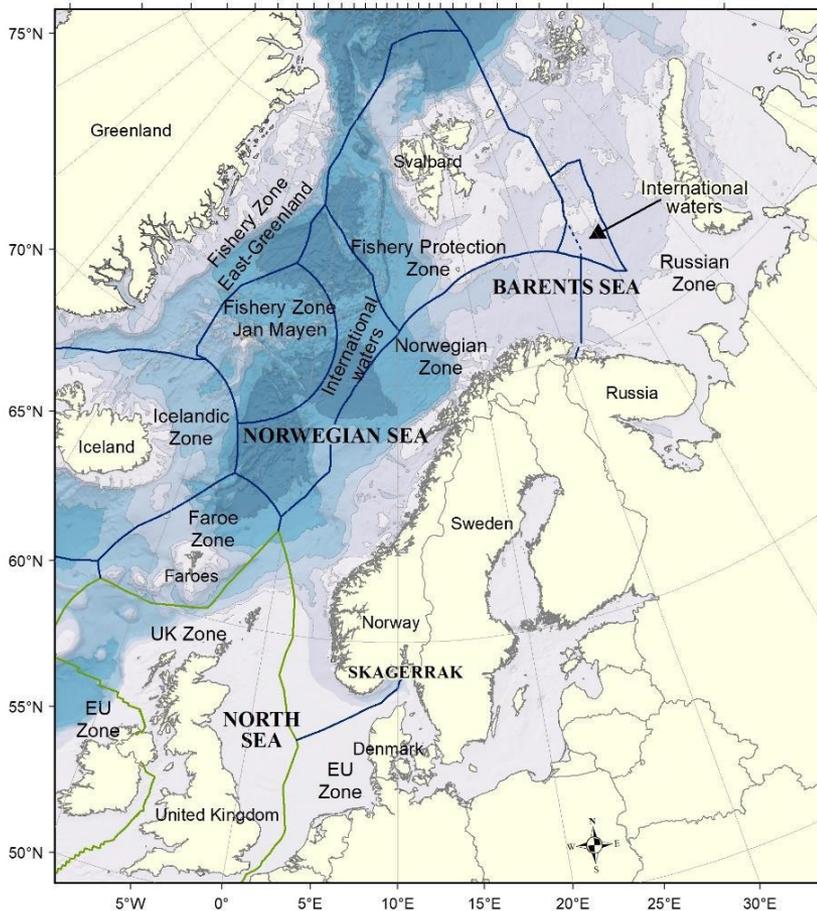
Necessary conditions for Cooperative Game

1. Players be able to **communicate** with one another
2. “**Individual Rationality**” each player expect payoff to be at least as great from the cooperation as from non-cooperation
3. “**Collectively Rational**” – no alternative solution exist so that one player breaks agreement

From time to time we can observe **Grand Coalitions** where all parties have been cooperating

The period of non-cooperation dominant – the **sustainability of fish stock endangered**

The Pelagic fisheries in the Norwegian Sea and principles for Quota sharing



- **Zonal Attachment** (share of stock weighted by time spent in EEZ) concept suggested as a tool to decide the share of TAC
- ZA not without problems – INFORMATION problem
Where is FISH?
- Change in migration lead to a breakdown of existing agreements

The Pelagic Fisheries in the Norwegian Sea – Post-Brexit

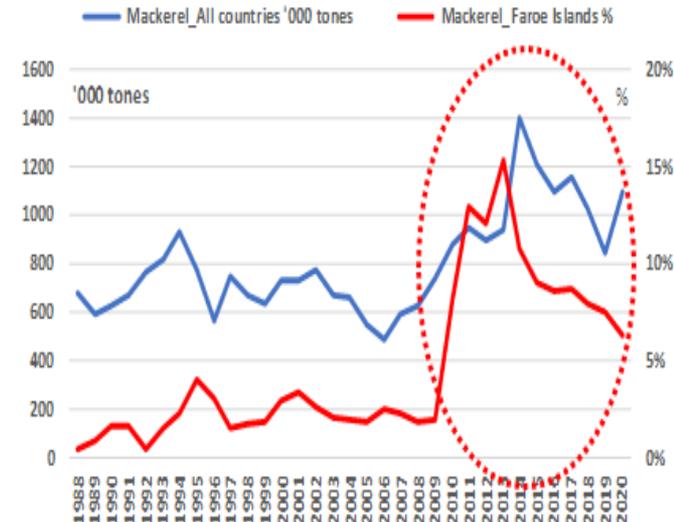
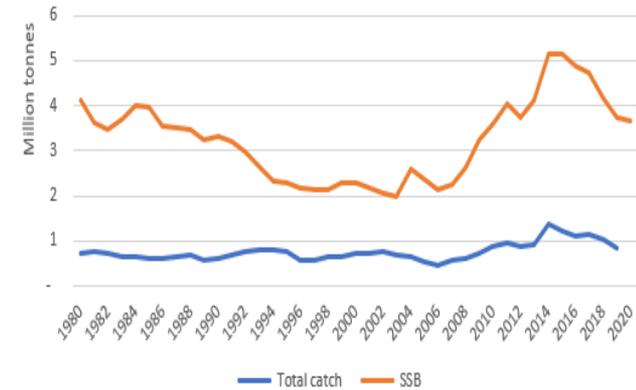
- The three stocks under consideration are all straddling stocks.
- According to the 1995 United Nations Fish Stocks Agreement (UNFSA; see UN; 1995), straddling fish stocks and highly migratory fish stocks are to be managed by Regional Fisheries Management Organisations (RFMOs), consisting of **coastal states** and relevant **Distant Water Fishing States (DWFSs)** with a “**real**” interest in the fishery.
- Management of straddling stocks in NEA is governed by the North-East Atlantic Fisheries Commission (NEAFC).
- NEAFC acts as a FORUM for CONSULTATION and Exchange of INFORMATION on the state of the fishery.
- Scientific advice provided by International Council for the Exploration of the Seas (ICES)

Fishery	Coastal States	Distant Water Fishing States
Mackerel	NO, UK, EU, FO, IS, GL	RU
Atlanto Scandian Herring	NO, UK, FO, RU, IS	EU, GL
Blue Whiting	NO, UK, FO, IS	RU, GL

MACKEREL

Year	Cooperation	Notes
1999-2009	Tripartite coastal agreement Norway, the EU and the Faroe Islands.	
2008-2009	Tripartite agreement Norway, the EU and the Faroes Islands; Iceland singleton.	Iceland entered the fishery in 2008.
2010-13	Norway-EU agreement; Iceland and the Faroe Islands singletons.	As a consequence of Faroese demands for higher quota shares in 2010, the tripartite agreement broke down. Iceland demanded quotas as a coastal state. Norway-EU agreement included access. In 2013, mackerel migrated to the Greenland EEZ for the first time.
2014-20	Renewed tripartite agreement Norway, the EU and the Faroes Islands; Iceland singleton.	Greenland has had no bilateral agreements regarding mackerel with any other country.
2021-	Agreement on TAC, unilateral quota setting by all countries	The UK enters as a coastal state.

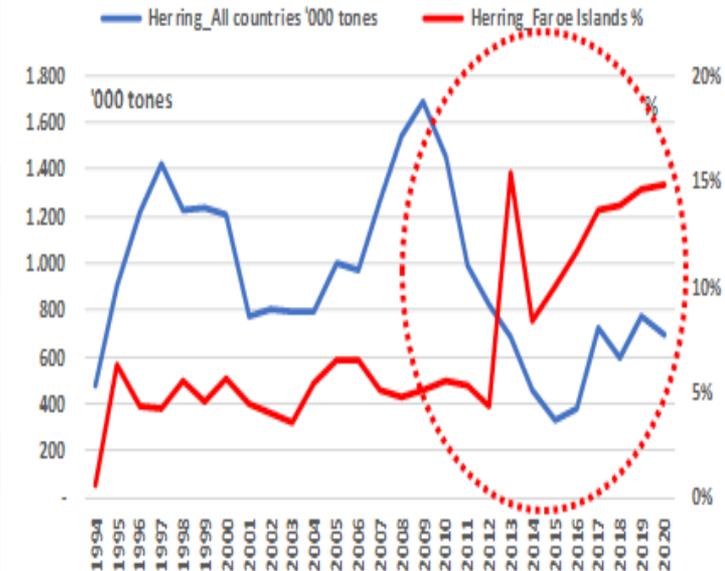
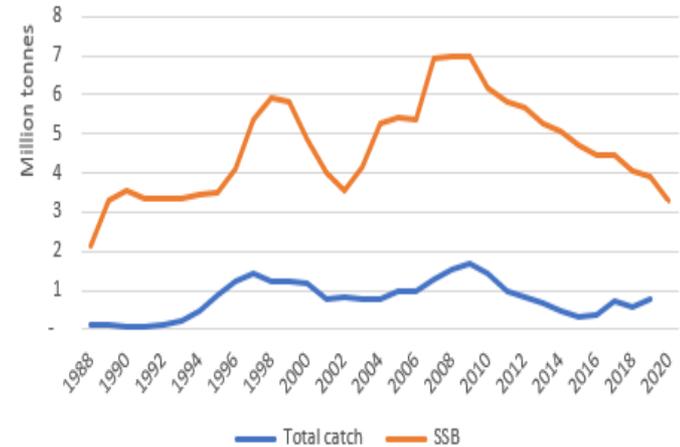
Spawning stock biomass and catches of mackerel, 1980-2020 (million tonnes)



Herring

Year	Cooperation	Notes
1996-2002	Full cooperation	Long-term management agreement was agreed on in 1996
2003-2006	No agreement.	The 2006 agreement broke down in 2003 because of Norwegian demands for a higher share of the TAC. Numerous bilateral agreements were suspended.
2007-12	Full cooperation.	New management agreement signed in January, 2007. Quota shares: EU 6.52%; Faeroe Islands 5.16%; Iceland 14.51%; Norway 61%, and Russia 12.81%.
2013-14	For 2013, the Faeroe Islands unilaterally increased its quota to 17%, for 2014, it set a quota of 40,000 t; four party agreement between Norway, Iceland, Russia and the EU.	Four party coalition, the Faeroe Islands operating as a singleton.
2015-16	Faeroe Islands quota: 40,000 t for 2015 and 2016. Greenland quota: 20,000 t for 2015. No four-party agreement.	Breakdown in cooperation.
2017-19	The five coastal states agreed on TACs but with unilateral quota setting.	Norway increased her quota from 61% to 67% in 2017, 70% in 2018 and then to 73%, based on zonal attachment.
2020-	Agreement on TAC but with unilateral quota setting.	Norway increased her quota to 76%.
2021	Agreement on TAC but with unilateral quota setting.	Norway set her quota at 76%. The UK enters as a coastal state.

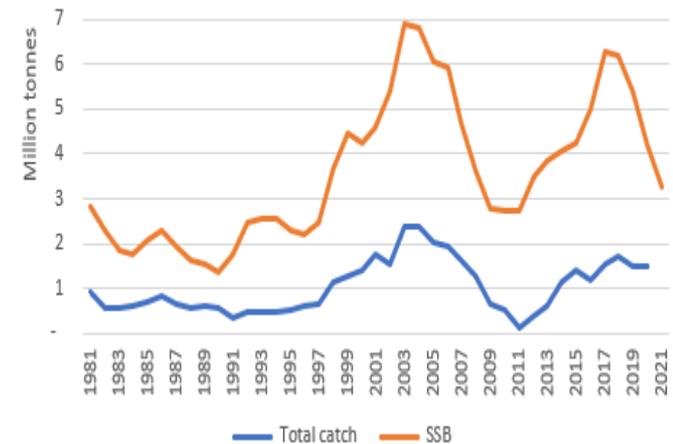
Spawning stock biomass and catches of herring, 1988-2020 (million tonnes)



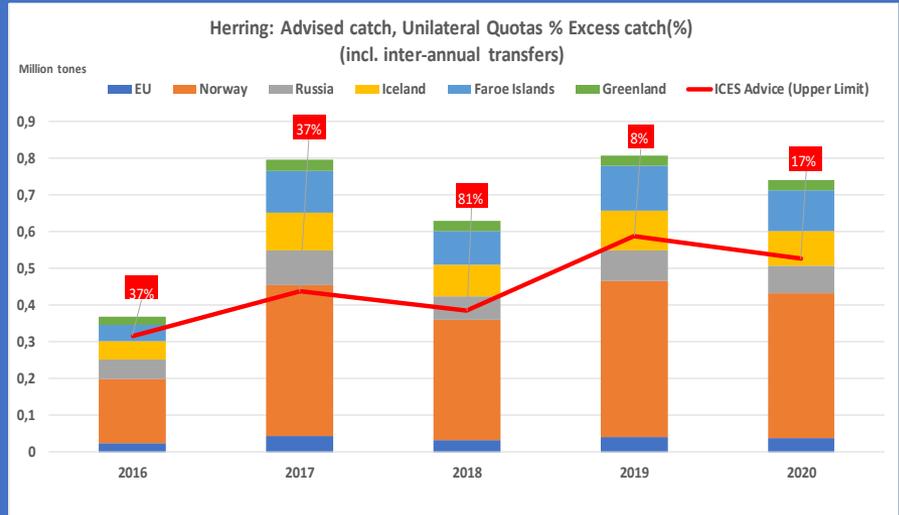
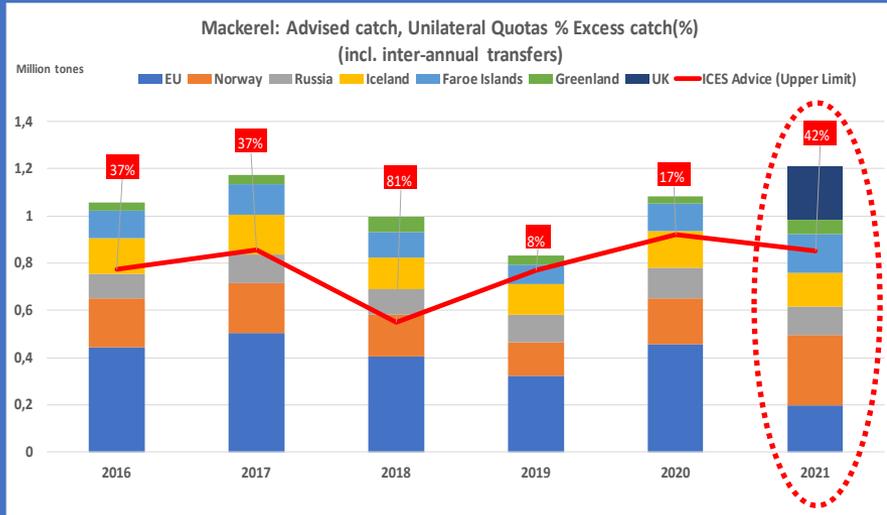
Blue Whiting

Year	Cooperation	Notes
2006 – 14	Full cooperation. Quota shares: EU 30.5%, Faroe Islands 26.13%, Norway 25.75%, Iceland 17.63%, Russia 16.3%.	Framework agreement between coastal states – Norway, the EU, Iceland and the Faroe Islands – with an allocation of quota to Russia in international waters.
2015 – 16	Breakdown in cooperation. Unilateral quota setting.	
2017	Agreement on TAC and management plan.	
2018 – 20	Agreement on TAC based on management plan but unilateral quota setting.	
2020		Norway: 26.25% of TAC after allocation to NEAFC for harvesting in international waters.
2021	Agreement on TAC based on management plan but with unilateral quota setting.	The UK enters as a coastal state.

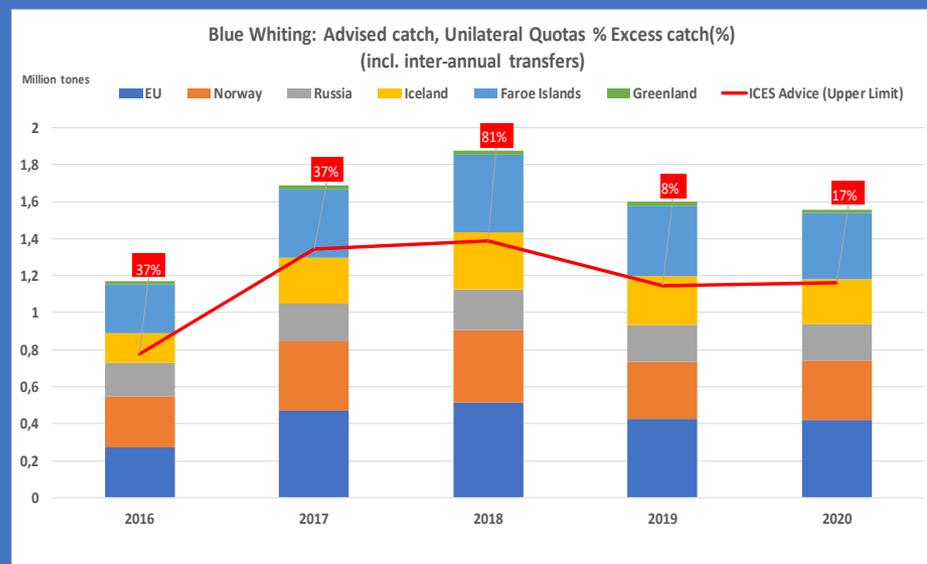
Spawning stock biomass and catches of blue whiting, 1981-2021 (million tonnes)



Sustainable Windfalls?



Average Excess Catches
 Mackerel 2010-2021 41%
 Herring 2016-2020 48%
 Blue Whiting 2016-2020 37%



Coastal Agreements	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mackerel	No	No	No	No	Yes	No																				
Herring	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No														
Blue Whiting	No	Yes	No																							

Sources: ICES WGIDE 2009-2020, Mackerel 2021 <https://kvf.f0/netvarp/sv/2021/06/01/20210601makrelur?portalfo>, Ongoing research project "Brexit and Fisheries Management in the Norwegian Sea"

Brexit Implications

- EU-UK Trade and Cooperation Agreement 2021-26 agreed on quota shares (**Adjustment period**)
- UK - Mackerel most important, Herring covered by EU-UK-Norway agreement, Blue-whiting fished in Irish waters
- UK Mackerel catches landed in Norway
- International ITQ system **not politically acceptable**
- FO Access to UK waters?

Takk Fyri