



UNIVERSITY OF THE FAROE ISLANDS

User Rights in the Fisheries and Salmon-Farming of the Faroe Islands*

“Nýtslurættindi í føroysku fiski- og alivinnuni”

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*NOS-HS Workshop Series

“The advantages and disadvantages of strong user rights in fisheries”

User Rights in the Fisheries and Salmon-Farming of the Faroe Islands

ABSTRACT

This paper focuses on the user rights regimes that have governed access to the marine resources of the Faroe Islands, which in the case of the fisheries are primarily fish stocks, and, in the case of salmon farming, primarily clean and healthy water masses. Examining the application of different user rights arrangements, we were able to observe a gradual improvement in the economic efficiency of the production activity for salmon farming, where strong operating exclusivity played a pivotal role in strengthening user rights. Similarly, the pelagic fisheries and the distant-waters demersal fisheries governed by ITQs have witnessed improved economic efficiency, although the strength of their user rights weakened over the last decade because of diminishing exclusivity and security of their rights. At the same time, the coastal demersal fisheries governed by ITEs continued to be marked by overcapacity and low fish stock levels despite the presence of strong exclusivity. These findings indicate that the design of user rights must also relate to specific management differences in marine resource exploitation under consideration.

Keywords: User rights, strong user rights, user rights in fisheries, user rights in marine fish farming, the efficiency of marine resource use, taxation of marine user rights.

JEL Code: K2, H25, Q22, Q28

Overview

- The Guiding Hypothesis
- The four main property rights attributes that impact the quality of user rights
- Fishery (ITE & ITQ) & Salmon Farming Economic Performance
- FO Government direct income from Fisheries & Salmon Farming
- Final Assessment

The Guiding Hypothesis

- The guiding hypothesis is that **stronger user rights** will lead to more economically **efficient** outcomes.
- This hypothesis is not taken for granted, however.
- It is put to a test, albeit quite unsystematically, by comparing the **economic outcomes** of the fisheries and salmon aquaculture under varying strengths of user rights regimes.

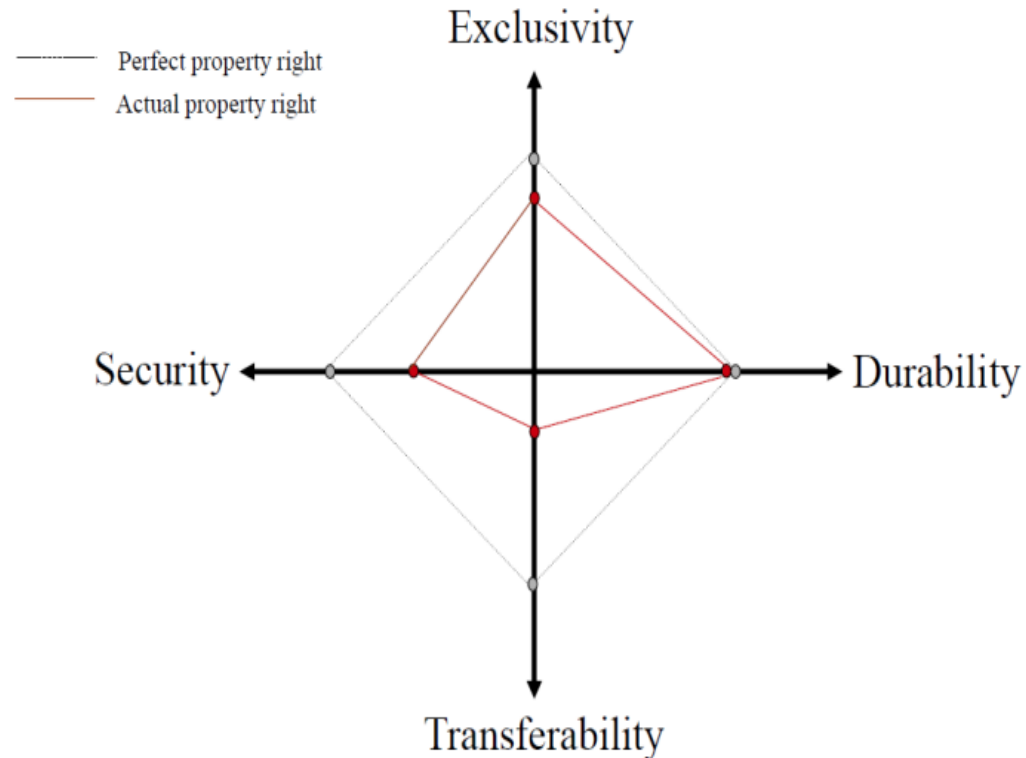
The four main property rights attributes that impact the **quality** of user rights

1. Exclusivity

2. Security

3. Durability

4. Transferability



Exclusivity & Transferability - Fishery

Stock Management	Fleet Classifications	Number of Ships end 2022	Maximum Ownership	2023 allocations	
				TAE Fishing Days	TAC '000 tonnes
TAE (ITEs)	Group 2. Stern Trawlers (Single & Pair >500hp)*	20	25%	6788	
TAE (ITEs)	Group 3. Longliners over 110 GRT	15	20%	1979	
TAE (ITEs)	Group 4. Coastal vessels between 15 and 110 GRT	13	20%	1685	
TAE (ITEs)	Group 4T. Coastal vessels >40GRT but <500hp using trawl	7	30%	1358	
TAE (ITEs)	Group 5. Coastal vessels below 15 GRT	297	20%	9456	
TAC (ITQs)	Others* *	8	20%		NA
TAC (ITQs)	Distant Waters Factory Trawlers	4	35%		21****
TAC (ITQs)	Pelagic Fleet***	17	25%		771*****

* Group 1. Deep sea single trawlers moved to group 2 at the end of 2011.

** Includes Gill netters, Dredgers, Shrimp trawlers and Pot vessels. TAC not available for 2023.

*** Includes both Purse seiners and pelagic trawlers.

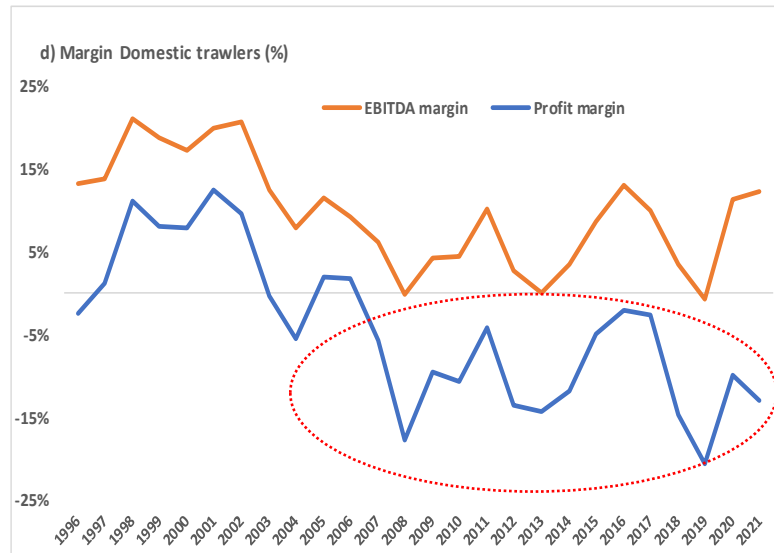
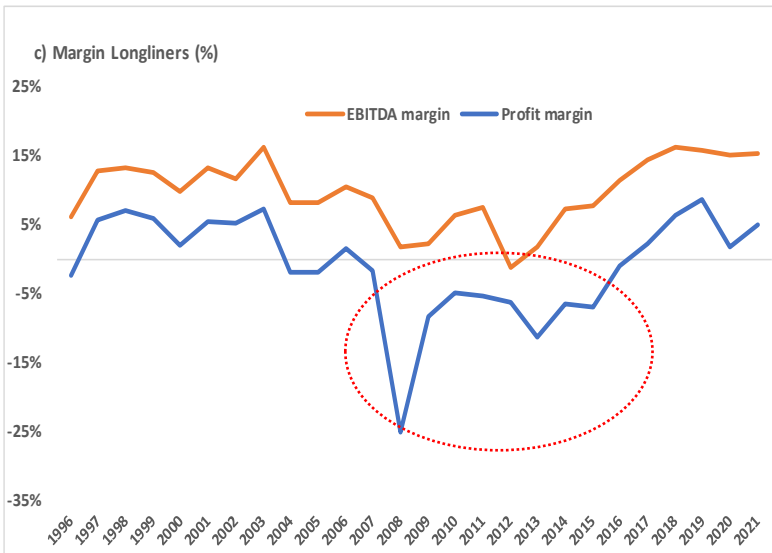
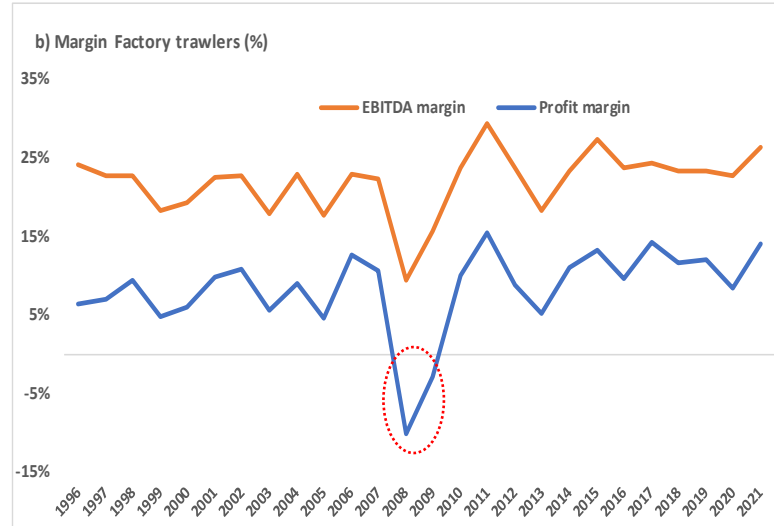
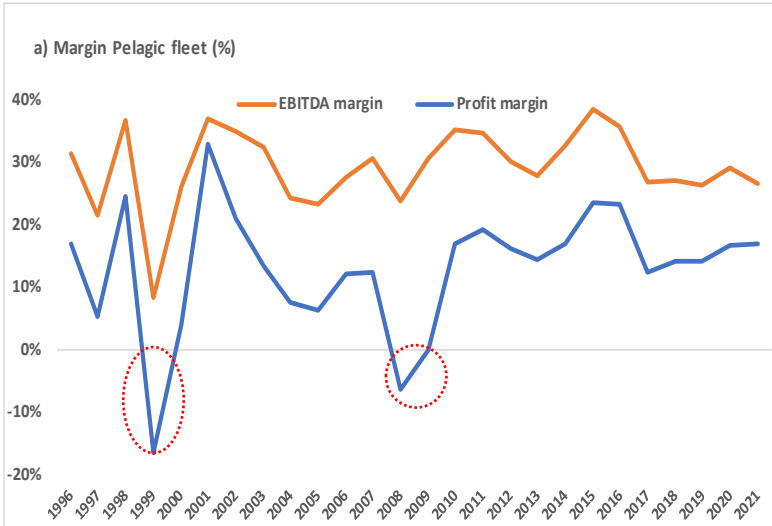
**** Includes both Norwegian and Russian EEZ in the Barents sea. (Acts 156/2022 & 154/2022)

***** Mackerel, Herring, Blue Whiting and Capelin. (Acts 166/2022, 165/2022, 67/2023, 162/2022 and 4/2023)

Total Available Effort (TAE), Individual Transferable Efforts (ITEs), Total Available Catches (TAC), Individual Transferable Quotas (ITQs)

Horsepower (hp), Gross Register Tonnage (GRT)

Economic Performance – Fishery



Weakened Exclusivity – Fishery

	Mackerel Dkr/kg	as % of landed price	Herring Dkr/kg	as % of landed price	Blue Whiting Dkr/kg	as % of landed price	Capelin Dkr/kg	as % of landed price	Distant-Waters Dkr/kg	as % of landed price	Act of Faroese Parliament	Fish Auctions Dkr Million
2012	0,75	11,23%									No 73/2012	
2013	0,75	14,01%	0,35	9,05%							No 50/2013	
2014	1,00	16,74%	0,50	9,32%							No 154/2013 & No 77/2014	
2015	1,00	16,33%	0,50	8,18%	0,20	10,48%					No 159/2015 & No 119/2014	
2016	1,00	13,79%	0,75	10,31%	0,20	9,27%					No 30/2016	59,80
2017	1,00	13,93%	0,75	20,16%	0,20	13,91%					No 150/2016	135,20
2018	1,50	18,78%	0,60	14,88%	0,25	14,39%					No 172/2017	143,39
2019	1,50	17,36%	0,60	14,15%	0,25	12,35%					No 172/2017	221,67
2020	1,50	18,30%	0,60	14,29%	0,25	12,12%		0,50	1,51%		No 172/2017	72,56
2021	1,50	21,31%	0,60	11,35%	0,25	13,30%		0,50	1,41%		No 172/2017	72,39
2022 - July 2023	1,23	18,62%	0,89	17,38%	0,31	13,94%		2,36	5,00%		No 111/2022 & No 77/2021	62,50
Averages	1,16	16%	0,61	13%	0,24	12,5%		1,12	2,6%			109,6
Aug 2023 - >>>2026*	1,77	23%	0,85	21%	0,36	18,8%	1,98	26,9%	2,36	5,0%	No 76/2023	60**

*Calculations' Base Period 2018-2022

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Exclusivity – Salmon Farming

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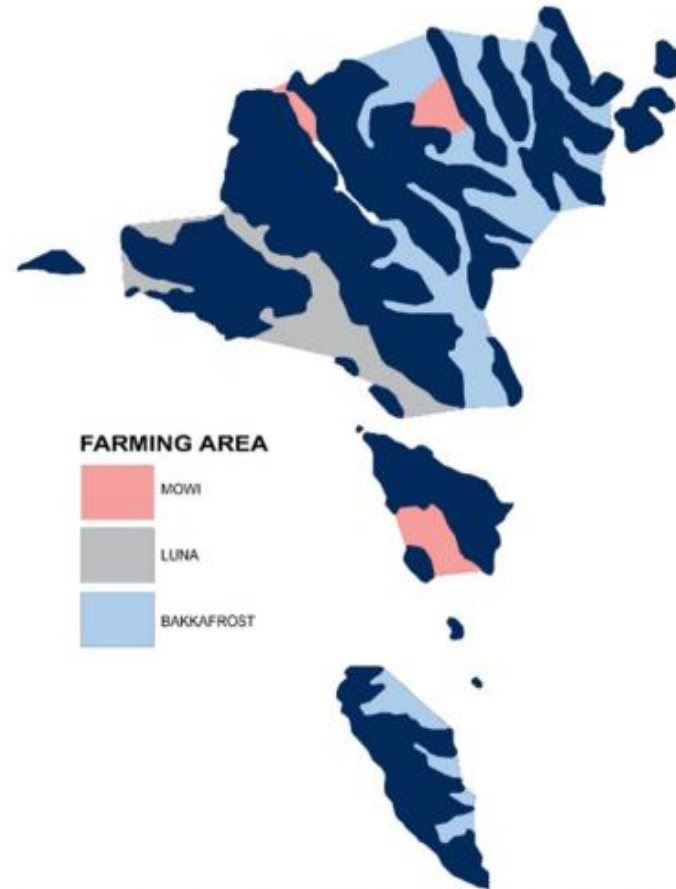
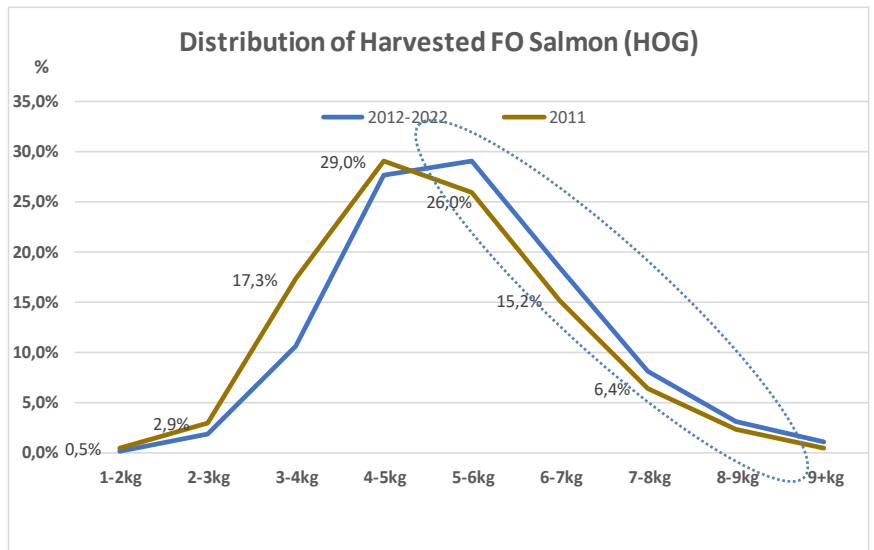
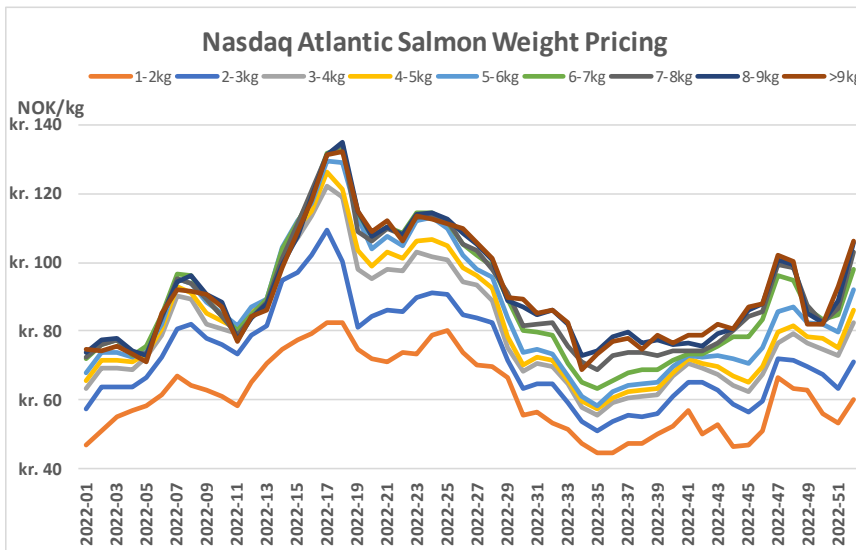
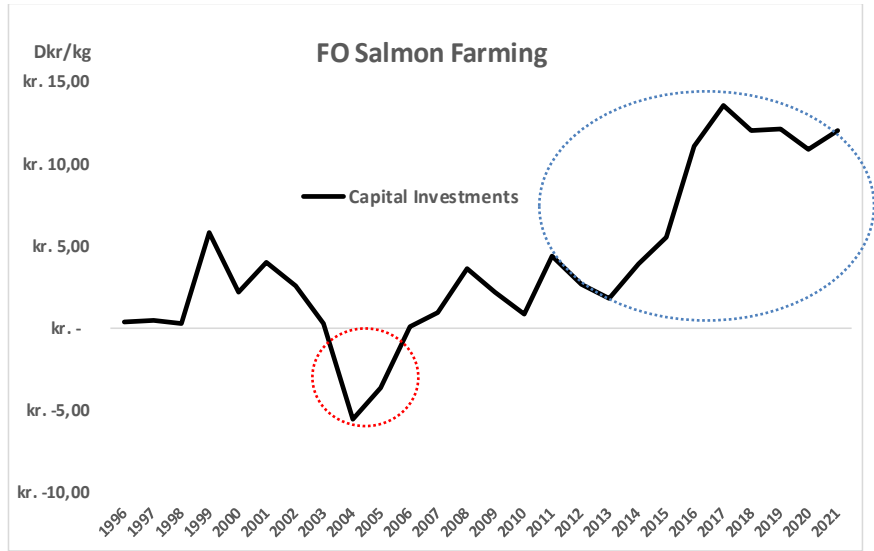
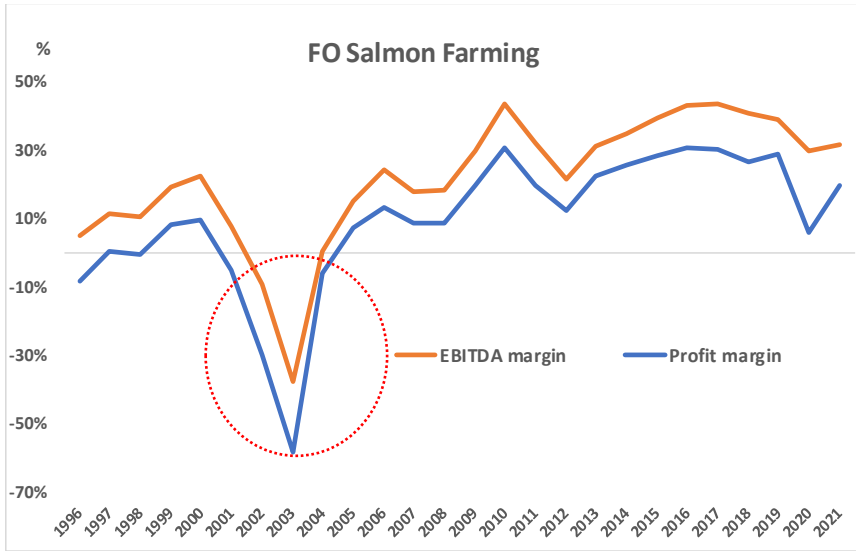
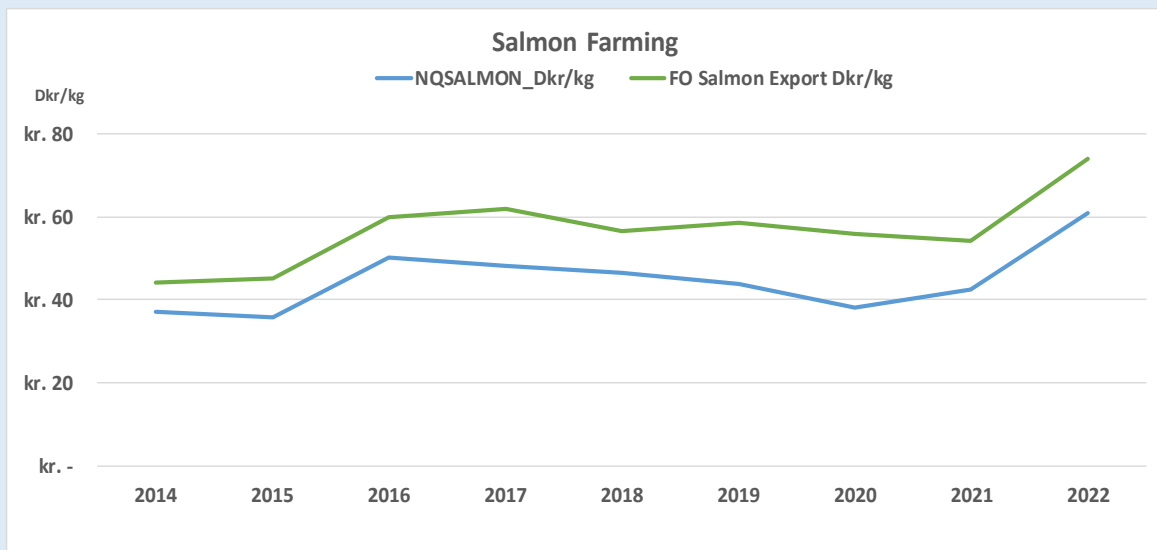
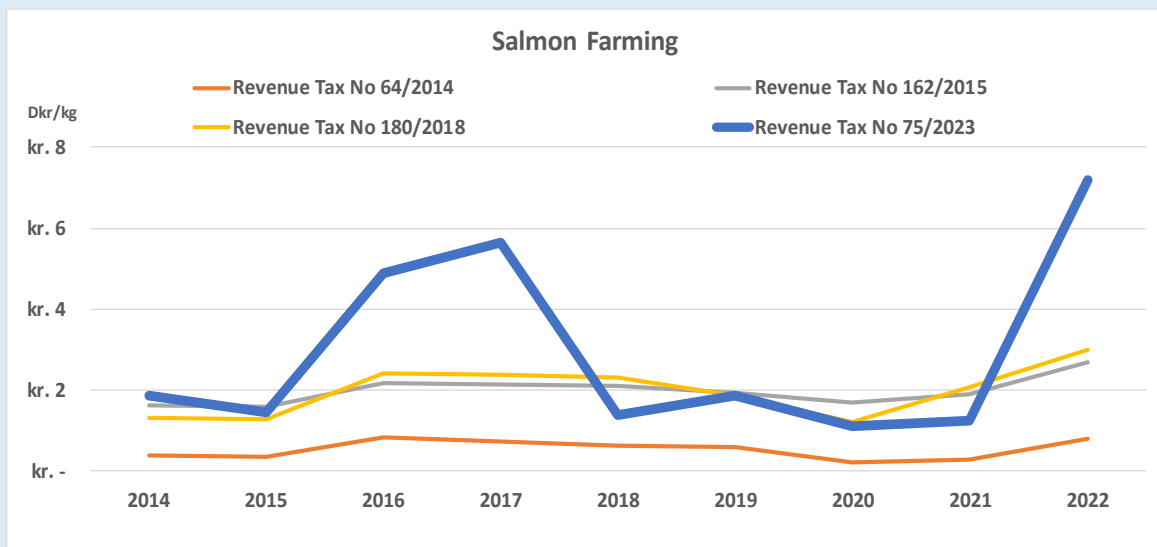


Figure 4. The current Faroe Islands three companies' fish-farmed designated areas (one company per farming site), by end of 2020.

Economic Performance - Salmon Farming



Weakened Exclusivity – Salmon Farming



Valid from 1st Jan 2014

Revenue Tax No 64_May 2014	
Revenue Tax	0,5%
Special Resource Tax	4,5%

Valid from 1st Jan 2016

Revenue Tax No 162_Dec 2015	
<23kr	0,5%
23-27kr	2,5%
>27kr	4,5%

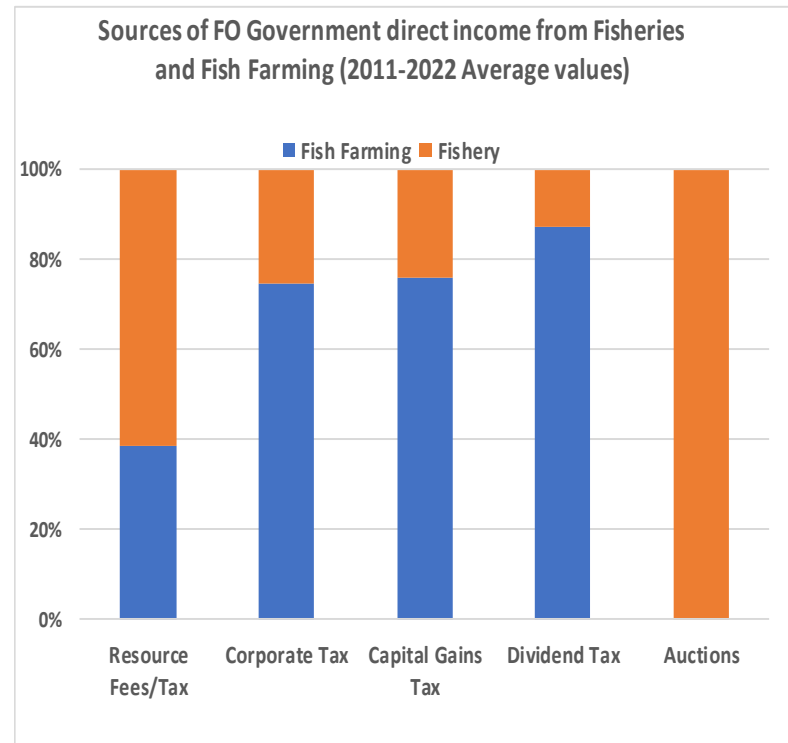
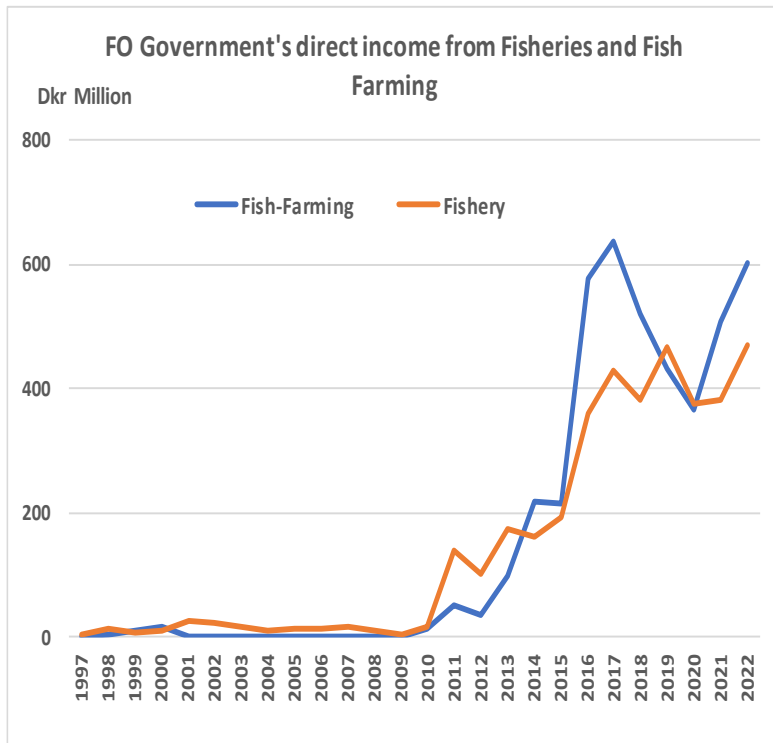
Valid from 1st Jan 2019

Revenue Tax No 180_Dec 2018	
<32kr	0,5%
32-36kr	2,5%
>36kr	5,0%

Valid from 1st Aug 2023

Revenue Tax No 75_Jun 2023	
$P < C$	0,5%
$C \leq P < C + Dkr 5$	2,5%
$C + Dkr 5 \leq P < C + Dkr 15$	5,0%
$C + Dkr 15 \leq P < C + Dkr 20$	7,5%
$C + Dkr 20 \leq P < C + Dkr 25$	10,0%
$C + Dkr 25 \leq P < C + Dkr 30$	12,5%
$C + Dkr 30 \leq P < C + Dkr 35$	15,0%
$C + Dkr 35 \leq P < C + Dkr 40$	17,5%
$P \geq C + Dkr 40$	20,0%

FO Government Direct income from Fisheries & Salmon Farming



Conclusion – Salmon Farming

1. Initially **weak** user rights in Salmon farming brought infections and/or pollution from other sites.
2. Later, various disease-prevention and environmental regulations on salmon farming activity **strengthened the user rights** embedded in the site production licenses, resulting in **increased economic efficiency**.
3. Resource tax charges **reduced the exclusivity** of user rights in salmon farming although **the impact** of such fiscal charges seems to be **neutral** for the time being given the industry's persistent investment programs.

Conclusion – Pelagic Sector

1. In the pelagic sector **strong exclusivity** improved efficiency and led to the realization of resource rents. However, over the last decade, user rights have been **weakened** by many factors simultaneously.
2. Since the pelagic fleet has been governed by the international fishing agreement, **changes in migration patterns** affect the structure of the cooperative agreement among coastal states. The Faroese pelagic fleet has been entirely **excluded** from the most valuable mackerel fishing in the UK EEZ since **Brexit**.
3. The **security** of the title has been further **weakened** by political processes of **mackerel quotas allocations** to domestic stern trawlers and issuing development catch licenses to newcomers.
4. Both exclusivity and duration were **diminished** by the introduction of resource usage charges and auctions.

Conclusion – Distant Water Demersal Fisheries

1. This segment's exclusivity and duration have also **weakened** due to the employment of auctions and resource payments.
2. Ongoing geopolitical tensions with Russia following the war with Ukraine pose user rights **security risk** over mutual quota allocation for the distant-water fishing fleet.

Conclusion – Domestic Water Demersal Fisheries

1. Despite the creation of EEZ, Faroese domestic fisheries policy continued to mirror an **open-access regime** supported by **subsidies** that contributed to fleet overcapacity until **the collapse** of the main fishing stocks in the early 1990s
2. A comprehensive management system (ITEs) produced **strong exclusivity** by creating clear distinction among fishing fleet groups and their spatial boundaries, further supplemented with gear restrictions.
3. ITEs were not able to address the unresolved issue of fleet **overcapacity** and control for technological improvements that generated **higher fishing mortality** and contributed to **lower profitability**.
4. This shows that the **exclusivity attribute** might not be a decisive factor in solving the fishery problem, like in the case of salmon farming.

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