



# ADAPTING A FISHING FLEET TO CO NFLICTING GOALS

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Norwegian Ministry of Trade, Industry and Fisheries

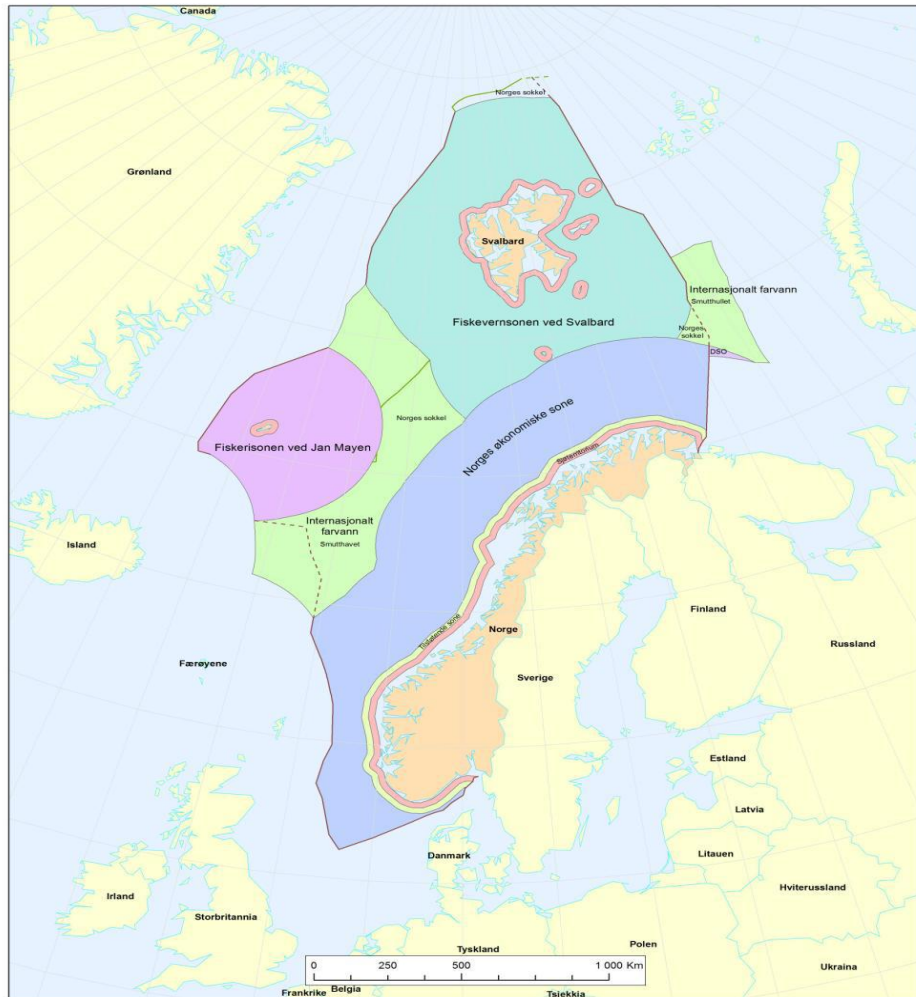
Yeosu, 12 September 2018, Session 8 R1



**Norway – too special to be an example?**



# Norway: An Ocean Nation

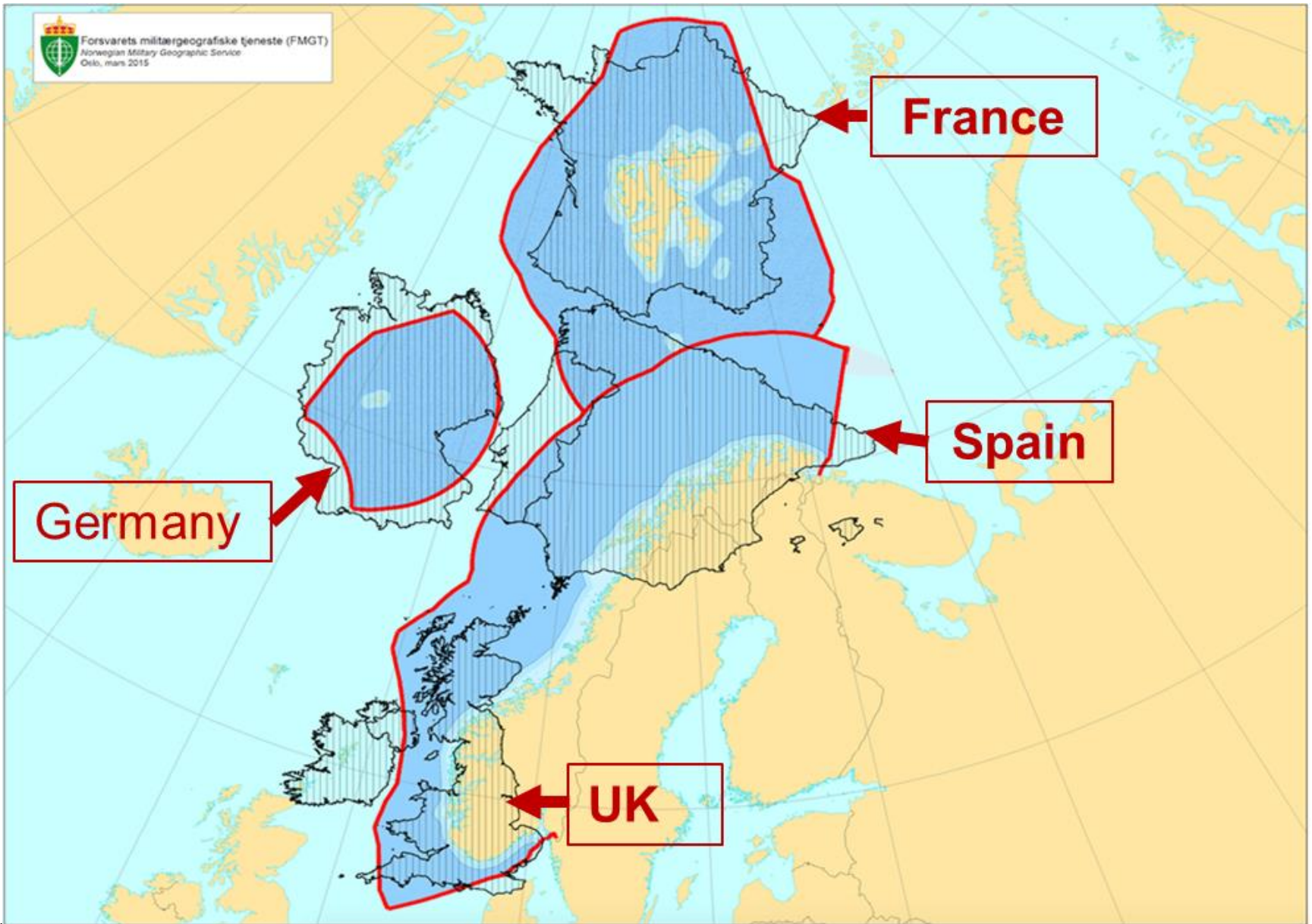


## NORWAY:

Population:	5.2 million
Mainland:	323 787 sq.km
Spitsbergen:	61 022 sq.km
Jan Mayen:	377 sq.km
Mainland coastline:	28 953 km
Total coastline (including islands):	100 915 km
Mainland EEZ:	968 700 sq.km
Spitsbergen FPZ:	804 000 sq.km
Jan Mayen FZ:	296 600 sq.km



Forsvarets militærgeografiske tjeneste (FMGT)  
Norwegian Military Geographic Service  
Oslo, mars 2015



**France**

**Spain**

**Germany**

**UK**

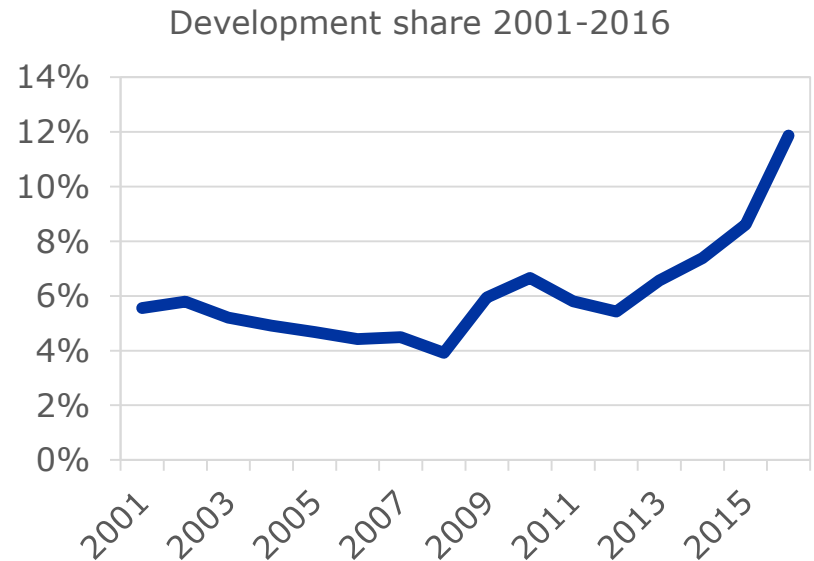
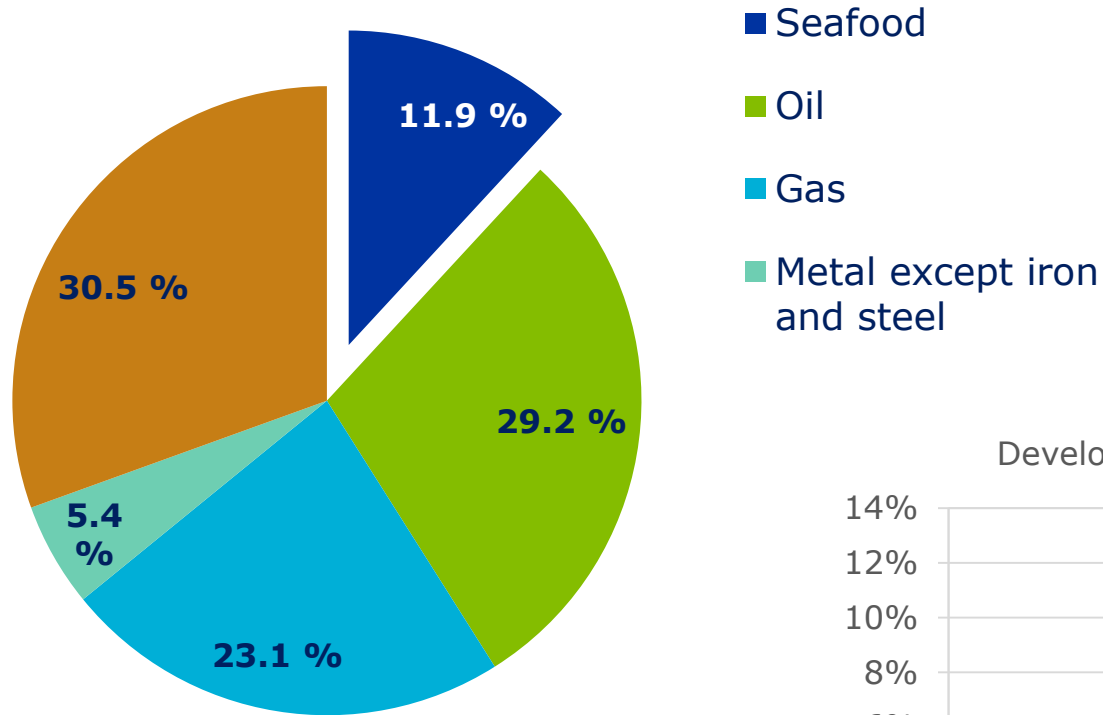
# Economic values of the Norwegian Seas

- ✓ 35 percent of GDP
- ✓ 10 percent of employment
- ✓ 70 percent of Norwegian export



# The seafood industry's share of total Norwegian exports

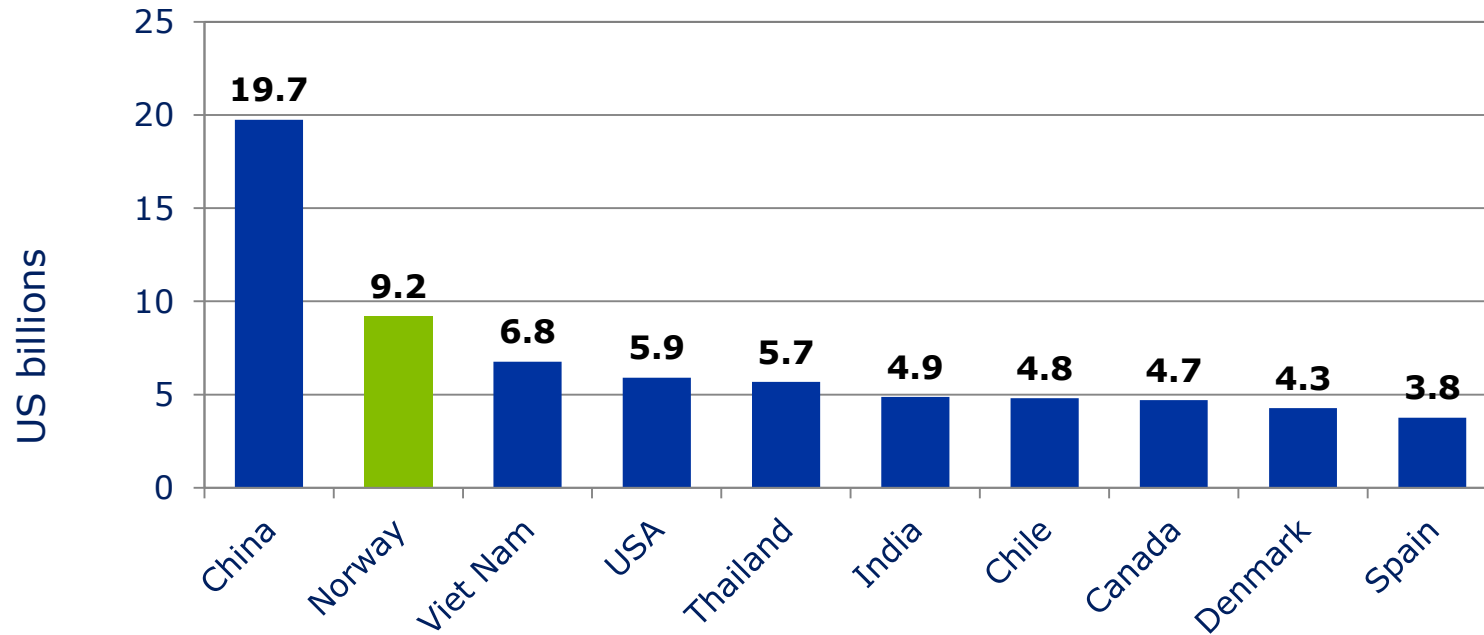
2016





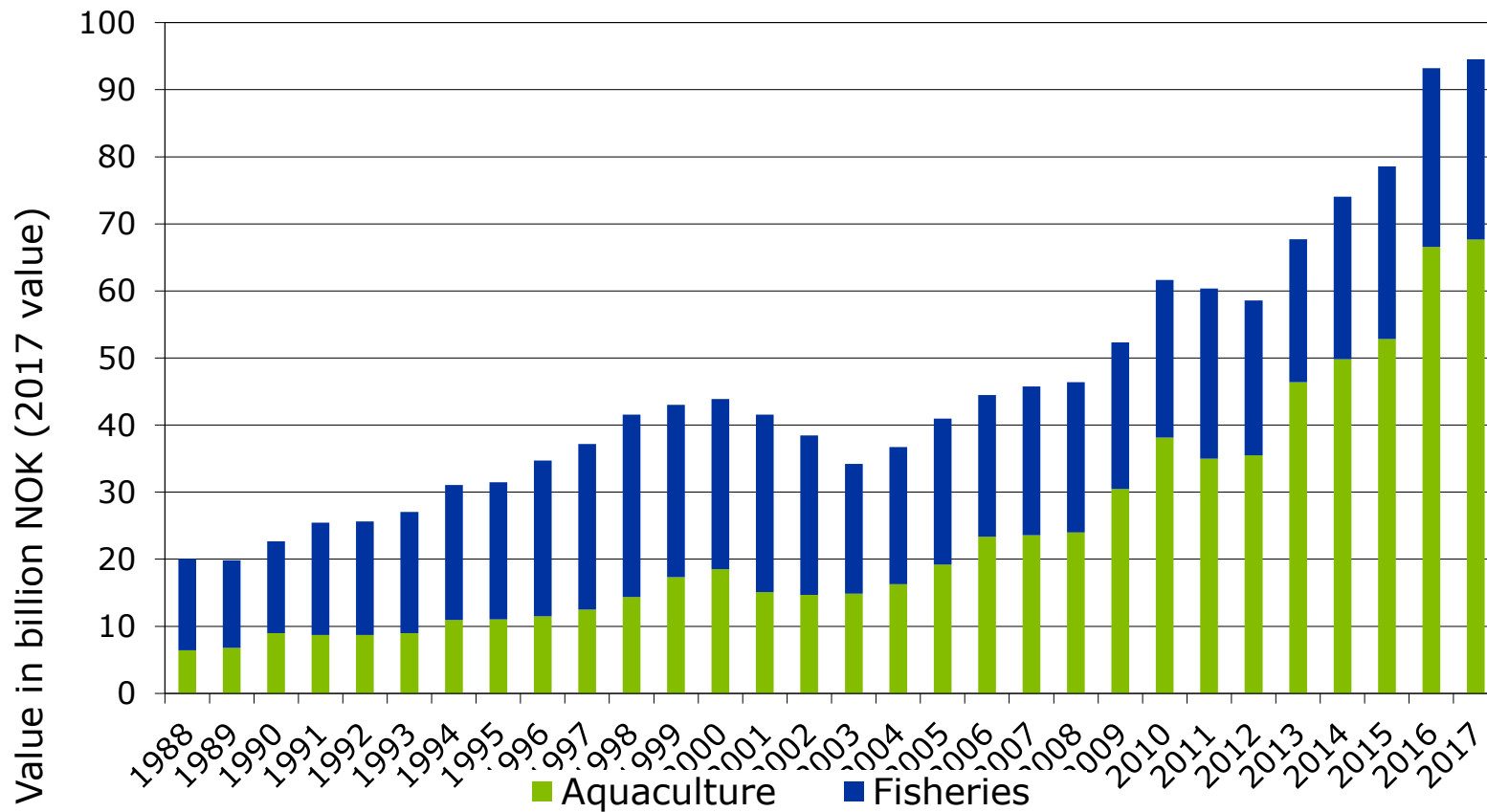
# The leading export nations of seafood

2015



# Norwegian seafood export

1988 – 2017





# **Our Way - "The Norwegian Management Model"**



# The Two Components of Fishery Management

- Fisheries management is based on two set of **measures**, which differ in aims and modalities:
  1. Maintaining fish stock productivity through technical measures and enforcement (output control)
  2. Adjusting catch capacity to stock renewal through access control or allocation of rights to fish (input control)
- In general, management **instruments** fall into two categories, namely regulatory instruments and economic instruments
- Norway use regulatory instruments coupled with strict control measures to ensure sustainability, and draw on economic instruments to enhance efficiency



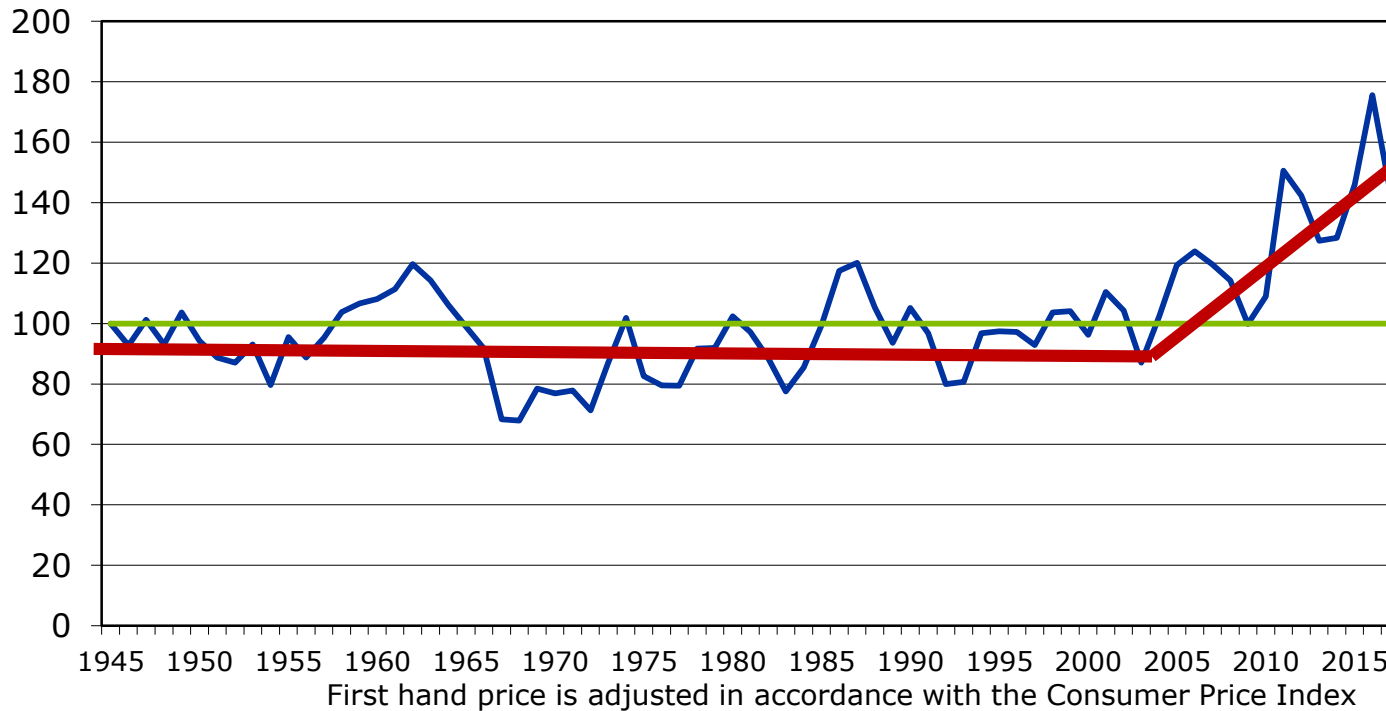
# Challenges

- Overall productivity growth
  - The harvest sector has to increase its productivity in order to compete with other sectors
- Technological capacity creep (est. 3% per annum)
- Limited resources
- Prices are stable



# Index of the weighted average first hand real price of fish

All species 1945 – 2017

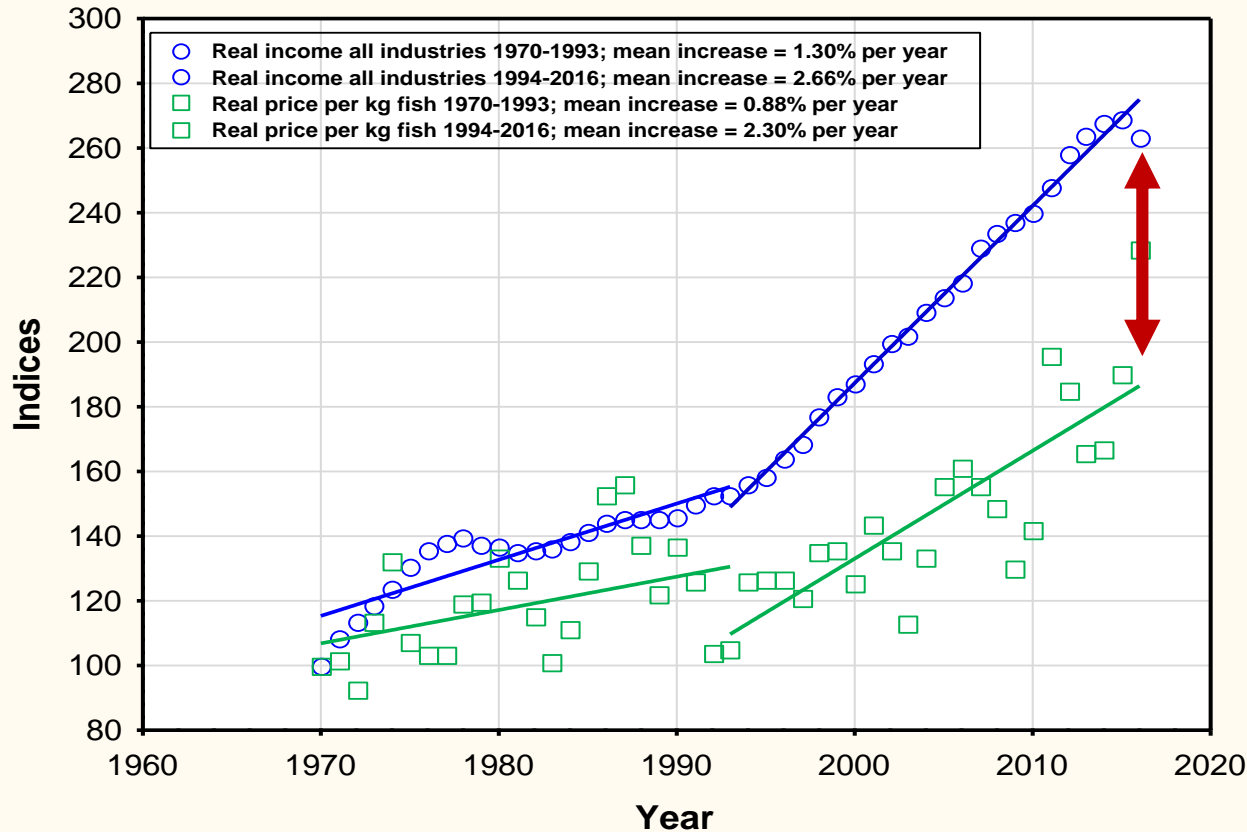


**1945=100**

First hand price is adjusted in accordance with the Consumer Price Index

# Development in income and first-hand price (indexed)

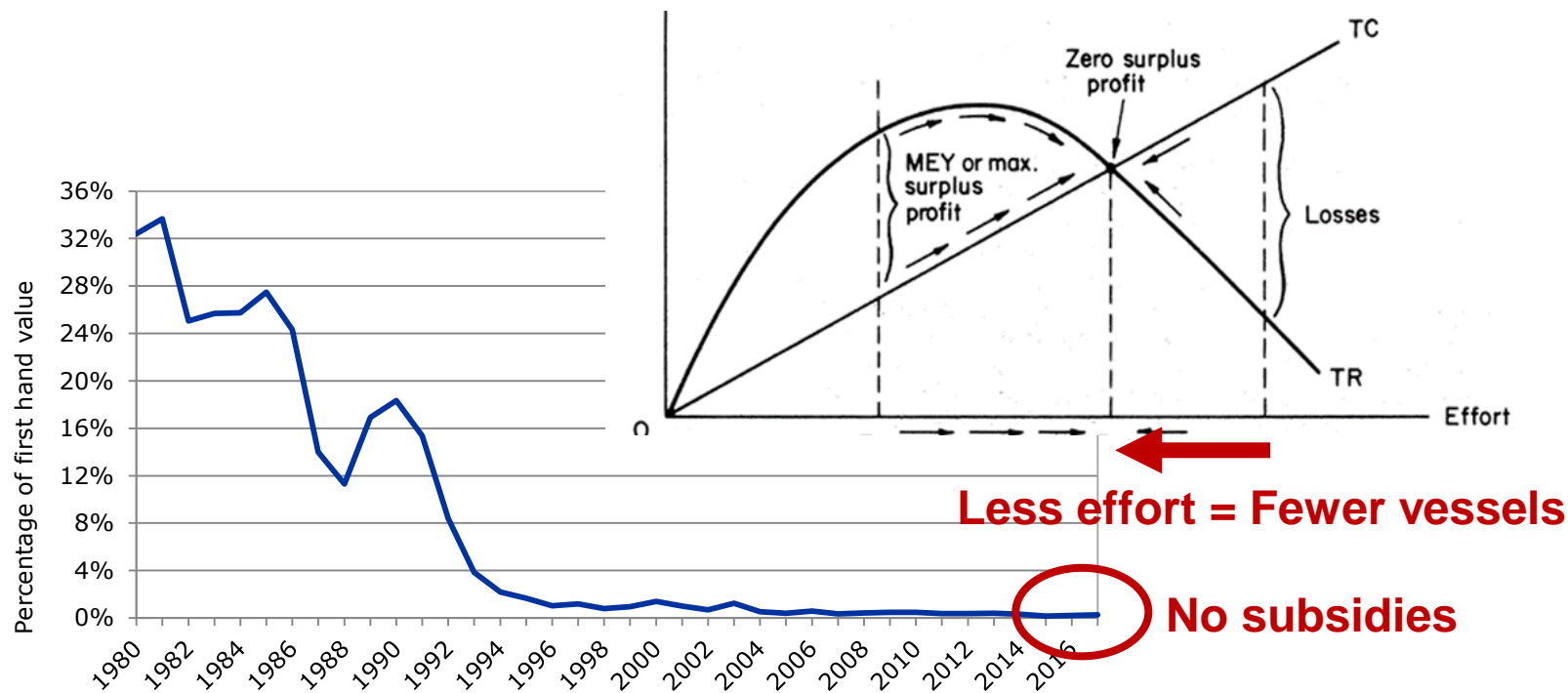
Norway 1970–2016



Indicate an **increasing gap** between income generated from selling fish, and the level of wages in Norway.

# Governmental financial transfer to the fishing fleet

1980 – 2017



# Capacity Adjustment

- Technical capacity reduction *per se* is not a goal
- Economic instruments are necessary in order to:
  - facilitate productivity growth and efficiency
  - achieve better profitability
  - improve utilisation of current capacity
- Capacity adjustment is a continuous process and with the right set of incentives the industry can adapt without government intervention
- Market-like instruments provide these incentives, and ensure an industry-driven capacity adjustment



# Market-like instruments in Norway

- Voluntary measures
- Flexibility
- User pays – user gains
- Safe-guards
  - Cap on quota consecration
  - Transactions only within the vessel groups
  - Scrapping requirement





# Current Instruments

		Management instruments to regulate the fisheries		Management instruments to adjust harvest capacity	
		Input	Output		
Denomination	Number of vessels*	Licence to fish	IVQ**	Buy-back programs	SQS***
Ocean-going vessels	241	X	X		X
Coastal vessels; 15-28m	235	X	X		X
Coastal vessels; 11-15m	657	X	X		X
Coastal vessels; 0-11m****	1170	X	X		

\* 2018

\*\* Individual Vessel Quota

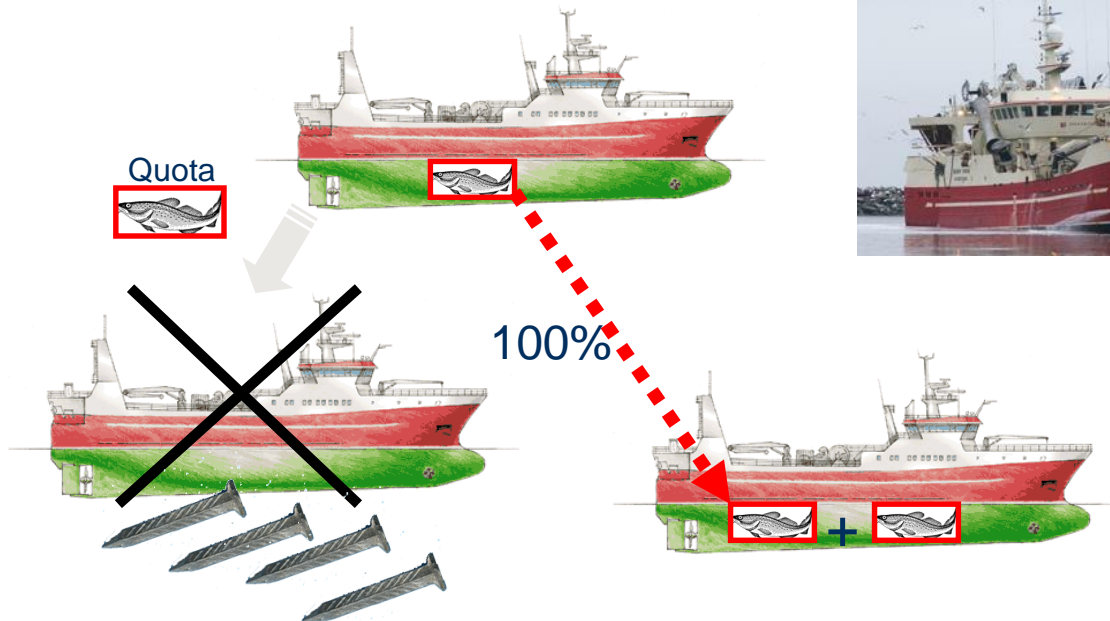
\*\*\*Structural Quota System

\*\*\*\*Full time vesels



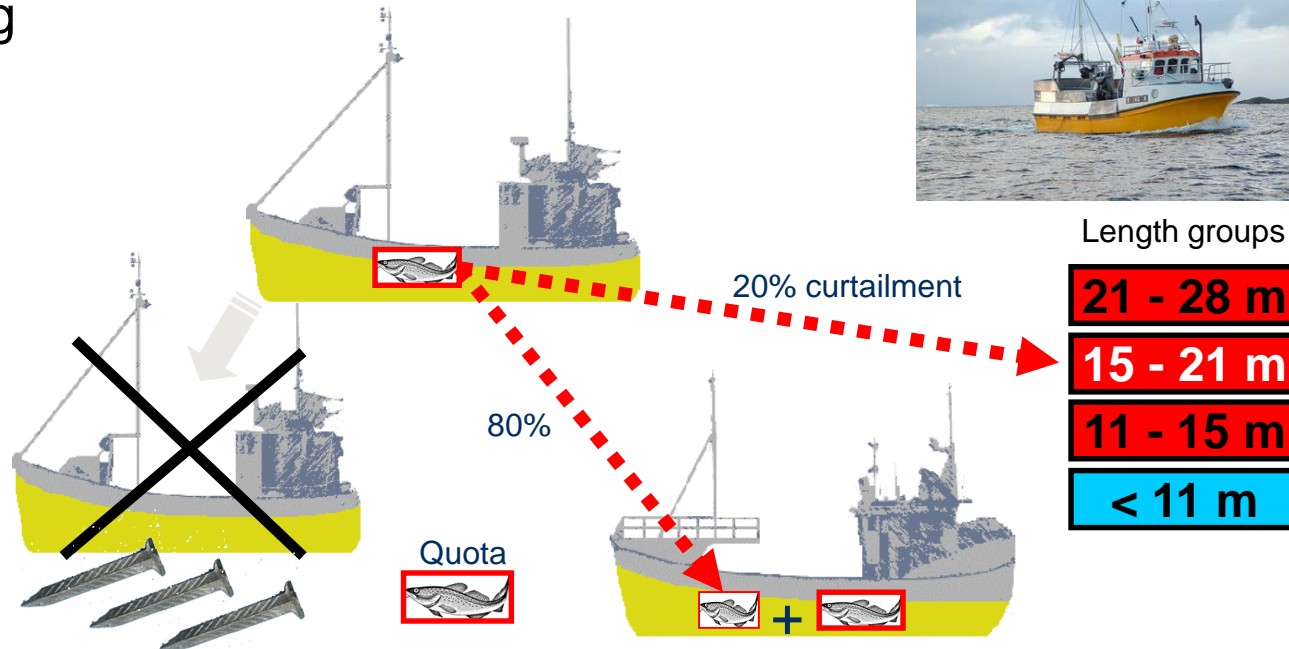
# Structural Quota System – Offshore Fleet

- Structural quota; 20 years duration
- Only for vessels holding a valid license
- One vessel must be scrapped



# Structural Quota System – Coastal Fleet

- Structural quota; 20 years duration
- Licensed vessels and mandatory scrapping



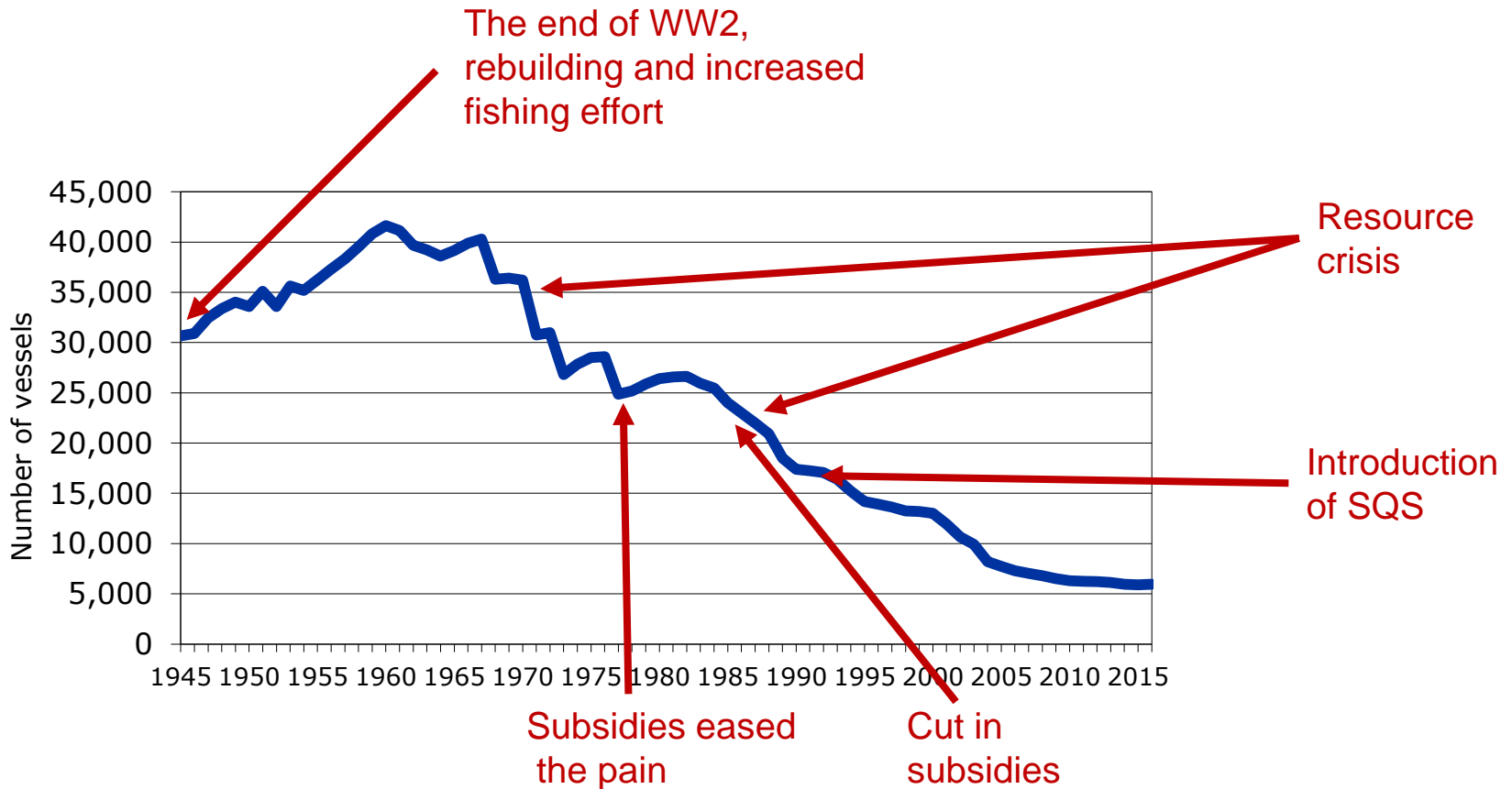
# The Structure Quota System

## - Results

<b>Vessel group</b>	<b>Percentage structural quotas</b>
Purse seiners herring	18,60 %
Pelagic trawlers	54,70 %
Coastal vessels herring	39,60 %
Cod trawlers	57,00 %
Ocean going line fishing vessels for cod	57,10 %
Coastal vessels cod	22,20 %

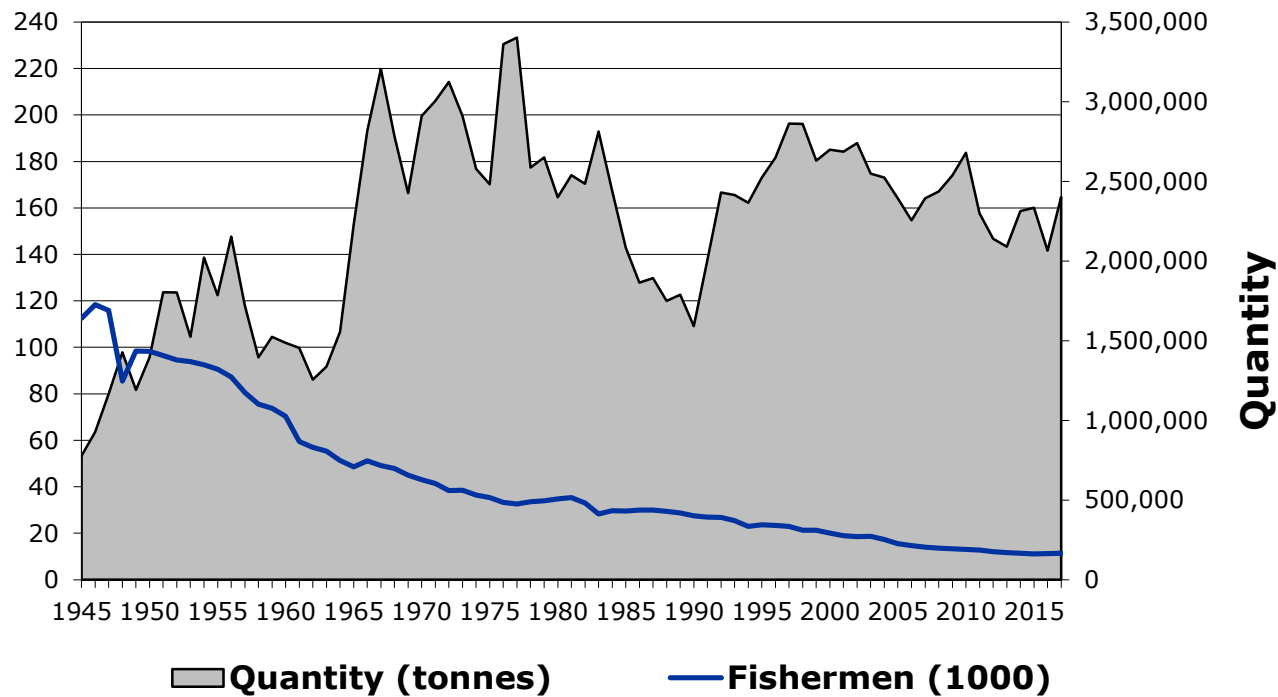
# Total number of fishing vessels

1945 – 2017



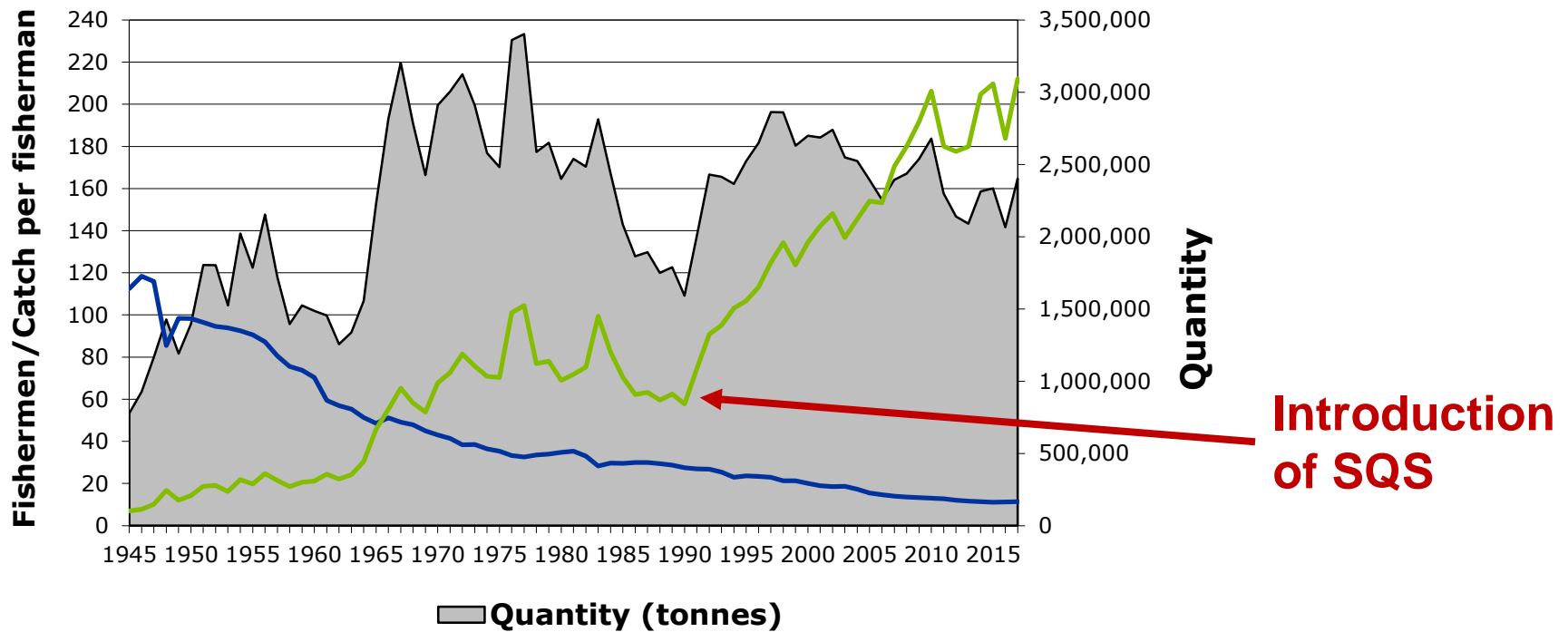
# Norwegian catches versus fishermen

1945–2017



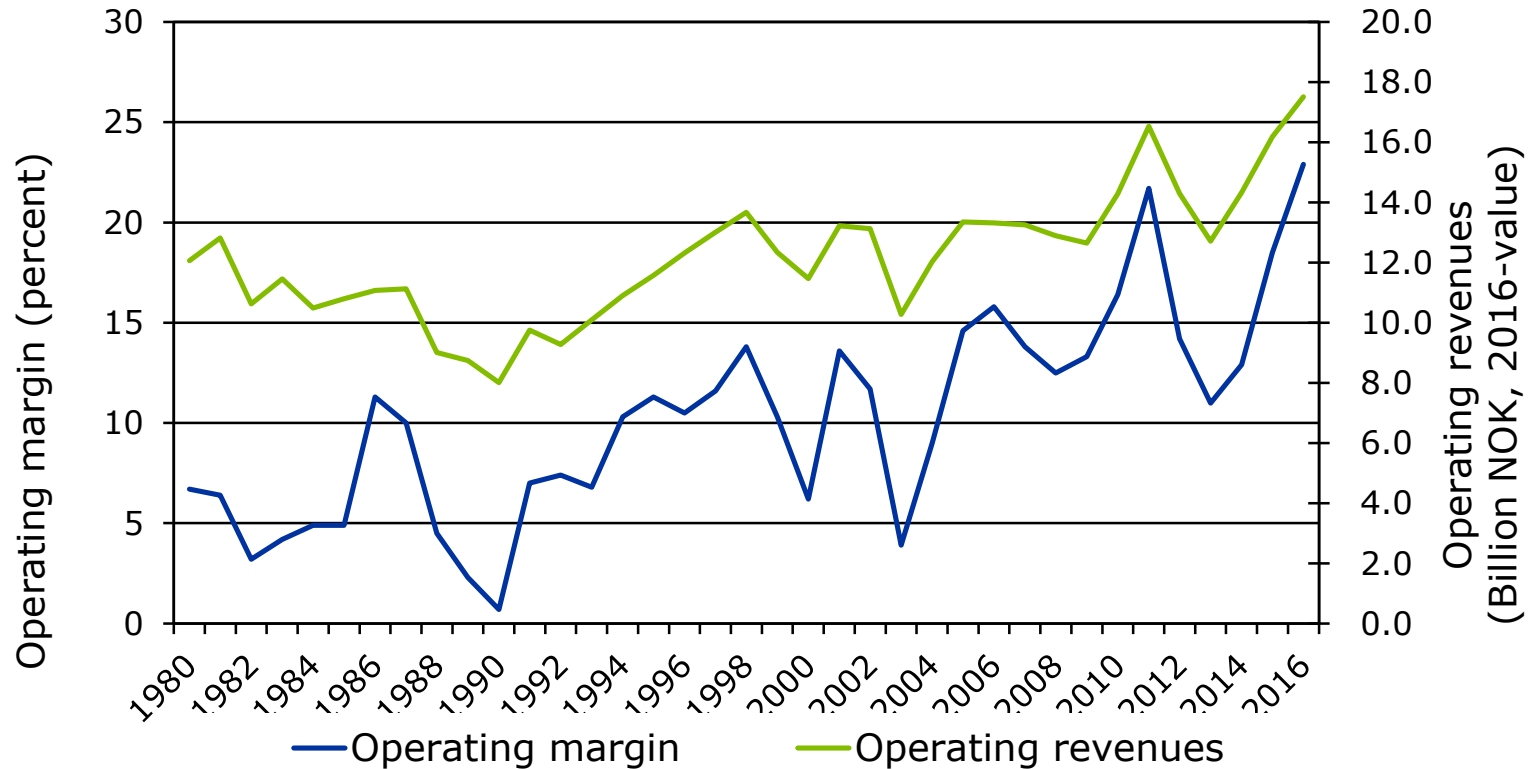
# Norwegian catches versus fishers

1945–2017



# Average operating margin and total operating revenues

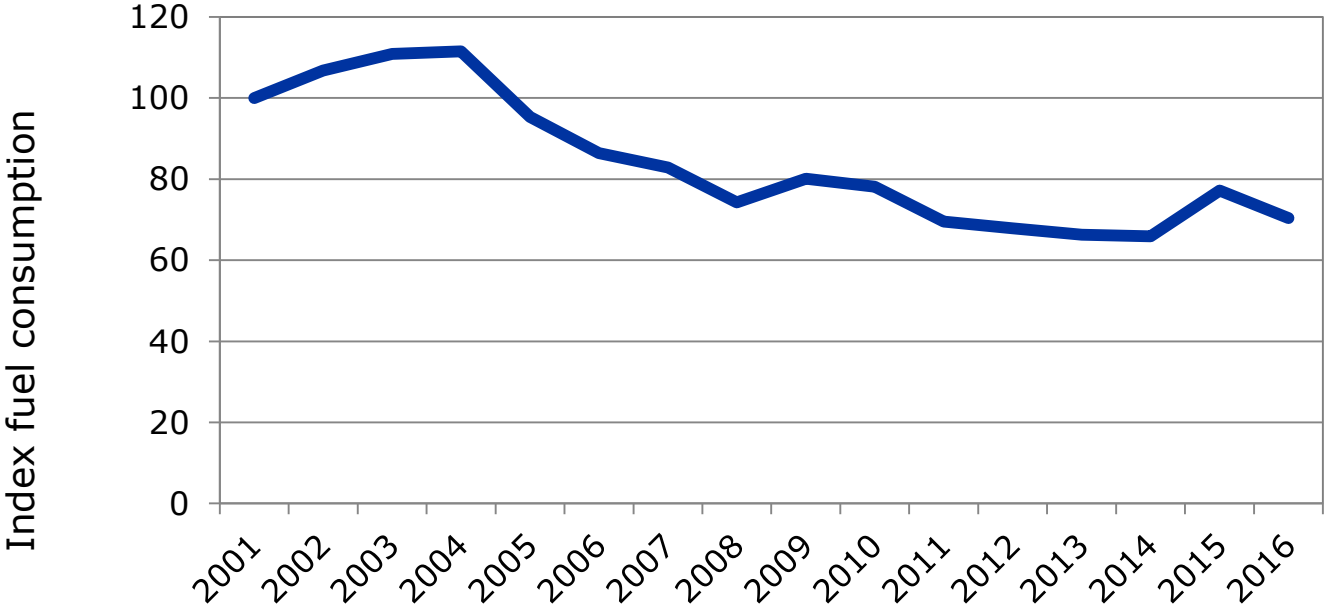
1980-2016





# Fuel consumption in the Norwegian fishing fleet

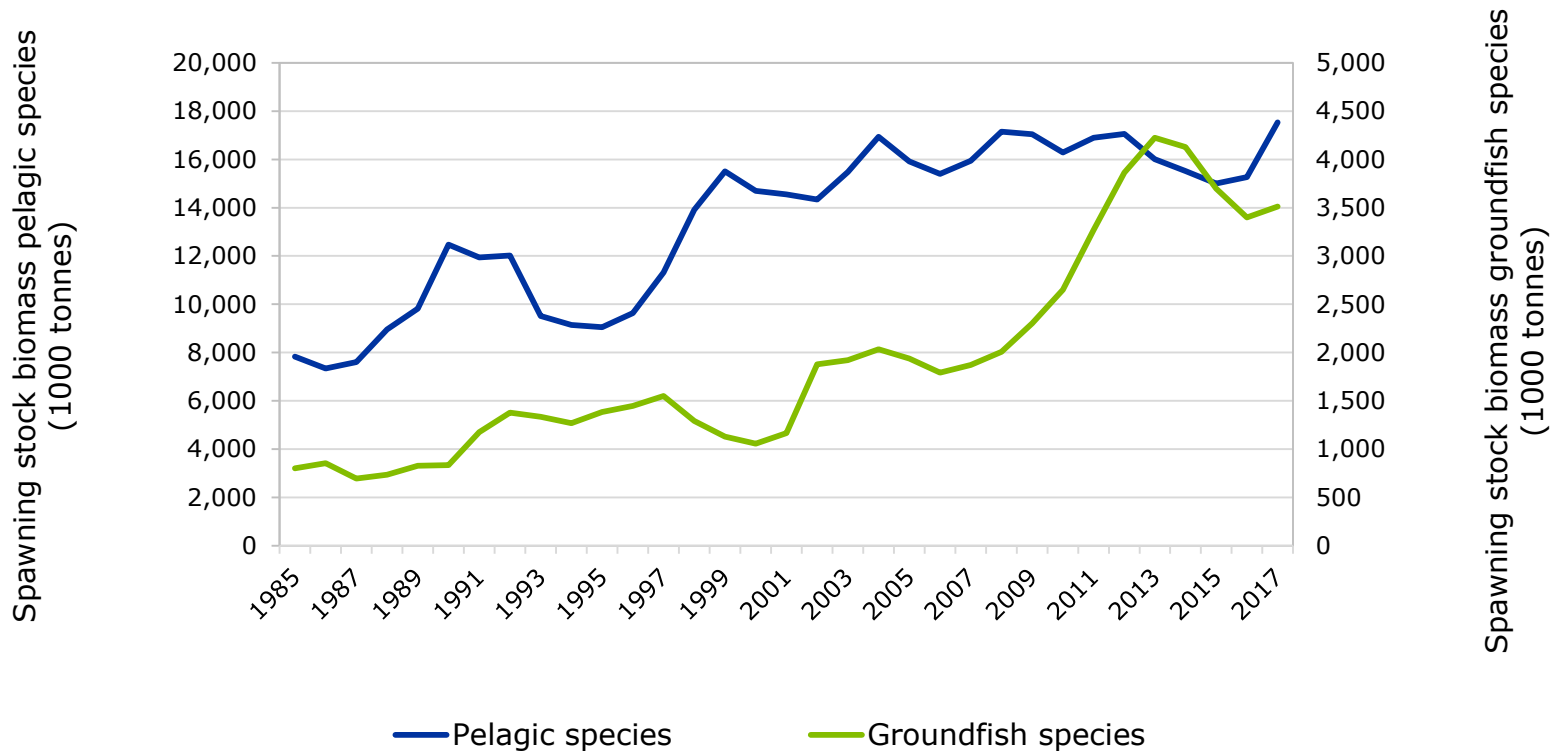
2001 – 2016



2001=100

# Spawning stock biomass

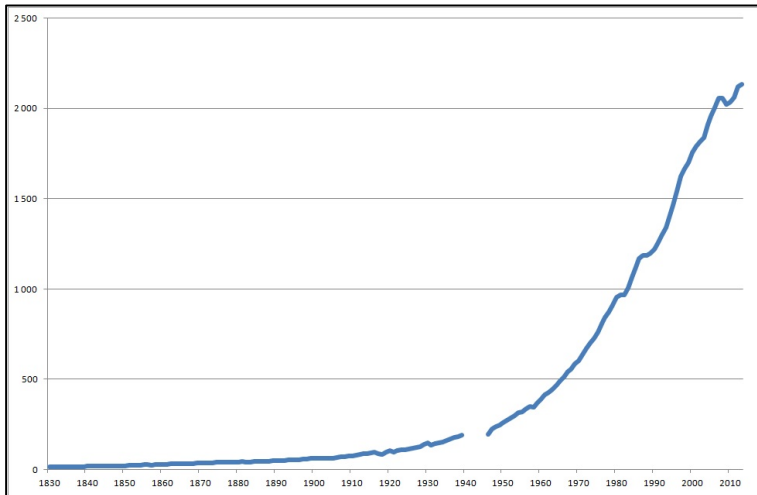
1985–2017



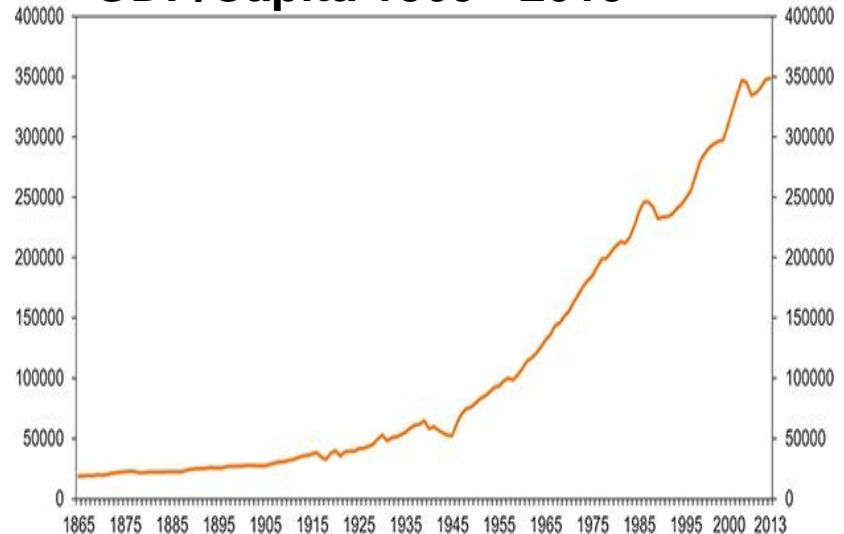
# Norway - From poor to rich

A transforming society absorbs the leavers --  
Economic growth and job creation post WW2 have given  
a social cost-free fisheries sector transformation

## GDP 1830 - 2010



## GDP/Capita 1865 - 2013



# Observations & Conclusions

- Fewer vessels and fishermen is inevitable
- Subsidies will only delay the transition
- With strong output control, harvest capacity is primarily an economic issue
- Capacity adjustment is a continuous process
- The industry is able to adapt without government intervention
- Strong incentives and favorable allocation of the benefits are important conditions to succeed



# The Norwegian fishing fleet

## Vessels and first hand value

	Number of vessels		Catch value (NOK 1000)	
		%		%
Less than 11 meters over all length	5 001	81,5 %	2 178 185	12,1 %
11-14,99 meters over all length	657	10,7 %	1 609 023	8,9 %
15-20,99 meters over all length	126	2,1 %	634 145	3,5 %
21-27,99 meters over all length	109	1,8 %	1 327 097	7,3 %
28 meters over all length and above	241	3,9 %	12 271 101	67,9 %
Undefined			44 980	0,2 %
Total	6 134	100,0 %	18 064 530	100,0 %



# Gradual Change in Policy Objectives

## Objectives in 1970, in order of priority:

- 1) Employment and coast rural settlement
- 2) Economic viability
- 3) Ecological sustainability



## Objectives today, in order of priority:

- 1) Ecological sustainability; a prerequisite for achieving;
- 2) Profitability without subsidies
- 3) Contribute to employment and coast rural settlement

## Objectives in 2020?



# Why a Restructuring of a Successful quota system?

- Current quota system deliver, but is:
  - Complex
  - Rigid
  - The contribution from the fleet to coastal community and the society high enough?
  - What about the small-scale fleet?
- A new quota system will be presented in a white paper to the Norwegian Parliament within a year.
  - Simplifications?
  - Increased flexibility?
  - Introduction of resource rent taxation?
  - Introduction of a market like system in the small scale fleet?



당신의 따뜻한 관심에  
감사드립니다



# Act relating to the management of wild living marine resources (Marine Resources Act)

- **Section 1 *Purpose***
  - The purpose of this Act is to ensure sustainable and economically profitable management of wild living marine resources and genetic material derived from them, and to promote employment and settlement in coastal communities.
- **Section 2 *Rights to resources***
  - Wild living marine resources belong to Norwegian society as a whole.



# Resource Rent in Norway – two out of three

## Norway abundant :

Water for Hydropower  
Oil and Gas for Energy  
Fish for Food

## Norway taxation / extraction on the Natural resources

### Hydro Power Plants:

25 % company tax, resource rent tax 33% = 58 % total tax

### Petroleum Activity,.

25 % company tax + 53 % resource rent tax = 78 % total tax

### Fishing

25% company tax + 0 % resource rent tax = 25 % total tax



	Number	Employees
Vessels	6 136	
Fishermen	Main occupation	9 486
	Part time occupation	+ 1 834 = 11 320
Processing industry Plants	431	10 560
Fish farming Licences (All species including shellfish and algae)	2 196	7 987
<b>Total number of employees</b>		<b>29 867</b>

