European Commission

Developments in fishing as a business: The 2016 Annual Economic Report on the EU Fishing Fleet

Scientific, Technical and Economic Committee for Fisheries (STECF)

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Joint Research Centre
the European Commission's in-house science service

Joint Research Centre

Outline of my talk

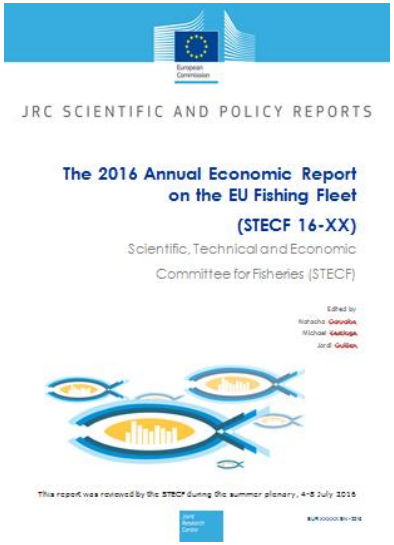
- **Short background**
  - Introduction
  - Annual Economic Report on the EU Fishing Fleet (STECF AER)
- **Brief Overview of the EU Fleet**
  - Fleet capacity, employment, fishing effort and landings
- **Economic performance results and recent trends**
  - Perfomance at the EU level, by scale of fishing operation - small-scale (SSF), large-scale (LSF) and distant-water (DWF) fleets and by major fishing region
- **Summary of main findings**
  - Factors affecting the performance of the EU fleet

Background

COMMERCIAL FISHING AS AN ECONOMIC ACTIVITY

- People fish to make a profit – it's a buisness
- Fisheries management and ocean governance have many conflicting goals
- It is impossible to maximise biological, social and economic objectives
- There are trade-offs and decisions need to be taken
- The Commission needs timely, scientific information on which to make sound decisions
- The AER is the main tool to monitor the profitability of the EU fishing fleet and to assess the socio-economic impacts of new policies and evaluate the effectiveness of existing ones.

Background



THE ANNUAL ECONOMIC REPORT (AER)

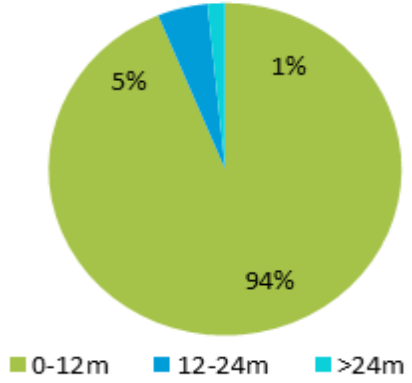
- The AER is a detailed annual exercise that estimates the EU fleet's economic performance and provides insight into the driving factors behind recent trends.
- Based on data officially submitted by Member States through the EU Data Collection Framework (DCF)
- The DCF/JRC database is one of the most comprehensive databases on fisheries cost and earnings globally
- The AER and data used to produce it are reviewed by the Commission's Scientific, Technical and Economic Committe for Fisheries (STECF).

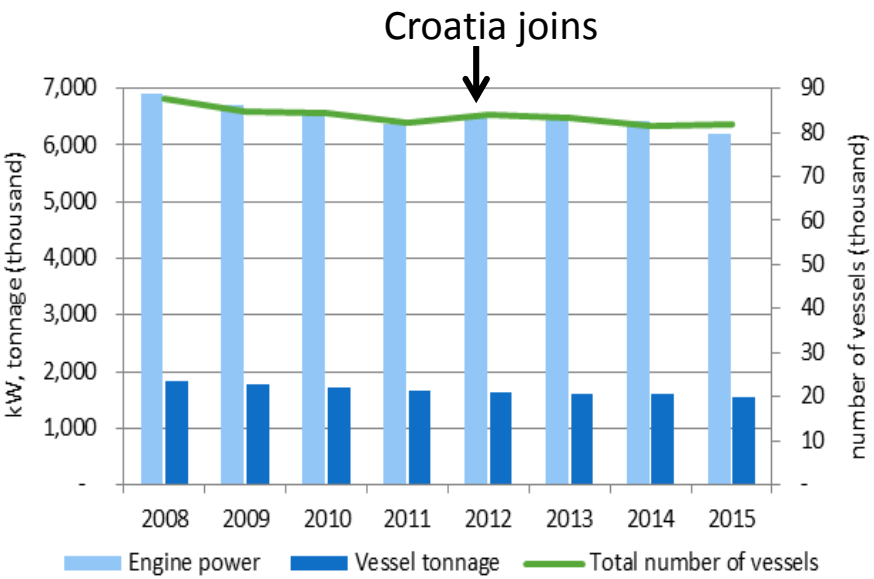
Brief Overview of the EU fleet

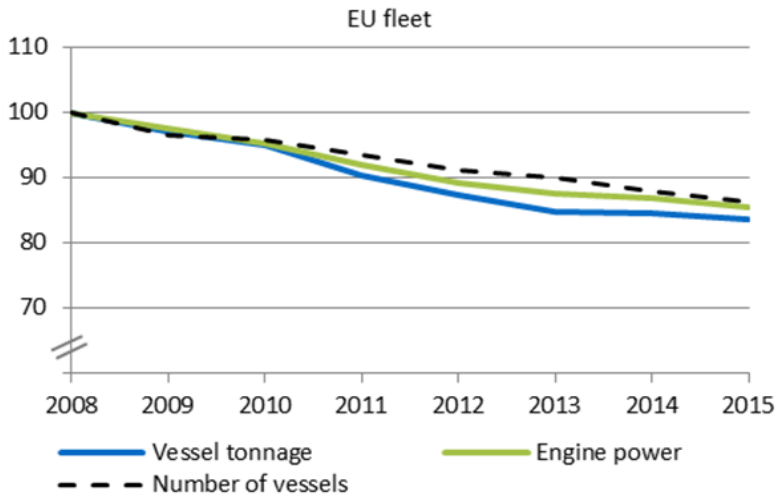
FLEET CAPACITY

- 81,500 vessels
- 1.6 million GT
- 6.4 million kW.
- Capacity continues to steadily decrease (-2% per year vessel and kW, -3% in GT).
- Inactive vessels 17,860

  ~ 80% active / ~ 20% inactive



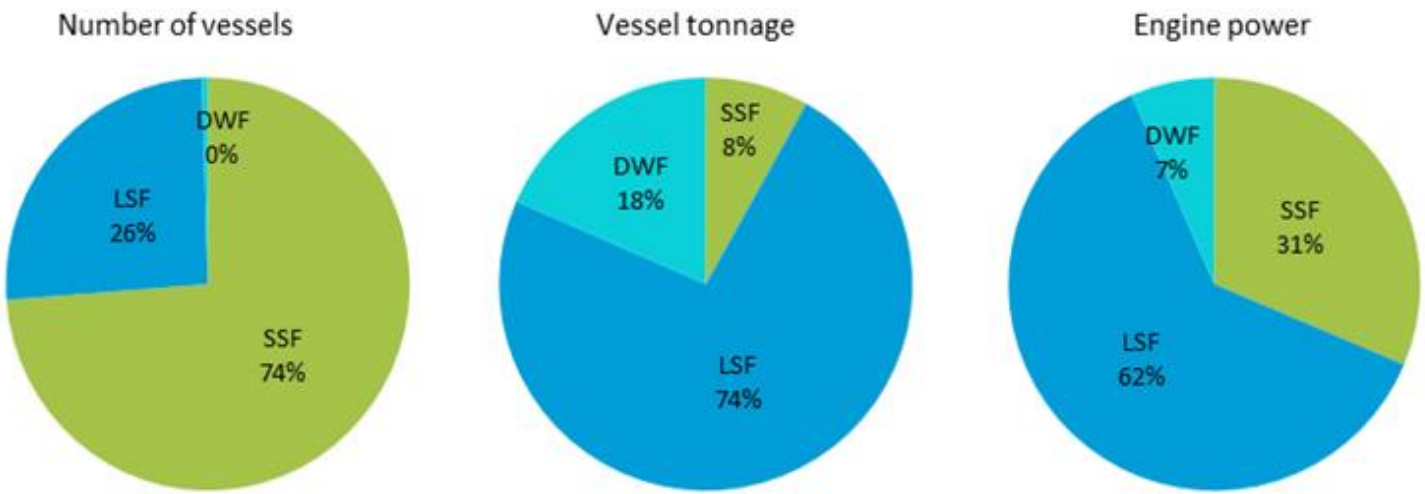




Brief Overview of the EU fleet

ACTIVE FLEET BY SCALE OF FISHING OPERATION

- Of the active vessels:
  - 74% small-scale coastal vessels (SSF) ; 31% kW and 8% GT
  - 26% large-scale vessels (LSF); 62% kW and 74% GT
  - less than 1% distant-water or high sea vessels (DWF); 7% kW; 18% GT



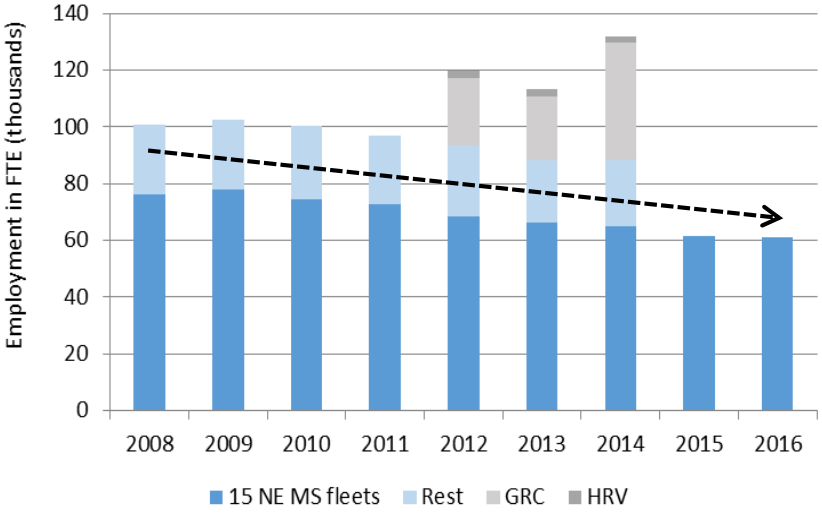
Brief Overview of the EU fleet

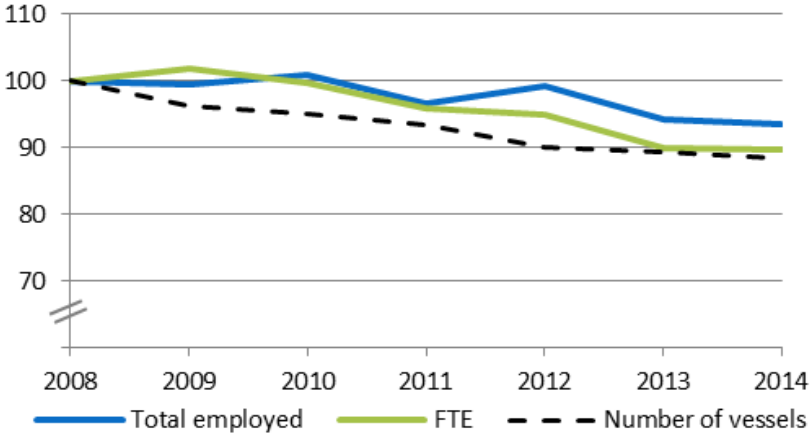
EMPLOYMENT

- 173 thousand fishers employed in 2014 (132 thousand FTEs)
- Employment: -1% p.a on average (-1.8% FTE).

  -6% since 2008 (-10% FTE).
- Five MS fleets employ 75% of the EU total:

  Spain, Italy, Greece, Portugal and the UK.

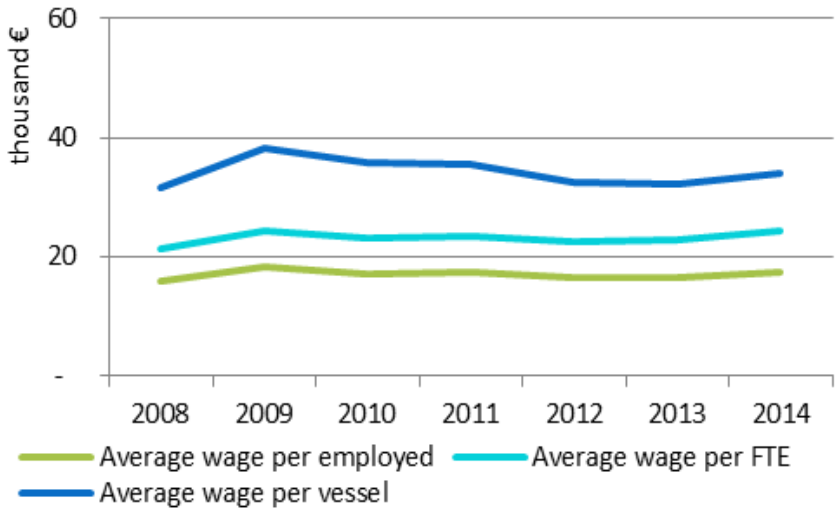


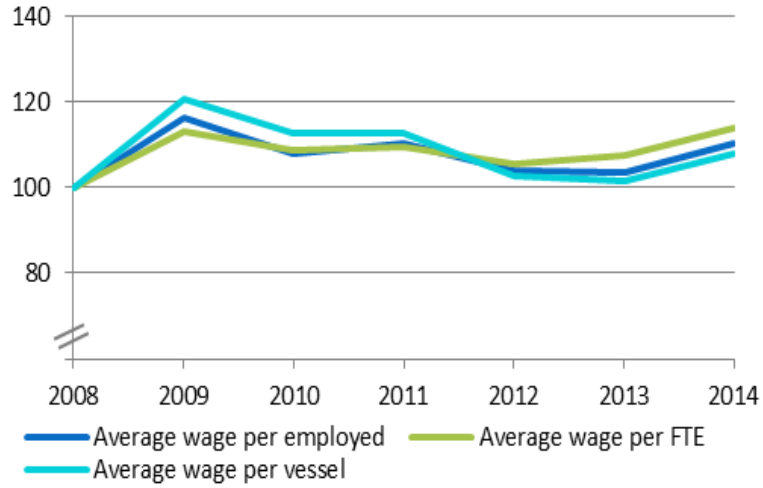


Brief Overview of the EU fleet

AVERAGE ANNUAL WAGE

- Average wage (per FTE) €23,800
- Wage LSF: €28,800 / wage SSF: €14,500
- Wages +2.4% p.a. per FTE (or +14% since 2008)
- Wages +1.7% p.a. per vessel (or +7.8% since 2008)

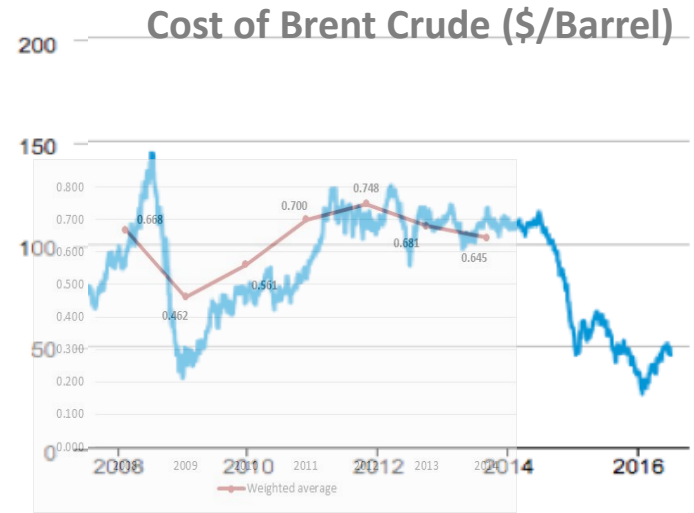


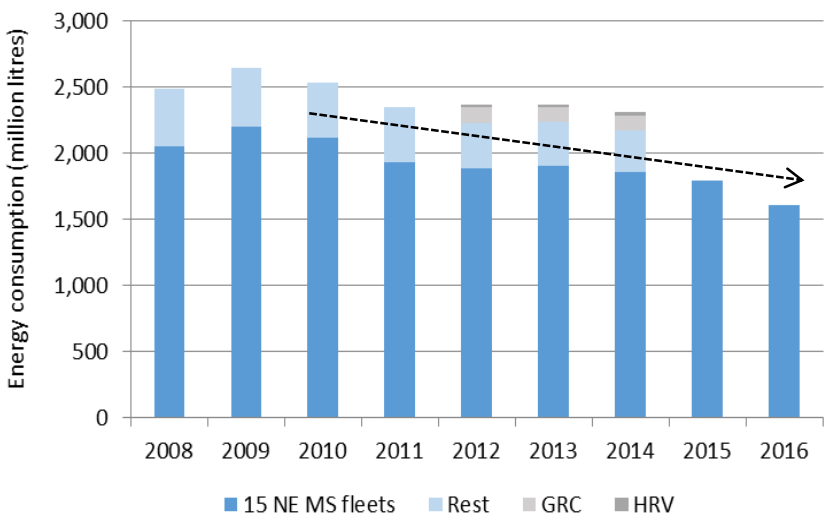


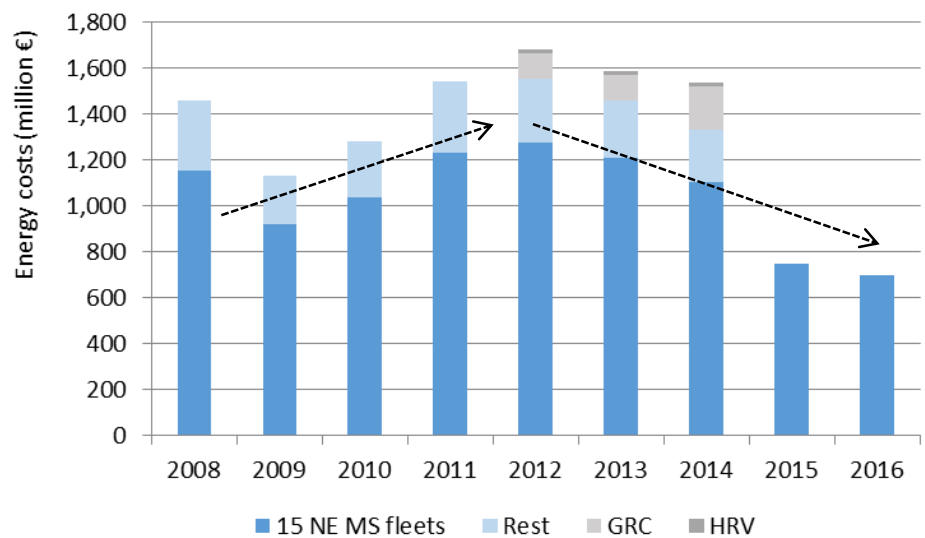
Brief Overview of the EU fleet

FISHING EFFORT AND FUEL USE

- Effort in days at sea down (-1%)
- Energy consumption down (-2.5 %)
- Fuel costs down (- 9%)



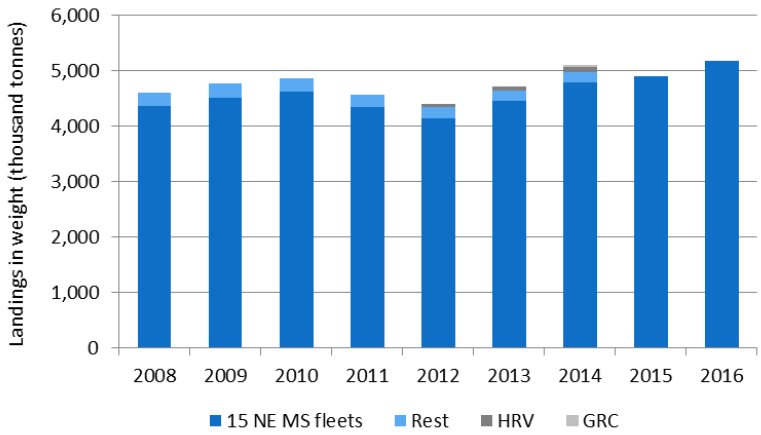


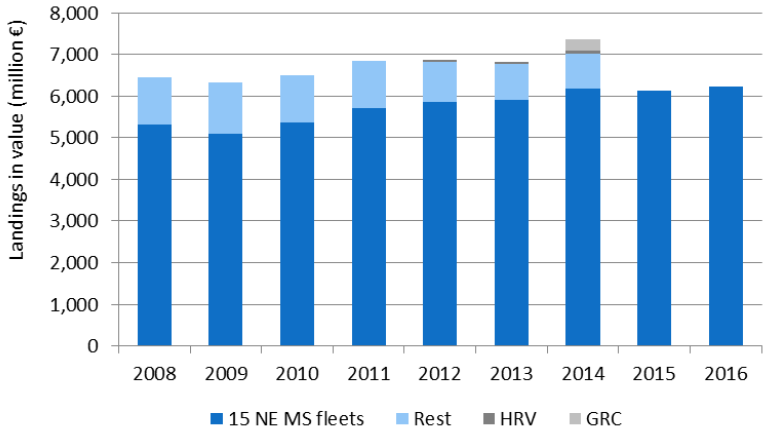


Brief Overview of the EU fleet

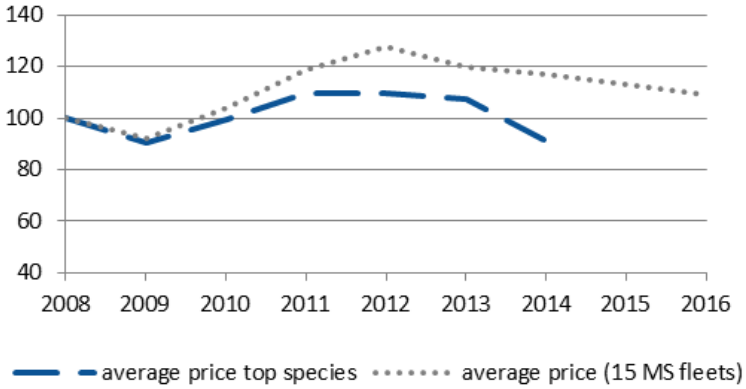
LANDINGS

- Landings (+7%), reaching over 5 million tonnes of seafood in 2014
- Worth > €7.1 billion in value (+4%)



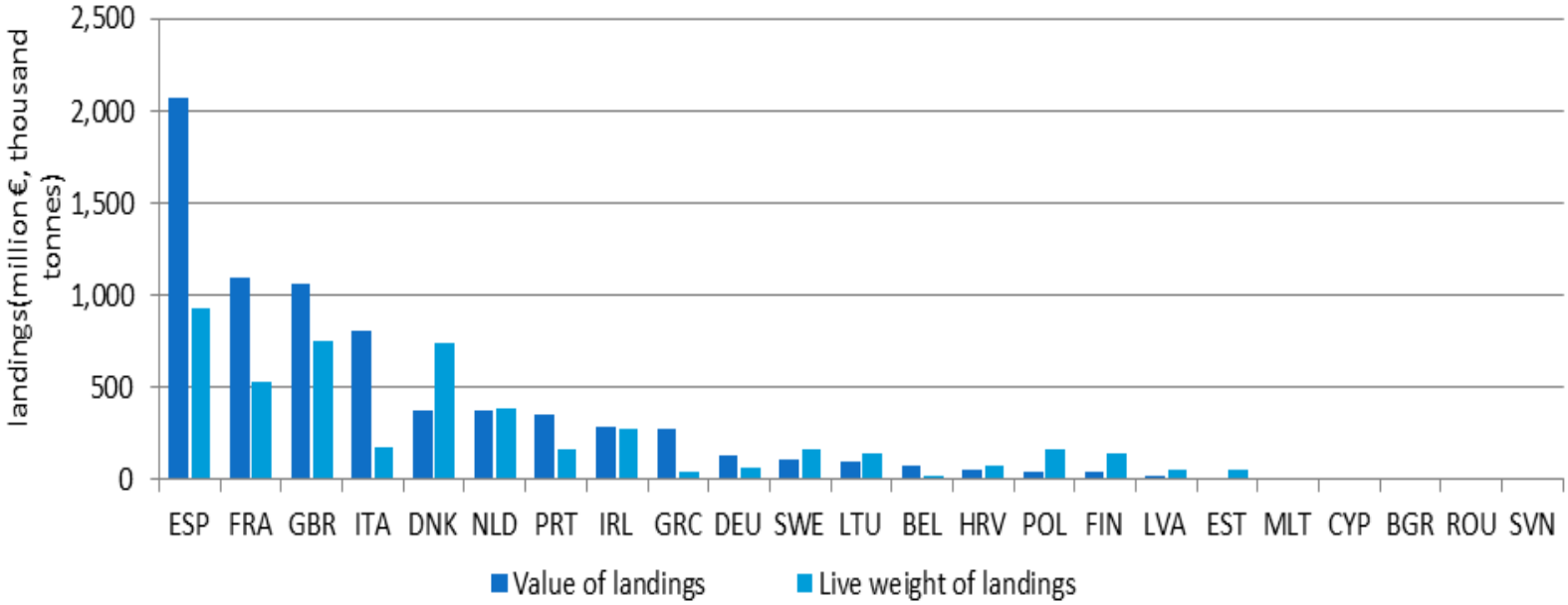


- Increases related to recovery of some stocks and higher TACs (e.g. mackerel, herring)
  - Average first sale price follow changes in supply



Brief Overview of the EU fleet

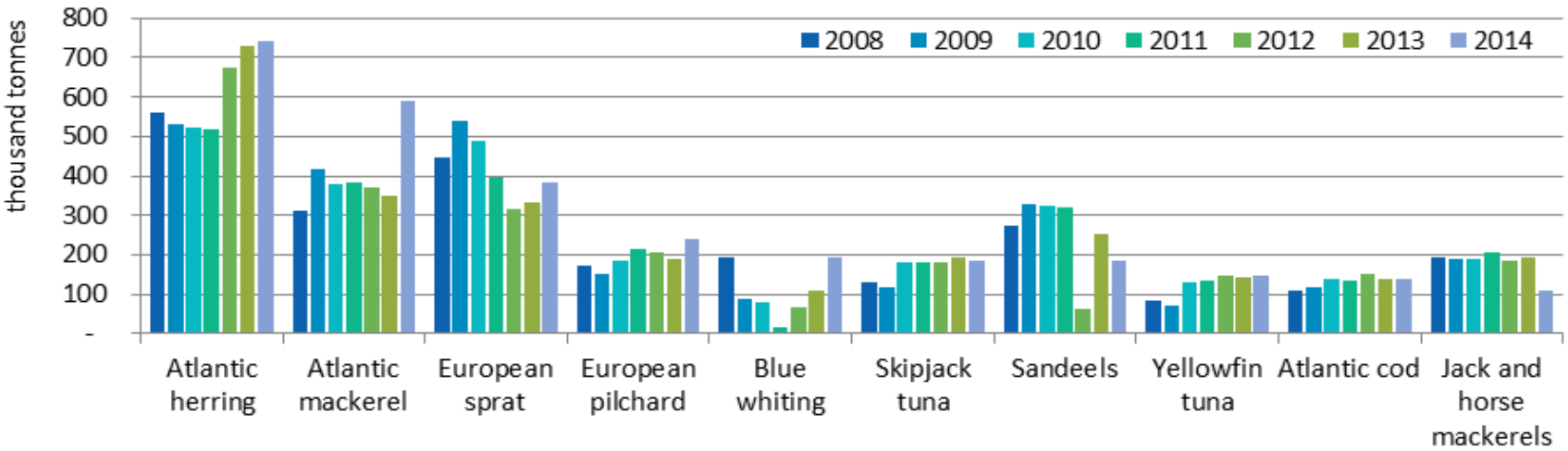
TOP CATCHES (landings)

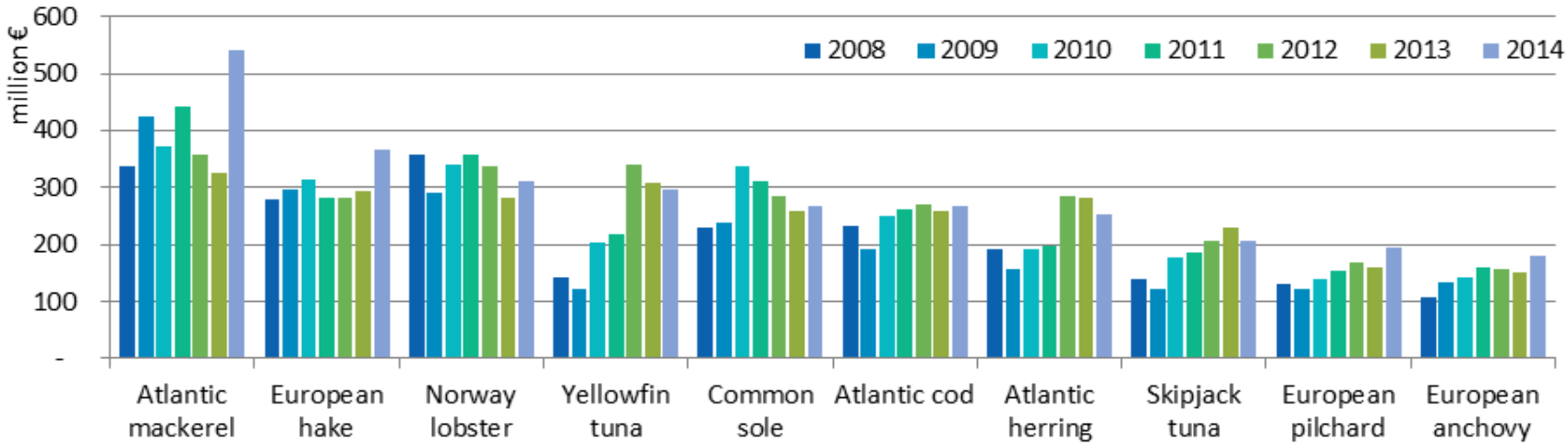


- High valued species composition: Spain, France Italy.
- Low valued species composition: Denmark, Sweden, Lithuania

Brief Overview of the EU fleet

TOP SPECIES LANDED

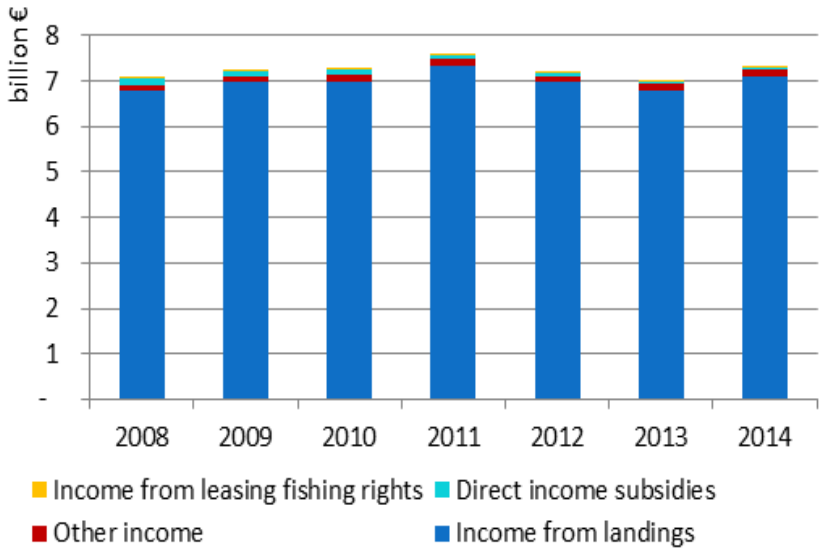


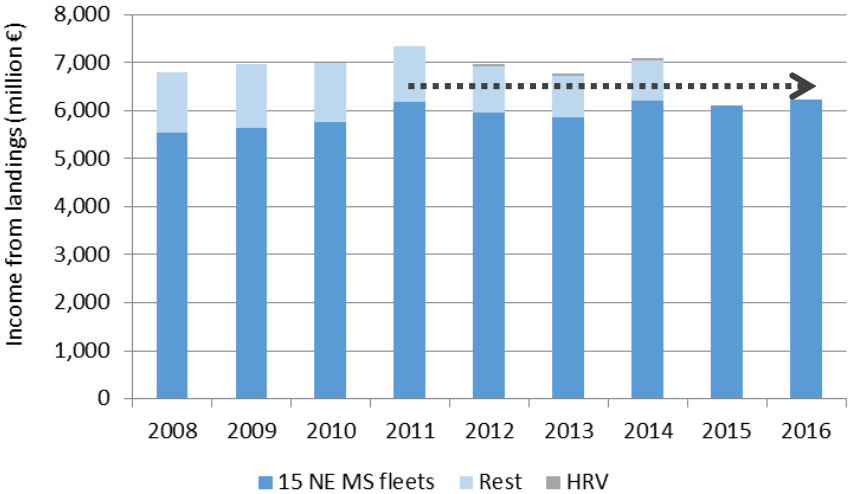


Main results and recent trends

REVENUE

- Revenue was €7.248 billion, +4.7% compared to 2013
- €7.1 billion in fish sales and €147 million in non-fishing income

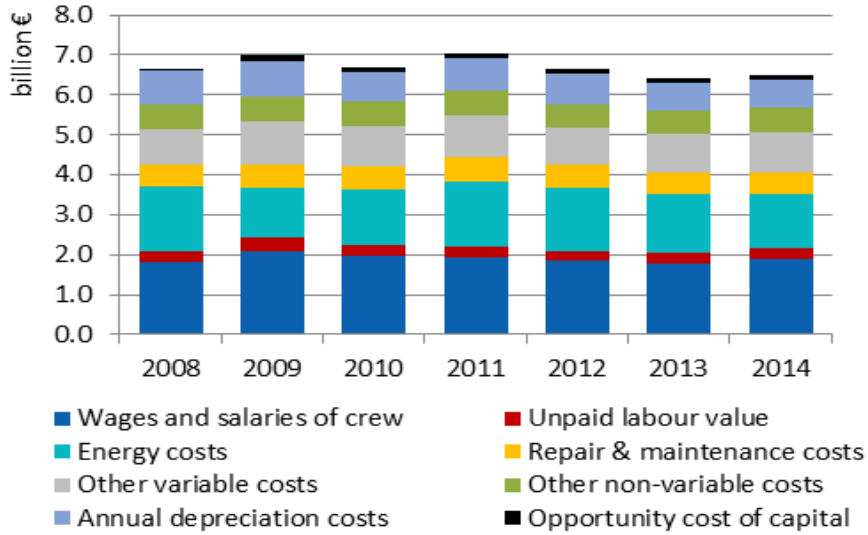


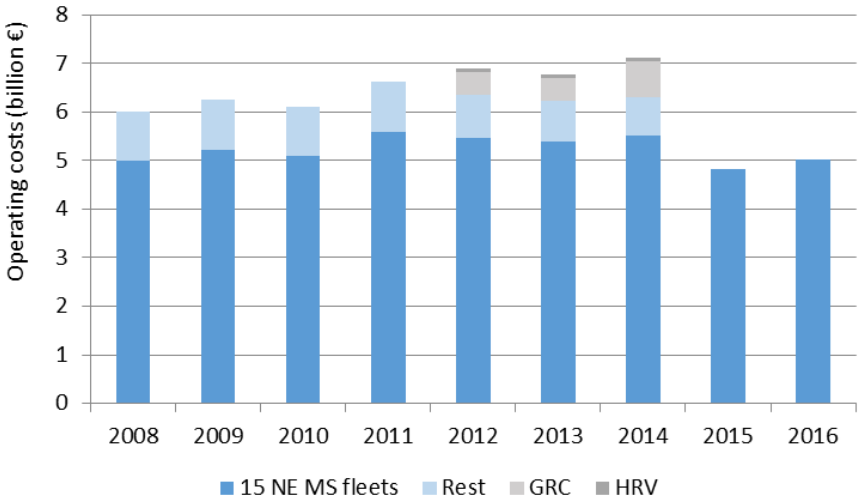


Main results and recent trends

COST STRUCTURE

- Labour costs €2.16 billion (38% of total operating costs) +6%
- Fuel costs €1.3 billion (24%) -9%
- Repair costs €577 million +5%
- Other costs linked to production €987 million +2%
- Non-variable costs €600 million 8%
- Annual depreciation €703m -2%
- Capital costs (opportunity cost of capital) €111 million +2%



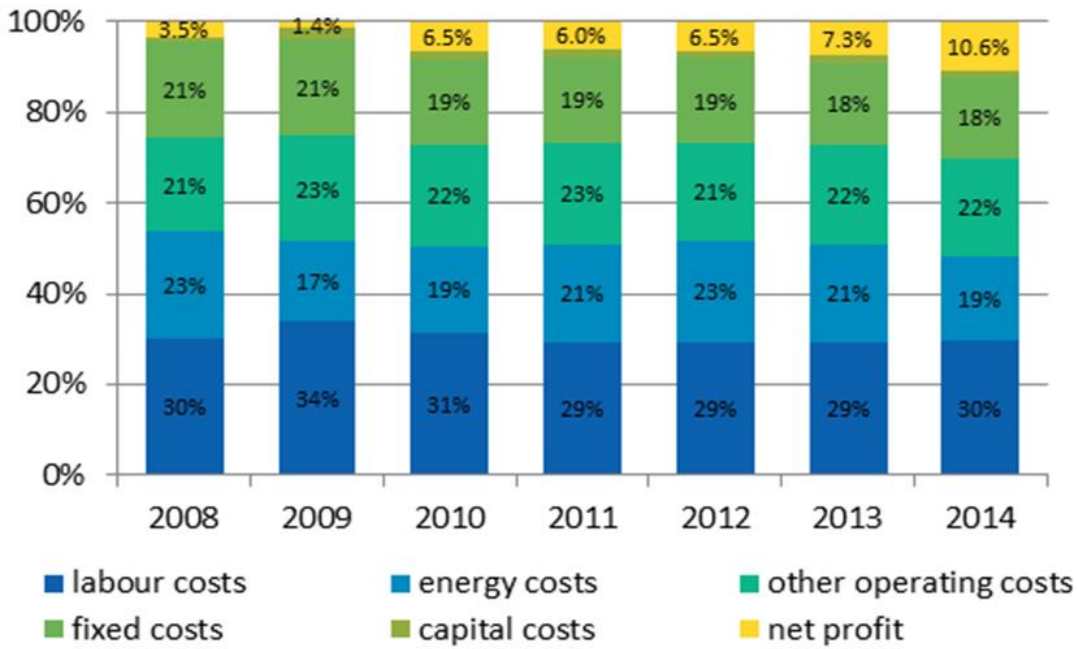


Main results and recent trends

REVENUE AND COSTS

- Total revenue €7.248 billion +4.7%
- Total costs €6.4 billion (+1%) = 89.4% of revenue

Total costs increased but revenue increased even more



Main results and recent trends

PROFITABILITY OF THE EU FLEET

- **Gross Value Added** = contribution of the fish catching sector to the economy in salaries and profits

  ↑ **€3.7 billion** (+10.8%)

- **Gross profit** = Revenue – operating costs

  ↑ **€1.6 billion** (+18.9%)

- **Net profit** = Revenue – operating costs – depreciation - capital costs

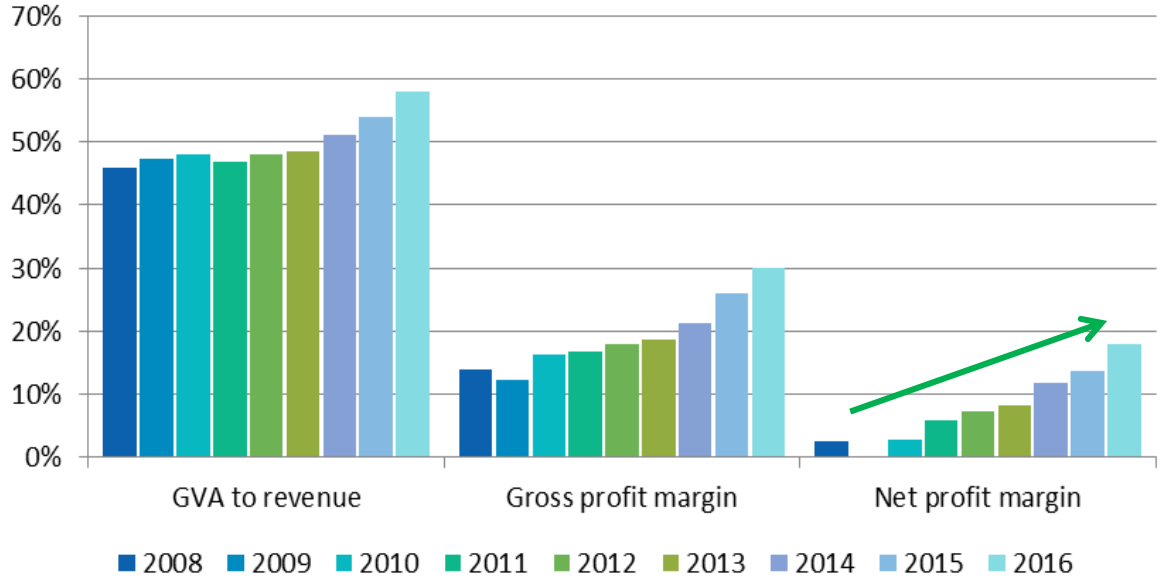
  ↑ **€770 million**, compared to €506 million in 2013 (+52%)

Main results and recent trends

PROFITABILITY OF THE EU FLEET

- **In relative terms:**
  - **10.6% of revenue was retained as net profit in 2014**

    7.8% in 2013
  - **2015: 14% profit margin**
  - **2016: 18% profit margin**



Main results and recent trends

PROFITABILITY BY MS FLEET

BUT

…while the EU fishing fleet as a whole was profitable:

- 3 out of the 22 MS fleets suffered gross losses in 2014
- 9 MS fleets suffered net losses

Belgium, Bulgaria, Cyprus, Croatia, **Finland**, **Lithuania**, Malta, **Poland** and **Sweden**

In 2015: 6 MS fleets

Bulgaria, Cyprus, Croatia, **Finland**, **Lithuania** and Malta post net losses

In 2016:

All NE Atlantic MS fleets post net profits

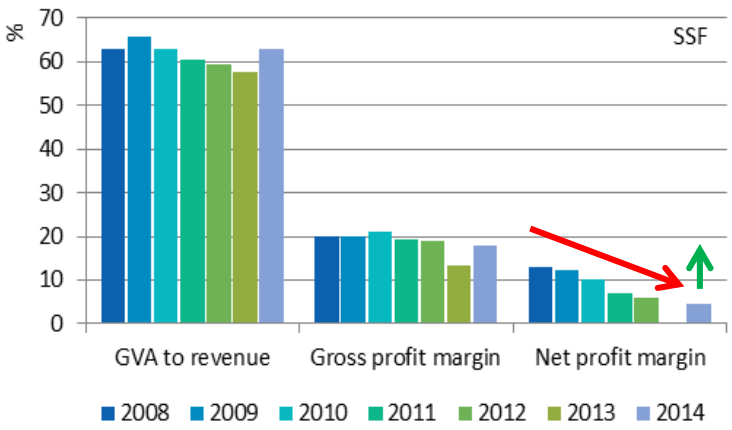
	GVA to revenue (%)	Gross profit margin (%)	Net profit margin (%)
BEL	42.8	8.7	-3.4
BGR	49.0	-0.9	-28.1
CYP	10.7	-1.5	-82.1
DEU	52.8	17.6	4.8
DNK	61.8	34.0	9.6
ESP	52.4	22.0	16.5
EST	63.2	26.7	11.2
FIN	39.4	18.3	-21.3
FRA	49.5	12.8	4.7
GBR	47.9	25.2	18.3
GRC	24.1	-27.8	-41.2
HRV	47.9	17.9	-20.3
IRL	52.4	27.0	15.4
ITA	55.9	27.4	6.7
LTU	14.4	5.2	-1.9
LVA	35.5	20.2	11.7
MLT	45.0	-7.3	-43.5
NLD	46.8	18.5	7.1
POL	45.2	12.7	-1.8
PRT	64.5	27.3	10.9
ROU	60.4	18.1	5.4
SVN	82.5	49.0	35.7
SWE	48.1	19.1	-0.7
EU excl. GRC	**51.5**	**21.9**	**10.6**
% Δ to 2013	5.8%	13.6%	45.6%

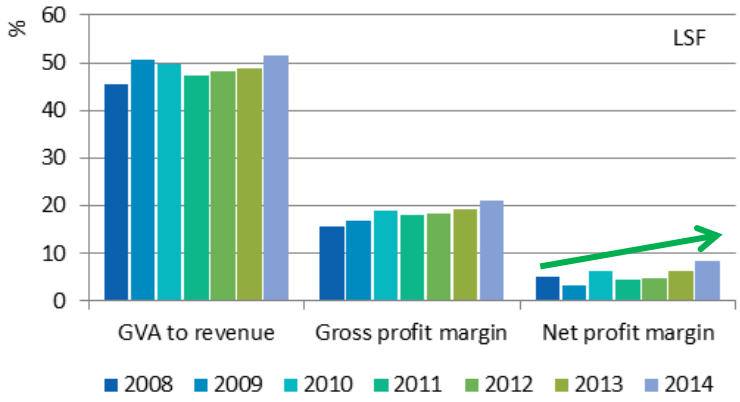
Main results and recent trends

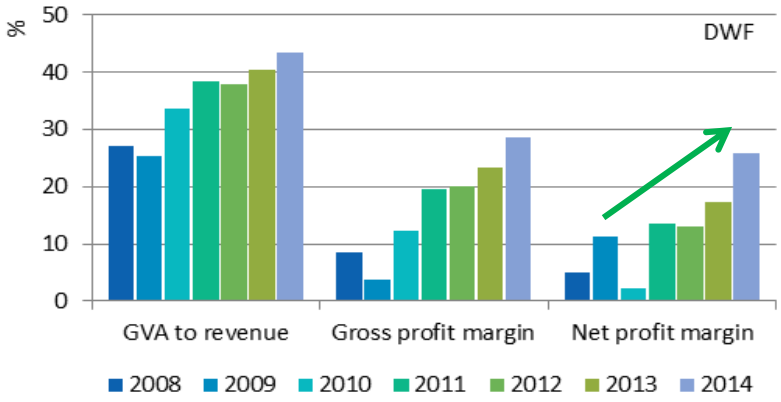
PROFITABILITY BY SCALE OF FISHING OPERATION

Differences were also observed by scale of operation:

- Performance of the LSF and DWF has steadily improved
- The SSF has gradually declined between 2008 and 2013, but showed some improvement in 2014.







Main results and recent trends

PERFORMANCE BY FISHING REGION

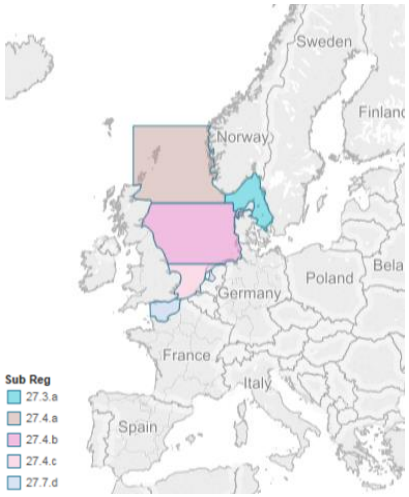
Differences were also observed by fishing region:

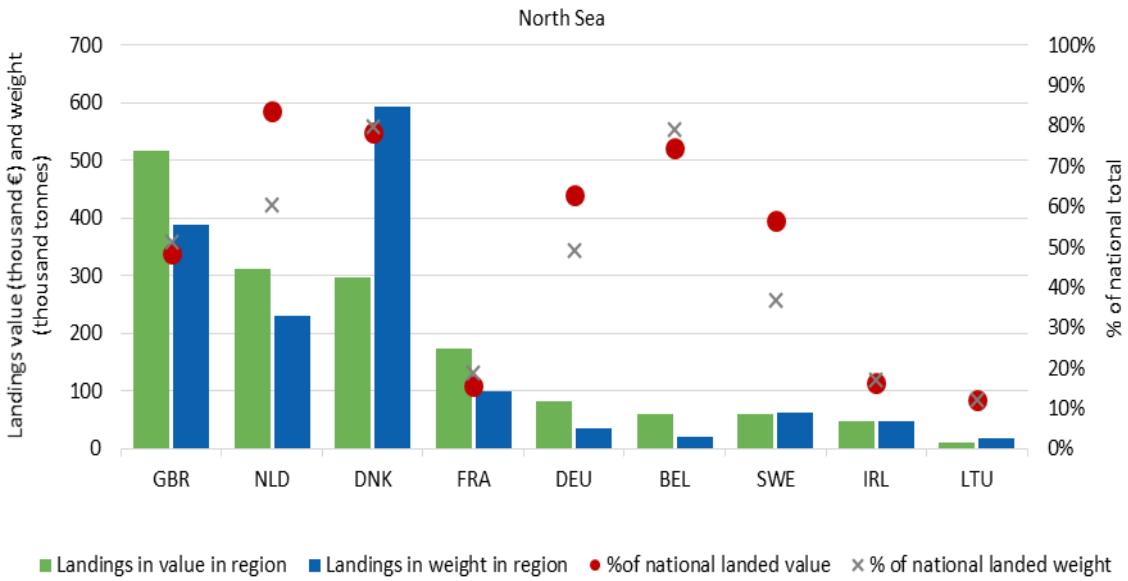
Region	Value of landings (K €)	as a % of total landed value (%)	Revenue (€K)	Labour costs (K €)	Energy costs (K €)	GVA (K €)	GVA to revenue (%)	Gross profit (K €)	Gross profit margin (%)	Net profit (K €)	Net profit margin (%)
Baltic Sea	217,941	3%	223,837	71,692	47,090	94,890	42.4	23,197	10.4	- 33,768	- 15.1
Mediterranean Sea ar	1,205,045	17%	1,337,102	450,229	330,173	732,257	54.8	279,371	21.0	42,152	3.2
Northeast Atlantic	2,386,736	34%	2,511,446	907,556	419,109	1,331,976	53.1	424,253	16.9	166,493	6.9
North Sea	1,496,520	21%	1,549,530	432,350	275,956	792,345	51.1	359,995	23.2	191,251	12.5
Other regions	1,344,451	19%	1,201,959	183,262	216,677	533,448	44.4	350,525	29.2	279,584	26.4
Outermost regions	70,816	1.0%	80,106	35,663	13,504	37,601	47.3	1,939	2.4	- 4,541	- 5.8
Northwest Atlantic	104,192	1.5%	93,347	26,686	16,267	47,977	51.4	21,291	22.8	10,735	11.5
Eastern Artic	172,974	2.5%	146,451	18,731	13,568	105,605	72.1	86,875	59.3	66,010	53.0
non EU Med	2,527	0.04%	3,342	596.6	571.4	2,110	63.1	1,514	45.3	787	23.6
EU regional total	7,001,202		7,167,817	2,136,029	1,333,535	3,694,306		1,555,791		709,102	

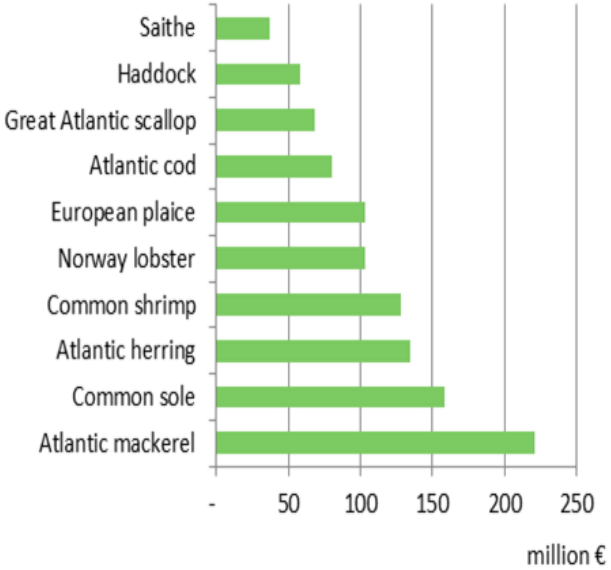
Main results and recent trends

NORTH SEA

Main fishing MS fleets:
Dutch, Danish, Belgian and German







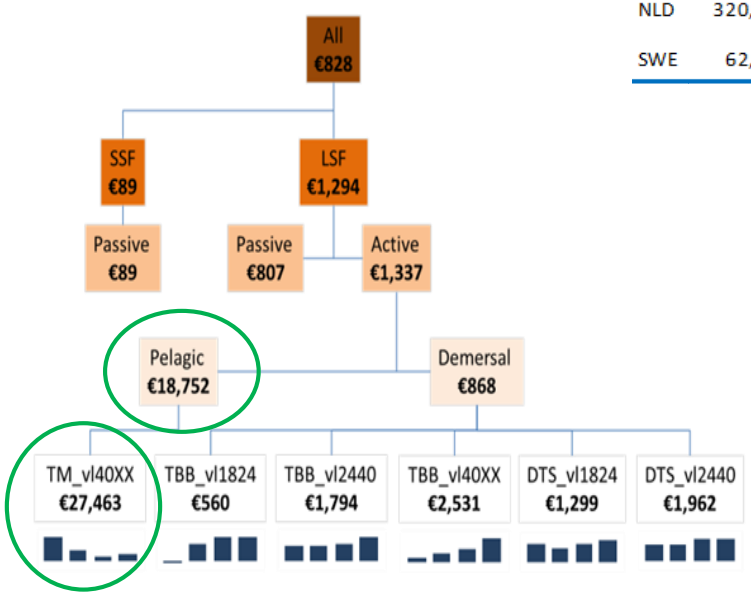
Main results and recent trends

NORTH SEA

Overall, performance has improved

	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BEL	63,210	21,084	16,545	29,172	46.2	8,088	12.8	1,857	2.9	383.8	134.3
DEU	84,808	30,547	15,360	45,028	53.1	14,481	17.1	4,063	4.8	184.7	98.6
DNK	301,264	84,499	46,149	184,850	61.4	100,351	33.3	37,838	12.6	188.4	143.5
ESP	54	21									
FRA	183,232	72,627	35,767	83,845	45.8	11,218	6.1	336	0.2	127.1	64.5
GBR	540,089	117,863	83,302	264,795	49.0	146,933	27.2	110,326	20.4	126.3	75.1
IRL	48,980	6,177	2,755	37,919	77.4	31,742	64.8	27,875	56.9	4,012.6	624.2
LTU	12,143	212	705	10,002	82.4	9,790	80.6	9,615	79.2	41,674.4	927.0
NLD	320,158	88,944	64,660	159,505	49.8	70,561	22.0	39,976	12.5	279.5	109.5
SWE	62,929	18,168	14,696	29,089	46.2	10,921	17.4	- 641	- 1.0	64.1	63.2

Gross profit per Day at Sea



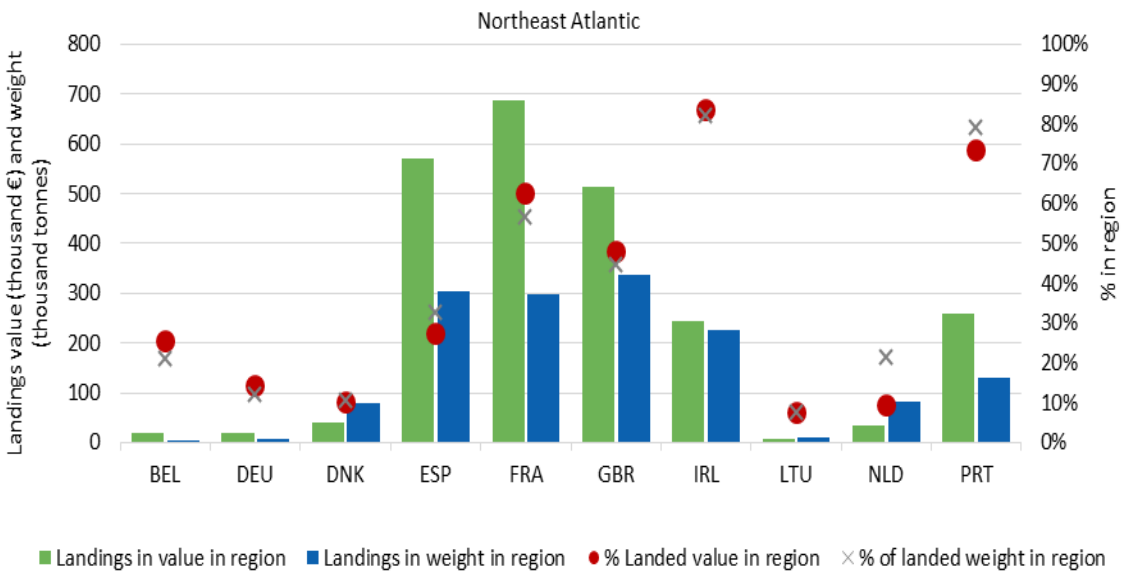
- ✓ Recovery of some stocks
- ✓ Increase in TACs and quotas for plaice, cod and mackerel
- ✓ Higher average first sale prices for sole and *Nephrops*
- ✗ Reduced TACs for sandeel, herring and Norway lobster

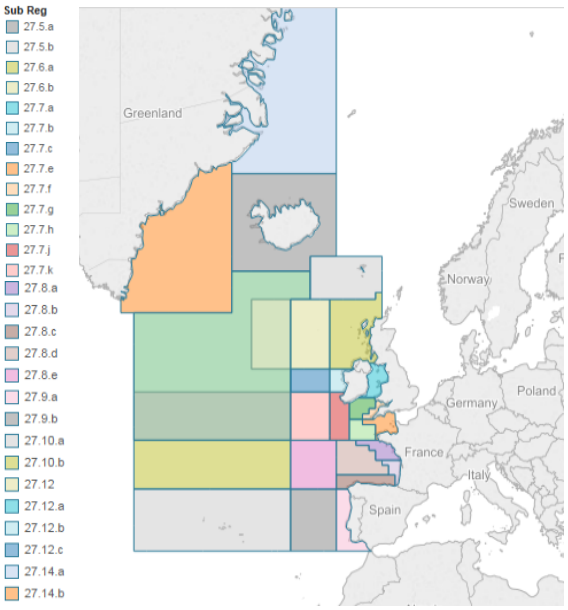
Main results and recent trends

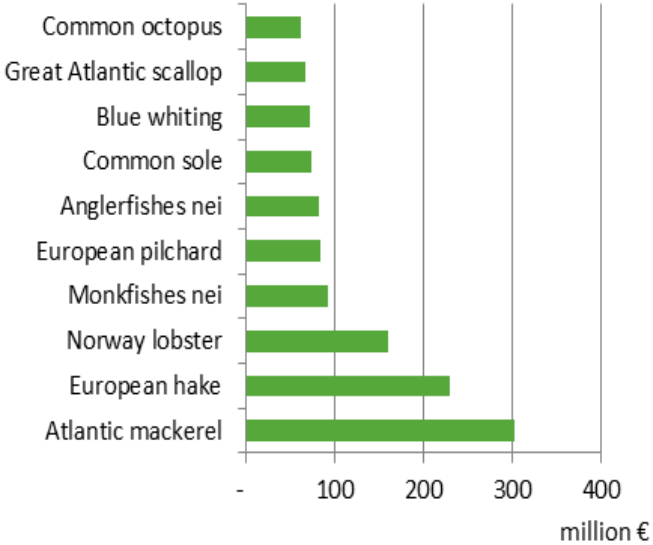
NORTHEAST ATLANTIC REGION

Main fishing MS fleets:

France, Spain, UK, Ireland, Portugal





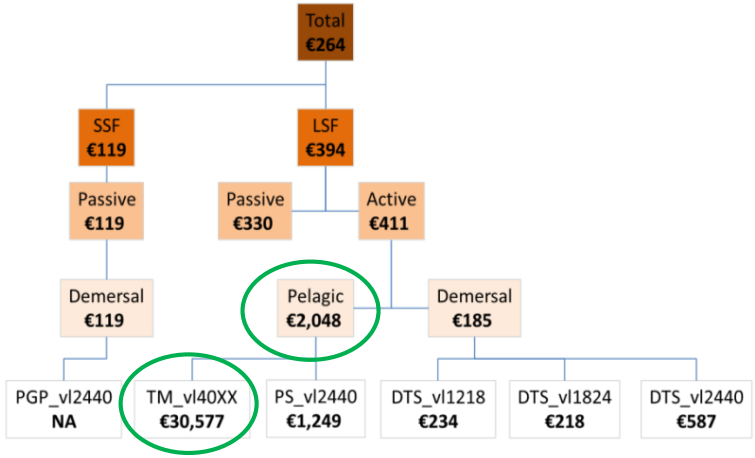


Main results and recent trends

NORTHEAST ATLANTIC REGION

	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BEL	5,532	21%	20,628	25%	22,180	8,082	6,988	7,416	33.4	- 666	- 3.0	- 4,801	- 21.7	190.1	97.8
DEU	8,631	12%	18,623	14%	18,467	6,471	3,047	10,720	58.1	4,249	23.0	2,211	12.0	1,291.5	123.0
DNK	78,639	11%	39,001	10%	39,558	4,767	3,607	31,224	78.9	26,458	66.9	12,152	30.7	3,122.4	701.4
ESP	303,177	33%	569,774	27%	601,823	240,560	21,310	101,802	65.3	20,373	13.1	- 16,905	- 13.0	54.9	25.3
FRA	298,161	57%	688,000	62%	722,169	267,435	118,161	372,493	51.6	105,058	14.6	33,595	4.9	136.1	81.8
GBR	338,009	45%	513,858	48%	535,834	129,348	86,463	248,991	46.5	119,643	22.3	81,594	15.2	101.0	58.6
IRL	226,954	82%	244,522	83%	271,955	73,678	45,913	130,242	48.1	56,442	20.8	10,786	4.4	98.9	56.8
LTU	10,772	7.4%	7,241	7.6%											
NLD	82,229	21%	34,550	9%	34,938	10,377	8,051	11,359	32.5	982	2.8	- 6,359	- 18.2	568.0	92.1
PRT	130,051	79%	259,754	74%	265,893	108,482	38,796	179,895	67.7	71,413	26.9	34,596	13.0	47.3	24.6

Gross profit per Days at Sea



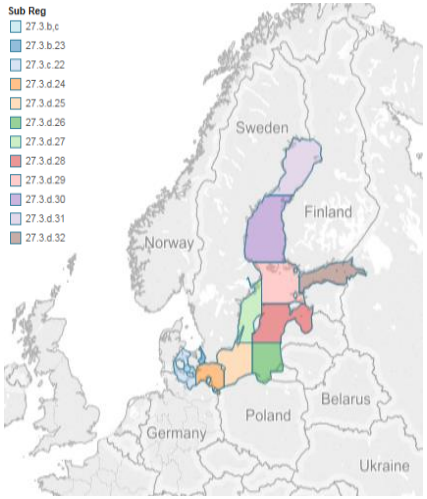
- ✓ **Recovery of some stocks**
- ✓ **Increased quotas and first sale price for several species, such as mackerel and hake**

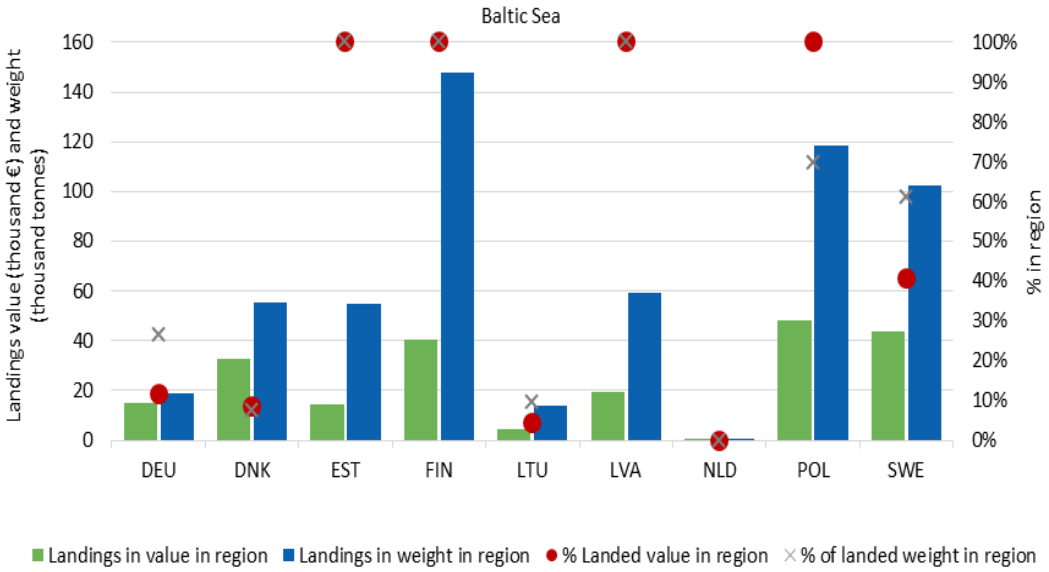
Main results and recent trends

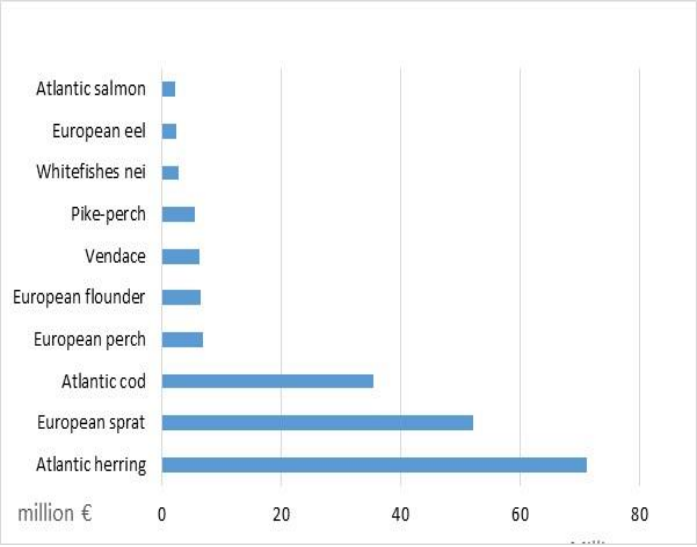
BALTIC SEA

Main fishing MS fleets:

Estonia, Finland, Poland, Latvia, Sweden, Denmark and Germany



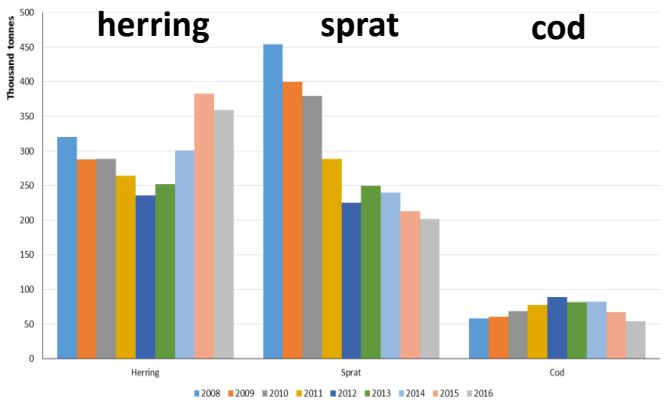




Main results and recent trends

BALTIC SEA

	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
DEU	18,958	26%	15,096	12%	16,673	6,935	2,912	5,139	30.8	- 1,796	- 10.8	- 5,214	- 31.3	5.9	7.6
DNK	55,450	7%	32,824	9%	34,067	17,195	6,107	12,640	37.1	- 4,555	- 13.4	- 20,838	- 61.2	21.3	45.2
EST	54,806	100%	14,544	100%	14,729	5,379	1,943	9,308	63.2	3,929	26.7	1,651	11.2	6.2	18.7
FIN	147,987	100%	40,359	100%	39,278	8,299	10,675	15,488	39.4	7,189	18.3	- 8,305	- 21.1	8.8	43.6
LTU	13,731	9%	4,208	4%	4,515	1,121	1,571	722	16.0	- 399	- 8.8	- 738	- 16.3	8.2	4.6
LVA	59,287	100%	19,496	100%	20,290	3,101	3,402	7,196	35.5	4,095	20.2	2,367	11.7	25.9	19.9
POL	118,424	70%	47,898	100%	48,060	15,617	11,067	21,734	45.2	6,117	12.7	- 780	- 1.6	27.4	9.2
SWE	102,174	61%	43,515	41%	46,225	14,044	9,413	22,662	49.0	8,618	18.6	- 1,910	- 4.1	38.8	59.9

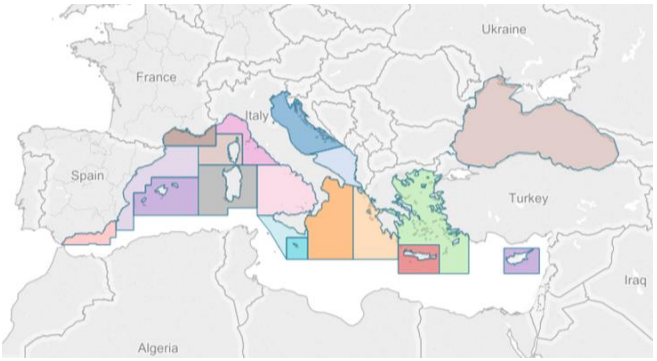


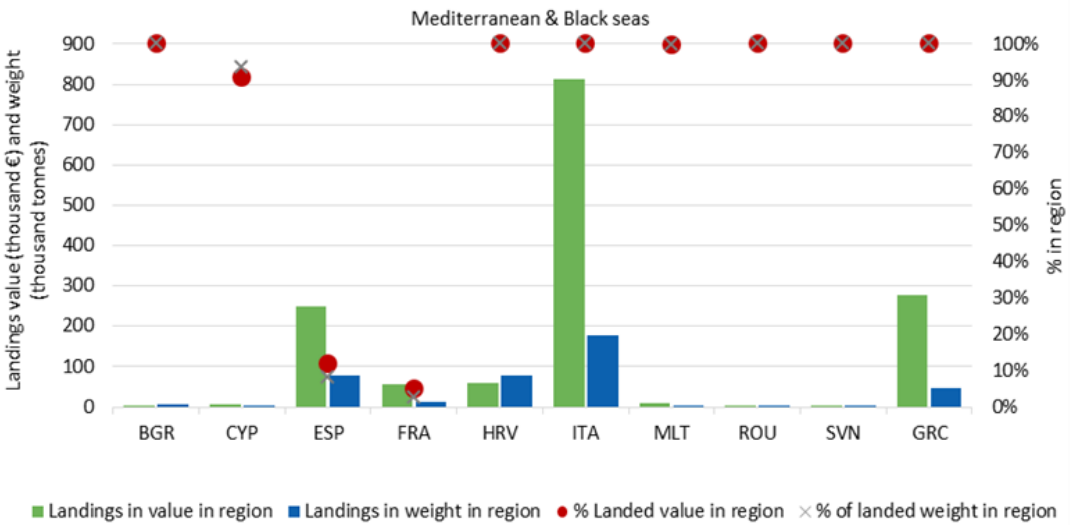
Quota uptake

		Germany	Denmark	Estonia	Finland	Lithuania	Latvia	Poland	Sweden
Atlantic cod	2012	63%	78%	54%	90%	53%	59%	68%	61%
	2013	37%	52%	15%	32%	40%	38%	60%	36%
	2014	45%	55%	10%	24%	24%	31%	55%	30%
	2015	60%	82%	12%	36%	46%	55%	75%	43%
Atlantic herring	2012	89%	65%	90%	90%	71%	89%	98%	88%
	2013	92%	101%	89%	96%	68%	87%	79%	88%
	2014	92%	94%	85%	87%	57%	92%	78%	79%
	2015	98%	46%	87%	74%	85%	98%	87%	70%
European sprat	2012	100%	98%	99%	83%	100%	100%	95%	99%
	2013	100%	91%	100%	97%	100%	100%	106%	100%
	2014	92%	88%	95%	93%	92%	94%	94%	97%
	2015	98%	95%	89%	100%	96%	97%	97%	100%
Atlantic salmon	2012	48%	80%	40%	85%	7%	55%	75%	100%
	2013	86%	93%	45%	73%	7%	18%	104%	92%
	2014	44%	95%	41%	83%	9%	13%	48%	95%
	2015	99%	78%	46%	87%	8%	22%	62%	100%

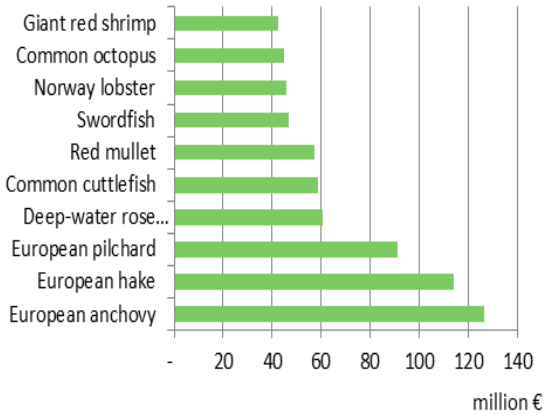
Main results and recent trends

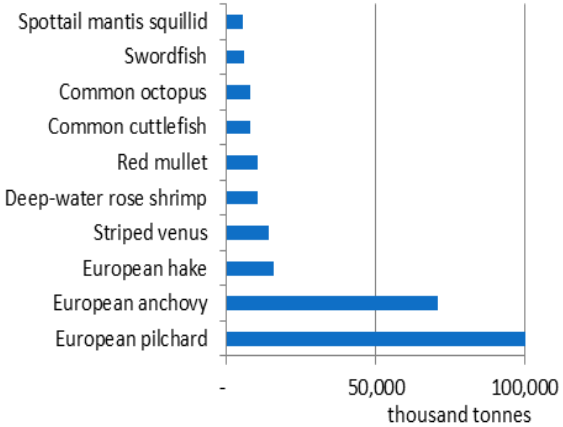
MEDITERRANEAN AND BLACK SEAS





Main fishing MS fleets:
Italy, Greece, Croatia, Spain and France





Main results and recent trends

MEDITERRANEAN AND BLACK SEAS

		Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Mediterranean Sea and Black Sea	BGR	7,897	100%	4,334	100%	5,488	2,736	1,508	2,687	49.0	-48	-0.9	-1,543	-28.1	2.4	5.0
	CYP	1,237	94%	6,819	91%	6,812	668	1,927	937	13.8	269	4.0	-5,090	-74.7	1.1	1.3
	ESP	77,063	8%	249,400	12%	334,044	149,799	66,119	189,481	56.7	37,025	11.2	13,203	4.0	77.1	26.6
	FRA	13,837	3%	56,142	5%	73,249	31,215	16,226	32,600	44.5	1,386	1.9	-7,371	-10.2	26.9	33.5
	HRV	79,408	100%	60,841	100%	76,479	22,785	19,194	36,596	47.9	13,811	18.1	-10,934	-14.3	13.5	17.0
	ITA	176,778	100%	813,320	100%	824,161	234,964	221,711	460,958	55.9	225,994	27.4	57,391	7.0	39.9	22.3
	MLT	2,401	100%	10,453	100%	11,670	6,103	2,702	5,251	45.0	-852	-7.3	-4,651	-39.9	7.4	4.7
	ROU	2,200	100%	2,458	100%	2,458	1,041	554	1,485	60.4	445	18.1	135	5.5	12.1	39.2
	SVN	254	100%	1,277	100%	2,741	918	232	2,261	82.5	1,343	49.0	1,012	36.9	24.8	28.2
	GRC	47,642	100%	278,651	100%	282,544	280,542	182,181	-126,698	-44.8	-407,240	-144.1	-477,999	-169.2	-9.3	-3.1

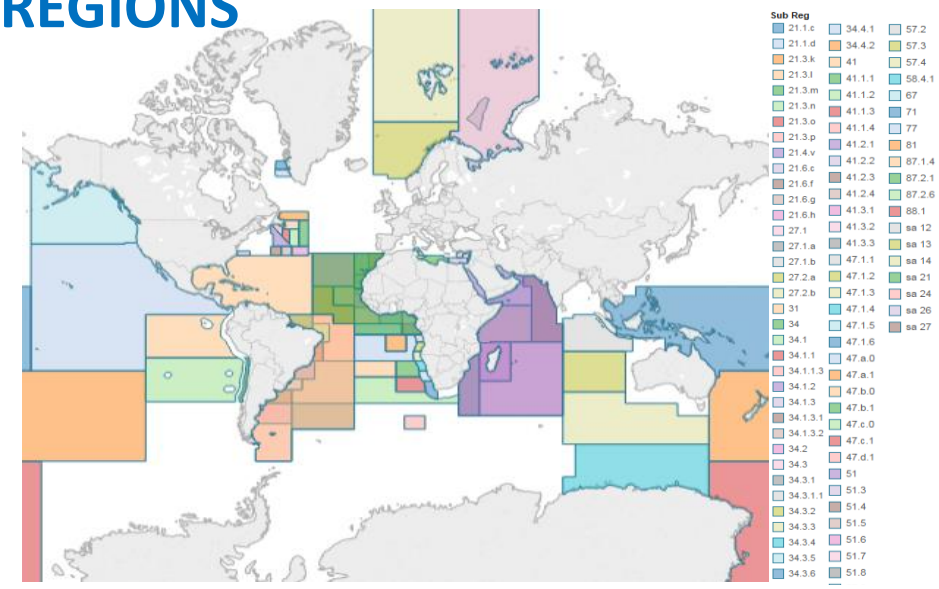
- Overall improvement but 2 MS fleets suffered gross losses and 5 suffered net losses

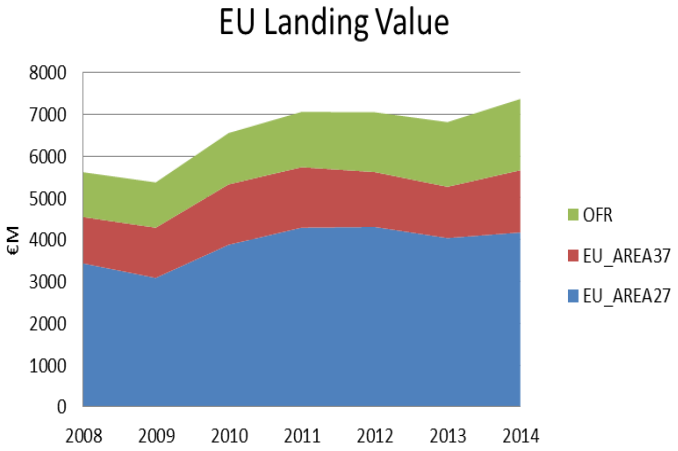
✓ **Reduced fuel prices**

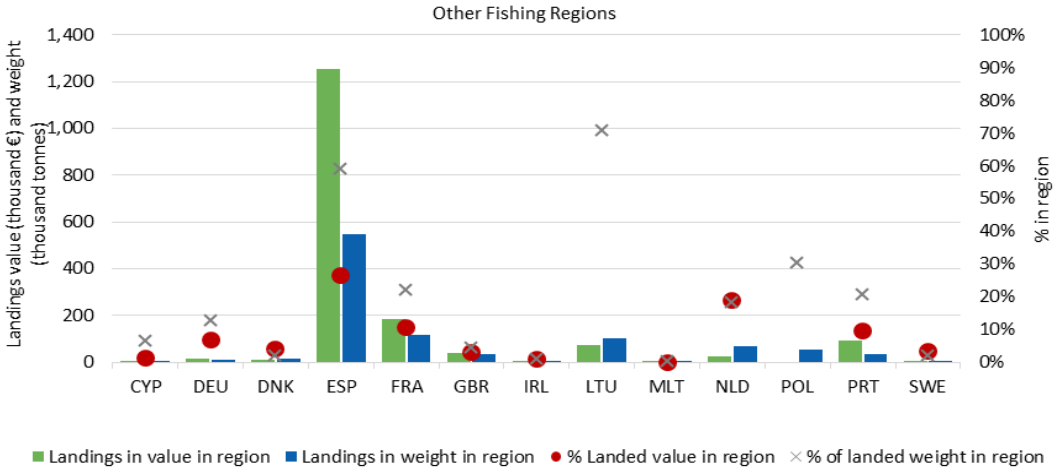
✓ **Higher average first sale price for some species, such as anchovies and sardines**

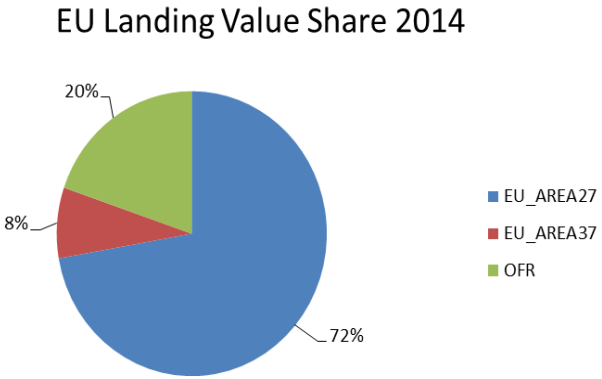
Main results and recent trends

OTHER FISHING REGIONS: EU HIGH SEA FLEET AND OUTERMOST REGIONS





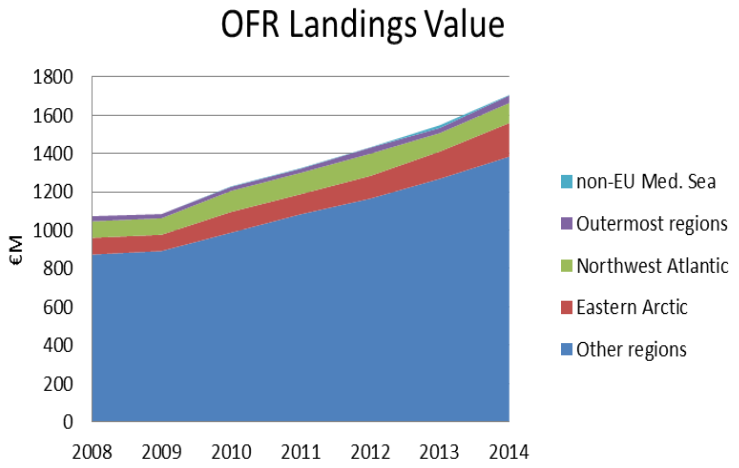


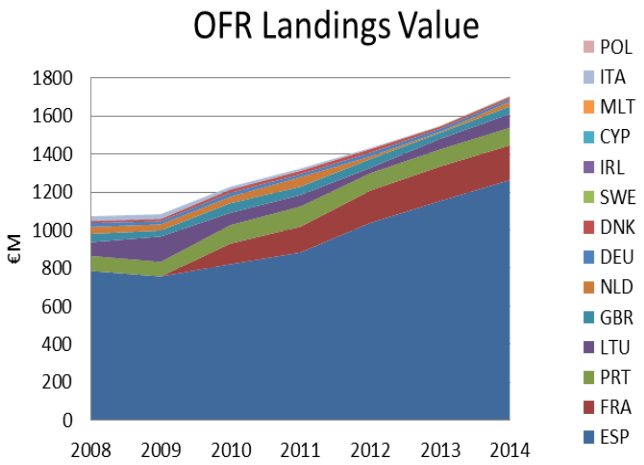


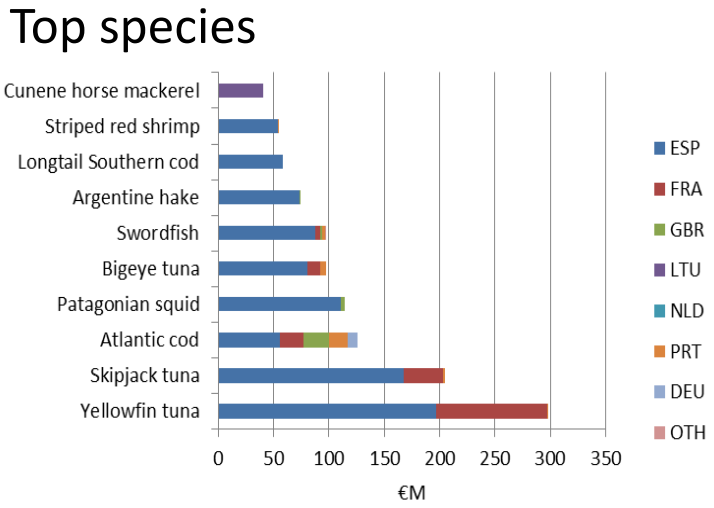
Main results and recent trends

OTHER FISHING REGIONS: HIGH SEA FLEET AND OUTERMOST REGIONS

- Share of landed value: Other regions 81%, Eastern Arctic 11% and NW Atlantic 6%, Outermost regions 2%







- Spain 74% of the landed value, followed by France 11% and Portugal 5%

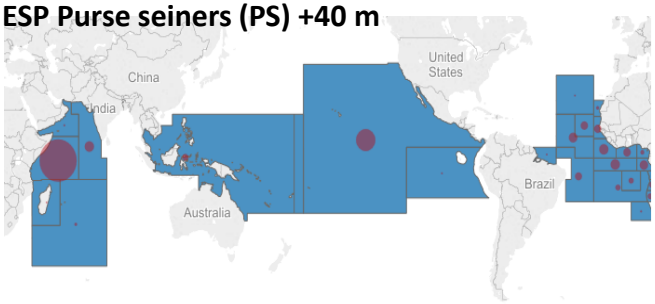
Main results and recent trends

OTHER FISHING REGIONS

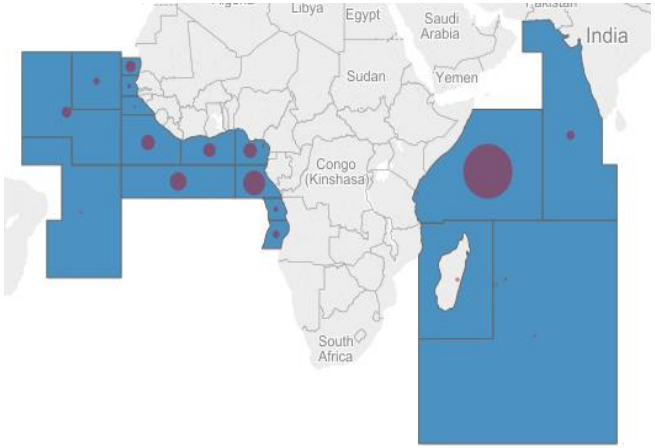
Important fleet segments

		Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
ESP	ESP OFR PS40XX	364,183	49,976	70,130	137,601	37.8	87,625	24.1	61,999	17.0	721.0	86.3
ESP	ESP OFR DTS40XX	221,388	32,321	35,750	101,651	45.9	69,329	31.3	60,519	27.3	1,588.3	111.6
ESP	ESP OFR DTS2440	212,801	11,363	16,287	157,339	73.9	145,977	68.6	144,072	67.7	2,097.9	120.9
FRA	FRA OFR PS40XX	142,699	43,633	34,697	55,754	39.1	12,120	8.5			2,534.3	96.5

ESP Purse seiners (PS) +40 m

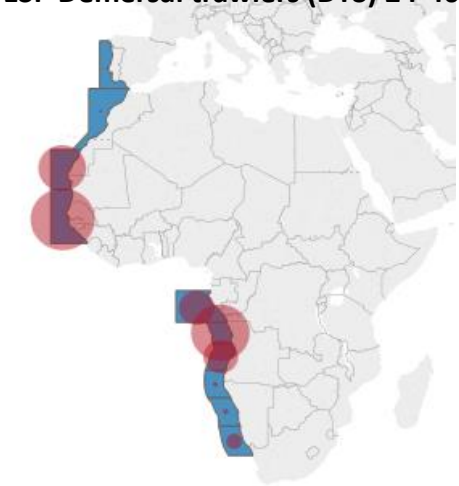


FRA Purse seiners (PS) +40 m



ESP Demersal trawlers (DTS) +40 m

ESP Demersal trawlers (DTS) 24-40 m



SUMMARY OF MAIN FINDINGS

- Overall, the economic performance of the EU fleet improved in 2014 and continued into 2015 and 2016.
- Revenue increased 4.7% while total costs increased by 1%.
- Net profit increased from €500 million in 2013 to €770 million in 2014.
- Improved performance is largely a result of increased landings and lower costs, in particular due to low fuel prices
- Economic performance by MS is mixed: 3 out of 22 MS fleets suffered gross losses, and 9 net losses.
- Performance of the LSF and DWF has steadily improved while SSF has gradually declined but showed some recovery in 2014 and is expected to have improved in 2015 and 2016.
- Performance also varies by region, with North Sea and NE Atlantic fleets performing well while Baltic Sea fleets have deteriorated

SUMMARY OF MAIN FINDINGS

FACTORS THAT MAY HAVE CONTRIBUTED TO IMPROVED ECONOMIC PERFORMANCE:

- ✓ Fuel price reductions in 2013 continued throughout 2014, 2015 and 2016
- ✓ Recovery of some stocks, such as plaice, cod and mackerel in the North Sea, herring in the Baltic, leading to increased TAC and quotas.
- ✓ Increased landings from some stocks especially Atlantic mackerel and herring.
- ✓ Higher average first sale prices for several important species, such as mackerel and hake in the NE Atlantic, sole and *Nephrops* in the North Sea, anchovy in the Med
- ✓ Capacity reduction, leading to lower costs
- ✓ More fuel efficient fishing techniques and fishing behaviour

SUMMARY OF MAIN FINDINGS

FACTORS THAT MAY HAVE CONTRIBUTED TO POOR ECONOMIC PERFORMANCE INCLUDE:

- Lower average first sale prices for some important species, e.g. cod in Baltic
- Reduced TACs and quotas for key stocks, such as European sprat
- The effects of the global economic crisis that continues to impact internal and international markets and access to credit
- Russian embargo on EU seafood exports has been noted for multiple MS, particularly impacting the pelagic sector
- Market saturation (e.g. Baltic cod) and poor marketing to place products on new markets

European Commission

Thank-you very much

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in-house science service

Joint Research Centre

Special thanks to the 32 independent experts that contributed to produce the 2016 AER

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Marianne AQUILINA	Janek LEES	Ivana VUKOV
Edo AVDIC MRAVLJE	Sophie LEONARDI	Kolyo ZHELEV
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Richard CURTIN	Marin MIHANOVIC	Franca CONTINI
Irina DAVIDJUKA	Arina MOTOVA	Jordi GUILLEN
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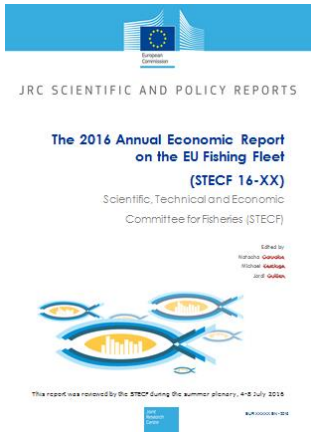
Edvardas KAZLAUSKAS	Mike TURENHOUT	Jordi GUILLEN
Michael KEATINGE	Irene TZOURAMANI	Aidas GLEMZA

For more information visit:

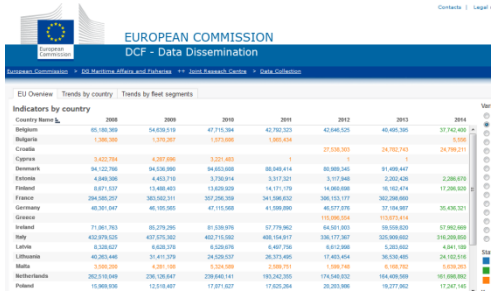
- 2016 Annual Economic Report on the EU fishing fleet + data files submitted by MS

http://stecf.jrc.ec.europa.eu/reports/economic



- Data dissemination tool:

https://datacollection.jrc.ec.europa.eu/dd/indicators/economic/graphs



SOME DATA CONSIDERATIONS

- A complete overview of the EU fishing fleet was not possible due to some missing data for several fleets, usually some high sea fleets (confidentiality) and for vessels under 10 m (data availability).
- The Greek fleet is not included in the economic analyses
- The economic data provided by MS have a 2-year time lag (data is old!). Projections and forecasts are used to keep the report more up-to-date.
  - As projections rely on TACs, estimates for 2016 could only be done for the 15 MS fleets with significant fishing activity in the NE Atlantic (FAO area 27)

Belgium, Germany, Denmark, Spain, Estonia, Finland, France, UK, Ireland, Lithuania, Latvia, The Netherlands, Poland, Portugal, Sweden

CONCLUDING REMARKS

- The AER is the most comprehensive source of information on the economic performance of the EU fishing fleet.
- Results are widely used for policy support and research.
- Attempts have been made to bring the report more up-to-date by projecting performance results for the current year.
- Further developments are needed to improve short-term forecasting as well as integrating biological and economic data (for bio-economic modelling) in order to improve assessments on the social and economic impacts of Long-term management plans (LTMP), the move towards MSY (FMSY), the landings obligation, etc..