European Commission

JRC SCIENCE FOR POLICY REPORT

Scientific, Technical and Economic Committee for Fisheries (STECF)

The 2019 Annual Economic Report on the EU Fishing Fleet (STECF 19-06)

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2019

Joint Research Centre

EUR 28359 EN

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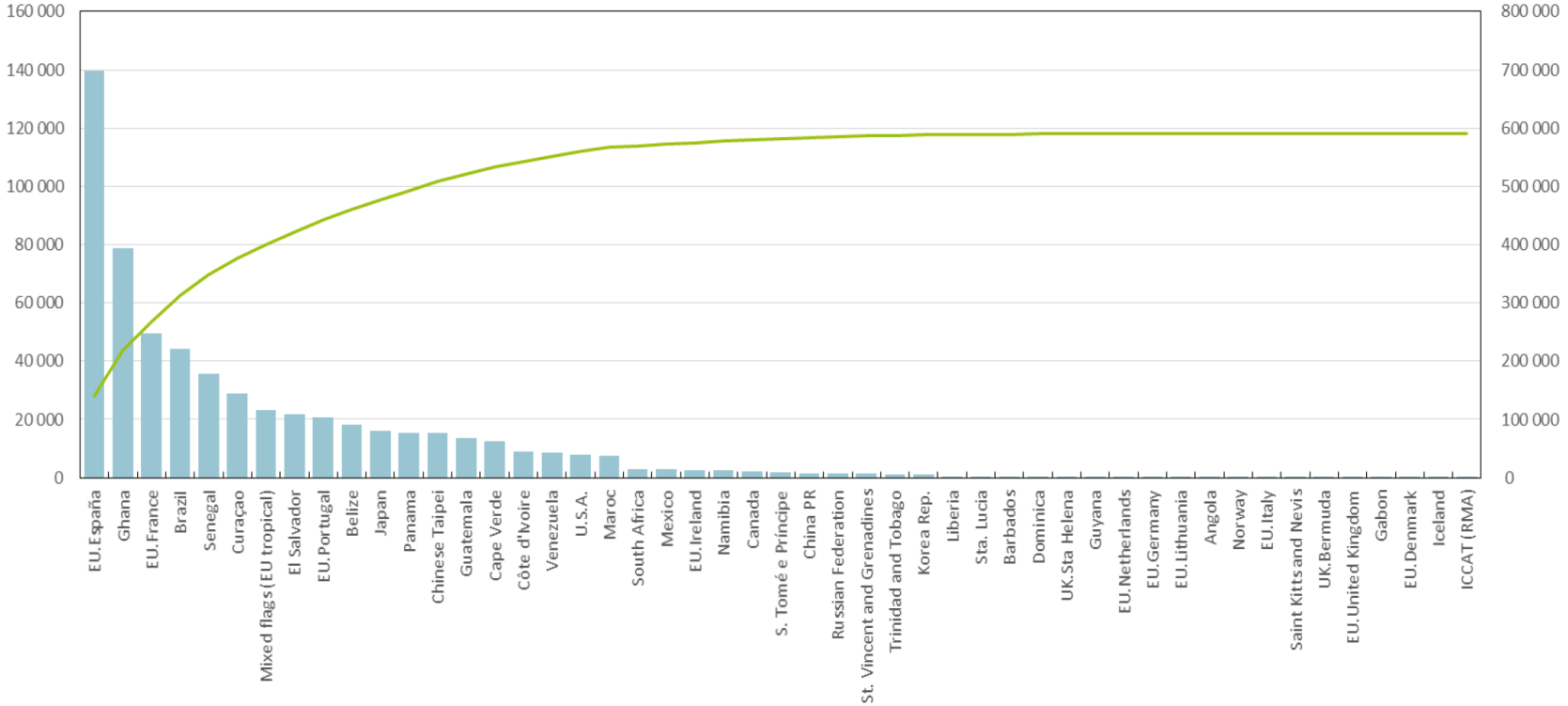
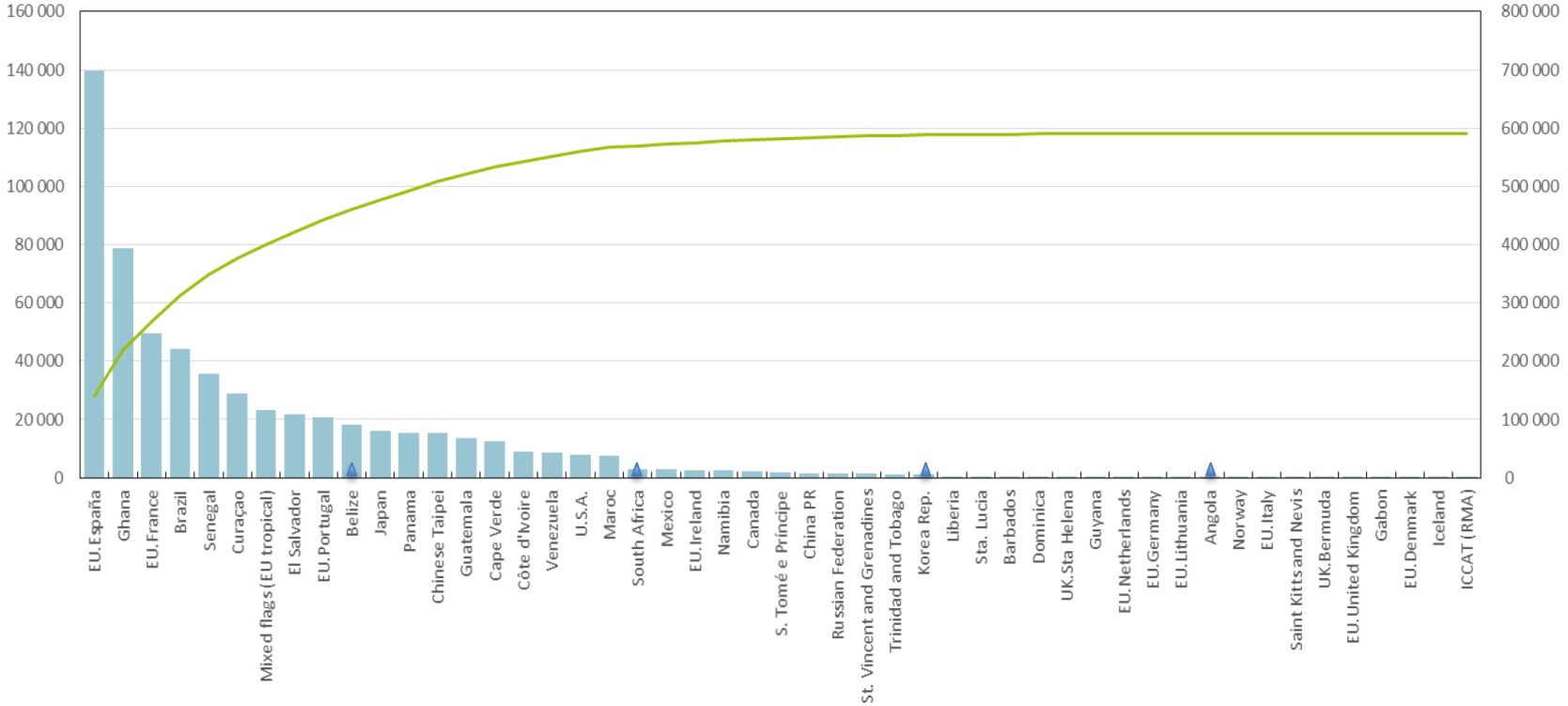
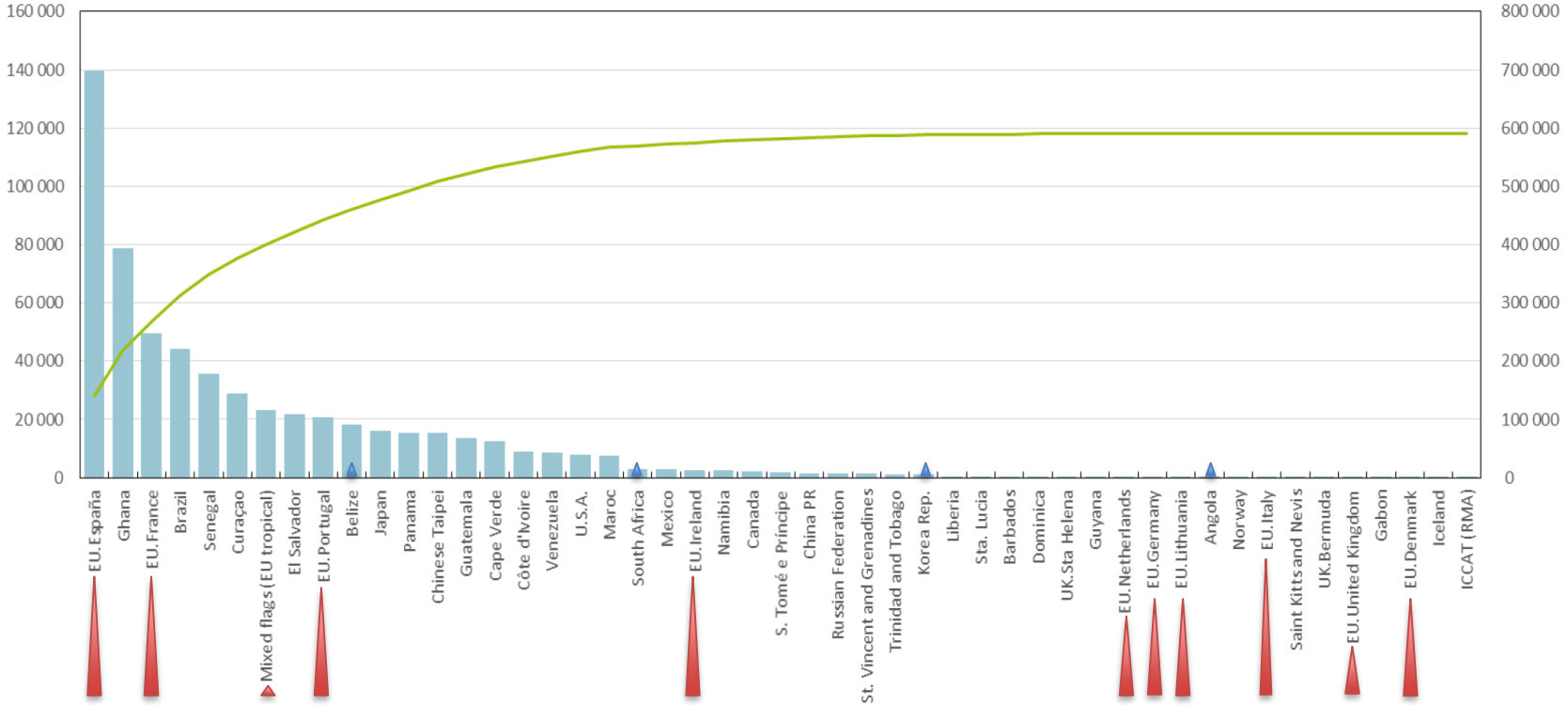


ICCAT catches (nominal, t) for Atlantic stocks by flag country, 2017



ICCAT catches (nominal, t) for Atlantic stocks by flag country, 2017



ICCAT catches (nominal, t) for Atlantic stocks by flag country, 2017

EWG 1906 CRITERIA

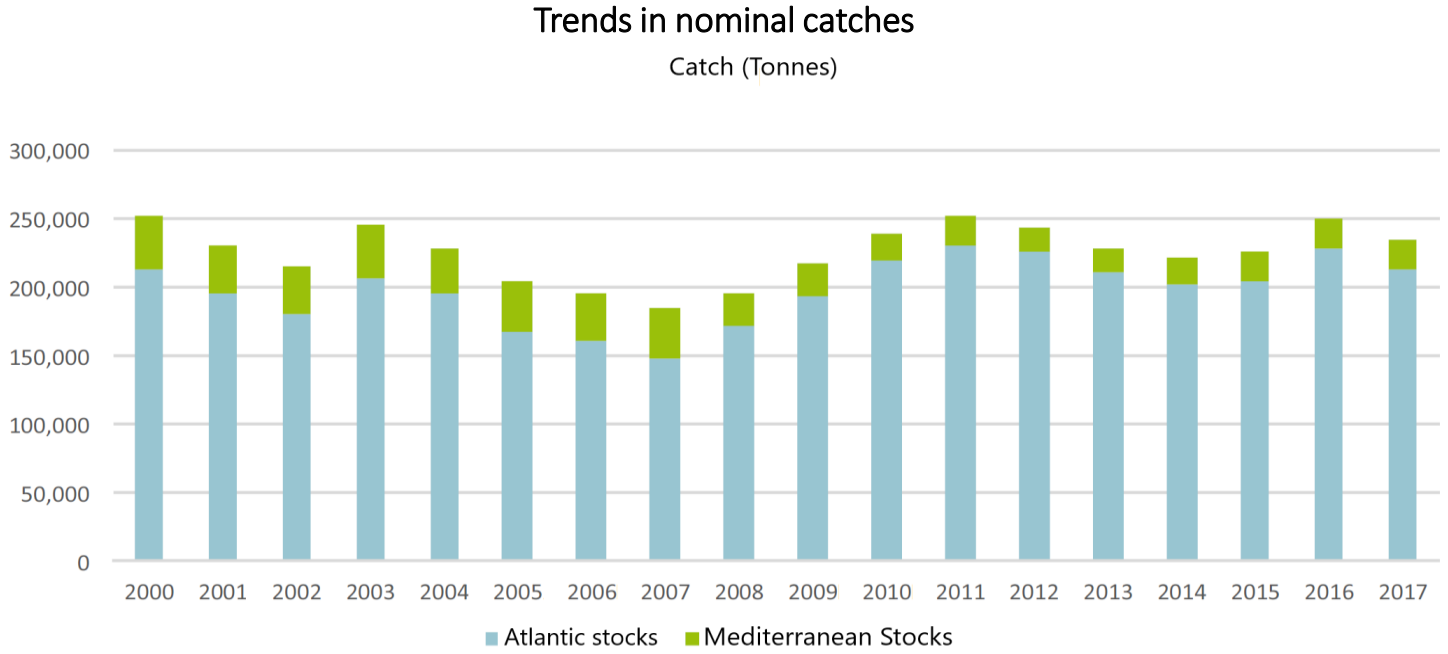
- ICCAT convention area embraces the Atlantic Ocean and covers >20 tuna/tuna-like species stocks.
- Criteria for inclusion (same as EWG 1807 but with dependency reduced form 60% to 40%)
  - Size: fleet segments over 24m LOA
  - Target species: highly migratory tuna and tuna like stocks.
  - High degree of dependency: ≥ 40% of landed value from ICCAT RA in 2017 or for the most part of 2014-2017.
- INCLUDED (for the first time)
  - 22 French purse seine vessels over 40m
  - 22 Spanish hook, pole and longline vessels (LLD) based in Canarias (IC) operating in ICCAT RA.
  - Spanish purse seiners (24 - 40m) operating in the North Atlantic (Bay of Biscay and NWW) targeting albacore and tropical tuna stocks in FAO 27.
- EXCLUDED
  - 26 vessels from the Spanish purse seine fleet targeting tropical tuna in the Atlantic, with an estimated 16 000 tonnes of landings.
    - The bulk (>71%) of these vessel's catches take place in the Indian Ocean and, to a lesser extent, in the Pacific Ocean.
    - ICCAT species landed ranged between 27-32% over the period 2014-2016; and was only 21% of their total catch in 2017
  - Irish Demersal trawlers/seiners between 24-40m (IRL NAO DTS 2440)
  - Irish Pelagic trawlers 24m-40m and over 40m LOA (IRL NAO TM 2440 and 40XX)
  - UK Pelagic trawlers over 40m (GBR NAO TM40XX NGI).

Fleet segments (12) identified for analysis

1. Spain
   - ESP NAO HOK2440 LLD: Surface (drifting) longliners 24-40m LOA North Atlantic
   - ESP OFR HOK2440 LLD: Surface (drifting) longliners 24-40m LOA Other Fishing Regions
   - ESP NAO HOK2440 IC: Canarias Hook, pole and line 24-40m LOA North Atlantic / Canaries
   - ESP NAO PS 2440 NGI: Purse seiners 24-40m LOA North Atlantic
   - ESP NAO HOK2440 NGI: Hook, pole and line vessels 24-40m LOA North Atlantic
   - OFR HOK 2440 NGI: Hook, pole and line vessels 24-40m LOA Other Fishing Regions
2. Portugal
   - PRT NAO HOK2440 NGI Hook, pole & line, longliners 24-40m LOA North Atlantic
   - PRT NAO HOK2440 P3 Azorean pole and line vessels 24-40m LOA North Atlantic
   - PRT OFR HOK2440 IWE9. Pole & line, longliners 24-40m LOA International waters
   - PRT OFR HOK40XX IWE Pole & line, longliners > 40m LOA International waters
   - OFR HOK 2440 P2 Madeiran pole & line 24-40m LOA Other Fishing Regions
3. France
   - FRA OFR PS 40XX IWE Purse seiners > 40m LOA International waters

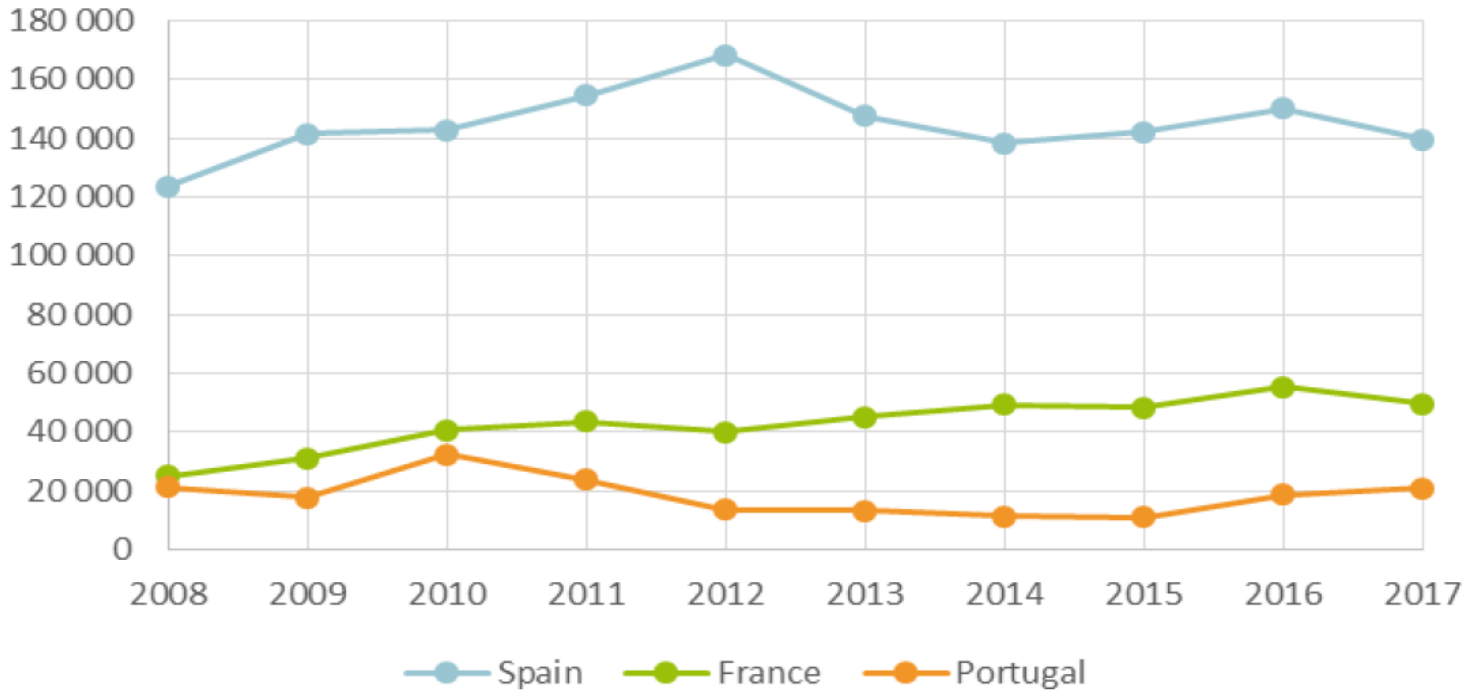
Fleet segments (12) identified for analysis

Country	Vessel length group	Main fishing technique	Main gear		Main fishing region	ICCAT share of landings value	No of vessels	kW	GT
ESP	VL2440	HOK	LHP	Canaries	NAO	93%	21	5,951	2,171
				Mainland		75%	19	6,750	2,616
					OFR	67%	8	4,811	2,587
			LLD		NAO	100%	31	8,860	6,351
					OFR	65%	41	15,690	11,410
		PS	PS		NAO	49%	40	14,098	5,614
FRA	VL40XX			Non EU	OFR	41%	9	31,301	19,024
PRT	VL2440	HOK	LHP	Madeira	NAO	59%	4	1,682	528
				Azores		86%	25	9,617	3,442
			LLD	Mainland		97%	17	6,078	3,101
				Non EU	OFR	69%	8	4,663	2,453
	VL40XX					61%	4	3,501	2,492

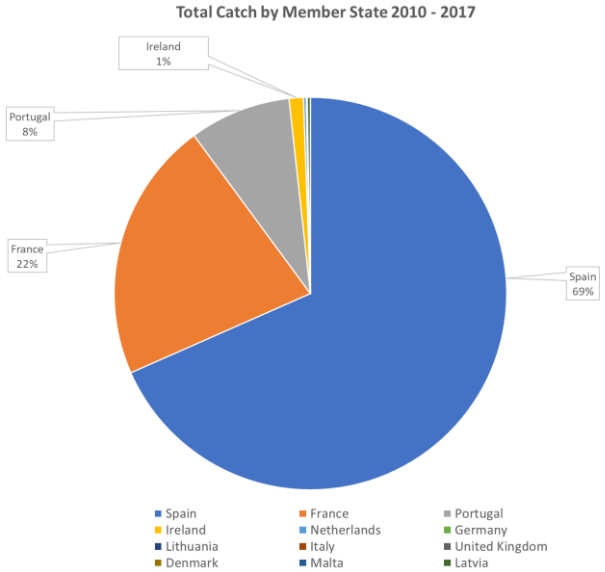


According to official statistics, ICCAT nominal catches in the Atlantic, excluding Mediterranean stocks (MED and A+M stocks), amounted to 590 801 tonnes in 2017

Trends in nominal catches



Nominal catch by MS, 2010-2017 (Atlantic, all species, ex live discards)



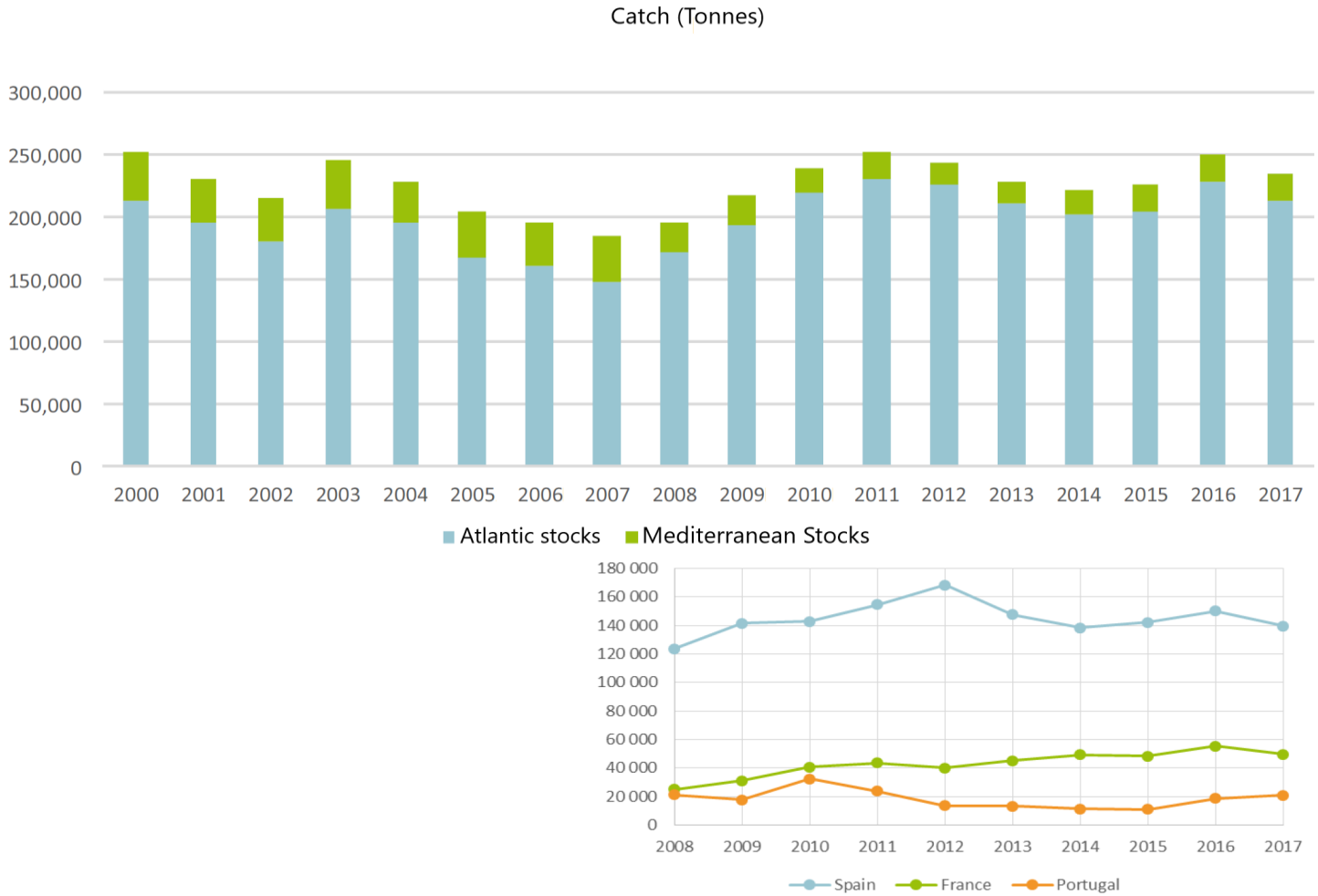
Quantity (tonnes)								
	2010	2011	2012	2013	2014	2015	2016	2017
Spain	142 732	154 682	168 572	147 695	138 420	142 234	150 093	139 819
France	40 669	43 590	40 085	45 296	49 313	48 470	55 382	49 580
Portugal	32 358	23 692	13 585	13 359	11 214	10 998	18 686	20 762
Ireland	924	3 696	3 702	2 348	2 508	2 420	2 383	2 525
Netherlands		2 257	110	1 169	54	17	217	130
Germany					6		4	91
Lithuania					95			84
Italy							47	57
United Kingdom	236	251	124	145	146	44	20	12
Denmark	0		2					1
Malta					1			
Latvia	1 219	2 374	49	48	30	192	528	
TOTAL	218 138	230 543	226 229	210 058	201 785	204 375	227 360	213 060

2017: Spain, France, Portugal and Ireland account for 99.8% of MS catches

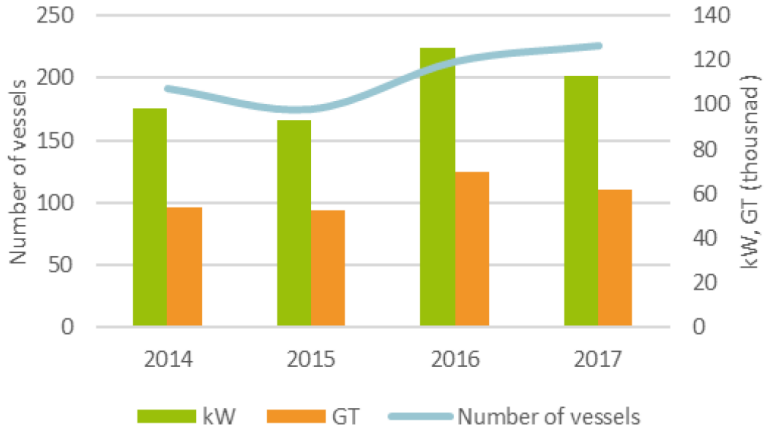
Nominal catch by MS, 2010-2017 (Atlantic, all species, ex live discards)

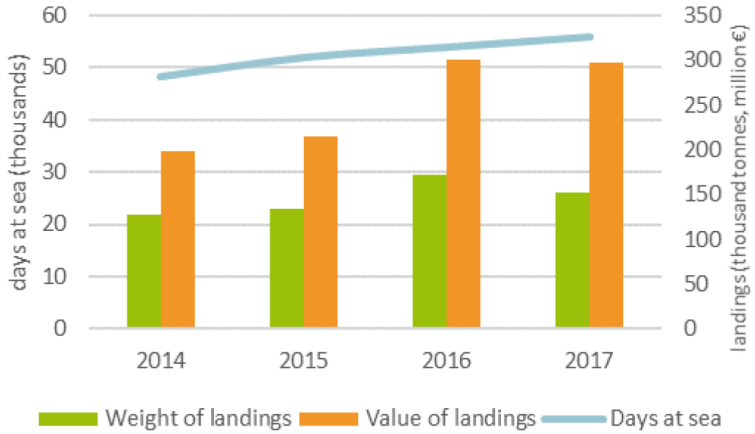
- The majority of EU catches are taken from:
  - East Atlantic stock 55%
  - North Atlantic 30%
  - South Atlantic 12%.
- Spain predominates in all stocks/areas:
  - East Atlantic stock 62%
  - North Atlantic 73%
  - South Atlantic 70%.

Trends in nominal catches

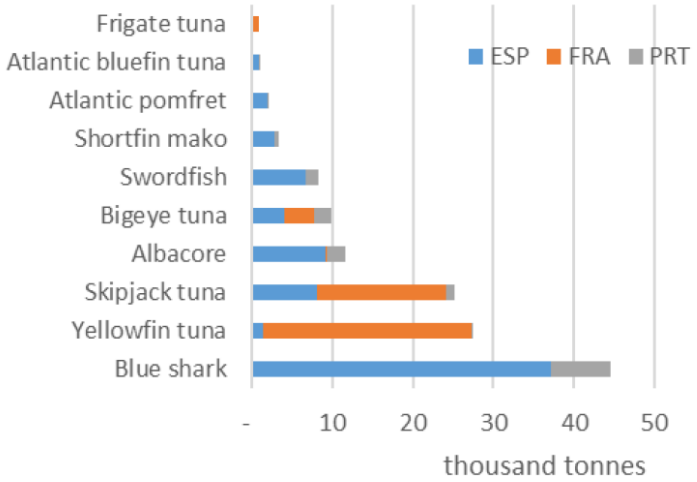


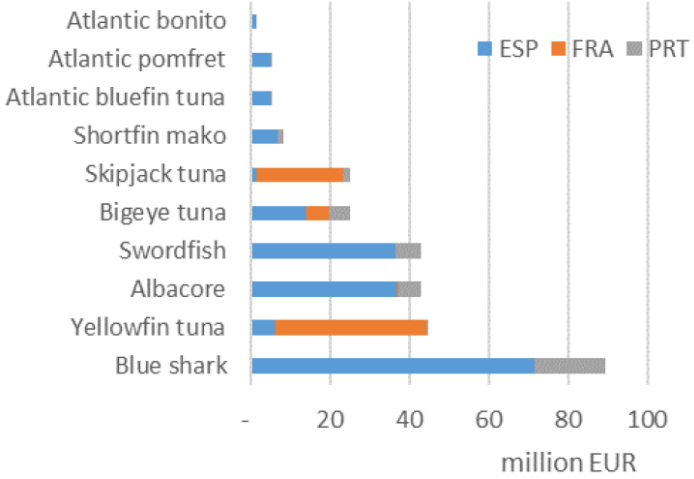
Trends in capacity, effort (days-at-sea) and landings for MS fleets with high dependency on ICCAT activity, 2004-2017

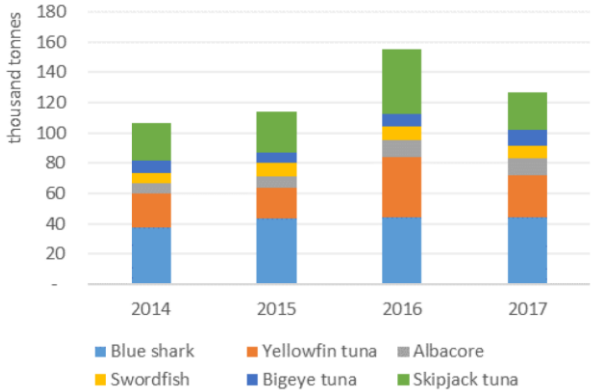


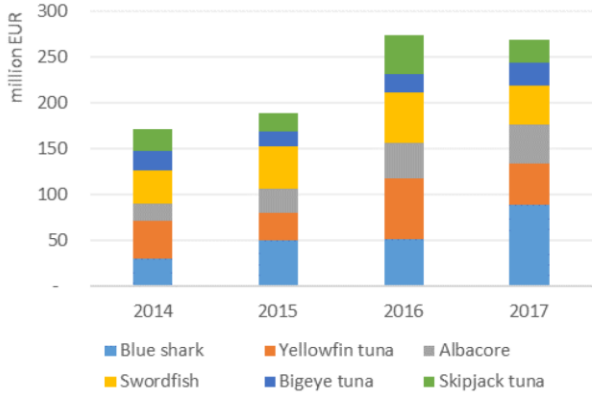


Trends in landings for MS fleets with high dependency on ICCAT activity, 2014-2017









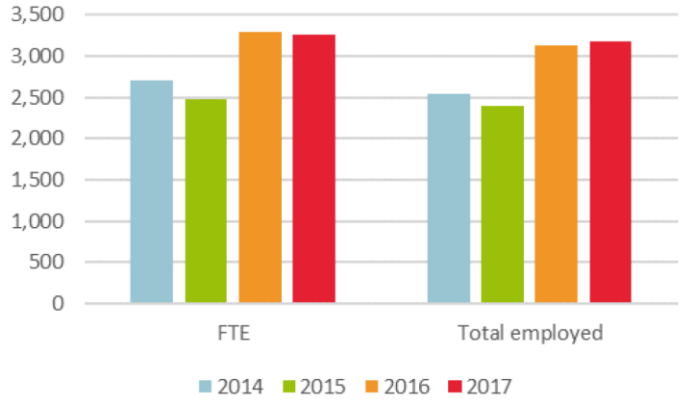
Landings by species in weight (kg) for the MS fleets with high dependency on ICCAT activity

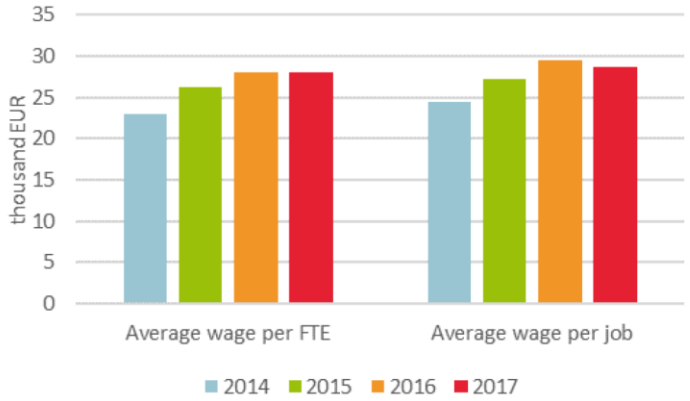
Species / country		ESP	FRA	PRT	Total (kg)
Blue shark	BSH	37,197,676		7,294,077	44,491,753
Yellowfin tuna	YFT	1,443,337	25,765,143	108,103	27,316,583
Skipjack tuna	SKJ	8,041,305	16,043,359	1,124,714	25,209,378
Albacore	ALB	9,257,014	98,865	2,355,962	11,711,841
Bigeye tuna	BET	4,127,252	3,665,934	2,166,210	9,959,396
Swordfish	SWO	6,661,385		1,659,215	8,320,600
Shortfin mako	SMA	2,804,324		587,758	3,392,082
Atlantic pomfret	POA	2,022,639		35,887	2,058,526
Atlantic bluefin tuna	BFT	822,922		8,672	831,594
Frigate tuna	FRI	48997.9	771558		820,556
Total top 10 ICCAT species		**72,426,852**	**46,344,859**	**15,340,598**	**134,112,309**

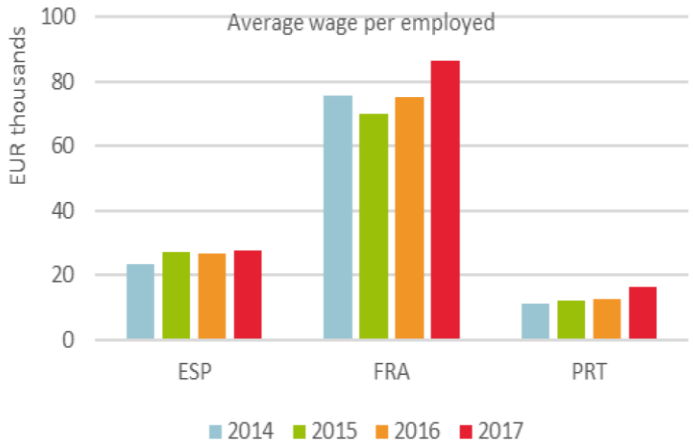
Landings by species in value (€) for the MS fleets with high dependency on ICCAT activity

Species / country		ESP	FRA	PRT	Total (EUR)
Blue shark	BSH	71,477,824		17,804,066	89,281,890
Yellowfin tuna	YFT	6,035,433	38,132,412	231,345	44,399,189
Albacore	ALB	36,691,984	248,151	5,960,768	42,900,903
Swordfish	SWO	36,499,884		6,332,340	42,832,224
Bigeye tuna	BET	13,889,423	5,682,198	5,523,105	25,094,726
Skipjack tuna	SKJ	1,155,975	22,139,835	1,581,508	24,877,318
Shortfin mako	SMA	6,616,981		1,456,090	8,073,071
Atlantic bluefin tuna	BFT	4,961,808		69,195	5,031,003
Atlantic pomfret	POA	4,756,610		107,208	4,863,818
Atlantic bonito	BON	1,446,791		2	1,446,793
Total top 10 ICCAT species		**183,532,712**	**66,202,596**	**39,065,627**	**288,800,935**

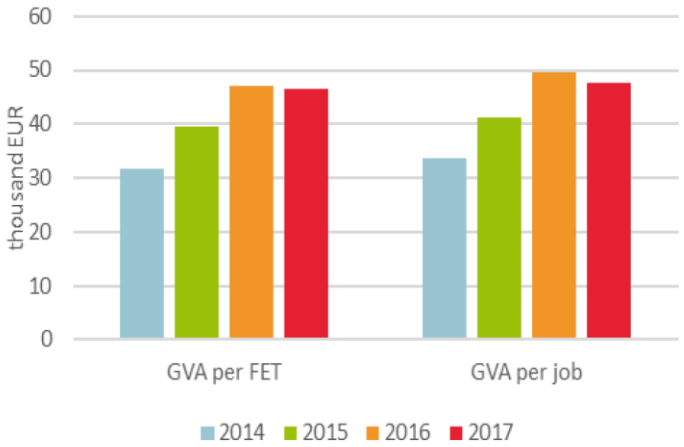
Employment & average wage for MS fleets with high dependency on ICCAT activity, 2014-2017

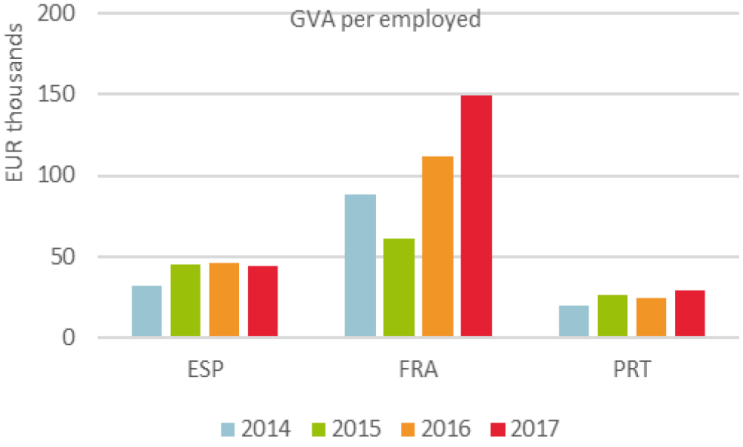




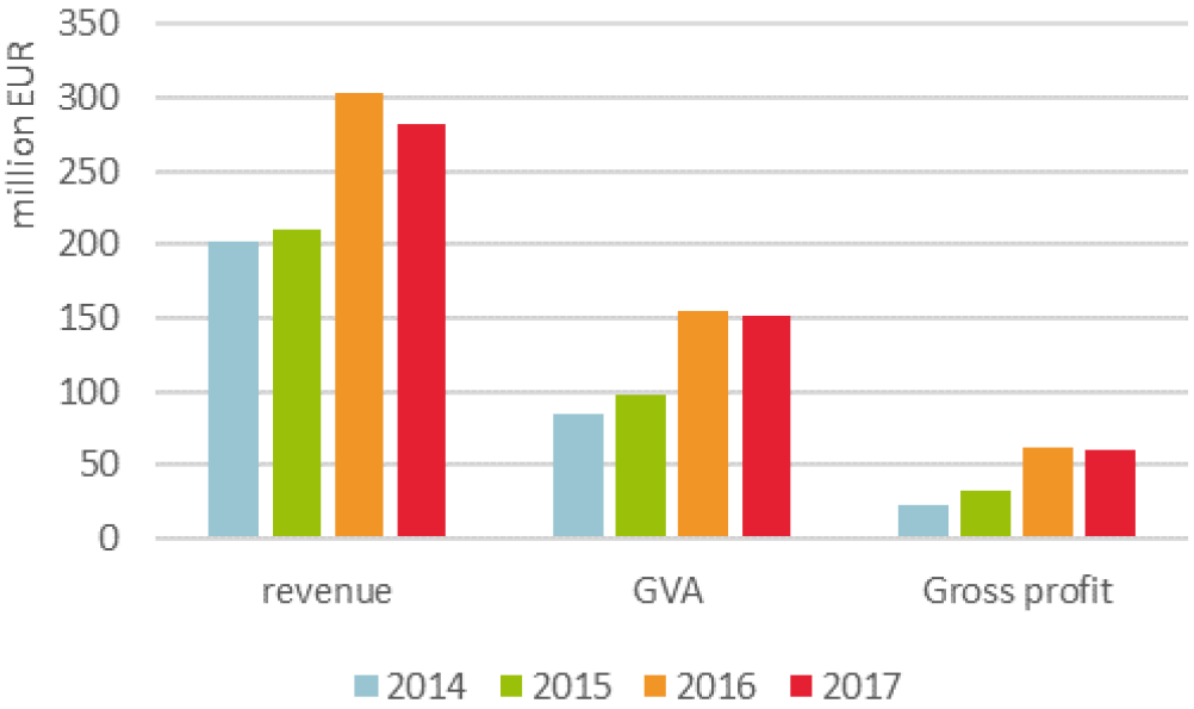


Labour productivity for MS fleets with high dependency on ICCAT activity, 2014-2017





Economic Performance of MS fleets with high dependency on ICCAT activity, 2014-2017



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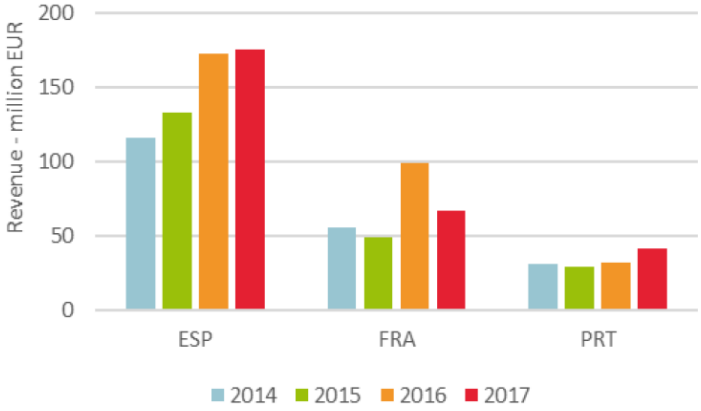
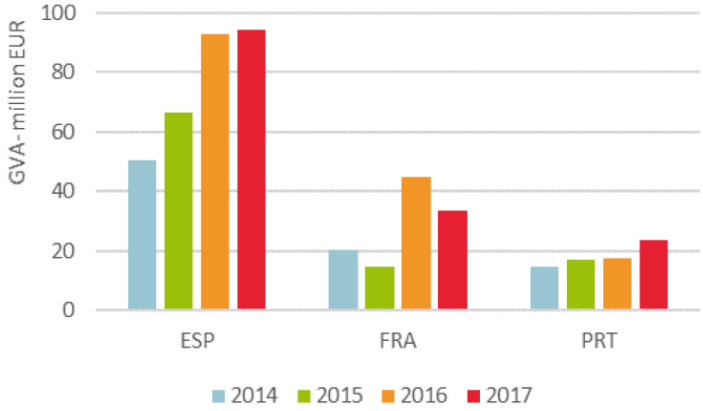
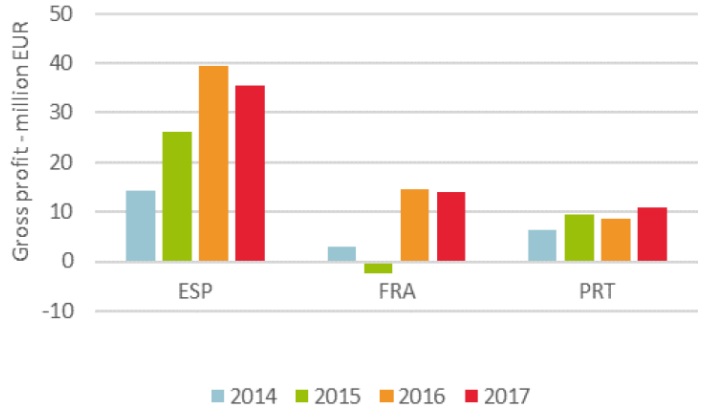
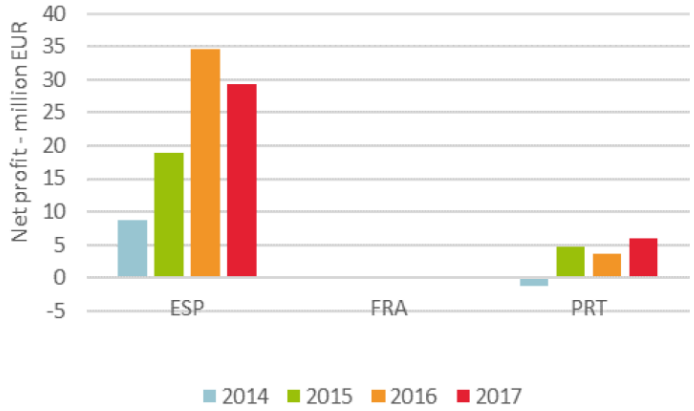
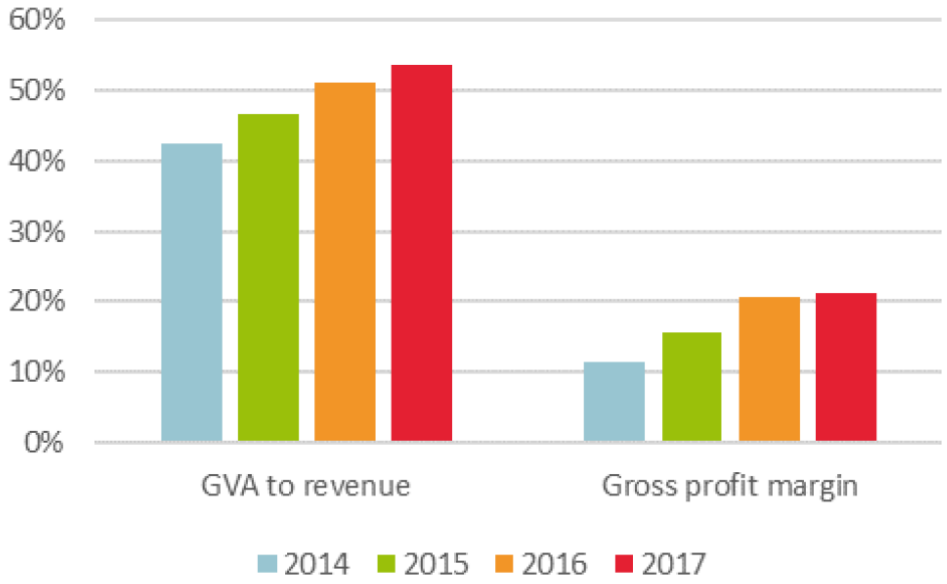








Economic Performance of MS fleets with high dependency on ICCAT activity, 2014-2017



Key parameter estimates for MS fleets with high dependency on ICCAT activity, 2017

	No of vessels	kW	GT	Persons employed	FTE	Days at sea	Fishing days
ESP	159	56,161	30,749	2,137	2,569	38,658	38,658
FRA	9	31,301	19,024	225	85	3,566	3,566
PRT	57	25,541	12,017	812	608	13,754	12,117
Total fleets ICCAT	**226**	**113,002**	**61,790**	**3,174**	**3,262**	**55,978**	**54,341**

	Weight of landings (kg)	Value of landings (€)	Revenue (€)	Income from landings (€)	Personnel costs (€)	Unpaid labour (€)	Energy costs (€)	GVA (€)	GVA to revenue (%)	GVA per FTE (€)	Gross profit (€)	Gross profit margin (%)	Average gross profits per vessel (€)	Net profit (€)	Net profit margin (%)	Average wage per employed (€)	Average wage per FTE (€)
ESP	89,119,023	192,495,858	174,996,372	174,143,222	57,886,245	917,208	20,787,870	94,217,026	54%	36,672	35,413,574	20%	222,098	29,326,331	17%	27,519	22,888
FRA	46,699,158	65,975,817	67,069,478	67,069,478	19,428,424	-	8,271,514	33,494,125	50%	396,106	14,065,701	21%	1,546,089	-		86,523	229,763
PRT	15,698,867	39,080,666	40,880,135	40,614,491	13,082,996	-	6,596,146	23,837,207	58%	39,183	10,754,211	26%	187,789	5,987,428	15%	16,103	21,506
Total fleets ICCAT	**151,517,048**	**297,552,341**	**282,945,985**	**281,827,192**	**90,397,664**	**917,208**	**35,655,529**	**151,548,358**	54%	46,457	**60,233,486**	21%	**266,738**	**35,313,759**	16%	28,771	27,993

		No of vessels	GVA to revenue (%)	GVA per FTE (€)	Gross profit (€)	Gross profit margin (%)	Average gross profits per vessel (€)	Net profit (€)	Net profit margin (%)	Average wage per employed (€)	Average wage per FTE (€)
ESP	Purse seiners	40	74	42,754	9,997,103	24	249,418	8,961,863	22%	32,589	28,715
	Longliners	71	42%	35,738	16,172,627	17%	226,597	12,184,481	13%	25,481	21,297
	Hooks	48	63%	32,215	9,243,844	24%	192,595	8,179,987	22%	25,299	19,676
PRT	Hooks	57	58%	39,183	10,754,211	26%	187,789	5,987,428	15%	16,103	21,506
FR	Purse seiners	9	50	396,106	14,065,701	21	1,546,089	-	-	86,523	229,763
Total fleets ICCAT		**226**	**54%**	**46,457**	**60,233,486**	**21%**	**266,738**	**35,313,759**	**16%**	28,771	27,993

MS	Fleet segment	GVA to revenue (%)	Average GVA per vessel (€)	GVA per FTE (€)	Gross profit (€)	Gross profit margin (%)	Net profit (€)	Net profit margin (%)	Average wage per employed (€)	Average wage per FTE (€)
ESP	ESP NAO PS 2440 NGI	74.0	759,584	42,754	9,997,103	24.3	8,961,863	21.8	32,589	28,715
	ESP NAO HOK2440 LLD*	50.9	580,213	42,659	6,858,293	19.7	5,332,530	15.3	31,085	26,130
	ESP OFR HOK2440 LLD*	36.5	546,252	31,665	9,314,335	15.2	6,851,951	11.2	22,150	18,452
	ESP NAO HOK2440 NGI	79.4	601,844	40,009	4,894,350	33.9	4,856,191	33.6	32,568	22,950
	ESP NAO HOK2440 IC *	50.6	242,982	21,780	- 501,849	- 5.0	- 1,094,237	- 11.0	22,604	23,946
	ESP OFR HOK2440 NGI*	53.7	886,014	33,049	4,851,343	36.1	4,418,032	32.9	18,869	10,851
FRA	FRA OFR PS 40XX IWE	49.9	3,681,644	396,106	14,065,701	21.0	-	-	86,523	229,763
PRT	PRT NAO HOK2440 NGI	59.3	416,233	40,901	2,723,264	23.0	1,487,376	12.6	23,175	25,050
	PRT NAO HOK2440 P2	78.8	653,086	50,238	1,158,877	38.9	961,782	32.3	22,544	25,434
	PRT NAO HOK2440 P3 *	68.6	342,675	35,936	2,912,853	23.7	1,152,034	9.4	13,799	23,515
	PRT OFR HOK2440 IWE*	38.7	397,271	32,430	1,927,372	22.1	856,547	9.8	12,752	13,879
	PRT OFR HOK40XX IWE*	52.7	717,310	51,854	2,031,845	40.1	1,529,689	30.2	10,346	12,340
	Total fleets ICCAT	**54%**	**671,117**	**46,457**	**60,233,486**	**21%**	**35,313,759**	**16%**	**28,771**	**27,993**

- The better economic performance (profit margin) reported for hook and line and (to a lesser extent) surface longliners over purse seiners can be partially explained by the higher fuel efficiency of these vessels resulting in lower average fuel consumed per day at sea, and, the average price paid for much of their catch, in particular swordfish and blue shark.
- Tropical tuna, albacore, swordfish and blue shark are main fisheries. For some - swordfish and blue shark - average price remains high.
- Both low fuel costs and high average prices (for key stocks) remained relatively stable in 2017 - this has contributed positively to the economic performance of this fleet generally and surface longliners and purse seiners in particular.

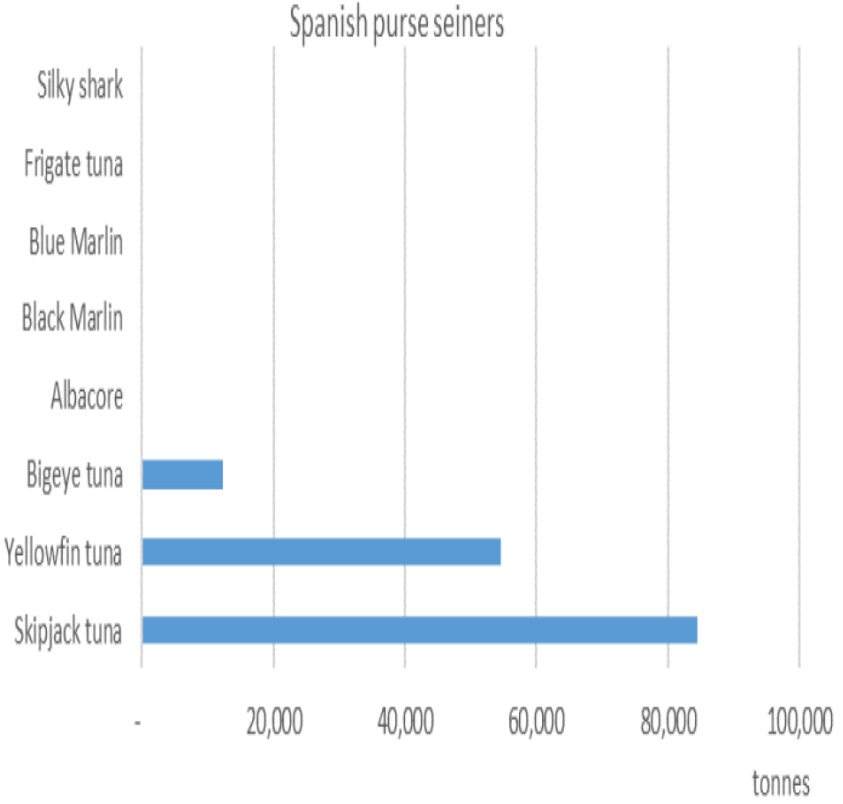
1. **Better knowledge** of the cost structure and improved information on landings (value and weight) for comparable fleets across Member States is required.
2. **Atlantic bigeye**: possible TAC reduction and more stringent management measures (skipjack, yellowfin and bigeye) could have economic consequences and might also displace fishing effort towards the Indian and Pacific Oceans.
3. **MSE** for tropical tuna key to setting objectives and improving management. There are significant information gaps for some parts of these fisheries.
4. **FADs** Management measures may impact FAD dependant fisheries and the economic performance and profitability of the purse seiners and could, once again, bring about changes to fishing patterns and/or displacement of effort.
5. **HCR for Northern Atlantic Albacore Tuna** in 2018, together with a 20% TAC increase has given increased certainty to EU operators, particularly in Spain and France, around future management of this stock using a set of clear rules. This could bring about increased landings by Spanish and French purse seiners and longliners from 2018 onwards.

6. **Atlantic swordfish.** Further scientific work is needed to get more reliable and robust data for both the North and South stocks. While total catches are below the EU TAC, at least one EU MS (Spain) is near full exploitation of its individual quota.
7. - The adoption, in 2017, of measures designed to reduce fishing pressure and rebuild the northern stock of shortfin mako stock, including enhanced reporting of catch, release of alive individuals and survivability and catch composition, will likely have a short term economic impact. This could see lower landings in 2018 and beyond.
8. - An amendment to the ICCAT Convention, extending its scope to sharks, has been discussed in the last two Annual meetings in 2016, 2017 and 2018 with the decision postponed. If adopted in 2019, sharks will become a directed, regulated fishery subject to management measures. This will likely result in better accountability and reporting of catch and landings data along with improved control systems for these species.

IOTC

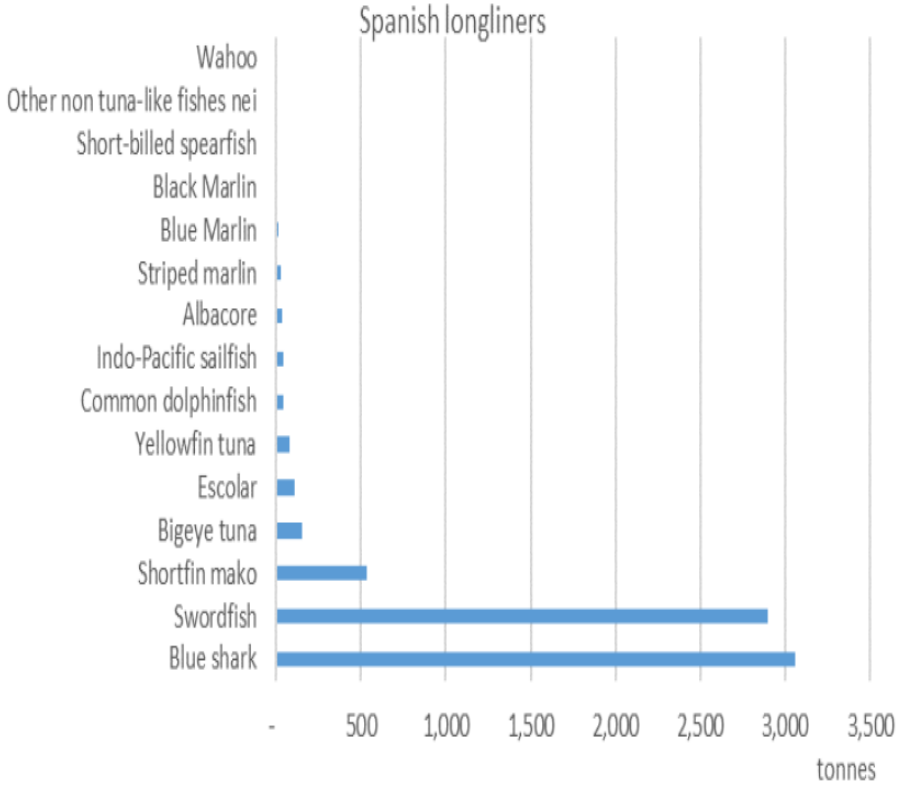
Spanish purse seiners
(ESP OFR PS VL40XX):

- Most important EU fleet in the IOTC area.
- 70% of activity in IOTC area.
- 151 509 tonnes in 2017 (+11%)
- Landings estimated at €332m.
- Skipjack tuna, yellowfin tuna and bigeye.
- Profitable,
  - GVA €106 million,
  - Gross profit €48 million
  - Net profit €5.8 million.



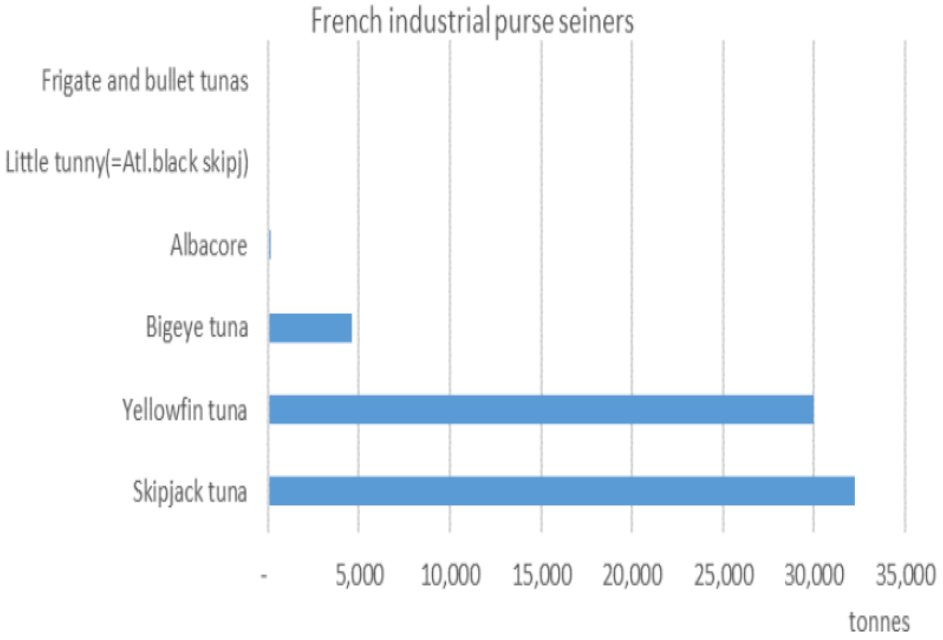
Spanish longliners :

- < 10% of activity in the IOTC area
- 7,013 tonnes (-15% compared to 2016)
- Main target species blue shark & swordfish
- Profitable? No economic performance estimates made.



French purse seiners

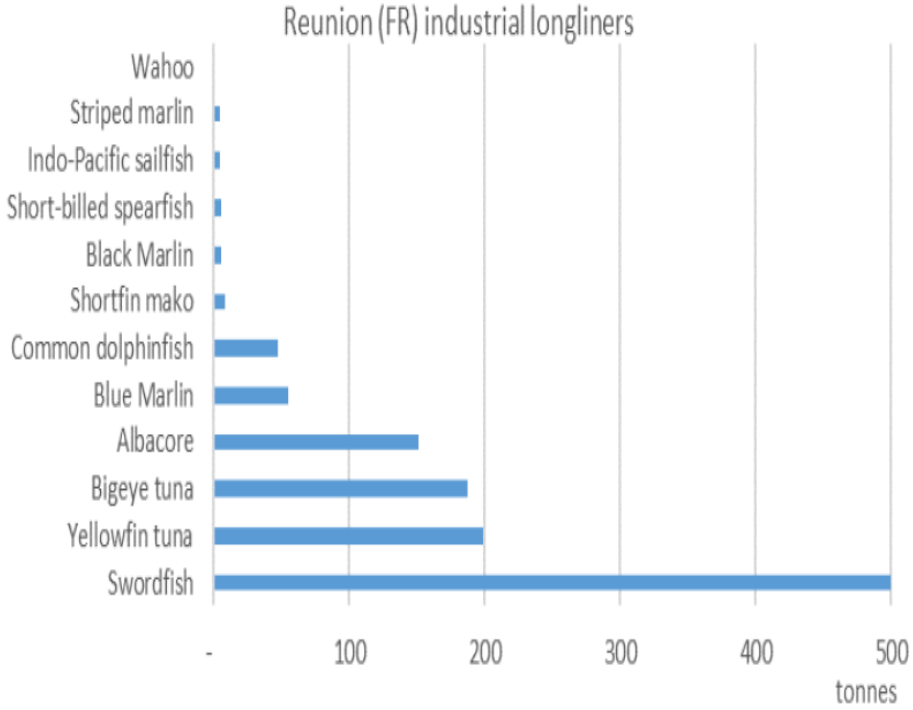
- 60% of activity in the IOTC area
- 66,946 tonnes (-2% compared to 2016)
- Main target species skipjack, yellowfin, bigeye.
- Landings estimated at €93m.
- Revenue estimated at €95 million
- GVA €14 million,
- Gross loss €13 million



French Reunion longliners

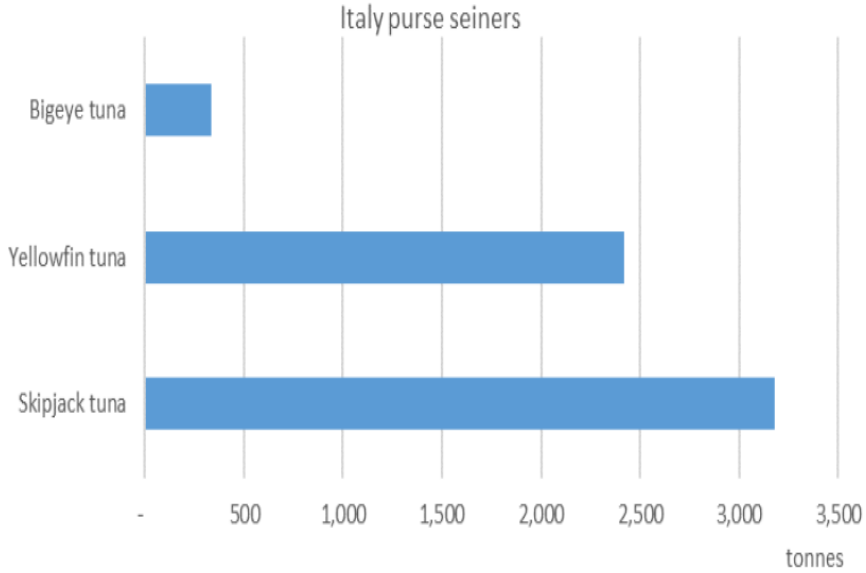
- 1,170 tonnes (-38% compared to 2016)
- Main target species swordfish, yellowfin, bigeye, albacore.

Limited data available



Italian purse seiner

- 5,931 tonnes (+57% compared to 2016)
- 1 vessel over 40m LOA (ITA PS VL40XX) fishing exclusively in IOTC
- Main target species skipjack, yellowfin, bigeye.



Limited data available

Portuguese longliner fleet

- 3,743 tonnes (+10% compared to 2016)
- Madeira longliners between 24-40m
- Mainland longliners between 24m + fishing exclusively in international waters
- Main target species swordfish, blue shark, mako, bigeye.
- Activity of each of these fleet segments was less than 25%