

The Annual Report on the Fishing Fleet of Estonia 2010

1. Overview

The Government of the Republic of Estonia established a state register of fishing vessels in 18.06.2002. The technical specifications and data on Estonian fishing vessels are entered into the register according to the requirements and codes given in EU Regulation 26/2004. On national level, the fishing fleet register is regulated by the Fisheries Act, Government Regulation of 28.02.2002 No 89 (establishing the Estonian Fishing Fleet Register) and Government Regulation of 09.03.2004 No 62 (the rules of the segmentation of the fishing fleet) and Government Regulation of 04.12.2003 No 307 (fishing vessels' fishing licences).

Estonia as one of the Member States to join the EU on 01.05.2004 is not subject to reference levels given in Commission Regulation 1438/2004, according to Council Regulation (EC) No 1242/2004 and Commission Regulation (EC) 916/2004 granting derogations to the new Member States from certain provisions of Regulation (EC) No 2371/2002 relating to reference levels of fishing fleets. Instead, Estonia follows the entry-exit strategy defined in Article 13 of Council Regulation (EC) No 2371/2002 of 20 December 2002.

1.1. Management of the entry-exit scheme

Estonia is not subject to reference levels, but must follow the entry-exit scheme according to Article 13 of EU Regulation 2371/2002. In addition to this scheme, the vessel and its owner must comply with several additional requirements set in the Fisheries Act.

According to CFR data calculated at 23.03.2011 by the Commission (Annex I), the fishing capacity of the Estonian fishing fleet at 31.12.2010 was 14 683 GT and 40 234 kW, which makes for ca 60% of the fleet's fishing capacity on 01.05.2004. The fishing capacity of the Estonian fishing fleet has decreased by 24 733 kW and 11 942 GT from 01.05.2004.

1.2. Public aid

It is possible for fishing vessel owners to apply for public aid for the permanent cessation of a vessel's fishing activities, thereby reducing the total fishing capacity of the fleet. This is achieved either by scrapping or by conclusively assigning the vessel for the preservation of historical heritage in the territory of Estonia, or for use in fisheries research or training activities of public or semi-public bodies of Estonia, or for control of fishing activities.

Permanent withdrawal with public aid only concerns fishing vessels at least 10 years old which have carried out fishing activities during the 12 month period preceding the date of the application for permanent withdrawal - at least 75 days at sea or, for at least 80 % of the number of days at sea permitted by current national regulations for the vessel concerned.

Prior to its permanent withdrawal, the vessel must be registered in the fishing fleet register. The vessel should be operational at the time the decision is taken to grant the premium. After permanent withdrawal, the fishing licence of the vessel shall be cancelled and the vessel declared permanently deleted from the fishing vessel register of the Community. The fishing capacity of the vessel can not be replaced.

1.3. Segmentation of the fishing fleet

On community level, the Estonian marine fishing vessels belong into the MFL segment. On national level, the Government Regulation of 09.03.2004 No 62 determines the criteria for

grouping fishing vessels into segments based on overall length (LOA), fishing gear, main target species and fishing grounds, and sets the possibility of entering fishing vessels into a segment.

Similar to the entry-exit scheme applied on Community level, a fishing vessel may only be entered into a marine segment if a vessel (or vessels) with a fishing capacity same as or greater than the fishing capacity of the vessel to be entered has previously been deleted from the same segment and, as a result, a free fishing capacity has been created. The fishing capacity of a vessel removed from the segment and, consequently, from the fleet register with public aid cannot be replaced.

By the end of 2010, there were 53 trawling vessels in the 4S1 segment. These vessels have an overall length above 12 metres and fish in the Baltic Sea. The main target species are Baltic herring, sprat and cod. The vessels in this segment make up for ca 6% of the total number and 32% of both the overall engine power and the overall gross tonnage of vessels in marine segments. As regards the 4S1 segment, 8 vessels left the register during the year, 5 of them with public aid; 3 new vessels entered the 4S1 segment, resulting in a 10 % decrease in the segment's total main engine power and a 2% decrease in the total gross tonnage.

In the end of 2010, there were 872 vessels in the 4S2 segment (93% of the total number, 37% of total kW, 12% of total GT). During 2010, 15 vessels were deleted from the 4S2 segment, none with public aid; nine fishing vessels entered the segment. These vessels are less than 12 metres in length and fish in the coastal areas of the Baltic Sea, using mainly fixed fishing gear and target a variety of species, but the catches are usually relatively small: for example, in 2010, the cod catches in the Baltic Sea subdivisions 25-32 of these coastal fishing vessels made up less than 1% of total cod catches in the area.

The 4S3 segment consisted of 6 vessels by the end of 2010. One vessel re-entered the register, none were deleted. As a result, there was a 7% increase in the total fishing capacity of the segment. Although few in number, the vessels make for ca 31% of the total kW and 56% of the overall GT of the marine fishing fleet because of their size - the vessels in this segment have an overall length over 24 m - and fish outside the Baltic Sea, mostly in the NAFO Regulatory Area and the areas governed by the NEAFC. Main target species are: Northern prawn (in NAFO 3L and NEAFC), redfish (quotas have been allocated to Estonia in NAFO and NEAFC) and Greenland halibut (mainly NAFO), but several other species are also caught.

2. Overview of the Estonian fisheries management system

Estonia adheres to the entry-exit strategy when entering fishing vessels into the fleet register. As a result of following the entry-exit strategy, the fishing capacity of the Estonian fleet has reduced over time. It has also made it possible to monitor and control the increase in engine power and gross tonnage in the fishing fleet. The entry of a new fishing vessel into the register is refused if there is no free fishing capacity or the vessel does not comply with the requirements set by national or EU legislation. The fishing capacity of a vessel deleted from the register with public aid can not be replaced.

In the Baltic Sea trawling segment and high seas fishery (segments 4S1 and 4S3), the fishing opportunities allocated to Estonia (usually given in tonnes or fishing days) are divided between companies based on their 3-year historical fishing rights. In coastal fishing, (segment 4S2), fishing effort is regulated by the number of fishing gear and the total number (determined by the Ministry of Environment based on scientific advice) is divided between fishing rights owners also based on their 3-year historical fishing rights.

In order to conduct fishing activities, the owner (or charterer) of a vessel which is registered in the fishing fleet register and also has a valid fishing licence must have rights to a fishing quota or quotas, and must have been given an authorisation to fish and issued a valid fishing permit. Fishing must be carried out following the rules set in national and Community legislation, and also by the rules of the appropriate Regional Fisheries Management Organisations. When fishing for Greenland halibut in the NAFO Regulatory Area, the vessels must comply with Council Regulation No 2115/2005 (amended by Council Regulation No 1197/2009); when fishing for cod in the Baltic Sea, the vessels must comply with the Council Regulation No 1098/2007 establishing the multiannual plan for the cod stocks in the Baltic Sea.

For the 4S1 and 4S3 segments, the fishing permit specifies the type of fishing gear, the species and amount of fish (in tonnes or fishing days) that the particular vessel is authorised to fish during a time period. The maximum period of validity for a fishing permit is one year and at the end of each year, the vessel owner or charterer must submit an application in order to receive a permit for the following year.

National law states that a vessel can only have one valid permit at any given time; when a new permit is issued, the previous permit loses validity. In the case of pair trawling, each vessel must have its own permit.

In coastal fishing (concerns the 4S2 segment of the fishing fleet), the fishing permit is issued to the owner of fishing rights (fisherman), not to a vessel, and indicates the type and maximum number of fishing gear that the owner of the permit is allowed to use. As is the case with the 4S1 and 4S3 segments, the maximum validity period of a coastal fishing permit is one year and at the end of each year, the vessel owner or charterer must submit an application in order to receive a permit for the following year.

Catch data for the 4S2 segment is not collected on individual vessel basis for the following reasons: firstly, the quotas for coastal fishermen are based on fishing effort (by fishing gear) allocated to the fisherman, not the vessel, secondly, some coastal fishing activities are carried out without the use of a fishing vessel (e.g. ice fishing); thirdly the coastal fishing vessels are small in size and their catches make up only a small proportion of the total catch numbers. As regards the three more important species in the Baltic Sea – sprat, Baltic herring and cod, the total catches of the 4S2 segment compared to the 4S1 trawl segment are usually relatively small.

In 2010, the total sprat catch for the 4S2 segment was only 0.15 tonnes, which is negligible in comparison with the 4S1 catches of ca 48 000 tonnes. The total 4S2 cod catches made up 0.47% of the 4S1 total cod catches. For Baltic herring, the situation is slightly different: in the open sea (areas 25-32, excluding the Gulf of Riga), 4S2 catches were 11.05% of 4S1 Baltic herring catches, while in the Gulf of Riga, coastal fishing catches actually exceeded the catches made by 4S1 vessels (51.5% of the total catch). However, it must be noted that most of the 4S2 Baltic herring catches are taken using pound nets, and in this case, the EU vessel logbook must be filled in and submitted to the competent authorities in accordance with deadlines set in EU regulation.

3. Fishing opportunities and fishing effort

3.1. Fishing opportunities

In 2010, Estonian Baltic Sea trawling vessels were allocated the following fishing opportunities in the Baltic Sea: ca 800 tonnes of cod in areas 25-32 (taking into account quota swaps), 135 tonnes of cod in areas 22-24, 8700 tonnes of Baltic herring in the Gulf of Riga and 13 000 tonnes in the rest of the Baltic, and 48 500 tonnes of sprat. Most of these quotas were almost completely exhausted, except for the 25-32 cod quota.

In the high seas, some of the quotas allocated to Estonia were almost fully exhausted (such as the Greenland halibut (3LMNO), Atlantic cod (3M) and Northern prawn (3L) quotas in the NAFO area), while out of others, considerably less than 50% was used (Northern prawn fishing days in NAFO 3M and Svalbard fishing days).

3.2. Indicators – technical indicator and CPUE

The technical indicator (Ratio) and CPUE biological indicator data has been calculated based on data from those fishing vessels in 4S1 and 4S3 segments that performed fishing operations in 2007 – 2010 (i.e. the vessels with zero fishing days have been omitted).

The technical indicator was calculated separately for the Baltic Sea trawling vessel segment and the high seas fishery segment, based on data from 2007 to 2010. Catch per unit of effort (CPUE) for a given vessel in a given year was calculated by dividing each vessel's catches (given in tonnes) for the year with the number of its fishing days for that particular year. On the graphs, the data series placed on the primary axis of the graph are indicated with full symbols (■); those on secondary axis are marked with empty symbols (○).

For the 4S1 segment, the catch data for the three main target species – Baltic herring (HER), sprat (SPR) and Atlantic cod (COD) is also given, although not all of the vessels listed targeted all three. For the 4S3 segment, only total catches are shown on the graph, since some of the vessels targeted Northern prawn, while two vessels targeted several other species.

When studying the fishing days, catch and CPUE data for individual vessels (not given in the report because of the size of the tables), there does not seem to be much consistency. The vessel with the highest number of fishing days for a given year might not rank very high in the following years; in the case of vessels with higher CPUE there seem to be some vessels that are slightly more likely to rank in the top 5 than others. On the other hand, a vessel with a high number of fishing days or a high CPUE value one year is quite unlikely to fall to the bottom of the list in the following years.

3.2.1. Baltic Sea trawling vessels (4S1)

As can be seen from the chart below, the maximum number of fishing days has decreased between 2007-2010, from 184 to 151, while the average ratio between a given vessel's number of fishing days and the maximum number of fishing days for the particular year has risen from 0.60 to 0.70. This could be interpreted as an increase of uniformity in the use of fishing days in the segment, though in accordance with the STECF guidelines, there still seems to be some overcapacity in the 4S1 segment.

The number of active fishing vessels (here: the vessels that actually carried out fishing activities) has decreased from 59 in 2007 to 48 in 2010, partly because of the decrease in the number of fishing vessels registered in the national fleet register. There is also a considerable rise in the number of fishing days for the least active vessel: from 10 in 2007 to 30 in 2010.

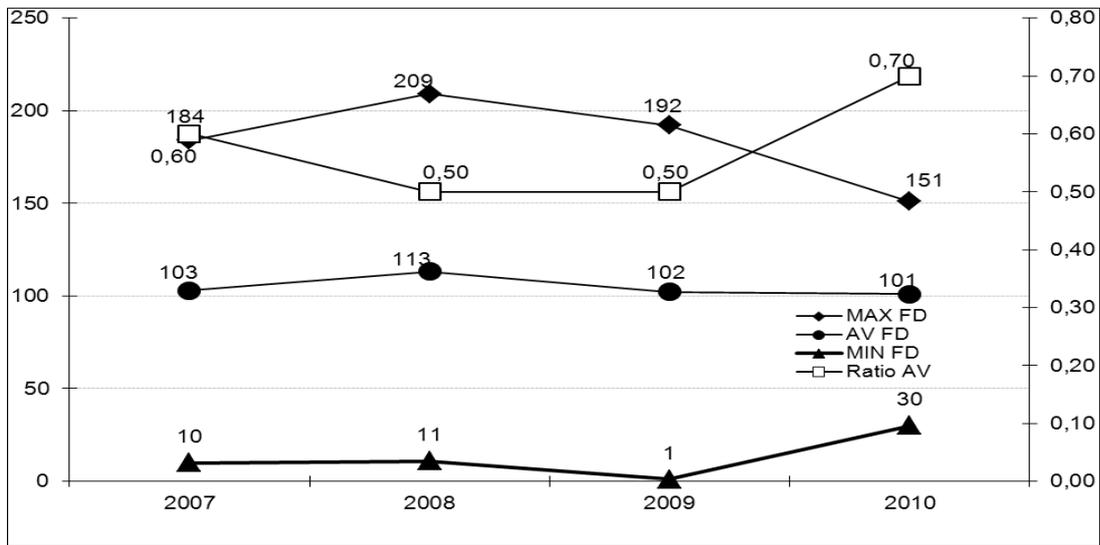


Chart 1. Number of fishing days and technical indicator (Ratio) for 4S1 segment in 2007-2010

As can be seen from tables 2 and 3, both the maximum and average CPUE have increased, despite the decrease in total catches and the catches of the three target species.

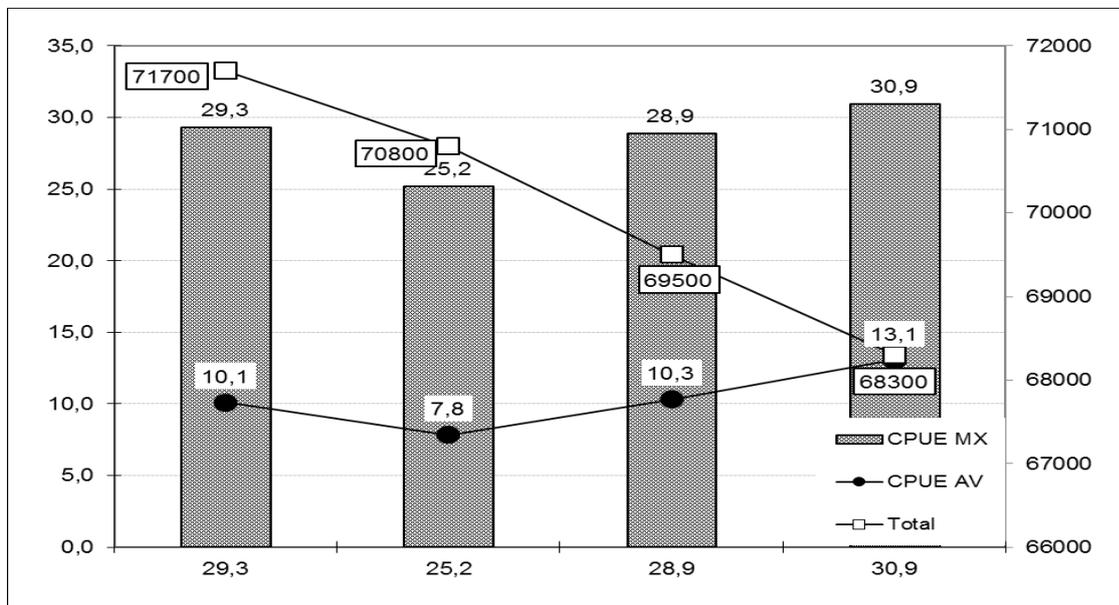


Chart 2. CPUE and total catch for 4S1 vessels in 2007-2010

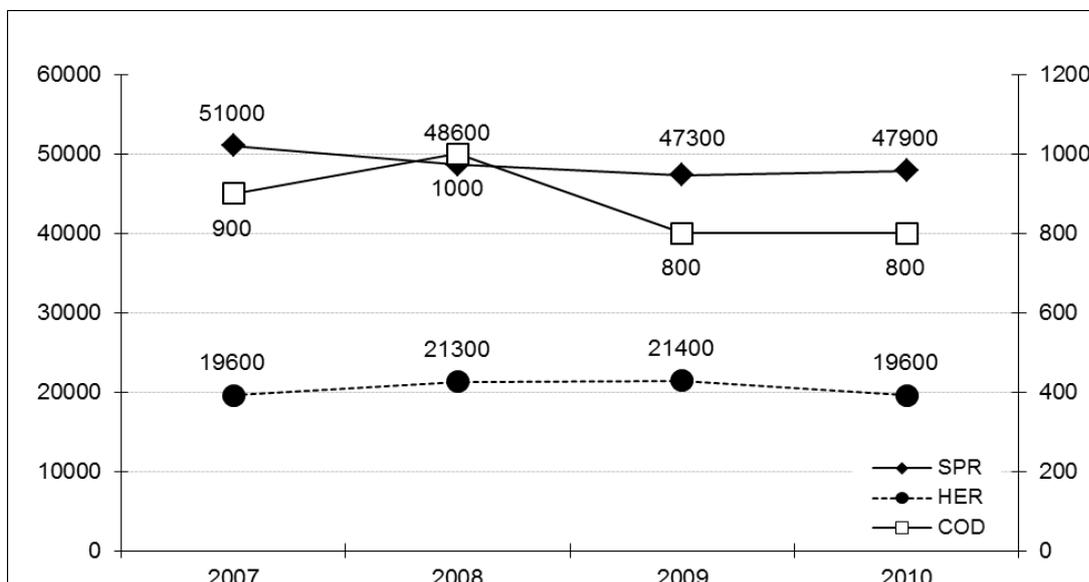


Chart 3. The catches of 3 main target species for 4S1 vessels in 2007-2010

3.2.2. High seas fishery (4S3)

Similar to the 4S1 segment, the maximum number of fishing days for the 4S3 vessels has decreased slightly between the years 2007 and 2010, from 296 to 284, while the average number of fishing days has remained almost the same. There is a small increase in the average ratio: from 0.80 to 0.83 and in the minimum number of fishing days spent at sea: from 161 days in 2007 to 173 in 2010.

The number of active fishing vessels was almost the same in 2010 (5 vessels) as in 2007 (6 vessels). There is also a considerable rise in the number of fishing days for the least active vessel: from 10 in 2007 to 30 in 2010.

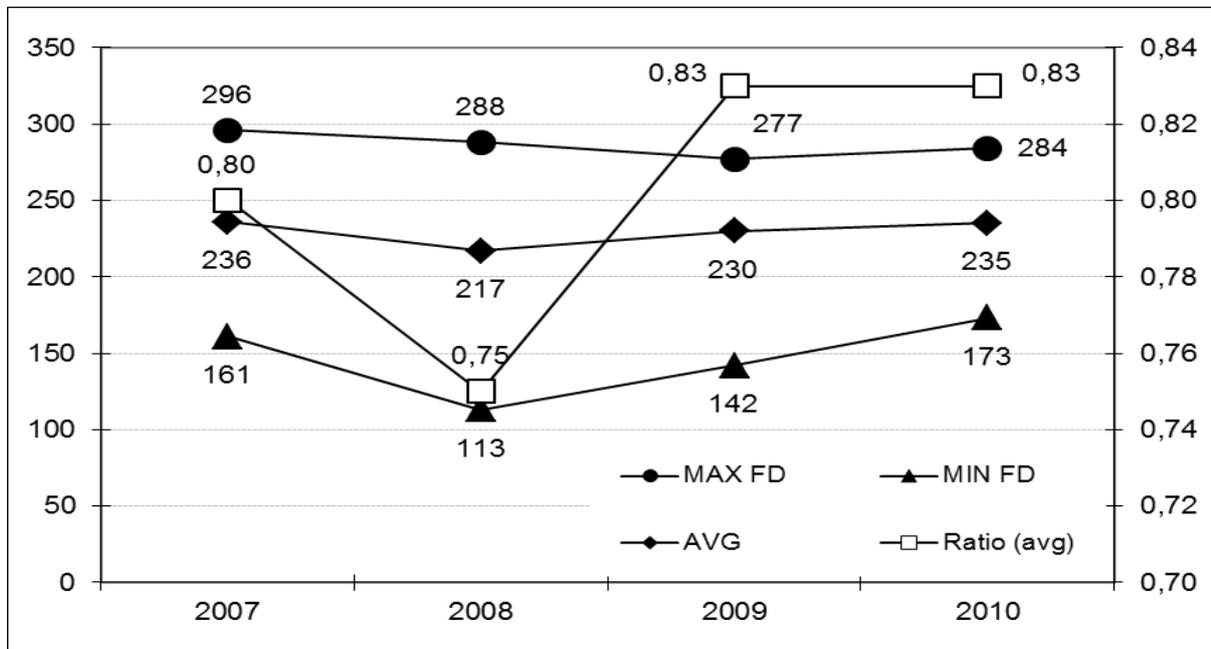


Chart 4. Number of fishing days and technical indicator (Ratio) for 4S3 segment in 2007-2010

The maximum CPUE has risen from 12.91 in 2007 to 15.00 in 2010, as have the minimum and average CPUE, despite the declining catches.

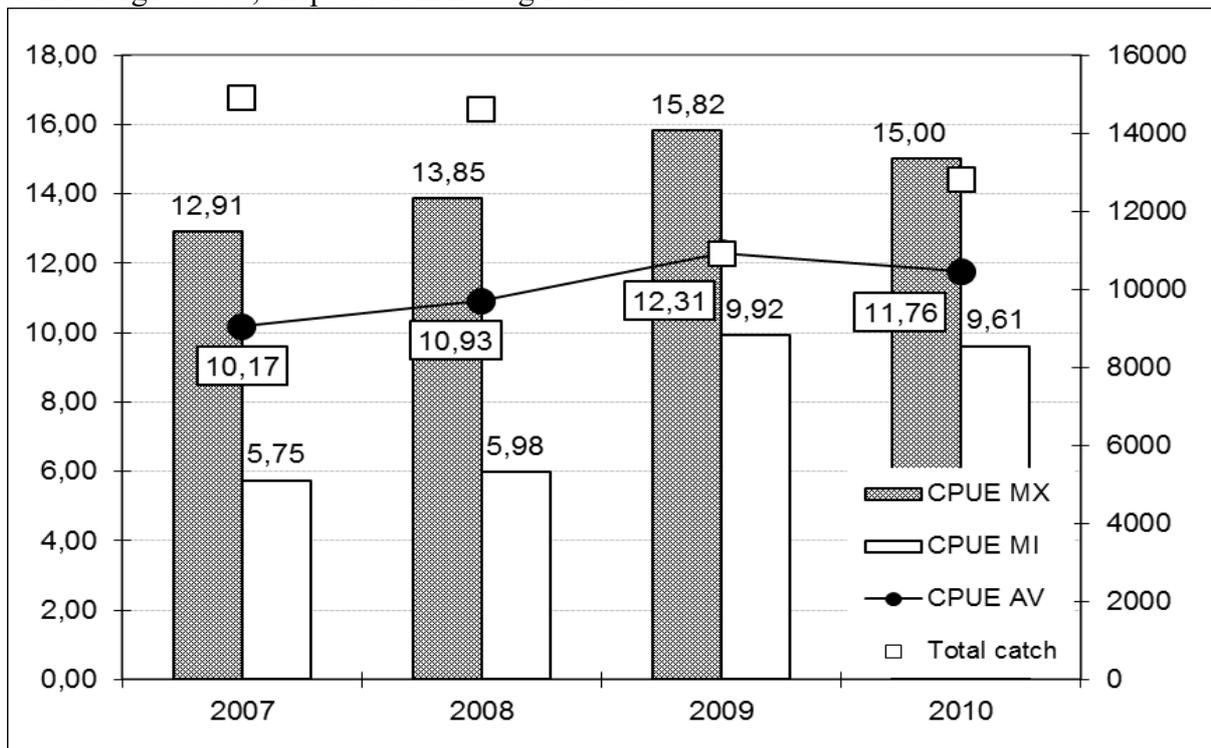


Chart 5. CPUE and total catch for 4S3 vessels in 2007-2010

3.3. Economic indicator – Return on Investment

The economic indicator - Return on Investment (ROI) is calculated based on data collected under the DCR by the Ministry of Environment following the Commission's March 2008 guidelines.

The ROI is calculated as follows: “profit after capital stock depreciation and interest payments – opportunity costs)/total investment”, where “profit after capital stock depreciation and interest payments” is derived by subtracting all cost items from “total income” and “opportunity costs” are calculated by multiplying “total investments” by 5%. Finally, the ROI is converted into per cent (%).

Regrettably, there were no investment data for the 4S1 segment for the years 2005 and 2006, so the 4S1 ROI for 2005 and 2006 could not be calculated.

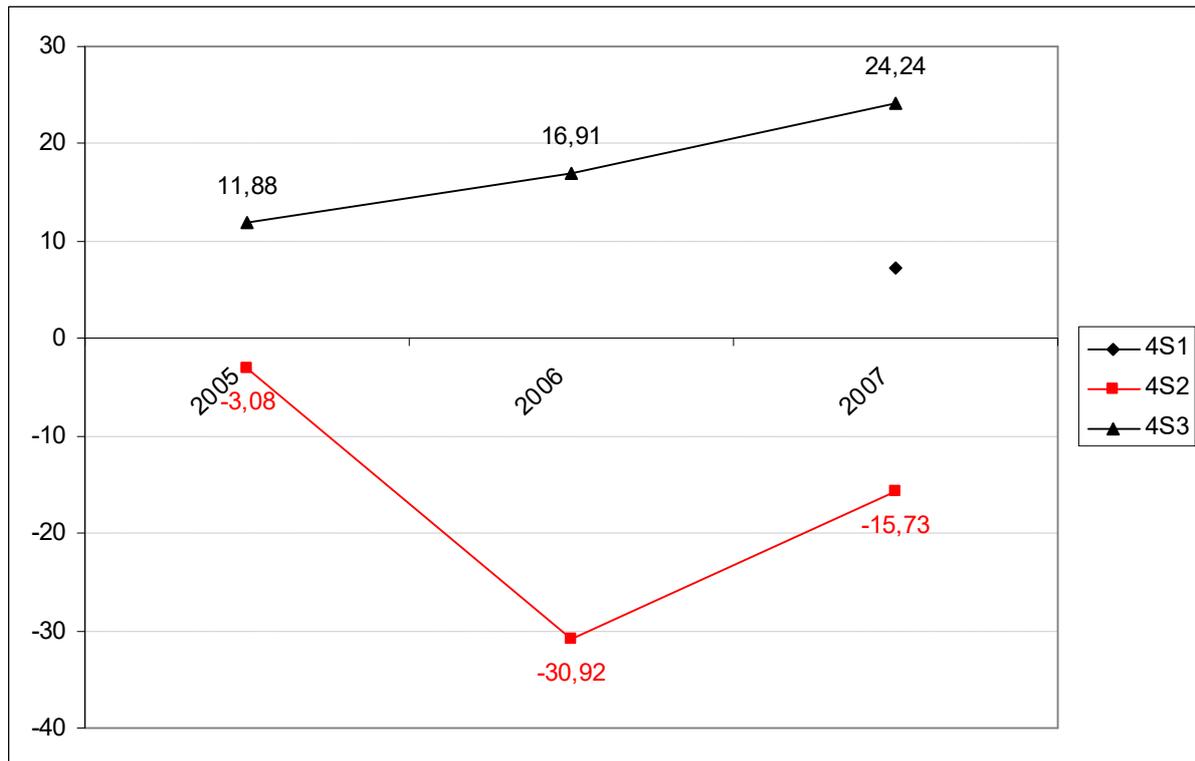


Chart 6. ROI for segments 4S1-4S3 for years 2005-2007.

As can be seen from the chart, the ROI for the 4S3 segment (high seas vessels) has been positive throughout the years and has increased from 2005 to 2007. The 4S1 segment (Baltic Sea trawling vessels) in 2007 also shows a positive ROI. However, the 4S2 segment displays a negative ROI for all three years.

3.4. Balance between fishing opportunities and fishing capacity

In 2008, the Estonian Marine Institute analysed the fishing capacity of the different segments of the Estonian fishing fleet on the basis of several indicators, including those suggested by the Commission (biological and technical indicators) based on 2007 data. According to the study, the optimum fishing capacity of the segment would be ca 12 500 kW and 5000 GT. However, since this assessment of optimum capacity is based on the assumption that the fleet uses its fishing capacity to the full, and since this assumption may not be very realistic, the study concludes that the capacity of the 4S1 segment should not fall below ca 14 400 kW and 5800 GT.

According to the fleet register, the capacity of the 4S1 segment at the end of 2010 was ca 12 800 kW and 4700 GT. However, this does not include the capacity of vessels that left the register without public aid that, according to the entry-exit scheme can be replaced (this type

of capacity is referred to in the analysis as “passive capacity”). When this unused “passive capacity” is also taken into account, the potential fishing capacity of the 4S1 segment at the end of 2010 would be ca 16 200 kW and 6000 GT, i.e. somewhat above the optimum fishing capacity according to the analysis.

As regards the 4S3 segment, the minimum fishing capacity necessary to make use of all Estonia’s high seas fishing quotas (based on the EMI analysis) would be ca 16900 kW and 12700 GT. At the end of 2010, the total capacity of active 4S3 fishing vessels was ca 12 700 kW and 8300 GT; the potential fishing capacity (which, in addition to active fishing vessels, includes the fishing capacity of vessels that left the register without public aid) was 19 200 kW and 12 500 GT, i.e. still above the minimum fishing capacity in terms of main engine power, but on the other hand, slightly below the minimum gross tonnage.

Annex I

Application of the entry-exit regime

a) Calculation of the baselines (GT04 and kW04) on 01/05/2004

Estonia

GTFR	GT1	GT2	GT3	GT4	GT04
26 625	0	0	0	0	26 625

kWFR	kW1	kW2	kW3	kW4	kW04
64 967	0	0	0	0	64 967

b) Management of the entry exit regime on 31/12/2010

Estonia

		GT		kW	
1	Capacity of the fleet on 01/05/2004	GTFR	26 625	kWFR	64 967
2	Capacity level for the application of the entry-exit regime	GT04	26 625	kW04	64 967
3	Entries of vessels of more than 100 GT financed with public aid	GT100	0	kW100	0
4	Other entries or capacity increases (not included in 3 & 5)		6 023		14 438
5	Increases in tonnage GT for reasons of safety	GTS	0		
6	Total entries (3 + 4 + 5)		6 023		14 438
7	Exits before 1/1/2007 financed with public aid	GTa1	1 779	kWa	4 691
8	Exits after 1/1/2007 financed with public aid	GTa2	2 934		6 507
9	Other exits (not included in 7 and 8)		13 252		27 974
10	Total exits (7 + 8 + 9)		17 965		39 171
11	Power of engines replaced with public aid conditional to power reduction			kWr	0
12	Capacity of the fleet on 31/12/2010 (1 + 6 - 10)	GTt	14 683	kWt	40 234
13	Fleet ceiling on 31/12/2010		22 057		53 770