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EMPLOYMENT AND WAGES IN FISHERIES OF THE BALTIC RIM COUNTRIES

Bartosz Mickiewicz[1], **Wojciech Brocki**[2]
[1]West Pomeranian University of Technology in Szczecin, Faculty of Economics;,
[2]West Pomeranian University of Technology in Szczecin, Faculty of Food Science and Fisheries

Abstract. There was employed 12.4 thousand sea fishermen in the Baltic Sea basin countries in 2014. They were only 0.02 % of the total number of employees. The biggest number of fishermen was in Poland - 2.5 thousand. people (0.02 %). However, the largest share in fishermen's general employment took place in Estonia, where it amounted to 0.37 % (2.3 thousand fishermen). Employment in the Baltic fisheries has been declining due to the deteriorating state of fish stocks, which affects the reduction of fishing fleets in individual countries. Wages in the Baltic fisheries mainly depend on the form of fishing activity and the level of economic development in individual countries. The highest level was achieved in the "old countries" of the European Union and in the open sea fishery. On the other hand, the lowest earnings were in coastal fishing and the "new countries" of the European Union.

Key words: Baltic Sea, fisheries, employment, wages.
Jel code: Q18

Introduction

Labour, next to capital and knowledge, constitutes a significant factor of production. The relative importance of these factors usually depends of the specifics of the given business. Fishing, pursued from the dawn of humanity, remains one of the traditional and highly labour-intensive forms of human economic activity. Fishing may provide a significant source of income for local seaside communities. It relies on the extraction of living resources: fish, molluscs, crustaceans etc. from bodies of water. The Baltic is a small, epicontinental sea, sensitive to human activities and phenomena such as the lack of intrusions from the North Sea or the rise of sea temperature due to global warming. The status of fish stocks in the Baltic Sea is catastrophic. Three countries of the Baltic Rim (Denmark, Germany and Sweden), thanks to having additional access to the fish-rich North Sea, are able to maintain the historic role of fisheries in their economies.

The aim of the study was to present the scale of employment and salaries in fishery of the Baltic Sea countries with special regards to economic indicators from Poland and Latvia. In the paper, there were used methods of induction in order to draw general conclusions from individual observations and synthesis with deduction for achievement of output of the known and already proven general theorems. The elaboration is mainly based on the European legislation, regulating the fishery in the Baltic Sea, Eurostat materials and data gained from STECF–Scientific, Technical and Economic Committee for Fisheries as well as the report of the Commission for the EP and the Council. All research analyses were done by the authors in 2017.

Research about the employment of Baltic fishermen takes on significance due to the progressing marginalization of fisheries. This makes the necessity to create new jobs for workers leaving the fishery. It plays an important role in regions heavily dependent on fisheries, which require additional financial support. Therefore, in the article there is used the method of comparative analysis, which allows to study changes in employment and wages of fishermen in all countries of the Baltic Sea basin and compare them to the EU average.

Research results and discussion

In 2014, the Member States of the European Union were inhabited by 499 million people, of whom 218 million (44 %) were in work. Out of all the people in employment, only as few as 149.000 (0.07 %) were total employed fishermen, including full-time and part-time employment

(tab. 1). There are countries and regions (Spain, Italy, Greece and Portugal) where the fishing sector employs half of all the people employed in the coastal zone. The employed in the above-mentioned countries constitute about 70 % of the headcount in the fisheries sector in the EU (Wspolna, 2016).

Table 1.

Percentage of fishermen in employment in the Baltic Rim countries in 2014 (in thousands)

Country	Population	Employment	Fishermen	Share of fishermen employed in total (%)
Denmark	5 638	2714	1.1	0.04
Estonia	1 311	625	2.3	0.37
Finland	4 615	1914	1.8	0.09
Lithuania	2 934	1319	0.9	0.05
Latvia	**1 968**	**885**	**0.7**	**0.08**
Germany	80 016	39871	1.6	0.00
Poland	**36 512**	**15862**	**2.5**	**0.02**
Sweden	9 551	4772	1.5	0,03
Old EU B.c.	99820	49271	6.0	0.01
New EU B.c.	42745	18691	6.4	0.03
Baltic total	142565	67962	12.4	0.02
EU	498 725	217710	148.7	0.07

Old EU BCs – countries of the Baltic Rim which belonged to the EU prior to the 2004 enlargement
New EU BCs – countries of the Baltic Rim which joined the EU in 2004
STECF – Scientific, Technical and Economic Committee for Fisheries
Source: authors' elaboration based on STECF and Eurostat materials

In the countries of the Baltic Rim, fishermen account for a smaller percentage in total employed population than the EU average. In the Baltic countries of the old EU, this percentage amounted to 0.01 % in 2014, and in the new EU (Member States as of 2004) – 0.03 %. There were three countries where the percentage of fishermen exceeded the EU average, in Estonia by a large margin, reaching 0.37 %, while in Finland it amounted to 0.09 %. Latvia was the last country where fishermen accounted for a higher percentage of employment than the EU average, with 0.08 %; in Lithuania it was marginally lower, 0.05 %; in Denmark 0.04 %. In Sweden and Poland, the percentage was 0.03 % and 0.02 % respectively, and in Germany it was close to 0 %. Characteristically, the percentage of fishermen in total employment tended to be higher in countries where a larger share of the coastal population lived up to 50 km from the seashore, as shown in Table 2. In Germany (0 %), Poland (0.02 %) and Sweden (0.03 %) the percentage of the population inhabiting seaside areas within 50 km from the seashore was the lowest, respectively: 64 %, 72 % and 79 %. These countries are characterised by the largest territory, which seems to be the explanation. Understandably, the coastal zones tend to rely on fishing to the greatest extent, and it is normal for employment in fisheries to increase the closer to the coast one gets.

Table 2.

Percentage of the population inhabiting coastal zones of seaside regions in the Baltic Rim countries in 2014 (%)

	5 km from the shore	15 km from the shore	50 km from the shore	Fishermen's participation in employment
Denmark	50	81	99	0.04
Estonia	51	73	94	0.37
Finland	43	65	86	0.09
Lithuania	23	46	64	0.00
Latvia	**46**	**61**	**89**	**0.08**
Germany	18	49	88	0.05
Poland	**17**	**40**	**72**	**0.02**
Sweden	40	62	79	0.03

Source: authors' elaboration based on STECF and Eurostat materials

Employment in fisheries of the Baltic Rim countries

In the European Union, as well as in the Baltic Rim (eight EU Member States), employment in the fishing sector (fish taking, aquaculture and fish processing) plays an important role in regions where it is hard to find alternative sources of employment. In these areas, which are usually not far from the coastline, fisheries also generate other jobs: port services, ship building and repair, storage and trade, manufacturing and repair of fishing equipment. Heavy dependence on fishing tends to occur in regions or small countries with small populations, and by no means does it translate into high numbers of fishermen. Dependence on fishing is determined not by the number of fishermen as such, but rather by the percentage of the total labour force they account for.

In 2014, the highest number of total employed fishermen, including full-time and part-time employment, was found in Poland: 2.700 (including 180 fishermen in distant-water fishing), accounting nevertheless for as little as 0.02 % of total employment. Estonia, the most fishing-dependent country of the Baltic Rim, was rather unique, because in this small country with a population of 1.3 million, there were 2.100 employed fishermen, which placed it second among the countries of the Baltic Rim in this regard. Finland was third, with 1.800 employed fishermen. It was followed by Germany and Sweden with 1.600 total employed fishermen in each, Denmark with 1.400, Lithuania with 700 and Latvia 600.

Fisheries, relying on the extraction of living resources, depend heavily on natural conditions, including weather and biological factors, as a result of which production is seasonal. Moreover, it is subject to legal restrictions as to the time and place of fish taking, and finally – catch limits. All of these have a major impact on the quantity and forms of employment. In the countries of the Baltic Rim, fishermen can find employment in various forms of fisheries activity: inshore (coastal), offshore (also going out to open sea) and distant-water fleet. Some fishermen are employed full-time; others find seasonal employment and often rely on other sources of income. The percentages between the two groups vary in individual countries and forms of fisheries activity, as presented in Tables 3 and 4. Where the risk is the highest and so is the related uncertainty, i.e. in coastal fishing, the difference between the total number of employed fishermen and the number of full-time employees is the greatest. This is due to the risk, which affects the employer and the employees alike. The threats are related both to the nature of the job and economic issues. Offshore fishing operations, which are also conducted in the open sea, are more regular and at the same time more flexible, and thus the disproportions between the total number of employed

fishermen and the number of full-time employees are smaller. Distant-water fishing does not play an important role, as according to EU statistics it employs 180 people in Poland and 460 people in Lithuania. Remote seas, far away from the Baltic Sea, where these fishermen operate, are not the topic of these considerations.

Table 3.

Total employed fishermen in the Baltic Rim countries in 2008–2014

	SSF							%	14:08 %
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**		
Denmark	420	378	333	342	345	362	307	24 %	73 %
Estonia	2 727	1 646	1 721	1 777	1 858	1 865	2 100	91 %	77 %
Finland	1 486	1 465	1 560	1 589	1 729	1 674	1 674	92 %	113 %
Lithuania	370	158	152	154	149	140	134	18 %	36 %
Latvia	**992**	**1 110**	**1 175**	**321**	**258**	**327**	**367**	**48 %**	**37 %**
Germany	1 031	559	847	869	876	777	763	47 %	74 %
Poland	**1 379**	**1 154**	**1 121**	**1 163**	**1 271**	**1 290**	**1 390**	**53 %**	**101 %**
Sweden	1 073	929	951	925	920	902	902	57 %	84 %
Old EU B.c.	4 010	3 331	3 691	3 725	3 870	3 715	3 646	60 %	91 %
New EU B.c.	5 468	4 068	4 169	3 415	3 536	3 622	3 991	63 %	73 %
Baltic total	9 478	7 399	7 860	7 140	7 406	7 337	7 637	61 %	81 %
EU	55 666	56 515	60 406	56 323	81 165	73 949	91 116	52 %	164 %
	LSF							%	14:08 %
	2008	2009	2010	2011	2012	2013	2014		
Denmark	1 380	1 317	1 195	1 119	1 127	1 127	807	76 %	58 %
Estonia	275	253	227	216	188	181	180	9 %	65 %
Finland	127	144	143	133	136	143	148	8 %	117 %
Lithuania	132	240	228	231	228	265	258	35 %	195 %
Latvia	**629**	**556**	**444**	**391**	**385**	**353**	**339**	**52 %**	**54 %**
Germany	1 037	970	897	770	876	870	875	53 %	84 %
Poland	**1 377**	**1 088**	**1 043**	**978**	**1 053**	**960**	**903**	**40 %**	**66 %**
Sweden	907	829	813	754	743	675	641	43 %	71 %
Old EU B.c.	3 451	3 260	3 048	2 776	2 882	2 815	2 471	40 %	72 %
New EU B.c.	2 413	2 137	1 942	1 816	1 854	1 759	1 680	27 %	70 %
Baltic total	5 864	5 397	4 990	4 592	4 736	4 574	4 151	33 %	71 %
EU	66 131	68 708	65 500	66 032	73 928	69 277	75 488	44 %	114 %

Source: authors' elaboration based on STECF materials

In 2014, the highest number of total employed fishermen in inshore fishing (SSF –Small Scale Fisheries) worked in Estonia 2100, Finland 1674 and Poland 1390, whereas the lowest numbers were found in Lithuania 134, Denmark 307 and Latvia 367. The greatest proportion of total employed fishermen in inshore fishing to the total employed fishermen was noted in Finland 92 %, Estonia 91 % and Sweden 57 %, while the smallest in Lithuania 18 %, Denmark 24 % and in Germany 47 %. In Poland, it amounted to 53 %, and in Latvia 48 %. For the whole EU, the percentage amounted to 52 %, that is 91,000 fishermen. In 2008–2014, the total number of employed fishermen went up only in Finland (by 13 %) and in Poland (by 1 %). In the other countries the numbers were down, with a nearly threefold drop in Lithuania and Latvia. The highest number of fishermen in full-time employment in inshore fishing could be found in Germany 626

(47 %), Poland 542 (33 %), Sweden 335 (36 %) and in Estonia 333 (66 %), and the lowest in Lithuania 44 (8 %), Denmark 225 (14 %), Finland 231 (71 %) and Latvia 255 (55 %). The figures in brackets represent the share in the entire fishermen community in full-time employment in the given country. Only in Finland (by 30 %) and in Poland (by 24 %) did the number of inshore fishermen in permanent employment go up in 2008–2014. In Lithuania, the headcount decreased fivefold, and in other countries by 20–40 %. Full-time employees accounted for the highest percentage of all employees in Germany 80 %, Denmark 73 % and in Latvia 69 %, and the lowest in Finland 14 %, Estonia 16 % and Lithuania 33 %. In Poland, the ratio was 40 %, and in Sweden 37 %.

Table 4.

Fishermen in full-time employment in the Baltic Rim countries in 2008–2014

	SSF							**%**	**14:08 %**
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**		
Denmark	379	319	281	276	252	239	225	14 %	59 %
Estonia	-	-	309	320	362	339	333	66 %	
Finland	178	135	220	216	238	258	231	71 %	130 %
Lithuania	208	55	49	37	49	39	44	8 %	21 %
Latvia	**373**	**329**	**329**	**202**	**154**	**229**	**255**	**55 %**	**68 %**
Germany	790	464	654	664	668	597	626	47 %	79 %
Poland	**436**	**424**	**419**	**449**	**482**	**515**	**542**	**33 %**	**124 %**
Sweden	470	383	384	367	340	321	335	36 %	71 %
Old EU B.c.	1817	1301	1539	1523	1498	1415	1417	35 %	78 %
New EU B.c	1017	808	1106	1008	1047	1122	1174	41 %	115 %
Baltic total	2834	2109	2645	2531	2545	2537	2591	37 %	91 %
EU	29 201	30 471	33 108	30 401	49 060	46 436	60 565	45 %	207 %
	LSF							%	14:08 %
	2008	2009	2010	2011	2012	2013	2014		
Denmark	1682	1535	1523	1385	1307	1413	1394	86 %	83 %
Estonia	255	240	212	204	178	175	181	34 %	71 %
Finland	86	94	93	108	108	103	114	29 %	133 %
Lithuania	87	175	155	169	162	156	123	32 %	141 %
Latvia	**291**	**219**	**192**	**176**	**199**	**186**	**170**	**45 %**	**58 %**
Germany	825	774	711	594	704	684	659	53 %	80 %
Poland	**995**	**890**	**815**	**792**	**990**	**928**	**841**	**59 %**	**85 %**
Sweden	663	636	606	606	602	565	516	64 %	78 %
Old EU B.c.	3256	3039	2933	2693	2721	2765	2683	65 %	82 %
New EU B.c	1628	1524	1374	1341	1529	1445	1315	46 %	81 %
Baltic total	4884	4563	4307	4034	4250	4210	3998	58 %	82 %
EU	57665	60953	55729	55859	61493	57134	64269	49 %	111 %

Source: authors' elaboration based on STECF materials

The data quoted above point to a strong dependency in Estonia and Finland on coastal fishing, as these countries catch fish nearly exclusively in the Baltic Sea.

In 2014, the highest number of total employed fishermen in offshore fishing (LSF –Large Scale Fisheries) among the Baltic Rim countries worked in Poland 903 (40 %), Germany 875 (53 %), Denmark 807 (76 %) and in Sweden 641 (43 %), while the lowest numbers were found in Finland 148 (8 %), Estonia 180 (7 %), Lithuania 258 (35 %) and Latvia 339 (52 %). The figures in brackets reflect the percentages of those employed in offshore fishing in the total number of fishermen in employment (inshore, offshore and distant-water fleet). In 2008–2013, the number of

offshore fishermen employed overall increased only in Lithuania (by 95 %) and Finland (by 17 %). In Germany, their number went down by 16 % and in other countries by 28–45 %. Turning to the data on offshore fishermen in full-time employment in Denmark, numbers have for years shown that their number is higher than the total number of offshore fishermen employed. In 2014, they numbered 1394, which means that there were 70 % more offshore fishermen in full-time employment than the total employed. They accounted for 86 % of all Danish fishermen employed full-time. Poland came second with 841 (59 %), followed by Germany 659 (53 %), and Sweden 516 (64 %). In the remaining countries, there were fewer than 200 individuals employed full-time in offshore fisheries. Similar to the total employed number, the number of fishermen employed full-time went up in 2008–2014 only in Lithuania (by 41 %) and Finland (by 33 %). The ratio of full-time employed to total employed reached 100 % in Estonia, 93 % in Poland, 80 % in Sweden, 77 % in Finland, 75 % in Germany, and about 50 % in Lithuania and Latvia. Employment levels in offshore fisheries in the countries of the Baltic Rim correspond to the capacity of the fleets and volumes of catch in these countries. It is worth noting, however, that a major share of the fishing operations of Denmark and Germany take place in the North Sea.

It can be assumed that the smallest disproportions between the numbers of total employed and full-time employed tend to occur in two situations. First, where good economic performance provides for economic security of employees, and second – the regulations on employment are strict.

Wages and employment in fisheries of the Baltic Rim countries

The issue of pay in fisheries is not completely clear. At the highest level of aggregation, data are usually presented as labour costs, while many statistics mention two data categories: crew wages and unpaid labour. Implicitly, it may be assumed that the latter covers the work performed by family members of the fishermen, the volume of which is estimated, seen as figures are not available in any statistics. A lion's share of the work is performed by family members, mainly women, involved in the running of family businesses and doing jobs like: office work, selling fish, cleaning fishing vessels, mending fishing nets and hook lines, as well as other onshore jobs (Women, 2013). Women and other family members are regarded as the invisible crew members, who make a considerable contribution of the functioning of the economic sector, but it is not reflected in remuneration (Marciniak, 2010). The amounts at stake are substantial, in 2014 wages and salaries in EU fisheries totalled EUR 1.523 billion, and the value of unpaid labour was estimated at EUR 125 million.

In the Baltic Rim countries, there are two factors at play that differentiate pay levels. The first one is the level of economic development; in the old EU Member States wages and salaries are much higher than in the new Member States to the Union. The other factor is the form of fishing activity. In inshore fishing, wages tends to be lower than in offshore fishing, which is understandable and seen as the latter is more profitable. One could liken this to the difference between a smallholder and a large-scale agricultural enterprise. Both are needed in the society, but as they deliver different products, they create different added values. The average wages in the fisheries of the Baltic Rim countries is presented in Table 5.

In 2014, in inshore fisheries the highest earnings were found in Denmark with EUR 59.200 per year, Sweden EUR 26.600, and Finland EUR 21.800, contrasting with the lowest average pay in Latvia of EUR 400. In Germany, Estonia and Lithuania, earnings were in the range of EUR 4–

5 thousand. In Poland, the average wage amounted to EUR 9.800. In Lithuania, in 2008–2016 there was a remarkable fourfold increase in average pay, which may be assumed to result from a reduction in employment, which was of a similar scale. A significant growth in average wage was observed in Poland. It amounted to 67 %, and was accompanied by a 24 % increase in full-time employment. In Finland and Latvia, the drop in headcount coincided with a drop in average earnings.

In 2014, in offshore fisheries of the Baltic Rim countries the highest earnings were found, again, in Denmark – EUR 69.700, German fishermen earned EUR 63.000, Finnish - EUR 55.000 and Swedish - EUR 36.700 (the old EU). Among the new Member States of the EU, the top-paid fishermen were Estonian with EUR 16.800, Latvian - EUR 18.300, Polish - EUR 11.700, while Lithuanian fishermen earned the least, with EUR 8,700. In 2008–2014, earnings went down in three countries: Estonia (8 %) and Finland (18 %), while the most drastic drop was observed in Lithuania (55 %). In the remaining countries, earnings went up by 4–31 %.

Table 5.

Average wage in fisheries of the Baltic Rim countries according to the form of fishing activity in 2008–2014 (constant price terms of 2014)

	SSF							**Average 08-14**	**14:8 %**
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**		
Denmark	54.7	54.1	55.0	53.0	55.3	57.9	59.2	55,.6	108 %
Estonia	-	-	3.7	3.8	3.8	4.6	5	4.2	
Finland	22.5	36.5	17.4	18.5	23.3	16.7	17.9	21.8	80 %
Lithuania	1.3	2.7	3.4	6.4	3.9	4.5	5.5	4.0	423 %
Latvia	**0.5**	**0.5**	**0.3**	**0.5**	**0.6**	**0.3**	**0.4**	**0.4**	**80 %**
Germany	4.1	7.7	3.7	4.2	4.4	5.3	4.5	4.8	110 %
Poland	**7.1**	**5.9**	**8.7**	**9.8**	**11.8**	**13.0**	**12.0**	**9.8**	**169 %**
Sweden	22.9	22.4	25.2	27.1	28.7	30.7	29.2	26.6	128 %
Old EU B.c.	26.1	30.2	25.3	25.7	27.9	27.7	27.7	27.2	106 %
New EU B.c.	3.0	3.0	4.0	5.1	5.0	5.6	5.7	4.5	193 %
Baltic total	16.2	18.5	14.7	15.4	16.5	16.6	16.7	16.4	103 %
	LSF							**Average 08-14**	**14:8 %**
	2008	2009	2010	2011	2012	2013	2014		
Denmark	66.9	64.5	73.1	74.8	70.7	68.0	69.7	69.7	104 %
Estonia	18.2	18.2	19.2	18.0	21.2	19.9	16.8	18.8	92 %
Finland	67.4	61.2	37.3	45.5	47.9	54.4	55.0	52.7	82 %
Lithuania	17.6	6.7	7.0	6.7	6.6	8.1	7.9	8.7	45 %
Latvia	**15.0**	**15.3**	**17.6**	**18.8**	**19.0**	**22.5**	**19.6**	**18.3**	**131 %**
Germany	51,.3	57.9	65.2	71.0	67.4	63.8	64.3	63.0	125 %
Poland	**11.2**	**9.2**	**11.3**	**11.8**	**11.3**	**15.0**	**11.8**	**11.7**	**105 %**
Sweden	29.0	27.4	31.6	31.6	34.5	41.6	36.7	33.2	127 %
Old EU B.c.	53.7	52.8	51.8	55.7	55.1	57.0	56.4	54.6	105 %
New EU B.c.	15.5	12.4	13.8	13.8	14.5	16.4	14.0	14.3	90 %
Baltic total	34,.6	32.6	32.8	34.8	34.8	36.7	35.2	34.5	102 %

Source: authors' elaboration based on STECF materials

The comparison of earnings according to the form of fishing activity goes to the conclusion that the remuneration paid in offshore fisheries provide for at least a basic standard of living in all the countries included in the analysis. In Denmark, Germany, Finland and Poland, wages can even be

described as good. In inshore fishing, this condition is fulfilled in the case of Denmark, Estonia, Latvia and Poland. In Sweden and Finland, average fisherman wage, as listed above, is only enough to survive (subsistence). In turn, the pay levels in Germany and Lithuania are not enough to meet basic needs. This implies that earnings from inshore fishing in these countries are merely a supplement to income from other sources. High wage levels in the fishery sector in Denmark (inshore and offshore) and Germany (offshore) can be explained by the expansion of their fisheries into the waters of the North Sea. It can be assumed that high earnings in the offshore fisheries of Finland are associated with the considerable financial input from industrial fishing. These operations do not require a lot of manpower due to the low labour-intensity and mechanised nature. In 2008-2014, full-time employment in offshore fishing in Finland increased by 33 %, which made for stable growth in this form of fish catching.

The comparison of the Baltic Sea with other fishing regions is presented in Table 6. The picture it paints is rather dark. The Baltic and the Mediterranean Sea have the lowest wages levels out of all the fishing regions of the EU in 2014, amounting to about EUR 14.000. It is most likely due to the greatest relative share of inshore, small-scale fishing in both these regions. Baltic fisheries came third last, before Outer Regions and the Mediterranean Sea, in terms of the gross value added per full-time employee. The Baltic Sea and Outer Regions were characterised by the lowest employment per vessel. An opinion on this topic was offered above.

Table 6.

Employment and pay in EU fishing regions in 2014

	Estimated employment	Estimated FTE	Labour costs (thousands euros)	Average FTE pay (thousands	GVA / FTE (thousand euros)	Number of vessels	Employed / ship	FTE / ship
Baltic	**9453**	**5076**	**71692**	**14,1**	**24,1**	**6491**	**1,5**	**0,8**
Mediterranean and Black Sea	46791	33419	459493	13,7	20,7	20838	2,2	1,6
North-east. Atlantic	48338	32750	907556	27,7	33,6	18323	2,6	1,8
North Sea	11274	8676	432350	49,8	87,8	5087	2,2	1,7
Other regions	6334	6970	183262	26,3	68,2	806	7,9	8,6
External regions	2736	2080	35663	17,1	19,7	2574	1,1	0,8
North-west. Atlantic	716	659	26686	40,5	49,7	168	4,3	3,9
Eastern Arctic	321	311	18731	60,2	272,8	31	10,4	10,0
The Mediterranean, not the EU	52	52	3342	64,3	469,4	12	4,3	4,3
EU regions -total	**126167**	**90009**	**2145293**	**23,8**	**1039,0**	**54348**	**2,3**	**1,7**

Source: Own elaboration based on STECF materials

The employment of fishermen is not the only form of employment related to the acquisition of fish for food and non-food purposes. The employment in aquaculture and fish processing also needs to be mentioned. In 2012, in Poland there were 5.600 people employed in aquaculture, and 16.000 people in fish processing. Denmark, Finland and Sweden employed some 400 people in aquaculture each. The German fish processing sector employed 7.000 people, Latvian – 6.000, Lithuanian – 4.500, Swedish – 2.100, Estonian – 1.900, and Finnish - 900 people (Wspolna, 2016).

Conclusions

1) There are two forms of fishing activity in the Baltic Sea: inshore and offshore. On the whole, inshore fisheries are a loss-making endeavour, while offshore fisheries generate modest profits.
2) Due to the poor condition of fish stocks, maintaining fisheries in the Baltic Sea is a dramatic struggle. As a result, a decline in overall employment in the Baltic Rim fisheries may be observed, in inshore fishing (except for Finland and Poland) and also in offshore fishing (except for Finland and Lithuania).
3) Fishermen's earnings in the countries of the Baltic Rim went up by as little as 2–3 % in nominal terms in 2008–2014, so taking into account inflation – they decreased in real terms.
4) Wage is higher in offshore fishing than in inshore fishing, which is exposed to more operational risks because of operating on a smaller area and being more sensitive to weather conditions. It is assumed that offshore fishermen's earnings are sufficient to live relatively comfortably, while inshore fishermen are forced to rely on additional income from jobs in other sectors of the economy. Their wage is one of the lowest of all the fishing regions of the European Union.

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