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ASSESSMENT OF CHANGES OF THE SIZE AND STRUCTURE OF FERRY TRANSPORT IN THE BALTIC SEA REGION IN THE YEARS 2011–2014

Abstract

The aim of the research was an attempt to find the answer for basic research question: To what extent the ferry transport in the BSR has changed in recent years? Analysis of data and assessment became the main research methods. In addition, the functions of linear trends for the selected variables included in the study were estimated.

The article presents the multi-aspects analysis of the transport of goods and passengers by ferry/ro-ro fleet in the Baltic Sea Region in 2011–2014. Following issues have been discussed: ferry/ro-ro fleets of the top 30 Baltic operators, ferry/ro-ro passengers in the top 30 Baltic ports, the number and structure of the transport of goods, passengers and freight units.

Keywords: Baltic Sea Region (BSR), ferry, ro-ro, transport

Introduction

The Baltic Sea is often treated as an internal sea of the European Union (Northern Europe; intercontinental shelf sea of the Atlantic Ocean). The countries of the Baltic Sea Region (the BSR) are: Denmark, Germany, Poland,

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Lithuania, Latvia, Estonia, Russia, Finland and Sweden.¹ The Baltic Sea region is highly diversified under the economic, geographical, natural (resources availability), political, civilization and historical reasons. Altogether, over 289 million people are inhabiting it [about 20% of the EU population (27)], whence directly in the seashores around 98–99 million, and indirectly, 190 million people.²

In the BSR in April 2015 34 shipowners served a dense network of ferry/ro-ro, which is one of its specific features. This form of navigation is considered to be dominant (without analysing container traffic). 21 ferry/ro-ro operators offered car&passenger connections (ropax for short), 10 – a ro-ro combination and 3 – container&car connections.³ In particular areas of the Baltic Sea however, the degree of the concentration of ferry transports is diversified which is mainly due to the different economic potential of the BSR countries and therefore is affecting the size and directions of the trade exchange occurring between them. The ferry/ro-ro shipping is being used for the purposes of passenger and cargo transports, and in the case of the latter has a significant participation in the transport of high-value goods.⁴

The purpose and applied research methods

The aim of the research was an attempt to find the answer for basic research question: To what extent the ferry transport in the BSR has changed in recent years? Trying to find the answer, in the article a brief characteristic of the BSR was presented. Particular attention was paid to the size of the fleet of the top 30 operators, the key 30 ports of the Baltic Sea as regards transhipped freight units, the type, number and gross tonnage of the vessels operated by them, the length

¹ Sometimes, due to the geographic location and existing transport routes leading among others through the territory of Denmark, Norway is also ranked among these countries. Also, economic, historical, cultural reasons as well as the membership in different regional organizations are speaking for it, which means that in some studies among the BSR countries Iceland also appears. This study focuses on the basic countries belonging to the BSR (excluding Iceland).

² E. Czermański, *Charakterystyka gospodarcza Regionu Morza Bałtyckiego*, p. 17, <http://studiamaterialy.pl/wpcontent/uploads/2013/07/ZN-2012-ITiHM-ECz.pdf> (access 29.08.2015).

³ *Baltic ro-ro & ferry market 2014/15*, “Baltic Transport Journal”, p. 11; http://www.balticpress.com/ftp2/baltic_ro-ro_ferry_yearbook_2014-15_preview.pdf (access 02.09.2015).

⁴ A.S. Grzelakowski, *Region Morza Bałtyckiego jako obszar wysokiej aktywności handlowej i transportowej oraz perspektywy jego rozwoju*, <http://www.portalmorski.pl/referaty/2004/04.pdf> (access 02.09.2015).

of the shipping lines, the number of passengers carried and the structure of the ferry/ro-ro traffic by countries, the size and structure by type of the transported cars, buses, other road vehicles, and the served journeys. The article attempts to analyze and assess the size and structure of the ferry transport in the BSR in the years 2011–2014. For this purpose, mainly tabular and graphical form of presentations were used. Besides, analysis of data and assessment became the main research methods. In addition, the functions of linear trends for the selected variables included in the study were estimated. Identification of trends matching to the empirical data required to use the coefficient of determination R^2 , which indicates the extent to which trends describe the course of the dependent variables.

Research findings

In terms of number of vessels among ferry/ro-ro operators six of them dominate (as of April 2015): Finnlines (22 vessels; 644,8 thousand GT), Stena Line (17 vessels; 512 thousand GT), DFDS Seaways (17 vessels; 493,3 thousand GT), Tallink/Silja (12 vessels; 483,8 thousand GT), Scandlines (12 vessels; 135,9 thousand GT) i Transfennica (10 vessels; 225,9 thousand GT). They have a total of 90 units (for 171 vessels operating in the Baltic Sea), which is over half of the fleet (52.63%). For comparison: in 2012 Finnlines had at their disposal 14 vessels (505,7 thousand GT), and in 2013 owned 12 units (433,7 thousand GT); in 2012 Stena Line had 10 vessels (316,6 thousand GT), and in 2013 – 18 (518,3 thousand GT), DFDS Seaways in the years 2012 and 2013 had 10 vessels (262,3–262,6 thousand GT), at the same time Tallink/Silja owned 11 vessels (472,2–512,1 thousand GT), however, Scandlines in 2012 had 19 vessels (349,3 thousand GT), and in 2013 – 10 units (127,1 thousand GT).⁵ Also transport market in the BSR is constantly changing. The total length of shipping lines served by them includes 198 435 km (approx. 60%). In terms of gross tonnage of ships on the transport market in this region also Viking Line, Color Line, TT-Line, SOL Continental Line and Unity Line are respected. Other data are shown in Table 1.

⁵ As of the beginning of 2012, *Baltic Ro-Ro&Ferry Yearbook 2012 – ploughing through the North-South & West-East matrix*, “Baltic Transport Journal”, p. 19 http://www.baltic-press.com/ftp/baltic_ro-ro_ferry_yearbook_2012_free.pdf (access 03.09.2015) and as of April 2013, *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 13, http://www.balticpress.com/_yearbook_ro-ro_2013/btj.ro-ro.ferry.yearbook_2013.pdf (access 03.09.2015); <http://baltictransportjournal.com> (access 03.09.2015).

Table 1

Ferries and ro-ro vessels in the BSR. The list of the top 30 operators (as of April 2015)

Operator	Vessels	Number of vessels	GT	Length of the shipping lines (km)	Shipping line in km/km per week
Finnlines	prom/ro-ro	22	644 784	67 032	223 870
Stena Line	prom	17	511 972	36 696	109 065
DFDSSeaways	prom/ro-ro	17	493 304	48 751	185 640
Tallink/Silja	prom/ro-ro	12	483 815	15 557	47 860
Viking Line	prom	7	264 491	6 535	20 960
Color Line	prom	6	250 148	7 518	30 361
Transfennica	ro-ro	10	225 881	24 214	116 755
TT-Line	prom/ro-ro	6	179 391	14 600	49 925
SOLContinent Line	ro-ro	7	149 785	15 826	53 310
Unity Line	prom	7	139 821	10 736	25 260
Scandlines	prom	12	135 879	6 185	19 780
SCA Logistics	ro-ro	5	102 875	10 500	35 000
CldN	ro-ro	4	92 964	9 993	32 708
Fjord Line	prom	4	86 826	3 420	14 700
Destination Gotland	prom	4	71 678	3 500	12 820
St. Peter Line	prom	2	71 676	2 135	4 760
Polferries	prom	3	66 950	3 548	11 094
Færgen	prom	8	55 829	3 115	6 482
Eckerö Line	prom	2	48 723	2 490	5 754
Black Sea Ferry	ro-ro	2	45 479	3 290	10 020
Smyril Line	prom	1	35 966	1 830	4 480
Mols-Linien	prom	3	26 621	1 134	3 596
Wagenborg Shipping Sweden	ro-ro	2	24 920	3 332	9 130
Mann Lines	ro-ro	1	24 688	3 000	13 320
Navirail	prom	1	20 921	1 400	1 900
Anship	ro-ro	1	20 729	1 787	7 250
Sea-Cargo	ro-ro	2	18 563	2 882	6 510
Wasaline	prom	1	17 503	1 150	2 025
ULS Estonia	prom	1	7 654	590	660
Lillgaard	ro-ro	1	6 040	780	1 220
TOTAL		171	4 325 876	313526	1 066 215

a) – without data for 2011 for Karlskrona

Source: *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 33, http://www.baltic-press.com/_yearbook_oro_2013/btj.oro.ferry.yearbook_2013.pdf (access 03.09.2015); *Transport. Wyniki działalności w 2011 r.*, GUS, Warszawa 2012, p. 254; <http://www.stat.gov.pl>

(access 02.09.2015); *Baltic Ro-Ro&Ferry Yearbook 2014/15 – steady as they go*, “Baltic Transport Journal”, http://www.baltic-press.com/ftp2/baltic_ro-ro_ferry_yearbook_2014-15_preview.pdf, p. 32 (access 03.09.2015).

In 2014 the 30 largest ports in the BSR (of 71) handled a total of 92.865 million passengers. Passenger traffic in the best of them (Helsinki, Tallinn, Stockholm, Helsingborg, Helsingør, Puttgarden and Rødby) took a total of 55.730 million passengers (60.01%). Comparing to the previous year, the largest gains in this respect Gdynia and Karlskrona recorded (by +10.0% each), then Stromstad (+9.7%), Aarhus (+7.7%), Rostock (+6.6%), Hirtshals (+5.6%) and Kapellskär (+5.1%). The worst results concern Riga (−12.5%), Turku (−4.9%) and Stockholm (−4.3%). Other data for the years 2011–2014 are shown in Table 2.

Table 2

The top 30 ferry/ro-ro Baltic ports in the years 2011–2014
(number of passengers in thousand)

Port	Country	2011	2012	2013	2014	2014:2013 (%)
1	2	3	4	5	6	7
Helsinki	Finland	10 255	10 608	10 724	10 901	+1.7%
Tallinn	Estonia	7 700	8 394	8 709	9 081	+4.3%
Stockholm	Sweden	9 124	9 025	8 833	8 453	−4.3%
Helsingborg	Sweden	8 340	7 841	7 763	7 656	−1.4%
Helsingør	Denmark	8 340	7 824	7 721	7 635	−1.1%
Puttgarden	Germany	6 027	6 001	5 945	6 002	+1.0%
Rødby	Denmark	6 027	6 001	5 945	6 002	+1.0%
Turku	Finland	2 813	3 312	3 425	3 257	−4.9%
Mariehamn	Finland	2 767	3 310	3 040	3 024	−0.5%
Odden	Denmark	1 811	2 038	2 462	2 525	+2.6%
Hirtshals	Denmark	2 249	2 245	2 344	2 476	+5.6%
Rostock	Germany	2 010	2 344	2 299	2 450	+6.6%
Aarhus	Denmark	1 233	1 507	2 182	2 350	+7.7%
Ystad	Sweden	1 913	1 962	1 934	1 953	+1.0%
Frederikshavn	Denmark	1 829	1 711	1 718	1 741	+1.3%
Gothenburg	Sweden	1 637	1 591	1 646	1 713	+4.1%
Trelleborg	Sweden	1 564	1 538	1 618	1 681	+3.9%
Visby	Sweden	1 598	1 590	1 583	1 630	+3.0%

1	2	3	4	5	6	7
Kiel	Germany	1 498	1 569	1 577	1 624	+3.0%
Rønne	Denmark	1 423	1 467	1 440	1 469	+2.0%
Nynäshamn	Sweden	1 398	1 408	1 385	1 430	+3.2%
Gedser	Denmark	1 368	1 414	1 329	1 363	+2.6%
Strömstad	Sweden	1 202	1 143	1 085	1 190	+9.7%
Eckerö	Finland	914	890	911	912	+0.1%
Grisslehamn	Szwecja	914	890	911	912	+0.1%
Kapellskär	Sweden	924	930	867	911	+5.1%
Copenhagen	Denmark	722	735	744	727	-2.3%
Riga	Latvia	719	732	774	677	-12.5%
Gdynia	Poland	485	469	509	560	+10.0%
Karlskrona	Sweden	no data	469	509	560	+10.0%
TOTAL		88 804	90 958	91 932	92 865	

a) – without data for 2011 for Karlskrona

Source: *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 33, http://www.baltic-press.com/_yearbook_roro_2013/btj.roro.ferry.yearbook_2013.pdf (access 03.09.2015); *Transport. Wyniki działalności w 2011 r.*, GUS, Warszawa 2012, p. 254; <http://www.stat.gov.pl> (access: 02.09.2015); *Baltic Ro-Ro&Ferry Yearbook 2014/15 – steady as they go*, “Baltic Transport Journal”, p. 32, http://www.baltic-press.com/ftp2/baltic_ro-ro_ferry_yearbook_2014-15_preview.pdf (access 03.09.2015).

In the years 2011–2014 the number of passengers at the top 30 ports in the BSR in this respect increased from 88 804 thousand to 92 865 thousand, so by 4 061 thousand persons (4.57%). Changes of this magnitude in the studied years are described by the function of a linear trend $y = 1\,315.7 t + 87\,851$ (Figure 1). The estimated trend in 95.19% describes the development of the dependent variable, and means that in the studied years, the number of passengers in ports increased statistically on average from year to year by about 1315.7 thousand people.

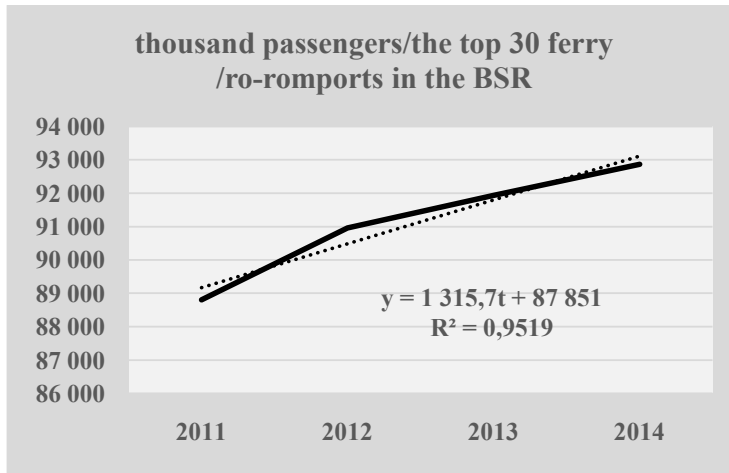


Figure 1. Passenger traffic at the key 30 ports of the BSR in this respect in 2011–2014 (in thousand). The function of a linear trend

Source: own calculations based on data from *Baltic Ro-Ro&Ferry Yearbook 2014/15 – steady as they go*, “Baltic Transport Journal”, p. 32, http://www.baltic-press.com/ftp2/baltic_ro-ro_ferry_yearbook_201415_preview.pdf (access 02.09.2015); *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 28; *Transport. Wyniki działalności w 2011 r.*, GUS, Warszawa 2012, p. 254, <http://www.stat.gov.pl> (access 02.09.2015).

In 2014 Swedish ports (28 089 thousand people; 30.25%) and Danish ports (26 288 thousand people; 28.31%) dominated in handling passenger ferry/ro-ro traffic in the BSR. Also Finnish ports have quite a large market share (18 094 thousand people; 19.48%). In total, Sweden (11 ports), Denmark (9 ports) and Finland (4 ports) in the segment of passenger transport have a 78.04% market share (Figure 2).

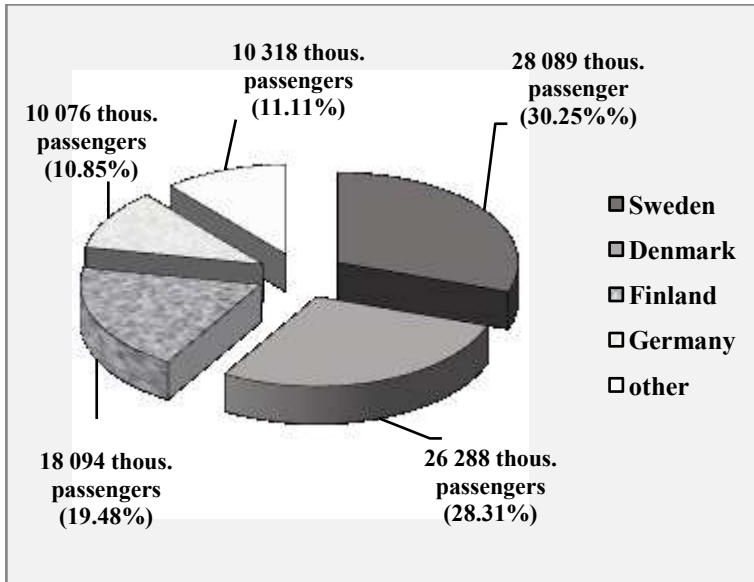


Figure 2. The size and structure of the ferry/ro-ro passenger traffic in 30 major ports in the BSR in this respect by country in 2014 (thousand; %)

Source: own calculations based on the data from *Baltic Ro-Ro&Ferry Yearbook 2014/15 – steady as they go*, “Baltic Transport Journal”, p. 32, http://www.baltic-press.com/ftp2/baltic_ro-ro_ferry_yearbook_201415_preview.pdf (access 03.09.2015); *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 28 (access 03.09.2015).

A list of the key 30 ports in the BSR in the years 2011–2014 in terms of handling freight units (trucks, trailers, containers, wagons) is shown in Table 3. In the analysed years they transshipped a total of 29 785 588 freight units. In 2014 in comparison to 2013 the biggest positive changes in this area related to the following ports: Ust-Luga (+25.0%), Nynäshamn (+21.2%), Karlskrona (+13.6%) and Gdynia (+11.6%), while negative ports were St. Petersburg (–14.3%) and Stockholm (–6.1%).

Table 3

The top 30 ferry/ro-ro Baltic ports in respect of transshipped units
in the years 2011–2014

Port	Country	2011	2012	2013	2014	2014:2013 (%)
Lübeck / Travemünde	Germany	892 740	730 324	733 391	744 860	+1.6%
Trelleborg	Sweden	670 141	648 991	645 696	670 776	+3.9%
Helsinki	Finland	520 214	501 465	485 816	503 354	+3.6%
Gothenburg	Sweden	517 659	480 979	479 528	497 609	+3.8%
Rostock	Germany	447 563	428 205	424 089	444 781	+4.9%
Puttgarden	Germany	364 903	369 871	389 344	412 151	+5.9%
Rødby	Denmark	364 903	369 871	389 344	412 151	+5.9%
Tallinn	Estonia	292 000	354 300	353 700	377 316	+6.7%
Helsingør	Denmark	388 244	365 833	360 840	375 450	+4.0%
Helsingborg	Sweden	no data	422 922	366 082	369 908	+1.0%
Świnoujście	Poland	282 966	306 446	324 422	341 782	+5.4%
Malmö	Sweden	231 172	226 071	223 640	218 814	-2.2%
Ystad	Sweden	200 587	193 261	214 942	218 790	+1.8%
Kiel	Germany	246 292	208 859	191 951	191 000	-0.5%
Klaipeda	Lithuania	188 849	189 382	185 726	178 627	-3.8%
Stockholm	Sweden	189 896	177 603	188 185	176 677	-6.1%
Hanko	Finland	107 164	120 884	149 340	162 880	+9.1%
Kapellskär	Sweden	173 406	163 032	153 315	159 017	+3.7%
Frederikshavn	Denmark	142 017	157 884	156 041	154 454	-1.0%
Gdynia	Poland	118 890	116 301	126 897	141 670	+11.6%
Hirtshals	Denmark	118 500	125 675	128 199	137 868	+7.5%
Turku	Finland	112 673	116 593	127 805	123 141	-3.6%
Karlskrona	Sweden	80 094	86 868	102 800	116 828	+13.6%
Ust-Luga	Russia	no data	69 000	88 000	110 000	+25.0%
Naantali	Finland	127 863	129 100	102 060	99 454	-2.6%
Gedser	Denmark	90 971	89 966	91 293	96 348	+5.5%
Nynäshamn	Sweden	80 679	80 587	69 103	83743	+21.2%
Esbjerg	Denmark	102 000	102 000	72 000	74 000	+2.8%
Ventspils	Latvia	68 261	69 812	68 100	72 758	+6.8%
St. Petersburg	Russia	no data	49 000	84 000	72 000	-14.3%
TOTAL		7 120 647	7 451 085	7 475 649	7 738 207	

a) – without data for 2011 for Helsingborg, Ust-Luga and St. Petersburg

Source: M. Błuś, M. Rozmarynowska, *Top Baltic ro-ro & ferry ports 2014*, “Harbours Review” 2015, No. 1, p. 42, <http://harboursreview.com/printed-edition.pdf> (access 02.09.2015); *Baltic Ro-Ro&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 29 (access 02.09.2015).

In the years 2011–2014 the number of freight units in the top 30 ports in the BSR in this respect increased from 7 039 968 to 7 738 207 (9.92%). Changes of this magnitude in the studied years are described by the function of a linear trend $y = 187\,724 t + 7\,000\,000$ (Figure 3). The estimated trend in 89.98% describes the development of the dependent variable, and means that in the studied years, the number of freight units transshipped at analyzed ports increased statistically on average by 187 724 from year to year.

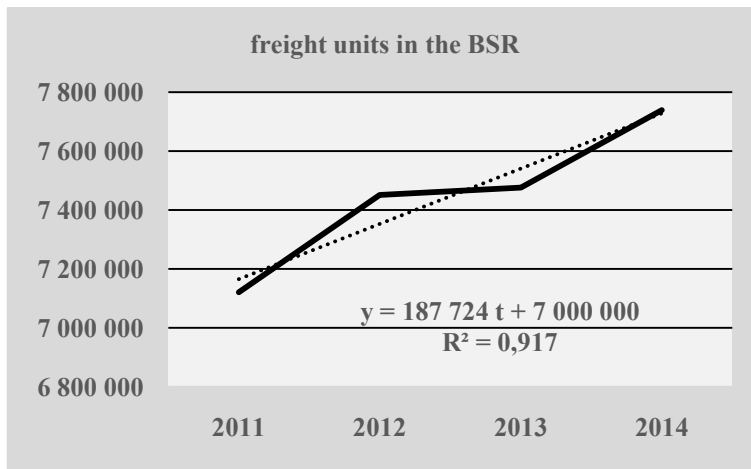


Figure 3. The number of freight units in the top 30 ports of the BSR in this respect in the years 2011–2014. The function of a linear friend

Source: own calculations based on the data from: M. Błuś, M. Rozmarynowska, *Top Baltic ro-ro & ferry ports 2014*, “Harbours Review” 2015, No. 1, p. 42, <http://harboursreview.com/printed-edition.pdf> (access 02.09.2015); *Baltic RoRo&Ferry Yearbook 2013 – last year on fairly calm waters?*, “Baltic Transport Journal”, p. 29 (access 02.09.2015).

The volume of rotation of the key 30 ports in the BSR in handling freight units in 2014 is shown in Fig. 4 and dominated by the 9 ports in Sweden (2 512 162 units; 32.46% of the market), 4 German ports (1 792 792 units, 23.17% of the market) and 6 Danish ports (1 250 271 units, 16.16% of the market). Polish ports of Świnoujście and Gdynia transshipped a total of 483 452 units, which gave them a 6.25% share in the market.

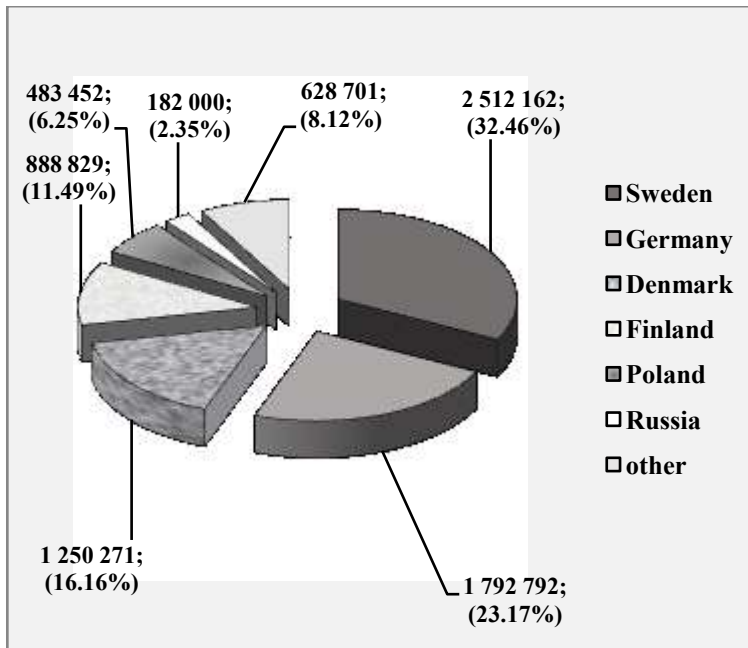


Figure 4. The volume and structure of rotation of freight units in the major 30 ports in the BSR in this respect in 2014 (thousand;%)

Source: own calculations based on the data from M. Błuś, M. Rozmarynowska, *Top Baltic ro-ro & ferry ports 2014*, "Harbours Review" 2015, No. 1, p. 42, <http://harboursreview.com/printed-edition.pdf>; *Baltic RoRo&Ferry Yearbook 2013 – last year on fairly calm waters?*, "Baltic Transport Journal", p. 29 (access 03.09.2015).

Conclusion

1. The study shows that in the Baltic Sea Region 34 ferry/ro-ro shipowners functioned in 2011–2014. The rate of ferry/ro-ro market concentration on the Baltic Sea is very large, because 6 operators (Finnlines, Stena Lane, DFDS Seaways, Tallink/Silja, Scandlines and Transfenica) has 90 (of 171) vessels (53% of the fleet), whose total gross tonnage in April 2015 was 2 495 635 GT (60%). The total length of shipping lines served by them amounted to 198 435 km (60%).
2. The most important amongst of 30 major ports of the BSR in terms of passenger numbers are: Helsinki (Finland), Tallinn (Estonia), Stockholm

- (Sweden), Helsingborg (Sweden), Helsingør (Denmark), Puttgarden (Germany) and Rødby (Denmark). In 2014, they took a total of 54 920 thousand passengers, which means 59% market share.
3. In the years 2011–2014 the number of passengers at the top 30 ports of the BSR in this respect increased from 88 804 thousand to 92 865 thousand, so 4 061 thousand persons (4.57%). Changes of this magnitude in the studied years are described by the function of a linear trend $y = 1\,315.7t + 87\,851$.
 4. In 2014, following ports dominated in the service of ferry/ro-ro passenger traffic: Swedish (30%), Danish (28%) and Finnish (20%), which gives them a total of 78% of the market. For comparison, the part of the most important Polish port of Gdynia in this respect amounted to 560 thousand persons (0.6%). Nevertheless, the port of Gdynia, as well as the port of Karlskrona, recorded the dynamics of changes of this magnitude in comparison to 2013, as in both cases in 2014 in comparison to 2013 a 10% increase in passenger numbers was reported.
 5. Thirty most important ports in the 2011–2014 of the BSR handled a total of 29 785 588 freight units. Changes of this magnitude in the studied years are described by the function of a linear trend $y = 187\,724t + 7\,000\,000$.
 6. In 2014, the highest rotation of freight units was recorded in the ports of Lübeck/Travemünde (744 860), Trelleborg (670 776), Helsinki (503 354), Gothenburg (497 609), Rostock (444 781), Puttgarden (412 151) and Rødby. The total market share of these 7 ports was therefore 3 685 682 units (47.63%). Polish ports of Świnoujście and Gdynia, transhipped a total of 483 452 units, which gave them a 6.25% share of the market.
 7. In 2014, in comparison with 2011, the largest gains in handled passenger traffic in the BSR respect port Aarhus recorded (+90.6%), and next: Odden (+39.4%), Rostock (+21.89%), Karlskrona (in this one case in comparison with 2012, +19.4%), Turku (+15.8%) and Gdynia (+15.5%). The largest decrease in handled passenger traffic in the BSR: Helsingør (−8.5%), Helsingborg (−8.2%), Stockholm (−7.4%) and Riga (−5.8%) recorded.
 8. In 2014, in comparison with 2011, the largest gains in ferry/ro-ro Baltic ports in respect of transhipped units, the following ports: Ust-Luga (in this case in compare to 2013, +59.4%), Hanko (+52%), St. Petersburg (in this case in compare to 2013, +46.9%), Karlskrona (+45.9%), Tallinn (+29.2%), Świnoujście (+20.8%) and Gdynia (+19.2%) recorded. The largest decrease in ferry/ro-ro Baltic ports in respect of transhipped units, the follow-

ing ports: Esbjerg (−27.5%), Kiel (−22.5%), Naantali (−22.2%), Lübeck/Travemünde (−16.6%) and Hirtshals (−16.3%) recorded.

9. In the West region of the Baltic Sea the highest turnover was recorded on the markets of Denmark–Sweden (in recent years, every year about 10 million passengers, 1.8 million cars and 0.5 million trucks have been transported) and Germany–Denmark (7.5 million passengers, 1.8 million cars and 0.5 million trucks). On the Eastern coasts of the Baltic Sea following markets prevail: Finland–Sweden (in recent years, every year roughly 8.5 million passengers, 0.6 million cars and 0.25 million trucks have been transported) and Estonia–Finland (8 million passengers, 1.2 million cars and 0.3 million trucks). In 2015, ferry transport in the BSR did not change significantly in comparison with the previous years). However, the first gas-powered cruise ferries were introduced (2013).⁶

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OCENA ZMIAN W WIELKOŚCI I STRUKTURZE TRANSPORTU PROMOWEGO W REGIONIE MORZA BAŁTYCKIEGO W LATACH 2011–2014

Streszczenie

Celem artykułu było przeanalizowanie zmian, jakie zaszły w wielkości i strukturze przewozów promowych w Regionie Morza Bałtyckiego w latach 2011–2014. W artykule przedstawiono wieloaspektową analizę wielkości i struktury przewozów promowych/ro-ro w Regionie Morza Bałtyckiego (RMB) w latach 2011–2014. Badaniu poddano takie zmienne, jak: wielkość floty 30 największych operatorów, liczbę pasażerów w 30 największych portach, wielkość i strukturę rodzajową przewozów i liczbę jednostek frachtowych.

Do najważniejszych portów RMB pod względem liczby pasażerów zaliczyć należy następujące: Helsinki (Finlandia), Tallinn (Estonia), Sztokholm (Szwecja), Helsingborg (Szwecja), Helsingør (Dania), Puttgarden (Niemcy) i Rødby (Dania). W 2014 roku przyjeły one łącznie 54 920 tys. pasażerów (59% udział w rynku). W tym samym roku największe obroty jednostkami frachtowymi odnotowano w portach: Lübeck/Travemünde (744 860), Trelleborg (670 776), Helsinki (503 354), Gothenburg (497 609), Rostock (444 781), Puttgarden (412 151) i Rødby.

Słowa kluczowe: Region Morza Bałtyckiego, promy/ro-ro, transport