THE IMPACT OF THE MARITIME BORDER ON THE DEVELOPMENT OF POLAND'S BORDER AREAS IN TERMS OF EXPENSES OF FOREIGNERS AND THE COVID-19 PANDEMIC

Agnieszka Malkowska 1, Arkadiusz Malkowski 2, Anna Tokarz-Kocik 2

¹ Faculty of Economics, Finance and Management, Institute of Management, University of Szczecin, Poland ² Faculty of Economic, West Pomeranian University of Technology in Szczecin, Poland

> Manuscript received: June 27, 2022 Revised version: July 25, 2023

MALKOWSKA A., MALKOWSKI A., TOKARZ-KOCIK A., 2023. The impact of the maritime border on the development of Poland's border areas in terms of expenses of foreigners and the COVID-19 pandemic. *Quaestiones Geographicae* 42(4), Bogucki Wydawnicsto Nakowe, Poznań, pp. 157–168. 9 figs.

ABSTRACT: The aim of this paper is to present the issue of border traffic of foreigners and their expenses on the Polish maritime border. The study is based on quantitative data on border traffic and expenses of foreigners in Poland. The time of the study was 2014–2021. Thus, the impact of the coronavirus disease (COVID-19) pandemic on foreigners' mobility and spending in Poland was additionally taken into account. For the purpose of this paper, the following study methods were adopted: reference literature analysis, secondary data analysis and comparative analysis. The paper mainly uses data from official statistics and the Border Guard. The study has shown that the Polish maritime border generates the smallest volume of border traffic, however, its share increased during the analysed period from 0.7% in 2014 to 0.8% in 2021. Nevertheless, it is foreigners crossing the maritime border. In 2020, they spent the most on non-food goods (40%) and services (34.7%). As the study results reveal, their spending patterns and travel purposes are different from those of foreigners crossing the land border. The potential that foreign visitors bring is significant for the development of border areas in such sectors as tourism, services and trade. The analysis of the motivation of foreigners crossing the sea border makes it possible to shape the regional development policy of this particular area.

KEYWORDS: maritime border, expenses of foreigners, shopping tourism, border area development, maritime border areas, South Baltic Area

Corresponding author: Anna Tokarz-Kocik, Institute of Management, University of Szczecin, ul. Cukrowa 8, 71-104 Szczecin, Poland; e-mail: anna.tokarz-kocik@usz.edu.pl

Introduction

Borders serve specific functions that also affect border areas. The perception of borders has changed under the influence of the processes of globalisation, economic integration or internationalisation of politics and economy. In the case of European countries, the perception of borders as an administrative barrier has been replaced by developing cross-border cooperation. Sea space is a specific space that has been performing various functions since time immemorial in human existence. In most cases, it is a cross-border space. Cross-border cooperation between countries separated by sea is much more difficult than cooperation between countries bordered by land. The sea continues to divide communities as a barrier to contact. As Cerić and Więckowski point



© 2023 Author(s) This is an open access article distributed under the Creative Commons Attribution license



out, in the case of the Baltic Sea, the specificity of this region, combining maritime, coastal and cross-border character, is an important aspect of the development of tourism space (Cerić 2019; Cerić, Więckowski 2020). The development of border traffic and the accompanying development of tourism, including shopping tourism, is an important factor influencing the socio-economic processes taking place in the border area. This is due to the fact that tourism has clear links with borders, debordering and reordering. Each part of this process has important implications for tourism and development in the heritage borderscapes of border tourism destinations (Więckowski, Timothy 2021).

A review of existing research conducted throughout the world, as well as activities undertaken in border areas, clearly indicates a pursuit of a new model for the development of these areas (Johnson 2009; Ivan et al. 2016; Lundén 2018; Wong Villanueva et al. 2020). For many years, they were deemed problematic, which was primarily due to their peripheral location and the isolating functions of the borders (Brunet-Jailly 2012; Cooper, Perkins 2012; Scott 2015). Changes in the functions of borders, including debordering and reordering, have led to the need to redefine the role of border areas in the political and economic systems of different countries. Debordering is seen as a factor enhancing the development of peripheral areas, significantly contributing to the increase of border traffic and, as a result, the development of various forms of tourism, including shopping tourism (Spierings, Van Der Velde 2008; Bygvra 2020; Liberato et al. 2020).

This has become more apparent within the European Union (EU), where 'a border' has generally not been equated with a barrier, especially since 1995 when the Schengen Area was established and internal EU border controls were completely abolished (Martinsen et al. 2019). One of the factors that significantly affected the role and functions of borders was the coronavirus disease (COVID-19) pandemic caused by the SARS-CoV-2 coronavirus. Given the implemented procedures related to crossing borders, in this case, we can talk about the so-called 'defence integration' (Schimmelfennig 2021), understood as a combination of activities consisting mainly of internal and external rebordering.

In the EU, the first case of the disease was reported in Italy in the second half of February 2020. In Poland, virus infections were recorded on 4 March 2020. The spread of the pathogen forced governments to take a number of measures. The safety and health of citizens became a priority, which necessitated the implementation of preventive sanitary regulations that resulted in the closure of borders to passenger traffic. Thus, the primary functions of borders in terms of isolation and protection, which had taken a back seat until the outbreak of the pandemic (Eckardt et al. 2020), were restored (Kolosov, Wieckowski 2018; Canale 2020). This internal and external rebordering was temporary but, undoubtedly, the related effects affected in particular border areas in an unprecedented manner.

In the case of Poland, the reduction in border traffic impacted both the land and maritime borders. The maritime border is a special type of border. It is 439.74-km long. The border runs along the shore of the Baltic Sea (Więckowski, Cerić 2016).

This study contributes to a better understanding of the role and impact of foreigners, and in particular, the impact of the maritime border on border areas in Poland, especially in the context of social and economic development. To the best of the authors' knowledge, there is still a lack of research in this area, as confirmed by the literature review.

Methodology

The aim of this paper is to present the issue of border traffic of foreigners and their expenses on the Polish maritime border. The following study questions were formulated: (1) What was the volume of visitor traffic at the Polish maritime border and visitor spending patterns between 2014 and 2021? (2) Do the travel purposes and spending patterns of foreigners travelling to Poland through the maritime border differ from the purposes and patterns of those crossing the land border?

The following study hypothesis was formulated: The spending patterns of foreigners crossing the maritime border and their travel purposes differ from those of foreigners crossing the land border. The aim of the paper was achieved and the study questions were addressed through the analysis of reference literature, secondary data and comparative analysis. The study is based on quantitative data on border traffic and visitor spending in Poland. The paper mainly uses data from the public statistics of Statistics Poland (GUS). The article estimates the value of tax revenues and the number of jobs associated with border traffic at the maritime border.

Owing to the availability of uniform statistical data, the time span of the study was 2014-2021. As data published for 2021 were incomplete, 2020 data were included for some of the more detailed analyses. The paper draws mainly on the literature on social and economic development, border area development, cross-border cooperation and tourism economics. The study examines the entire Polish maritime border, providing comprehensive characteristics of border traffic and visitor spending as well as an analysis of their impact on adjacent border areas. It should be emphasised that the Polish maritime border has a direct impact on three Polish regions. Maritime border crossings in Poland are located at: (1) Zachodniopomorskie Voivodeship: Szczecin, Trzebież, Nowe Warpno, Świnoujście, Mrzeżyno, Dziwnów, Kołobrzeg, Darłowo; (2) Pomorskie Voivodeship: Ustka, Władysławowo, Jastarnia, Hel, Łeba, Gdynia, Gdańsk-Port, Gdańsk-Górki Zachodnie; (3) Warmińsko-Mazurskie Voivodeship: Elbląg, Frombork. The study area is called the border sea area and it covers parts of the three indicated voivodeships.

The results of the study are presented descriptively and graphically in the form of figures. The conclusions in the last section of the paper are drawn on the basis of inductive and deductive reasoning based on desk research analysis.

Literature review

An analysis of the available literature on the subject indicates that border areas may be assigned characteristics that distinguish them from others. They are usually peripheral, which should be understood, not only in terms of location and space (i.e. distance from the centre), but primarily in terms of social and economic development. Border regions are generally less developed (Pezzi, Urso 2016). Today, location is of lesser importance because of structural changes, improved transport infrastructure or development of technology, including communication technology. Copus (2001) argued that today, peripherality is primarily determined by non-spatial factors such as information society infrastructure, human capital, business networks, civil society, institutional networks as well as global-local relations. The above elements are often less developed in the peripheral areas, which include border areas. Moreover, Erkut and Özgen (2003) proved that economic peripherality leads to geographical peripherality.

Border areas, which have typically been little transformed by human economic activity, consist mainly of natural and rural areas (Salvatore et al. 2018). Thus, they often show considerable potential for the development of tourism (Ianioglo, Rissanen 2020). Mikhaylova et al. (2022) in their studies demonstrated that cross-border tourism plays a crucial role as a tool for the sustainable development of urban-rural systems. Cross-border tourism can be understood as tourism within a region that includes two or more countries. Crossborder tourism is therefore an element of international tourism and is related to the cross-border tourist space functioning on both sides of the border. According to Więckowski (2011), it can be understood as all forms of tourism that allow them to be used in neighbouring border areas of at least two countries. It is a form of tourism related to the specific values found on both sides of the border. They are also considered in economic terms (price differences, quality of services and access to other products). One type of cross-border tourism is shopping tourism. For border areas, shopping tourism is of great importance (Timothy 2017; Malkowski et al. 2020), also as an element of local economic development planning (Rogerson 2011). According to the World Tourism Organization (UNWTO), shopping tourism should be seen as a modern form of tourism chosen by people who decide on their travel destination based on their ability to shop for goods outside their usual environment (UNWTO 2014). Shopping accounts for a significant portion of tourist spending (Choi et al. 2016), and shopping behaviour when travelling abroad differ from shopping behaviour in the home country (Choi et al. 2018). In addition, cross-border shopping is more often accompanied by leisure activities (Bar-Kołelis, Wendt 2018). Tourism stimulates the development of a diverse sector with a variety of tourist attractions and services centred around shopping. Shopping tourism is becoming an increasingly relevant component of the tourism value chain (UNWTO 2014). Shopping is already a determining factor in the decision to travel and the choice of destination. Owing to social, cultural and economic changes around the world, there are new patterns of consumption and purchasing behaviour (Rylance, Spenceley 2017; Liberato et al. 2020). Previous research has found that shopping tourists stay longer at a destination and spend approximately three to four times more than leisure tourists (Getz et al. 1994; Alegre, Cladera 2012).

The research in cross-border areas revealed that market processes can balance short-term shopping trips and contribute to long-term tourism that provides economic value to border areas (Leick et al. 2021). Hence, it is important to study consumers' motivation to visit the border region, the benefits they seek or their spending patterns (Díaz-Sauceda et al. 2015).

Border traffic and visitor spending can be used to analyse their role in borderland development. However, the subject literature focuses on areas adjacent to land borders. In Poland, this issue was studied, among other scholars, by Dołzbłasz and Zelek (2019), Malkowski et al. (2020) for the Polish-German border; Malkowski (2019) for the Polish–Ukrainian border; Cyargeenka (2021), Studzieniecki et al. (2021) for the Polish– Belarusian border; Batyk (2016), Studzieniecki et al. (2016), Zaitseva et al. (2016), Bobryk (2020), Palmowski and Fedorov (2020) for the Polish– Russian border.

The development of the border region is closely related to the presence of a tourist product, in which spatial development, tourist attractions and the development of the network of services and infrastructure significantly affect the development of border traffic (Jussi 2000; Roest 2004; Cerić, Więckowski 2020). Many authors also emphasise the impact of sustainable tourism on the development of the peripheral region (Studzieniecki et al. 2020; Kropinova 2021; Renfors et al. 2021). This indicates that the analysis of the motives for crossing borders is an important element in shaping regional development policy (Anderson, Wever 2003; Ramazannejad et al. 2021; Lim, Kim 2022).

An extremely interesting direction of research is also an attempt to determine what economic benefits accompany the development of tourism. The size of border traffic and the accompanying expenses of tourists crossing the border justify the search for a unified methodology for assessing the impact of this form of tourism on the economy of the region (Ennew 2003). Unfortunately, to date, a universally applicable methodology for assessing this impact has not been established. This is primarily related to the fact that different types of indicators are used in research because of differences in the scope of collected data characterising tourist traffic, the type of tourist destination (Kizielewicz 2016), preference in the use of certain methods by entities carrying out research and entities which commission and pay for these studies (Dooms et al. 2015). Some of the studies are industry-specific and concern a selected form of tourism such as cruise tourism (CLIA Europe 2013; Kizielewicz 2020). This leads to a situation where some studies deal with direct impacts and others with indirect or induced impacts. The direct economic impact usually captures the volume of production and the amount of employment in enterprises whose customers are tourists. The indirect impact is related to the creation of products and services for tourists using the economic potential of the socio-economic environment in which the enterprises selling their products and services to tourists operate. The induced impact is related to expenditures made by employees affected by tourism.

Among the main beneficiaries of the economic benefits associated with tourism are first and foremost local governments (new investments, new jobs, increased attractiveness of settlements and additional tax revenues), entrepreneurs (sale of goods and services), local community (new jobs and new technical infrastructure serving residents) and public institutions (number of visitors, revenues from fees, e.g. port fees, etc.). Benefits are, of course, also accompanied by costs including environmental costs (increased noise and emissions) and social costs (prostitution, crime, etc.).

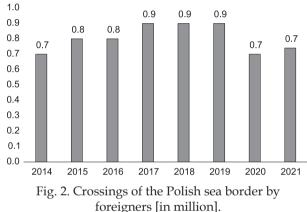
The literature on the subject clearly lacks studies on the maritime border, which confirms the need to undertake this line of research. This poses considerable challenges to researchers in determining the scale of this effect, as well as the economic impact of the increased border traffic in a specific peripheral area, such as the Baltic Sea coast. To the best of the authors' knowledge, there is still lack of research in this area, as confirmed by the literature review. Based on selected and popular databases such as Scopus, Web of Science and EBSCO, it was shown that there were no papers on the subject under discussion and there was a knowledge gap. The search with the phrases 'maritime border' and 'expenses of foreigners' has yielded no results. We searched for publications containing both of these keywords together.

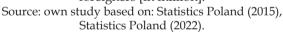
Results

Border traffic and motives for crossing the sea border

The analysis of border statistics showed that the overall traffic on the Polish border gradually increased from 2014 to 2019, rising by 18.6%. This trend halted in 2020 due to the introduction of administrative restrictions on the free movement across borders triggered by the COVID-19 pandemic. It should be emphasised that 2021, i.e. the second year of the pandemic, saw a noticeable increase in the number of visitors crossing Polish borders. During the examined period, the Polish border was crossed 258 million times in 2014 (58.9% by foreigners) and only 193.3 million times in 2021 (55.5% by foreigners). This means that, in 2020, there was a 25.5% drop in overall border traffic. This was more true for Poles (down by 29.8%) than for foreigners (down by 23.8%) – (Fig. 1).

The number of foreigners crossing the Polish maritime border in 2014–2019 indicates a systematic increase in the volume of border traffic. In the analysed period, it grew by as much as 28.6%.





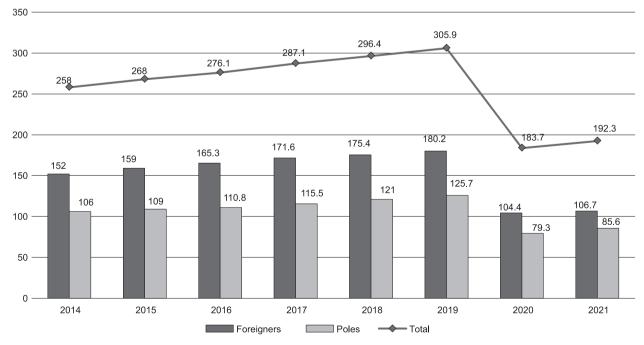


Fig. 1. Crossings of the Polish border [in million]. Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

The year 2020 saw a marked fall in the volume of border traffic. The overall number of visitors crossing the Polish maritime border decreased from 0.9 million in 2019 to 0.7 million in 2020 and 2021 (Fig. 2). In 2021, almost half were foreigners coming to Poland (0.37 million).

Expenses of foreigners crossing the sea border and their structure

When the reasons for which foreigners crossed the Polish maritime border were analysed, it was found that they travelled both for private and business purposes. During the period under study, quite significant changes were observed in this regard. The number of surveyed foreigners travelling privately decreased in the analysed period from 590,000 to 480,000, and those travelling on business increased from 110,000 to up to 220,000. The percentage of foreigners who travelled for private purposes decreased by 16.2 percentage points (from 84.8% in 2014 to 68.6% in 2020), and the percentage of visitors travelling on business increased (from 15.2% in 2014 to 31.4% in 2020) - see Figure 3. It should be noted that the share of foreigners crossing the maritime border for business purposes is much higher than the share for Poland in general (in 2020 it was 9.3%). Business trips to attend congresses, conferences, trainings and trade fairs, among others, are purely business-related and concern various aspects of the business. The increase in the number of foreigners travelling for business purposes should be viewed positively in terms of their impact on the economic development of maritime border areas.

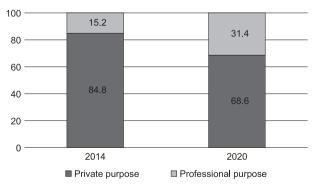


Fig. 3. Foreigners crossing the Polish sea border for the purpose of a visit in 2014 and 2020 [%].Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

Analysis of the data on the declared purposes of private visits by foreigners has shown significant changes in the studied period. The number of foreigners crossing the Polish sea border in the case of transit and shopping decreased in the analysed period, and increased in the case of visiting friends and family, and leisure, recreation and holiday. Detailed data is presented in Figure 4.

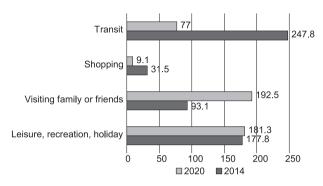


Fig. 4. Foreigners crossing the Polish sea border for private purposes in 2014 and 2020 [in thousands]. Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

In 2014, foreigners arriving by maritime border declared transit as the main purpose of their visit (35.4%), and in 2020, visiting friends and family (27.5%). In both the baseline and target years, the fewest visitors crossed the border to shop (4.5% in 2014 and 1.3% in 2020) – see Figure 5.

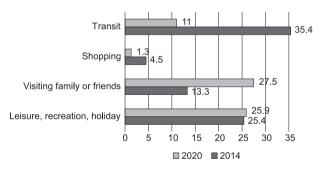


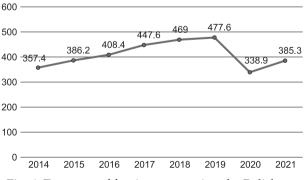
Fig. 5. Foreigners crossing the Polish sea border for private purposes in 2014 and 2020 [%].Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

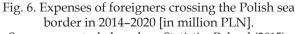
These data contrast with national data, according to which most foreigners visited Poland to shop (61.2% in 2014 and 64.3% in 2020). The main travel purposes of foreigners arriving in Poland by sea were therefore completely different from those indicated by foreigners crossing the land or air border. It should also be noted that their hierarchy has changed over the years studied. There was a significant decrease in the share of respondents declaring transit (by 24.4 percentage points) and shopping (by 3.2 percentage points) as the main purpose of their visit. However, the number of foreigners coming to Poland mainly to visit relatives and friends as well as for leisure, recreation and vacation has increased by 14.2 percentage points and by 0.5 percentage points, respectively.

Structure of expenses of foreigners crossing the sea border

An important factor affecting the economy of border areas is the expenditures of foreigners crossing the border. The estimated value of total goods and services purchased in Poland by foreigners in 2021 was PLN 24.5 billion, and in 2014 - PLN 35.4 billion. Thus, during the period under review, visitor spending decreased by 30.7%. The highest level of spending by foreigners in Poland was recorded before the pandemic, i.e. in 2019, when it reached PLN 45.3 billion. The level and type of expenditures were influenced by movement restrictions imposed by individual countries, including Poland. These resulted from the COVID-19 pandemic. As part of the pandemic restrictions, temporary restrictions on traffic were also introduced in Poland from 15 March, 2020, and for numerous border crossings, the traffic was completely halted.

The study showed that the expenditure of foreigners crossing the Polish maritime border amounted to PLN 357.4 million in 2014 and PLN





Source: own study based on: Statistics Poland (2015), Statistics Poland (2022). 385.3 million in 2021. As shown in Figure 6, between 2014 and 2019, foreigners' spending was highest in 2019, when it amounted to PLN 477.6 million. There was a marked annual increase in spending in the period from 2014 to 2019. The year 2020 saw a sharp decline in spending by foreigners which began to rise again in 2021. It should be noted that spending by foreigners travelling by sea accounted for a small, yet growing share of total visitor spending and was 1.1% in 2014 and 2019, and 1.6% in 2021.

An analysis of the average spending of foreigners leads to interesting conclusions. It was found that foreigners crossing the Polish maritime border spent on average more than twice as much as those crossing the land border. The analysed value in the examined years remained at a similar level and amounted to PLN 1,016 per capita in 2014 and PLN 1,022 per capita in 2021 (Fig. 7).

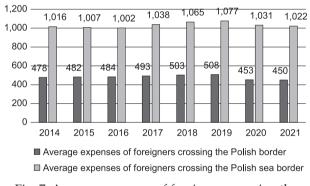


Fig. 7. Average expenses of foreigners crossing the Polish border and Polish sea border in 2014–2021 [in PLN].

Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

In the analysed period, the types of expenditures of foreigners crossing the maritime border changed slightly. Of the total amount of money spent in Poland in 2020, they spent the most on non-food goods (40%) and services (34.7%), and much less on food and non-alcoholic beverages (17%) as well as alcoholic beverages and tobacco products (8.3%). Compared to 2014, the share of spending on services increased the most (by 5.5 percentage points), while spending on non-food goods decreased the most (by 4.9 percentage points) – see Figure 8.

Therefore, it may be concluded that the Polish service market is increasingly attractive for

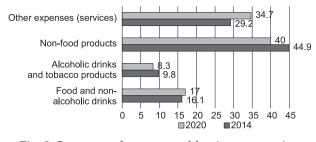


Fig. 8. Structure of expenses of foreigners crossing the Polish sea border, incurred in Poland in 2014 and 2020 [%].

Source: own study based on: Statistics Poland (2015), Statistics Poland (2022).

foreigners. Foreigners spend more than one-third of their funds on services in the maritime border areas, which undoubtedly has a positive impact on their socio-economic development.

Importance of foreigners' border traffic for maritime border areas

The level of expenses incurred by foreigners in Poland is related, among others, to the mode of travel (including the type of means of transport), the purpose of travel (private or business) or the length of stay (including the need for accommodation). The amount of expenditures depends on the profitability of purchases (price level and exchange rates), the international situation and changes in border crossing regulations that facilitate or restrict trade between countries. There is no doubt that the foreigners visiting Poland, including the money they spend, affect the functioning and socio-economic development of maritime border regions (see Fig. 9).

Based on the declared purposes of travel, it can be concluded that foreigners crossing the maritime border come to Poland for business tourism, leisure and recreation tourism, family tourism, shopping tourism and transit tourism. Border traffic is a particularly important factor influencing the development of border areas. This is primarily due to the amount of spending by foreigners crossing the border. The conducted research revealed that in the case of the maritime border, most foreigners (over 90%) shopped in a zone up to 50 km from the border. This means that the bulk of their funds was spent in the coastal belt, becoming a significant driver of the local economy. This became particularly evident after the limitation of border traffic as a result of the pandemic restrictions. They were met with disapproval by local business owners from all Polish border areas who lost their customers overnight. The tourism industry in the border sea area has been significantly affected. The drop in the number of foreign and domestic tourists has led to a decline in revenue for the entire tourism sector and the related service sector. As a result, the government and local government authorities were forced to introduce a number of support instruments to alleviate the adverse impact of the border traffic restrictions. However, this does not change the fact that compared to 2019, the local economy lost more than 140 million in 2020 as a result of the border restrictions.

To assess the impact of border traffic on the region's economy, a methodology created by Cruise Lines International Association (CLIA) Europe was used. This methodology assumes that the

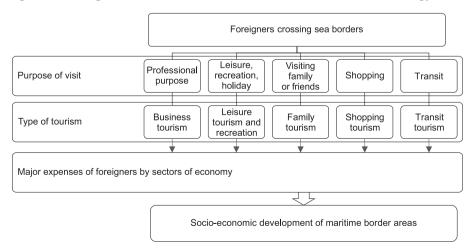


Fig. 9. The importance of foreigners' border traffic for sea border areas. Source: own study.

total economic impact should be considered as the sum of the direct, indirect and induced impacts of the cruise industry. According to this methodology, each 1 million EUR in direct spending by the cruise industry generates about 2.4 million EUR in output and about 21 jobs (CLIA Europe 2018).

In addition, the analysis uses the per capita tax revenue ratios for individual municipalities of districts (poviats) and provinces (voivodeships), used in Poland by the Ministry of Finance, which are the basis for calculating the annual amounts of the equalisation part of the general subvention and payments for municipalities, districts and provinces, respectively.

As a result of the analysis, the value of output that was generated by tourism in 2021 in the study area was estimated at more than PLN 924 million. The added value for the study region was the creation of about 1,760 jobs. The estimates presented also made it possible to determine the projected tax revenue to budgets. Using the methodology of the Ministry of Finance, an estimate was made of tax revenue related to the size of border traffic in the border sea area. As regards an influence on the budgets of municipalities, the value of funds raised in the form of tax revenues amounted to no less than PLN 3.7 million in 2021. The budgets of districts operating in the study area and the budget of provinces received respectively about PLN 558,000 and 404,000 from this source.

Conclusion

This paper focuses on presenting the issue of border traffic of foreigners on the Polish maritime border and defining the role of the maritime border in the development of border areas. Tourism is one of the leading economic sectors. Changes in the function of the border and, above all, loosening tourist traffic restrictions render this area attractive for the service sector oriented towards the needs of tourists, including shopping tourists. Therefore, it is necessary to take advantage of the increase in border traffic and development of all forms of tourism to provide attractive services available regardless of the season and thus stimulate the development of this peripheral region. Therefore, it is necessary to prepare an integrated tourism offer for the region, paying particular attention to well-recognised border traffic.

The conducted study indicates that the volume of maritime border traffic is the smallest among all borders in Poland. It is worth noting that, during the period under review, its share increased from 0.7% in 2014 to 0.8% in 2021. During this period, the highest traffic volumes were recorded at the EU's internal border (85.7% in 2020), with much lower volumes at airports (7.1% in 2020) and at land crossings on the EU's external border (6.3% in 2020).

Furthermore, the studies have shown that foreigners crossing the maritime border on average spend in Poland more than twice as much as foreigners crossing the Polish land border. Their spending patterns and travel purposes are also different. The potential that foreign visitors bring is crucial for the development of border areas. The study shows that the traffic of foreigners at the Polish maritime border increased almost every year between 2014 and 2021. Moreover, the study has found that the COVID-19 pandemic significantly affected all examined figures regarding foreigners. The year 2020 saw a decrease in the number of foreigners crossing the Polish maritime border and a decrease in their spending, including a decrease in average spending. It should be emphasised that these figures have improved in 2021.

A comparison of travel purposes and the types of expenditures of foreigners coming to Poland by maritime and land border revealed significant differences in this respect. The share of foreigners crossing maritime borders for business purposes in 2020 was more than 3.4 times higher than this share for Poland overall. The difference is therefore significant. Differences were also found when comparing the purposes of foreigners' visits. In 2020, foreigners came to Poland across the maritime border mostly to visit friends and family, and least often, to shop. The opposite was true for the Polish land border, which foreigners usually crossed to do shopping. Thus, the formulated hypothesis was confirmed. Additionally, it was shown that the hierarchy of travel purposes of the foreigners surveyed has also changed.

During the period analysed, with the exception of 2020, spending by foreigners travelling by sea was increasing steadily. Their share in the total expenditure of foreigners was small but it should be noted that it increased in the examined years (from 1.1% in 2014 to 1.6% in 2021). Studies have shown that foreigners crossing the maritime border on average spend in Poland more than twice as much as foreigners crossing the Polish land border. This trend continued throughout the entire period examined, hence it can be considered steady. This is another aspect that distinguishes the study group from other groups in the country. It is also worth noting that 90% of the foreigners surveyed purchase products and services within 50 km of the border.

Analyses and studies of foreigners crossing the maritime border of Poland have shown that these are determinants of the socio-economic development of maritime border areas. The study conducted allowed the authors to develop a model which shows that the purposes for which the Polish maritime border is crossed can be translated into different types of tourism practiced by foreigners. They support various sectors of the Polish economy, which contributes to better functioning and development of border sea areas.

The volume of border traffic and the accompanying expenditures of tourists crossing the border are an important factor affecting the region's economy. The magnitude of border traffic and the value of expenditures incurred in Poland by foreigners crossing the sea border made it possible to estimate that, in 2021, at least PLN 4.65 million would flow into the budgets of local government units (from the study area) in the form of taxes on this account. Border traffic and spending by foreigners contributed to the creation of 1,760 jobs. The total value of output generated by tourist traffic in 2021 in the study area was no less than PLN 924 million.

The authors' contribution to the literature on the subject was to demonstrate that, in terms of purpose and nature, the border traffic and expenditures of foreigners crossing the maritime border differ from those of foreigners crossing the land border. The available literature on the subject lacks studies comparing these aspects. The study conducted by the authors should be treated as a starting point for further in-depth analysis in this area, including the comparison of shopping behaviour and decisions of foreigners crossing land, maritime and air borders. The conditions of crossing these borders are somewhat different but the study results presented may be used by local governments or institutions planning the development of maritime border areas.

The analysis conducted in this paper can serve as a basis for further academic discussion and more detailed studies to better understand the importance of foreigners, including their spending, in the development of maritime border areas.

Acknowledgements

The project was partially financed under the programme of the Ministry of Science and Higher Education as 'Regional Initiative of Excellence' in the years 2019–2022, Project No. 001/RID/2018/19, funding amount: 10,684,000.00.

References

- Alegre J., Cladera M., 2012. Tourist characteristics that influence shopping participation and expenditures. *International Journal of Culture, Tourism and Hospitality Research* 6: 223–237.
- Anderson J., Wever E., 2003. Borders, border regions and economic integration: One world, ready or not. *Journal of Borderlands studies* 18(1): 27–38.
- Bar-Kołelis D., Wendt J.A., 2018. Comparison of cross-border shopping tourism activities at the Polish and Romanian external borders of European Union. *Geographia Polonica* 91(1): 113–125.
- Batyk I.M., 2016. Small border traffic between Poland and the Kaliningrad Oblast of the Russian Federation as one of the elements creating cross-border cooperation. *European Journal of Service Management* 19(3): 5–10.
- Bobryk A., 2020. Security policy and regional development: The impact of local border traffic on the economy of the Polish-Russian border area. *Regional Science Policy & Practice* 12(5): 833–845.
- Brunet-Jailly E., 2012. In the increasingly global economy, are borderland regions public management instruments? *International Journal of Public Sector Management* 25(6–7): 483–491.
- Bygvra S., 2020. Cross-border shopping A regional economic perspective. Online: https://www.researchgate.net/profile/Susanne-Bygvra/publication/346059959_Cross-border_shopping_A_regional_economic_perspective/ links/5fb94dbe458515b7975d54cb/Cross-border-shopping-A-regional-economic-perspective.pdf (accessed 30 April 2022).
- Canale D., 2020. Border walls: On the contemporary transformation of state borders. *Bocconi Legal Studies Research Paper* 3536293. DOI 10.2139/ssrn.3536293.
- Cerić D., 2019. Transgraniczna przestrzeń turystyczna obszarów morskich i nadmorskich na przykładzie Morza Bałtyckiego – próba wyjaśnienia pojęcia (Cross-border tourism space in maritime and seaside areas as exemplified by the Baltic Sea Region – an attempt at explaining the concept). Przegląd Geograficzny 91(4): 531–551.
- Cerić D., Więckowski M., 2020. Establishing transboundary tourist space in the Baltic Sea region. Baltic Journal of Health and Physical Activity 12(5): 149–157.
- Choi M.J., Heo C.Y., Law R., 2016. Progress in shopping tourism. Journal of Travel & Tourism Marketing 33(1): 1–24.

- Choi M.J., Law R., Heo C.Y., 2018. An investigation of the perceived value of shopping tourism. *Journal of travel Research* 57(7): 962–980.
- CLIA Europe, 2013. The cruise industry. Contribution of Cruise Tourism to the Economies of Europe: 3–29.
- CLIA Europe, 2018. The cruise industry. Contribution of Cruise Tourism to the Economies of Europe 2017: 4–28.
- Cooper A., Perkins C., 2012. Borders and status-functions: An institutional approach to the study of borders. *European Journal of Social Theory* 15(1): 55–71.
- Copus A.K., 2001. From core-periphery to polycentric development: Concepts of spatial and aspatial peripherality. *European Planning Studies* 9(4): 539–552.
- Cyargeenka A., 2021. Changes in cross-border tourist traffic on the Poland–Belarus border, as exemplified by the Augustów Canal. *Turyzm* 31(1): 57–68.
- Díaz-Sauceda J., Palau-Saumell R., Forgas-Coll S., Sánchez-García J., 2015. Cross-border tourists' behavioral intentions: The green line of Nicosia, Cyprus. *Tourism Geographies* 17(5): 758–779.
- Dołzbłasz S., Zelek K., 2019. Wybrane cechy zagospodarowania przestrzennego i aktywności gospodarczej w otoczeniu miejsc przekraczania granicy polsko-niemieckiej (Selected features of spatial management and economic activity in the vicinity of border-crossing points on the Polish-German border). *Przegląd Geograficzny* 91(4): 487– 510.
- Dooms M., Haezendonck E., Vrbeke A., 2015. Towards a meta-analysis and toolkit for port-related socio-economic impacts: A review of socio-economic impact studies conducted for seaports. *Maritime Policy & Management* 42(5–6): 459–473.
- Eckardt M., Kappner K., Wolf N., 2020. COVID-19 across European regions: The role of border controls. DP15178. Online: https://cepr.org/active/publications/discussion_papers/dp.php?dpno=15178 (accessed 10 May 2022).
- Ennew C., 2003. Understanding the economic impact of tourism. World 477: 463–466.
- Erkut G., Özgen C., 2003. The economic and spatial peripherality of border regions in Southeastern Europe. In: 43rd Congress of the European Regional Science Association: "Peripheries, Centres, and Spatial Development in the New Europe". 27th – 30th August 2003, Jyväskylä, Finland: 1–29.
- Getz D., Kelly M., Joncas D., 1994. Tourist shopping villages in the Calgary region. *Journal of Tourism Studies* 5(1): 2–15.
- Ianioglo A., Rissanen M., 2020. Global trends and tourism development in peripheral areas. *Scandinavian Journal of Hospitality and Tourism* 20(5): 520–539.
- Ivan G., Tatyana K., Lidiya O., 2016. Local border traffic as an efficient tool for developing cross-border cooperation. *Baltic Region* 8(1): 67–82.
- Johnson C.M., 2009. Cross-border regions and territorial restructuring in Central Europe: Room for more transboundary space. *European Urban and Regional Studies* 16(2): 177–191.
- Jussi J., 2000. *Regional development and regional policy*. European Union and the Baltic Sea region. University of Turku, Turku.
- Kizielewicz J., 2016. Cruise travels to the Arctic and Antarctica-trends, development & prospects. *Ekonomiczne Proble*my Turystyki 3: 313–325.
- Kizielewicz J., 2020. Measuring the economic and social contribution of cruise tourism development to coastal tourist destinations. *European Research Studies Journal* 23(3): 147–171.

- Kolosov V., Więckowski M., 2018. Border changes in Central and Eastern Europe: An introduction. *Geographia Polonica* 91(1): 5–16.
- Kropinova E., 2021. Transnational and cross-border cooperation for sustainable tourism development in the Baltic Sea region. *Sustainability* 13(4): 2111.
- Leick B., Schewe T., Kivedal B.K., 2021. Tourism development and border asymmetries: An exploratory analysis of market-driven cross-border shopping tourism. *Tourism Planning & Development* 18(6): 673–698.
- Liberato D., Liberato P., Silva M., 2020. Shopping tourism: Comparative analysis of the cities of Oporto and Lisbon as shopping destinations. In: Katsoni V., Spyriadis T. (eds), *Cultural and tourism innovation in the digital era*. Springer, Cham: 365–379.
- Lim D.S., Kim J.B., 2022. The long-term development of a smart region at the border of the Amnok River. *Journal of the Architectural Institute of Korea* 38(5): 131–138.
- Lundén T., 2018. Border regions and cross-border cooperation in Europe. A theoretical and historical approach. In: Medeiros E. (ed.), *European territorial cooperation*. Springer, Cham: 97–113.
- Malkowski A., 2019. Shopping tourism as a factor in the development of peripheral areas on the example of the Polish-Ukrainian borderland. *Scientific Papers of Silesian University of Technology. Organization and Management* 139: 301–312.
- Malkowski A., Mickiewicz B., Malkowska A., 2020. Shopping tourism as a factor in the development of peripheral areas: The case of the Polish-German borderland. *European Research Studies Journal* 23(3): 238–248.
- Martinsen D.S., Rotger G., Thierry J.S., 2019. Free movement of people and cross-border welfare in the European Union: Dynamic rules, limited outcomes. *Journal of European Social Policy* 29(1): 84–99.
- Mikhaylova A.A., Wendt J.A., Hvaley D.V., Bógdał-Brzezińska A., Mikhaylov A.S., 2022. Impact of cross-border tourism on the sustainable development of rural areas in the Russian–Polish and Russian–Kazakh borderlands. *Sustainability* 14(4): 2409–2438. DOI 10.3390/su14042409.
- Palmowski T., Fedorov G.M., 2020. The potential for development of Russian-Polish cross-border region. *Geography*, *Environment, Sustainability* 13(1): 21–28.
- Pezzi M.G., Urso G., 2016. Peripheral areas: Conceptualizations and policies. Introduction and editorial note. *Italian Journal of Planning Practice* 6(1): 1–19.
- Ramazannejad Y., Zarghamfard M., Hajisharifi A., Azar S., 2021. Factors behind tourists' travel motivation: The case of the Gilan Region, Iran. *Quaestiones Geographicae* 40(4): 101–112.
- Renfors S.M., Lanzanova A., Czarnecka-Gallas M., 2021. Baltic Sea marinas as sustainable tourism destinations. Satakunta University of Applied Sciences, Satakunta. Online: https://www.theseus.fi/bitstream/handle/10024/494498/2021_B6_Baltic_Blue_Marinas_as_ Sustainable_Tourism_Destinations.pdf.pdf?sequence=4 (accessed 10 June 2022).
- Roest M., 2004. Report tourism development in the Baltic Sea region. Creating joint policies as a win-win scenario. Online: http://www.bdforum.org/wp-content/uploads/2016/02/thematic_reports_tourism_2004.pdf (accessed 10 June 2022).
- Rogerson C.M., 2011. Urban tourism and regional tourists: Shopping in Johannesburg, South Africa. *Tijdschrift voor* economische en sociale geografie 102(3): 316–330.

- Rylance A., Spenceley A., 2017. Reducing economic leakages from tourism: A value chain assessment of the tourism industry in Kasane, Botswana. *Development Southern Africa* 34(3): 295–313.
- Salvatore R., Chiodo E., Fantini A., 2018. Tourism transition in peripheral rural areas: Theories, issues and strategies. *Annals of Tourism Research* 68: 41–51.
- Schimmelfennig F., 2021. Rebordering Europe: External boundaries and integration in the European Union. *Journal of European Public Policy* 28(3): 311–330. DOI 10.1080/13501763.2021.1881589.
- Scott J.W., 2015. Bordering, border politics and cross-border cooperation in Europe. In: Celata F., Coletti R. (eds), *Neighbourhood policy and the construction of the European external borders*. Cham: Springer International Publishing (GeoJournal Library): 27–44. DOI 10.1007/978-3-319-18452-4_2.
- Spierings B., Van Der Velde M., 2008. Shopping, borders and unfamiliarity: Consumer mobility in Europe. *Tijdschrift* voor economische en sociale geografie 99(4): 497–505.
- Statistics Poland, 2015. Border traffic and expenses made by foreigners in Poland and Poles abroad in 2014. GUS, Warsaw.
- Statistics Poland, 2022. Border traffic and expenses made by foreigners in Poland and Poles abroad in 2021. GUS, Warsaw.
- Studzieniecki S.T., Jakubowski J.A., Meyer M.B., 2020. Transnational tourist destination management: A case study of the Baltic sea region. *Baltic Region* 12(3): 127–146.
- Studzieniecki T., Jakubowski A., Meyer B., 2021. Key conditions for Euro regions development at external EU borders: A case study of the Polish-Belarusian borderland. *Regional Science Policy & Practice* 14(4): 718–739. DOI 10.1111/rsp3.12414.

- Studzieniecki T., Palmowski T., Korneevets V., 2016. The system of cross-border tourism in the Polish-Russian borderland. *Procedia Economics and Finance* 39: 545–552.
- Timothy D.J., 2017. Shopping tourism. Special interest tourism: Concepts, contexts and cases. In: Agarwal S., Busby G., Huang R. (eds), *Shopping tourism*. CAP International, Walllingford: 134–144.
- UNWTO, 2014. Global report on shopping tourism. *World Tourism Organisation* 8. Online: https://webunwto.s3eu-west-1.amazonaws.com/imported_images/42481/ am9-shopping-report_v2.pdf (accessed 10 May 2022).
- Więckowski M., 2011. Wybrane aspekty rozwoju turystyki transgranicznej w sąsiedztwie zewnętrznej granicy strefy Schengen (Selected aspects of trans-border tourism development in the vicinity of the external border of the Schengen area). Zeszyty Naukowe Wyższej Szkoły Społeczno-Przyrodniczej w Lublinie 12: 122–140.
- Więckowski M., Cerić D., 2016. Evolving tourism on the Baltic Sea coast: Perspectives on change in the Polish maritime borderland. *Scandinavian Journal of Hospitality and Tourism* 16: 98–111.
- Więckowski M., Timothy D.J., 2021. Tourism and an evolving international boundary: Bordering, debordering and rebordering on Usedom Island, Poland-Germany. *Journal* of Destination Marketing & Management 22: 100647.
- Wong Villanueva J.L., Kidokoro T., Seta F., 2020. Cross-border integration, cooperation and governance: A systems approach for evaluating "good" governance in cross-border regions. *Journal of Borderlands Studies* 1–24.
- Zaitseva N.A., Korneevets V.S., Kropinova E.G., Kuznetsova T.Y., Semenova L.V., 2016. Cross-border movement of people between Russia and Poland and their influence on the economy of border regions. *International Journal of Economics and Financial Issues* 6(4): 1690–1695.