




Export activity of enterprises: a case study of a border region

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Abstract

Motivation: Enterprises, especially SMEs, are the backbone of the Polish economy. Their desire to develop makes them decide, among other things, to export. Particularly those located in border regions, are a challenge for the economic cohesion and economic activation of these areas. The openness of the border and the prevailing economic relations between neighbouring countries are of vital importance here. This peculiarity of the border location and the potential of the border regions of Eastern Poland (peripheral and economically underdeveloped), as well as the still existing research gap in this area justifies, among other things, taking up the topic.

Aim: Identification and assessment of the state of export activity of Polish companies, with particular emphasis on the sector of small and medium-sized enterprises located in the border region.

Results: The research carried out (empirical — primary and secondary — identifying the level of export activity by region in terms of quantity and value) into the dynamics and level of export activity by border regions — shows significant differentiation. This differentiation is influenced, inter alia, by the location and different historical and political conditions of the neighbours. Poland's accession to the EU in 2004 and joining the Schengen area in 2007 resulted in completely different opportunities for the development of export activity in regions located on Poland's western border (e.g. with Germany and thus within the European Union) than in regions located on Poland's north-eastern border (e.g. with the Kaliningrad Oblast of the Russian Federation, where the state border is at the same time the EU border in the eastern part of Europe). This peculiarity results in the fact that there is still a lack of compact, homogeneous studies on the export activ-

ity of enterprises, especially SMEs, in relation to border regions. This is certainly still an existing research gap.

Keywords: export activity; SMEs; border regions; voivodships of Eastern Poland
JEL: R11; L26; F14

1. Introduction

According to economic theory, economic development occurs, among other things, through internationalisation and the international division of labour (Bombińska, 2014, pp. 87–100). The individual resources of companies are spread out in a mobile manner in order to make full use of them in different parts of the world. The value chain in effect breaks down, disperses and products and services are created by a “global factory” (Nummela, 2010, pp. 1–8). It becomes advantageous to sell products abroad, to engage in export activities (Cusolito et al., 2016). This activity influences economies of scale, which has been recognised in the literature as an important source of economic growth (Bożyk, 2004; Kosińska, 2008; Sobiecki & Pietrewicz, 2014). Exporters acquire information about the foreign (neighbouring) market and “learn” it precisely by exporting. They gain experience. There is an increase in innovation and productivity of the company. Export activities based on constant assessment of the environment and the use of emerging opportunities brings benefits in understanding the needs of foreign customers and legal regulations of trade (cf. analyses by Cieślik, 2019; Kaczmarek & Królak-Werwińska, 2008). This is particularly important for SMEs, characterised by lower levels of organisational inertia and thus absorbing external knowledge at a faster pace (González-Pernía & Peña-Legazkue, 2015, pp. 505–522).

In post-socialist countries, free export activities were only possible after 1989 (and even after 1991), especially in border regions (see Smallbone & Welter, 2012, pp. 95–104; van Houtum & Bueno Lacy, 2020, pp. 706–733; van Melik, 2021; Vollmer, 2021, pp. 4–10; Welter & Smallbone, 2008, pp. 1–28; Yuval-Davis et al., 2019). This activity remains significantly different due to the location (north-eastern vs. western Polish border) or the different historical and political conditions of the neighbours (internal vs. external EU border; Schengen area).

Therefore, taking into account the specific character of Poland’s eastern border — which is at the same time the external border of the EU and the border of the former post-socialist bloc countries (of different political, social and economic systems), the main objective of the research was to identify and attempt to evaluate the export activity of Polish SMEs located in this border region. This peculiarity of the border location and the potential of the border regions of Eastern Poland (peripheral and economically underdeveloped), as well as the still existing research gap in this area justifies, among other things, taking up the topic.

2. Literature review

In SME export activity, levels can be distinguished (Białecki et al., 2007). On the one hand, products are exported to neighbouring (neighbouring) markets, where different socio-economic mechanisms and cultural differences as well as competition occur and the company has a low degree of knowledge of preferences of foreign buyers. On the second hand — when the SME is more attuned to buyers' needs and uses similar techniques to its competitors. And when the SME assumes that the neighbouring market is identical and constitutes one system (e.g. one cross-border region).

Therefore, international entrepreneurship has a long tradition in research on theories targeting SME export activities (research: Daszkiewicz, 2014; Huczek, 2008, pp. 9–29; Mtigwe, 2006, pp. 5–25). It constitutes a research area with a multidimensional character. This makes it, according to some researchers (Jones et al., 2011 as cited in Michna & Kmiecik, 2016, pp. 107–116; McDougall, 1989, pp. 387–400), a much broader concept. It additionally focuses on factors influencing internationalisation (cf. empirical studies of SMEs in Spain, Ireland, Great Britain, Malaysia, Finland, USA, Slovenia, Austria, Australia, Turkey, Poland and Hungary). Due to the specific nature of the SME (and tendencies towards export activity), the characteristics of the owner (Michna & Męczyńska, 2014) and the level of socio-economic development of the neighbouring country are also dominant here. Thus, exports may be higher the larger the enterprise and the weaker the appreciation of the national currency (e.g. Polish zloty — research conducted for over 760 Polish enterprises: Daszkiewicz, 2008, pp. 119–139).

In the context of a firm's export performance, empirical research also focuses on the relationship between exports and productivity and the positive impact on its innovation activity (Cieślik & Michałek, 2018, pp. 233–250)¹. In the model view of firm heterogeneity in the context of export performance, it is assumed that firm productivity is given exogenously (Melitz, 2003). While in reality it can be linked to innovation activity. Most empirical work focuses on developed countries, less on less developed EU countries (albeit from Central and Eastern Europe). Studies for selected CEE countries (e.g. Poland) have identified the role of different forms of innovation (Brodzicki, 2017, pp. 91–105; Brodzicki & Ciołek, 2016, pp. 59–76; Cieślik & Michałek, 2017a, pp. 4989–500; 2017b, pp. 85–95) or the relationship between forms of innovation, multi-product status and firms' export performance (Visegrad Group countries) (Cieślik & Michałek, 2018, pp. 234–248). In contrast, another CEE country (Ukraine) investigated whether the determinants of firms' export performance are similar to those of CEE countries that are members of the EU. It turns out that the probability of exporting increases with increasing firm productivity.

¹ This strand of research conducted for: United States, Colombia, Mexico and Morocco, Germany, Spain, Italy, United Kingdom, Canada, Sweden, Belgium, Slovenia, Spain and Greece.

Moreover, Ukrainian firms become more similar to firms operating in CEE countries that have joined the EU (Cieślak et al., 2015, pp. 91–101).

Thus, export activity is crucial for SME growth. It enables them to expand abroad. However, SMEs face certain obstacles. These include legislative, tax and cultural and linguistic differences. This affects SMEs' different perceptions of export restrictions. This is confirmed by a study of 408 SMEs from the Czech Republic, Slovakia and Hungary (Ključnikov et al., 2022, pp. 173–188). It is also important in the case of SME exports from the Eastern Poland border region² (border with: Lithuania, Belarus, Russia, Ukraine).

When carrying out an export transaction, SMEs have to pay attention to many conditions. These include differences in production and transport costs or disparities in the size of the partner country etc. (Meade, 2003). Furthermore, the specific characteristics of border SME's often mean that the whole process does not fully follow the assumptions of internationalisation models (Plawgo, 2004). It is a consequence of the size of their resources (Wach, 2012) and their experience in operating on foreign markets. Market and cost motives also become important (cf. Grzegorzczak & Krawiec, 2019) due to the border location (location rent). Additionally, the synergy effect, the nature of the state border and the prevailing political relations between countries are advantageous for SMEs located in this way (Zabielska, 2020, pp. 569–580). As are financial (for export transactions), legal and administrative facilities (e.g. the introduction of local border traffic).

The literature on the functioning of SME companies also draws attention to numerous barriers (Fonfara, 2007, pp. 2–5) identified by exporters — especially from border areas (own research: Zabielska et al., 2021, pp. 11–25). These include the limited possibilities of financing an export transaction, the lack of equity capital and qualified staff, and technical limitations when exporting. Legal and administrative regulations in the neighbouring market, cultural and language differences as well as a lack of information about the foreign partner's market are also significant (cf. research by Dorożyński et al., 2017). Consequently, they mostly pursue a late entry strategy on the foreign market. Only after achieving a position on the domestic market do SMEs decide to enter foreign markets gradually (Bell et al., 2003, pp. 339–360; Duliniec, 2009; Fonfara, 2009; Madsen & Servais, 1997, pp. 561–580; Małys, 2010, pp. 96–

² Eastern Poland comprises the Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie Voivodeships. It accounts for 1/3 of the country's area (32%). Its peripherality has a spatial dimension (distance from Polish and EU development centres) and a socio-economic dimension (level of economic development is among the lowest in the EU: very low innovation, competitiveness and investment attractiveness). The development backwardness has deep historical roots and is an example of long-lasting processes (MFIPR, 2022). In this discussion, Eastern Poland is treated identically as the regions (voivodeships) located at Poland's eastern border.

100). They generally follow the internationalisation model of the Universities of Helsinki and Uppsala and expand sequentially (Piercy, 1981, pp. 26–38)³.

In Poland, SMEs mainly expand into European markets. In the literature there is even a concept of “Europeanisation” of SME companies, specifying different approaches to it: pan-European (European orientation) and sub-European (region-centric), euromultiterritorial (polycentric) and eurominimalist (export-based). The most feasible, due to the characteristics of Polish SMEs, is the implementation of the euromultiterritorial and sub-European strategy. Therefore, for SME, out of many forms of expansion, export activity becomes the most appropriate. They often use indirect exports (other studies conducted on Polish exporting companies: Gostowska-Dźwig & Mroziak, 2016, pp. 64–70; Ratajczak-Mrozek et al., 2010, pp. 212–220). This is because they are most often not able to reach the final products themselves⁴. Only after they have been present on the foreign market for a longer time, and after they have cooperated with an intermediary for a longer time, do they undertake direct exports (cf. analyses by Wach, 2012).

3. Methods

Although research on the internationalisation of SMEs plays a key role in modern economics and finance, the involvement of companies in export activities, especially in border areas, is still a subject of discussion and analysis. Border areas are an area of many languages, religions and traditions, as well as foreign (neighbouring) market activity, with a special character. In the present discussion, these are the provinces of Eastern Poland and at the same time the eastern border of the EU. Thus, in the new post-transformation geopolitical arrangement of Europe, the former Soviet bloc countries come into contact with each other. A common tradition and history, which enriches but also complicates the propensity to engage in export activity. With the above in mind, the aim of this study was to identify and attempt to assess the export activity of Polish SMEs located at Poland’s eastern border. Aiming to achieve its objective, the hypothesis was also verified: H1: the location of enterprises in the border area has a positive impact on its export activity.

The realisation of the research objective and the verification of the hypothesis set required the collection and analysis of the necessary data. The source was primary and secondary research on the identification of Polish enterprises in export activity, especially from the SME sector. They came, from reports

³ An increasing number of researchers (Gorynia, 2000, pp. 9–25; Karlsen et al., 2003, pp. 385–395; Morgan & Katsikeas, 1997, pp. 68–75; Wach, 2012; Welch & Luostarinen, 1993, pp. 46–55) point out that internationalisation is already an engagement in foreign exchange.

⁴ This is mainly due to a lack of gathered information about the foreign partner’s market. Which consequently leads to failure or withdrawal from the market (see: Chmielak et al., 2018; Grzegorzczak & Krawiec, 2019; Grzegorzczak & Szymańska, 2018).

of the Polish Agency for Enterprise Development (PARP, 2022), publications of the Central Statistical Office (GUS) and the Ministry of Development, Labour and Technology (MRPiT, 2021), Supreme Chamber of Control (NIK, 2022) and from own research.

Thus, the following indicators were used for the analysis concerning the ranking of SMEs by voivodeship (Eastern Poland) in the context of their propensity to export:

- number of active enterprises per 1000 inhabitants;
- number of employees per active entity in SME companies;
- employees in active enterprises per 1000 inhabitants;
- revenue per active enterprise and revenue per employee in an active company;
- share of costs in revenue in active enterprises;
- average wages and salaries in active enterprises;
- capital expenditure per active enterprise and per employee in an active enterprise.

The Synthetic Index (WS), prepared in accordance with the formula:

$$WS = (pn - x)100 / \max(pn - x), \quad (1)$$

where:

n — number of variables;

x — number of points for the variables representing the sum of the places taken by the region in the ranking in individual subrankings;

p — number of places in the ranking;

$\max(pn - x)$ — maximum number of points that can be obtained in case of taking the first place in all subrankings.

The value of the indicator is the level of realisation of the maximum result by the voivodeship. On the other hand, when identifying the obstacles related to export activity by Polish enterprises, analyses of the Ministry of Development, Labour and Technology were used. In turn, with regard to the entrepreneurs' perception of the impact of the 2020–2022 crisis on the economic situation prevailing on their market, a survey carried out within the PARP Polish Enterprises Panel was used. It was conducted in 3rd–4th quarter 2022 on a 293 representative group of owners and managers of companies operating in Poland, using the CAWI (Computer-Assisted Web Interview) technique.

The source of information was also provided by a survey conducted at the end of 2019 by a research team led by Zabielska on a sample of 244 SMEs located in the border zone of Poland, neighbouring the former USSR countries. i.e. Russia, Ukraine, Belarus and Lithuania⁵.

⁵ Team composition: Zabielska I. (head), members: Nazarczuk J., Wojarska M., Zielńska-Szczepkowska J.

4. Results and discussion

For several years, Poland has seen a steadily growing number of active SMEs (by 35% by the beginning of 2021) and an increase in their share in GDP (as of 2020 the SME share in GDP was 72.3%)⁶. Unfortunately, the COVID-19 pandemic and other emerging barriers (Russian-Ukrainian conflict, rising inflation) have slowed down some of the favourable trends. This is also noticeable with regard to the involvement of Polish SMEs in export activities, both in terms of the number of companies cooperating with foreign countries and the size of exports. In 2020, the weakened Polish economy due to the pandemic experienced a decline in exports. In 2019–2020, it amounted to 5.2%, while in 2018 it was 6.9–6.9%. It did not rebound until 2021. Polish exports increased by almost 12% (PARP, 2022).

Unfortunately, in Poland, the number of enterprises engaged in export activities is still not among the strong points. According to estimates based on data from the Polish Central Statistical Office, only 4.6% of SMEs in Poland sell products abroad, and only 0.97% sell services. Exports of enterprises operating in Poland amounted to PLN 1.31 trillion (as of the beginning of 2021). Estimates by the Central Statistical Office indicate that sales abroad by the average Polish exporter are small: for goods the value is PLN 10.8 million and for services PLN 12.6 million. Micro-enterprises definitely stand out from the rest of the SME group. The export value of an average micro-exporter, in the analyzed period, amounted to PLN 0.7 million in the case of goods and PLN 3.1 million in services. Larger entities fared better. The small exporter sold abroad products worth PLN 3.3 million and services worth PLN 5.6 million. The medium-sized exporter respectively: PLN 19.1 million and PLN 12.3 million, and a large one: PLN 203 million and PLN 49.6 million (PARP, 2022).

According to CSO estimates, 25% of SME revenues came from exports of goods and services. The weakest results were achieved by micro-exporters (5.1%). Significantly better — small companies (16%), medium-sized (21.4%) and large entities (26.6%) were significantly better. In 2010–2021 the share of exports in revenues of Polish SME grew steadily from 17.6% in 2010 to 25% at the beginning of 2021. The analysis of the distribution of export activity by territory shows a significant imbalance (Figure 1)5.

On the one hand, there are 4 voivodeships with 60% of the total export value (Mazowieckie, Śląskie, Wielkopolskie and Dolnośląskie voivodeships). And quite strong ones, located at Poland's western border (Zachodnio-Pomor-

⁶ After Poland's accession to the EU, i.e. since 2004, a gradual increase in SME involvement in export activities has been observed. Most of them focused on intra-EU exports, and only 30% went outside the EU. Here, micro-exporters accounted for as much as 87% of the total number, but the contribution of this group to the export volume was only less than 2%. Over the course of several years, the growth potential has become diversified. Cieślík (2019) shows in his research that more than 47% of exporters are medium and large companies.

skie, Lubuskie, Dolnośląskie). On the other hand, the voivodeships of Eastern Poland (Lubelskie, Warmińsko-mazurskie, Świętokrzyskie, Podkarpackie, Podlaskie), whose share in export volume was very low considering their overall economic potential (Figure 2).

In the 2008–early 2021 entrepreneurship ranking in Poland, the leader was the Mazowieckie voivodeship, which took 15th place out of 27 analysed categories (WS was 80.51). The worst performance was recorded in the border voivodeships of Eastern Poland: Lubelskie (18.5), Warmińsko-Mazurskie and Świętokrzyskie (25.9 each). For comparison, the Synthetic Index for the voivodeships on the western border was at the level of 60–70.

In order to assess the level of entrepreneurship by region, values of the indicator were compared in relation to the number of active SMEs per 1000 inhabitants. Here, similarly, the lowest values were reached by the voivodeships of Eastern Poland: Podkarpackie (41.7), Świętokrzyskie (45.6) and Warmińsko-Mazurskie (46.8). The following were ranked higher: Zachodniopomorskie (69.4), Dolnośląskie (58.9) and Lubuskie (52.1).

An analysis was also made of the established SMEs and their survival rate in the first year of operations. It turns out that there is a decrease in SME creation in particular border regions of Eastern Poland (beginning of 2021 vs. beginning of 2020), which translates into a lower value of the indicator (Table 1).

There are also clear fluctuations over the years. In the period under review, this was definitely influenced by the pandemic situation.

The consequences of the above are reflected in the average revenue per active SME (in Poland in 2020=PLN 1.30 million). Out of the five border voivodeships of Eastern Poland, the highest average revenue of active SMEs was recorded in: Podlaskie (PLN 1.05 million) and Podkarpackie Voivodeship (PLN 1.04 million), and the lowest in Warmińsko-Mazurskie Voivodeship — PLN 0.9 million (a drop by ca. 40 thousand y/y) and Lubelskie Voivodeship — PLN 0.92 million (a drop by ca. PLN 30 thousand); slightly higher in Świętokrzyskie Voivodeship — PLN 0.95 million (a drop by ca. PLN 50 thousand). Such a trend was noted in most Polish voivodeships (9/16), also in the voivodeships located on Poland's western border (the greatest decline in the West Pomeranian Voivodeship).

The analysis of the industry structure of Eastern Poland's SME shows that services (professional, scientific and technical operations; healthcare; transport) constituted an important group in exports (over 50%). Slightly smaller — trade, construction and industry (over 20%, 15% and 10% each). The country with the most revenue was Germany. This was also the country chosen as the main market for cross-border projects (89%) in addition to the UK, France and the USA⁷. Active SMEs from a number of export industries (e.g. software

⁷ The largest number of cross-border projects until 2022 was signed by small and medium-sized exporters of Eastern Poland from Podkarpackie voivodeship (36%) and the smallest from Świętokrzyskie voivodeship (6%). Companies that generated the highest revenue from exports came from the Podlaskie Voivodeship. It was mainly related to the sale of re-

activities, plastic construction products, metal construction or special-purpose machinery) failed to enter these markets (NIK, 2022).

It is worth emphasising once again that Eastern Poland — like the whole Poland and the majority of economies — is dominated by micro-enterprises. Their share in the structure of enterprises is 97%, and in GDP among all groups of enterprises — over 30%; and assuming the value of GDP generated by the enterprise sector as 100% — over 40% (as for 2020). Most micro-exporters are active in services and trade, slightly less in construction and industry. Most operate in wholesale trade (about 50%). More than a third diversify their activities and expand into at least one more sector — combining, for example, manufacturing with wholesale trade (NIK, 2022).

Thus, challenges for export expansion of Polish SMEs arise. They concern, among others, better coordination and coherence of activities of Polish public institutions and better access to instruments supporting export activity. But not only. In the research conducted so far, according to small and medium-sized exporters, the available procedures are quite complicated and time-consuming (MRPiT, 2021). Moreover, many SMEs do not develop long-term business strategies taking into account specific activities towards export activities. Additionally, there is:

- lack of knowledge of the exporter’s market access conditions;
- export barrier. e.g. complicated customs formalities, documentation, requirements for standards and norms, political uncertainty etc.;
- the need to adapt the product/service to the exporter’s market requirements — in addition to mandatory certificates and licenses;
- barrier related to marketing. e.g. product adaptation;
- fear of risk and economic fluctuations (political and economic situation);
- psychological barrier — the belief that one’s own export offer is not competitive when confronted with foreign entrepreneurs;
- insufficient access to resources to undertake export activities.

The above elements contribute to a decline in the general economic situation and condition of small and medium exporters — not only in Eastern Poland but also in Poland as a whole. So does the crisis related to Covid-19 and the war in Ukraine. This is confirmed by research conducted by PARP (2022). The average rating is strongly dependent on the size of the company. Micro and small companies rate the current economic situation below average, while medium and large companies value this indicator better (Table 2).

The survey shows that the COVID-19 crisis is no longer an important determinant of exporters’ perceptions of the economic situation on any dimension, among others. More than 70% of surveyed SMEs have been operating at full capacity or have even increased their operations over the past year. On the other hand, 45% of SME assess the impact of the war in Ukraine negatively on their export activities, and only 16% neutrally. Three companies view the events

located gigas, teletechnical investments and barrels and agricultural machinery as well as regranulates (NIK, 2022).

positively. Thus, focusing on the three groups (1=positively; 2=neutrally; 3=negatively), one notices statistically significant correlations with all four business climate variables. Most strongly, the war in Ukraine and its consequences affect the industry's assessment of future export prosperity. This means that the worse the respondents assessed the situation of the war in Ukraine, the greater the negative impact on the perception of the conjuncture. And various factors influenced the assessment of this economic climate. Mainly related to how the company has been performing over the past year. And to what extent the situation of their company has changed, for example in terms of liquidity, debt, investments or exports (Table 3)⁸.

In the regression describing the overall level, most factors did not have such a significant impact on the perception of individual aspects of the economy. On the plus side is liquidity (the higher the indication, the higher the rating). On the negative side is investment: the more a company had to invest, the lower its economic climate rating. Micro and small companies identify the current and future economic climate through the prism of their current financial situation. Employment (positive) and investment (negative) are also important determinants. And, in the case of small companies, debt. This is an indicator that makes companies less optimistic about the prosperity of the industry and the economy. In contrast, among medium-sized companies, a positive determinant was observed in the area of exports. In contrast, no strong determinants were detected among large companies. Perhaps due to the relatively small sample size in this group.

It is worth citing other studies that have analysed various forms of SME presence in neighbouring country markets. Zabielska and her team distinguished them for SMEs from Eastern Poland (Zabielska et al. 2021, pp. 11–24): foreign trade (involving mainly exports); establishment of branches/films; acquisition and/or exchange of employees; promotional activities; purchase and/or licensing and other activities. The collected empirical material shows that the majority of SME (approx. 49%) did not diversify their forms of presence on the market of a neighbouring country and most often limited themselves to trade through exports (approx. 30%) or combining foreign trade with promotional activities (used by 21% of SME). The research showed that SME from Eastern Poland used the border location to a small extent. Almost 45% did not undertake any activities abroad. Those that did conduct export activities, mostly did not justify it by the geographical proximity of the border. Almost $\frac{3}{4}$ of the SMEs considered that this factor had no impact on their export activity. And those with higher export activity were located close to Belarus, Slovakia and Ukraine. Those with lower — were located near the border with Russia and Lithuania.

⁸ For each variable, consideration was also given to whether the indicator was statistically significant in explaining the variance of each of the four dependent variables.

5. Conclusion

In response to the challenges faced and to the dynamics of changes in international conditions, it is crucial to strengthen SME export activities. The answer is to define the barriers and motives for such activity (Table 4).

On the basis of analyses and research focused on the export activities of Polish SMEs located at Poland's eastern border, the author concludes that:

- the number of SMEs engaged in export activity is still not among Polish strengths and micro-enterprises are the most distant from this group;
- the share of 5 voivodships of Eastern Poland in the export volume is very low considering their economic potential;
- SME used the border location to a small extent to implement their export activities, most of them did not justify it by the geographical proximity of the border. It allowed for a negative verification of hypothesis H1 assuming a stimulating effect of a border location;
- export is not the most significant determinant in the assessment of SME economic situation and export standing;
- more export activity was carried out by SMEs located closer to Belarus, Slovakia and Ukraine than to Russia or Lithuania. The country where small and medium-sized exporters generated the most revenue on foreign markets was Germany;
- the main criteria for a small and medium-sized exporter's choice of market relate to distance, the existence of demand for its products. access to a distribution system and a small number of competitors;
- a significant group in SME exports is the services sector with professional and technical activities and healthcare and transport dominating. Export activities, which most often attempted to enter new markets, were related to software and the installation of industrial machinery, equipment and appliances;
- exporters from the Podkarpackie voivodeship signed the highest number of cross-border projects and those from the Świętokrzyskie voivodeship the lowest. The companies that generated the highest export revenues came from Podlaskie voivodeship and were involved in the relocation of gigawatts and teletechnical investments;
- significant barriers that block the development of export activity of SME of Eastern Poland are: unawareness of the benefits of exporting; fear related to unfamiliarity with foreign markets; lack of adequate resources.

Therefore, in terms of increasing the economic activity of small and medium exporters of Eastern Poland on foreign markets, the author recommends, among others:

- comprehensive measures (assistance from the government and self-government levels) supporting SMEs in the diagnosis of export potential, in the preparation of their offer in terms of export and in active search for business partners on selected foreign markets;

- selecting the most effective marketing and promotional tools and methods;
- reorganisation and preparation of SMEs for export activities; developing a concept for entering a foreign market (export strategy).

On the basis of the above analyses, it can be concluded that export activity of SMEs is still a challenge for building economic cohesion and economic activation of border regions (especially peripheral and economically backward ones, and Eastern Polish voivodeships are such an example). But not only for them, also for the country's economy. It is a difficult conclusion, but the impact on the economic development of these voivodeships to date is negligible, not reflecting the potential opportunities in this respect (e.g. taking advantage of the border location with different borders). This is a consequence of a number of conditions influenced by, inter alia, mutual history, open borders (EU internal and external borders, Schengen area), politics and prevailing economic relations between neighbouring countries.

The author cautions that, despite diligence, the present discussion does not exhaust all aspects of the issue. Therefore, the obtained results should be interpreted taking into account the specificity of the described assumptions. In the author's opinion, the identification of export activity of Polish SMEs located at the eastern border of Poland is an important contribution to future research. It may become a stimulus for extended analyses to other border zones, e.g. post-socialist countries. It may partially fill the still existing research gap in this field, as most empirical works focus on border regions of developed countries, and less on less developed EU regions (e.g. from Central and Eastern Europe, e.g. Poland).

In the author's opinion, and taking into account various factors that could influence the increased propensity of enterprises to carry out export activities, it is important to carry out research on the effective policy and strategy of continuous export support. This could determine the effectiveness of internationalisation processes and thus the export development opportunities of SMEs in border areas.

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Appendix

Table 1.
Businesses in border regions established in the years beginning 2020/2021 per 1.000 inhabitants and their survival rate (2020/2019 and 2021/2020)

Enterprises established	Province	1-year survival rate (in %)
6.3 / 7.3	Poland	69.3 / 67.1
5.8 / 5.7	Lubelskie	62.4 / 47.7
4.8 / 5.3	Podkarpackie	77.4 / 65.0
5.2 / 6.1	Podlaskie	78.9 / 69.2
4.8 / 5.4	Świętokrzyskie	51.0 / 74.4
4.7 / 5.9	Warmińsko-mazurskie	43.9 / 45.4
7.1 / 7.9	Dolnośląskie	64.8 / 72.2
5.8 / 7.3	Lubuskie	67.5 / 66.1
6.1 / 7.7	Zachodniopomorskie	74.9 / 67.9

Source: Own preparation based on PARP (2022).

Table 2.
Crisis 2020–2022 in relation to the economy

Influential factors	Statistics	Dependent variables			
		Current economic conditions	Current economic in the sector	The future economic conditions	The future economic in the sector
war in Ukraine and sanctions imposed on Russia, Belarus	R. Pearson	-0.229	-0.274	-0.166	-0.269
	Sig.	0.002	0.000	0.030	0.003
	N	176	179	172	174
COVID-19 pandemic — reduction in company activity	R. Pearson	0.003	0.022	0.008	-0.030
	Sig.	0.966	0.711	0.892	0.614
	N	287	290	274	280

Notes:

The bold value shows statistically significant correlations at P=95%.

Source: Own preparation based on PARP (2022).

Table 3.
Selected determinants of perceived prosperity

	Total		Micro		Small		Medium		Large	
	Beta	Sigma	Beta	Sigma	Beta	Sigma	Beta	Sigma	Beta	Sigma
Dependent variable: current situation in the Polish economy										
liquidity	0.277	0.000	0.280	0.021	0.081	0.612	0.245	0.140	-0.071	0.876
indebtedness	-0.066	0.407	-0.082	0.498	0.143	0.356	0.203	0.267	-0.867	0.251
investments	-0.306	0.009	-0.340	0.045	0.089	0.685	-0.288	0.12	-0.427	0.588
exports	0.059	0.525	0.054	0.706	0.176	0.351	0.146	0.488	0.670	0.506
Dependent variable: current economic situation in the industry in which the company operates										
liquidity	0.088	0.207	0.197	0.061	-0.009	0.953	0.091	0.593	-0.559	0.124
indebtedness	-0.045	0.528	-0.069	0.512	0.214	0.144	-0.023	0.899	-1.116	0.062

	Total		Micro		Small		Medium		Large	
	Beta	Sigma	Beta	Sigma	Beta	Sigma	Beta	Sigma	Beta	Sigma
investments	-0.129	0.148	-0.230	0.143	0.043	0.835	-0.357	0.054	-0.167	0.758
exports	0.067	0.437	0.149	0.233	0.124	0.482	-0.025	0.905	0.730	0.314
Dependent variable: future situation in the Polish economy										
liquidity	0.294	0.001	0.277	0.047	0.255	0.136	0.388	0.036	0.081	0.766
indebtedness	0.077	0.378	0.007	0.960	0.380	0.028	0.220	0.281	-1.105	0.054
investments	0.023	0.833	0.240	0.248	0.064	0.796	0.181	0.388	0.837	0.188
export	0.004	0.968	0.259	0.128	0.009	0.965	0.284	0.246	0.566	0.381
Dependent variable: future economic situation in the industry in which the company operates										
liquidity	0.214	0.011	0.176	0.209	0.116	0.500	0.260	0.157	0.087	0.840
indebtedness	0.039	0.649	-0.063	0.654	-0.353	0.044	0.064	0.751	-0.691	0.344
investments	0.033	0.763	-0.081	0.700	0.001	0.995	0.083	0.683	0.086	0.923
exports	-0.090	0.393	0.141	0.407	-0.009	-0.967	0.522	0.030	0.178	0.854

Notes:

Bold value shows statistically significant data at P=95%.

Beta coefficients from the linear regression are included in the Table 3 along with the significances.

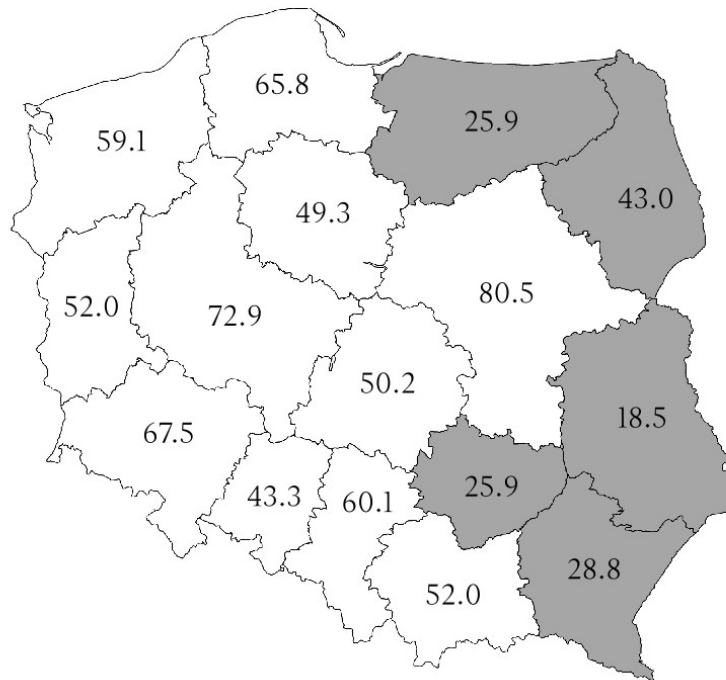
Source: Own preparation based on PARP (2022).

Table 4.
SWOT analysis of Polish small and medium-sized exporters

<p style="text-align: center;">Strengths:</p> <ul style="list-style-type: none"> - flexible adaptation to foreign markets, exploiting existing links; - production. innovation and export potential; - important component suppliers; - increasing involvement in export activities; - integration into supply chains, cost competitiveness, competitive centres; - increasing direct investment abroad; - highly qualified engineering staff. 	<p style="text-align: center;">Weaknesses:</p> <ul style="list-style-type: none"> - low degree of internationalisation and share in exports of Polish companies; - low share of exports of goods and services; - reluctance to export expansion; - low share of high technology products in exports; - entrepreneurs mainly in the role of sub-suppliers; - insufficient knowledge of support opportunities.
<p style="text-align: center;">Opportunities:</p> <ul style="list-style-type: none"> - exploiting the export boom in the postcovid world; strengthening relations with EU countries; - possibility of taking over supply chains; - image potential of the Poland brand; - better coordination of activities of public institutions supporting export activity; - exporter's development path adjusted to the entrepreneur's level of experience; - diversification of risk of export activity; - use of Internet in e-exports; - use of export support instruments. 	<p style="text-align: center;">Risks:</p> <ul style="list-style-type: none"> - dependence of the economy on global market conditions; - disruption of global supply chains; - increasing costs of entering foreign markets; - lack of efficient SMEs navigation of offers; - complexity of procedures and time-consuming process of applying for support for export development; - distrust as regards quality and effectiveness of support offered by public administration; - failure to adapt Polish products and services to foreign customers.

Source: Own preparation based on MRPiT (2021).

Figure 1.
Entrepreneurship in the regions: synthetic indicator for 2021

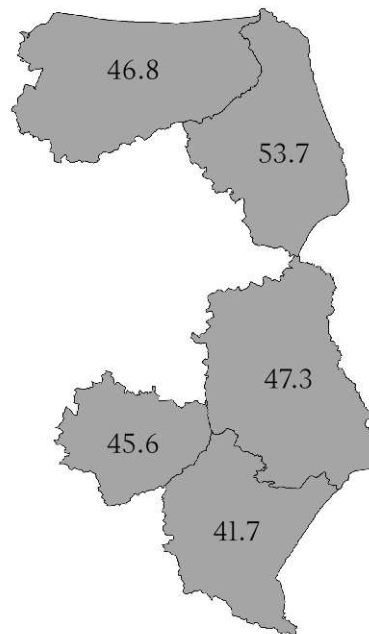


Notes:

Rank (change to 2020 — y/y): 80.5 — Mazowieckie (n/c); 72.9 — Wielkopolskie (n/c); 67.5 — Dolnośląskie (n/c); 65.8 — Pomorskie (n/c); 60.1 — Śląskie (n/c); 59.1 — Zachodniopomorskie (+1); 52.0 — Lubuskie (+3); 52.0 — Małopolskie (-2); 50.2 — Łódzkie (n/c); 49.3 — Kujawsko-pomorskie (+1); 46.3 — Opolskie (-3); 43.4 — Podlaskie (n/c); 28.8 — Podkarpackie (n/c); 25.9 — Świętokrzyskie (+1); 25.9 — Warmińsko-mazurskie (-1); 18.5 — Lubelskie (n/c).

Source: Own preparation based on PARP (2022).

Figure 2.
Active SMEs in the eastern border regions



Source: Own preparation based on PARP (2022).