Environment Characteristics and Internationalization of SMEs: Insights from a Polish and Finnish Sample

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Abstract

Purpose: The article presents research on enterprises from various economic environments, namely the mature Finnish market and the Polish post-transformation one. Thus, our study examined how the external (international) environment affected the internationalization and business opportunities of Polish and Finnish SMEs.

Methodology: Data for the Polish sub-sample was collected from January to February 2021 using the mixed CATI/CAWI method. We used multigroup confirmatory factor analysis (MGCFA) to check for measurement invariance, and chi-square independence test and logistic regression to verify the hypothesis.

Findings: Perceiving the environment as hostile hinders internationalization for Poland only and not for Finland. According to theoretical premises and earlier studies, entrepreneurial marketing orientation (EMO) increases the probability of internationalization in both countries. However, countries differ in terms of which EMO dimensions – and to what extent – influence internationalization.

Implications: In turbulent times, such as a pandemic, respondents might take the worst moment of turbulence as a reference point while assessing environmental hostility and appraising it as favorable. Perceiving the environment as hostile hinders internationalization in some sets only. In a mature economy, resources such as human capital, managerial experience, and access to finance may help to mitigate the negative influence of environmental hostility on internationalization. Respondents in both countries perceived the EMO dimensions in a similar way, so the EMO scale proved to be invariant and useful in a different country setting. Nevertheless, the EMO dimensions that are the main drivers of internationalization were country specific.

Originality: The article presents a study on the influence of environment characteristics on the internationalization of enterprises from various economic environments, i.e. the mature Finnish market and the Polish post-transition one. Thus, the article fills the literature gap regarding comparative studies of small and medium-sized enterprises (SMEs) acting in different country sets.

Keywords: international environment, internationalization of SMEs, Polish SME-exporters, Finnish SME-exporters.

JEL: F18, F23, M3

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Introduction

Small and medium-sized enterprises (SMEs) have specific features and perform important tasks in the economic system. SMEs significantly contribute to the growth of employment and GDP dynamics. Small and medium-sized enterprises create a more intense competitive environment which translates into prices and quality of products and services. SMEs, thanks to greater flexibility, are also carriers of important innovations. The economic activity of SMEs is determined to a large extent by their international environment, which forces them to have a specific orientation toward foreign markets and to use a particular business model and way of its implementation. An opportunity for the development of SMEs and a great challenge is the internationalization of their activities. Therefore, the key question in this thesis is: How does the broader international environment affect the momentum and success of SMEs? And, how does the process of their internationalization proceed?

It is natural to assume that certain country-specific characteristics – in our case, Poland and Finland – may influence the internationalization of SMEs and their response to various global events. At the same time, individual managerial characteristics influence certain business attitudes, strategic choices, and consequently, the financial performance of smaller companies.

This article fills the gap in the literature regarding comparative studies on Polish and Finnish SMEs. Thus, our study examined how the external (international) environment affects the internationalization and business opportunities of Polish and Finnish SMEs.

Literature Review

Environment Characteristics and Internationalization of SMEs

As argued by many researchers, SMEs play a significant role in the European Union economy (Smallbone & Welter, 2001; Agndal & Chetty, 2007; Musso & Francioni, 2013; Musso & Francioni, 2014; Love & Roper, 2015; Musso, Francioni, & Cioppi, 2015; Gaganis et al., 2018; Chen et al., 2021). According to the European Commission’s July 2021 report on European SMEs, in the European Union (EU27) alone, there were more than 22.5 million SMEs in 2020, accounting for 99.8% of all enterprises in the non-financial sector and generating 53.0% of value-added and 65.0% of employment, i.e. employing more than 82 million people (European Commission, 2021). At the same time, it is forecasted that in the next decade, employment in EU SMEs will increase by about 5–7% (European Commission 2021; OECD 2021). The focus of research on the inter-
nationalization of SMEs is interesting not only because of the importance of SMEs to the global economy but also because they differ in many respects from larger entities operating on international markets; e.g. there is a relationship between the degree of internationalization and firm performance (Brouthers, 2002). Moreover, many authors indicate the differences in organizational structures among SMEs, their reaction to changes in the external environment, their management styles, or how they compete with other firms. In this context, the advantages of internationalizing SMEs may be their greater flexibility, better international communication, and founders’ vision, who become directly involved in what happens in the company, so they can react more effectively and in advance to what may occur in the external context (Liesch et al., 2011; Torkkeli et al., 2011; Zwan et al., 2016; Freixaneta & Renart, 2020; Demir et al., 2021). Among SMEs’ advantages conducive to internationalization, researchers cite such characteristics as prior international experience, social capital, social networks engagement, entrepreneurial orientation, management attitudes, and a properly designed internationalization strategy (Penrose, 1959; Baird et al., 1994; Bijmolt & Zwart, 1994; Chetty & Stang, 2010; Nielsen & Nielsen, 2011; Freeman et al., 2013; Agwu & Onwuegbuzie, 2018; Freixaneta & Renart, 2020). Foreign language skills and international business knowledge are also indicated as desirable (Love & Roper, 2015). Researchers emphasize that there are theoretical premises combining entrepreneurial orientation and knowledge in the process of internationalization (Głodowska et al., 2019). As noted by Wach, knowledge and the ability to discover market opportunities is the driving force behind the entire entrepreneurial process (Wach, 2021). Numerous other determinants of internationalization success are identified in the literature, with a special focus on the gradual shift from tangible determinants to new dimensions that can be defined as decidedly intangible, such as demographic characteristics and managers’ psycho-cognitive aspects (Müller, 1991; Dichtl et al., 1990; Nielsen & Nielsen, 2011; Freixaneta & Renart, 2020; Demir et al., 2021). Most agree that human capital is the main source of competitive advantage for SMEs. As emphasized by Buzavaite and Korsakiene (2019, p. 130) “though owners and managers significantly impact the internationalization of firms, human capital of employees plays an important role in the expansion of firms.” The above elements play a crucial role in the success of SMEs’ internationalization. Studies show that international experience reduces the apparent risk of internationalization by enabling firms to export to increasingly distant markets, thus increasing the probability of their survival in foreign markets (Chandra et al., 2020; Gabrielsson et al., 2012). Moreover, many authors indicate numerous barriers in this regard, such as resources scarcity, unfavorable international environment, along with marketing, economic, environmental, or institutional barriers and management incompetence (Nielsen & Nielsen, 2011; Wach, 2017; Chandra et al., 2020; Freixaneta & Renart, 2020; Oleksiuk et al., 2020). Many researchers highlight the
importance of country-specific characteristics, such as issues related to SMEs’ financing. For example, Beck and Demirguc-Kunt (2006) found that access to finance is an important constraint to SMEs’ growth and financial institutions play a significant role in alleviating this constraint (Beck & Demirguc-Kunt, 2006).

Functioning in the global market requires operating in conditions of risk and a changing external environment. Uncertainty in international markets can be defined as an individual's perceived inability to accurately predict what may happen in the future. The process of internationalization offers the possibility of expansion abroad, but it may equally well result in many undesirable effects and consequences (Oliveira et al., 2020). Thus, the SMEs unadapted to the changing environment may be forced to partially or completely withdraw from their current foreign markets when faced with unpredictable external factors (López-Duarte & Vidal-Suárez, 2010; Oliveira, 2020). These may include economic policies of public authorities and other external shocks, such as the Covid-19 pandemic (Loayza & Pennings, 2020; McKibbin & Fernando, 2020; Morrison & Saavedra, 2020).

Therefore, the companies that take risks in foreign markets must learn to manage uncertainty. Therefore, even in a turbulent environment, internationalization should be treated not as a threat but primarily as an opportunity and challenge. Many researchers argue that an internationalization strategy should consider the possibility of chaos, and they emphasize that company managers in global markets should be mindful of such risks (Alimadadi et al., 2018; Yu et al., 2018). Thus, we may perceive internationalization as a management process under uncertainty, so we should consider these mechanisms in the internationalization strategies of SMEs.

As mentioned above, the international environment is a very important component from the viewpoint of some enterprises, especially SMEs (Oleksiuk et al., 2020). In this context, many indicate that the industries in which companies operate play an equally significant role. The industries more dependent on imports or exports must more closely follow events in the international environment. Consequently, any kind of turbulence in international markets can create several difficulties for export-dependent industries (Diamantopoulos & Inglis, 1988; Miesenböck, 1988; Culpan, 1989; Dichtl et al., 1990; Yang & Gabrielsson, 2017). On the other hand, an export market boom or an easing of protectionist policies may help export-oriented industries. Recessions or pandemics such as Covid-19 are significant international events that affect the performance of companies (Nicola et al., 2020; Tokic, 2020; Wolf & Fornaro, 2020; Wnukowski, 2020). Export marketing facilitates the achievement of optimal capacity utilization; a firm may be able to mitigate the effects of a domestic recession through
exports. However, an entity that relies heavily on the export market also faces the impact of adverse events in foreign markets.

Some of the more important factors that need to be mentioned are those related to political and legal conditions that depend on the policies pursued by government authorities (Daniels et al., 2007; Agwu & Onwuegbuzie, 2018). By learning and understanding these political regulations, SMEs can adapt their business strategies to the external environment. Moreover, government laws and regulations significantly affect business; we should first mention tax issues, packaging standards, or those related to the possibility of promoting certain products. Moreover, ecological/environmental elements are also gaining in importance; regulations in this area affect businesses in a very significant way (Stenholm et al., 2013; Agwu & Onwuegbuzie, 2018). Furthermore, governments can influence the elimination of unfair competition and fight all kinds of monopolies. Thus, it is commonly believed that the political and legal environment stimulates and influences a firm’s financial performance. Thus, factors of governmental and political nature exert considerable influence on companies. This form of uncertainty in host markets can e.g. threaten companies’ abilities to predict unforeseen situations. Some negative trends are observed in the business environment in many countries such as Poland. Undoubtedly, a great help for Polish SMEs comes from EU funding, which supports the smaller and weaker entities.

Cultural factors also play a colossal role. The lack of understanding when formulating business strategies of elements related to customs, traditions, taboos, tastes, and preferences of particular countries can be a strong barrier to entry and success in international markets (Hofstede, 1980; Hofstede, 1983). A successful business in this area includes adaptation to the cultural environment through a well-designed and implemented strategy (Dimitratos et al., 2011; 2012; Kotabe & Helsen, 2017). A marketing strategy should be designed to best fit a particular foreign market. Even if people from different cultures use the same basic products and modes of consumption, the purpose of use or perception of product attributes may differ. Many authors also highlight that language differences can prove to be a significant barrier. Thus, cultural differences increase uncertainty in international transactions because they complicate the understanding and predicting of customer tastes and needs in foreign markets. The occurrence of these cultural differences requires more interaction between firms and their foreign partners López-Duarte & Vidal-Suárez, 2010; Gaganis et al., 2018). Failure to act in this regard can result in problems with processing and assimilating information from a firm’s contacts abroad due to communication noise (Solberg, 2008; Slangen & van Tulder, 2009). The literature shows that cultural differences influence SMEs’
international behavior (Buzavaite & Korsakiene, 2019). Therefore, this study contributes to the literature by comparing the mature and post-transition economies.

Other geographical factors such as natural resources, weather, climatic conditions, topographical factors, or locational aspects are equally important for companies. The differences in geographical conditions between markets may sometimes require changes in the implementation of marketing mix strategies. Along with climatic and weather conditions, geographical factors also influence the location of certain industries, such as the textile or timber industry. What has recently become equally important are ecological factors: the depletion of natural resources, pollution, and ecological imbalance. Government policies have begun seeking to maintain sustainable development and conserve non-renewable resources. This implies additional responsibilities and problems for enterprise management, which increases the costs of production and marketing (Stephan & Stride, 2015; Agwu & Onwuegbuzie, 2018).

**Hypothesis**

The Doing Business project captures several important dimensions of the regulatory environment affecting domestic firms by providing quantitative indicators on regulations for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. In the ranking of the ease of doing business, Finland was ranked 20 but Poland was ranked 40 (World Bank, 2020). From this, it should be concluded that the environment for doing business in Finland is friendlier than in Poland. In the light of the phenomena described above, we should test the following hypothesis:

**H1:** The environment is perceived by SMEs as more hostile in Poland than in Finland.

**H2:** The perception of the environment as hostile hinders SMEs’ internationalization.

**H3:** The higher the entrepreneurial marketing orientation level, the greater the likelihood of internationalization.
Methodology

Sample and Methods

We decided to examine firms with different economic environments and backgrounds, i.e. the mature Finnish market and the Polish post-transition one. The data for the Polish subsample was collected from January to February 2021 with the use of a CATI/CAWI mixed-mode method. We were interested in SMEs operating in the manufacturing industry, established no earlier than 1995 (excluding mergers), and those that were not branches of foreign companies or with foreign ownership exceeding 50%. The population in these criteria in the purchased Bisnode database amounted to 1395, of which 807 companies were selected using a random algorithm, giving each company equal chances to participate in the study. Of this group, 211 companies refused to participate, 46 no longer responded to the questionnaire, 228 companies agreed to participate, while 75 did not meet other selection criteria. The percentage of responses was 42%, meaning the quotient of the sum of the partially and fully completed interviews and the number of selected interviews. Data for the Finnish sub-sample was collected among Finnish companies from December 2020 to January 2021 using the CAWI technique and the same survey questions as in the Polish sub-sample, translated into Finnish. The same selection criteria were used to select the final sample of 81 Finnish SMEs and the response rate was 41%.

The respondents were mainly CEOs (46% PL, 46% FIN), sales/export/marketing directors (53% PL, 47% FIN), or persons responsible for (foreign) sales (2% PL, 7% FIN). Over 62% of companies in the Polish subsample were small companies with 10–49 employees and 38% of them employed between 50 and 249 people. Moreover, 68% of the studied companies sold products only to the B2B market, while 32.4% served both the B2B and B2C markets. Similarly in the Finnish subsample, most companies were small (64%) while medium-sized ones accounted for 36%; they served mainly the B2B market (76%) or both B2B and B2C markets (24%).

To verify H1 and H2, we used a chi-square independence test. To test for H3 we estimated a logistic regression model in which internationalization was a dependent variable and environmental hostility and entrepreneurial marketing orientation were independent variables. The model was estimated for each country separately.
Measurements

Internationalization

Internationalization was operationalized based on the export activity of the companies. Companies that had more than 15% export share in sales were treated as exporters while other companies as mainly locally active non-exporters. Following this division, we found 50% exporters in both subsamples.

Environmental Hostility

We applied the four-item semantic differential scale to measure how companies assessed their environment. The environmental hostility scale used in the study was based on Dimitratos et al. (2011) and Khandwalla (1977), and it contained the statements translated into Polish and Finnish, as shown in Table 1.

Table 1. Environmental hostility scale’s statements

<table>
<thead>
<tr>
<th>Question: Please give your opinion on the pairs of statements concerning the environment of company activity. The company environment in the main market is:</th>
<th>Variable Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement 1. Very secure (a few threats for the company activity) vs. Statement 2. Very risky (each wrong decision can lead to company failure)</td>
<td>E_1</td>
</tr>
<tr>
<td>Statement 1. Friendly, full of opportunities (investment, marketing) vs. Statement 2. Stressful, hostile (it is difficult to follow the other players and stay on top of things)</td>
<td>E_2</td>
</tr>
<tr>
<td>Statement 1. Easy to be controlled vs. Statement 2. Uncontrollable, dominant, (company initiatives have little power against the competitive, political, or technological factors)</td>
<td>E_3</td>
</tr>
<tr>
<td>Statement 1. Stable, easy to forecast (concerning customer preferences and technological trends) vs. Statement 2. Unstable, volatile</td>
<td>E_4</td>
</tr>
</tbody>
</table>

Note: the answers were put on semantic differential scales ranging from “1” strong agreement with the first statement (SF), “2” first statement (F), “3” a rather first statement (RF), “4” neutral (N), “5” a rather second statement (RS), “6” second statement (S), and “7” strong agreement with the second statement (SS).

Source: own elaboration.

We saw that most respondents agreed with the positive characteristics of the foreign market environment (Table 2). A positive asymmetry in the distribution of answers appeared for both countries. The exploratory factor analysis has confirmed that the environmental hostility scale was unidimensional; to that end, we used the Kaiser criterion and Cattell’s scree test to determine the number of dimensions. Cronbach’s alpha based on standardized items equaled .776 for Finland, indicating that the scale
was reliable, and 0.643 for Poland, which was at the lower limit to conclude that the scale was reliable.

**Table 2.** Distribution of answers to the environmental hostility scale’s statement by the studied SME in Finland and Poland and Cronbach’s alpha

<table>
<thead>
<tr>
<th>Country</th>
<th>Item</th>
<th>SF</th>
<th>F</th>
<th>RF</th>
<th>N</th>
<th>RS</th>
<th>S</th>
<th>SS</th>
<th>total</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>E _ 1</td>
<td>12%</td>
<td>41%</td>
<td>31%</td>
<td>14%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>.776</td>
</tr>
<tr>
<td></td>
<td>E _ 2</td>
<td>12%</td>
<td>38%</td>
<td>26%</td>
<td>21%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E _ 3</td>
<td>15%</td>
<td>38%</td>
<td>32%</td>
<td>12%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E _ 4</td>
<td>2%</td>
<td>48%</td>
<td>36%</td>
<td>11%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>E _ 1</td>
<td>10%</td>
<td>35%</td>
<td>38%</td>
<td>15%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>.643</td>
</tr>
<tr>
<td></td>
<td>E _ 2</td>
<td>9%</td>
<td>41%</td>
<td>37%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E _ 3</td>
<td>11%</td>
<td>28%</td>
<td>32%</td>
<td>29%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E _ 4</td>
<td>3%</td>
<td>47%</td>
<td>38%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Note: *Categories S and SS were not chosen by the respondents.
Source: own elaboration.

**Figure 1.** Environmental hostility scale distribution

Source: own elaboration.
However, the distribution of environmental hostility scales showed to be bimodal as can be seen from Figure 1. This indicates that there are two overlapping groups of companies showing a different level of perceived environmental hostility; one group with the mode of nine for Poland and 10 for Finland, and another group with the mode of 12 for both countries.

We decided to split the companies into two groups in both countries. As a split point we took the value of 11, so companies that scored up to 10 on the environmental hostility scale were assigned to the group perceiving the environment as not hostile and companies scoring 11 or more to the group perceiving the environment as hostile. The group that assessed the environment as hostile accounted for 49% in Poland and 33% in Finland.

**Entrepreneurial Marketing Orientation**

To measure entrepreneurial marketing orientation (EMO), we used the construct proposed by Fiore et al. (2013), adapted by us previously to Polish settings (Kowalik, 2020). The multidimensional entrepreneurial marketing orientation (EMO) construct comprised proactive orientation, opportunity focus, customer orientation, and low-risk marketing dimensions.

This construct was tested for reliability and convergent validity based on F-L Criteria (Fornell & Larcker, 1981; see Table 3). Discriminant validity was assessed based on bootstrap percentile confidence intervals (Rönkkö & Cho, 2020).

**Table 3. Scales’ properties of EMO dimensions**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Poland</th>
<th>Finland</th>
<th>Bootstrap 90% CI</th>
<th>CR</th>
<th>AVE</th>
<th>CR</th>
<th>AVE</th>
<th>P</th>
<th>OP</th>
<th>RM</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proactive orientation (P)</td>
<td>.928</td>
<td>.811</td>
<td>(.55; .79)</td>
<td>.931</td>
<td>.818</td>
<td>(.66; .27)</td>
<td>.05; .40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Opportunity Focus (OP)</td>
<td>.914</td>
<td>.780</td>
<td>(.42; .61)</td>
<td>.924</td>
<td>.803</td>
<td>(-.91; -.73)</td>
<td>.13; .49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Low-risk Marketing (RM)</td>
<td>.740</td>
<td>.599</td>
<td>(.55; -.32)</td>
<td>.761</td>
<td>.631</td>
<td>(-.94; -.82)</td>
<td>(.47; -.13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Customer Orientation (CO)</td>
<td>.566</td>
<td>.311</td>
<td>(.21; .51)</td>
<td>.829</td>
<td>.628</td>
<td>(.37; .65)</td>
<td>(.62; -.31)</td>
<td>←PL\FIN↑</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: CR – composite reliability, AVE – Average Variance Extracted, CI – bias-corrected bootstrap confidence intervals, the CI for Finland are shown above the diagonal and for Poland below the diagonal.

Source: own elaboration.
As can be seen from Table 3, all EMO dimensions proved to be reliable and showed convergent validity in both subsamples as the CR and AVE values are high (CR 0.7 and AVE 0.5 cut-offs were used). This was not a case for customer orientation (CO) for the Polish subsample. The discriminant validity could be recognized for all the constructs, as none of bootstrap bias-corrected percentile confidence intervals contained the value of 1 (Bagozzi et al., 1991; Rönkkö & Cho, 2020). Theoretical validity is achieved when convergent and discriminant validity exists. This was the case for all EMO dimensions for Finland and all EMO dimensions for Poland, but for CO.

To test for the measurement invariance, we used the Multigroup Confirmatory Factor Analysis (MGCFA) approach. We estimated three nested measurement models (Table 4). The first model with no restriction assumed the same factor structure between the countries, i.e. the same items loaded on corresponding EMO dimensions among the countries. In the metric measurement invariance model, we restricted the regression weights between EMO dimensions and their items to be equal across the countries. In the third model, we imposed restrictions both on regression weights and items’ intercepts, to test for scalar measurement invariance.

Table 4. Measurement invariance of EMO scale

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fit</th>
<th>Nested models comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>χ²</td>
<td>df</td>
</tr>
<tr>
<td>1. Unconstrained</td>
<td>150.73</td>
<td>76</td>
</tr>
<tr>
<td>2. Metric Invariance</td>
<td>164.03</td>
<td>83</td>
</tr>
<tr>
<td>3. Scalar invariance</td>
<td>202.85</td>
<td>94</td>
</tr>
<tr>
<td>3a. Partial scalar Invariance*</td>
<td>175.95</td>
<td>90</td>
</tr>
</tbody>
</table>

Note: *Intercepts for one item of proactive orientation (P) and all three items for customer orientation (CO) were released.

Source: own elaboration.

The result showed that the metric measurement invariance held for all EMO dimensions, so we could meaningfully compare the relationships between the dimensions of EMO between the countries. Furthermore, the partial scalar measurement invariance is met. As Ariely and Davidov (2012) indicate, the constructs’ means may be meaningfully compared if partial measurement invariance is supported. That was the case for proactive orientation, opportunity focus, and low-risk marketing. Thus, we were able to meaningfully compare the means of all dimensions of EMO between the countries, but for CO.
Results and Discussion

H1: The environment is perceived as more hostile in Poland than in Finland.

We expected that due to the Covid-19 pandemic, companies would find the environment to be hostile. However, contrary to our expectations, SMEs found the environment as rather secure, friendly, easy to control, and stable in both countries. Tendency to consider the environment as very risky, uncontrollable, and dominant was stronger among Polish companies compared to the Finnish ones. As for environment stability, the means and medians were the same in both samples.

Figure 2. Perception of environmental hostility among Polish and Finnish SMEs

Since the distributions of the environmental hostility scale were bimodal, we did not test for H1 by comparing the means of the environmental hostility summary scale, as the use of the mean for multimodal distribution might be questionable. Instead, we used the dichotomized scale, i.e. two groups of different levels of perceived environmental hostility, and conducted a Chi-square test of independence. We find the relationships between environmental hostility perception and country to be significant (chi-square statistic = 6.102, p=.014), thus hypothesis 1 was supported: companies in Poland are more likely to evaluate the environment as hostile compared to the Finnish companies, see Table 5.

The odds of perceiving the environment as hostile were 1.94 times higher in Poland than in Finland. Perceiving the environment as hostile might be influenced by government authorities’ policy shaping the political and legal environment (Daniels et al.,
2007; Agwu & Onwuegbuzie, 2018), existence of marketing, economic, environmental, or institutional barriers and management incompetence (Nielsen & Nielsen, 2011; Wach, 2017; Chandra et al., 2020; Freixaneta & Renart, 2020; Oleksiuk et al., 2020) or country-specific characteristics such as issues related to SMEs financing (Beck & Demirguc-Kunt, 2006). Moreover, perceived environmental hostility may correlate with manager-related characteristics such as prior international experience, international business knowledge, management attitudes, the human capital of managers, or their combination (Baird et al., 1994; Bijmolt & Zwart, 1994; Chetty & Stang, 2010; Nielsen & Nielsen, 2011; Freeman et al., 2013; Agwu & Onwuegbuzie, 2018; Głodowska et al., 2019; Freixaneta & Renart, 2020). In both scopes, the Polish firms were in an unfavorable situation compared to the Finnish ones.

Table 5. Relationship between environmental hostility group and country

<table>
<thead>
<tr>
<th>Environmental hostility group by country crosstabulation</th>
<th>Perceiving environment as being hostile</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>66.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Poland</td>
<td>50.7%</td>
<td>49.3%</td>
</tr>
<tr>
<td>Total</td>
<td>55.0%</td>
<td>45.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>value</th>
<th>df</th>
<th>Sig*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson’s Chi-Square</td>
<td>6.102a</td>
<td>1</td>
<td>.014</td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>5.473</td>
<td>1</td>
<td>.019</td>
</tr>
</tbody>
</table>

Note: *Asymptotic Significance (two-sided) test was used. a. The minimum expected count is 36.45, so the chi-square test may be used. b. Continuity correction is computed only for a 2x2 table.

Source: own elaboration.

H2: Perceiving the environment as hostile hinders internationalization for Poland only

The results of testing H2 are shown in Table 6.

The result did not support the hypothesis that perceiving the environment as hostile hinders internationalization for Finland ($\chi^2(1) = .099, p = .753$). However, for Poland, the evidence confirmed that there is a relationship between perceiving the environment and internationalization ($\chi^2(1) =5.599, p = .018$). The odds ratio for internationalization for companies that perceived the environment as hostile was 47.5% lower.
than those perceiving the environment as friendly. That is, hostile environment perception showed to hinder internationalization in Poland only. This is a very interesting result showing that in a mature economy the perceived environmental hostility does not hinder internationalization, because other resources such as human capital, managerial experience (Wach, 2017; Nielsen, & Nielsen, 2011; Chandra et al., 2020; Freixaneta & Renart, 2020; Oleksiuk et al., 2020), and access to finance (Beck & Demirguc-Kunt, 2006) can help mitigate the negative impact of environmental hostility on internationalization. The shortage of resources in the post-transition Polish economy does not provide such a possibility.

Table 6. Internationalization by environmental hostility crosstabulations

<table>
<thead>
<tr>
<th>Environmental hostility</th>
<th>Finnish Internationalization</th>
<th>Total</th>
<th>Polish Internationalization</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Environmental hostility</td>
<td>no</td>
<td>48.1%</td>
<td>51.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>51.9%</td>
<td>48.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>49.4%</td>
<td>50.6%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Finnish</th>
<th>Polish</th>
</tr>
</thead>
<tbody>
<tr>
<td>value</td>
<td>df</td>
<td>Sig*</td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
<td>.099a</td>
<td>1</td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>.006</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5.599b</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4.978</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: *Asymptotic significance (two-sided) test was used. a. The minimum expected count is 13.33. b. The minimum expected count is 53.75. c. Computed only for a 2x2 table.

Source: own elaboration.

H3: The higher the EMO level, the greater the likelihood of internationalization: supported for some of the EMO dimensions

To determine the impact of EMO on internationalization, while taking into consideration the perception of environmental hostility, we estimated a logistic regression model for each country. The dependent variable was internationalization, and exploratory variables were EMO dimensions and environmental hostility perception. The assessment of the estimated models was based on Hosmer and Lemeshow’s goodness-of-fit test and pseudo-R-squared measures, i.e. Cox-Snell R-squared and Nagelkerke R-squared,
which indicated a good fit for both models. The models’ estimation and fit are shown in Table 7.

### Table 7. Logistic regression model of internationalization

<table>
<thead>
<tr>
<th><strong>Dependent variable</strong></th>
<th><strong>Finland</strong></th>
<th><strong>Poland</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables in the Equation</strong></td>
<td><strong>B</strong></td>
<td><strong>Exp(B)</strong></td>
</tr>
<tr>
<td>Environmental hostility</td>
<td>-.423</td>
<td>.655</td>
</tr>
<tr>
<td>Proactive orientation (P)</td>
<td>1.463 **</td>
<td>4.321</td>
</tr>
<tr>
<td>Opportunity focus (OP)</td>
<td>1.875 *</td>
<td>6.523</td>
</tr>
<tr>
<td>Customer orientation (CO)</td>
<td>.536</td>
<td>1.710</td>
</tr>
<tr>
<td>Low-risk marketing (RM)</td>
<td>.308</td>
<td>1.361</td>
</tr>
<tr>
<td>Constant</td>
<td>-16.607 ***</td>
<td>-14.277 ***</td>
</tr>
<tr>
<td>-2 Log likelihood</td>
<td>60.977&lt;sup&gt;a&lt;/sup&gt;</td>
<td>189.314&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cox &amp; Snell R Squared</td>
<td>.469</td>
<td>.407</td>
</tr>
<tr>
<td>Nagelkerke R Squared</td>
<td>.626</td>
<td>.542</td>
</tr>
</tbody>
</table>

Note: *** significant at 0.001, ** significant at 0.05, * significant at 0.1 level
Source: own elaboration.

The evidence showed that entrepreneurial marketing orientation fosters internationalization. However, each dimension of the EMO affects it to varying degrees in both countries. Proactive orientation proved to be a significant stimulant of internationalization in both countries, while low-risk marketing did not. Moreover, opportunity focus increased the probability of internationalization in Finland, but it did not for Poland, in which customer orientation turned out to boost internationalization. Given the same EMO dimension levels, perceiving the environment as hostile emerged as an inhibitor of internationalization in Poland. The positive impact of entrepreneurial marketing orientation agreed with theoretical premises (Glodowska et al., 2019) and previous studies (Wach, 2021). However, both countries differed in terms of the EMO dimensions that play the main role in internationalization. This result corresponds to the view of the international process as an opportunity and challenge. And as many researchers indicate, international strategy must take risk into account (Alimadadi et al., 2018; Yu et al., 2018), which is why the low-risk marketing dimension does not foster internationalization.
Conclusions

The results support hypothesis 1, and there is partial evidence confirming the second and third hypotheses. Due to the Covid-19 pandemic, we expected companies to find the environmental hostile. However, contrary to our expectations, SMEs found the environment to be rather safe, friendly, easy to control, and stable in both countries. The tendency to perceive the environment as uncontrolled and dominant was stronger among the Polish companies compared to the Finnish ones. The means and medians were the same in both samples for environment stability. Companies in Poland evaluated the environment as hostile more often than Finnish companies. The results did not support the hypothesis that perceiving the environment as hostile hinders Finland's internationalization. Still, for Poland, the evidence confirmed that there is a link between environment perception and internationalization. Thus, our study discovered that the perception of environment as hostile hinders internationalization only in Poland. Evidence showed that an entrepreneurial marketing orientation promotes internationalization. However, each EMO dimension affects differently in each country. Proactive orientation proved to be an important driver of internationalization in both countries, while low-risk marketing did not. Moreover, opportunity focus increased the likelihood of internationalization in Finland, but it did not in Poland, where the dimension that proved to favor internationalization was customer orientation. Given the same level of EMO dimensions, the perception of the environment as hostile was an inhibitor of internationalization in Poland. The results concerning the positive perception of the environment were like those reported by Oleksiuk, Pleśniak, and Kowalik (2020) before the Covid-19 pandemic in Poland. Therefore, why did respondents perceive the environment as not hostile during the Covid-19 pandemic? That may be due to the fact, that (1) the Covid-19 pandemic changed the reference point for the assessment or (2) there were some signs of relief seen in both countries at the moment of conducting the research which might make the environment perception more optimistic. Further study on environment perception in a turbulent time is needed to shed stronger light on the perception of environmental hostility in a turbulent time. Moreover, the relationship between environment perception and internationalization should be tested in different countries to confirm our results in a broader country sets.
References


