Patterns of Business Internationalisation in Poland: Empirical Results from the V4 Survey

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5.1. INTRODUCTORY REMARKS

The chapter focuses on the specifics of the internationalisation process among Polish businesses at post-slowdown period of the turn of 2013 and 2014. The chapter is organised into two main parts – the characteristics of the sampling and the empirical results. The last one was divided into 6 thematic passages as the chapter deals with the following problems: (i) Internal Resources for Internationalisation; (ii) Motives for Going International; (iii) The Pace and Scope of Internationalisation; (iv) Internationalisation Strategies; (v) The Choice and Use of Entry Modes; (vi) The Role of the Entrepreneur in the Internationalisation Process.

The main research method, which was applied was the survey (an e-mail or a telephone conversation request followed by an online password protected questionnaire) conducted among 216 firms. The survey was conducted between October 2013 and February 2014. The statistical calculations were made by the use of the statistical software package "Stata/SE 12.0" as well as "Statistica PL v. 10". In order to verify the assumed hypothesis the following statistical tests were applied: Pearson's chi-square independence test, the Yate's corrections, Pearson's contingency coefficient, differences between two means as well as the logistic regression.

5.2. RESEARCH SAMPLE CHARACTERISTICS

The Size of the Studied Firms

The research sample includes firms of all sizes – micro, small, medium and large ones (Figure 5.1). The share of large businesses in the sample is 24% (52 firms) and SMEs 76% (164 firms). Large firms are over-represented as compared with the whole population however they reflect the structure for internationalised businesses. Also among SMEs there are 30% of medium-sized enterprises, which is also more than in the whole population. However there is much evidence that the share of

internationalised firms is growing with their size. A. Tarnawa *et al.* (2013, p. 74-82) revealed that the share of exporters in the total number of firms increases with the their size. Also the larger the exporting firm the higher the share of exports in its sales.
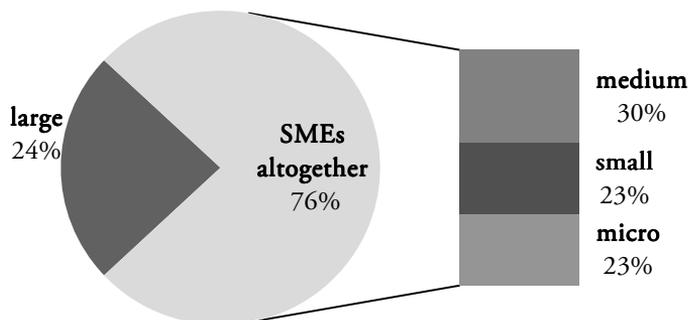
Figure 5.1. Size of the firms in the sampling in Poland
Source: Own study based on the V4 survey results of 2014 (*n* = 216).

The investigated firms on average employ 187 employees with the median 50. The lower quartile is 10 which means that 25% of analysed firms employ no more than 10 employees. Thus, the lower quartile includes micro firms and the these small firms that employ exactly 10 employees. On the contrary, the upper quartile is 180, which means that 25% of the analysed firms employ at least 180 employees (including large and some medium-sized firms) (Table 5.1).

Table 5.1. Number of employees in the studied firms in Poland

Valid answers	Min	Max	Mean	Median	Standard Deviation	Lower quartile	Upper quartile
206	1	3500	187	50	399	10	180

Source: Own study based on the V4 survey results of 2014 (*n* = 216).

The Age of the Studied Firms

Such as 18% of the investigated firms started their activities more than 30 years ago, thus under condition of centrally planned economy. Just 33% of the firms were set up at the turn of the 1980s and 1990s including the transformation period, which was characterised by explosions of numerous new SMEs. Just 51% of the sample consists of "old" companies, experienced in the market economy. Such as 26% of firms were established between the year 1995 and Poland's accession to the European Union in 2004, generally during the period of economic growth. Just 23% of firms in the sample can be regarded as young – they were set up after 2005 (Table 5.2).

The average time from the establishment of the firm to its internationalisation is 5.6 years in the research sample. However the median is 2.

Table 5.2. The age of the firms in the sampling in Poland

Year of establishment	Frequency	%
Before 1985	39	18
1985-1995	70	33
1996-2004	57	26
2005-2013	50	23
Total	216	100

Source: Own study based on the V4 survey results of 2014 (n = 216).

The Familiness of the Studied Firms

The research sample included 41% of family firms and 59% of non-family firms. The definition of family businesses was quite wide and included firms that were solely (or dominantly) owned by the same family and in which the family members were employed or at least active in supporting the business processes of the family members (Table 5.3). The share of family firms in the research sample is more or less the same as their share in the whole population. A. Surdej and K. Wach (2011, p. 5 and 135-136) state that it is estimated that in Poland, family businesses constituted from 25% (prudent estimates) to about 70-80% (optimistic estimates) of the total number of Polish firms.

Table 5.3. The familiness of the studied businesses (in observations and in %) in Poland

Familiness status	All firms		Firms according to the size							
			large		medium		small		micro	
family firm	88	41%	9	10%	26	30%	28	32%	25	28%
non-family firm	128	59%	43	34%	38	30%	22	17%	25	19%
Total	216	100%	52	24%	64	30%	50	23%	50	23%

Source: Own study based on the V4 survey results of 2014 (n = 216).

Foreign Ownership among the Studied Firms

The average share of foreign ownership in the total assets of the studied firms is over 29%, which is not surprising in case of international businesses (Table 5.4 and 5.5). The median is 0, which means that at least half of the investigated firms are entirely controlled by domestic capital. In turn, the value of the upper quartile shows that among 25% of the analysed firms, the foreign ownership measured as a percentage of the total assets is at least 60%.

Table 5.4. Foreign ownership as a percentage of the total assets of the studied firms

Valid answers	Min	Max	Mean	Median	Standard Deviation	Lower quartile	Upper quartile
216	0	100	29.41	0	41.25	0	60

Source: Own study based on the V4 survey results of 2014 (*n* = 216).

Table 5.5. The year of start of international activities in Poland

Foreign ownership	Frequency	%	Cumulative %
0%	111	58.4	58.4
1-50%	29	15.3	73.7
51-99%	15	7.9	81.6
100%	35	18.4	100.0
Total	190	88.0	100.0
Missing answers	26	12.0	-

Source: own study based on the V4 survey results of 2014 (*n* = 216).

The Territorial Scope of the Studied Firms

The territorial scope of activities of the majority of the investigated firms is wide. Almost 63% of firms declare to operate within and beyond EU markets. Almost 17% of businesses function within EU markets and only 3% in neighbouring and cross border countries. Although the sample consists of internationalised firms only, nevertheless almost 18% of the analysed firms declare to function mainly on domestic market which means that their internationalisation is rather occasional. There has not been a firm in the research sample that functions only beyond the EU markets (table 5.6).

Table 5.6. The territorial scope of studied firms in Poland

The territorial scope	Frequency	%
Mainly domestic market (local, regional, national markets)	38	17.6
Only neighbouring countries / cross border countries (CEE markets, including V4 countries)	6	2.8
Within the EU markets (all EU-28 member states)	36	16.7
Within and beyond the EU markets (various international markets incl. EU and non-EU countries)	136	62.9
Only beyond the EU markets (only third countries outside the EU-28)	0	0
Total	216	100.0

Source: Own study based on the V4 survey results of 2014 (*n* = 216).

There is statistical dependence between the territorial scope of firm's activity and its size (chi2 = 25.0003, df = 4, p = 0.00005). Calculated on the basis of Chi-square contingency coefficient C Pearson (C = 0.343) shows that between these variables there is a relation of moderate strength. Large and medium-sized firms are mainly global players, while small and microenterprises pay attention to neighbouring countries and the EU markets in general.

Business Activities according to NACE Classification

For the classification of the business activities, the NACE as the EU classification of economic activities has been used. In the research sample the share of manufacturing is the highest (29%), followed by wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (over 17%), other service activities (13%) construction (11%) (Table 5.7). The structure of the sample is very close to the economy (the share of agriculture in the Polish economy is 3.4%, industry is

Table 5.7. Business activities of the studied firms according to NACE classification

NACE activities	Frequency	%
AGRICULTURE, including:	7	3
Agriculture, forestry and fishing	7	3
INDUSTRY, including:	90	42
Mining and quarrying	3	1
Manufacturing	63	29
Electricity, gas, steam and air conditioning supply	1	1
Water supply, sewerage, waste management and remediation activities	0	0
Construction	23	11
SERVICES, including:	119	55
Wholesale and retail trade, repair of motor vehicles and motorcycles	36	17
Transporting and storage	8	4
Accommodation and food service activities	4	2
Information and communication	14	6
Financial and insurance activities	5	2
Real estate activities	2	1
Professional, scientific and technical activities	12	5
Administrative and support service activities	2	1
Education	2	1
Human health and social work activities	2	1
Arts, entertainment and recreation	4	2
Other services activities	28	13
Activities of households as employers	0	0
Total	216	100

Source: Own study based the V4 survey results of 2014 (*n* = 216).

33.6%, services 63%, measured by the percentage of GDP). It is worth to add that the share of service sector in generation of gross value added is lower in Poland than in UE. Thus, a greater contribution to gross value added in the Polish economy compared to the UE economies have trade and industry.

3.3. RESULTS AND DISCUSSION

Internal Resources for Internationalisation

Respondents were asked about the importance of the internal resources for internationalisation. They were to evaluate in particular financial resources (e.g. own capital, credits, venture capital), human resources (e.g. staff members fluent in foreign languages, staff members experienced with foreign markets and different cultures), physical resources (e.g. equipment, know-how, innovation) and information resources (e.g. sources of information on international markets).

Respondents were offered a five-level Likert's scale to evaluate each of the researched resources for internationalisation. The five levels that we offered were as follows: extremely low, rather low, moderate, rather high, extremely high.
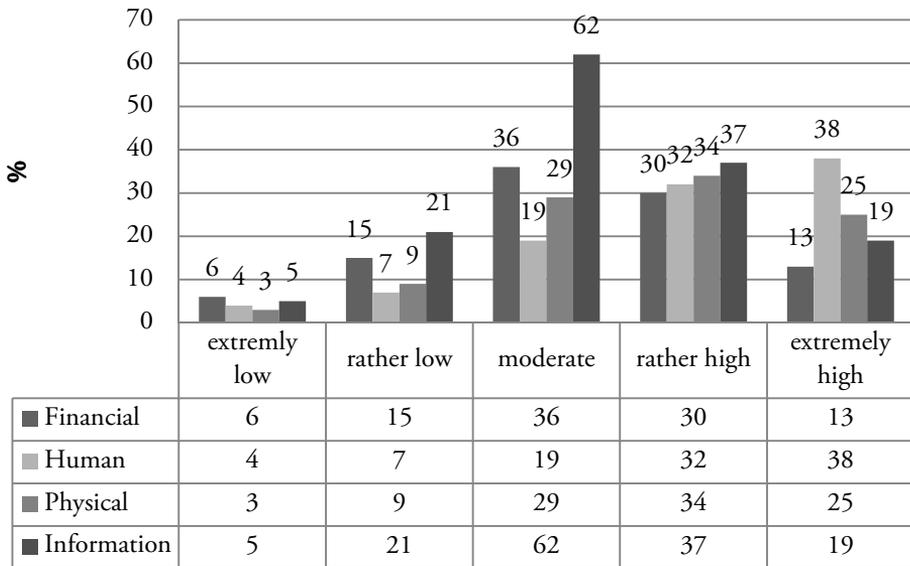
The research result showed that financial resources are generally of moderate importance for internationalisation. Only 21% of the respondents evaluated their financial resources as low (15% of the surveyed firms evaluated their financial resources for internationalisation as low and 6% as rather low). On the contrary, 30% of the respondents considered their financial resources for internationalisation as rather high and 13% evaluated them as extremely high. In turn, 36% of the firms evaluated financial resources as moderate.

The results of the analyses show that human resources are important for internationalisation for 70% of the investigated firms. Such as 38% of the respondents evaluated them as extremely high and 32% as rather high. Just 19% think that the importance of human resources for internationalisation process is moderate and only 11% regard them as low or very low.

In the light of the research results the role of physical resources for internationalisation process is important. Just 25% of the sampled firms find their importance as very high and 34% as rather high. Such as 29% of the respondents claim that the role of physical resources in internationalisation process is moderate and only 12% claim that their role is low.

The majority of the respondents think that the role of information in internationalisation process is moderate (62%). However 56% of the firms think it is high (rather high -37% and extremely high – 19%). On the contrary, 26% of the sampled firms think that this role is low.

Thus the research result allow for conclusion that human resources are the most important for firm's internationalisation process (Figure 5.2).

	extremly low	rather low	moderate	rather high	extremely high
■ Financial	6	15	36	30	13
■ Human	4	7	19	32	38
■ Physical	3	9	29	34	25
■ Information	5	21	62	37	19

Figure 5.2. The importance of resources for internationalisation in Poland
Source: Own study based on the V4 survey results of 2014 ($n = 216$).

Motives for Going International

As for the internationalisation motives taxonomy according to OECD (1997a, 1997b), the most popular motives for going international are entrepreneurial factors as well as push factors. As for Dunning's typology (Dunning, Lundan 2008, p. 67) of internationalisation motives the majority of the studied firms are just market seekers (74%). What can be interesting, there is a relation between these two typologies of motives (Table 5.8). All four OECD motives correspond mainly with

Table 5.8. Cross tabulation concerning motives for going international in Poland

| Motives	Market seekers	Resources seekers	Efficiency seekers	Strategic assets seekers	Total
Pull factors	44	5	11	16	76
Push factors	13	0	2	4	19
Chance factors	24	1	3	0	28
Entrepreneurial factors	79	1	6	7	93
Total	160	7	22	27	216

Source: own study based on the V4 survey results of 2014 ($n = 216$).

market seeking (chi2 = 26.3998, df = 9, p = 0.002). Nevertheless, if the firms go international because of being attracted by international markets, being forced to

look for new markets, by chance or if they greed for dynamic growth, at the same time they are market seekers above all (Daszkiewicz, Wach 2014).

The Pace and Scope of Internationalisation

There is a relation between the size and speed of internationalisation (chi2 = 144.4564, df = 120, p = 0.064). However the results can be controversial (Wach 2014) as we don't know the size when they internationalised (only the current size). The fastest internationalisation, that is in the year of establishment, occur among medium-sized and microenterprises as well as large enterprises (figure 5.3). After one year from the establishment the internationalisation was very popular among small firms. Altogether 76 out of 216 firms were internationalised from the inception (31 firms after a year, 14 after 2 consecutive years, 8 after three years and 11 firms after 4 years).
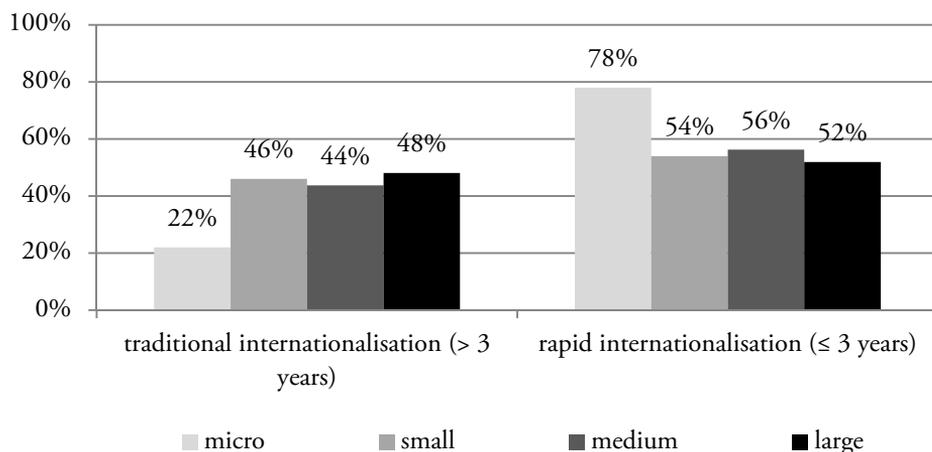
Figure 5.3. Size of the firms and their traditional and rapid internationalisation in Poland
Source: Own study based on the V4 survey results of 2014 (*n* = 216).

Four out of ten investigated firms internationalise according to the traditional path, while six firms internationalise much faster and use the rapid internationalisation path. This relation is a bit higher on the plus of born globals for non-family firms. Slightly less than half of family firms use traditional and slower path of the internationalisation. By testing differences between two means (z = 2.853 > 1.644), it can be proved that family firms internationalise longer than non-family firms.

Due to the lack of statistical significance (p = 0.58817) the hypothesis H2 is neither confirmed nor rejected. The distribution of the responses reveals that 56% of

firms operating in high-tech industries implemented the accelerated internationalisation (versus 44% for traditional internationalisation), while the same indicator for low-tech industries was 60% and 40%.

Table 5.9. Cross-tabulation for the size of the firm and its territorial scope in Poland

Observed Frequencies		Territorial Scope			Total
		CEE*	EU*	Globe*	
Large	observations	1	1	42	44
	% of column	16.67	2.78	30.88	-
	% of line	2.27	2.27	95.45	-
	% of total	0.56	0.56	23.60	24.72
Medium	Observations	0	9	47	56
	% of column	0.00	25.00	34.56	-
	% of line	0.00	16.07	83.93	-
	% of total	0.00	5.06	26.40	31.46
Small	Observations	3	14	25	42
	% of column	50.00	38.89	18.38	-
	% of line	7.14	33.33	59.52	-
	% of total	1.69	7.87	14.04	26.60
Micro	Observations	2	12	22	36
	% of column	33.33	33.33	16.18	-
	% of line	5.56	33.33	61.11	-
	% of total	1.69	6.74	12.36	20.22
Total	Observations	6	36	136	178
	% of total	3.37	20.22	76.40	100.00

Size of the Firms

Notes: *CEE – only neighbouring countries including cross border countries
   *EU – within the EU markets
   *Globe – within and beyond the EU markets
Source: own study based on the V4 survey results of 2014 (*n* = 216).

Based on the calculations of the Pearson's chi-square independent test, there is a significant statistical relation between the size of the studied firms and their territorial scope (chi2 = 26.61, df = 6, p = 0.00061). Studied dependences became also confirmed using Yates correction chi-square test (chi2 = 28.40, df = 6, p = 0.00008). Only 3% of all firms declared other CEE countries as their territorial scope (table 5.9), however most of them were small (50%) and microenterprises (33.33%). Over three fourth of the studied firm declare very wide scope including both EU and non-EU markets. What is more it was the most frequent scope among all firms regardless its size (large, medium, small, micro). Nevertheless the ratio for large and medium-sized enterprises was extremely high (ca. 90%), while for small and microenterprises was much lower, however also relatively high (ca. 60%).

The presented calculations proved the hypothesis H4, which is confirmed, while the hypothesis H3 is not supported.

Taking into account the above mentioned results, it is necessary to conclude the hypotheses concerning the pace and the scope of internationalisation among the studied firms:

|		
H1:	In general, firms from Poland implement traditional process approach toward their internationalisation.	*no significance* *supported*
H2:	Firms, from Poland, operating in high-tech industries are more likely to accelerate their process of internationalisation.	*no significance* *not supported*
H3:	Micro and small firms, from Poland, entry mainly other V4 and CEEC markets.	*rejected*
H4:	Medium and large firms, from Poland, entry mainly non-CEEC markets.	*confirmed*

*supported by descriptive statistics, no by statistics tests for hypothesis verification

Internationalisation Strategies

In general, only one of four studied firms declares having the planned international strategy, while the same number of firms doesn't have any strategy for internationalisation (Wach & Wojciechowski, 2014). Half of the studies firms en bloc declares that they have a partial strategy, which is not formalised (23% yes, 53% partially, 23% no). Comparing family and non-family firms, there is no statistical significance as for the international strategy planning and implementation ($p = 0.249$). However, the size of the firm in general determines the strategic thinking (chi2 = 25.9405, df = 6, $p = 0.000$). Almost one out of two large firms have any international strategy (figure 5.4), which is quite obvious and with the accordance to other research results.

In the questionnaire the responders were asked to determine which of the four basic strategic approaches are used. There were four descriptive options (ethnocentric, polycentric, regiocentric, geocentric). The statistical calculations (chi2 = 6.3113, df = 3, $p = 0.097$) prove that there is a dependence between the type of the EPRG strategy and the familiness of the studied firms at the acceptable level of significance ($p < 0.01$). Family firms use mostly polycentric and geocentric strategies while polycentric and ethnocentric strategies are the most popular ones among non-family firms. The chi-square statistics can prove that there is a correlation between the size of firm and the use of EPRG strategy (chi2 = 20.1630, df = 9, $p = 0.017$). Large firms use mostly both adaptive strategies which are regiocentric and polycentric strategies as well as the ethnocentric strategy (figure 5.5), they rarely use the geocentric strategy. Microenterprises apply the same strategy (ethnocentric and geocentric strategies) on international markets, probably due to limited available

resources, however they also try to find a couple similar markets and if they must adopt the strategy they do it for blocked markets in order to reach outputs/inputs effectiveness.
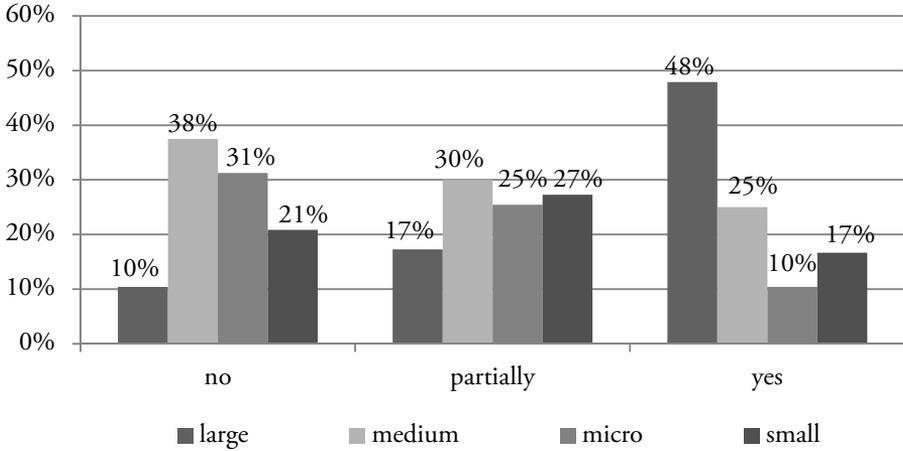
Figure 5.4. International strategy by the size of the studied firms in Poland
Source: Own study based on the V4 survey results of 2014 (*n* = 216).
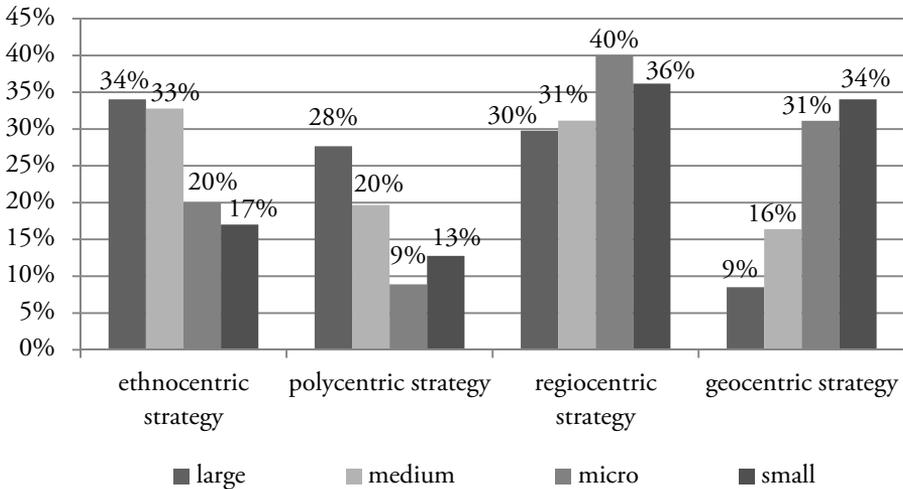
Figure 5.5. The EPRG strategy type by the size of the studied firms in Poland
Source: Own study based on the V4 survey results of 2014 (*n* = 216).

Taking into account the above mentioned results, it is necessary to change the initially assumed hypotheses as follows:

H5:	SMEs, from Poland, apply mainly ethnocentric and regiocentric strategy of internationalisation.	*no significance*
H5a:	Microenterprises, from Poland, apply mainly standardised strategies, including ethnocentric and geocentric strategy of internationalisation.	*confirmed*
H6:	Large firms, from Poland, apply mainly polycentric and geocentric strategy of internationalisation.	*no significance*
H6a:	Large firms, from Poland, apply mainly adaptive strategies including polycentric and regiocentric strategy of internationalisation.	*confirmed*

The Choice and Use of Entry Modes

The most popular entry modes among the studied firms (table 5.10) is direct exporting (especially through a foreign distributor or own foreign representative office) as well as subcontracting. There are no statistical differences between family and non-family firms as for particular exporting (all 9 different studied modes

Table 5.10. Frequency of entry modes of the studied firms in Poland

Entry modes	Frequency	%
Indirect Exporting		
Export commission house	11	5
Export/import broker	19	9
Export management company	6	3
Trading company	9	4
Direct Exporting		
Foreign agent	43	20
Foreign distributor	84	39
Representative office	73	34
Cooperative exporting		
Export grouping	15	7
Piggybacking	13	6
Contractual modes		
Management contracts	33	15
Assembly operations	25	12
Subcontracting	61	28
Turnkey operations	11	5
Int'l licensing	11	5
Int'l franchising	8	4
Investment modes		
Foreign branch	32	15
Joint venture subsidiary	16	7
Wholly-owned subsidiary	29	13

* the responses cannot sum up as each respondent could indicate more than one option
Source: Own study based on the V4 survey results of 2014 (*n* = 216).

including indirect, direct, cooperative kinds of export) and contractual modes (all 6 different studied modes).

As for investment modes, there is no difference between family and non-family firms as far as joint venture and wholly-owned subsidiaries are concerned (p > 0.1), however some slight differences can be observed from the distribution of results (wholly-owned subsidiaries are used almost twice as much by non-family firms). The results for a foreign branch are the only ones (out of all 18 studied entry modes) that have statistical significance (chi2 =   4.0610, df = 1, p = 0.044). According to the descriptive statistics 19% of non-family firms and only 9% of family firms have foreign branches.

Table 5.11. Cross-tabulation for the advancement of entry modes and the competitiveness level in the industry in Poland

Competitiveness Level in the Industry		Advancement of Entry Modes							Total
		1st*	2nd		3rd				
		exporting	contractual	exporting and contractual	investment	exporting and investment	contractual and investment	exporting, contractual and investment	
Low	observations	1	1	1	1	0	0	0	4
	% of column	1.64	7.69	1.79	100.00	0.00	0.00	0.00	-
	% of line	25.00	25.00	25.00	25.00	0.00	0.00	0.00	-
	% of total	0.53	0.53	0.53	0.53	0.00	0.00	0.00	2.13
Moderate	Observations	12	2	9	0	4	0	5	32
	% of column	19.67	15.38	16.07	0.00	19.05	0.00	15.15	-
	% of line	37.50	6.25	28.13	0.00	12.50	0.00	15.63	-
	% of total	6.38	1.06	4.79	0.00	2.13	0.00	2.66	17.02
High	Observations	48	10	44	0	17	3	28	152
	% of column	79	77	82	0	81	100	85	-
	% of line	66	11	59	0	23	4	38	-
	% of total	26	5	24	0	9	2	15	80.85
Total	Observations	61	13	56	1	21	3	33	188
	% of total	32.45	6.91	29.79	0.53	11.17	1.60	17.55	100.00

*28 missing answers
Source: own study based on the V4 survey results of 2014 (*n* = 216).

Based on the calculations of the Pearson's chi-square independent test, there is a significant statistical relation between the choice of entry modes and the competiveness level in the industry, in which the studied firms operate (chi2 = 53.73, df = 18, p = 0.00002). None of firms operating in low competitive industry (table 5.11) uses the most advanced entry modes, while in the industries, in

which there is high competition, the most advanced entry modes are the most frequently used, however.

Due to the lack of statistical significance (p = 0.06004) the hypothesis H8 is neither confirmed nor rejected. Nevertheless. the distribution of the responses reveals that ca. 75% of firms operating in high-tech industries implemented the any of the investment entry modes, while the same indicator for low-tech industries was ca. 55%, however it is not statistically significant.

Taking into account the above mentioned results, it is necessary to conclude the hypotheses concerning the advancement of entry modes used by the studied firms:

H7:	Firms, from Poland, operating in industries where there is high competitiveness, are more likely to use more advanced entry modes (i.e. contractual and investment modes).	*confirmed*
H8:	Firms, from Poland, operating in hi-tech industries, are more likely to use more advanced entry modes (i.e. contractual and investment modes).	*no significance*

In order to find specific features of firms having a foreign branch abroad, the logistic regression model was applied (table 5.12). Being a born global reduces the likelihood of opening a branch (negative coef.), however it is difficult to explain. The share of foreign capital has a positive but insignificant effect on the probability of the opening of the branch.

Table 5.12. Logistic regression for a foreign branch among studied firms in Poland

A foreign branch	Coef.	Std. Err.	z	P>|z|	95% Conf.	Interval]
Born Global	-1.057342	.4122574	-2.56	0.10	-1.865352	-.2493325
Foreign ownership	.0059818	.0049258	1.21	0.225	-.0036725	.0156362
Family business	-.6754454	.46447	-1.45	0.146	-1.58579	.234899
Business Experience	.4564566	.2352509	1.94	0.052	-.0046268	.9175399
<constant>	-2.899441	.9259997	-3.13	0.002	-4.714367	-1.084515

Source: Own study based on the V4 survey results of 2014 (*n* = 216).

Being a family firm reduces the probability that a form will open a foreign branch (negative coef.). The business experience significantly affected the probability of opening a foreign branch (the higher level of experience, the higher probability to open a branch.

The used model was correctly classified at 85.12% (table 5.13 and figure 5.6), which means that the model was right in 85 out of 100 cases in assessing whether an the firm has or a foreign branch abroad or not. Therefore, one can predict with a high degree of probability whether the firm of the specific values of the indicated features (born global, foreign ownership, family business, business experience)

will or will not have a chance to open a foreign branch (the area under ROC curve is 0.7145, see figure 5.6).

Table 5.13. Diagnosis of the logistic model for a foreign branch in Poland

Classified	True		Total
	D	~D	
+	0	0	0
-	32	183	215
Total	32	183	215
Classified + if predicted Pr(D) >= .5 True D defined as a foreign branch != 0			
Sensitivity	Pr(+| D)		0.00%
Specificity	Pr(-|~D)		100.00%
Positive predictive value	Pr(D| +)		.%
Negative predictive value	Pr(~D| -)		85.12%
False + rate for true ~D	Pr(+|~D)		0.00%
False - rate for true D	Pr(-| D)		100.00%
False + rate for classified +	Pr(~D| +)		.%
False - rate for classified -	Pr(D| -)		14.88%
Correctly classified			85.12%

Source: Own study based on the V4 survey results of 2014 (*n* = 216).

Area ROC curve = 0.7145
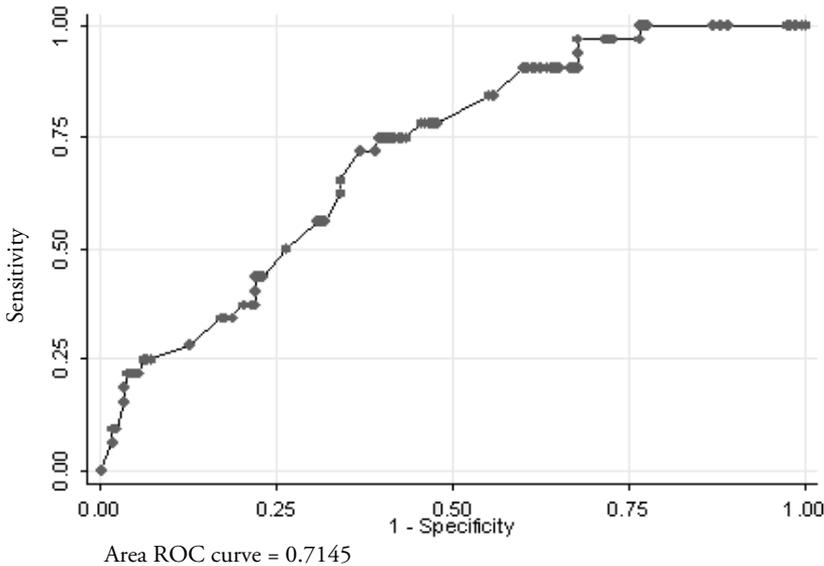
Figure 5.6. Diagnosis of the logistic model for a foreign branch
Source: Own study based on the V4 survey results of 2014 (*n* = 216).

The Role of the Entrepreneur in the Internationalisation Process

Due to the lack of statistical significance (p > 0.9) we cannot judge the hypotheses H9. The problem is that the choice of entry modes is very diversified in the sample, while the self-evaluation of the entrepreneur's is very high, this is why there is no statistical significance. Perhaps the Polish entrepreneurs are ones of the most optimistic and they want to be reported to be the most international-orientated among all V4 nations.

Based on the calculations of the Pearson's chi-square independent test, there is a significant statistical relation between the declared knowledge and experience of the studied entrepreneurs and the choice of entry modes (chi2 = 31.59, df = 18, p = 0.02). The distribution of the responses reveals that these entrepreneurs who declared rather or very poor level of knowledge in international markets and experience in international business, used mostly exporting modes, what is more, none of them used investment modes. On the contrary, the entrepreneurs declaring high or rather high knowledge and experience used very diverse entry modes, including investment modes, thus the hypothesis H10 is confirmed.

The hypotheses concerning role of the entrepreneurs in the process of internationalisation among the studied firms in Poland can be summarised as:

H9:	The higher the international motivation and openness of the entrepreneur of the firms from Poland, the more advanced entry modes (i.e. contractual and investment modes) are used.	*no significance*
H10:	The higher the knowledge and experience on international markets of the entrepreneur of the firms from Poland, the more advanced entry modes (i.e. contractual and investment modes) are used.	*confirmed*

5.4. CONCLUSIONS

The research results do not allow to make more generalisations as the whole population of Polish firms is concerned, however they reveal some specifics of the internationalisation process among studied firms[1]. The research results allow to formulate the following general conclusions:

1.   It can be assumed that the businesses in the research sample are generally experienced and bigger in comparison with the whole population. The territorial scope of their activities can be regarded as wider as well. Almost 63% of firms declare to operate within and beyond EU markets. The analyses of the research results show that there is a significant statistical relation

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[1] See also (Wach, 2014a; 2014b; Daszkiewicz, 2014; Bartha & Gubik, 2014; Gubik & Karajz, 2014; Gubik & Wach, 2014; Knežević & Wach, 2014; Kindl-Wendner & Wach, 2014).

(chi2 = 25.0003, df = 4, p = 0.00005) between the size of the studied firms and their territorial scope (Large and medium-sized firms are mainly global players, while small and microenterprises pay attention to neighbouring countries and the EU markets in general).

2. The share of family firms in the research sample is more or less the same as their share in the whole population. The research results show that family firms internationalise longer than non-family firms. In turn, the results concerning the strategies show that family firms use mostly polycentric and geocentric strategies while polycentric and ethnocentric strategies are the most popular ones among non-family firms.

3. The analyses of motives for going international shows that the studied firms do it because of being attracted by international markets, being forced to look for new markets, by chance or if they greed for dynamic growth, at the same time they are market seekers above all.

4. The most popular entry modes among the studied firms are direct exporting and subcontracting. However there is a significant statistical relation between the choice of entry modes and the competiveness level in the industry. None of firms operating in low competitive industry uses the most advanced entry modes, while in the industries, in which there is high competition, the most advanced entry modes are the most frequently used.

5. There is a significant statistical relation between the declared knowledge and experience of the studied entrepreneurs and the choice of entry modes (these entrepreneurs who declared rather or very poor level of knowledge in international markets and experience in international business, used mostly exporting modes). On the contrary, the entrepreneurs declaring high or rather high knowledge and experience used very diverse entry modes, including investment modes.

6. The results of the research show that that human resources are the most important (of all four categories of resource) in the internationalisation process.

Based on the empirical results and the statistical calculations the following hypotheses were supported:

H4:	Medium and large firms, from Poland, entry mainly non-CEEC markets.
H5a:	Microenterprises, from Poland, apply mainly standardised strategies, including ethnocentric and geocentric strategy of internationalisation.
H6a:	Large firms, from Poland, apply mainly adaptive strategies including polycentric and regiocentric strategy of internationalisation.
H7:	Firms, from Poland, operating in industries where there is high competitiveness, are more likely to use more advanced entry modes (i.e. contractual and investment modes).

H10: The higher the knowledge and experience on international markets of the entrepreneur of the firms from Poland, the more advanced entry modes (i.e. contractual and investment modes) are used.

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