

Internationalization of top management teams: A comprehensive analysis of Polish stock-listed firms*

Tobias Dauth, Agata Tomczak**

For most Polish firms, doing business across borders is very common. In order to identify whether the firms' internationalization is reflected by the internationalization of their upper echelons, we conduct a descriptive study on top managers of firms listed on the Polish stock exchange. We apply a holistic approach to measuring board internationalization by taking into account multiple dimensions (e.g., nationality, international education, international work experience, foreign language skills). Our results show that the average level of top management internationalization in Polish firms is relatively low and barely corresponds with the firms' international business activities.

Key words: top management teams, top management demographics, international executives, top management internationalization, board internationalization, Poland (JEL: L20, M10, M12, M16)

* Manuscript received: 24.11.2014, accepted: 10.3.2015 (0 revision)

** Corresponding author: Tobias Dauth, Alfried Krupp von Bohlen und Halbach Junior Professorship in International Management, HHL Leipzig Graduate School of Management/Fraunhofer Center for International Management and Knowledge Economy, Jahnallee 59, 04109 Leipzig, Germany.
E-mail: tobias.dauth@hhl.de.

Agata Tomczak, Senior Consultant, DREBERIS GmbH, Heinrich-Zille-Straße 2, 01219 Dresden, Germany.
E-mail: agata.tomczak@dreberis.com.

Introduction

The globalization of markets, technological advancements and increased competition have been important drivers for the rapid transformation process of Polish firms and the continuous internationalization of their business activities (Radlo/Sass 2012). Moreover, the enlargement of the European Union has led to fast development of economic relations with countries across the world (Schweiger 2014). In this regard, the internationalization of Polish firms is reflected by many criteria such as foreign sales, foreign employees and foreign assets. The transformation and internationalization processes of Polish firms are highly relevant topics that have generated a substantial stream of research. Many scholars investigate the internationalization motives, market entry modes, and competitive strategies of Polish firms (e.g., Cieřlik/Nikk 2011; řliwiński 2012; Trąpczyński/Wrona 2013). However, the question “How international are top management teams in Poland?” remains unanswered. To the best of our knowledge, there is only fragmented evidence on the demographics and the international composition of Polish upper echelons (e.g., Rakowska 2010). This research gap needs to be addressed because empirical analyses highlight the crucial role of top managers and their international experience in firms’ internationalization processes (e.g., Finkelstein et al. 2009).

Several existing studies consider top management teams’ internationalization as an important variable in upper echelons research (e.g., Sambarya 1996; Elron 1997; Hambrick et al. 1998; Carpenter et al. 2001; Athanassiou/Nigh 2002; Schmid/Daniel 2006). In this regard, scholars argue that international activities constitute an important part of the daily business of many firms and the internationalization of business activities shall be reflected at the top management level. It is assumed that top managers need specific international knowledge, skills and experience in order to successfully manage cross-border activities (Heijltjes et al. 2003; Carpenter et al. 2004; Schmid/Dauth 2014). Consequently, international top managers’ human capital is considered as a valuable resource for multinational corporations (MNCs), and corporate governance codes in many European countries recommend the appointment of international top managers to corporate boards (e.g., Daily et al. 2000; Carpenter et al. 2001; AFG 2011; GCGC 2012; UKCGC 2012; Schmid/Dauth 2014; Schmid et al. 2015).

The objectives of our paper are twofold. First, we aim to measure top management internationalization in Poland in a comprehensive way. To do so, we analyze the nationalities, international work experience, international education, international mandates, home-country international experience, international extracurricular activities and the language proficiency of top managers. This approach enables us to contribute to existing literature because we address the call for fine-grained and comprehensive measures of top management internationalization (Greve et al. 2009; Nielsen/Nielsen 2013). Second, we complement exist-

ing investigations that primarily focus on top management characteristics in the Anglo-American context. Our study provides empirical evidence on top management internationalization in Poland and thus it sheds light on an important, yet neglected aspect of internationalization in a Polish context.

The remainder of the paper is structured as follows. The second section provides details on our theoretical argumentation. The third section includes a description of the sample and outlines our research method. The results of our empirical investigation are presented in the fourth section, followed by a discussion and concluding comments in section five.

Theoretical aspects of top management internationalization

Human capital theory posits that employees make rational choices regarding investments in their own human capital (Becker 1975). In return, labor markets ought to reward top managers' investments in themselves (Judge et al. 1995). Existing research has highlighted that top managers' international experience can, for example, help to reduce a firm's environmental constraints and uncertainty (Sambharya 1996; Athanassiou/Nigh 1999) and ensure access to a valuable network of (foreign) individuals and organizations (Geletkanycz et al. 2001; Schmid/Dauth 2014).

McCall and Hollenbeck (2002) stress the necessity of international experience and understanding for executives aspiring to work globally. In this regard, Beechler and Javidan (2007) argue that top managers need a "global mindset" in order to successfully operate on an international level. This "global mindset" can manifest itself in several dimensions:

- (i) Intellectual capital (e.g., understanding of how to build and manage global alliances, partnerships, and value networks; the ability to manage the tension between corporate requirements and local challenges; the ability to handle complex cross-cultural issues; familiarity with global businesses and industries),
- (ii) Psychological capital (e.g., respect for cultural differences; willingness to adapt, learn, and cope with other cultures; acknowledgement of the validity of different views but also: adaptability, self-confidence, resilience and optimism), and
- (iii) Social capital (e.g., the ability to excite and motivate people from different cultures, the ability to connect and interact with foreigners).

To measure internationalization, we draw on arguments from upper echelons theory (Hambrick/Mason 1984). Accordingly, we assume that organizations represent a reflection of their top managers. Top managers' field of vision, their strategic choices and ultimately firm-level outcomes are influenced by their individual psychological characteristics, such as their cognitions, their values and their perceptions (Knight et al. 1999). In accordance with Hambrick and Mason

(1984), we employ demographic characteristics as proxies for top managers' psychological attributes.

Dimensions of top managers' internationalization

While upper echelons literature highlights that top managers' internationalization can take various forms, many existing studies employ only one or two demographic dimensions of internationalization (for a review see Schmid/Dauth 2012). In this regard, scholars mostly investigate top managers' nationality (e.g., Gong 2006; Ruigrok et al. 2007; Staples 2007) or international assignment experience (e.g., Sullivan 1994; Daily et al. 2000; Carpenter/Fredrickson 2001; Carpenter et al. 2001). By focusing on single dimensions of internationalization, these studies may neglect other important aspects of a top manager's internationalization (Schmid/Daniel 2006; Nielsen 2010; Schmid/Dauth 2014). In order to address the call for a more complex modelling of internationalization, our study focuses on multiple dimensions that shall be described in the following paragraphs.

First, we analyze top managers' nationality. In line with existing research, we expect that an individual's nationality can have an impact on his or her personality (Hambrick et al. 1998; Triandis/Suh 2002; Nielsen 2011) and his or her underlying orientations and values (Hofstede 2001; House et al. 2004). In turn, these orientations and values affect a top manager's behavior and have implications for strategic decision-making within a firm (Elron 1997; Geletkanycz 1997; Hambrick et al. 1998). Therefore, scholars consider top managers' foreign nationality to be a specific form of human capital (Schmid/Dauth 2014; Schmid et al. 2015). In this study, we determine an individual's nationality by drawing on top managers' CVs (where nationality is stated) or, if possible, by identifying the country in which the person has spent most of his/her formative years.

As a second dimension, we consider international work experience as an important aspect of top managers' internationalization. It is reasonable to assume that top managers who have completed international work assignments possess valuable knowledge of foreign markets and regulations. In contrast to individuals who have lived and worked only in their home countries, international top managers face fewer uncertainties when entering foreign markets (Sambharya 1996; Lu/Beamish 2001; Schmid/Dauth 2014; Schmid et al. 2015). Again, we count the number of years of foreign work experience mentioned in top managers' CVs.

Third, we analyze top managers' international education. The knowledge gained from international education can enhance individuals' understanding of customs and habits in foreign markets (Yeung/Ready 1995; Carpenter et al. 2001). Moreover, the experience gathered during an educational process abroad may have an impact on the manager's selective field of vision and thus his/her deci-

sion-making in a business context. We draw on top managers' CVs and count the years of international education mentioned in their biographies.

Fourth, we consider top managers' mandates in boards of foreign firms located outside Poland. The presence in boards of foreign firms can be regarded as an effective means for top managers to gain valuable insights into foreign business practices and decision-making processes, and to develop ties to international stakeholders (Maruca 1994; Athanassiou/Nigh 1999; Carpenter et al. 2001). The number of mandates is derived from an analysis of firms' annual reports and top managers' CVs.

Fifth, we account for home-country international experience by including domestic job assignments (i.e., jobs in Poland) where top managers either had international responsibilities (e.g., sales manager for the North-American region) or worked for Polish subsidiaries of foreign MNCs. Before the collapse of the Soviet Union, Polish top managers had only limited possibilities to gain international experience in a business context (Śliwiński 2012). Thus, a position in a subsidiary of a foreign MNC in Poland was one way to get in touch with foreign management practices. After 1990, FDI in Poland rose tremendously and foreign MNCs increased their presence in Poland (Gorynia et al. 2007). Those individuals who were assigned to the highest management levels of the Polish subsidiaries had intensive contact with foreign headquarters or other colleagues from abroad (Hetrick 2002). This was a basis for further internationalization of Polish top managers. The regular exchange with foreign colleagues helped them to improve their language skills and confronted them with different management styles, new ways of problem solving and decision-making processes (Sarmiento-Mirwaldt/Roman-Kamphaus 2013).

Sixth, we consider international extracurricular activities as a valuable source of internationalization. This dimension becomes highly relevant in a Polish context because it was almost impossible for Polish top managers to work and/or study in Western (European) countries before 1990 (see, for example, Leven 2008). In the late 1990s, study exchange programs, scholarships or expatriate assignments became more and more common, so Polish managers were able to experience different cultures. For a long time, courses and seminars (i.e., extracurricular activities) in foreign countries were one of the few ways to gain international experience. Interaction with international lecturers, the exposure to foreign languages, and the interaction with foreign participants were factors that enabled Polish managers to broaden their international knowledge.

Seventh, we account for the foreign language skills of a top manager. Proficiency in foreign languages is one of the most important factors for the internationalization level of a person (Piekkari/Tietze 2011). Being able to communicate with foreign colleagues, potential partners and investors may serve as a key success factor for a top manager's international business activities. Again, we draw on

the top managers' CVs to obtain more information on this dimension of internationalization.

Data and methodology

Sample

In our study we analyzed the 20 largest firms (based on sales) listed on the Polish GPW¹ as of March 2014. We excluded subsidiaries of foreign firms (e.g., Eurocash Group) since our research shall concentrate on firms headquartered in Poland. We also excluded Polish firms that were acquired by foreign firms (the case of Orange, formerly Telekomunikacja Polska S.A.). The final list of firms represented in our sample is illustrated in table 1. In total, we analyzed the internationalization of 238 individuals (95 management board members and 143 supervisory board members).²

Table 1: Sample overview

Firm	Industry	Total sales 2012 (in 1,000 PLN)	No. of management board members	No. of supervisory board members
PKN Orlen	Petroleum	88,348,971	5	7
Lotos	Petroleum	33,111,000	5	6
PGE	Energy	30,556,814	4	9
PGNiG	Energy	28,730,000	5	8
Tauron	Energy	24,741,257	5	9
KGHM	Mining	21,337,870	5	7
Energa	Energy	11,176,799	3	7
Enea	Energy	10,096,032	4	8
JSW SA	Mining	8,820,956	5	12
Azoty	Chemical	7,098,735	7	9
Pelion	Pharma	6,685,516	5	5
Synthos	Chemical	6,206,544	5	5
Budimex	Construction	6,077,660	6	9
Neuca	Pharma	5,687,431	3	5
Asseco	IT/Telco	5,529,100	11	6
Boryszew	Chemical	4,878,036	4	6
Farmacol	Pharma	4,843,571	3	5
AB	IT/Telco	4,821,476	4	6
Ciech	Chemical	4,377,952	3	7
Polimex Mostostal	Construction	4,110,417	3	7

¹ Giełda Papierów Wartościowych w Warszawie (GPW), Polish stock exchange.

² Our sample consists of 11 state-owned firms. This fact has also an influence on the composition of these firms' supervisory boards. Among the 89 supervisory board members of the state-owned firms in our sample, there are 41 individuals who are direct representatives of the Polish government. All analyzed individuals are Polish citizens, 19 of them are female and 22 are male.

Internationalization of top managers

Several studies have already analyzed the internationalization level of top management teams (see, for example, Schmid/Dauth 2012). Not surprisingly, we can observe a variety of measures and variables to operationalize the internationalization construct. Our measure of internationalization contains seven dimensions that stem from a detailed CV analysis of all top managers in our sample. We investigated publicly available CVs as well as online resources (e.g., social networks for professionals or firm websites). For each individual in our sample, our objective was to identify all relevant elements of international experience, language skills and detailed information about the time spent on foreign education, seminars, projects or job assignments. It is important to note that detailed information about individual careers was not available for all top managers in our sample. We only considered individuals where complete CVs were available or where we could build on reasonable assumptions regarding an individual's internationalization (e.g., through an analysis of top managers' profiles in internet-based social networks).

In order to measure top managers' internationalization, we build on the internationalization index established by Schmid and Daniel (2006). In a next step, we modify the original internationalization index according to the Polish context of our study. Based on interviews with Polish top managers and executive search firms in Poland, we decided to add three additional dimensions of internationalization to the index of Schmid and Daniel (2006): home-country international experience, international extracurricular activities and foreign language proficiency. Furthermore, to account for the varying relevance and importance of the internationalization dimensions in a Polish context, we weight the elements of the index as follows:³ (a) Nationality is a dummy variable that takes the value 1 if a top manager is non-Polish and 0 otherwise. Nationality is weighted with the factor 1. (b) International extracurricular activities is another dummy variable indicating whether a person has gained such a type of international experience or not. Based on discussions with top managers and executive search firms we argue that this dimension of internationalization is highly relevant in a Polish context and thus we weight it with the factor 1. (c) International work experience is the number of years an individual has spent on job assignments outside Poland. This dimension is weighted with the factor 0.8. (d) International education is the number of years a person has spent in foreign schools/universities. The dimension is weighted with the factor 0.7. (e) For the element foreign language proficiency, we assess whether a person most likely speaks other languages than Polish. We do so by analyzing individuals' CVs, where, in some cases, language

³ We acknowledge that the weighting involves a rather subjective assessment of the internationalization dimensions. In this context, it is important to note that we conducted interviews with Polish top managers and Polish executive search firms in order to obtain an adequate and realistic assessment of the importance of each internationalization dimension.

skills were explicitly mentioned. Moreover, we assume that individuals who have lived and/or worked outside Poland are able to communicate in a foreign language. Thus, the dummy variable foreign language proficiency has the value 1 if foreign language skills are highlighted on an individual's CV and/or the individual has lived or worked in a country outside Poland. We weight this dimension with the factor 0.6. (f) Foreign mandates is the number of foreign board appointments and/or the number of memberships in foreign organizations. We weight this dimension with the factor 0.5. (g) Home-country international experience is the number of years the person worked in a position with international exposure but where he/she was based in Poland. The dimension is weighted with the factor 0.4.

We modify the index of Schmid and Daniel (2006) by adding three more dimensions in the formula and by weighting the dimensions. Thus, our index can be illustrated as follows:

$$INT = \frac{1}{n} \times \sum_{i=1}^n \left[\frac{1}{7} \left(N_i + C_i + 0.8 \left(1 - \frac{1}{W_i + 1} \right) + 0.7 \left(1 - \frac{1}{E_i + 1} \right) + 0.6(L_i) \right. \right. \\ \left. \left. + 0.5 \left(1 - \frac{1}{A_i + 1} \right) + 0.4 \left(1 - \frac{1}{H_i + 1} \right) \right) \right]$$

where:

- n = total number of top management team members
- N_i = Dummy: Nationality of person i (0 for Polish, 1 for non-Polish)
- C_i = Dummy: International extracurricular activities of person i
(0 for no activities, 1 for international extracurricular activities)
- W_i = Number of years of international work experience of person i
- E_i = Number of years of foreign education of person i
- L_i = Dummy: Foreign language proficiency of person i
(0 for no foreign language skills, 1 for foreign language skills)
- A_i = Number of foreign mandates of person i
- H_i = Number of years of home-country international work experience of person i

Results

Internationalization of Polish top managers

Our analysis shows that the average internationalization index score of top management teams of Polish firms in our sample is 0.102. Members of management boards have a higher average internationalization level (0.124) than members of supervisory boards (0.080). Table 2 illustrates the top management internationalization for all firms and the respective corporate governance bodies.

Table 2: Top management internationalization across all firms in the sample

Ranking (firm sales)	Firm	TMT internationa- lization (entire TMT)	MB internationa- lization	SB internationa- lization	Ranking (TMT internatio- nalization)
1	PKN Orlen	0.140	0.184	0.097	5
2	Lotos	0.190	0.308	0.073	3
3	PGE	0.096	0.144	0.050	8
4	PGNiG	0.037	0.058	0.018	19
5	Tauron	0.074	0.056	0.093	15
6	KGHM	0.091	0.099	0.083	13
7	Energa	0.088	0.131	0.046	14
8	Enea	0.092	0.149	0.035	11
9	JSW SA	0.095	0.111	0.079	9
10	Azoty	0.092	0.116	0.068	12
11	Pelion	0.051	0.008	0.094	16
12	Synthos	0.046	0.077	0.016	17
13	Budimex	0.214	0.177	0.250	1
14	Neuca	0.094	0.099	0.089	10
15	Asseco	0.102	0.071	0.133	7
16	Boryszew	0.153	0.226	0.088	4
17	Farmacol	0.039	0.043	0.034	18
18	AB	0.021	0.041	0	20
19	Ciech	0.110	0.119	0.102	6
20	Polimex Mostostal	0.207	0.264	0.150	2
Average		0.102	0.124	0.080	

As previously stated, the internationalization of Polish top managers is a relatively recent phenomenon and thus it is not surprising that only 2.5% of the top managers have *foreign nationalities*. Moreover, it needs to be considered that 11 out of 20 firms in our sample are state-owned firms. This fact may also serve as an explanation for the relatively low percentage of top managers with foreign nationalities. A more detailed investigation of the six individuals with foreign nationalities shows that they work for two firms in our sample. The top management team of Budimex consists of five Spanish managers who are all associated with Ferrovial, the firm's strategic investor from Spain. At Polimex, only the CEO is an individual with a foreign nationality.

The total number of individuals with *foreign work experience* across management board members and supervisory board members is 64. The average length of professional experience gathered abroad is higher for members of the supervisory board: 7.8 years vs. 4.5 years for management board members. The aver-

age length of foreign work experience of all top managers in our sample is 6.2 years.

Both corporate governance bodies have similar average results concerning individuals who possess *international education experience*. In the management boards, we observe 26 managers (27%), in the supervisory boards there are 33 individuals (23%) with an average length of the international education of 2.4 years and 2.7 years respectively.

In most cases, our assessment of an individual's *foreign language proficiency* was based on his/her track record of previous activities. Thus, we expect proficiency in a certain language if a person has studied or worked for several years in a specific foreign country. Based on this assumption, our analysis shows that among the management board members 80 individuals speak foreign languages (84%). Among the supervisory board members, it is 86 managers (60%).

For the dimension *international mandates*, we can observe that 27% of the managers in management boards have international professional connections, on average two mandates per person. Among the supervisory board members only 11% have foreign mandates, on average 1.7 mandates per person.

With regard to *home-country international experience* we observe higher results for management board members compared to supervisory board members. Our investigation shows that 25% of the management board members (24 individuals) and 15% of the supervisory board members (21 individuals) have such experience. The average length of home-country international experience is 5.7 years.

The analysis of the dimension *international extracurricular activities* shows that 13% of all management board members and 10% of all supervisory board members attended seminars and courses abroad. Of all top managers in our sample, 26 individuals (11%) took on average three courses in a foreign country.

Table 3 summarizes the results for various internationalization dimensions.

Table 3: Detailed analysis of top management internationalization

	Management Boards (MB)			Supervisory Boards (SB)		
International Work Experience	No. of individuals	in %	Average length (in years)	No. of individuals	in %	Average length (in years)
	32	33.7%	4.5	32	22.4%	7.8
Total MB+SB:						
No. of individuals with int. work experience	No. of individuals with int. work experience (in %)		Average length (in years)			
64	26.9%		6.2			

Table 3: Detailed analysis of top management internationalization (continued)

	Management Boards (MB)			Supervisory Boards (SB)		
International education	No. of individuals	in %	Average length (in years)	No. of individuals	in %	Average length (in years)
	26	27.4	2.4	33	23.1	2.7
Total MB+SB:						
No. of individuals with int. education	No. of individuals with int. education (in %)		Average length (in years)			
59	24.8%		2.5			
Foreign language proficiency	No. of individuals	in %	Average number of languages	No. of individuals	in %	Average number of languages
	80	84.2	1.25	86	60.1	1.3
Total MB+SB:						
No. of individuals with foreign language proficiency	No. of individuals with foreign language proficiency (in %)		Average number of languages			
166	69.7%		1.28			
Foreign mandates	No. of individuals	in %	Average number of activities	No. of individuals	in %	Average number of activities
	26	27.4	2.1	15	10.5	1.7
Total MB+SB:						
No. of individuals with foreign mandates	No. of individuals with foreign mandates (in %)		Average number of mandates			
41	17.2		1.9			
Home-country international experience	No. of individuals	in %	Average length (in years)	No. of individuals	in %	Average length (in years)
	24	25.3	5	21	14.7	6.4
Total MB+SB:						
No. of individuals with home-country int. experience	No. of individuals with home-country int. experience (in %)		Average length (in years)			
45	18.9		5.7			
Int. extra-curricular courses	No. of individuals	in %	Average number of courses	No. of individuals	in %	Average number of courses
	12	12.6	3	14	9.8	3
Total MB+SB:						
No. of individuals that took courses abroad	No. of individuals that took courses abroad (in %)		Average number of courses			
26	10.9		3			

Top management internationalization and firm internationalization

In a next step, we compare the results from our analysis of top managers' internationalization with firm internationalization measured by a firm's foreign sales ratio. An incipient investigation shows heterogeneous results. For example, the firm KGHM generates 80% of its sales outside Poland while the firm's top management internationalization index is at 0.090. In contrast, the firm Lotos generates 27% of its sales abroad with a top management internationalization index of 0.190. It must be noted that we cannot draw on a statistically significant relationship between the two variables "international sales" and "top management internationalization". However, it is striking that all firms in our sample with a top management internationalization index above average ($INT > 0.102$) show a relatively high foreign sales ratio between 27% and 71%. Almost all firms with a below average top management internationalization index ($INT < 0.102$) have a foreign sales ratio between 0% and 5.8%.⁴

Discussion and conclusions

With our research, we aim to shed light on the internationalization of upper echelons in a Polish context. Our study illustrates that Polish top management teams have a relatively low level of internationalization. Moreover, the findings highlight a stark contrast between top management internationalization and internationalization of firm activities. In addition, we find substantial differences in top management internationalization among the different corporate governance bodies of Polish firms. Management board members tend to be more international (across several dimensions of internationalization) than supervisory board members.

While we acknowledge that our sample of 20 firms does not allow any generalization, we observe a prevalent connection between the internationalization levels of TMTs and firms' foreign sales. Many firms with an above average TMT internationalization also show relatively high levels of foreign sales. Another notable result concerning the dimensions of internationalization is related to foreign language proficiency. Nearly 70% of all TMT members are assumed to be familiar with a language other than their mother tongue. Thus, it can be expected that Polish managers aim to increase their foreign language proficiency (Odrakiewicz 2013). This fact can have positive consequences with regard to the further expansion of Polish firms abroad.

The analysis of the dimensions "international work experience" and "international education" showed that for both variables about one quarter of the examined individuals have such experience. Polish TMT members can therefore be assumed to be rather mobile and flexible (see also Botterill 2014). A detailed investigation of the average length of these two dimensions shows that, on aver-

⁴ The only exception is KGHM, generating 80% of its sales abroad.

age, the duration of international work experience is 2.5 times longer than the period of international education.

An investigation of the countries in which individuals gained their international work experience or their international education illustrates the most popular destinations for Polish top managers: It is the USA (29% of all individuals have studied or worked in this country), Spain (17%), Germany (14%), France (11%), UK (8%), Canada (5%). Other CEE countries (e.g., Czech Republic, Lithuania, Slovakia) that have strong economic ties with Polish firms do not serve as prominent locations for international education and international work experience.

As with any research project, there are a number of limitations to this study. Besides the small sample size, our internationalization index is the basis for a relevant restriction. The selection of the internationalization dimensions as well as their weighting can be criticized as subjective to some extent. It is important to note that our decision to complement the internationalization index of Schmid and Daniel (2006) and to weight the internationalization dimensions is based on insights gathered during interviews with Polish top managers and executive search firms. We are aware of the fact that there are other elements that might influence a top manager's international orientation or internationalization which were not considered in our analysis (see also Schmid/Dauth 2014). The array of measures included in our study is partly related to the chosen method, i.e. CV analysis, which does not allow for including additional indicators. However, drawing on Schmid and Daniel (2006) we can state that our selection of index dimensions is more holistic than in most previous works. Thus, we are able to portray a comprehensive picture of internationalization among Polish top managers.

References

- AFG (2011): Recommendations on corporate governance. Paris: Association Française de la Gestion Financière.
- Athanassiou, N. A./Nigh, D. (1999): The impact of U.S. company internationalization on top management team advice networks: A tacit knowledge perspective, in: *Strategic Management Journal*, 20,1, 83-92.
- Becker, G. S. (1975): *Human capital: A theoretical and empirical analysis, with special reference to education*. New York: Columbia University Press.
- Beechler, S./Javidan, M. (2007): Leading with a global mindset, in: *Advances in International Management*, 19, 131-169.
- Botterill, K. (2014): Family and mobility in second modernity: Polish migrant narratives of individualization and family life, in: *Sociology*, 48, 2, 233-250.
- Carpenter, M. A./Fredrickson, J. W. (2001): Top management teams, global strategic posture, and the moderating role of uncertainty, in: *Academy of Management Journal*, 44, 3, 533-545.

- Carpenter, M. A./Geletkanycz, M. A./Sanders, G. W. M. (2004): Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition, in: *Journal of Management*, 30, 6, 749-778.
- Carpenter, M. A./Sanders, G. W. M./Gregersen, H. B. (2001): Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay, in: *Academy of Management Journal*, 44, 3, 493-511.
- Cieślak, J./Nikk, K. (2011): Wsparcie internacjonalizacji młodych innowacyjnych firm przez instytucje otoczenia biznesu. Polska Agencja Rozwoju Przedsiębiorczości.
- Daily, C. M./Certo, T. S./Dalton, D. R. (2000): International experience in the executive suite: The path to prosperity? in: *Strategic Management Journal*, 21, 4, 515-523.
- Elron, E. (1997): Top management teams within multinational corporations: Effects of cultural heterogeneity, in: *Leadership Quarterly*, 8, 4, 393-413.
- Finkelstein, S./Hambrick, D. C./Cannella, A. A. (2009): *Strategic leadership: Theory and research on executives, top management teams, and boards*. New York: Oxford University Press.
- GCGC (2012): *German corporate governance code*, Government Commission German Corporate Governance Code. Frankfurt am Main.
- Geletkanycz, M. A. (1997): The salience of 'culture's consequences': The effects of cultural values on top executive commitment to the status quo, in: *Strategic Management Journal*, 18,8, 615-634.
- Geletkanycz, M. A./Boyd, B. K./Finkelstein, S. (2001): The strategic value of CEO external directorate networks: Implications for CEO compensation, in: *Strategic Management Journal*, 22, 9, 889-898.
- Gong, Y. (2006): The impact of subsidiary top management team national diversity on subsidiary performance: Knowledge and legitimacy perspectives, in: *Management International Review*, 46, 6, 771-789.
- Gorynia, M./Nowak, J./Howak, J./Wolniak, R. (2007): Motives and modes of FDI in Poland: An exploratory qualitative study, in: *Journal for East European Management Studies*, 12, 2, 132-151.
- Greve, P./Nielsen, S./Ruigrok, W. (2009): Transcending borders with international top management teams. A study of European financial multinational corporations, in: *European Management Journal*, 27, 3, 213-224.
- Hambrick, D. C./Davison, S. C./Snell, S. A./Snow, C. C. (1998): When groups consist of multiple nationalities – towards a new understanding of the implications, in: *Organization Studies*, 19, 2, 181-205.
- Hambrick, D. C./Mason, P. (1984): Upper echelons: The organization as a reflection of its top managers, in: *Academy of Management Review*, 9, 2, 193-206.
- Heijltjes, M./Olie, R./Glunk, U. (2003): Internationalization of top management teams in Europe, in: *European Management Journal*, 21, 1, 89-97.
- Hetrick, S. (2002): Transferring HR ideas and practices: Globalization and convergence in Poland, in: *Human Resource Development International*, 5, 3, 333-351.

- Hitt, M. A./Bierman, L./Shimizu, K./Kochhar, R. (2001): Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective, in: *Academy of Management Journal*, 44, 1, 13-28.
- Hofstede, G. (2001): *Culture's Consequences. Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks et al.: Sage.
- House, R. J./Hanges, P. J./Javidan, M./Dorfman, P. W./Gupta, V. (2004): *Culture, leadership and organizations. The GLOBE study of 62 societies*. Thousand Oaks et al.: Sage.
- Judge, T. A./Cable, D. M./Boudreau, J. W./Bretz, D. (1995): An empirical investigation of the predictors of career success, in: *Personnel Psychology*, 48, 485-496.
- Keck, S. L. (1997): Top management team structure: Differential effects by environmental context, in: *Organization Science*, 8, 2, 143-156.
- Knight, D./Pearce, C. L./Smith, K. G./Olian, J. D./Sims, H. P./Smith, K. A./Flood, P. (1999): Top management team diversity, group process, and strategic consensus, in: *Strategic Management Journal*, 20, 5, 445-465.
- Leven, B. (2008): Poland's transition and new opportunities for women, in: *Feminist Economics*, 14, 1, 123-136.
- Lu, J. W./Beamish, P. W. (2001): The internationalization and performance of SMEs, in: *Strategic Management Journal*, 22, 6-7, 565-586.
- Maruca, R. F. (1994): The right way to go global: An interview with Whirlpool CEO David Whitwam, in: *Harvard Business Review*, 72, 2, 134-145.
- McCall, M. W./Hollenbeck, G. P. (2002): *Developing global executives: The lessons of international experience*. Harvard Business Press.
- Mellahi, K./Guermat, C. (2004): Does age matter? An empirical examination of the effect of age on managerial values and practices in India, in: *Journal of World Business*, 39, 2, 199-215.
- Nafukho, F. M./Hairston, N./Brooks, K. (2004): Human capital theory: Implications for human resource development, in: *Human Resource Development International*, 7, 4, 545-551.
- Nielsen, S. (2010): Top management team diversity: A review of theories and methodologies, in: *International Journal of Management Reviews*, 12, 3, 301-316.
- Nielsen, B. B./Nielsen, S. (2011): The role of top management team international orientation in international strategic decision-making: The choice of foreign entry mode, in: *Journal of World Business*, 46, 2, 185-193.
- Nielsen, B. B./Nielsen, S. (2013): Top management team nationality diversity and firm performance: A multilevel study, in: *Strategic Management Journal*, 34, 3, 373-382.
- Odrakiewicz, P. (2013): Management of complexities and innovation prognosis in higher education – challenges, changes, and a new paradigmatic shift facing polish management education in a globalized education era, in: *Global Management Journal*, 5, 1, 69-81.
- Palmer, T. M./Varner, I. I. (2007): A comparison of the international diversity on top management teams of multinational firms based in the United States, Europe, and Asia: Status and implications, in: *Singapore Management Review*, 29, 1, 1-30.

- Piekkari, R./Tietze, S. (2011): A world of languages: Implications for international management research and practice, in: *Journal of World Business*, 46, 3, 267-269.
- Reuber, A. R./Fischer, E. (1997): The influence of the management team's international experience on the internationalization behaviors of SMEs, in: *Journal of International Business Studies*, 28, 4, 807-825.
- Radlo, M./Sass, M. (2012): Outward foreign direct investments and emerging multinational companies from Central and Eastern Europe, in: *Eastern European Economics*, 50, 2, 5-21.
- Rakowska, A. (2010): Od transformacji do globalizacji. Rola menedżerów w rozwoju polskiej przedsiębiorczości. From transformation to globalization. The role of managers in the development of Polish entrepreneurship, in: A. Arent (ed). *Zarządzanie przedsiębiorstwem i regionem wobec wyzwań europejskich*. Politechnika Lubelska: 9-32.
- Roth, K. (1995): Managing international interdependence: CEO characteristics in a resource-based framework, in: *Academy of Management Journal*, 38, 1, 200-231.
- Ruigrok, W./Peck, S. I./Tacheva, S. (2007): Nationality and gender diversity on Swiss corporate boards, in: *Corporate Governance: An International Review*, 15, 4, 546-557.
- Sambharya, R. (1996): Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations, in: *Strategic Management Journal*, 17, 9, 739-746.
- Sarmiento-Mirwaldt, K./Roman-Kamphaus, U. (2013): Cross-border cooperation in Central Europe: A comparison of culture and policy effectiveness in the Polish–German and Polish–Slovak border regions, in: *Europe-Asia Studies*, 65, 8, 1621-1641.
- Schmid, S./Daniel, A. (2006): Measuring board internationalization – Towards a more holistic approach. Berlin: ESCP-EAP Working Paper No. 21.
- Schmid, S./Dauth, T. (2012): Internationale Diversität im Top-Management – Eine empirische Analyse der DAX-30-Unternehmen, in: *Zeitschrift für betriebswirtschaftliche Forschung*, 64,7, 772-802.
- Schmid, S./Dauth, T. (2014): Does internationalization make a difference? Stock market reaction to announcements of international top executive appointments, in: *Journal of World Business*, 49, 1, 63-77.
- Schmid, S./Wurster, D. J./Dauth, T. (2015): Internationalisation of upper echelons in different institutional contexts: top managers in Germany and the UK, in: *European Journal of International Management*, 9, 4, 510-535.
- Schweiger, C. (2014): Poland, variable geometry and the enlarged European Union, in: *Europe-Asia Studies*, 66, 3, 394-420.
- Śliwiński, R. (2012): Internationalization strategies of Polish fast growing enterprises, in: *Poznań University of Economics Review*, 12, 1, 17.
- Staples, C. L. (2007): Board globalisation in the world's largest TNCs 1993-2005, in: *Corporate Governance: An International Review*, 15, 2, 311-321.
- Sullivan, D. P. (1994): Measuring the degree of internationalization of a firm, in: *Journal of International Business Studies*, 25, 2, 325-342.

- Trąpczyński, P./Wrona, T. (2013): From going international to being international – strategies for international competitiveness, in: Poznan University of Economics Review, 13, 1, 89.
- Triandis, H. C./Suh, E. M. (2002): Cultural influences on personality, in: Annual Review of Psychology, 53, 1, 133-160.
- Tihanyi, L./Ellstrand, A. E./Daily, C. M./Dalton, D. R. (2000): Composition of the top management team and firm international diversification, in: Journal of Management, 26, 6, 1157-1177.
- UKCGC (2012): The UK corporate governance code. London: Financial Reporting Council.
- Yeung, A. K./Ready, D. A. (1995): Developing leadership capabilities of global corporations: A comparative study in eight nations, in: Human Resource Management, 34, 4, 529-547.