



PRIMARY RESEARCH

Characteristic features of small business and large firms: An empirical comparative study

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Abstract. When conducting research into small business, it is necessary to clearly define and identify the particular size classes of enterprises. This can be done by applying quantitative and/or qualitative criteria which reflect the specificity of business entities of different sizes. The effectiveness of solutions adopted in this field is crucial for determining the methodological basis of research into small and large business management, and affects the cognitive and interpretative value of the research, as well as its practical outcomes. In light of the above, the present paper aims to identify and assess the quantitative and qualitative areas that classify firms according to their size into the category of small business (micro, small and medium-sized enterprises) and the category of large firms. The objective of the paper was achieved through an empirical comparative study carried out on a sample of 1,784 enterprises of different sizes in the European Union. Based on the results, two research hypotheses were verified, and a series of theoretical, methodological and managerial implications was formulated. The appendix contains a proposal of a research tool for assessing the size of enterprises based on the quantitative and qualitative criteria under investigation.

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INTRODUCTION

According to the data collected by the International Finance Corporation in 132 countries between 1993 and 2010, there are over 125 million micro, Small and Medium-sized Enterprises (SMEs) worldwide (Kushnir, Mirmulstein & Ramalho, 2010). For identifying those enterprises, specific criteria need to be adopted which distinguish the small business category from the Large Enterprises (LEs). The criteria can be examined from quantitative and qualitative perspectives reflecting the specificity of business entities of different sizes.

The effectiveness of the solutions adopted in this field is crucial for determining the methodological basis of research into small and large business management, and affects the cognitive and interpretative value of the research, as well as its practical (managerial) outcomes. The exist-

ing methods of defining SME sector companies are often considered insufficient (Berisha & Pula, 2015). The main objections concern: lack of precision in terms of quantitative criteria measurement, lack of deeper understanding of the qualitative specifics of the small businesses compared to the large business entities and lack of empirical verification of the criteria taken into account in the business practice.

Moreover, Curran & Blackburn (2001) point out the difficulties in operationalization of the qualitative criteria used for distinguishing the size of the entities. The researches mentioned above point out a theoretical gap in terms of proposal and operationalization of both quantitative and qualitative criteria that are used for distinguishing the small and large business entities, as well as research gap in terms of empirical verification of the proposed classifica-

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tion solutions. These research gaps constitute the grounds for the research given in this work. In light of the above, the present paper aims to identify and assess the quantitative and qualitative areas that classify firms according to their size into the category of small business (micro, small and medium-sized enterprises) and the category of large firms. Two research hypotheses were put forward. The objective of the paper was achieved through an empirical comparative study carried out on a sample of 1,784 enterprises of different sizes in the European Union.

The paper is organized as follows: in the first part, a literature review was conducted, specific model assumptions were adopted, and research hypotheses were drawn up. Next, the research methodology was described, including the characteristic features of the enterprises under study, and attributes of the respondents. Further sections of the paper present the research findings along with the discussion, verify the research hypotheses and assess them against the current scientific knowledge. The final part of the paper draws attention to the limitations of an empirical study, and presents the key conclusions that lead to the formulation of theoretical, methodological and managerial implications.

The article enriches the theory of the management sciences by identifying key internal and external areas that differentiate the qualitative specifics of the small and large business. The significant theoretical asset of this work is the description and empirical identification of the denaturation of the business entities, taking into account the differentiation of their size.

LITERATURE REVIEW

SME sector companies play an important economic and social role in most countries around the world. Numerous studies conducted so far in various countries and regions (Leegwater & Shaw, 2008; Ionica, 2012; Nwachukwu, 2012; Decker, Haltiwanger, Jarmin & Miranda, 2013; Blundel, 2016; Naqshbandi & Kamel, 2017; Naqshbandi, Kaur & Ma, 2015) point to the special importance of small business in such areas as: economic growth, generating the gross domestic product, increase in employment, reducing poverty, implementing innovation, taking action to promote sustainable development and green economy, as well as shaping entrepreneurial attitudes in the society. In the discussions addressing this topic, SME sector companies are often contrasted with large enterprises, both with respect to macroeconomic issues (Edmiston, 2007; Haltiwanger *et al.*, 2013), and the differences in the management processes

(Verdú-Jover, Lloréns-Montes & García-Morales, 2006; Kozłowski & Matejun, 2016). This leads to the necessity of making a clear-cut distinction between the two classes of enterprises, which constitutes one of the fundamental methodological issues and challenges of research into the nature, causes, conditions and effects of functioning of micro, small and medium-sized enterprises. This research trend is referred to as the search for the specificity of SMEs (Torrès, 2003a), and focuses on distinguishing those firms from large enterprises. The beginnings of the trend are associated with the studies conducted by the representatives of the Aston Group (Pugh, Hickson, & Hinings, 1969; Pugh, Hickson, Hinings & Turner, 1968) and in the initial phase concerned mainly the effect of the size of an enterprise on the organizational structure and the management processes (Mintzberg, 1979; Penrose & Pitelis, 2009). The Bolton Report (1971), which was also published around that time, initiated the discussion about the criteria for distinguishing SMEs from LEs.

This led to the perception of small business as a coherent population juxtaposed with large enterprises on the basis of specific qualitative and quantitative characteristics that are identifiable and quantifiable (Dandridge, 1979; Welsh & White, 1981; Curran & Blackburn, 2001; Bannier & Zahn, 2012). Theoretical speculations and multi-year observation of economic practice resulted in creating many different definitions of small business all over the world (Ayyagari, Beck & Demirgüç-Kunt, 2007; Dilger, 2013). The most commonly applied quantitative criteria include: employment numbers and various financial data expressing the input, or the output of the activity conducted by enterprises of particular sizes. One of the examples here is the uniform, formal definition of micro, small and medium-sized enterprises used in the European Union, which was suggested by the European Commission (2015). According to the definition, a SME is a company with an employment level not exceeding 249 employees (calculated as full-time equivalent positions), an annual turnover not exceeding 50 million euros, and a balance sheet total not exceeding 43 million euros.

Additionally, this definition takes into account the capital relations and/or ownership relations between SMEs and other enterprises, which, if significant, have influence on the final level of criteria adopted for size analysis. Due to their practical utility, formal definitions of small business are primarily based on quantitative criteria which are measurable and quantifiable. However, such an approach restricts the methodological and substantive level of the

conducted studies, and is insufficient to obtain a complete picture of the specificity of the population of micro, small and medium-sized enterprises as opposed to large enterprises. This resulted in the growing importance of qualitative criteria for defining small business, as exemplified by the set of criteria characterizing an “average small firm”, proposed by (Mazzarol, Reboud & Clark, 2011). The criteria allow for both the specificity with respect to the quantitative size of business activity, and such areas of qualitative specificity as: the characteristics of the owner-manager, the company’s strategy, organizational configuration, preferences concerning the financing of business activity, and the growth potential. According to this approach, the key characteristic features of small business are: resource limitations, concentration of management in the owner’s hands, intuitive management style, low formalized structural solutions, and the predominance of internal, own sources of financing. Other qualitative features that distinguish small business from large enterprises include (Torrès, 2004; Nicolescu, 2009; Storey & Greene, 2010; Schaper, Volery, Weber & Gibson, 2014): independent ownership, high au-

tonomy of business activity, simplified communication systems, a small market share and limited spatial range of market activity, as well as searching for, creating and exploiting market niches, which is connected with the high level of work specialization and the focus on discrete manufacturing and services. Those suggestions enable forming a general picture of the qualitative specificity of small business as opposed to large enterprises. It is important to point out that this model identifies both the internal qualitative criteria (related to management processes inside the enterprise), and the external criteria (connected with the firm’s orientation in its environment). However, the existing solutions have certain weaknesses, such as the lack of clearly identified areas of specificity and inadequate empirical verification of the proposed models. Bearing this in mind, on the basis of the literature review, the author’s proposal was formulated concerning the configuration of internal and external areas and qualitative features categorizing enterprises according to their size into small business (micro, small and medium-sized enterprises) and large enterprises, as shown in Table 1.

TABLE 1. Author’s model of areas and qualitative features differentiating enterprises according to their size

Characteristic Features	SMEs	LEs
Area of Management		
Level of management centralization	Centralization	Decentralization
Strategic approach to the company’s development	Intuitive and short-term	formalized and long-term
Information system in the company	Simple and informal	complex and formal
Area of Structure		
Relations between ownership and management	Unity of ownership and management	separation of ownership and management
Organizational structure	Simplified and low formalized	Complex and strongly formalized
Area of Specialization		
Scope of duties in the company	Broad scope, varied duties	Narrow scope, specialized duties
Returns to scale	Small possibilities of application	large possibilities of application
Area of Autonomy		
Relations with other entities	High level of independence from other entities	Limited level of independence of other entities
Sources of financing	Own, internal	Third party, external
Area of Scope of Operations		
Market coverage	Local/regional	National/ International
Competitive arena	Market niche	Broad competitive arena

(Source: Own work based on theoretical considerations)

In the above model, the areas of management, structure and specialization were classified as internal criteria, while the areas of autonomy and market coverage as external criteria. The adopted model leads directly to the formulation of the research hypothesis.

H1: Small business and large enterprises differ significantly in terms of quantitative criteria and five key areas of qualitative specificity: management, structure, specialization, autonomy and scope of operations.

The above discussion can be supplemented with the proposal by Torrès & Julien (2005) who, when identifying the characteristic features of small and large business, pointed out the existence of a certain group of denatured

enterprises within the SME sector, which despite meeting the quantitative criteria of small business, have many (the majority of) qualitative attributes typical of large enterprises. Those include e.g.: born global companies, international new ventures, highly internationalized companies, or companies operating in the high-tech sector (Oviatt & McDougall, 1994; Baum, Schwens & Kabst, 2011; Naqshbandi & Kaur, 2015). Likewise, it can be assumed that the category of large enterprises contains a certain group of denatured companies which despite meeting the quantitative criteria possess many (the majority of) qualitative attributes typical of small business. This leads directly to the formulation of the research hypothesis.

H2: Both the populations of small businesses and large enterprises contain denatured companies which despite meeting the quantitative criteria, possess the majority of qualitative attributes typical of the opposite size class.

METHODOLOGY

For achieving the objective of this study and verifying the research hypotheses, an empirical comparative study (Wiseman & Popov, 2015) was conducted on the basis of data collected via survey research (Bryman & Bell, 2015). A Computerized Self-Administered Questionnaire (Callegaro, Manfreda & Vehovar, 2015) was employed as the research technique, and an electronic self-designed survey questionnaire made available to the respondents via the www.questionpro.com website was used as the research tool. The survey was conducted in 22 selected EU countries: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Finland, France, Greece, Spain, the Netherlands, Lithuania, Germany, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, Hungary, Great Britain, Italy. According to the World Bank (2016), the study covered an area of over 4 million km² (representing over 95% of the EU total area), inhabited by nearly 500 million people (over 98% of the EU population). The countries with the greatest number of business entities were selected for the survey. As a result, the survey encompassed a territory where, according to the Eurostat data (2016) and the SME Performance Review data (2016), there are over 21 million enterprises, of which over 98% belong to the small business category. The distribution of business entities in that area according to

particular size classes was as follows: micro enterprises – 92.52%, small enterprises – 6.25%, medium-sized enterprises – 1.03%, and large enterprises – 0.20%. The empirical data were collected from a random sample of 1,784 enterprises which were divided into 4 size classes based on the integrated criteria of the uniform, formal definition of small business used in the EU, formulated by the European Commission (2016). The criteria take into account the average annual level of employment measured as full time equivalent, level of turnover and balance sheet total. Moreover, only the autonomous enterprises were included in the category of SMEs, i.e. those which are completely independent of other entities in terms of capital and ownership, or have one, or more minority partnerships (each less than 25 %) with other enterprises. The survey research was conducted in 1,183 (66.31%) micro enterprises, 399 (22.37%) small enterprises, 159 (8.91%) medium-sized enterprises and 43 (2.41%) large enterprises. The structure of the sample does not fully correspond with the distribution of enterprises according to size classes in the area under study. However an attempt was made to preserve the key features of the actual distribution, such as the predominance of micro-enterprises, the predominance of SMEs over large enterprises, as well as ensuring that the sample of large enterprises meets the statistical criteria of a large sample, which permitted the use of statistical comparative tests (Ramachandran & Tsokos, 2009). Detailed characteristics of the surveyed enterprises broken down by size classes are shown in Table 2.

TABLE 2 . Surveyed enterprises and respondent characteristics as a percentage of the sample

Variable	Micro (n = 1183)	Small (n = 399)	Medium (n = 159)	SMEs (n = 1741)	Large (n = 43)
Legal form of the company					
Individual company	56.4%	23.3%	9.4%	44.5%	2.3%
Private/general partnership	13.1%	14.3%	12.6%	13.3%	2.3%
Limited liability company	27.0%	52.1%	54.1%	35.3%	41.9%
Joint stock company	2.8%	7.8%	20.1%	5.5%	51.2%
Cooperative	0.3%	2.0%	1.9%	0.9%	2.3%
Foundation / Association	0.3%	0.5%	0.6%	0.4%	0.0%
Other	0.0%	0.0%	1.3%	0.1%	0.0%
Sector of Operations					
Service	68.2%	44.9%	35.8%	59.9%	67.4%
Trade	19.9%	19.5%	13.8%	19.2%	2.3%
Production	11.9%	35.6%	50.3%	20.9%	30.2%
Range of Market Operations					
Local	8.3%	3.3%	3.1%	6.7%	7.0%
Regional	22.1%	16.3%	13.2%	19.9%	23.3%
National	43.2%	33.1%	20.8%	38.8%	7.0%
International	21.9%	39.1%	40.3%	27.5%	37.2%
Global	4.6%	8.3%	22.6%	7.1%	25.6%
Company Age					
Up to 5 years	15.0%	4.5%	1.3%	11.4%	0.0%
Over 5 to 10 years	26.2%	12.0%	6.3%	21.1%	11.6%
Over 10 to 15 years	17.3%	20.1%	12.6%	17.5%	9.3%
Over 15 to 20 years	12.9%	16.5%	13.2%	13.8%	14.0%
Over 20 years	28.5%	46.9%	66.7%	36.2%	65.1%

(Source: Own work based on survey results)

The results show that the category of small business is dominated by individual companies, or limited liability companies, while the population of large enterprises is characterized by a significantly higher number of joint stock companies. Moreover, large companies more frequently operate in international and global markets, and have been active in the market for a relatively longer period of time than small businesses.

The survey respondents were representatives of the enterprises under study. They were mainly the owners of the surveyed companies (74%), less frequently senior managers (19%), or employees authorized by the management to take part in the survey (7%). The survey participants were mostly men (70%), persons aged 31-40 (30%), or above 50 (35.5%), with a university degree (81%) in technology (40%), or economics/management (26%). The collected empirical material was subjected to statistical analysis using the IBM SPSS Statistics software (Field, 2014). The following quantitative methods of statistical analysis were employed (Swift & Piff, 2014) contingency table analysis, Spearman's correlation coefficient r_s and its signifi-

cance test as a measure of interdependence of phenomena, and the Mann-Whitney U test to assess the variation in responses provided by the representatives of SMEs and large enterprises. For the purpose of comparative analysis, a nonparametric test was used. The choice of the test was dictated by the significant quantitative differences between the two groups under examination, which arose from the actual economic conditions characterized by the considerable predominance of SMEs over large enterprises. The strength of interdependence between phenomena was assessed using the solution proposed by Cohen (1992), where the following levels of dependence were adopted as the threshold limit values of linear correlation coefficients: 0.1 - weak; 0.3 - medium; 0.5 - strong, 0.7 - very strong.

RESULTS AND DISCUSSION

In the first part of the research, the level of occurrence of qualitative features differentiating enterprises in terms of their size was identified in the examined sample, in accordance with the model assumptions. The detailed results are shown in Table 3.

TABLE 3. Level of occurrence of qualitative features characterizing companies in terms of their size in the examined sample

Qualitative Characteristic Features of Enterprises	SMEs		LEs	
	n	%	n	%
Area of Management				
Centralization of management	1525	87.6%	30	69.8%
Decentralization of management	216	12.4%	13	30.2%
Intuitive and short-term approach to company's development	1008	57.9%	6	14.0%
Formalized and long-term approach to company's development	733	42.1%	37	86.0%
Simple and informal information system	1319	75.8%	13	30.2%
Complex and formal information system	422	24.2%	30	69.8%
Area of Structure				
Unity of ownership and management	1666	95.7%	13	30.2%
Separation of ownership and management	75	4.3%	30	69.8%
Simplified and low formalized organizational structure	1646	94.5%	10	23.3%
Complex and strongly formalized organizational structure	95	5.5%	33	76.7%
Area of Specialization				
Broad and varied scope of duties	1206	69.3%	25	58.1%
Narrow and specialized scope of duties	535	30.7%	18	41.9%
Small possibilities of applying returns to scale	858	49.3%	13	30.2%
Large possibilities of applying returns to scale	883	50.7%	30	69.8%
Area of Autonomy				
High level of independence from other companies	1433	82.3%	33	76.7%
Limited level of independence from other companies	308	17.7%	10	23.3%
Own, internal source of financing	1555	89.3%	29	67.4%
Third party, external source of financing	186	10.7%	14	32.6%
Area of Scope of Operations				
Local/regional scope of operations	1254	72.0%	12	27.9%
National/international scope of operations	487	28.0%	31	72.1%
Operating in a market niche	686	39.4%	9	20.9%
Operating on a wide competitive arena	1055	60.6%	34	79.1%

(Source: Own work based on survey results)

The above characteristics were identified on the basis of the respondents' declarations. This enabled further assessment of the variation in answers relating to particular features and areas that qualitatively characterize businesses

in terms of their size. For assessing and identifying the differences in answers between the representatives of micro SMEs and LEs the Mann-Whitney U test was applied. The detailed results are shown in Table 4.

TABLE 4. Differences in identifying particular features and areas of qualitative characterization of surveyed enterprises according to their size

Features and areas of qualitative characterization of enterprises according to their size	Mean rank			
	U	Z	SMEs	LEs
Area of management, including:	14302.50	-7.434**	879.22	1430.38
- Level of management centralization	30759.00	-3.451**	888.67	1047.67
- Approach to company's development	20982.50	-5.746**	883.05	989.40
- Information system in the company	20389.50	-6.779**	882.71	1275.03
Area of structure, including:	5267.00	-17.937**	874.03	1640.51
- Relations between ownership and management	12929.00	-18.012**	878.43	1462.33
- Organizational structure	10747.50	-17.889**	877.17	1513.06
Area of specialization, including:	28573.50	-2.923**	887.41	1098.50
- Scope of duties in the company	33265.00	-1.559	890.11	989.40
- Returns to scale	30301.00	-2.468*	888.40	1058.33
Area of autonomy, including:	28603.50	-3.452**	887.43	1097.80
- Relations with other entities	35348.50	-0.942	891.30	940.94
- Source of financing	29243.50	-4.490**	887.80	1082.92
Area of scope of operations, including:	19637.00	-6.022**	882.28	1306.33
- Market coverage	20916.50	-6.295**	883.01	1276.57
- Competitive arena	30517.00	-2.453*	888.53	1053.30

Mann-Whitney U test. * significant at 0.05; ** significant at 0.01. (Source: Own work based on survey results)

The adopted methodological assumptions indicate that all enterprises under study differ with respect to the quantitative criteria provided in the uniform, formal definition of small business used in the European Union. The criteria, however, do not give a complete picture of the specificity of SMEs as compared with large enterprises. Therefore, the subsequent empirical analysis was oriented towards the identification and assessment of qualitative areas that differentiate enterprises according to their size. The findings suggest that the examined enterprises differ statistically and significantly with respect to 5 key qualitative areas: (1) solutions used in the management system, (2) structural organization of the analyzed business entities, (3) character of economic specialization, (4) preferences reflected in the scope of autonomy of a business entity, and (5) differences in the scope of market operations. This fully confirms hypothesis H1 according to which small business and large enterprises differ significantly in terms of quantitative criteria and 5 key areas of qualitative specificity: management, structure, specialization, autonomy and scope of operations. At the level of detailed evaluations, statistically significant differences were found with respect to 9 from 11 (82%) qualitative features proposed in the theoretical

model. The strongest qualitative differences between the companies of various sizes were found with respect to the adopted structural solutions, with the unity of ownership and management being the key characteristic of small business. In order to combine those roles effectively, the following factors are essential: a high level of the owner's human and social capital, exploration of the market opportunities, development of proactive and innovative strategies (Manev, Gyoshev & Manolova, 2005), orientation towards knowledge acquisition and achievement, competitive aggressiveness, innovative and risk-taking orientation, and personal initiative (Krauss, Frese, Friedrich & Unger, 2005).

It should be pointed out that the unity of ownership and management is closely linked to the owner's aspiration to retain a high level of independence and autonomy. However, as the company size increases, it becomes more common to include hired managers in management process of SME sector companies (Churchill & Lewis, 1983) which should result in a higher level of business performance, and stronger orientation towards the achievement of nonfinancial company objectives (Westhead & Howorth, 2006). It might also be an interesting solution to use all kinds of configurations of the synergistic combinations of ben-

efits arising from combining the managerial and ownership functions with the support from professional managers, or appointment of supervisory and/or advisory boards (Van Gils, 2005). Another key difference between SMEs and LEs concerns the significant structural disparity between the two, which results from the changes taking place during the enterprise growth processes (Davidsson, Achtenhagen & Naldi, 2010). As the size of the company grows, so does the general scale of formalization and complexity of structural solutions (Levie & Lichtenstein, 2008), which is also related to the changes in the management systems, such as the increased decentralization of management, increased complexity of the information systems, and the growing specialization of activity (Meijaard, Brand & Mosselman, 2005).

It also becomes important to adopt a longer-term perspective of activity (Barrett & Mayson, 2007), which is directly related to the growing scope and formalization of the solutions used for strategic planning (Honig & Samuelsson, 2012). However, excessive administration and bureaucracy of operations, which increase as the company size increases, may adversely affect the level of entrepreneurship, creation of changes and implementation of innovation, and eventually lead to the collapse of the enterprise (Adizes, 1988; Kaur, Naqshbandi & Jayasingam, 2014). The subsequent part of the study focused on identifying the level of occurrence of qualitative characteristics of SMEs and large enterprises in the surveyed sample. The results demonstrate that out of the 11 examined features differentiating enterprises in terms of their size, SME sector companies show on average 8.13; 73.9% of the characteristic feature of small business (and 2.87; 26.1% of the characteristic feature of large enterprises), while LEs identified 6.51; 59.2% of the characteristic feature of their size class, and 14.49; 40.8% of the characteristic feature of small business.

The number of characteristic features of small business identified by the surveyed companies decreases statistically and significantly with moderate strength with the increasing size of the companies, $rs (N = 1784) = -0.35$, $p < 0.01$ and has a mean value of 8.47 for micro companies, 7.70 for small companies, and 6.70 for medium-sized companies. Thus, all categories of enterprises belonging to SME sector show the predominance of characteristics features of small business, while large enterprises are predominantly characterized by the features typical of large business. The aggregate results demonstrate that over 93% of the SMEs under study show the predominance of characteristic features of small business, whereas in the group of large enterprises, the

proportion of companies showing features of large business was slightly lower, and reached 86%. Detailed results in this respect are shown in Table 5.

TABLE 5 . Percentage of companies showing the features of small and large business in the examined sample

Companies in the Examined Sample	Predominance of Small Business Features		Predominance of Large Business Features	
	n	%	n	%
SMEs	1623	93.2%	118	6.8%
Les 4	14.0%	37	86.0%	

(Source: Own work based on survey results)

Also in this case, the percentage of companies with predominant features of small business decreases statistically significantly to a moderate degree with increasing company size, $rs (N = 1784) = -0.32$, $p < 0.01$, and is 96.7% for micro enterprises, 88.5% for small enterprises, and 79.2% for medium-sized enterprises. However, the results indicate explicitly that both the category of SMEs and large enterprises contain a number of entities (6.8% and 14.0% respectively) which despite meeting the quantitative criteria, have the majority of qualitative attributes of the opposite size class Torrès (2003b) associates this phenomenon with such processes as: a growing number of strategic alliances, more common use of increasingly advanced management systems, formation of more and more complex network connections, development and growing use of risk capitals, as well as the accelerating internationalization connected with market globalization and a widespread use of new communications technologies. Thus, the results fully confirm the hypothesis H2 and empirically verify the theoretical assumptions formulated by Julien (1998) concerning the existence of a certain group of denatured companies within the SME sector. At the same time, the research results broaden this approach to include the identification of large denatured enterprises whose nature and conditions of functioning should be further investigated.

Limitations of the Empirical Study

An analysis of the research findings should take into account the methodological limitations resulting from the adopted method and research technique (Geletkanycz & Tepper, 2012). They include mainly cognitive limitations stemming from the use of the inductive approach to research which does not give certainty as to the completeness of the picture of phenomena in the investigated population (Popper, 2005). Another limitation is related to the high level of subjectivity of the respondents' answers, which results from the adopted research technique (Wright, 2005),

and from the complexity, relativism and contextuality of the issues researched by management sciences (Johnson & Duberley, 2003). Another weakness is the fact that the research does not take account of the time criterion which would enable capturing the changes taking place in the surveyed companies (Bryman & Bell, 2015). On the other hand, this would considerably lengthen the research process, and, given the high rate of business failure or transformation, it might be impossible to reach the surveyed enterprises again.

The limitations concerning the substance of the research topic were pointed out by Volery & Mazzarol (2015) who note that it is not possible to create a universal and complete classification system of enterprises due to the considerable diversification, individual specificities, and contextual nature of functioning of particular business entities.

CONCLUSION

For many years now, management scientists have made attempts to construct models which would enable distinguishing SME sector companies from large firms. Those attempts led to the creation of numerous, diverse definitions based on quantitative criteria, as well as many quantitative typologies of characteristic features of small and large businesses. However, the solutions suggested so far have certain weaknesses, such as the absence of empirical verification of the formulated proposals, as well as the lack of comprehensive inclusion of external and internal area-related criteria in the qualitative specificity of enterprises of various sizes. The above considerations were the reason for undertaking the research described in this paper. The research findings enabled verification of two research hypotheses and, at the same time, enriched the theory of management sciences with a new, comprehensive (i.e. including both external and internal factors), and empirically verified proposal concerning the configuration of quantitative and qualitative areas classifying enterprises according to their size into the category of small business (micro, small and medium-sized enterprises) and category of large enterprises. Simultaneously, the research results allow the formulation of the following theoretical implications:

- the basic areas differentiating the qualitative specificity of small and large business in the internal sphere include: the area of management, structure and specialization, and in the external sphere: the area of autonomy and range of market operations, with internal areas having a stronger impact on the specificity of entities in a given size class than external areas.

- particular size classes differ with respect to the internal structure of the examined qualitative characteristics. Although the distribution of those features shows a strong statistical concentration of answers of SME sector representatives as compared to the features reported by large enterprises, the phenomenon of denaturation can be observed in the surveyed sample, whereby one size class has the predominance of qualitative features characteristic of the opposite size class. Consequently, 4 categories of entities can be distinguished: (1) specific SME sector companies with predominant features of small business (93.2% in the SME class), (2) denatured SME sector companies with predominance of qualitative features of large business (6.8%), (3) specific large enterprises with predominant features of large business (86%), and (4) denatured large companies with predominant features of small business (14%). Additionally, the paper enriches the achievements of management sciences by formulating recommendations for identification of enterprises in terms of their size. On that basis, the following methodological implications were formulated:

- the division of enterprises into various size classes based on the integrated quantitative and qualitative criteria does not usually give an unequivocal, direct answer as to which size class a given company should belong to. Therefore, for methodological purposes, the predominance, or particular combinations of qualitative features of companies in a given size class should be taken into account, rather than a full list of those features.

- in order to identify the size class of an enterprise, it is advisable to use methodological triangulation (Böhme, Childerhouse, Deakins & Towill, 2012) which takes into account both the quantitative and qualitative criteria. Appendix A contains a suggestion of an integrated research tool which takes account of the above recommendations and enables the assessment of a company's size based on empirically verified criteria. In this questionnaire reverse scored questions (R) are also included (Church & Waclawski, 2001). The presented results can be used by the owners and managers of SMEs and large enterprises to identify and assess the level of occurrence of quantitative and qualitative features typical of a given size class. On their basis, the following managerial implications can be formulated:

- quantitative changes leading to the growth of business entities should take place simultaneously with qualitative changes which adjust the specificity of the business activity to the characteristics of a given size class. Based on the re-

search results, the owners and managers can assess the extent to which their companies fit into the typical qualitative profile identified for a particular size class of enterprises.

- there is no need for owners and managers to try to achieve the qualitative characteristics that fully conform with the theoretical profile specified for a particular size class. The key is to optimally adjust and, above all, to predict the configurations of the company's qualitative characteristics which ensure the high level of business performance and enable building a long-term competitive advantage.

Research into this field should definitely be continued. The following directions of further research seem particularly interesting and prospective: assessing the impact of specific configurations of qualitative characteristics of SMEs and large enterprises on business performance, ex-

amining the internal diversification of qualitative features and the occurrence of denaturation within the population of small businesses and large enterprises. As regards the methodology, it would be worthwhile to consider enriching the existing research methods with qualitative analysis performed using e.g. case studies, which would allow achieving more objective results.

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Appendix-A

The proposal of an integrated research tool for assessing the size of an enterprise. The quantitative criteria were adjusted to the uniform, formal definition of small business used in the European Union (European Commission, 2015).

1. Please, specify the average level of employment in your company in the last year (measured as full-time equivalent):
 - a) 0 - 9 people
 - b) 10 - 49 people
 - c) 50 - 249 people
 - d) Over 249 people
2. Please, specify the amount of turnover (revenue) generated by your company in the last year:
 - a) Up to 2 million euros
 - b) Over 2 million euros to 10 million euros
 - c) Over 10 million euros to 50 million euros
 - d) Over 50 million euros
3. Please, specify the value of assets (balance sheet total) of your company in the last year:
 - a) Up to 2 million euros
 - b) Over 2 million euros to 10 million euros
 - c) Over 10 million euros to 43 million euros
 - d) Over 43 million euros
4. Please, specify the capital (ownership) relations of your company with other entities:
 - a) The company is fully independent of other entities in terms of capital and/or ownership
 - b) The company is partly related through capital and/or ownership to other entities, however the relationship does not exceed 25% of share in the share capital, or votes in the meeting of shareholders
 - c) The company is related through capital and/or ownership to other entities and the relationship exceeds 25% of share in the share capital, or votes in the shareholders' meeting
5. Please, specify the predominant features of your company's management system:
 - the company's management is rather: a) centralized; b) decentralized
 - the approach to managing the company's development is rather a) intuitive and short-term; b) formalized and long-term
 - the information system in the company is rather: a) complex and formal; b) simple and informal (R)
 - the company is primarily managed by: a) its owners; b) hired (professional) managers
 - the organizational structure of the company is rather: a) complex and strongly formalized; b) simplified and low formalized (R)
 - the possibilities of applying the returns to scale (reducing costs as the production output increases) in the process of production/provision of services are: a) large; b) small (R)
 - the financing of the company is mainly based on: a) own, internal sources; b) third party, external sources
 - the company operates rather in a) local/regional market; b) international/global market
 - the company conducts its market activity rather: a) on a broad competitive arena; b) in a market niche (R).